IMPORTANT
Read Before Using Keyboard!

Congratulations on your purchase of the new GEM SK760/SK880 World Keyboard by Generalmusic. This instrument is equipped with cutting edge Flash ROM memory, so that your new keyboard can be permanently updated by disk with the latest operational advantages and new features. **It is important that you follow the procedure below before using your instrument for the first time to ensure that the instrument functions properly**. Check with your authorised Generalmusic dealer for exciting new features to load in your Flash ROM in the future.

STEP 1

With the instrument turned OFF, insert the GEM SK760/SK880 Operating System Disk included in your materials packet into the disk drive. **After you have inserted the disk, turn the instrument ON**.

STEP 2

You will see a message in the instrument display screen that says: **Loading OS-DISK clears ALL MEMORY!! <Enter to Load/Escape to abort>**

Press ENTER and wait about 3 minutes for the new Operating System to load. When the new system has finished loading, you will see the following message in the instrument display screen:
Loading Successful!! <Enter to continue>
At this time, **Press ENTER** again and the instrument will proceed through the normal operating display screens. You can now **Turn OFF** the instrument in preparation for the final step listed below. **IMPORTANT: REMOVE THE OPERATING SYSTEM DISK BEFORE PROCEEDING TO THE FINAL STEP!**

FINAL STEP

As you turn the instrument **ON, KEEP ROTATING THE DIAL until the following message appears in your display screen:**
!!WARNING!! Dial on Power-Up Requests Memory Clear!! <Enter to clear/Escape to abort>

Press ENTER. You have now completed the update process, and your WK6/WK8 World Keyboard has been permanently upgraded.
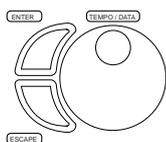
Dial — Location of Dial, Enter & Escape controls.

Note: There may be a Battery Warning message when you initially turn on the instrument. This message will not appear after the instrument has been plugged in and turned ON for a few hours. During this time, the internal battery that holds new information in memory will recharge. For now, just press ENTER or ESCAPE to continue on if the message appears when you power-up the instrument.

GEM by GENERALMUSIC

SK760 SK880 WORLD KEYBOARD

POWERSTATION
271219

SK760 WORLD KEYBOARD
POWERSTATION

SK880 WORLD KEYBOARD
POWERSTATION

GEM
by GENERALMUSIC

Owner's manual

Cod. 271219

English
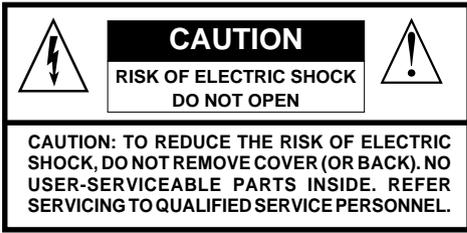
IMPORTANT SAFETY INSTRUCTIONS

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK OR INJURY TO PERSONS

1. Read all the instructions (Safety, Installation and FCC if applicable) before using the product.
2. Do not use this product near water (example, near a swimming pool, spa, tub, sink or wet basement) and do not expose to rain.
3. This product should be used only with a cart or stand that is recommended by the manufacturer, or should be used with the components supplied. If this product requires assembly before being played, take special care to follow the assembly instructions found at the back of the manual.
4. This product, whether alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for long periods of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
5. **WARNING**: Do not place this product or any other objects on the power cord, or place it in a position where one could walk on, trip over or roll anything over power or connecting cords of any kind.
6. This product should be located so that its location does not interfere with its proper ventilation.
7. This product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
8. This product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.
9. This product may be equipped with a polarised line plug (one blade wider than the other). This is a safety feature. If you are unable to insert the plug into the wall outlet, contact an electrician to replace your obsolete outlet. Do not defeat the safety purpose of the plug.
10. The power supply cord of the product should be unplugged from the outlet when left unused for long periods of time.
11. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
12. This product should be serviced by qualified service personnel when:
    a) the power supply cord or the plug has been damaged; or
    b) objects have fallen, or liquid has been spilled into the product; or
    c) the product has been exposed to rain; or
    d) the product does not appear to operate normally or exhibits marked changes in performance; or
    e) the product has been dropped, or the enclosure damaged.
13. Do not attempt to service the product beyond that described in the user-maintenance instructions. All servicing should be referred to qualified service personnel.
14. Some products may have benches and/or accessory mounting fixtures that are either supplied as part of the product or as optional accessories. Please ensure that benches are correctly assembled and stable and any optional fixtures (where applicable) are well secured before use.
15. Electromagnetic Interference (RFI) This electronic product utilises digital sample wave processing technology (S.W.P.) that may adversely affect radio/TV reception. Read the FCC note on the inside back cover of the owner's manual for additional information.

SAVE THESE INSTRUCTIONS

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Introduction

Thank you for purchasing the GEM **SK760/SK880** World Keyboard by Generalmusic.

The **SK760/SK880** is a multimedia keyboard workstation which offers several ways of interfacing with the instrument. With the optional A/V card, a musician can connect his instrument to the **SK760/880**, mix his sounds with those of the workstation (complete with effects processing!) and follow a music score which can be projected on a monitor connected to the instrument's video outputs. At the same time a group of singers can follow the lyrics projected on the monitor (television or other video projection device) by the **SK760/880** video interface.

TWO VERSIONS OF A POWERFUL WORKSTATION

The **SK Series** World Keyboard is produced in two versions: the **SK760** standard and the **SK760 Power Station**, the **SK880** standard and the **SK880 Power Station**. All two versions incorporate a Flash-ROM memory which allows the instruments to be up-dated by disk with the latest operational advantages and new functions.

The basic Operating System, which features an advanced Edit Sound function and the Sample Translator, is common to all three versions. The **SK760/880 Power Station** is supplied with a factory-fitted Hard Disk containing a vast library of Songs and User Styles. **SK760/880** model is also predisposed for a SCSI port which can be installed via an optional Generalmusic SCSI kit.

The Standard model can be fitted with optional kits for Power Station and Mega Station facilities, and all models can be fitted with the SCSI port.

HOW TO USE THE OWNER'S MANUAL

To ensure long, trouble-free operation, please read this manual carefully. The Owner's Manual is supplied as a 3-ring binder with instructions inserted inside.

First, read the **Quick Guide** chapter while operating the **SK760/880** which explains the functions of each button and the display. This will help you understand the basic operation of the instrument. Graphical illustrations are included for a better understanding of the instrument.

Once you are acquainted with the instrument's basic functions, use the **Reference Guide** to discover all the potentials of your **SK760/SK880** World Keyboard.

At the end of the manual is the **Appendix** containing various tables, MIDI information and an index.

FEATURES OF THE WK6 & WK8

- **Polyphony/multitimbral capabilities**
  Maximum polyphony: 64 voices. Multitimbricity: 16 parts (Style/RealTime modes) or 32 parts (Song mode). Each part is assigned to a track. In Style/RealTime mode 8 tracks are assigned to the keyboard and the other 8 to the auto-accompaniment section.

- **Sound generation**
  Based on sampled waveforms (Wave), modified by programmable digital filters (DCF, Digitally Controlled Filters). Waves are assigned singularly or in pairs to up to a maximum of 3 Layers, to obtain Sounds consisting of a maximum of 6 Waves per voice.

- **ROM-Sounds**
  ROM (permanent memory) contains up to 16 megabytes of samples which are the source of over 1,000 ROM-Sounds.

- **RAM-Sounds**
  You can load disk-based RAM-Sounds based on samples contained in ROM. RAM Sounds can be supplied by Generalmusic, by third parties, or can be created by the user with the sound editor program. Sounds can be loaded from **SK760/880**, WK6/8, WK4, SK, PS and WX/SX Series disks.

- **Edit Perf-Sound/Sound Patch**
  The "Edit Perf Sound" and "Edit Sound Patch" functions permits quick modification of Sounds and Drumkits to produce "Performance-Sounds". The modifications are stored in Performance tracks to allow Songs, Styles or Real-Performances to load the correct sounds.

- **Sound Edit**
  SK760/880 features and advanced, powerful and highly flexible Sound Edit section that takes you deep into the heart of sound synthesis at its very best. You can shape envelopes, control Waveforms and open and close filters with the help of high definition graphical representations projected on the display. The Sound Edit also features the Sample Translator, an incoporated Waveform creating program which allows you to create new Sounds starting from disk-based samples or data received via MIDI.

- **Volatile Sample RAM (optional)**
  It is possible to install up to 32 megabytes of additional Sample-RAM via standard 30 pin computer SIMMs (single in-line Memory Modules) obtainable from most computer outlets.

- **Digital Effects Processor**
  Four Digital Effects Processors, controlled in real time, enrich the sound with effects (reverbs and modulations). A flexible matrix allows different effects to be assigned to every track.

- **Sequencer**
  The 32 track, 250 event/16 Song sequencer has a Microscope function (microscopic edit) and Score facility (to display Score, chords and Lyrics). The QuickRec recording method allows the rapid recording of Songs by using existing Styles.

- **Jukebox & Preload**
  The Jukebox function allows you to chain the Songs in memory and play them one after the other with a single command. The Preload function allows you to create a list of disk-based Songs or MIDI Files and play them all by means of a single command, without first loading all data in memory.

- **Automatic accompaniment**
  The internal ROM Styles provide automatic musical accompaniments, consisting of 8 tracks. Every Style has 4 Variations. Up to 32 disk based Styles (User programmable) can be loaded and automatically stored in the battery backed system memory. Each Style can also be automatically reconfigured by means of up to 8 associated Style Performances.

- **Disk drive**
  Data can be stored on 3.5" HD floppy disks, in **SK760/880** expanded format (1.6 megabyte), standard MS-DOS (1.44 megabyte) or Atari ST/Falcon format (720 Kb). **SK760/880** is able to initialize disks for every format. It is possible to load RAM-Sounds, Styles and Songs from **SK760/880**, WX2, SX2 floppy disks. If Sample-RAM is present, it is also possible to load

new samples from disk (as RAM-∿-Sounds). MS-DOS compatibility permits MIDI file exchange with other instruments and computers.

• **Hard disk**
SK760/880 (Power Station) can be fitted with a 2.5" IDE or E-IDE internal hard disk (max. 2 Gigabytes). The standard model can be upgraded with the optional Generalmusic Hard Disk installation kit, available from authorized Generalmusic stores and should be installed by a qualified service technician. A compatible IDE hard drive can be purchased from most computer outlets.

• **Score view**
The display can show the score, the lyrics and chord symbols of a song. It is also possible to connect **SK760/880** to a video system (monitor, domestic TV, closed circuit video) by means of the Generalmusic Audio/Video card (optional) to display score and lyrics on a television (or other external video device). Lyrics can be projected onto a monitor during a performance to allow others to sing with the player.

• **Audio/Video card with Vocal Processor**
The optional Audio/Video card installation kit offers the possibility of processing Mic/Line signals with the instrument's internal Effects Processor, of projecting Song lyrics onto an external video device (TV, monitor, etc.), and includes the Vocal Processor function to add vocal harmonies to your performance.

• **Advanced MIDI operation & System Exclusive**
SK760/880 has two independent MIDI circuits (A and B), offering up to 32 MIDI channels, with MIDI-merge and MIDI-thru functions and System Exclusive communcation.

• **Direct connection with a computer**
The Computer jack permits the connection of computers not fitted with a MIDI interface to **SK760/880** via a single serial cable.

• **SCSI port (optional)**
For off-line storage, **SK760/880** can be fitted with a SCSI port, so you can store files on an external storage device connected via the SCSI port (ZIP™, JAZ™, Hard Disks, etc.). This also makes it possible to load files from a CD-ROM drive. A SCSI port can be installed in all models by means of Generalmusic's optional SCSI installation kit, available from all authorised Generalmusic outlets. Installation should only be carried out by authorised Generalmusic service centres. The WK8 leaves the factory predisposed for the SCSI port for easy installation.

• **Multitasking operating mode**
The Multitasking operating system allows you to execute several operations simultaneously, such as modifying sounds while a song is playing, loading a song during song play, formatting a disk while playing.

• **Up-dateable operating system (OS)**
Since the operating system resides in a flash-ROM, it is possible to load updates from floppy disk. Operating system updates can add new functions to the instrument.

IMPORTANT PRELIMINARY NOTES

Observe these important preliminary notes before using your instrument:

AVOID PLACING DISKS NEAR MAGNETS - Do not place floppy disks on top of speakers, near magnets, telephones, or other sources of electromagnetic fields. The disk contents could be damaged.=

MODELS WITH OPTIONAL HARD DISK INSTALLED- the hard disk may appear to operate rather slowly the first time you open its directory. This is caused by operations relating to the organization of the internal data and tests on the integrity of the device. The delay is eliminated on all successive hard disk access operations. You may also find that the Hard Disk is write protected - this is merely a precautionary measure to avoid accidental erasure of any factory-loaded files. The protection is removed in the Disk Utility page.

UP-DATEABLE OPERATING SYSTEM - A disk containing the operating system is supplied with the instrument. The disk can contain a more recent version of the operating system than the one contained in the instrument's Flash ROM.

To load the operating system contained on the floppy disk:

(1) turn off the instrument, (2) insert the floppy disk in the drive, (3) turn on the instrument, (4) When the message «Loading OS-disk clears all memory!! ENTER to load, ESCAPE to abort» appears, press ENTER to start the OS update, (5) wait while the operating system is being loaded, (6) when the message «Loading successful (Enter to continue)» is displayed, press ENTER. After completing this process, proceed with the power-up reset that follows below to insure proper operation.

RESETTING AT POWER UP - If the data contained in the instrument's memory has been damaged, either by being exposed to the effects of a strong magnetic field, or other unknown reason, the instrument may not operate properly. The remedy is a power-up reset:

(1) Turn on the instrument while simultaneously pressing the POWER switch and rotating the DIAL, (2) when the message «!!WARNING!! Dial on Power-Up Requests MEMORY CLEAR !! < ENTER to CLEAR / ESCAPE to abort>» appears, press ENTER to clear the MEMORY.

Important information

1. The **SK760/880** should contain the following items from the factory:
   a) Instrument;
   b) 2 Floppy disks (1 Operating System (OS)-Disk, 1 Demo disk);
   c) Owner's manual (shrink-wrap pack with 3-ring binder).
2. When contacting your retailer or authorized Generalmusic technical assistance centre, always provide the model name and serial number of your instrument (found on the identification plate).
3. Generalmusic on Internet:
   http://www.generalmusic.com

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SOME USEFUL INFORMATION BEFORE STARTING

The rechargeable battery

The **SK760/880** conserves the data in RAM after turning off, thanks to a rechargeable battery. The battery is recharged while the instrument is turned on (not just plugged in!).

When the instrument is turned off, if the battery is at maximum charge level, the data in RAM is conserved for about two weeks. The charge of the battery increases by one day for every hour the instrument is left on, until the maximum level is reached. If the battery discharges, leave the instrument on for at least 15 hours to recharge it completely.

To increase the efficiency of the rechargeable battery, repeat the complete recharging operation at least once a month. In most cases, normal use of the **SK760/880** will keep the battery charged.

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► *WARNING- Sounds based on sample RAM (RAM ⌁ -Sounds) are conserved after power down only if the Backed Sample-RAM is installed. If the volatile Sample-RAM is installed, the Sounds and samples will be lost at power down (much like typical computer memory). If desired, these Sounds can be reloaded from disk after powering up the instrument again*
· ·
► *Note: It is possible to load RAM⌁ -Sounds (totally new Sound Waves) only if the Sample-RAM is installed.*
· ·

What remains in memory and what is cancelled

Stored after turning off	Not stored after turning off
Programmable Performances	
Modified Style-Performances	
User Styles (User buttons)	
Songs	
Setup (general settings)	
RAM-Sounds (based on samples in ROM)	
RAM⌁ -Sounds (based on samples in *Backed S-RAM*)	RAM⌁ -Sounds (based on samples in *Volatile S-RAM*)
Samples in *Backed S-RAM*	Samples in *Volatile S-RAM*

The status of the following buttons also remain memorized: ARRANGE ON/OFF, ARRANGE MEMORY, LOWER MEMORY, TEMPO LOCK, MIXER LOCK, BASS TO LOWEST and the ARRANGE MODE settings.

RAM RESET

If you want to recall the factory settings, you can reset the backed RAM.

1. Press GENERAL in the EDIT section to enter the "Edit General" menu.
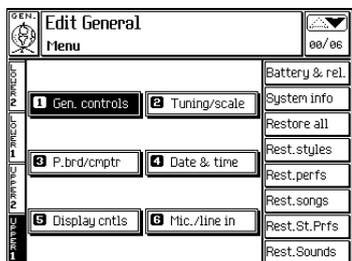
2. Press the soft button F4 to select the "Restore all" command. The following dialogue window is displayed.
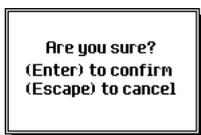
3. Press ENTER to confirm the initialization, or ESCAPE to cancel the procedure. If the procedure is confirmed, the instrument can be played after few seconds.

Battery discharged message

If the instrument has been left turned off for a long period of time, the battery will slowly discharge.

When the battery discharges completely, it causes the total loss of all user programmed data.

If the battery has lost its charge completely, turning the instrument on will show the following message:

The message cancels automatically after 2/3 seconds.

After the message cancels, be sure to save all of your edited work to disk until after the battery has sufficiently charged.

Leave the instrument on for a few hours to recharge the battery. One hour of charge time corresponds to approximately one day of use - the battery charge remains active for approximately 15 days of non-use.

If you foresee leaving the instrument turned off for a long period of time, be sure to save all user-programmed data to disk to safeguard your data against automatic erasure due to battery discharge.

Quick Guide

• 1 Layout & Display

• 2 User Guide

SK760 WORLD KEYBOARD

POWERSTATION

SK880 WORLD KEYBOARD

POWERSTATION

GEM
by GENERALMUSIC

GENERAL SAFETY INSTRUCTIONS

Power source

• Be sure that your local AC mains voltage matches the voltage specified on the name plate before connecting to the mains.

• DC power cannot be used to power this instrument.

• If the instrument is to remain unused for long periods of time, remove the power cord from its wall outlet. For safety purposes, remove the power cord in cases of storms with lightning.

Handling the power cord

• Never touch the power cord or its plug with wet hands.

• Never pull on the cord to remove it from the wall socket, always pull the plug.

• Never forcibly bend the power cord.

• If the power cord is scarred, cut or broken, or has a bad contact, it will be a potential fire hazard or source of serious electric shock. NEVER use a damaged power cord; have it replaced by a qualified technician.

If water (or other liquid) gets into the instrument

• Do not allow liquids to penetrate the instrument. Do not place containers of liquids on the instrument. If water or liquids penetrate the instrument, remove the power cord from the wall socket at once, and contact the store where the unit was purchased.

• As a general precaution, never open the unit and touch or tamper with the internal circuitry.

If the instrument plays in an abnormal way

• Turn off the power immediately, remove the power cord from the mains outlet and contact the store where it was purchased.

• Discontinue using the unit at once. Failure to do so may result in additional damage or other unexpected damage or accident.

Important notes

• Do not place heavy objects on the instrument and avoid leaning on it.

• Before turning on the instrument, be sure to set the volume to a reasonable level (master volume slider at about two thirds of the course).

• Before connecting your instrument to other devices, always remember to turn off the power to all units; this will help to prevent damage or malfunction.

General user maintenance

• Clean the outer surface of your instrument using a soft, clean, slightly damp cloth and polish with a soft, dry cloth.

• Never use industrial cleaners, detergents, abrasive cleansers, waxes, solvents or polishes as they may damage the instrument finish.

• Always turn off the power supply after use and never turn the unit on and off repeatedly in quick succession as this places an undue load on the electronic components.

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User Guide

Chapter 1 • Layout & Display

FRONT LAYOUT

1. Sliders (M.Vol, Mic/Line, Drum, Bass, Acc1/ 3, Acc 4/6, Lower 2, Lower 1, Upper 2, Upper 1, [A, B, C, D, E, F, G, H].

2. Arrange On/Off, Arrange Memory, Lower Memory, Arrange Mode, Tempo Lock, Mixer Lock, Bass to Lowest, Harmony On/Off

3. Effects Bypass, Solo, Single Touch Play, Store Perf.

4. 1/4 VGA Display (backlit), Track Scroll buttons, Page Select buttons, Soft buttons A…H, F1…F8.

5. Contrast, Undo, Help, D. Hold, Key Pad.

6. Sequencer: Record St./Song, <<, >>, Score, Song, Stop, Play, Style/Real Time.

7. Sound Groups.

8. Edit/Number: Effects, Midi, Mixer, Cnt/Pads, Tracks, Sound, St./Song, Synth, General, Demo, Preload, Disk, Hard Disk LED.

9. Disk Drive location.

10. Wheels (Pitch Bend, Modulation).

11. Headphones jacks (2).

12. Keyboard (SK760: E1-A7, SK880: C0-C8) - responds to note messages transmitted to MIDI IN for all notes from C–1 - G9 (notes numbers 0 - 127). Using the Transpose function, the entire range C–1 - G9 can be covered on the keyboard.

13. Alphanumeric configuration - each note corresponds to a letter or number for use in name writing situations.

14. Fade In/Out, Var 1, Var 2, Var 3, Var 4, Fill <, Fill ><, Fill >.

15. Style Groups.

16. Start/Stop, Intro, Key Start, Ending.

17. Style Lock, Performance Groups, Style P.

18. Enter, Escape, Tempo/Data Dial.

19. Directional buttons (cursor arrows).

20. Pad 1, Pad 2, Pad 3, Pad 4.

21. Octave –/+, Transpose b/#.
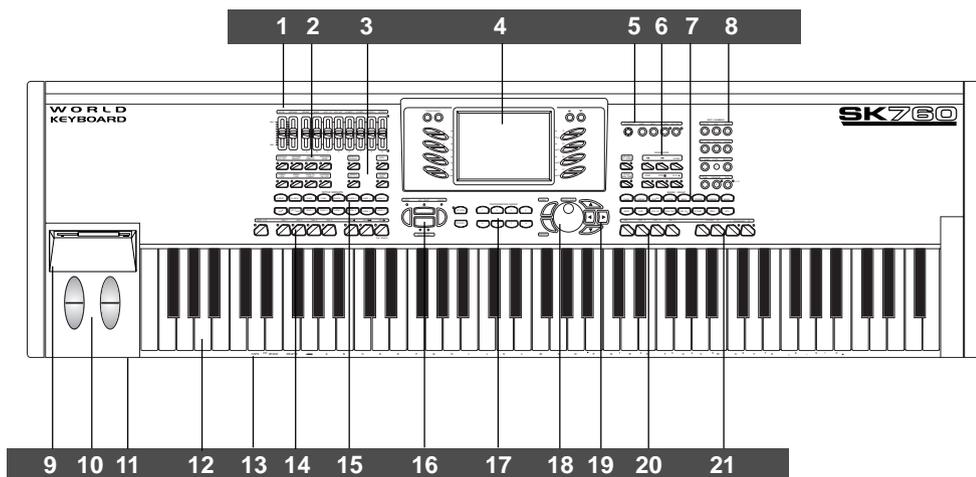
REAR PANEL (CONNECTIONS)

1. **SCSI port** (optional).

2. **Pedals**: Damper, 1, 2, Volume.

3. **Pedalboard port**.

4. **Computer port** (serial connector for direct computer conection (Apple Macintosh or IBM PC and compatibles).

5. **MIDI interface**: (MIDI IN A/B, MIDI THRU A/B, MIDI OUT A/B).

6. **Video RGB, SVHS**: **RGB** (Video output in RGB/Composite Video standard), **SVHS** (Video output in SVHS/Composite Video standard). Both outputs are operational only with the Audio/Video Interface (optional). Models not fitted with the A/V Interface leave the factory with an adhesive applied below these outputs saying "NO VIDEO INTERFACE INSTALLED".

7. **Output**: (Left, Right, 1, 2). For Mono reproduction, use either the RIGHT or LEFT jack. The auxiliary outputs emit "dry" sounds (i.e. with no effects).

8. **Mic/Line In**: 1, 2, Gain 2/1 (audio inputs for Microphone or Line signals and twin gain control for the input signals). The optional A/V board is required for most external processing applications (optional for **WK6** standard and Power Station models).

9. **Power On/Off Switch.**

10. **Mains socket**: Insert the supplied power cord into this socket.
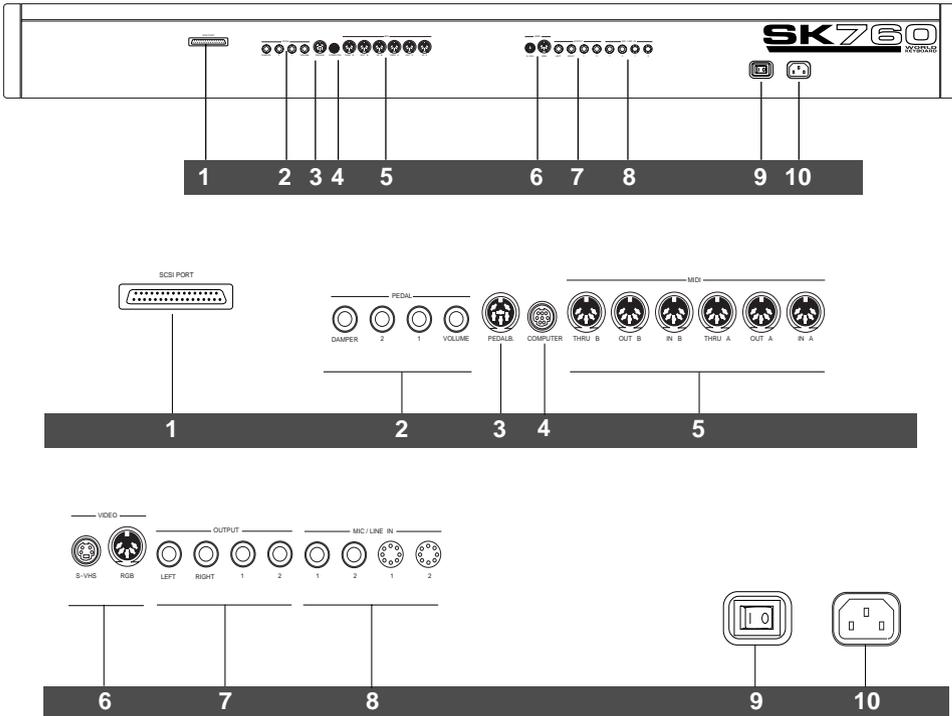
THE DISPLAY

The **SK760/880** display is the principal user interface which communicates the status of the instrument at all times.

TRACK SCROLL BUTTONS

PAGE (MENU) SCROLL BUTTONS

SOFT BUTTONS A … H

NEGATIVE HIGHLIGHT CURSOR
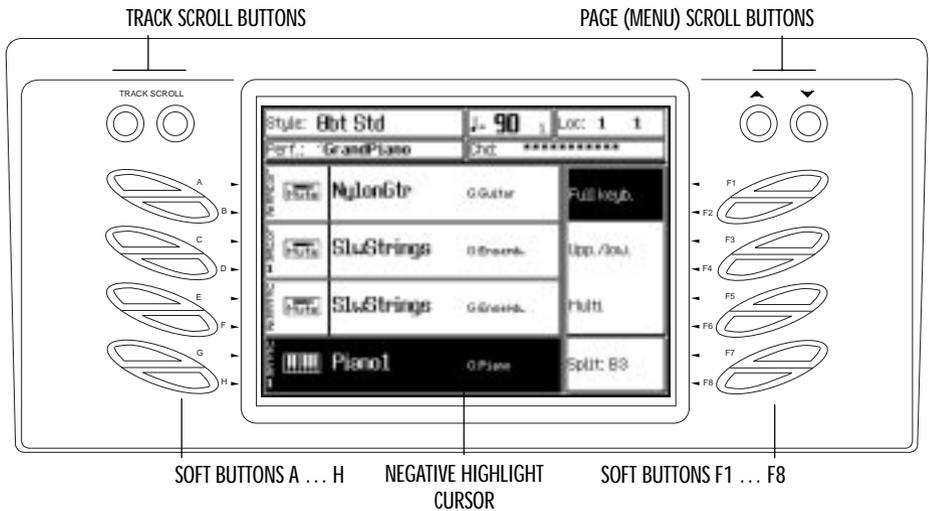
SOFT BUTTONS F1 … F8

NAVIGATION, DATA ENTRY, CONFIRMA-TION/CANCELLATION

The principal navigating controls are the CURSOR ARROWS (directional arrows) and the principal Data entry device is the DIAL. Secondary navigating devices are the SOFT BUTTONS on the left and right of the display, and the TRACK SCROLL and PAGE (MENU) SCROLL buttons above the Soft buttons. A secondary data entry device is the numeric keypad (the EDIT/NUMBER section), which enters absolute numbers when the KEYPAD LED is on.

The display's cursor is a negative highlight zone which can be moved by means of the cursor buttons. The selected parameter can be modified with the DIAL or NUMERIC KEYPAD. Confirmation or cancellation of an operation within the display is with the ENTER or ESCAPE buttons.

ENTER/ESCAPE AND DIAL

CURSOR ARROWS

EDIT/NUMBER SECTION ENABLED FOR NUMERIC ENTRY WHEN THE KEYPAD LED IS ON
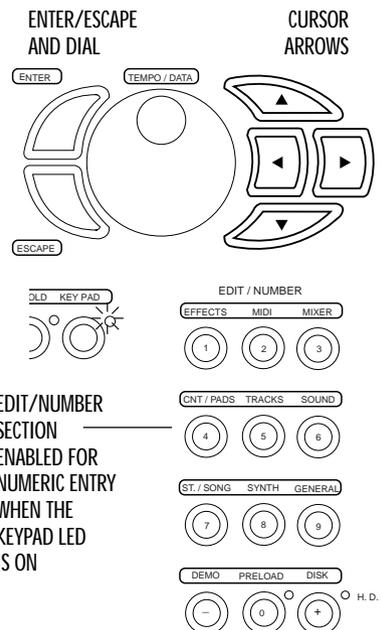
ALPHANUMERIC ENTRY

In name writing situations (Performance name, Song name, etc.), the keyboard activates as a source of alphanumerical data where each note of the central zone of the keyboard corresponds to a letter, symbol or number. Use the ◀/▶ cursor buttons or the DIAL to navigate within the active name writing zone.

ALPHANUMERIC CONFIGURATION IN NAME-WRITING MODE

The following example shows how to modify a Performance name:

1. Press the STORE PERFORMANCE button. An entry zone appears showing the status of the current Performance:
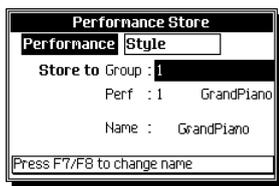
2. Press the Soft buttons F7 or F8 to activate the "Change name..." function. A second entry zone appears where a name can be inserted. The current name appears selected (shown in negative highlight).

3. To completely cancel the selected name, insert the first character. To change one or more characters only, move the flashing cursor with the cursor buttons.

4. Insert the desired characters using the keyboard. Each note corresponds to a character, processing command or number.

   Two options appear below the name ("Caps On/Caps Off" and "Insert/Overwrite") which can be enabled or disabled with notes D2 and D#2 respectively.

   The notes on the extreme left of the keyboard zone provide word processing functions:

   - **D2**: CAPS - Caps On / Caps Off;
   - **D#2**: INS/OVER - toggles between Insert / Overwrite mode;
   - **E2**: SPACE - inserts a space between two entries;
   - **F2**: DELETE - cancels the selected character or the one after;
   - **G2**: <— (BACKSPACE) - cancels the previous character;

5. Move back with the ◀ cursor button and correct wrong characters. In Overwrite mode, the inserted characters substitute the selected characters (in negative highlight).

6. Press ENTER to confirm and to close the active zone, or press ESCAPE to cancel and close the window.

THE DEFAULT DISPLAY: "SOUND VIEW" PAGE

This type of page shows the Sounds assigned to the tracks. **«Sound View»** is the default viewing mode. A typical Sound View page appears in Style/RealTime mode (other Sound View pages showing slight variations appear in Song mode and Style and Song recording modes).
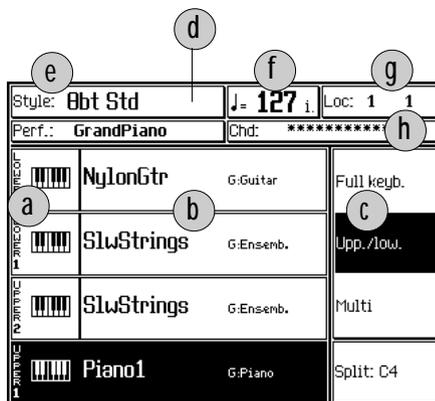
a. **Track status icons**. Select the tracks with the Soft buttons A...H or with the cursor buttons ▲/▼.

b. **Sound names**. The name of the Group to which the Sound belongs appears close to the Sound name, or (in order) the ProgramChange, BankSelect MSB, BankSelect LSB numbers. Tracks which are not assigned to internal sounds show a string of dashes (------) instead of the Sound name.

   If the track has been modified with «Edit Perf Sound», the symbol ▨ appears after the Sound name.

c. **Menu or Function list**. Contains options which can be selected with the Soft buttons F1...F8. In Style/RealTime mode the soft buttons are coupled (F1/F2, F3/F4, F5/F6, F7/F8) and the menu shows the options to select:

   • the track status (Full, Upp/Low, Multi).

   • the Split Point. The keyboard area below the split point corresponds to the chord recognition zone for the automatic accompaniment.

d. **Status bar** showing general information.

e. **Style and Performance name** (Performance or Style-Performance, depending on whether SINGLE TOUCH PLAY is on or off). Song mode: Song and Song-Performance name.
   A Performance that has been modified but not saved with STORE PERFORMANCE is identified by the symbol [']. A ROM Style with a modified Style-Performance is identified by the symbol [*].

f. **Tempo** (varied with the DIAL).

g. **Locator** (measure and beat counter). In Style mode this parameter monitors the Style pattern (riff).

h. **Chord** - the current recognized Chord symbol.

THE DISPLAY'S EDIT STATUS IDENTIFICATION ICONS

Every edit environment has a relative icon:

Edit Effects

Edit MIDI

Edit Mixer

Edit Controllers/Pads

Edit Tracks

Edit Perf Sound/Drumkit

Edit Style/Song

Edit General

Edit Disk / Preload

Edit Sound

TRACKS, PERFORMANCES AND THE TRACK STATUS ICONS

A Track is the smallest part of a Performance and in normal playing conditions, the display shows from 4 to 8 tracks of the current Performance.

A Performance is a configuration of several tracks, so that different Sounds can be combined to play at the same time. The Sound name and its ProgramChange and BankSelect numbers or the relative Group name appears on the main display.

Style-Performances and Programmable Performances have a maximum of 16 tracks (8 tracks for the keyboard and 8 engaged by the sequencer for the arrangements). A Song-Performance can contain up to 32 tracks.

Sometimes, a track is not assigned to a **SK760/880** Sound, but it controls an expander connected to the MIDI OUT. In this case, "MIDI" is shown as well as ProgramChange and BankSelect numbers (MSB-LSB) on the main display when **SK760/880** is set to Multi mode. In Full or Upper/Lower modes only the Sound Bank name appears, the ProgramChange and Bank Select numbers are not shown.

. . . .

Most of the operating modes display the tracks and their status icons are shown on the left part of the display.

The status of a track can be shown in four different ways:

in *key-play* if it can be played on the keyboard;

in *mute* if the track is temporarily deactivated;

in *record* if the track is in a record pending status;

in *seq-play* if the track contains recorded notes.

Each status is identified by an icon which appears in the track status column. You can change the track status by repeatedly pressing the corresponding soft button. For example, in RealTime mode, you can toggle between the "mute" and "play" status by pressing the corresponding soft button repeatedly.

THE TRACK ICONS

«key-play» icon (keyboard play)

The track can be played on the keyboard in Real Time.

«mute» icon

The track is temporarily deactivated, even if it is connected to the keyboard. The track does not receive or transmit MIDI.

«seq-play» icon (sequencer-play)

The track contains notes – i.e. it is engaged by a Song or Style accompaniment track. In either case, this type of track cannot play in real time on the keyboard, unless it is set to key-play. This track cannot receive data at MIDI IN.

«mute» icon (track with note)

The track is temporarily deactivated.

«record» icon

The track is in a recording status.

The MIDI status of the tracks is also be identified by a status icon.

«MIDI-receive/transmit» icon

The track can receive (IN) and transmit (OUT).

«MIDI-receive» icon

The track receives MIDI messages (IN), but does not transmit them (OUT).

«MIDI-transmit» icon

The track does not receive MIDI messages (IN), but transmits them (OUT).

The Track and MIDI status Icons are usually combined together to allow you to control the overall track status, both for playing, muting, recording in real time and in MIDI setups.

DIALOG WINDOWS

Several types of dialog window exist; generally an option requires selection or one or more parameters require modifications and confirmation with ENTER or a soft button. Some examples follow.

```
┌──────────────────┐
│    Rec Mode      │
├──────────────────┤
│ Replace          │
│                  │
│ Overdubb         │
│                  │
│ Punch in         │
└──────────────────┘
```

Select one of the options with the cursor buttons.
Press ENTER to confirm or press ESCAPE to cancel the modifications.
ENTER and ESCAPE close the dialog windows.

```
┌──────────────────┐
│     Option       │
├──────────────────┤
│ Count Down  :On  │
│ Metr.Volume :90  │
└──────────────────┘
```
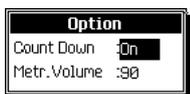
Select the parameter which has to be modified with the cursor.
Modify the value with the DIAL or numeric keypad.
Press ENTER to confirm or press ESCAPE to cancel the modifications.

```
┌────────────────────────┬──────────────┐
│       NEW SONG         │ F1: Record   │
│                        ├──────────────┤
│                        │ F2: Quick rec.│
│ ┌─┐ Create a new song. │              │
│ │?│ Select the recording mode.        │
│ └─┘                    │              │
│                        ├──────────────┤
│                        │ F5: abort    │
└────────────────────────┴──────────────┘
```
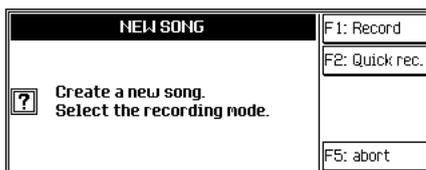
Press the soft button corresponding to the option required.

WARNINGS

These are similar to the dialog windows, but they do not display options to select. They communicate specific messages to the user (wrong operations, information on the current operation, etc.).

```
┌────────────────────────┬──────────────┐
│       WARNING !        │              │
│                        │              │
│ ┌─┐ Battery completely discharged      │
│ │?│ instrument re-initialized          │
│ └─┘                    │              │
│                        │              │
└────────────────────────┴──────────────┘
```
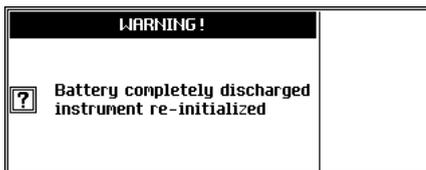
Press F5, ENTER or ESCAPE to close the warning.

Chapter 2 • User Guide

POWER UP

1. Be sure that the power switch on the rear panel is in the "OFF" position.

2. Connect the power cord to the rear panel mains socket and insert the other end of the power cord into a suitable grounded wall outlet.

3. Connect the audio cables

   Connect the stereo audio outputs (Left, Right) to your amp. system (mixer, powered speakers, etc.) using audio cables with standard 1/4" jacks. Use RCA jacks to connect to domestic stereo units. For mono reproduction, connect to either the Left or Right jack.

4. Press the power switch to turn on **SK760/880**.

   After a few seconds the instrument sets to the default situation.

   The power up display shows a single sound (Piano 1) active.

5. Play on the keyboard and you will hear the Piano 1 sound play across the full keyboard.

   If necessary, regulate the display contrast with the DISPLAY CONTRAST panel knob on the right of the display.

   Different viewing angles may require an adjustment of the contrast.

   The display reaches its maximum brightness a few minutes after turning on.
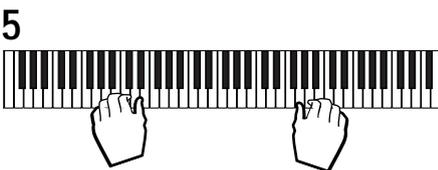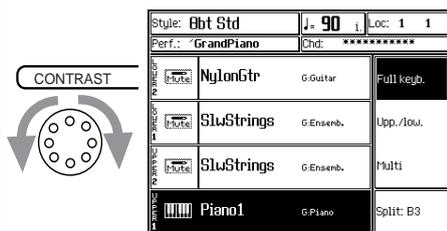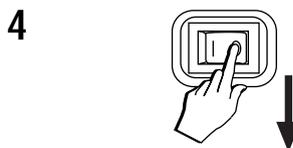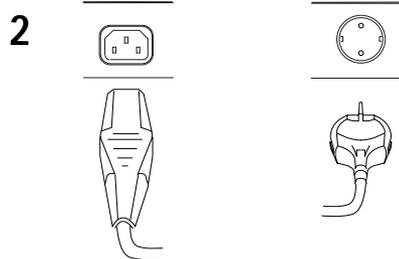
< -------------- Single sound - full keyboard -------------- >

1 • The SK760/880 playing modes

SK760/880 features two distinct playing modes:
- **Style/RealTime** mode and
- **Song** mode.

STYLE/REALTIME MODE

In this mode you can play with **Styles**, or play with the **Performances** and use **SK760/880** as a conventional keyboard.

If the auto-accompaniments are playing, the Style mode is active; if not, Style mode is off and Performance (RealTime) mode is on.

Style and RealTime modes have a **Performance** in common, structured with the same number of tracks (16) and the same Performance editing tasks. A sound is assigned to each track and 8 tracks can be played at the same time in real time; the remaining 8 accompaniment tracks belong to the Style and play automatically when you press Start/Stop and play chords below the split point with the instrument set to Style mode.

Sounds and accompaniments can be recalled by selecting a Style (from the STYLE GROUP buttons) or a Performance (from the PERFORMANCE GROUPS buttons).

SONG MODE

Up to 32 tracks are available in **Song** mode. Via MIDI, **SK760/880** can be also used as a multitimbral (32 part) sound generator for Song recording with an external sequencer.

A Song is sequenced data consisting of one or more tracks (instrumental parts). A Song can be loaded from disk as a **SK760/880** Song or as a Standard MIDI-file.

You can record a Song one track at a time (multitrack recording), or in a single step by exploiting the existing styles (Quick Record). The Quick Record method has the advantage of allowing you to record the melody of a Song while the auto-accompaniments take care of the rest.

Let's takes a brief look at some of the operations that can be carried out in Style/RealTime mode and Song mode.

2 • Play the SK760/880 keyboard sounds (Style/RealTime mode)

Every time you power up, **SK760/880** sets to **Style/RealTime mode** with the GrandPiano Performance selected. This Performance is factory-set to activate the **Piano 1** sound across the full keyboard. This sound is assigned to the **Upper 1 keyboard section** - all other keyboard sections (Upper 2, Lower 1, Lower 2) are off (mute).

FULL KEYBOARD MODE

Play a single sound or two layered sounds across the entire keyboard

1. After turning the instrument on, you can play a single sound (Piano1) straight away.

   The sound, which is assigned to the Upper 1 keyboard section, plays across the entire keyboard range (Full keyboard).

2. Press the soft button(s) E/F TWICE to select and activate the Upper 2 keyboard section.

   Note that the soft buttons in this situation are paired.

   The track (Upper 2) activates for "play" (shown by the small keyboard icon in the track status column).

3. Play on the keyboard.

   You will hear two sounds for each note played. Both sounds are layered across the entire keyboard.

1

< --------------------- Piano 1 (Upper 1) --------------------- >

2
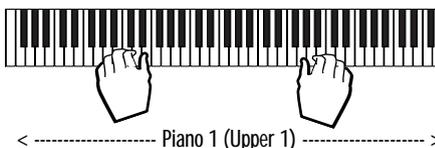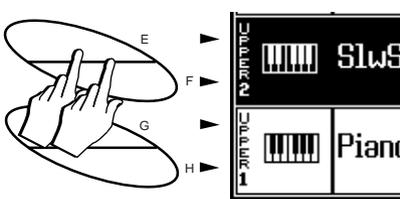
Sounds shown active for play (the keyboard icon)

3

< --------------------- Piano 1 (Upper 1) --------------------- >
< ------------------ Slow Strings (Upper 2) ------------------ >

UPPER/LOWER KEYBOARD MODE

Split the keyboard

4. Press the paired soft buttons F3/F4 on the right of the display to select the UPP/LOW keyboard mode.

5. Play on the keyboard with both hands.

   You will hear no sound on the left part of the keyboard and two on the right. The keyboard will be divided at the note indicated in the bottom right hand corner of the display (Split: F#3).

   In this situation (Upper 1 & 2 active, Lower mute), the Upper 1 & 2 sounds are assigned to the right keyboard extension while the left section is muted.

6. Press the soft button(s) C/D TWICE to select and activate the LOWER 1 keyboard section.

   The track activates for "play" (shown by the small keyboard icon in the track status column).

7. Play on the keyboard with the left hand below note.

   This time, you will hear a sound on the left part of the keyboard.

   In this situation (Upper 1 & 2 & Lower 1 active), three sounds play: two layered sounds across the right keyboard extension and a single sound across the left keyboard extension C2-B3.

   ·
   ► *Note: The Split Point is programmable - more about this later.*
   ·

4

Full keyb.

◄ F1
◄ F2
◄ F3
◄ F4

Upp./low.

5

SPLIT Keyboard
< --- no sound ----- > < ----------- Upper 1 ------------ >
< ----------- Upper 2 ------------ >

CURRENT SPLIT POINT — Split: F#3

6

Style: **8bt Std**   ♩=
Perf.: ´GrandPiano   Ch

A ►
B ►   L O W E R 2   Mute NylonGtr   G:G
C ►
D ►   L O W E R 1   SlwStrings   G:E
E ►
F ►   U P P E R 2   SlwStrings   G:E
G ►
H ►   U P P E R 1   Piano1   G:P

7

SPLIT Keyboard
< - Slow Strings --- > < ----------- Piano 1 ------------ >
< -------- Slow Strings ----------- >
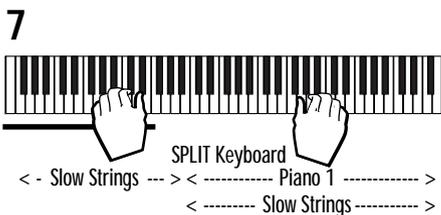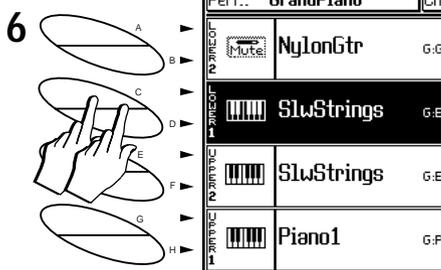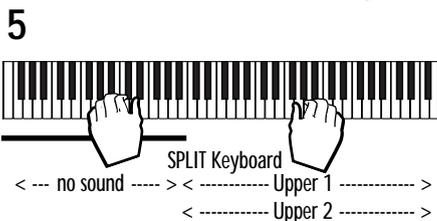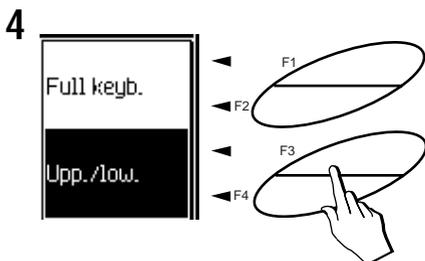
ADD A SECOND SOUND ON THE LEFT HAND

8. Press the soft button(s) A/B TWICE to select and activate the LOWER 2 keyboard section.

   The track activates for "play" (shown by the small keyboard icon in the track status column).

9. Play on the keyboard with both hands.

   Now you can play with two real time sounds on the left hand and two on the right.

SPLIT Keyboard
< - Slow Strings --- > < ----------- Piano 1 ------------ >
< --- Nylon Gtr ----- > < -------- Slow Strings ----------- >

MUTE OR ACTIVATE ONE OR MORE SOUNDS

To mute a sound, or to activate a muted sound, it must be shown **selected** in the display. A selected sound is shown in negative highlight. In this example, if you have followed the steps above, the sound NYLONGTR will be shown in negative highlight.

To mute a sound

10. Press the corresponding soft button(s) A/B ONCE to mute the (selected) sound assigned to the Lower 2 keyboard section.

    The track is muted (shown by the "mute" icon in the track status column).

11. Play on the keyboard.

    You will hear one sound only on the left hand. To mute other sounds not shown selected (positive), press the corresponding paired soft buttons TWICE.

Sounds shown muted (the mute icon)

SPLIT Keyboard
< - Slow Strings --- > < ----------- Piano 1 ------------ >
< -------- Slow Strings ----------- >

12. Press the paired soft buttons C/D TWICE to mute the sound assigned to the Lower 1 keyboard section.

13. Now play on the keyboard with both hands.

    You will return to the situation described at point 4 on page 3 (no sound on the left hand, two sounds on the right).
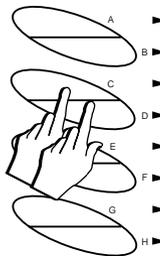
12

| Style: 8bt Std | ♩= |
| Perf.: ´GrandPiano | Ch |

L O W E R 2	[Mute]	NylonGtr	G:G
L O W E R 1	[Mute]	SlwStrings	G:E
U P P E R 2	[IIII]	SlwStrings	G:E
U P P E R 1	[IIII]	Piano1	G:P

13

SPLIT Keyboard
< --- No sound ----- > < ----------- Piano 1 ------------ >
< -------- Slow Strings ---------- >
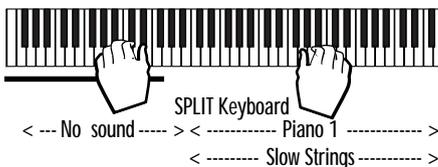
To activate a muted sound

To activate a muted sound, press the corresponding paired soft buttons <u>once if the track is selected</u> (negative) or <u>twice if the track is not selected</u> (positive).

14. Press, for example, the paired soft buttons C/D ONCE (if the muted sound is shown selected), or TWICE if the muted sound is not selected (positive highlight).

    The track (Lower 1) activates for "play" (shown by the small keyboard icon in the track status column).

14
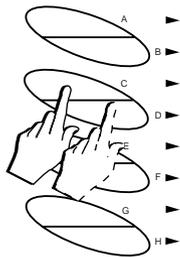
| Style: 8bt Std | ♩= |
| Perf.: ´GrandPiano | Ch |

L O W E R 2	[Mute]	NylonGtr	G:G
L O W E R 1	[IIII]	SlwStrings	G:E
U P P E R 2	[IIII]	SlwStrings	G:E
U P P E R 1	[IIII]	Piano1	G:P

MULTI KEYBOARD MODE

Play up to 8 sounds at the same time

15. Press the paired soft buttons F5/F6 on the right of the display to select the MULTI keyboard mode.

    All references to the Upper and Lower keyboard sections are no longer displayed.

    The Multi situation shows 8 of the 16 **Tracks** of the current Performance. In Multi keyboard mode, you can play up to 8 Sounds in real time. The remaining 8 tracks are associated to the Style auto accompaniment tracks (explained later).

16. Configure the active/mute status of the displayed tracks using the relative soft buttons A … F on the left of the display.

    In Multi mode, the soft buttons on the left <u>are not paired</u>; each button relates to the corresponding track shown in the display.

17. Play on the keyboard with both hands.

    You will hear a single sound, or a combination of sounds on both the left hand and right hand, depending on the active/mute status of each track.

    At this point, you can practice changing the overall sound combination by activating and/ or muting the sounds at will using the methods already described.

Multi (split) Keyboard
< --- Sound(s) ----- > < ----------- Sound(s) ------------- >
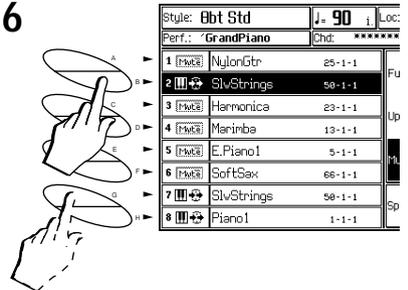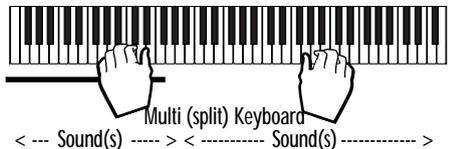
3 • Adjusting the volume

ADJUST THE OVERALL VOLUME OF THE INSTRUMENT

Adjust the general volume of the instrument with the M. VOL. slider.

Note: better results are obtained by adjusting the volume with mixer or amplifier controls rather than lowering the volume of the instrument.

If you are using headphones, a comfortable level is around half way of the slider's travel distance.

ADJUST THE SOUND VOLUMES SEPARATELY (BALANCING)

The volume of each sound (in Full, Upp/Low or Multi setups) can be independently regulated with the corresponding sliders of the group to the left of the display.

The correspondence between the sliders and the tracks is indicated by the two LEDs shown on the right of the group of sliders. The sliders can affect:

A) the tracks identified by the silkscreened markings above the sliders, or

B) the tracks identified by the silkscreened markings A…H below the sliders.

• In *Full Keyboard* or *Upper&Lower* keyboard modes (situation **A**), refer to the markings above the sliders. The sliders (Upper 1 & 2, Lower 1 & 2) control the corresponding tracks.

• In *Multi* mode (situation **B**), or when Style **accompaniment tracks** are shown (see page 22), refer to the markings A…H. Each slider corresponds to one of the displayed tracks: slider A to track 1, slider B to track 2, …. slider H to track 8.
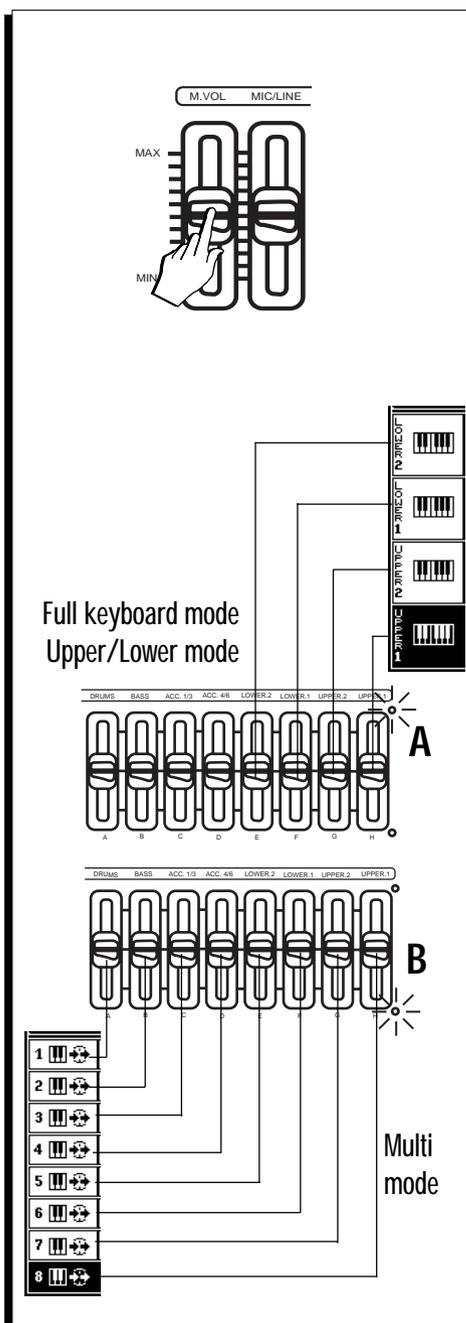
4 • Transposition

TRANSPOSE THE INSTRUMENT UP OR DOWN

If you would like to play a song in a different key, or a song is too high or too low for a singer or another instrument, you can transpose **SK760/880** to play the song in an easier key.

The TRANSPOSE b/# buttons allow real time semitone adjustments (transpositions) of the overall pitch (range ±24 semitones = 2 octaves).

1. Press TRANSPOSE # to raise the pitch.

   An insertion screen shows the current Transpose value (0 = standard pitch).

   Press the Transpose # button as many times as necessary until you reach the desired pitch. The LED turns on to show that the instrument is in a positive transposed status.

2. Press TRANSPOSE *b* to lower the pitch.

   An insertion screen shows the current Transpose value.

   Continue pressing the TRANSPOSE *b* button until the dialog window shows a negative reading. The LED on the *b* button will then turn on. (An eventual positive transpose status will be cancelled).

To clear the keyboard transpose setting

3. Press both TRANSPOSE buttons simultaneously.

   The LED on the active button goes off and the instrument's normal pitch is restored. The display shows the "0" setting for a few seconds then returns to normal.

1

b TRANSPOSE #

D4	D#4
C#4	D4
C4	C#4

M. Transpose

Value = **1**

2

b TRANSPOSE #

C#4	D4
C4	C#4
B3	C4

M. Transpose

Value = **-1**

3

b TRANSPOSE #

M. Transpose

Value = **0**

TRANSPOSING TRACKS BY OCTAVES

Any track, if selected, can be instantly transposed in octave steps, within the range ±5 octaves.

1. Select the track you wish to transpose.

2. Press the OCTAVE + to raise the octave setting.

   An insertion screen shows the current Octave setting.

   Press the OCTAVE + button as many times as necessary until you reach the desired setting. The value is expressed in semitones: 12 = 1 octave, 24 = 2 octaves, etc.. The insertion screen cancels automatically after 2/3 seconds.

3. Press OCTAVE – button to lower the octave setting.

   The current Octave setting is shown.

   Continue pressing the OCTAVE – button as many times as necessary until you reach the desired setting. An eventual positive Octave status will be cancelled.

To clear the Track Octave setting

4. Press both OCTAVE buttons simultaneously.

   The insertion screen shows the value of "0" and the track's normal pitch is restored.
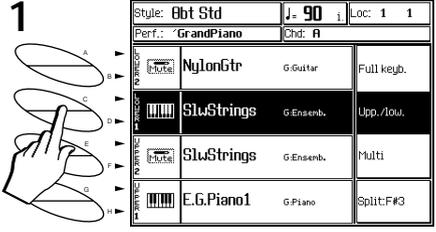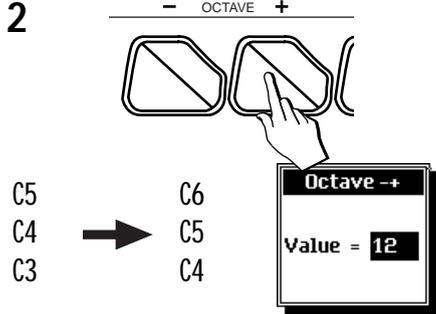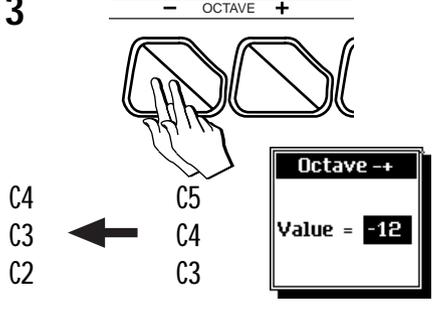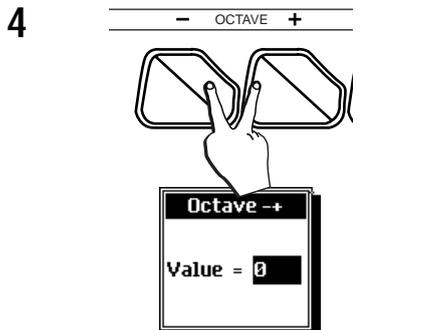
PLAY THE PROGRAMMABLE PADS

The four programmable Pads buttons (Pad 1, Pad 2, Pad 3, Pad 4) provide quick and easy ways of adding extra sounds to your playing. You can program each pad to produce an instrumental sound, a percussive sound or sample. The programmable Pads can also be assigned to the rotary slow/fast switching function.

- Strike the Pads freely.

  While you play, add additional sounds from the pads in real time.

  The configuration of the Programmable Pads can be stored in the Programmable Performances.
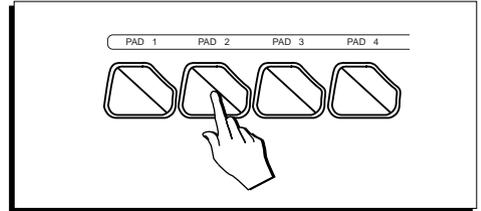
PLAY WITH HEADPHONES

- Plug a set of headphones into the PHONES 1 jack.

  Two headphones jacks are available under the keyboard on the extreme left of the instrument. Each jack can accept a standard pair of stereo headphones.

  Use the **Master Volume** slider to adjust the headphone volume.
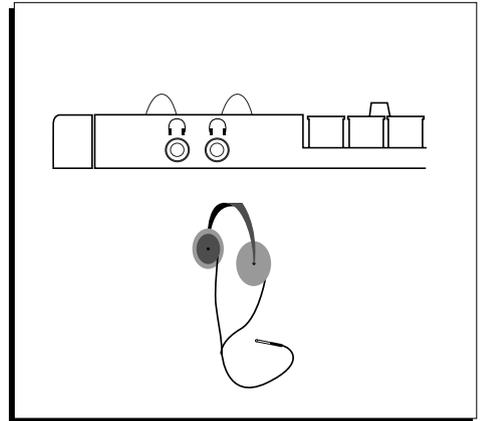
PLAY WITH THE PEDALS

The rear connections panel includes four jacks for control pedals, denoted Volume, 1, 2, Damper. The Volume jack is a non-programmable port for a standard Volume Pedal (optional). The remaining three pedal jacks are programmable and preset to provide Performance functions.

The default configuration of the pedals is as follows:

- Ped1   =   Soft
- Ped2   =   Sostenuto
- Ped3   =   Damper (sustain)
- Volume   =   Volume

The pedal jacks 1, 2 and Damper are function assignable and can be independently enabled or disabled to react with the keyboard tracks of a Performance.

All three pedals (1, 2, Damper) can be programmed to accept Switch action (on/off) or Continuous (graduated levels) control pedals (Volume type).
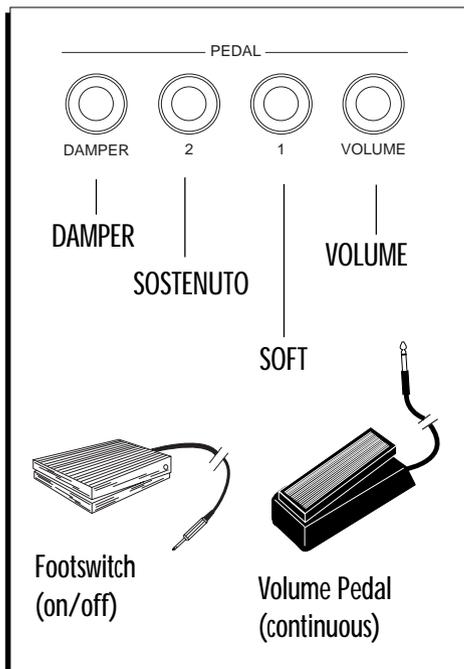
PLAY WITH THE WHEELS

The on-board controlling devices include two wheels on the left key block, both preset for Performance functions.

The default configuration of the wheels is as follows:

- Wheel 1 (left)   =   Pitch Bend
- Wheel 2 (right)   =   Modulation

Wheel 1 is spring loaded to return to the central position.

Wheel 2 is centre-dented in order to be able to take it exactly at the central position.

The Wheels can be enabled or disabled to react with the keyboard tracks of a Performance.

. . . .

2•12   User Guide
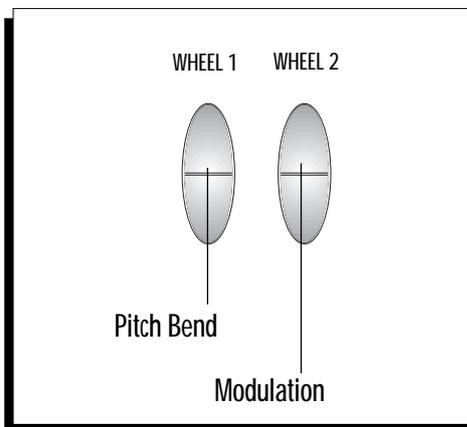
5 • Listen to the Demos (All, Song, Style)

1. Press DEMO (in the Edit/Number section) to open the Demo window.

   The "Select Demo" dialog window appears.

2. Select one of the elements in the list (All, Demo Song, Demo Style) with the cursor buttons ▲/▼.

3. Press ENTER to gain access to the selection window of the element selected in step 2 (Demo Song or Demo Style).

   The corresponding selection window activates showing 8 Song or Style names.

   An animated string of text starts to scroll across the top of the display under the title, shiwing basic technical specifications of the instrument.

   If you select ALL, all the Demo Songs and Demo Styles are chained into a single medley. The sequencer starts to play the first song automatically and stops when it reaches the end of the last Demo Style in memory.

   If you want to cancel the Select Demo display without playing the Demo Songs or Styles, press ESCAPE.

4. To listen to a single Song or Style, select one of the Demos (Song or Style) with the corresponding soft button.

   The selected single demo playback starts and shows up in negative highlight. When the end is reached, the demo stops.

5. Select the «ALL DEMO» option shown in the current selection window to chain all demos displayed (Song or Style).

Playback starts automatically from the first demo. Demos not yet played are shown in negative highlight while those played return positive.

While a demo plays, all the buttons on the control panel (except DEMO, the Function buttons and ESCAPE) are disabled.

6. To stop a demo press the corresponding soft button, or press ESCAPE.

If you press ESCAPE, the SELECT DEMO dialogue window closes and the display returns to the last operating mode selected.

. . . .
▶ **IMPORTANT**: *Remember to escape DEMO mode if you want to select a Performance, Style or Song, or enter one of the Edit modes.*
. . . .

5

DEMO Songs
WK6/8 – 16Mb Waves ROM – Over 1000 Sounds –

RockGuitar	LiveBallad
Acoustic	Orchestra
Synth	JazzPiano
Drawbars	ALL DEMO

F1
F2
F3
F4
F5
F6
F7
F8

6

DEMO   PRELOAD   DISK   ENTER

○   ○ H. D.

0   +

ESCAPE
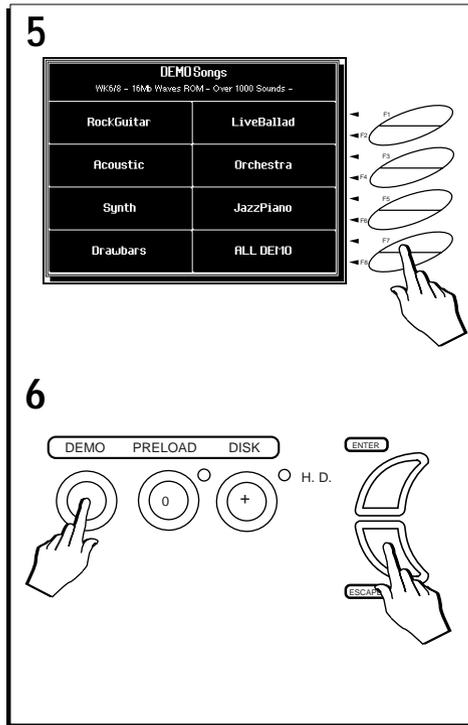
6 • The Performances

ABOUT THE PERFORMANCES

A **Performance** is a combination of sounds that sets the instrument automatically for real time playing (keyboard sounds), for the accompaniments (Styles) and for Songs (multitrack recording) The Performances feature single, layered and multi sounds, split and full keyboard combinations, custom effect settings and more. You can create your own Performances or load new ones from disk.

The **Performance** memorises, in addition to the sounds, the status of the effects, the assignments of the controlling devices (trackball, pedals, pads), the MIDI channel configuration, the track status (active/mute), the mixer settings and Tempo data. Selecting a **Performance** instantly changes all the sounds of the tracks and the relative Performance settings.

Performances are divided into two types: those residing in the **PERFORMANCE GROUPS** which govern the keyboard sounds and those associated to Styles and Songs which are recalled by selecting the respective element. The structure and programming procedures of both Performance types are practically identical. In this section, we'll take a closer look at the **RealTime Performances**.

SK760/880 has 64 user programmable **Performances**, organized into eight different banks.

Select and play the Performances

1. If the instrument is set to Style/RealTime mode, press button **1** in the **PERFORMANCE GROUPS** section.

   The display shows 8 Performances to choose from, each with a different name.

   If the instrument is in a mode other than Style/RealTime, press the STYLE/REALTIME button (only if the LED is not on) then any button in the PERFORMANCE GROUPS. STYLE/REALTIME returns you to the last selected Performance - use this button as a 'return to start' button whenever you wish to have one or more sounds active across the keyboard.

2. Select the Performance called "StGuitar".

   Use the paired Soft buttons F7/F8 nearest to the name.
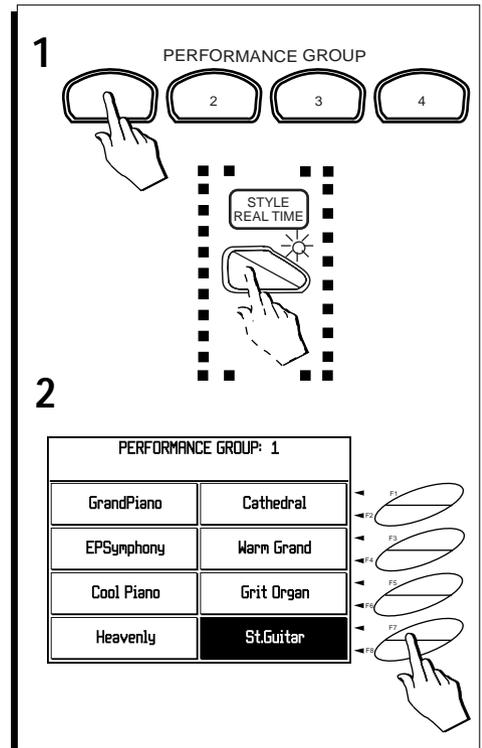
If the STYLE LOCK button is on, selecting Performances selects live keyboard sounds only.

If the STYLE LOCK button is off, selecting a Performance selects live keyboard and also accompaniment Sounds. The relative Style, Variation and Tempo are selected. Sounds are those stored in the Performance.

After selecting your Performance, the display returns to the power up situation showing the sounds recalled by the Performance selected.

. . . .
▶ **Note**: *If you do not select a Performance within the first 2/3 seconds, the display returns to the previous situation with no changes.*
. . . .

3. Play on the keyboard and listen to the selected Performance.

In this case, two sounds are shown active for play across the entire keyboard; SteelGtr1 and SteelGtr2, respectively assigned to the Upper 1 and Upper 2 keyboard sections. **Full Keyb** mode is shown selected.

Repeat steps 1 and 2 to make additional selections.

Change keyboard mode and activate/mute the sounds recalled by the Performances using the methods described on the previous pages to modify the overall sound combination.

To memorise a new situation to the current Performance of to a different one, go to page 2. 39 for an example of how to store a Performance setting.

7 • Selecting the SK760/880 Sounds

The vast number of Sounds in the **SK760/880** memory, arranged in 16 Banks of 8 Sounds each, include orchestral, percussion and contemporary musical instrument sounds.

The **Bank 1 Sounds** are all **GeneralMidi compatible,** while those that occupy the positions of the remaining 15 banks are variations the Bank 1 sounds.

. . . .
► *Note: Not all sound Banks are fully occupied - the "empty" slots are ready to accept user-edited sounds or disk based RAM-sounds.*
. . . .

ABOUT THE SK760/880 SOUNDS

The **SK760/880** Sounds are divided in four different types:

- • ROM-Sounds;
- • RAM-Sounds;
- • RAM ᵔ᷈ -Sounds;
- • Drumkits / SoundPatches.

You can customize any sound to your tastes with the built in sound edit capabilities:

«Edit Perf Sound» is a quick edit method which forms part of the Edit Performance functions. The resulting modifications are stored in the track to which the Sound (or Drumkit) is assigned, consequently, all Sounds subsequently assigned to the same track inherit the same modifications.

In the more advanced «Edit Sound» environment, you intervene on the Sound parameters and the resulting modifications are stored to RAM. This allows you to assign the edited sound (or drumkit) to any track of any Performance. Also incoporated within the same edit is the Sample Translator which allows the loading and editing of Samples.

ROM-Sounds

The ROM-Sounds are a part of the instrument's permanently stored data base. These sounds are permanent and cannot be cancelled. They are based on the internal samples archive (ROM-Waves).

RAM-Sounds

These types of Sounds can be loaded from floppy disk (**SK760/880**, WK, SK, PS/GPS or WX/SX), or created with the advanced «Edit Sound».

RAM ᵔ᷈ -Sounds

These sounds are RAM-Sounds based on RAM samples. The Sample Translator incoporated in «Edit Sound» allows you to load disk-based Samples and edit them with dedicated parameters. These type of Sounds are stored in the Sample-RAM. Disk based RAM ᵔ᷈-sounds can also be loaded into Sample-RAM.

Drumkit / SoundPatch

These are Sound combinations comprising the three sound types described above. Drumkits assign a different percussive Sound to each note of the keyboard. SoundPatches superimpose two Sounds, separated by a dynamic threshold (velocity switch).

The structure of the Drumkit and SoundPatch can be fused, in order to obtain, for example, a Drumkit in which a percussive instrument responds with two different Sounds, each on a different dynamic level.

. . . .

SELECT AND PLAY BANK 1 SOUNDS (GM)

Your selection will be assigned to the currently selected track of the selected Performance. The keyboard extension over which the sound will play will also depend on the current keyboard mode.

To listen to the sound that you select without hearing others, mute the tracks of all the sounds not wanted, or use the SOLO button as described on page 2.21.

1. Press a SOUND GROUPS button.

    In this example, press the PIANO 1 button.

    The display shows 8 Sounds to choose from.

2. Select a Sound by pressing the paired Soft buttons near the Sound name in the display (buttons E/F for Piano3 in this example).

    After selecting the Sound, the display returns to the previous situation showing the selected sound assigned to the selected track.

3. Play on the keyboard and listen to the Sound.

    Repeat step 2 to make additional selections.

< -------------------- Piano 3 (Upper 1) -------------------- >

SELECT AND PLAY SOUND VARIATIONS (BANK 2, 3, ... ETC..)

4. Press a SOUND GROUPS button.

   If you press the same Sound Groups button as in point 1, you can listen to variations of the same sound selected in point 2.

5. Select a different Bank using the Page/Bank buttons (▲▼).

   The ▼ button selects the Banks in increasing numerical order while the ▲ button selects in decreasing order.

   Each Sound Group consists of 16 Sound Banks capable of containing up to 8 Sounds each.

6. Select a Sound from the current Bank with the corresponding paired Soft buttons (buttons E/F for E.G.Piano1 in this example).

7. Play on the keyboard and listen to the Sound.

   Repeat steps 4, 5 and 6 to make additional selections from other Banks and Groups.

< ------------------ E.G. Piano1 (Upper 1) ------------------ >

USING THE KEYPAD TO SELECT A SOUND

The **SK760/880** Sounds are identified by two numbers: the ProgramChange (PC) and the BankSelect MSB number (ControlChange 00 [CC00]). You can select a Sound by specifying the absolute values (PC and CC numbers) on the numeric keypad.

In MIDI setups, a third number corresponding to the BankSelect LSB (CC 32) is sometimes necessary to select a sound of an expander connected to the **SK760/880** MIDI OUT.

> . . . .
> ▶ **Note**: *If you specify the ProgramChange on its own, the bank rests unchanged. For example, if the current Sound is 112-2-1, by specifying ProgramChange 96 or sending PC96 via MIDI, you will select Sound 96-2-1.*
> . . . .

1. Select (if necessary) the track whose sound you wish to reassign.

2. Press the KEY PAD button to enable the numeric keypad.

   An insertion window activates showing the number of Sound currently assigned to the track.

3. Specify the ProgramChange of the required Sound.

   A: In the example, specify «4» then «9».

   B: If the required Sound belongs to a different Bank, key in a dash («–») which acts as a separator then specify the corresponding Bank number (Bank Select MSB). In the example, specify «–» then «2».

   If necessary, add a second separator («–») and the third part of the message (BankSelect LSB).

4. Confirm by pressing KEY PAD or ENTER, or press ESCAPE to cancel the operation.

   The KEY PAD LED turns off.

. . . .
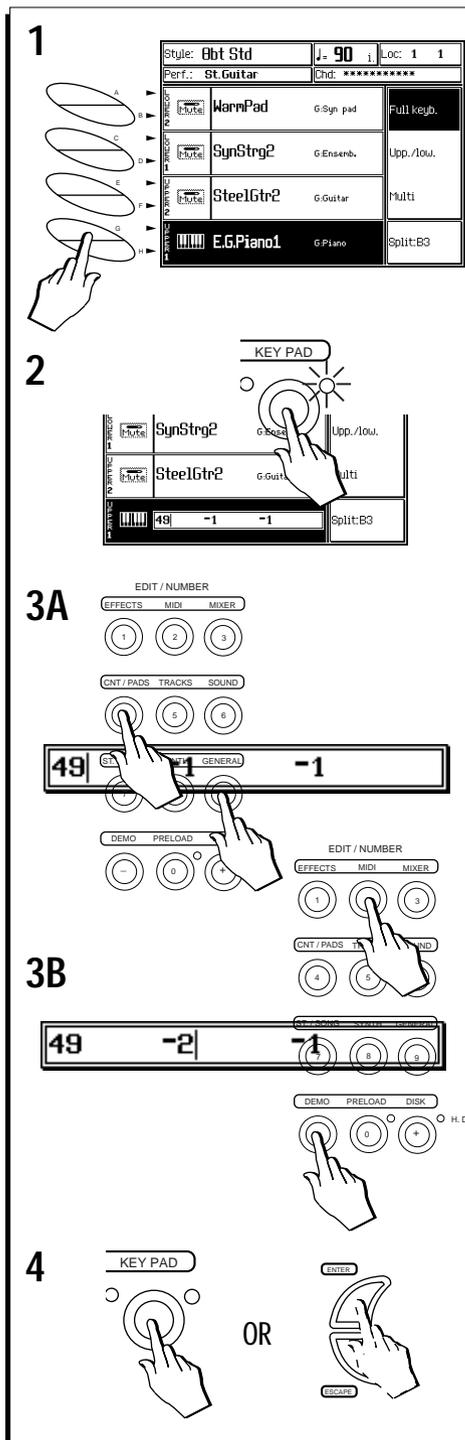
THE SOLO BUTTON - ISOLATE A SINGLE SOUND FROM THE REST

If you are playing in a situation where two or more sounds are displayed, before activating a muted sound you may want to listen to it alone to decide whether to activate it or not. In such a situation, you can isolate the sound from the rest using the SOLO button in the following manner:

1. Press the SOLO button and play on the keyboard.

   The LED of the SOLO button turns on and the sound currently shown highlighted will play while all other sounds are automatically muted (if active).

2. Select any another sound by pressing the corresponding Soft button once only.

   In this example, the sound WarmPad (Lower 2) is automatically activated and the previous one (E.G.Piano1) is automatically muted. Observe that the sound plays across the full keyboard: normally Lower 2 plays on the left split in Upp/Low mode and cannot be activated when Full keyboard mode is selected.

   In Full keyboard mode, therefore, even sounds assigned to the Lower keyboard sections play across the full keyboard when they are "Solo'd". In other words, the SOLO button overrides the current Split point.

   In Upp/Low and Multi mode, a Solo'd sound plays across the currently assigned keyboard extension. In this case, the SOLO button recognises the current Split Point.

   The SOLO button finds its principal use in Multi track situations.

3. Press the SOLO button again to return to normal operation.

   The SOLO LED turns off.

< ------------------- WARMPAD (Lower 2) ------------------- >
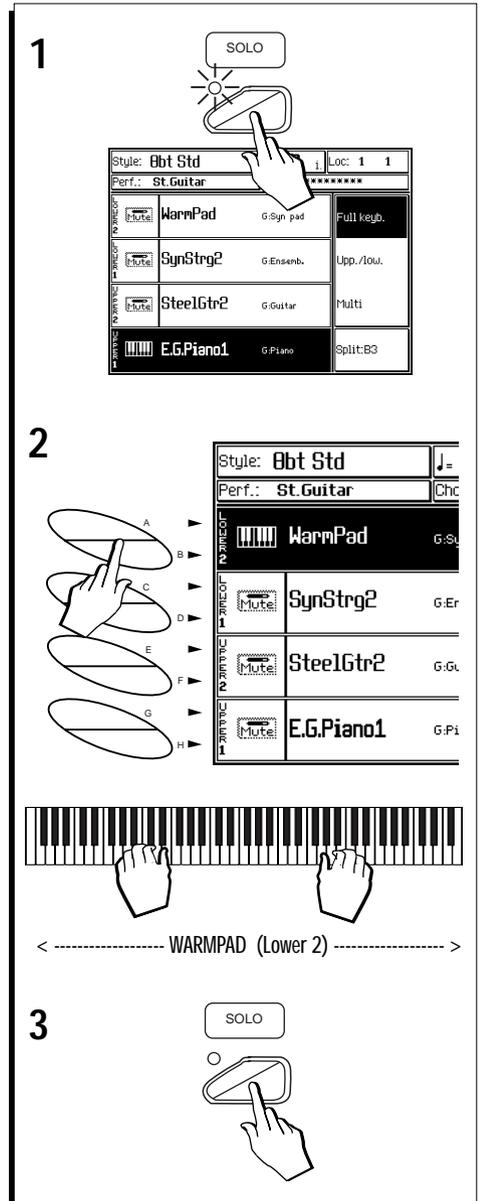
8 • Display Hold

HOLD THE DISPLAY DURING SELECTION PROCEDURES

SK760/880 powers up with the D.HOLD button active. With this function the selection window remains locked after selecting an item. If you disactivate D.HOLD (led off), after selecting an item, the display returns to the previous status automatically.

2. Press a button from the SOUND GROUPS, the PERFORMANCE GROUPS or the STYLE GROUPS section to open the relative selection window.

   In the example, we select a Sound Groups button:

3. Select a Sound from the selection window.

   The selection window remains locked after you select your sound.

4. Select other sounds as required.

   The display remains fixed showing the selection of sounds.

5. Press another Group button to open a different selection window and select another item.

6. Press ESCAPE to close the selection window without cancelling D. HOLD.

   Press **D. HOLD** to cancel the function (LED off).
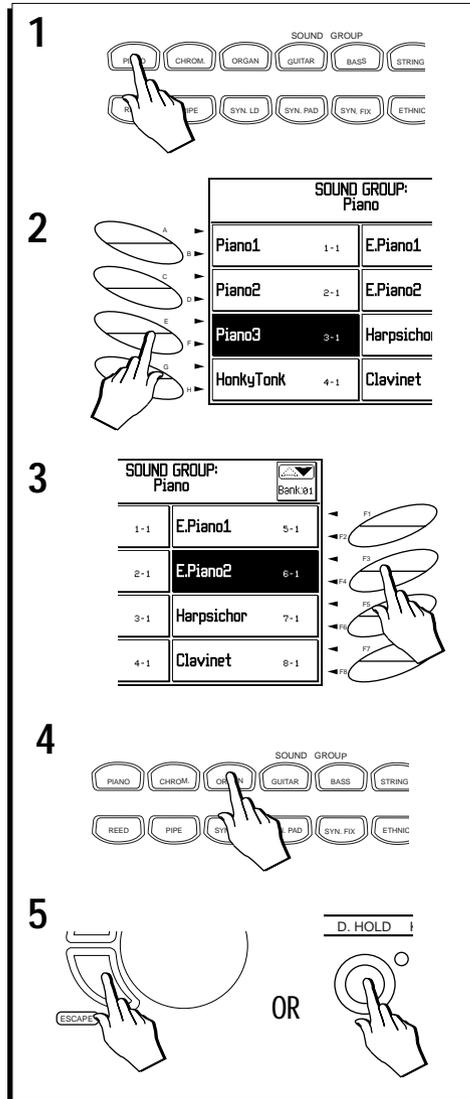
9 • The Styles

Styles are a collection of musical patterns representing many types of music, ranging from rock and pop to traditional, Latin and Oriental music The automatic accompaniments of the Styles are triggered by the chord information received from the **SK760/880** keyboard; the accompaniment patterns change to suit the current chord.

ABOUT THE SK760/880 STYLES

The **SK760/880** has 192 auto accompaniment Styles arranged in 12 Style Groups, each containing 2 banks of 8 Styles each. Your instrument may also contain a set of Flash User Styles. See page 2. 27 for more details. Each Style has 4 Variations, 4 Intros, 4 Fills and 4 Endings. A Style, therefore, provides a complete range of musical structures with which you can create an entire song.

The Styles are rendered more versatile by their Performances, 8 for each Style. In fact, once you select a Style, you can assign up to 8 different Performances to the Style while you play, giving you endless sound combination possibilities.

Each Style consists of 16 tracks: the first 8 are engaged by the sequencer for the auto accompaniments, and the remaining 8 belong to the real time keyboard sections (Upper 1 & 2, Lower 1 & 2 in Upp/Low mode, tracks 1 … 8 in Multimode). The 8 accompaniment tracks are divided as follows: DRUMS (drum sets), BASS, ACC. 1/2/3 and ACC. 4/5/6 (accompaniments 1, 2, 3, 4, 5 and 6).

The accompaniment tracks and the keyboard tracks can be changed in the same manner and saved in the Performance (Style-Performance or Performance).

In Style/RealTime mode, press the right TRACK SCROLL button to bring the 8 automatic accompaniment tracks into view.

TRACK SCROLL

Accompaniment tracks

Sounds assigned to the accompaniment tracks

The arrangement patterns of the ROM Styles are fixed and cannot be modified. It is, however, possible to program your own Style patterns to create up to 32 User-programmable Styles and store them in the 4 USER GROUPS. You can also program User Styles using copies (whole or partial) of the ROM Styles.

Up to 32 disk based user-programmable Styles of your choice can be loaded into the 4 USER Groups available.

Press the left TRACK SCROLL button to restore the Style/RealTime display.

PLAY WITH THE STYLES

1. Press SINGLE TCH. PLAY.

   The ARRANGE ON/OFF and ARRANGE MEMORY buttons will activate if not already on.

   When SINGLE TOUCH PLAY is on, the sounds memorized in the recalled Style Performance are assigned to all the tracks. Selecting a Style changes the sounds of the accompaniment tracks as well as those assigned to the keyboard sections. Also recalled are settings relating to the keyboard mode and chord recognition mode for the current Style.

   If SINGLE TOUCH PLAY is off, selecting Styles changes the sounds of the accompaniment tracks only while those of the keyboard sounds remain unchanged.

2. Press a Style button in the STYLE GROUPS (8 Beat, 16 Beat, Rock, etc.).

   JAZZ in this example.

   8 Style names belonging to the selected Style Group are displayed in Bank 1.

3. Use the Page Scroll buttons (▲▼) to select Bank 2 if Bank 1 does not show the required Style.

   A second bank of 8 Styles belonging to the selected Style Group is displayed.

1

SINGLE TCH. PLAY

ARRANGE ON / OFF   ARRANGE MEMORY   LOWER MEMORY   ARRANGE MODE

2

STYLE GROUP

8. BEAT | 16. BEAT | ROCK | FUNK | DANCE. 1 | DANCE. 2 | US

JAZZ | US. TRAD | TRAD. 1 | TRAD. 2 | LATIN. 1 | LATIN. 2 | US

3

STYLE GROUP: Jazz — Bank:01

Swing	Big Band 2
Mid Swing	Dixieland
Slow Swing	Broadway
Big Band 1	Foxtrot

STYLE GROUP: Jazz — Bank:02

Swing.Band	PEPPYSWING
BourbonStr	BgBANDXmas
EasyGoSwng	XmasFoxtrt
LatinBigBa	XMASshfl

4. Select a Style with the corresponding paired soft buttons.

Buttons A/B for SWING in this example.

The display returns to Style/RealTime mode showing the recalled keyboard sounds. Observe also that the keyboard mode has changed from **Full** to **Upp/Low**.

Press the right Track Scroll button to check the sounds recalled for the accompaniment tracks. Observe that in this example, the tracks Acc4/5/6 are all muted.

Press the left Track Scroll button to return to the keyboard sounds.

. . . .
▶ **Note:** *You can also scroll all 16 Style tracks using the ▼/▲ cursor buttons.*
. . . .

5. Press the INTRO button if you want to preselect the Style introduction, then press the START/STOP button to start the accompaniment.

You'll hear the drum track start to play with an introduction (the length of the Intro will depend on the currently selected Variation). You can also preset the Ending or the Fill >< to play as an Intro.

6. Play a chord of at least three notes below the chord Split Point (note B3) to start Style play.

A fully orchestrated auto accompaniment pattern is triggered.

In default conditions, the keyboard's chord recognition mode is set to "Fingered 1". You can change the chord recognition mode to "One finger", "Fingered 2" or "Free 1 & 2", by entering the ARRANGE MODE options. See the ARRANGE MODE function on page 2.33 of this chapter.

7. Press one of the VAR buttons shown off.

Note how the accompaniment pattern changes to a different Variation.

The VAR buttons control the Style Variations. Each button recalls a different version of the same accompaniment. Each Variation includes different patterns for the Basic, Intro, Fill and Ending sections.

8. Press one of the FILL buttons.

FILL< plays the fill cycle then breaks into the previous Variation.

FILL>< plays the fill cycle then continues with the current Variation. When the accompaniment is not playing, Fill >< can be preselected to play as an intro.

FILL> plays the fill cycle then breaks into the next Variation (this button also incorporates the Tap Tempo function - see over).

Normally the fill cycle plays once only. If you hold the FILL button pressed, it will repeat the Fill cycle continually until release.

9. Play a different chord.

Note how the accompaniment pattern is transposed.

10. Start to play a melody with the right hand.

The combination of sounds that play and the current keyboard mode will depend on the Style selected.

11. Stop the Style by pressing the Start/Stop button or the Ending button.

Start/Stop stops the Style instantly.

Ending stops the Style with an ending phrase.
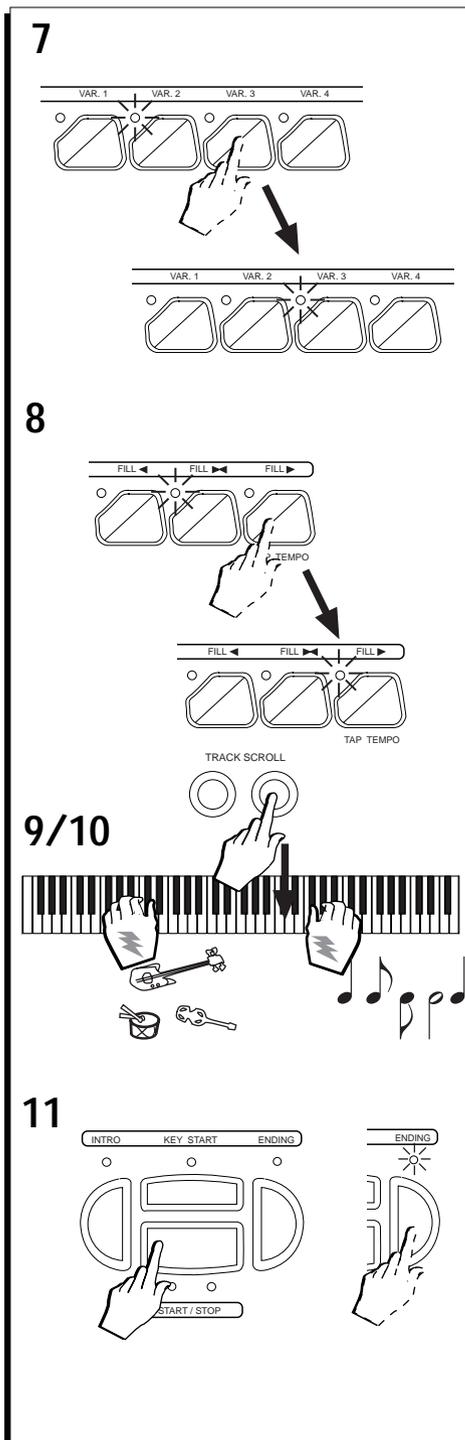
SELECT AND PLAY THE FLASH MEMORY USER STYLES

Your instrument leaves the factory with a set of User Styles stored in the Flash banks of the User Style locations. These memory locations are reserved for factory use and the contents may differ depending on the various world markets. It is not possible to save data (other than Performance data) to the User flash banks, nor is it possible to erase the data contained in them. From time to time, Generalmusic may offer operating systems which contain upgrades of the User flash banks.

Select a Flash User Style

The selection procedure is identical to the one used to select a Style, with the different that you select the Flash User Style from the second bank of the User locations (User 1).

1. Press the User 1 button in the STYLE GROUPS section.

    8 User locations belonging to the selected User Group are displayed in Bank 1 (if User Styles have not been recorded or loaded from disk, all the User locations of Bank 1 will be "empty").

2. Use the Page buttons (▲▼) to select Bank 2.

    The second bank of the User Styles corresponds to the Flash bank which contains 8 Flash User Styles. These Styles may differ from market to market.

3. Select a Flash User Style with the corresponding paired soft buttons.

    Buttons A/B for SpgtiWSTRN in this example. Proceed as already described for the Rom Styles in the previous pages.

N.B. The recalled Flash User Style can be modified and memorised to the same Flash User Bank, or to any other User location. Refer to the Style Performance procedure on the pages which follow for details regarding how to store Performance.

START A STYLE WITH KEY START

The Key Start function synchronizes the start of the automatic accompaniment with a note pressed on the keyboard below the split point without having to use START/STOP. KEY START can be used in various situations. The most common use is as follows:

1. Make sure that ARRANGE MEMORY or LOWER MEMORY are off.

   ▶ *Note: If ARRANGE MEMORY or LOWER MEMORY are off, the accompaniment plays while your notes are pressed on the keyboard and stops instantly when the notes are released. If, instead, one of these two functions are active, the accompaniment or the drum track only will continue playing after releasing the keys.*

2. When the Style is not playing, press KEY START.

   The KEY START LED turns on.

3. Preselect the INTRO (or FILL or ENDING) to start the Style with an Intro, and play a chord (at least 3 notes) with your left hand.

   The accompaniment starts immediately (eventually preceded by the introductory pattern if selected). If you release the keys, the accompaniment stops instantly.

4. Press the Arrange Memory button (LED on) and play another chord with your left hand.

   The accompaniment starts playing again. If you release the keys, this time the arrangement continues to play. The Arrange Memory function memorises the last chord played.

5. Press START/STOP or ENDING to stop the accompaniment.

   With Start/Stop, KEY START remains active.

   With Ending, KEY START turns off.

   If you use Start/Stop to stop the accompaniment, press KEY START to turn it off.
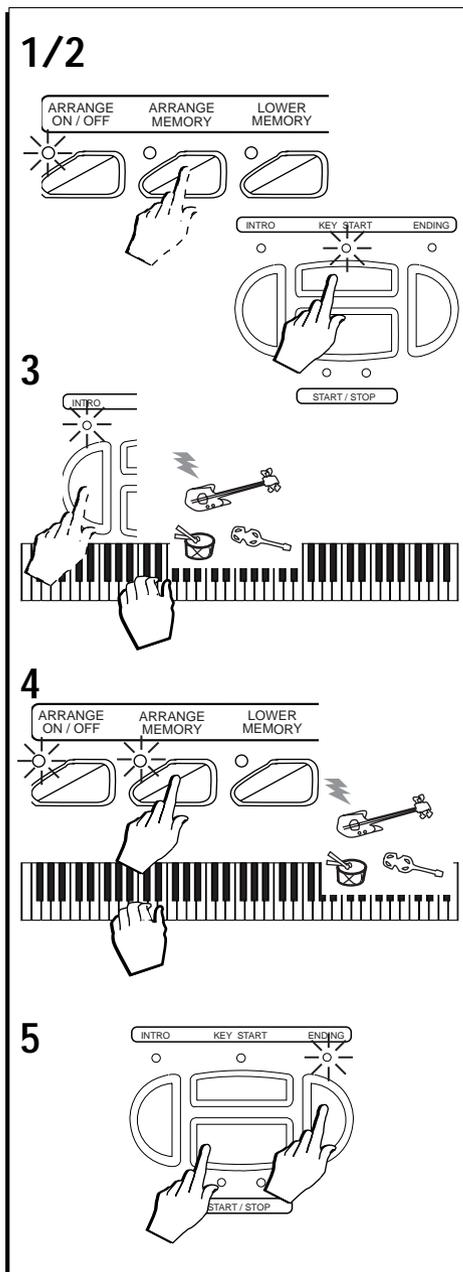
START A STYLE WITH TAP TEMPO

• With the Style accompaniment off, beat time on the TAP TEMPO button.

The tempo is set according to the timing of the last two taps, the relative Tempo value is displayed and the accompaniment starts automatically.

The tempo adjusts itself automatically according to the current Time Signature (4/4, 3/4, etc.).

The beat is tapped out with the sound of drumsticks.
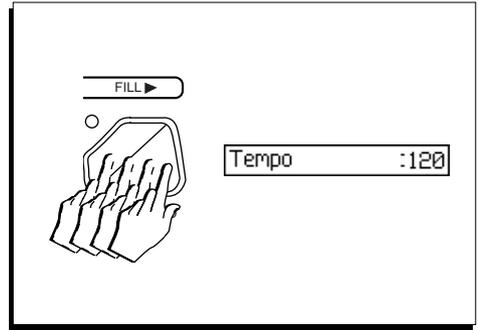
START AND STOP A STYLE WITH FADE IN/OUT

• Press the button before starting the accompaniment with Start/Stop.

The Style track volumes are instantly set to zero. Use either START/STOP or KEY START to start the accompaniment. After the start, the accompaniment track volumes gradually increase and reach their programmed peak after a 2 measure (bar) cycle.

Press FADE IN/OUT while the accompaniment is running; all the track volumes gradually decrease and the accompaniment automatically stops at the end of the Fade Out cycle.

During the Fade cycle, the relative LED flashes.
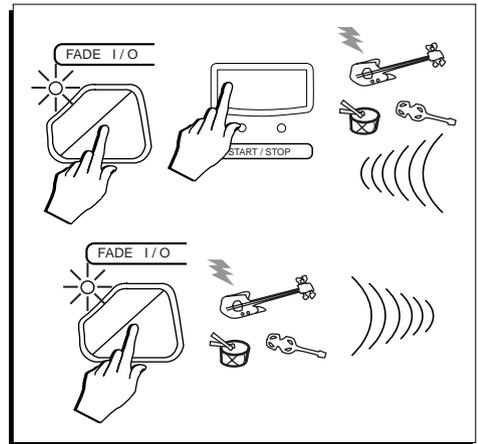
THE FUNCTIONS OF THE STYLES

The Styles are governed by the following 8 functions which determine how the Styles play.
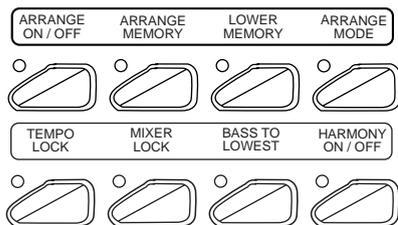
ARRANGE ON/OFF

When this button is on, all the accompaniment parts of a Style are enabled. If it is not on, you will only hear the Drum track when you press Start/Stop to start the Style.

ARRANGE MEMORY

When this button is on, the accompaniment continues to play after releasing the left hand from the keyboard. When off, releasing your left hand causes the accompaniment to stop.

LOWER MEMORY

If this is on, the notes of the track assigned to the left hand (Upper&Lower and Multi modes) are held even if the left hand is taken away from the keys.

The Lower Memory function is useful for holding on 'background' sounds without having to use a Damper pedal (which may be of more use with the upper sounds).

In the Upper&Lower and Multi modes, the function is used to keep the Drum part playing even when you have taken your hand off the keys.

ARRANGE MODE

Pressing this button gains access to the chord recognition modes for the accompaniments. Refer to the "Arrange mode" paragraph on page 2.33 for more information.

. . . .

TEMPO LOCK

If TEMPO LOCK is off, when a Style or a Performance is selected the tempo changes too. If the function is on, the tempo will not change.

MIXER LOCK

A Performance also memorizes the track volumes. If MIXER LOCK is off, when a Style or a Performance is selected the track volumes change too. If it is on, all the volumes of the tracks assigned to the keyboard will change while the accompaniment track volumes will not.

BASS TO LOWEST

If BASS TO LOWEST is on, the bass part of the auto accompaniment of the current Style plays around the lowest note of the current chord. If you play a different inversion of the same chord, the lowest note also changes resulting in a different bass note being played.

If off, the bass will follow the original programmed pattern of the Style.

Bass To Lowest permits real time changes to the otherwise fixed bass pattern of a Style, by playing different chord inversions.

HARMONY ON/OFF

This button enables (LED on) or disables (LED off) the current Harmony Type selected in the HARMONY function of the «Edit Tracks» environment.

Harmony can orchestrate your Style playing, making simple one-note melodies sound as if they are being played by a full orchestra. Harmony is associated to Styles only. Songs cannot exploit this function. For more information on the Harmony types available, see «Edit Tracks» in the Reference Guide.

SELECT A STYLE PERFORMANCE

When Single Touch Play is on, each **SK760/880** Style is associated to 8 Style Performances which you can assign at any time before or during play. The Style Performances are permanent and cannot be destroyed. They are, however, rewritable (keyboard and accompaniment sounds). Their default settings can be restored with the Restore command.

A Style Performance be programmed to change the keyboard sounds as well as the accompaniment sounds, but the accompaniment patterns of the current Style remain unchanged.

Here's how to assign a different Style Performance to the current Style.

1. Press SINGLE TCH. PLAY and press a Style button in the STYLE GROUPS.

2. Select a Style from bank 1 or 2 of the Style Group with the corresponding soft buttons.

   The display returns to Style/RealTime mode showing the recalled keyboard sounds for the Style selected.

3. Press the STYLE P. button to gain access to the Style Performances.

   8 Style Performance names associated to the current Style are displayed.

4. Select a Style Performance with the corresponding paired soft buttons.

   Buttons C/D for E.Guitar in this example.

   If Single Touch Play is off (LED off), selecting a Style Performance activates the button automatically (LED on).

   The display returns to Style/RealTime mode showing the keyboard sounds recalled by the selected Style Performance.

   Repeat steps 3 and 4 for other Style Performance selections. Use D.HOLD to lock the selection display.

SELECT A STYLE WITHOUT CHANGING THE KEYBOARD SOUNDS

If you want to change Style while playing without changing the keyboard sounds, select the Style with Single Touch Play off:

1. While playing with a Style, turn off SINGLE TCH PLAY.

   When SINGLE TOUCH PLAY is off, selecting a Style changes the accompaniment patterns, the sounds and effects of the accompaniment tracks only - the keyboard sounds remain unchanged.

2. Press one of the buttons of the STYLE GROUPS section and select a Style from bank 1 or 2.

   Selecting a Style instantly changes the automatic accompaniment patterns together with the sounds and effects of the automatic accompaniment tracks.

   The sounds and effects of the live keyboard tracks remain unchanged.

3. To check the change in accompaniment sounds, press the right Track Scroll button to view the accompaniment tracks.

   Press the left Track Scroll button to return to the keyboard sounds.

   If TEMPO LOCK and MIXER LOCK are off, the tempo and track volumes also change.

10 • Arrange Mode and the chord recognition modes

The **ARRANGE MODE** button gains access to several options associated to the Styles: the "**Auto**" or "**Fixed**" **Chord** modes, the **Style Chord Recognition** modes, **Dynamic Arrange** and **Autobacking**.

About the Auto and Fixed Chord modes

Chord recognition can be set to remain fixed regardless of the keyboard mode setting, or to change automatically according to the change in the keyboard mode.

- "**Auto Chord Mode**", active by default, allows changes of the chord recognition mode according to the selected keyboard mode (Full Keyboard, Upper&Lower or Multi). Given that the keyboard mode is memorized in a Performance, the chord recognition can change along with the Performance.

- "**Fixed Chord Mode**" allows you to set a chord recognition mode which does change with changes in the keyboard mode (and consequently any Performance changes).

  The option selected remains memorized after power down.

About the Chord Recognition modes

The Chord Recognition modes generate the automatic accompaniments of the Styles in various different ways according to how many notes are pressed and where on the keyboard (above or below the split point). The programmed accompaniment patterns are always fully generated with a fully recognised chord. Major, minor and seventh chords each can generate completely different accompaniment patterns.

The chord recognition modes available are:

- **One finger** - A single note played below the Split Point is interpreted as the root of a major chord.

A minor chord requires the root note and the minor third (e.g. C and Eb). A seventh chord requires the root and seventh (e.g. C with a Bb either above or below C).

- **Fingered 1** - Needs at least three notes for full chord recognition. With less than three notes, the chord is not recognized - the notes played are considered 'stray'.

- **Fingered 2** - At least three notes must be played to obtain the fully programmed pattern. If less than three notes are played, the arranger recognizes the chord but triggers a 'partial' accompaniment.

- **Free 1** - A three note chord is recognized anywhere along the keyboard, overriding the Split Point. Less then three notes does not affect the chord recognition mechanism.

  Free 1 recognizes up to 4 chord notes.

- **Free 2** - As above. Up to 6 notes are recognized.

  The option selected can be stored to the Performances.

About Dynamic Arrange

When Dynamic Arrange is active, the volume of the Style Auto accompaniments can be controlled according to the velocity applied to the chord notes. Increased chord note velocity increases the volume of the accompaniments.

When Off, the accompaniment volumes remain unchanged with changes in chord note velocity.

About Autobacking

When Autobacking is on, a quick change of chord updates the Style auto accompaniment pattern instantly without "breaks" in the pattern.

When off, a change of chord does not update instantly but waits for the next note of the accompaniment before revising the pattern.

. . . .

SELECTING THE ARRANGE MODE OPTIONS

1. Press the ARRANGE MODE button to gain access to the «Arrange Mode» environment.

   The page shows the parameters of either «Auto Chord Mode» or «Fixed Chord Mode», depending on the option currently selected.

2. Use the Soft buttons to select one of the two Chord Mode options.

   • Fixed Chord Mode - the display shows a single list of recognition modes.

   • Auto Chord Mode - the display divides into two parts. The left part shows the options for Upper&Lower and Multi, while the right shows those for Full Keyboard.

3. Select the preferred chord recognition mode with the cursor buttons.

   If the display is divided into two parts, use the ◀▶ cursor buttons to pass from left to right and vice versa.

   Use the ▼/▲ buttons to select the chord recognition options.

4. Exit «Arrange Mode» by pressing either ARRANGE MODE or ESCAPE.

. . . .
▶ *Note: The symbols of the recognized chord appear on the main Style display screen. If the chord is not recognized, the chord symbol is shown as the lowest note played followed by several asterisks. For example: «C***** ».*
. . . .

. . . .
▶ *Note: In order for the chord to be recognized (and the relative symbol to be shown on the display) Arrange On/Off must be on.*
. . . .

. . . .
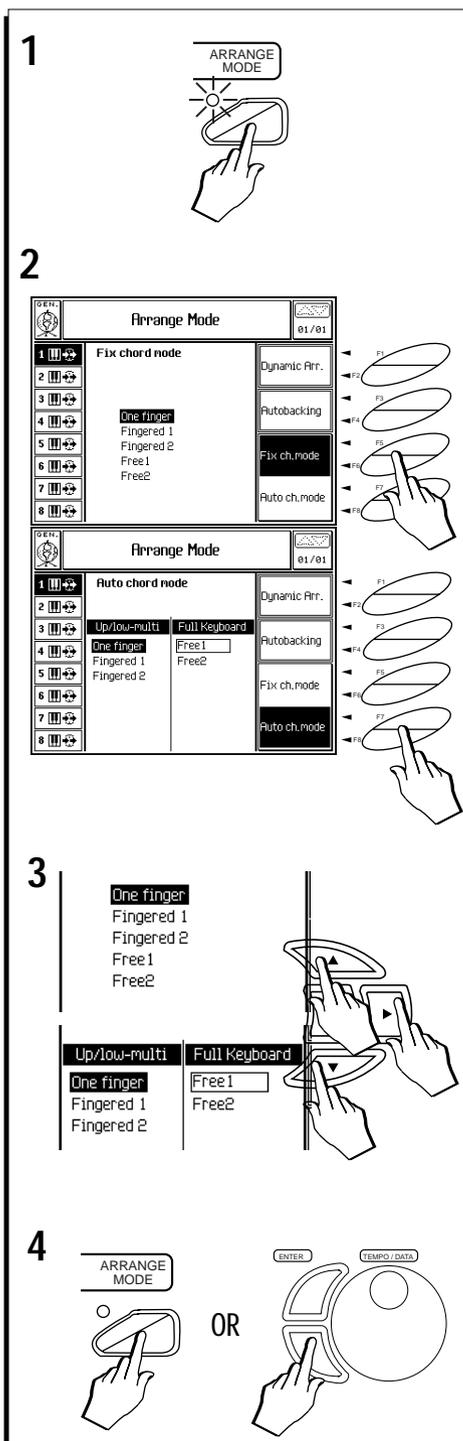
CHANGING THE SPLIT POINT

The Split Point is:

(a) the point that separates the Upper and Lower keyboard sections in the Upper&Lower and Multi keyboard modes and,

(b) the point below which the keyboard recognizes chords which trigger the Style automatic accompaniments (*in Fingered and One Finger chord recognition modes*).

The current Split Point setting appears in the main page as an option that can be selected with the paired soft buttons F7/F8. The setting can be modified as required.

1. With the main Style/RealTime display showing, press Soft buttons F7/F8 to open the «Split Point» dialog window.

2. Rotate the DIAL, or play a note on the keyboard (corresponding to the highest note of the Lower split zone) to modify the setting.

   The new Split Point is shown in the dialog window. If you entered the wrong note, simply play another.

3. Press ENTER to confirm the new Split Point, or ESCAPE to cancel the operation.

   If you press ENTER, the main page will show the new Split Point setting.

   If you press ESCAPE the original Split Point will be restored.

. . . .
▶ *Note: The Split Point is a general parameter (not linked to a particular Performance) which is conserved in memory when the instrument is turned off. The new setting is lost when the "Reset All" operation is carried out or if the backed-RAM loses its data due to the total discharge of the battery.*
. . . .
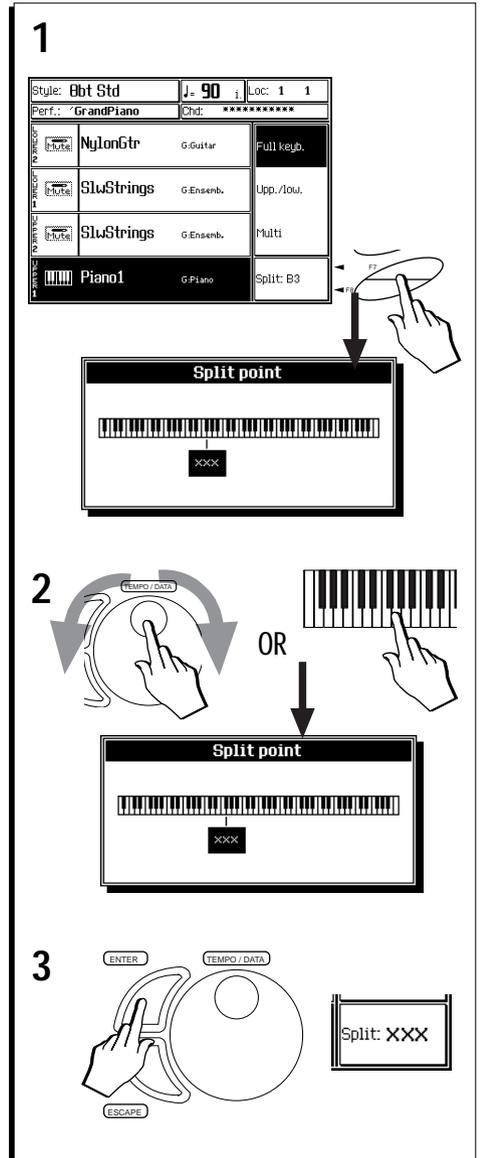
11 • The Digital Signal Processor (DSP)

SK760/880 allows you to route the Performances (RealTime, Style and Song) to the on-board multi-effects processor to enrich the sounds with Reverb and Modulation effects. The DSP consists of four real time controlled units which process the Performances with Reverbs and Delay/Modulation effects: two Reverb channels (A & B) and two Modulation channels (A & B) are available.

In Style/RealTime mode, channel A effects are reserved for the keyboard tracks and channel B for the accompaniment tracks. Each track can be processed by two effects. When a Style is selected with the SINGLE TOUCH PLAY button off, only the effects assigned to the accompaniment tracks will change (Group B). When a Performance is selected with STYLE LOCK on, only the effects assigned to the keyboard will change (Group A).

In Song mode, each track can be independently processed by either A or B channel effects.

Access to the DSPs is via the EFFECTS button in the Edit section. Press the EFFECTS button and (if necessary) press ENTER to access the Effects editor to open the main Edit Effect page showing the Effect Type function currently selected. The status of the parameters on this page depends on the current mode (Style/RealTime or Song).

CHANGE THE EFFECT ASSIGNED TO A PERFORMANCE

1. Press the EFFECTS button in the EDIT section.

   The first time you enter, the Edit Effect Menu appears with the "Effect" editor selected (other editors may or may not be available depending on the configuration of your instrument).

2. With the Effect editor selected, press ENTER or the right PAGE SCROLL button to access the Effect Type page.

   The Effect Type page shows the effects and relative Effect Volume levels assigned to the current Performance.
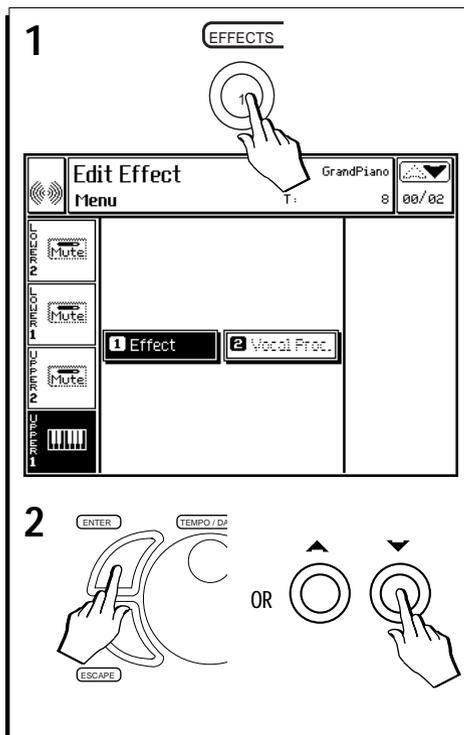
3. Select the effect processor (Eff1 or Eff2) and Group (A or B)

   If the EFFECT TYPE function is not shown selected in the right column, press the Soft button F1 to activate the correct page.

   Use the ▲/▼ cursor buttons to select the processors (Eff1 - Reverbs, or Eff2 - Modulations). The current effect type selected appears in negative highlight.

4. Rotate the DIAL to select a different effect type from the selected processor (Eff1 or Eff 2).

   The DIAL scrolls through the available effects of the selected DSP. The Reverb DSP (Eff1) provides a selection of 24 effects. The Modulation DSP (Eff2) provides a selection of 32 effects.

5. Select the Vol parameter with the ▶ arrow button and regulate the general Volume level of the Effect for the Performance.

   Use the Dial to enter a value for the selected Vol parameter. Repeat the operation for the other Vol parameter is necessary.

6. Select the Effect 2 to Effect 1 parameter with the ▼ cursor button and rotate the Dial to change the quantity of feedback of the Eff2 signal into Eff1.

   The changes heard when you modify this parameter will depend on the current effect types selected in both processors.

   Repeat the operations 3, 4 and 5 for the Group B parameters (accompaniment tracks) if required.

   The changes made remain in memory until a new Performance or the same one is selected, or until the instrument is turned off. To save the changes to the Performance, use the STORE PERFORMANCE command, explained on page 2.39.
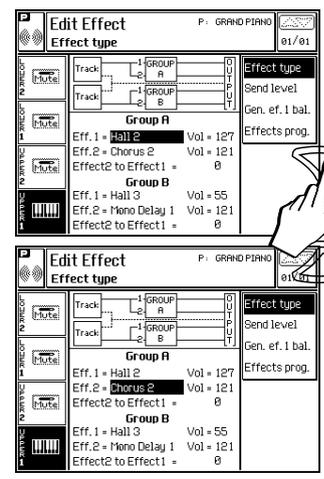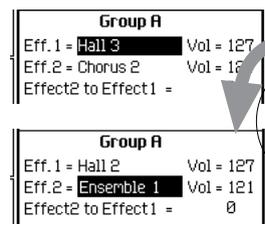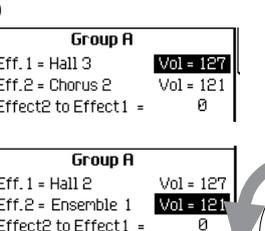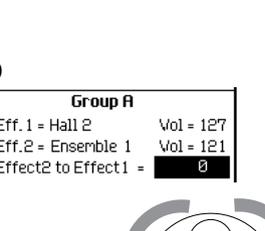
PLAY WITH EFFECTS OR BYPASS THEM

You can temporarily modify the way in which a Performance is processed with the on-board effect processor by changing the On/Off setting of the **Effects Bypass** button.

When the LED is off, the current Performance is processed by the effects; when on, the effects are bypassed.

Bypass

1. To bypass the effects, press the EFFECTS BYPASS button.

   The LED of the button turns on, indicating that the current Performance is no longer processed by the Effects.

To activate the effects

2. Press the active EFFECTS BYPASS button.

   The LED of the button goes off to indicate that the current Performance is processed by the Effects.
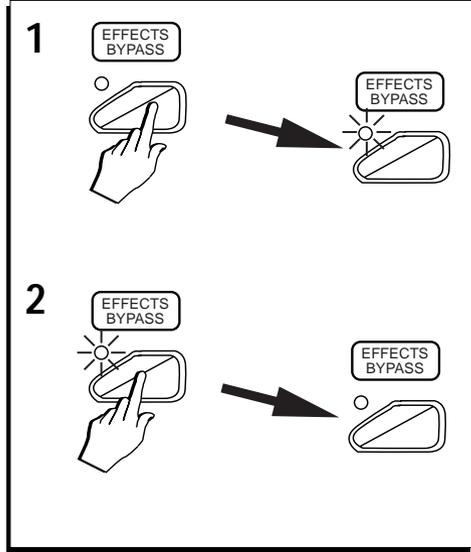
12 • Store Performance

Use the STORE PERFORMANCE command to save any changes you make to a RealTime Perform-
ance, a Style Performance or a Song Performance.

The changes made to a RealTime Performance or Style Performance are interchangeable, that is, you
can save a modified RealTime Performance to a Style Performance and vice versa. A modified Song
Performance can be saved to the Song Performances only. In all cases you can create a completely
new Performance and change its name.

The temporary status of an unsaved Performance is lost if you select a different Performance or the
same one again, or if you select a Style or Song. Changes to a Song Performance are also lost if you
press START/STOP or PLAY.

Saving to the power-up Performance

SK760/880 powers up in Style/RealTime mode with the GrandPiano Performance selected and ready
to play in Full Keyboard mode. This Performance corresponds to the first Performance location of
Group button 1 of the Performance Groups. The factory-programmed status of the power-up Perform-
ance can be modified in order that **SK760/880** powers-up according to a preferred setting.

Whatever modifications you make (sound, keyboard mode, effect, track volume, Style tempo, etc.) and
save to the GrandPiano Performance are retained after power down. You can restore the original
(factory-set) status of the Performance Groups using the Restore Perfs function in «Edit General».

SAVE TO THE CURRENT PERFORMANCE

1. Press STORE PERFORMANCE to open the «Store
   Performance» dialog window.

   The type of Performance proposed by
   SK760/880 depends on the status of the SIN-
   GLE TOUCH PLAY button - if active a Style-
   Performance is suggested, if not a Perform-
   ance is proposed.

   To save changes to the current Performance
   (RealTime or Style), there is no need to make
   any changes to the display situation because
   it represents the current Performance.

2. Press ENTER to confirm the operation, or ESCAPE
   to cancel.

   With ENTER, the new settings are memo-
   rised to the current Performance.

   Each time this Performance is recalled,
   SK760/880 will be configured with precisely
   the same settings as those memorised.
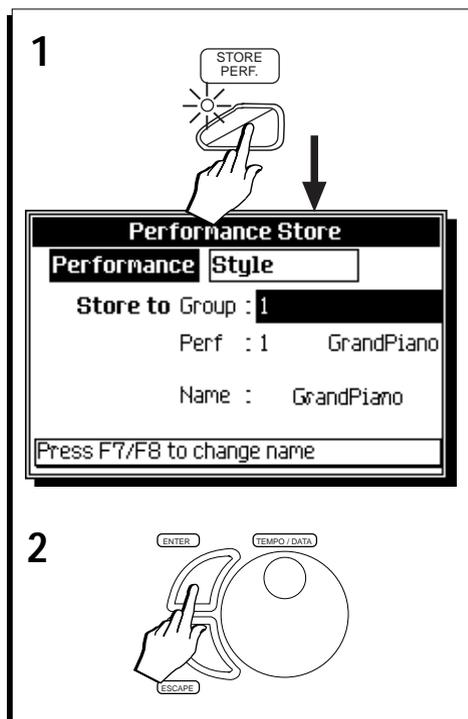
SAVE TO A DIFFERENT PERFORMANCE

Save changes to a different Performance if you want to retain the configuration of the original Performance.

1. Press STORE PERFORMANCE to open the «Performance Store» dialog window.

   If SINGLE TOUCH PLAY is off, the destination suggested is a Performance (situation A), if SINGLE TCH PLAY is active, the destination suggested is a Style-Performance (situation B).

2. Select the type of Performance to save to using the ◄/► cursor arrows.

   These two buttons toggle between the "Performance" and "Style" zones.

3. Select a destination Group.

   Rotate the Dial if you want to select a different Group (Performance or Style) in the "Store to" zone. The Dial scrolls through all the Performance Groups (situation A) or Style Groups (situation B). In each case, the first location (1) of the selected Group is proposed as the destination in the "Perf" zone.

1

A

STORE PERF.

```
      Performance Store
 Performance  Style
    Store to Group : 1
             Perf  : 1    GrandPiano
             Name :      8bt Std
 Press F7/F8 to change name
```

B

```
      Performance Store
 Performance   Style
    Store to Group : 1
             Style : 1    8bt Std
             Perf. : 1    8bt Std
```

2

```
 Performance  Style
```
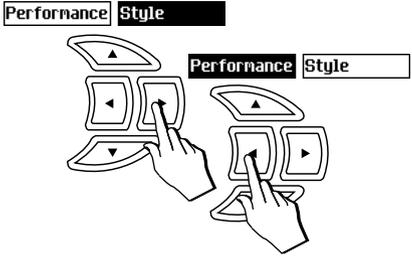
```
          Performance  Style
```

3

A

TEMPO / DATA

```
      Performance Store
 Performance  Style
    Store to Group : 2
             Perf  : 1    OscarClub
             Name :    GrandPiano
 Press F7/F8 to change name
```

B

```
      Performance Store
 Performance   Style
    Store to Group : 2
             Style : 1    16bt Std
             Perf. : 1    16bt Std
```

4. Move down to the next zone with the ▼ cursor arrow and select the destination Performance (1 - 8) with the Dial.

If you are saving to the RealTime Performances (A), the Dial scrolls through the 8 Performance destinations of the selected Group, each identified by a number and name. Empty locations have a number and no name. The destination Performance will take the name of the Performance being saved. To change the name of the RealTime Performance, refer to the procedure explained on page 1.4 of the Layout & Display chapter 1.

If you are saving to the Style Performances (B), the Dial scrolls through the 8 Styles of the selected Style Group or User Group. As you scroll, each Style also shows the currently associated Style Performance in the "Perf" zone.

To select the destination Style Performance, move down to the "Perf" zone and rotate the Dial. A Style Perf. destination shows a name and number, while an empty User Style destination shows a number only.

5. Press ENTER.

If the destination is a RealTime Performance (A), the display returns to the modified version of the original Performance.

If the destination is a Style Performance (B), pressing ENTER opens a dialog window requesting confirmation of the Style Performance name. You can either confirm the same name or change it.

Press ENTER again to confirm the new or old Style Performance name. The display returns to the modified version of the original Performance. The Performance or Style Performance that you saved will be in the destination selected in point 4.

If you don't want to save your modifications, press ESCAPE to cancel the operation.

4A

```
        Performance Store
 Performance  Style
     Store to Group : 2
              Perf  : 4      ToneWheel

              Name :    GrandPiano
 Press F7/F8 to change name
```

4B

```
        Performance Store
 Performance    Style
     Store to Group : 2
              Style : 4       16bt Pop
              Perf. : 1       16bt Pop
```

```
        Performance Store
 Performance    Style
     Store to Group : 2
              Style : 4       16bt Pop
              Perf. : 2      16btPop2
```

5A

5B

```
        Performance Store
 Perform       Style
     St    Performance Name

          16btPop2

                         Overwrite
```
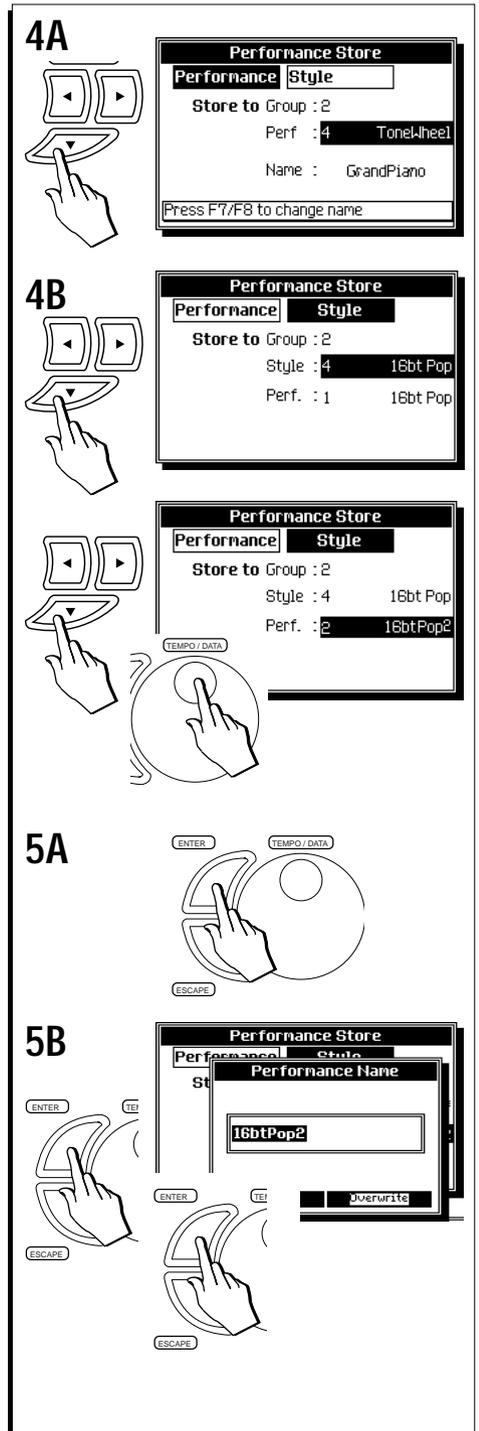
RESTORING THE ORIGINAL PERFORM-ANCE SETTINGS

It is possible to cancel all modifications made to the Performances and restore the factory settings. You can select the type of Performance to restore (Rest.St.Perfs, Rest. Perfs, Rest. styles, Rest. songs) or restore the default settings of all the Performances in a single step (Restore all).

1. Press GENERAL in the EDIT section to gain access to the «Edit General» environment.

2. Press F5 («Restore Perfs») or F7 («Rest. St.Perfs») to cancel the changes made to the Performances or Style-Performances.

   You are prompted with a request to reconfirm your choice.

3. Press ENTER to confirm, or ESCAPE to cancel.

   With ENTER, the changes are cancelled and the original Performance settings (volume, sounds, transposition, tempo, etc.) are restored.

   With ESCAPE, the new settings are retained.

. . . .
► *Hint: To cancel the entire contents of RAM in a single operation, use the «Restore All» command.*
. . . .

. . . .
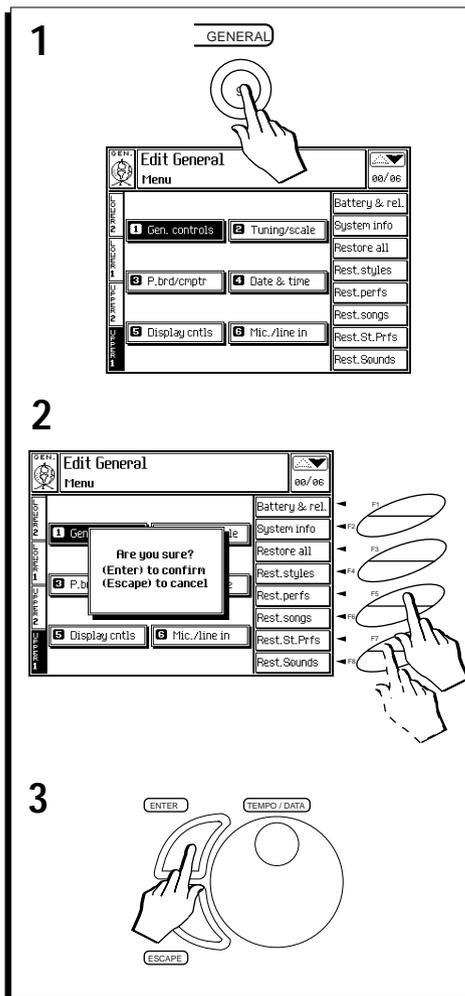
13 • Load and play back the supplied Demo Song

Your **SK760/880** is supplied with two floppy disks, one containing the operating system and one containing a Demo Song, some User Styles and some Samples. In the following pages, you'll learn how to load a Song into the instrument's memory and how to play it back.

Have the Demo Disk ready to load the Demo Song into memory. If you don't have the supplied Demo disk, use any **SK760/880** format song disk, disks of previous formats (such as WK, SK, PS, WX or SX Series), or MIDI file disks.

LOAD THE DEMO SONG

1. Insert the floppy disk into the drive.

2. Press DISK to open the main Load page.

   If the main Load page is not shown, use the left page scroll button (▲▼) to open it.

   If you are working with the Hard Disk, press DISK and select the HARD DISK option with soft button F2. The H.D. LED (next to the Disk button) turns on.

3. Specify the load operation required (example, "Load Single Song").

   Use the navigational arrows (◄/► and ▲/▼ buttons) to navigate within the two columns of the display area and select the required command by combining one element from each column.

   For example, combine "Single" from the left column with "Song" from the right to specify "Load Single Song".

   If you are using a MIDI file disk, specify "Single MIDI File".
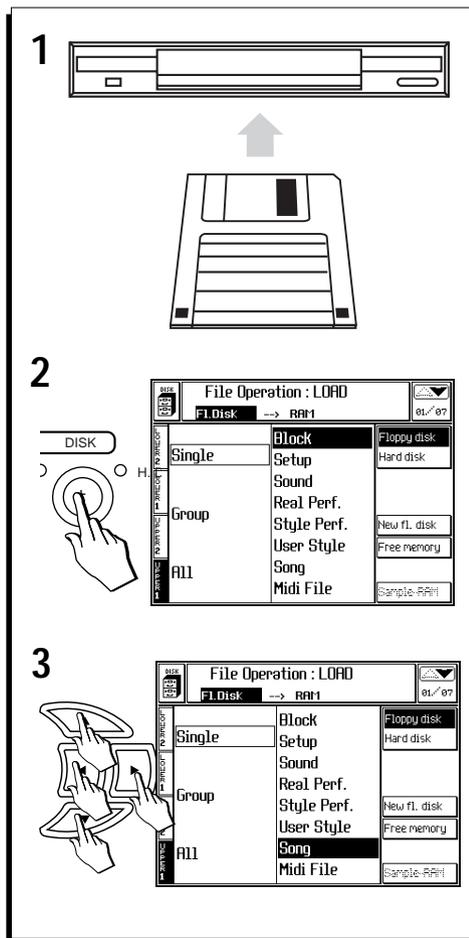
4. Press ENTER to confirm the command and open the File Selector.

The File selector shows one or more Blocks in the disk directory, and the directory of the destination which represents the section of RAM containing the file types currently being handled (in this example the Songs).

5. If necessary, select a Block file and press ENTER to gain access.

Now the display shows a list of Songs contained in the Block file. In this example, one Song only is listed (Children).

6. Select a destination (if necessary) and press ENTER twice to execute the Load Song command.

If necessary, move over to the right column and select an empty destination for the incoming file. In this example, all the destinations are empty and the first one is preselected (shown enclosed by a rectangular frame).

Pressing ENTER the first time prompts a request to confirm the command. Press ENTER a second time to complete the procedure.

After a short period, the Demo Song will be in memory.

7. Press DISK (or ESCAPE three times) to exit DISK mode.

DISK leaves Disk mode directly. If you return to Disk, the page will be the last one selected, in this case, the file selector showing the Song directory.

ESCAPE allows you to *(1)* leave the Block, *(2)* exit the file selector, *(3)* exit Disk mode.

PLAYBACK THE DEMO SONG

Access to the Songs in memory is via the SONG button in the SEQUENCER.

Select and playback the Demo Song

1   Press the SONG button.

The «Select Song» window appears showing a list of song in memory. In this example, the list shows the demo Song (Children) that you loaded in the previous pages.

2   Select the Song (if necessary) with the Soft button.

The selected Song is shown in negative highlight. After selection, you pass automatically to Song mode showing the "play view" window and the Song name on the status bar.

3. Toggle between SOUND VIEW and PLAY VIEW with the corresponding Soft button (F5 or F6).

You can opt to see the Song in «Play View» mode in order to modify the playing parameters, or in «Sound View» mode in order to see the sounds assigned to 8 tracks of the current Song-Performance.

Use the Track Scroll buttons to view the other 8 tracks of the Song.

1

SONG

2

SONG BANKS

CHILDREN	User
User	User
User	User
User	User
User	User
User	User
User	User
User	User

3

Song: CHILDREN   ♩= **137** i   Loc: **1**   **1**
Perf.:   DEMO_Vers   Chord: Off

9	Play	Juke box...
10	Loc : **1** 1 1	Option...
11	Play/Rec. mode :Linear	
12	Start :0	Song P.
13	End :0	Sound view
14	Time Signature :4 /4 Tempo :137	Play view
15	Song Memory :52182 bytes	Erase...
16		Metronome

Song: CHILDREN   ♩= **137** i   Loc: **9**   **4**
Perf.:   DEMO_Vers   Chord: Off

9	WhaGtr1	30-2-1	Juke box...
10	DK_TECHNO	117-3-1	Option...
11	MoonWind	98-2-1	
12	SynRain	98-5-1	
13	Machiner	96-2-1	Sound view
14			Play view
15			Erase...
16			Metronome

Song: CH   7 i   Loc: **9**   **4**
Perf.:   Chord: Off

9		Juke box...
10		Option...
11	MoonWind	98-2-1	
12	SynRain	98-5-1	
13	Machiner	96-2-1	Sound view
14	SlowUuh	53-3-1	Play view
15	Fantasy1	89-4-1	Erase...
16	PianoW2	2-2-1	Metronome

4. Press PLAY in the SEQUENCER to start the playback.

   This button starts the Song playback (or recording).

   During the playback, the LED on the PLAY button is on. The song location pointer (LOC) in the display shows the current position of the Song.

   You can also use the START/STOP button to start the playback.

5. Press << to 'rewind' the Song and >> to advance.

   The **<<** and **>>** buttons rewind or advance one measure (bar) at a time. If you hold these buttons pressed, the Song rewinds or advances at high speed. These buttons are active either in Song play or stop status.

6. Rotate the DIAL to change the Song tempo.

   During playback, the DIAL changes the Song's playing speed (tempo).

7. Press STOP in the SEQUENCER to stop the playback.

   This button stops the Song playback (or recording). You can also use the START/STOP button to stop the Song.

   When the Song has been stopped at a position that differs to the initial Song start position, the LED on the STOP button flashes.

   Pressing PLAY while the STOP button is flashing starts the Song from the current position.

   If you press the START/STOP button again, the Song starts instantly from the beginning.

8. Press STOP again to return to the starting position of the Song, or rewind with the << button.

   When the Song is not playing and at its initial starting position, the LED on the STOP button remains on.

. . . .
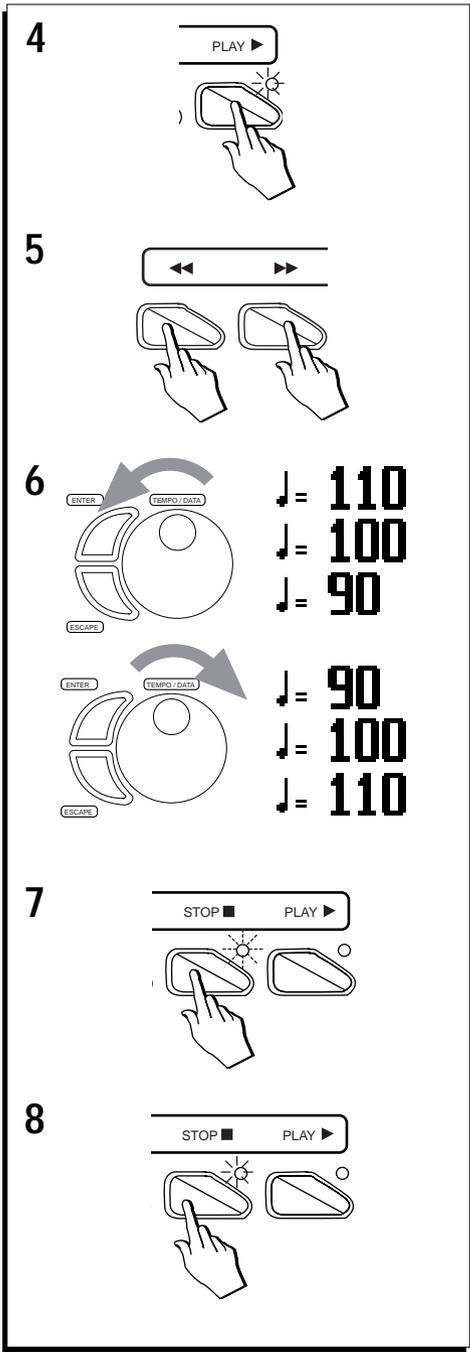
14 • Preload

Use the PRELOAD button to play all the Songs or MidiFiles present a disk.

1. Insert a SK760/880 Songs disk or MidiFile data disk into the drive.

   Check the disk label for the type of data contained in the disk.

2. Press PRELOAD.

   SK760/880 Starts to scan the disk contents ten loads the first Song or MIDI File on disk into the instrument's Songs memory.

   Shortly after, the Song (or MIDI File) starts to play back. During the playback, the second Song on disk is loaded (in background) to the Songs memory.

   N.B. The PRELOAD function exploits the first two locations in Song memory, while all other locations are automatically cancelled if occupied.

   When the first Song or MidiFile ends, a second sequence begins (there will be a short pause while the second song is accessed).

   Playback continues non-stop until all the Songs or MidiFiles on disk have been played.

   When the last Song or MidiFile reaches the end, playback stops automatically.

3. Stop the playback at any time by pressing STOP or START/STOP.

   Playback stops instantly.
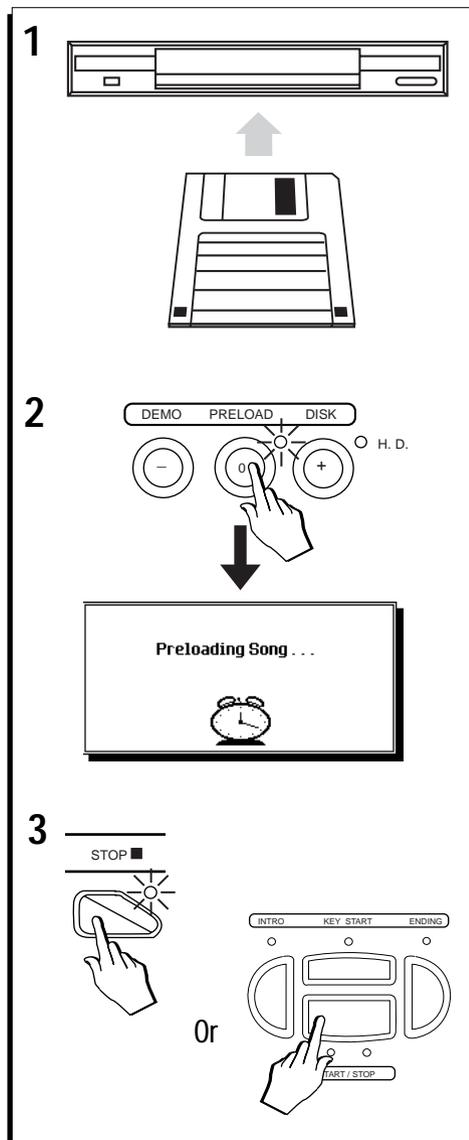
4. Start the playback from the point it was stopped by pressing PLAY.

5. Press the STOP button twice to stop and escape from the PLAY ALL SONGS function.

   To return to Style/RealTime mode, press the STYLE/REALTIME button.

4 PLAY ▶

5 STOP ■

15 • Multimedia
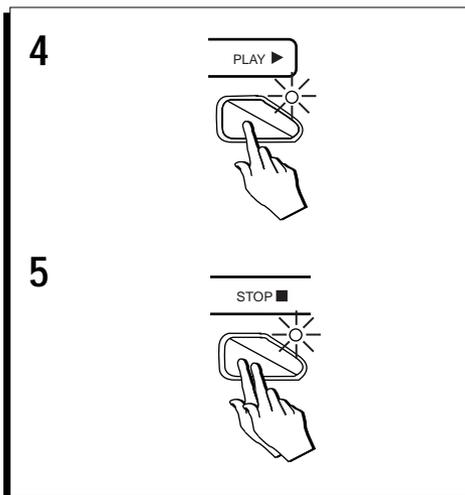
DISPLAY SONG LYRICS

SK760/880 can display Lyrics when playing **SK760/880**, WK, SK & PS Series disks with songs containing Lyrics tracks. There are a wide variety of disks that display lyrics when played.

Automatic loading of Songs at power up

If your **SK760/880** has no Songs with lyrics in memory, it is possible to load a Block of data (including Song data) automatically from disk at power up. If you have one or more Songs disks (1.44 Mb format), insert the disk into the drive of your computer and change the name of the Block file containing Song data to: AUTOLOAD.BLK (use capital letters only). At power up, if the floppy-disk containing the AUTOLOAD.BLK file is inserted in the drive, the Block is loaded in RAM automatically.

> ▶ **WARNING** - *The automatic AUTOLOAD.BLK loading procedure replaces all the data conserved in System RAM.*

1. Press the SONG BUTTON.

    You will see up to sixteen Song choices in the display. (If necessary, load Song data into memory using the Load All Song operation).

2. Select the desired SONG with the corresponding Soft button.

3. Press PLAY to start the SONG playback.

4. Press the SCORE button and the score will appear.

5. Press the F8 soft button to activate the SCORE CONTROLS.
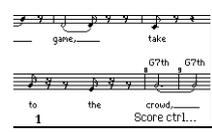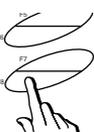
6. Use the DIRECTIONAL ARROWS to highlight the desired viewing choices (All, Lyrics 1, 2, 3, 4, Chord).

Press the ENTER button to view the results.

7. Press ESCAPE or SCORE to return to the main Song Playback page.

TO DISPLAY LYRICS ON AN EXTERNAL MONITOR

Connect one of the video outputs to a domestic TV or to a monitor by means of the dedicated cable supplied with the AV board (optional).

Tune the TV to the AV channel. To select the AV channel, consult the owner's manual of the television set. Computer monitors or televisions normally operate in AV mode.

In Song mode, press SCORE to display the Score. Press F8 («Score controls...») to open the «Score controls» dialog window and move the cursor to the «Echo LCD» parameter.

Set the «Echo LCD» parameter to OFF.

«Echo LCD = OFF»: only the Score or the Lyrics is displayed on the external monitor.

«Echo LCD = ON»: the monitor displays exactly what is shown on the display, including all the controls.

Move the cursor to «View mode» and select a combination of colors for the lyrics and the screen.

Move the cursor to «Video mode» and select the RGB or CV (Composite Video) mode. To view on RGB monitors, set this parameter to RGB. U.S.A. models normally operate in CV and transmit in Composite.

Move the cursor to «Y shift» and regulate the vertical alignment of the image.

Press ENTER to close the dialog window and return to the Score View page.

6

ENTER TEMPO / DATA

ESCAPE

TAKE ME OUT TO THE
BALLGAME, TAKE ME
OUT TO THE CROWD,
BUY ME SOME PEANUTS

Loc: 1 1   Score ctrl...

7

ENTER TEMPO / DATA

ESCAPE   SCORE

OR
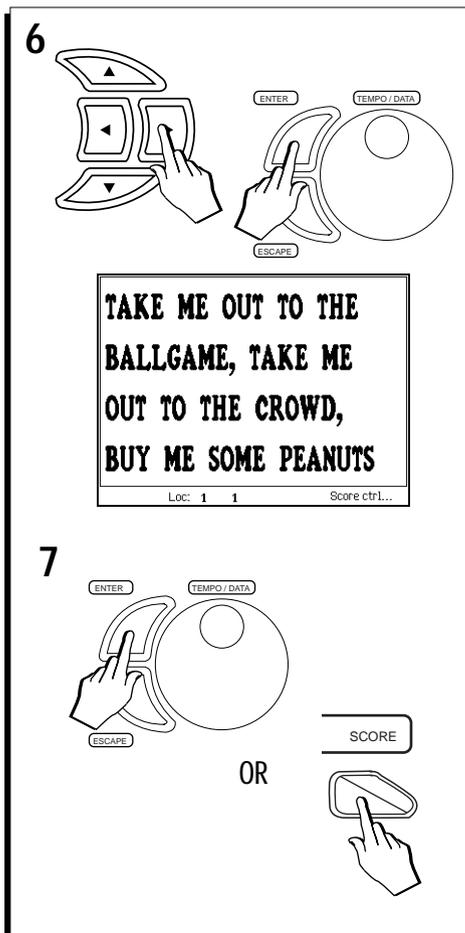
16 • Record a Song (Quick rec.)

SK760/880 allows you to record a simple multi-track Song using the QUICK REC recording method and the existing Styles for automatic accompaniments. In practice, the Quick Rec method can record from 1 to 8 real time tracks accompanied by all the backing tracks of a Style to create a multitrack Song of up to 16 tracks. You can then play along with your recorded Song in playback with one or more tracks not used in the recording.

Quick Rec Recording

1. Press the SONG button.

   The «Song Banks» display shows empty songs as User locations. If not, you can use the Restore All Songs function (in Edit General) to clear all songs in memory.

2. Select an empty location with the corresponding Soft button or Function button.

3. Select QuickRec with the soft button F2.

   The RECORD ST./SONG button turns on (LED on).

   A new Song and Song Performance is created based on the Performance selected at the time of entering Quick Rec mode. The display appears in negative highlight with the selected track in positive.

4. Select a preferred Style to use as the provider of the backings for the Song.

   If you want the Style to govern the Performance sounds, press SINGLE TCH PLAY before selecting the Style (Arrange On/Off and Lower Memory activate automatically if off).

   To maintain the current Performance, select the Style with SINGLE TCH PLAY Off then turn on the accompaniment controls (Arrange On/Off and Lower Memory) if necessary.

5. Select the preferred keyboard mode.

Full allows you to record one or two keyboard sounds across the entire keyboard.

Upp/Low allows you to record up to two keyboard sounds on the left and two on the right on a split keyboard.

Set **Multi** (as in the example) if you want to view all 8 keyboard tracks of the Performance in order to set more than 4 sounds for simultaneous recording.

The tracks already activated for the recording are shown set for "key-play" (with a small keyboard icon together with the MIDI status icon [⊞ ⬦] - see page 1.7 of chapter 1).

6. Activate, if necessary, other tracks to record with.

Press the corresponding soft button repeatedly, first to select, then to activate a track. The track status icon changes from "mute" to "play". In the example, track 2 is activated by pressing soft button B twice.

If you don't want to record with one or more of the currently activated tracks, simply mute them.

You can also change the sounds of one or more tracks of both the keyboard sounds as well as the accompaniment sounds. Use the Track Scroll buttons (or the ▲/▼ buttons) to view the accompaniment tracks.

7. If you have changed something (keyboard mode, sound, track status, etc.), PRESS STORE PERF + ENTER to store the changes to the current Performance.

IMPORTANT: If you don't store the changes, they will be lost when to start the recording.

8. Press either PLAY or START/STOP or KEY START to start the recording and start to play.

PLAY starts the recording for the real time tracks only.

START/STOP starts the recording and engages the Style accompaniment tracks at the same time.

KEY START allows you to start the recording (Style and real time tracks) by playing on the keyboard.

You can also start the recording with an Intro by preselecting the INTRO, FILL or ENDING button before record start. Use START/STOP or KEY START to trigger the Intro.

As the recording proceeds, you can select other Styles, introduce the Fills, change Performances, activate or deactivate other real time tracks, etc..

9. When you have finished, stop the recording either with STOP or START/STOP.

STOP stops the sequencer and the recording of both the accompaniment and keyboard tracks, taking the Song pointer (locator) to the starting position [1 1 1].

START/STOP stops the accompaniment tracks but not the sequencer, allowing you to continue recording the real time tracks without accompaniment. The Song Pointer continues to monitor the recording. To stop the recording completely, press STOP.

The RECORD ST./SONG button LED will now turn off.

When the sequencer stops recording, the display reverts to the Play View situation showing the song's parameters.

The icon of the recorded tracks are shown with note symbols.

To start the playback and to play along with the Song, press PLAY or START/STOP. See over.

Recorded track icon
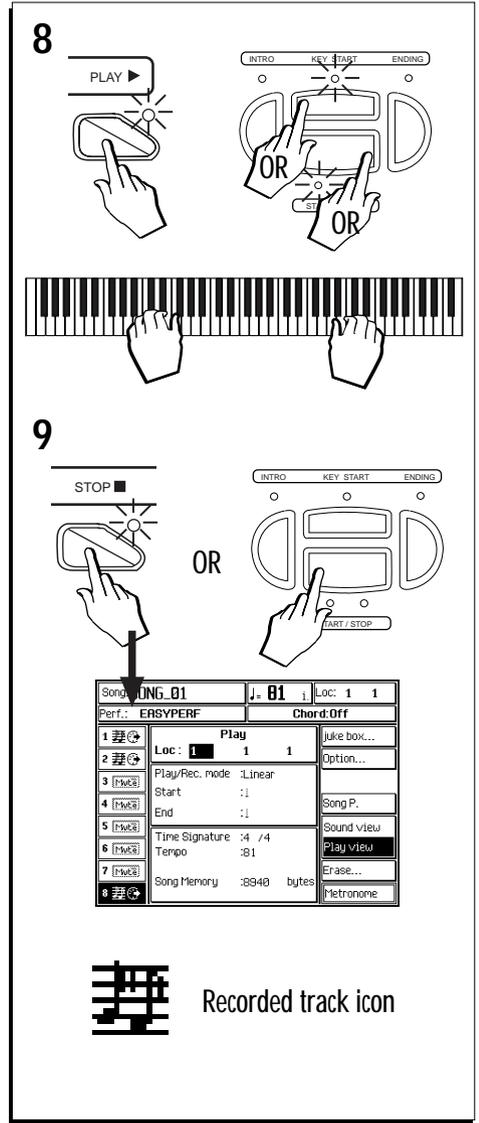
PLAY ALONG WITH YOUR RECORDED SONG

In Song playback mode, you can play along with your recorded Song by activating one or more tracks not used for the recording. It is also possible to disengage a recorded track from the sequencer and use it to play in real time. Naturally, you can also mute the tracks you do not wish to hear.

The operations can be carried out before or after start, but remember, if you start after modifying the track status, the tracks will revert to their previous status underline you store the Performance. In the example below, the changes are carried out during playback.

1. Start the playback of the selected Song with PLAY or START/STOP.

2. During playback, press the soft button of the track you wish to play along with as many times as necessary until it is shown set for "key-play" then start to play.

   If the track contains recorded notes (shown with the "seq.-play" icon 疌):

   • press the relative soft button once to select the track;

   • once again to mute the track and;

   • once again to set it to "key-play".

   The graphic example opposite illustrates how to disengage a recorded track and activate it for real time playing.

   If the track was not used for the recording, it will be shown either as a muted track (Mute) or in "key-play" status (Ⅲ➔). In this case:

   • press the relative soft button repeatedly to toggle from "muted" to "key-play" and vice versa.

3. Press STOP or START/STOP to stop the playback.

PLAY SONGS USING JUKEBOX

The Jukebox function chains the songs of your choice and plays them back as a 'medley' with a single command.

1. With the Song «Play View» page showing, press F1 («Jukebox...») to access the Jukebox display.

   The left part of the display shows the list of Songs in memory. The right part shows the Jukebox list.

   The negative highlight cursor shows which song is selected in the Song list. The frame on the right shows the destination in the Jukebox list.

   Pass from left to right and vice versa with the directional arrows.

2. Select a Song from the left part to include in the Jukebox list and press the INSERT soft button (F5) (or ENTER) to insert the Song in the list.

   The right part of the display shows the name of the Song added to the list and the frame advances one step automatically.

3. Repeat the procedure for other Songs and press INSERT (or ENTER) each time to compile the list.

   If you want to substitute one of the names in the Jukebox list, move the cursor to the right part of the display, select the name to change; move the cursor back to the left part, select the Song to insert and press INSERT or ENTER.

   Take the cursor to the right and select a new location for the next Song. Return to the left part and carry out the selection.

4. Press F8 («Execute») to start the playback of the Jukebox list.

   The Play View page of the Song appears and the status bar shows the indication: «Jukebox active».

   You can interrupt the Jukebox at any time with STOP.
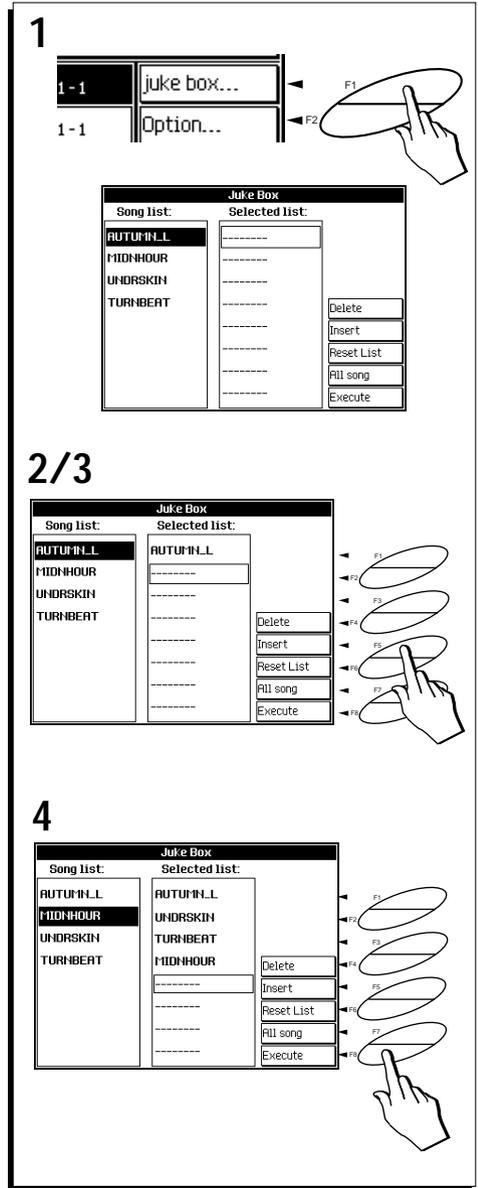
17 • Save your programmed data to disk

The **SK760/880** RAM is backed by a rechargeable battery to safeguard your programmed data when the instrument is turned off. For security reasons, however, it is necessary to store your data to floppy disk (or Hard disk) with the Save command. The RAM should be considered as a work area which can be continually updated, not as a data storage device.

Have a new or used disk ready to save data to. These can be **SK760/880** format disks (or standard MS-DOS disks for the storage of MIDI files). You can also save MIDI Files to **SK760/880** format disks. How to save MIDI files is discussed in the Disk chapter of the Reference Guide.

Check that the floppy disk is not write protected - if so, remove the protection beforehand. If you forget to do this, the instrument will prompt you with an appropriate message when you attempt to save to the disk.

Save operations are characterized by the option of creating of a new Block if necessary.

THE SAVE PROCEDURE

The following example shows how to save the Song that you recorded with the Quick Rec method to Disk.

. . . .
► *WARNING - Do not save data to the original disks supplied with the instrument. As a precautionary measure against data loss, always check that your original disks are write protected. Make back-up copies of the supplied demo disks and store the originals in a safe place.*
. . . .

1. Insert the floppy disk into the drive.

2. Press DISK to open the main Save page.

   If the main Save page is not shown, use the page scroll buttons (▲▼) to open it.

   If you are working with the Hard Disk, press DISK and select the HARD DISK option with soft button F2.

1

2

```
DISK          H.D

┌─────────────────────────────────┐
│ File Operation : SAVE      ▲▼   │
│ RAM1    --> F1.Disk        02/07│
├─────────────────────────────────┤
│          Block      Floppy disk │
│ Single   Setup      Hard disk   │
│          Sound                  │
│          Real Perf.             │
│ Group    Style Perf. New fl. disk│
│          User Style  Free memory│
│          Song                   │
│ All      Midi File  Sample-RAM  │
└─────────────────────────────────┘
```

. . . .
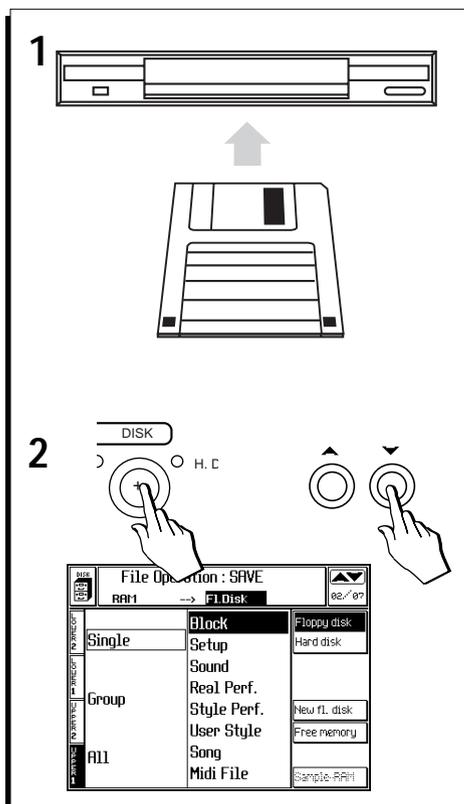
3. Specify the Save operation required (example, "Save Single Song").

Use the navigational arrows (◄/► and ▲/▼ buttons) to navigate within the two columns of the display area and select the required command by combining one element from each column.

For example, combine "Single" from the left column with "Song" from the right to specify "Save Single Song".

If you are using a MIDI file disk, specify "Single MIDI File".

4. Press ENTER to confirm the command and open the File Selector.

The display shows the directory of the songs present in RAM and the floppy disk directory.

In the example, the instrument's RAM directory is shown with 2 songs (with generic names).

If the disk is new (no Blocks present), the directory will be empty. In the illustrated example, a new disk is used.

If the disk is a used one, what appears in the directory will depend on the contents. One or more Block files may be present.

5. If necessary, select the Song to save and its destination on disk.

A selected file is shown in negative highlight. Use the cursor arrows to select a different file. In the example, Song_02 is selected.

An empty destination is shown as a broken line. A preselected destination is shown enclosed by a rectangular frame.

6. Press ENTER.

You'll be prompted to create a new Block. The name "MAIN" is suggested automatically.

Use the keyboard as the source of alphanumeric data to give the block a name.
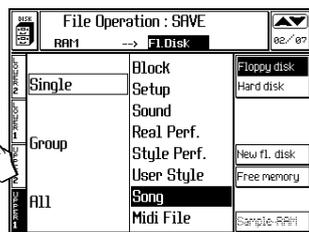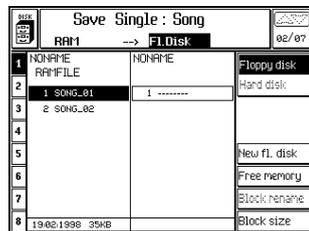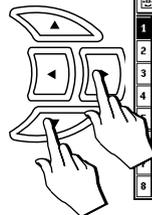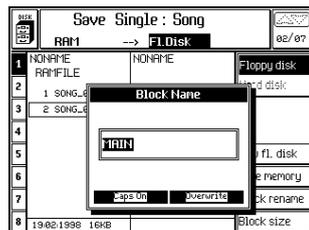
7. Confirm the new Block name with ENTER.

   The floppy disk directory now shows the first 8 empty Song locations (within the new block). Up to 16 locations are available by scrolling with the cursor arrow.

8. If necessary, select a destination and press EN-TER twice to execute the Save Single Song command.

   Pressing ENTER the first prompts a request to confirm the command (Are you sure?). Press ENTER a second time to complete the procedure.

   After a short period, the Song will be saved to disk.

   Remember that if you save to an existing file, it will be overwritten by the incoming one.

   Whenever possible, try to save to an empty location (shown as a broken line) to safeguard existing data on the storage device.

9. Press DISK (or ESCAPE three times) to exit DISK mode.

RESTORING THE SONGS MEMORY

If you have loaded disk-based Songs or recorded Songs and used up all the memory dedicated to the storage of Songs, there is a quick and easy way of clearing memory to make room for other Songs using the Restore Songs operation. Naturally, you must remember to save your Songs to disk before proceeding with the restore procedure.

1. Press GENERAL in the EDIT section to gain access to the «Edit General» environment.

2. Press the «Restore Songs» soft button (F6) to cancel all the Songs (and relative Song-Performances) in RAM.

   You are prompted with a request to reconfirm your choice.

3. Press ENTER to confirm, or ESCAPE to cancel.

   With ENTER, the Songs are cancelled from memory.

   With ESCAPE, the song data are retained.

. . . .
► *Hint: To cancel the entire contents of RAM in a single operation, use the «Restore All» command.*
. . . .

18 • MIDI
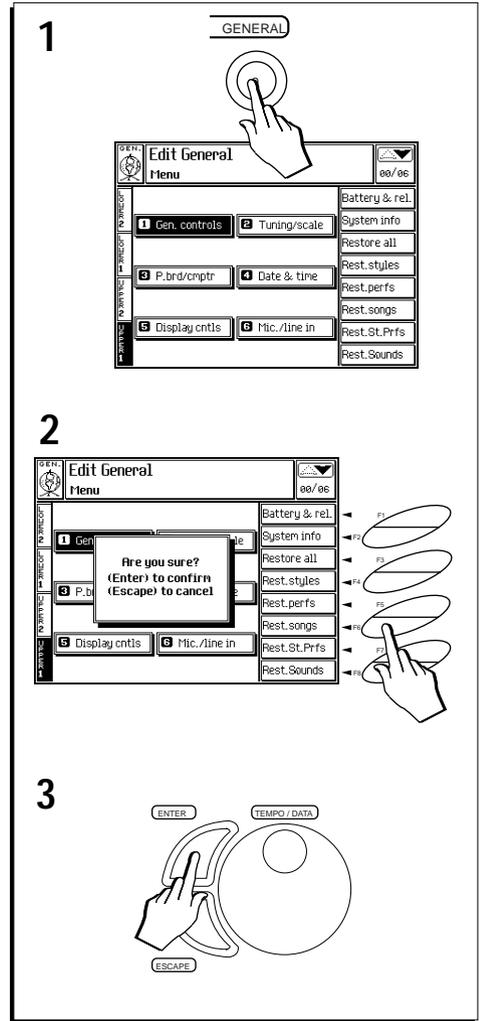
ABOUT MIDI

MIDI (Musical Instruments Digital Interface) is a system of communication between electronic musical instruments and computers. This section explains some of the more important MIDI features of your **SK760/880**. If you wish to delve further into MIDI and all the possibilities offered, you should refer to specialised MIDI literature available in all music outlets.

All MIDI programming tasks referred to are carried out in the MIDI Edit environment (unless otherwise specified), accessed by pressing the MIDI button in the EDIT section. Some examples are discussed here while for the rest, you should refer to the Edit MIDI chapter of the Reference manual.

With MIDI it is possible to:

• control another musical instrument (expander, keyboard, etc.) with **SK760/880**;

• control **SK760/880** with a master keyboard or other controlling device (guitar controller, wind controller, drum pads...);

• connect **SK760/880** to an external sequencer to program Songs and Styles.

MIDI connection rules

• An instrument which controls another instrument is called the ***master***, while an instrument that is controlled by a controlling device is called the ***slave***.

• The MIDI OUT of the master is connected to the MIDI IN of the slave.

• To program Songs on an external sequencer, connect the MIDI OUT of the **SK760/880** to the MIDI IN of the sequencer; the MIDI OUT of the sequencer to the MIDI IN of the **SK760/880**.

• Do not connect the same MIDI port between two instruments.

The MIDI ports

Your **SK760/880** is fitted with a twin set of MIDI ports:

• Two MIDI OUTs (A & B)

• Two MIDI INs (A & B)

• Two MIDI THRUs (A & B).

The MIDI THRU port

The MIDI THRU port permits the connection of several slave instruments in series, as shown in the illustration below (Fig. 1). Slave 1 and Slave 2 are controlled by the single Master. Slave 2 does not receive Slave 1 data, which only acts as a through device.
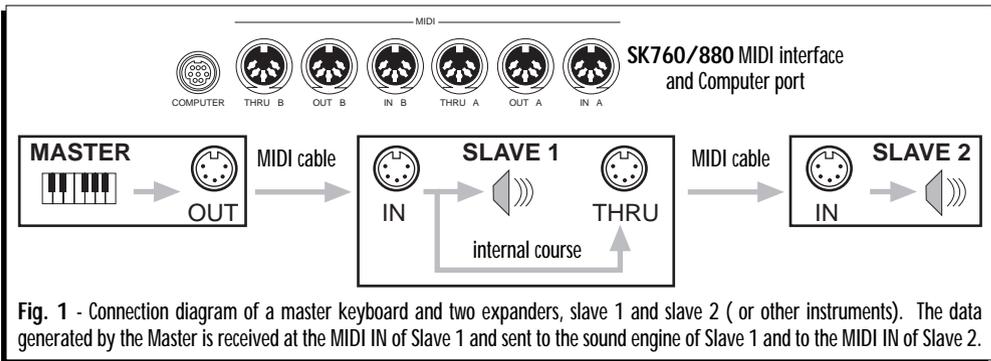
Fig. 1 - Connection diagram of a master keyboard and two expanders, slave 1 and slave 2 (or other instruments). The data generated by the Master is received at the MIDI IN of Slave 1 and sent to the sound engine of Slave 1 and to the MIDI IN of Slave 2.

THE MIDI CHANNELS

The MIDI channel is the principal channel assignable to a track and used to transmit and receive track MIDI messages (note data, bank change/program change, etc.). The **SK760/880** is able to transmit and receive via two groups of MIDI channels: A and B (MIDI A ports and MIDI B ports). Each group can handle 16 MIDI channels. One MIDI channel is freely assignable to each **SK760/880** track from the 32 channels available (A1...A16, B1...B16).

Each track of every Performance can be independently assigned a MIDI receive channel and a MIDI transmit channel. The receive and transmit channels do not necessarily have to be the same.

How to assign the MIDI channels

1. Press the MIDI button in the EDIT section.

   You enter in Edit MIDI with the display showing the current MIDI channel and port (A or B) configuration for the first 8 tracks of the current Performance.

2. Select the track whose channel you wish to change using the corresponding Soft buttons.

   Use the Track Scroll buttons, or the ▲/▼ cursor buttons to bring other tracks into view.

3. Select the parameter to change with the ▶ cursor arrow.

   The first parameter represents the MIDI IN port (A or B), then the IN channel followed by the OUT port (A or B) and OUT channel.

4. Rotate the DIAL to change the setting of the selected parameter.

   Repeat the procedure for other parameters and other tracks.

- MIDI IN port (A or B)
- MIDI OUT channel (1...16)
- MIDI OUT channel (1...16)
- MIDI OUT port (A or B)

THE MIDI CONFIGURATION

Each track of a Performance can be independently configured with regards to how the track handles keyboard data, MIDI IN and MIDI OUT data and the information directed to the internal sound engine. Each parameter (MIDI IN, MIDI OUT, Keyboard and Sound Engine) can be independently enabled/disabled for the track selected.
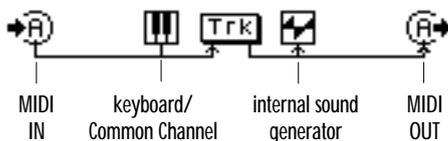
How to configure a track

1. After entering Edit MIDI, press the soft button F2 (or the page button) to open the Configuration page.

   The display shows the current configuration of the first 8 tracks of the current Performance.

2. Select the track whose configuration you wish to change using the corresponding Soft button.

   Use the Track Scroll buttons, or the ▲/▼ cursor buttons to bring other tracks into view.

3. Select the parameter to enable/disable with the ▶ cursor arrow.

   The first parameter represents the assigned MIDI IN port (A or B), then the keyboard followed by the internal sound engine and OUT port.

4. Rotate the DIAL to disable or enable the selected parameter.

   For example, if you set the MIDI IN port to OFF, the track cannot receive MIDI IN data. Or, if you set the keyboard to off, the track is muted but still available for MIDI IN data. Or, if you disable the sound engine, the track cannot play the internal sounds but can play external sounds via MIDI OUT. Finally, if yo set the OUT port to off, the track cannot trasmit data via MIDI OUT. The on/off combinations of the 4 available elements provide endless MIDI configurations.

   Repeat the procedure for other parameters and other tracks.

MIDI IN — keyboard/Common Channel — internal sound generator — MIDI OUT

THE COMPUTER PORT

Your **SK760/880** is fitted with a COMPUTER port which allows two way communications between the instrument and a computer (PC or MAC) without the need of a MIDI interface. A cable to connect the instrument to your computer's (IBM/compatible or Macintosh) serial port can be obtained from your Generalmusic outlet or computer outlet.

The connection via the COMPUTER port allows the control of 16 MIDI channels (group A), while MIDI connections can control 32 (groups A & B).

. . . .
► **Note**: *The COMPUTER port and PEDALBOARD connector cannot be used at the same time. Connecting one excludes the other automatically.*
. . . .

Figure 2 shown below illustrates a simple connection possibility between the **SK760/880**, a Computer and an expander.

The Computer function (in Edit General - P.brd/ Computer editor) offers three communication modes to choose from:

• Macintosh	for any Apple Macintosh computer;
• PC1	a slow PC communication suitable for 80386, or earlier models;
• PC2	a fast PC communication suitable for 80486, Pentium or faster processor.

When the COMPUTER port is in use, the MIDI ports can be used to connect to other musical instruments.
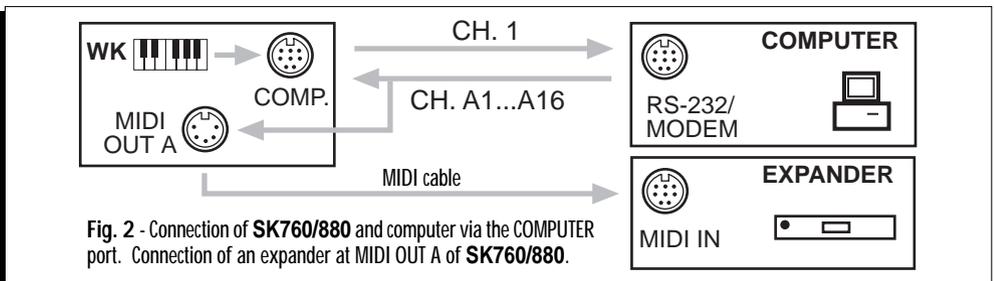
Fig. 2 - Connection of **SK760/880** and computer via the COMPUTER port. Connection of an expander at MIDI OUT A of **SK760/880**.

. . . .

MIDI FILTERS

The **SK760/880** MIDI Filters allow you to block the reception and transmission of unwanted MIDI messages from the MIDI data stream.

For example, if you were playing a midi file from an external sequencer using the E. Piano 2 sound from the **SK760/880**, you might find that every time you start the playback of the sequence, the sound switches to, for example, Piano1. This occurs because of the presence of a Program change message at the beginning of the Song. This problem can be overcome by selecting the "Program change" MIDI IN Filter Program which "filters off" all program change messages from the MIDI IN data stream.

In another example, whenever you select a Sound from the **SK760/880** panel, a Program Change message would also be sent to an expander connected to the **SK760/880** MIDI OUT, causing the expander's sound to be changed at the same time. To avoid changing the external sound every time you select a **SK760/880** sound, you would select a "Program Change" MIDI OUT Filter to exclude all program change messages from the MIDI OUT data stream.

MIDI LOCK

This feature allows you to "lock" the MIDI settings of the instrument. Normally, the MIDI Channels, MIDI Configuration and MIDI Filters are memorized for each Performance. This means that every time you recall a different Performance, the instrument's MIDI settings will change according to the way they were set for the recalled Performance.

MIDI Lock allows you to override the individual Performance settings, permitting you to select any Performance without changing the current settings. After enabling the MIDI Lock function (soft button F8 - option in negative highlight), you may adjust the MIDI settings as you wish. All subsequent changed made to the MIDI settings will remain in memory until you change them again, or until you disable the MIDI Lock function.

Other MIDI features

Very briefly, your **SK760/880** offers the following additional MIDI features:

Common channel: this channel is primarily used for the sending and receiving of PERFORMANCE messages. A Program Change message received on the Common channel will not change one of the individual sound on the keyboard. Instead, it will be interpreted as a PERFORMANCE CHANGE message.

MIDI Dump: a means of sending all information currently residing in the instrument's memory to another **SK760/880,** or an external data storage device. The **SK760/880** can also receive a DUMP from an external source.

System Exclusive: your **SK760/880** can be enabled or disabled for the transmission/reception of System Exclusive messages.

SMF Save Format: this function allows you to set **SK760/880** to save MIDI files as format 0 or format 1.

General MIDI: a GeneralMIDI compatibility on/off switch.

MIDI In Fix Velocity: allows you to receive velocity as transmitted, or to fix a set velocity value for all note data, useful for instruments that are not able to transmit velocity messages.

Local On/Off: a switch which isolates the **SK760/880** as a whole from its internal sound engine allowing **SK760/880** to be used as a MIDI controller.

MIDI PANIC

The **SK760/880** features a hidden MIDI PANIC button. This function can be used in the event of problems or "lock-ups" during MIDI transmission or reception.

How to perform MIDI PANIC

• If your machine locks up while working with MIDI, carry out the MIDI Panic operation by pressing the two ▲▼ buttons to the right of the display.

MIDI Panic sends "All Notes Off" and "Reset all Controllers" commands on all active channels.

Reference Guide

SK760 WORLD KEYBOARD

POWERSTATION

SK880 WORLD KEYBOARD

POWERSTATION

GEM by GENERALMUSIC

. . . .

Reference Guide

• 3 Disk & Hard disk

GENERAL INFORMATION

Working with disks provides you with a means of building a library of Performances, Styles, Sounds and Songs that you can load into the **SK760/880** RAM memory at any time. As you become more familiar with your **SK760/880**, you'll discover the practical uses of working with disks, because of the flexibility and power that they offer.

Floppy disks and the Hard disk

The **SK760/880** can handle floppy disks and hard disks of the following types.

- **Floppy disks**: **3.5" high density (HD)** and **double density (DD)**.
- **Hard disk**: a 2,5" IDE or E-IDE unit with a capacity of 2 Gigabytes (max.). Installation requires the Generalmusic HDisk kit which also expands the System-RAM. A Hard disk has faster access times and more convenient than floppies. The **SK760/880** with a factory installed Hard disk is write-protected to avoid accidental cancellation of the files it contains. However, the protection can be de-activated (see "Hard Disk Protection" option in the Disk Utility page).

Floppy disk formats

SK760/880 recognizes the following formats:

- **SK760/880** expanded format (1.6 Mb);
- standard **MS-DOS** (1.44Mb);
- Atari ST/Falcon format (720 Kb).

SK760/880 is able to initialize disks for every format. It is also possible to load Ram-Sounds, Styles and Songs from WK, SK, PS, WX and SX Series disks.

Song disks of other formats, such as the WK3 and PS1500 Series, are recognized if the data conforms to the **GMX format**, a General MIDI eXtended format by Generalmusic which renders the first three banks of all **SK760/880** Series instruments fully compatible.

SK760/880 cannot read Song, Style and Sound data disks originating from non-Generalmusic instruments. Song exchanges with other instruments requires that the Song be saved as a MIDI file on MS-DOS formatted disks (1.44 Mb or 720 Kb formats).

Files & the block

Data is stored on disks in the form of **Files** (a Song, a Performance, a Style, a Setup or a Block).

Files are organized in sub-directories which are contained in a **Block**. The Block reflects the structure of the instrument's internal RAM, as illustrated below.
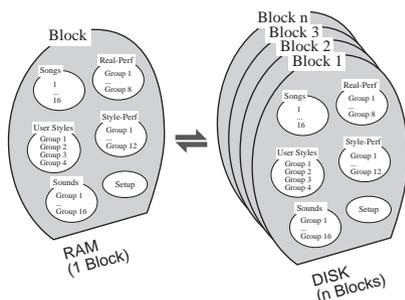
Illustration showing how data is organized in RAM and disks.

Floppy disks can contain more than one Block, but as a unit of storage, the Block is more suitable for Hard Disks.

When you load a Block using the Load Single Block command, the entire contents of RAM are updated.

. . . .

Disk & Hard Disk **3•1**

File Types

The types of File encountered when working in the **SK760/880** Disk environment are identified by a name and, in some cases an extension. The table which follows summarizes the file types encountered:

Type of File	Description
Block	All file types except MIDI files.
Setup	General settings for MIDI channels video, pedals & pads.
Sound	RAM-Sound and RAM ∿ -Sound.
Performances	Real Perf Groups.
Style-Perf.	ROM Style Perf banks excluding USER.
User Style	USER Styles and relative Style-Perfs.
Song	**SK760/880**, WK4, SK, PS format; WX2 format ("Name".**WXS);** SX2 format (Name".**SXS.**
MIDI file	MIDI files ("Name".**MID**) Format 0 or 1.

The Main DISK pages

The Disk commands a spread across 7 main pages, each identifying a principal Disk operation:

1. Load	Loads data to RAM.
2. Save	Saves data to disk.
3. Erase	Erases data from RAM or disk.
4. Copy	Copies data from floppy disk to hard disk or vice versa, from disk to disk or from RAM to RAM.
5. Move	Moves data from floppy disk to hard disk or vice versa, from disk to disk or from RAM to RAM.
6. Floppy Utility	Useful functions for floppy disks (formatting, disk name).
7. H Disk Utility	Useful functions for the Hard disk (formatting, HD check, restore, backup, protection).

. . . .

File Quantity

Files can be handled as Single elements, as a Group of files or as an entire set of file types (All), as shown in the following table:

FILE QUANTITY	
Single	A single file.
Group	All the files assigned to one of the buttons of the Style Groups (ROM and User), Performance Groups or Sound Groups. It is also possible to load to 2 "virtual" Song Groups.
All	All Groups of a file type (all Sounds, All Performances, All Styles, etc.).

The DISK commands

The «Disk» commands are specified in the main Disk pages by combining the File Quantity in one column with the File Type in the other:

- select the file quantity (Single, Group, All);
- select the file type (Sound, Performance, Song, etc.).

Example: To load a single Song, specify «SINGLE» and «SONG» in the main LOAD page.

Load, Save, Erase Copy, Move operations

Data stored in floppy disk, hard disk or RAM can be Loaded, Saved, Erased, Copied or Moved using one of the following methods:

- as single elements (Single Song, Single User Style, Single Performance, Single MidiFile, etc.);
- as a Group of files (User Style Group, Song Group, etc.);
- as an "ALL" data set containing file types of all Groups (All Songs, All Sounds, All Style Groups, All Performance Groups, etc.).

Limitations

Some file types cannot be handled more than one at a time. MIDI Files, for example, can only be handled using the SINGLE MIDI FILE command. Some files can be handled as Single elements, Groups and All sets, while others are limited to Single and All sets only.

The table below shows the valid commands for each file type:

File Type	Command
Block	Single
Setup	Single
Sound	Single, Group, All
Real Perfs	Single, Group, All
Style Perfs	Single, Group, All
User Styles	Single, Group, All
Song	Single, Group, All
MIDIFile	Single

The file selector

The File Selector corresponds to the second level of disk operations and is accessed by confirming the command specified in the main page. Once in the **file selector,** you can select the source files and respective destinations.

The **file selector** is divided into two columns showing (a) the source file **directory** (a contents list) and (b) the destination directory. All «Disk» operations, except the Erase command and the Utility, copy or move files from a source to a destination (e.g. from disk to RAM).

The direction of the copy or move operation is shown in the status bar by an arrow pointing the direction and the names of the **source** and **destination** files.

The source device can be a floppy disk, the Hard Disk or RAM. The device is selected with the Soft buttons F1, F2 and F3.

Empty locations are represented by a broken line. If you select a destination already occupied by a file, the existing file is replaced by the incoming one.
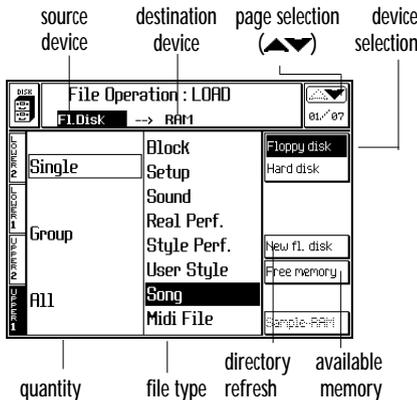
Main «Load» page
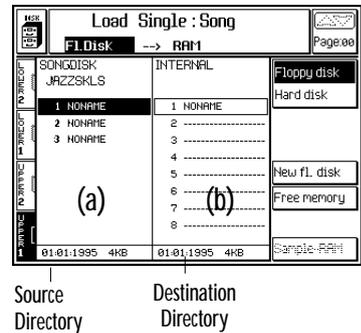
«Load Single Song» File selector

The general «Disk» procedure

Use the following procedure as a reference for all the Disk operations. Some specific examples are also explained in this chapter.

1. If you are working with floppy disks, insert a disk into the drive.

   If you are working with the Hard Disk (optional accessory), simply press DISK.

2. Press DISK and go to the page relating to the desired Disk function (Load, Save, Erase, Copy, Move, Utility).

   Use the ▲▼ buttons to scroll through the main disk pages. The example shows the main Load page.

3. Select, if necessary, the device being handled with the soft buttons F1, F2, F3.

   Load and Save operations show the Floppy Disk and Hard Disk options. If you are working with the Hard disk, the H.D. LED will turn on during the course of an operation.

   Erase, Copy and Move operations show the RAM option in addition to Floppy and Hard Disk.

   Utility is an exception, discussed afterwards.
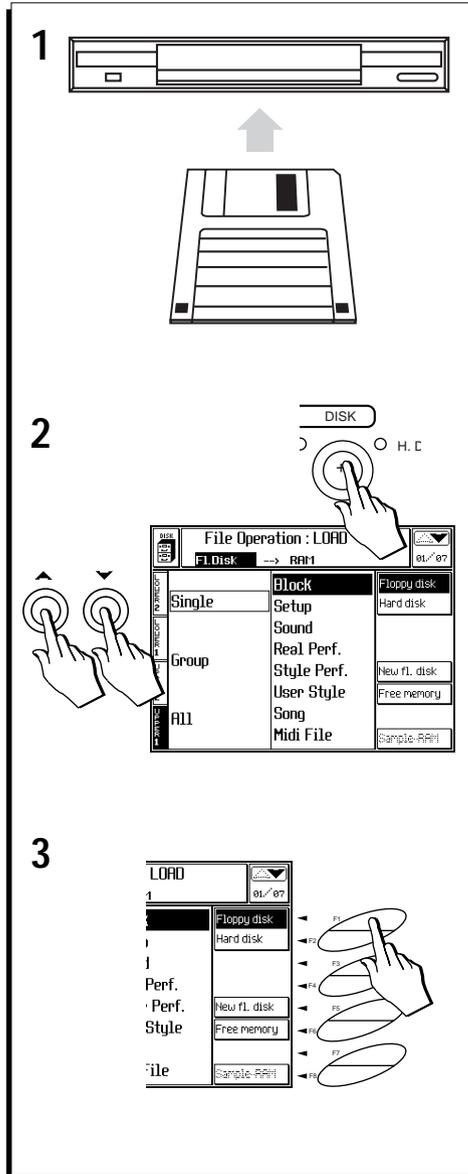
4. Specify the desired command with the directional arrows (for example, «Load Single Song»).

   Use the ◀ button to move into the quantity column and select the file quantity (Single, Group, All) with the ▲/▼ buttons.

   Pass over to the other column with the ▶ button and select the file type (Sound, Performance, Song, etc.) with the ▲/▼ buttons.

5. Press ENTER to confirm the command and open the **File Selector**.

   The "Wait Please" message appears for an instant before opening the File Selector.

   The file selector now shows the source directory consisting of one or more Blocks to choose from, and the destination directory representing the sector of RAM corresponding to the file type being handled (in this case the Song memory).

   This display example shows the floppy disk directory (a) with a single Block file, and the instrument's RAM directory (b) showing the empty Song memory. The disk name is shown at the top of the left column (c). If the disk has no name, either "NO NAME" or "UNTITLED" or other will be shown.

   . . . .
   ▶ *Note: At this point, to exit from «Edit Disk», press DISK. Escape exits the File selector.*
   . . . .

6. Select a Block and press ENTER to gain access.

   The contents of the opened Block reveals the file type selected in step 4 (in this case, several Songs in numerical order).

   At the bottom of both columns, information regarding the selected file will appear. In this case, the left column shows the date that the file was created and its dimensions expressed in Kb (d). The right column is blank and represents the empty destination.
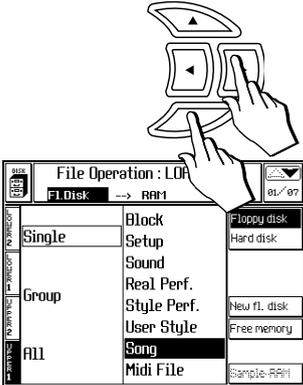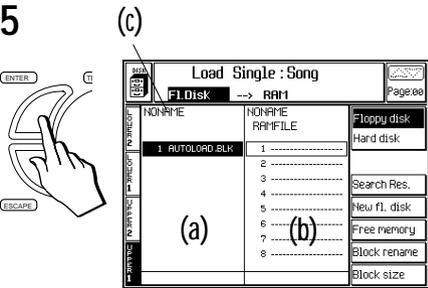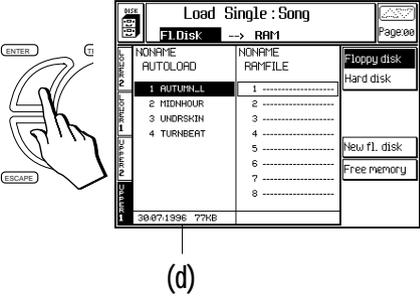
7. If necessary, select the source file.

   Use the ▲/▼ buttons to select the source file from the active column. If you are not in the desired column, move over with the ◄/► buttons.

8. If necessary, select the destination.

   Move into the destination column with the ◄/► buttons and use the ▲/▼ buttons to select a destination.

   Empty locations are identified by a broken line. If you select an existing file, it will be erased by the incoming file.

9. Press ENTER to confirm your choice.

   You will be prompted with "Are you sure?".

10. Press ENTER again to execute the command, or ESCAPE to cancel the operation.

    With ENTER, the command is executed and a dialog window opens showing a message relating to the current operation: For example, if you are loading a single Song, the message will say: "Loading Single Song...." When the dialog window closes, the operation has been executed.

11. Repeat steps 7, 8, 9 and 10 until your destination is organized according to your requirements.

    To select another file from a different block, return to the source column, press Escape to escape the current Block, press Escape again to exit the File Selector, select another Block, press Enter to gain access and continue as already described.

12. Press DISK (or ESCAPE three times) to exit «Disk».

    Pressing DISK escapes the Disk operations and remembers the last page selected.

    Pressing ESCAPE allows you to *(1)* close the current Block, *(2)* close the file selector and *(3)* escape from «Disk».

Load Operations

The load operations operate in the direction Source –> RAM where the source can be Floppy disk or Hard disk.

Have a disk ready containing the data you wish to load. These can be **SK760/880** format disks, disks of previous formats, such as WX or SX Series, and MIDI file disks. If you are working with the Hard Disk, press DISK and select the HARD DISK option with soft button F2 and proceed from point 3 below.

THE GENERAL LOAD PROCEDURE

1. Insert the floppy disk into the drive.

2. Press DISK to open the main Load page.

   If the main Load page is not shown, use the left page scroll button (▲▼) to open it.

3. Specify the load operation required (example, Load SingleSong) then press ENTER to open the File Selector.

   From here, proceed as described for the Load operations on the pages which follow.

   NOTE: All Load Single operations also feature a SEARCH RESOURCE function which allows you to search for a single element (Block, Sound, Real Perf, Style Perf, User Style, Song, MIDI File). How to use the Search Resource is explained at the end of this chapter.

4. When you have finished, press DISK (or ESCAPE three times) to exit «Disk».
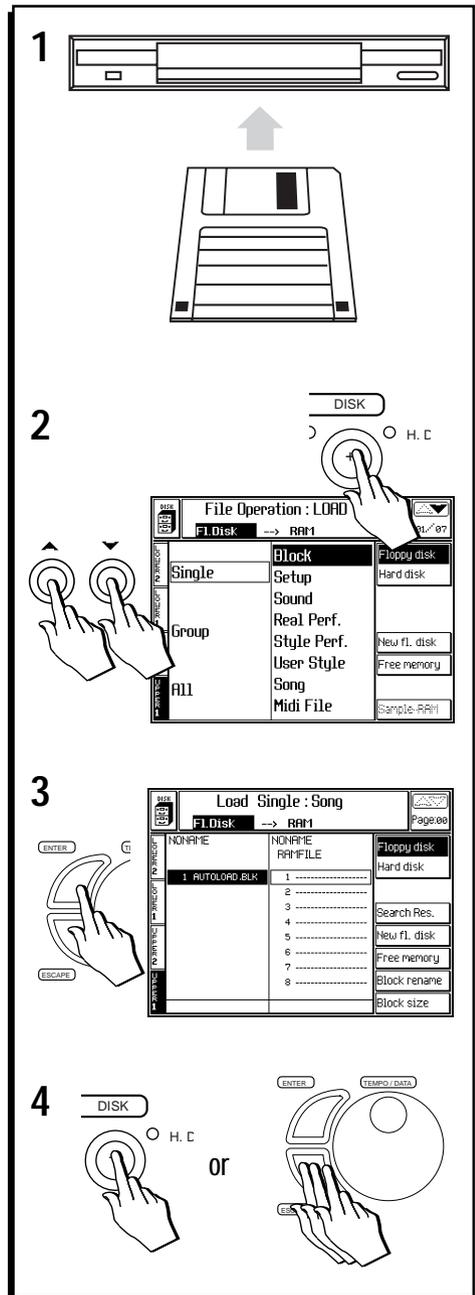
LOAD SINGLE

The Load Single command offers the following possibilities:

Load Single Block

Rewrites the entire contents of RAM. Block data contains: Setup file, Sounds, Performances, Style Performances, User Styles (and relative Performances), Songs (and relative Performances).

Load Single Setup

Loads a Setup file into RAM. Setup files contain information relating to the status of the instrument's general functions (Tuning/Scale, Audio Mic/Line settings, the MIDI Lock status, MIDI lock configurations, Pedals/Pads Lock status, Pedals and Pads configuration). Load a disk-based Setup file when you want to change the general status of the instrument in a single step instead of programming the individual parameters that constitute a Setup file. Loading a Setup file into RAM does not affect other data. Only one Setup file resides in each Block.

Load Single Song

Loads Songs to RAM one at a time. This operation allows you to choose single Song files from various different blocks and load to RAM in a preferred order. **SK760/880** can load Songs from disk in its own format (Song), in previous compatible formats (WK, SK, PS, WX**,** SX), in standard MIDI file format 0 or 1 and in Tune1000™ format.

Load Single MIDI File

Loads disk-based MIDI files to RAM one at a time Loading MIDI Files into RAM automatically converts the files into **SK760/880** format Songs. The «Load MIDI File» procedure is almost identical to «Load Single Song». In this case instead of Song names, you'll see a list of files in the source directory with the **".MID"** extension. In some cases, other names appear which represent sub-directories containing other MIDI Files.

Important: When you load a MIDI File, track 17 is created automatically in order to be able to play along with the Song in playback.

Load Single Sound

Loads single disk-based sounds to the Sound Bank destinations. Loads Ram-Sounds as well as RAM-∿-Sounds. The «Load Single Sound» procedure is characterized by an increased number of steps, owing to the fact that there are 16 Sound Groups, each consisting of 8 Banks of 16 slots. You can choose to load your Ram-Sounds anywhere you want, but it is recommended that you load to the original Sound Group to facilitate future selection.

Load Single Sound also features a Sound Search function. Owing to the large **SK760/880** Sound library, you might find it easier to pass directly to a Sound bank by specifying the name of a Sound that occupies a particular bank. From there, you can then easily select a destination for the Sound being loaded. The Sound Search procedure is explained in detail on pages 3.33 & 3.34.

Load Single Performance

Loads a single Performance (RealTime) to any of the 64 locations of the Performance Groups (1-8). The incoming Performances overwrite those in RAM. The original factory-set Performances can be restored at any time with the Restore Perf. operation.

Load Single User Style

Loads a single User Style and associated User Style Performances to any location in the USER Style Groups (1-4).

Load Single Style Performance

Loads a single bank of up to 8 user-programmed Style Performances to the original ROM Style Performance bank. These Performances cannot be loaded to locations other than the original source Style Performance bank. For example, the Style Performances of Style 59 (U.S.Trad) cannot be loaded to any other location of the ROM Styles.

If you attempt to load to a destination other than the correct one, a user message will inform you of your error with the following message:

Press ESCAPE to close the message and try again, this time selecting the correct destination.

LOAD SINGLE SOUND PROCEDURE (EXAMPLE)

Use the Demo Disk 01 supplied with the instrument to load a Sample to memory. For this procedure, your instrument requires additional Sample RAM. If your **SK760/880** does not have additional S-RAM, use any **SK760/880** Sounds disk containing edited sounds, or have your instrument upgraded with optional S-RAM.

1. Insert the supplied Demo Disk 01 in the disk drive and press DISK.

2. Select SINGLE SOUND from the Load page then press ENTER to gain access to the File Selector.

   The floppy disk directory may show the presence of several blocks, one containing the Sample, another User Styles, etc.. The instrument's RAM directory shows the ROM sounds of the first Group (Piano).

3. Select (if necessary) the Sample Block and press ENTER to gain access.

   In this example, the disk directory shows the presence of one Percussive Sample (GRV.bpm 106♪•) with Pr. Change and Bank Select number 114-6.

4. Select (if necessary) the Sample and its corresponding destination in RAM (114-6).

   Use the ▲▼ buttons to scroll the Sound Groups (1, 2, … 15, 16). In this case, scroll to Group 15 (Percussive - example **A**).

   Use the directional ▲/▼ arrows to scroll to the desired Bank (in this case, bank 6) and destination (Program Change 114 - example B).

5. Press ENTER twice to load the Sample file to memory.

   . . . .
   ▶ **Note**: *It is recommended to load Sounds and Samples to their original locations to facilitate the on-board file search facilities, but you are free to load them to any Group.*
   . . . .

. . . .

LOAD GROUP

The Load Group command offers a quick way of loading a Groups of 8 elements at a time.

. . . .
▶ **Warning:** *The Group currently in memory is overwritten by the incoming Group. If, for example, the User Style Group you are loading contains only one User Style, all User Styles of the destination Group currently in RAM will be cancelled and replaced by the new Group. Be sure that your Group data are safely saved to Disk or Hard Disk before proceeding.*
. . . .

Load Group offers the following possibilities:

Load Group Real Perf

Loads a Group of Performances consisting of up to 8 user-programmed RealTime Performances to any Real Performance destination.

Load Group User Style

Loads a Group of up to 8 User Styles (and corresponding Performances) to any User Group destination.

Load Group Song

Loads Songs as "virtual Groups" (Song Group 1 and Song Group 2 found in the Disk environment only). Each virtual group corresponds to the first 8 or second 8 locations of the Song memory. In fact, in normal conditions when you press the Song button to select a Song, the song selection display shows two columns, left and right. The left column corresponds to the virtual Songs-Group 1 and the right to Songs-Group 2. This feature is particularly useful for the WX Series Songs disks which contain Song Groups containing up to 8 Songs each.

Load Group Style Perf

Loads a Group of 8 Style Performance banks, each bank containing up to 8 user-programmed Style Performances. Unlike other Groups, the Style Groups cannot be "switched" - they must be loaded to their original locations in memory. For example, Group 8 (US. TRAD) cannot be loaded to any other location in RAM other than Group 8.

If you attempt to load to a destination other than the correct one, a user message will inform you of your error with the following message:

Press ESCAPE to close the user message and try again, this time selecting the correct destination.

LOAD GROUP USER STYLE PROCEDURE (EXAMPLE)

Use the Demo Disk 01 to load a User Style Group to memory.

1. Insert the supplied Demo Disk 01 in the disk drive and press DISK.

2. Select GROUP USER STYLE from the main Load page then press ENTER to gain access to the FILE SELECTOR.

   The floppy disk directory may show the presence of several blocks, one containing the Sample, another User Styles, etc..

3. Select the Styles Block and press ENTER to gain access.

   In this example, the disk directory shows the presence of two User Style Groups (User 3 and User 4).

4. Select the User Group that you wish to load and its corresponding destination in RAM (1, 2, 3 or 4).

5. Press ENTER twice to load the User Style Group file to memory.

   User Style Groups can be interchanged. For example, User Group 3 on floppy disk can be loaded to User Group 1 in RAM.

LOAD ALL

Use «Load All» to load an entire set of file types in a single step.

. . . .
► **Warning**: Use "Load ALL" with care. If, for example, the disk-based «All User Style» data contains only one User Style, all your User Styles currently in RAM will be irremediably lost through cancellation by the incoming file. Be absolutely sure, therefore, that your Sounds, Songs, Styles and Performances are safely stored to Disk or Hard Disk before using the "Load ALL" procedures.
. . . .

The Load All procedure offers the following possibilities:

Load All Song: loads up to 16 Songs;

Load All Sound: an unspecified number of Ram-Sounds and RAM-♪-Sounds;

Load All Real Perf: loads 8 Groups of Real Performances;

Load All Style Perf: loads 12 Groups of Rom Style Performance banks, each containing up to 8 Style Performances;

Load All User Style: loads 4 Groups of User Styles (including all associated User Style Performances).

LOAD ALL SONG PROCEDURE (EXAMPLE)

1. Select ALL SONG from the main Load page then press ENTER to gain access to the File Selector

2. Select the Block containing the Songs required from the source directory then press ENTER twice to start the loading procedure.
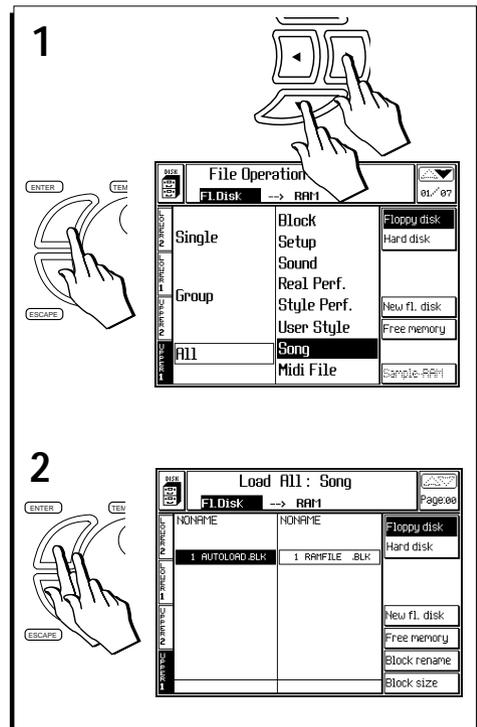
LOAD WX/SX SONGS AND STYLES

SK760/880 can load Songs and Styles from the following previous format disks:

WX2, WX400, WX Expander, SX2, SX3

The loading procedures are identical to those used for **SK760/880** Songs and Styles.

The Blocks however show the «.WXS» extension instead of «.BLK».

Furthermore, WX2/SX2 disks contain one Block only.

WX Songs disks contain Song Groups consisting of up to 8 Songs each. For this purpose, the **SK760/880** Disk environment contains two virtual Songs Groups (1 and 2) specific for the WX Series disks. Refer to the Load Group procedure explained on page 3.12.

Save operations

The Save procedures operate in the direction RAM –> Destination where the destination can be Floppy disk or Hard disk.

The **SK760/880** RAM is backed by a rechargeable battery to safeguard the data when the instrument is turned off. For security reasons, however, it is necessary to store your data to floppy disk or Hard disk with the Save command. The RAM should be considered as a work area which can be continually updated, not as a data storage device.

Have a new or used disk ready to save data to. These can be **SK760/880** format disks or standard MS-DOS disks for the exclusive storage of MIDI files. You can also save MIDI Files to **SK760/880** format disks.

Check that the floppy disk is not write protected - if so, remove the protection beforehand. If you forget to do this, the instrument will prompt you with an appropriate message when you attempt to save to the disk.

Save operations are characterized by an additional option: the creation of a new Block if necessary.

. . . .
▶ *WARNING - Do not save data to the original disks supplied with the instrument. As a precautionary measure against data loss, always check that your original disks are write protected.*
. . . .

THE GENERAL SAVE PROCEDURE

1. Insert the floppy disk into the drive.

2. Press DISK to open the main Save page.

    If the main Save page is not shown, use the page scroll buttons (▲▼) to open it.

    If you are working with the Hard Disk, press DISK and select the HARD DISK option with soft button F2.
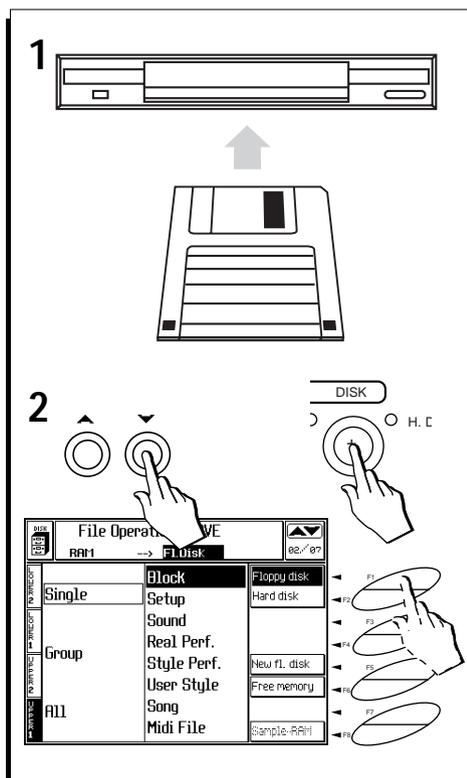
3. Specify the Save operation required (example, Save All Song) then press ENTER to open the File Selector.

4. Select an existing Block to save to or empty destination to create a new Block.

   Save to an existing Block to backup your data after a work session when the destination Block and RAM block are of the same origin.

   Select an empty destination (shown as a broken line with .BLK extension) to create new block.

5. Press ENTER.

   If you selected an existing Block, the operation will proceed depending on specified command.

   If you save to an empty location, you'll be prompted to create a new Block. Use the keyboard and the numeric keypad as the sources of alphanumeric data to give the block a name (see Data Entry procedures in chapter 1). The extension ".BLK" is created automatically. Confirm the new name with ENTER.

6. Press ENTER to confirm the Save operation.

   The existing Block will be updated or the new Block will be created and the file(s) will be saved to the Block.

   Remember that if you save to an existing file, it will be overwritten by the incoming one.

   Whenever possible, try to save to an empty location (shown as a broken line) to safeguard existing data on the storage device.

7. When you have finished, press DISK (or ESCAPE three times) to exit «Disk».

SAVE SINGLE

The Save Single command offers the following possibilities:

Save Single Block

Saves the entire contents of RAM to disk or Hard disk in a single step. Block data contains: a Setup file, Sounds, Performances, ROM Style Performances, User Styles (and relative Performances) and Songs (and relative Performances), all housed in their respective Groups.

. . . .
► *Note: If you assign a new block the name "AUTOLOAD", you can load the Block into RAM automatically on a future occasion by turning the instrument on with the floppy disk inserted in the drive. Naturally, only one Block with the name "AUTOLOAD" can exist in a disk.*
. . . .

Save Single Setup

Saves a Setup file to a Block on floppy disk or Hard Disk. The Setup corresponds to the configuration of the instrument's global parameters (Edit General status) that determine how the machine operates, regardless of the contents of RAM. Saving a Setup file to a Block overwrites the existing Setup file without affecting other data. Only one Setup file can be saved in each Block.

You can create different Setup files for particular occasions. For example, one for home sessions, one for live shows, one for piano-bar work, etc.

Save Single Song

Saves Songs to disk one at a time. If you have already loaded some MIDI Files to RAM, use this procedure to convert the files to **SK760/880** format songs.

. . . .
► *Hint: A Block can hold up to 16 Songs divided into two virtual groups. If no empty locations are shown, it means that the block is fully occupied. In this case, either overwrite an existing Song that you don't mind losing, or close the Block with ESCAPE, then select an empty location and press ENTER to create a new Block.*
. . . .

Save Single Performance

Saves a single user-programmed Performance (RealTime) to any of the 64 locations of the Performance Groups (1-8) on disk or Hard disk. The incoming Performances overwrite those present on the storage device.

Save Single User Style

Saves a single User Style and associated User Style Performances to any location in the USER Style Groups (1-4) present on disk or Hard disk.

Save Single Style Performance

Saves a single bank of up to 8 user-programmed Style Performances. These Performances cannot be loaded to locations other than the original source Style Performance bank. For example, the Style Performances of Style 59 (U.S.Trad) cannot be saved to any other location of the ROM Styles.

If you attempt to save to a destination other than the correct one, a user message will inform you of your error with the following message:

Press ESCAPE to close the user message and try again, this time selecting the correct destination.

Single MIDI File

Saves a **SK760/880** Song to disk (MS-Dos format) as a MIDI File in order to exchange the song with other instruments or computers. **SK760/880** saves Songs as SMF1 or SMF0 format MIDI files. Set the "SMF Save Format" parameter in the «General Set» function of «Edit MIDI».

If you want to save GM compatible MIDI files, set the "General MIDI" parameter to ON in the «General set» function of «Edit MIDI».

. . . .

Performances are converted into track data (Bank Select MSB and LSB, Program Change, Volume, Pan, CC91 and CC93 for the depth of the effects).

If a Score is present, the text is converted into Lyric events and the chord symbols into Text events.

The save procedure is almost identical to «Save Single Song». In this case you'll see a list of files in the destination directory with the **.MID** extension. In some cases, other names appear which represent sub-directories containing other MIDI Files. Empty locations are shown as a broken line with the .MID extension. The **.MID** extension is attached to the original **SK760/880** Song name automatically.

Have an MS-DOS or Atari ST/Falcon format disk ready. Use the «Format MS-DOS disk (1.44 Mb)» and «Format MS-DOS/Atari (720 KB)» functions in the «Utility» Disk page to format your new disks.

Save Single Sound

Saves single Ram-Sounds as well as RAM-Sounds to disk or hard disk to build a library of Sounds for future use. The «Save Single Sound» procedure is characterized by an increased number of steps, owing to the fact that there are 16 Sound Groups, each consisting of 8 Banks of 16 slots.

You can choose to save your Ram-Sounds anywhere you want, but it is recommended that you save to the same location as the original RAM position to facilitate future selection.

Bear in mind that the RAM-Sound will take the ProgramChange number of the chosen destination, therefore, if you save 19-7 SwOrgan to, say, destination 25-16, the Sound will be shown with the new ProgramChange number on a future load operation, not with the old.

▶ *Note: You can also use the Sound Search function to pass directly to a particular Sound and sound Bank. The Sound Search procedure is explained in detail on pages 3.33 & 3.34.*

SAVE MIDI FILE PROCEDURE (EXAMPLE)

1. Select SINGLE MIDI FILE from the main Save page then press ENTER to gain access to the FILE SE-LECTOR.

2. Select the destination device (Floppy or Hard disk).

   Press soft button F1 to select the Floppy disk. Press soft button F2 to select the Hard disk.

3. Select the **SK760/880** Song to save as a MIDI file from the RAM directory and select a ".MID" destination in disk.

   If necessary, enter a Block (or sub-directory shown with the .<DIR> extension) to gain access to other MIDI File locations.

   You can create a new Block in the destination device as already discussed in the General Save procedure.

4. Press ENTER twice to start the conversion process.
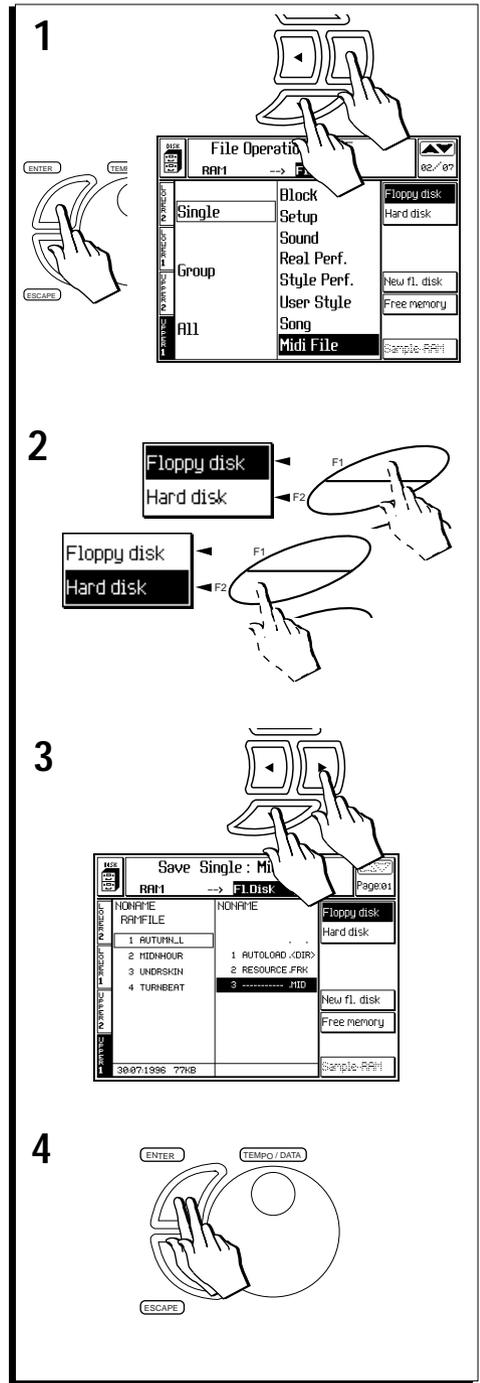
SAVE GROUP

The Save Group command offers a quick way of saving a Group of 8 elements in a single step.

. . . .
▶ *Warning: The Group currently on disk or hard disk is overwritten by the incoming Group. If, for example, the User Style Group you are saving contains only one User Style, all User Styles of the destination Group currently on disk will be cancelled and replaced by the new Group. Be sure of the contents of the Group data being overwritten before proceeding.*
. . . .

Save Group offers the following possibilities:

Save Group Real Perf

Saves a Group of Performances consisting of up to 8 user-programmed RealTime Performances to any Real Performance destination on disk or hard disk.

Save Group User Style

Saves a Group of up to 8 User Styles (and corresponding Performances) to any User Group destination on disk or hard disk.

Save Group Song

Saves Songs as "virtual Groups" (Song Group 1 and Song Group 2 found in the Disk environment only). Each virtual group corresponds to the first 8 or second 8 locations of the Song memory. The left column corresponds to the virtual Songs-Group 1 and the right to Songs-Group 2.

Save Group Style Perf

Saves a Group of 8 Style Performance banks to disk or hard disk, each bank containing up to 8 user-programmed Style Performances. Unlike other Groups, the Style Groups cannot be "switched" - they must be saved to their original locations. For example, Group 8 (US. TRAD) cannot be saved to any other location on disk other than Group 8.

. . . .

If you attempt to save to a destination other than the correct one, a user message will inform you of your error with the following message:

```
┌─────────────────────────────────┐
│            SORRY !              │
├─────────────────────────────────┤
│ ┌─┐ This file cannot be         │
│ │?│ copied/moved/saved/loaded   │
│ └─┘ to another location!        │
└─────────────────────────────────┘
```

Press ESCAPE to close the user message and try again, this time selecting the correct destination.

SAVE GROUP STYLE PERFORMANCE (EX-AMPLE)

1. Select GROUP STYLE PERFORMANCE from the main Save page then press ENTER to gain access to the FILE SELECTOR.

2. Select the destination device (Floppy or Hard disk).

   Press soft button F1 to select the Floppy disk. Press soft button F2 to select the Hard disk.

3. Select the destination Block then press ENTER to gain access.

   If necessary, select an empty location to create a new Block using the method already discussed in the General Save procedure.

4. Select the Group file from the RAM directory and its destination then press ENTER twice to execute the command.

SAVE ALL

Use «Save All» to save an entire set of file types contained in RAM in a single step.

. . . .
▶ **Warning**: Use "Save ALL" with care as this procedure overwrites all data at the destination. Be absolutely sure, therefore, of the file content in disk before using the "Save ALL" procedures.
. . . .

The Save All procedure offers the following possibilities:

Save All Song: saves up to 16 Songs;

Save All Sound: saves an unspecified number of Ram-Sounds and RAM-∿-Sounds (16 Groups);

Save All Real Perf: saves 8 Groups of Real Performances;

Save All Style Perf: saves 12 Groups of Rom Style Performance banks, each containing up to 8 Style Performances;

Save All User Style: saves 4 Groups of User Styles (including all associated User Style Performances).

SAVE ALL SONG PROCEDURE (EXAMPLE).

1. Select ALL SONG from the main Save page then press ENTER to gain access to the FILE SELECTOR.

2. Select the destination device (Floppy or Hard disk).

   Press soft button F1 to select the Floppy disk. Press soft button F2 to select the Hard disk.

3. Select the destination Block in the disk directory.

   If necessary, select an empty location to create a new Block using the method already discussed in the General Save procedure.

4. Press ENTER twice to start the saving procedure.

. . . .

Erase operations

Use the Erase command to cancel files no longer needed from a data storing device (Disk or Hard Disk) or from RAM to make room for other files.

When you pass to the Erase page, you can choose the device to erase data from with the corresponding soft buttons:

- Floppy disk = F1
- Hard Disk = F2
- RAM = F3

The Erase File Selector does not operate between source and destination directories as in the load and save file selector, but on a single directory contained in the device you are cancelling files from.

The example which follows shows how to Erase a single Song from RAM.

1. Press DISK to open the main Erase page.

   If the main Erase page is not shown, use the page scroll (▲▼) buttons to open it.

2. Select the ERASE command required from the main page.

3. Select the source device to erase from.

   In this case, select the RAM option with soft button F3.

   If you are erasing from a floppy disk, insert the disk into the drive and check that the "Floppy Disk" option is selected (soft button F1).

   If you are erasing from the Hard Disk, select the "Hard Disk" option with soft button F2.

4. Press ENTER to enter the file selector.
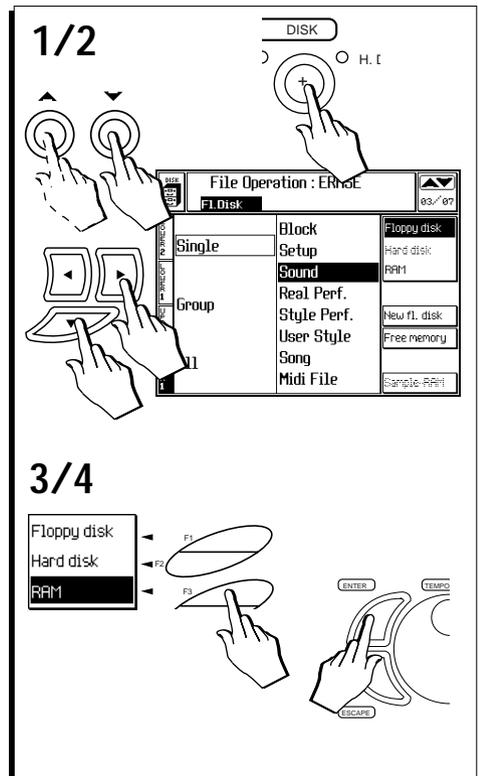
5. If necessary, select the Block containing the file to erase then press ENTER to access the Block.

6. Select the file to erase.

7. Press ENTER twice to erase the file from the directory.

5

Erase Single : Sound
RAM   Page:02

NONAME

    1 RAMFILE .BLK

Floppy disk
Hard disk
RAM
Search Res.
New fl. disk
Free memory
Block rename
Block size

6/7

Erase Single : So
RAM   Group:03

NONAME
RAMFILE
  19- 7 SwOrgan *
  19- 8 2'2/3perc *
  30- 4 Solo Jazz *
  65- 4 Alley Sax *
 118- 5 Ride It

Group : ORGAN
08-01-2002 3KB

Floppy disk
Hard disk
RAM

New fl. disk
Free memory
Sound search
Search next
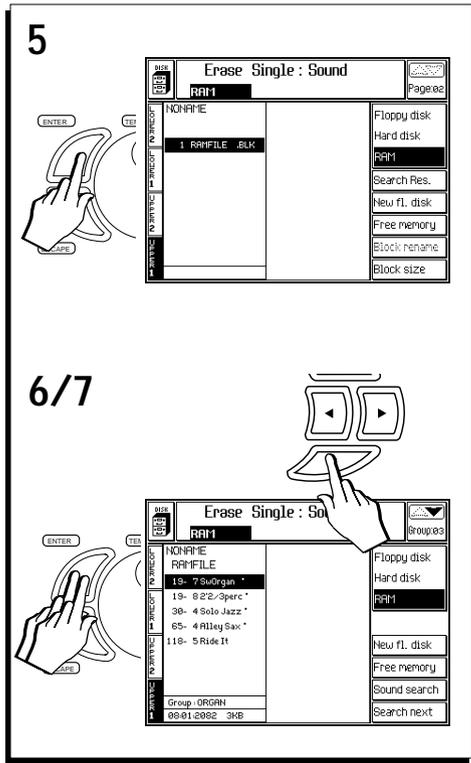
Copy operations

Use the Copy command to copy a file from one location to another within the same device, or from the Hard Disk to floppy (bypassing the RAM) and vice versa. The source file remains intact.

Models without a Hard disk can copy from floppy to floppy or from RAM to RAM.

To copy a file from one floppy disk to another, first load the file to RAM, then save it to the other floppy.

The example which follows shows how to copy a single Sound file from Floppy disk to Hard Disk, and provides sufficient information which you can apply to all Copy situations.

1. Press DISK to open the main Copy page.

   If the main Copy page is not shown, use the page scroll (▲▼) buttons to open it.

2. Select the COPY command required from the main page.

3. Select the source and destination devices with soft buttons F1, F2 or F3 and directional arrows.
   In this case, use the ◄ button to pass to the source directory and, if necessary, select Floppy Disk (F1).

   Then use the ► button to pass to the destination directory and select the Hard disk (F2) as the destination. Entering the Hard disk for the first time takes some time, depending on the number of files already present. A "Please Wait" message appears during the scanning period.

   Selecting «Floppy disk» or «RAM» automatically assigns the same device to source and destination.

4. Press ENTER to enter the file selector.
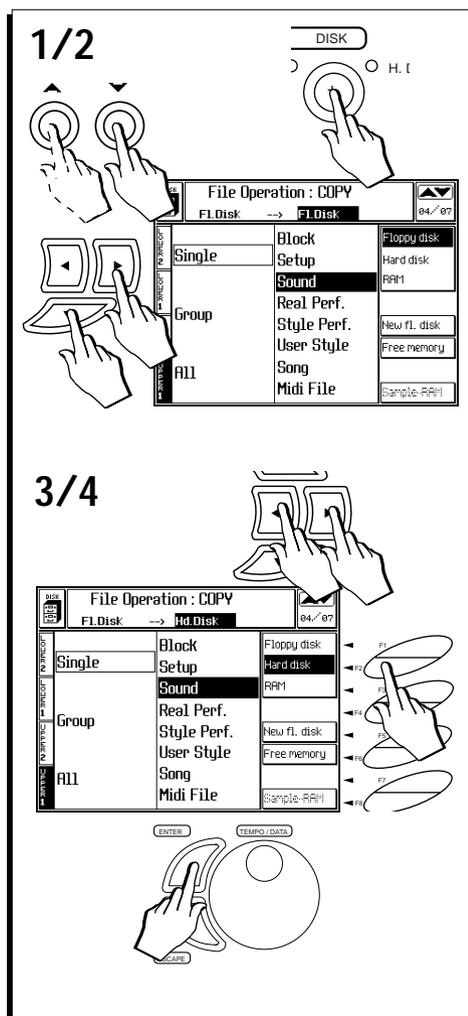
5. If necessary, select the source Block containing the desired file and press ENTER to gain access.

6. Select the File to Copy from the source directory.

7. Pass into the destination directory to select the destination

   If necessary, select a Block in the Hard disk and press ENTER to access then select a destination.

8. Press ENTER twice to copy the file to the destination.

. . . .
► *Note: It is not possible to copy a file to itself. Attempting to do so prompts the following message*:
. . . .

SORRY!

This file cannot be copied/moved/saved/loaded to the same location!

Press ENTER or ESCAPE to close the window and repeat the operation by copying to a different destination.

5

Copy   Single : Sound
Fl.Disk   ──→   Hd.Disk   Page:03

6/7

Copy   Single : Sound
Fl.Disk   ──→   Hd.Disk   Page:03

8

Copy   Single : Sound
Fl.Disk   ──→   Hd.Disk   Page:03

Move operations

Use the Move command to shift a file from one location to another within the same device, or from the Hard Disk to floppy (bypassing the RAM) and vice versa. This option cancels the file at the source.

. . . .
▶ **WARNING** - *Use the Move function only in cases where the original file is to be cancelled.*
. . . .

Models without a Hard disk can move files from within the same floppy or within RAM.

To move a file from one floppy disk to another, first load the file to RAM, then save it to the other floppy.

The example which follows shows how to use the Move operation within RAM (Move Single Sound), and provides sufficient information which you can apply to all Move situations.

1. Press DISK to open the main Move page.

   If the main Move page is not shown, use the page scroll (▲▼) buttons to open it.

2. Select the MOVE command required from the main page.

3. Select the source and destination devices with soft buttons F1, F2 or F3.

   In this case, select RAM as the device to work in. Selecting «Floppy disk» or «RAM» automatically assigns the same device to source and destination.

4. Press ENTER to enter the file selector.
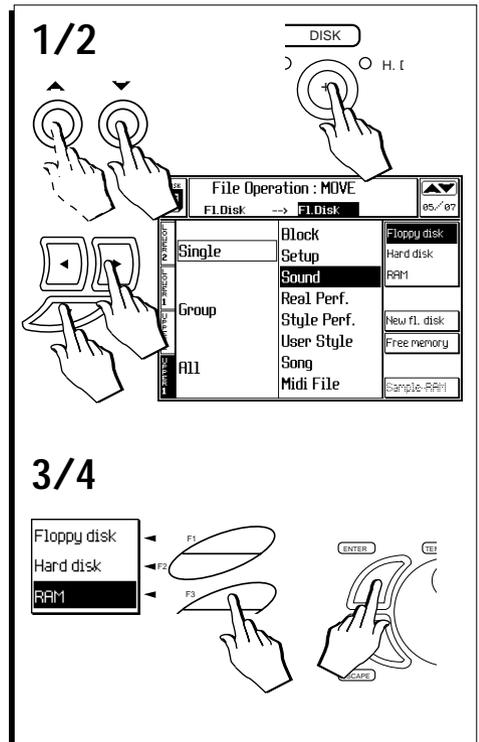
5. If necessary, select a Block containing the desired file then press ENTER to access the Block.

6. Select the File to Move from the source directory.

7. Pass into the destination directory and select the destination.

   In this case, use the Page scroll ▲▼ buttons to scroll through the Sound Groups and the ⬆/⬇ directional arrows to scroll through the individual Sound Group locations.

8. Press ENTER twice to Move the Sound file to the selected destination.

   The file at the original location (in this case, 19-7) is cancelled and moved to the new location (in this case, 17-8).

   ·
   ▶ **Note:** *It is not possible to move a file to itself. Attempting to do so prompts the following message*:
   ·

   Press ENTER or ESCAPE to close the window and repeat the operation by moving to a different destination.

5

Move Single : Sound — Page:04
RAM --> RAM

NONAME   NONAME
1 RAMFILE .BLK 1 RAMFILE .BLK

Floppy disk
Hard disk
RAM
Search Res.
New fl. disk
Free memory
Block rename
Block size

6/7

Move Single : Sound — Group:03
RAM --> RAM

NONAME   NONAME
RAMFILE   RAMFILE
19- 7 SwOrgan * 1- 1 Piano1
19- 8 2'2/3perc* 1- 2 PianoMk1
30- 4 Solo Jazz* 1- 3 PickPiano
65- 4 Alley Sax* 1- 4 PianoStage
118- 5 Ride It 1- 5 ---------

Floppy disk
Hard disk
RAM
New fl. disk

SORRY!

This file cannot be
copied/moved/saved/loaded
to the same location!

Move Single : S — Group:03
RAM --> RAM

NONAME   NONAME
RAMFILE   RAMFILE
19- 7 SwOrgan * 17- 1 Organ1
19- 8 2'2/3perc* 17- 2 16'1'Draw
30- 4 Solo Jazz* 17- 3 Organ1WX
65- 4 Alley Sax* 17- 4 OrgTheatre
118- 5 Ride It 17- 5 16'1'Vib3
                17- 6 8'
                17- 7 2'
                17- 8 ------------
Group : ORGAN   Group : ORGAN
08·01·2002 3KB

Floppy disk
Hard disk
RAM
New fl. disk
Free memory
Sound search
Search next

8

ENTER   TEMPO / DATA
ESCAPE

Utility

After pressing DISK, use the page scroll ▼ button to pass to the last two Disk pages: Floppy Disk Utility and Hard Disk Utility.

These pages provide useful functions for disk and hard Disk formatting and servicing.

The Floppy Disk Utility page options include:

- Format Work Disk (1.62 MB);
- Format Ms-Dos Disk (1.44 MB);
- Format Ms-Dos/Atari (720 KB)
- Change Disk Name

The Hard Disk Utility options include:

- Hard Disk Check-Recovery
- Hard Disk Sleep Time
- Hard Disk Protection
- Hard Disk Back-up
- Hard Disk Restore
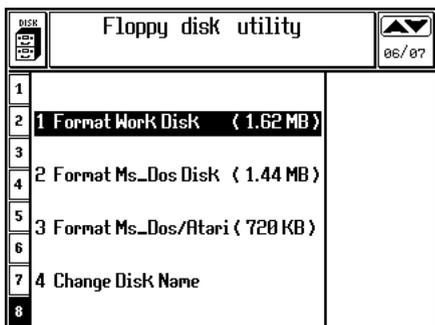
Floppy Disk Utility page

FORMAT WORK DISK (1.62 MB)

This operation force-formats a 3.5" HD floppy disk for **SK760/880** use.

This extended format procedure prepares the disk with a capacity of 1.62 megabytes (compared with the standard 1.4 of MS-DOS disks). This format cannot be read by computers.

1. Insert a new floppy disk into the drive.

   You can also use a formatted disk, provided that you are not interested in conserving its contents.

2. Select «Format work disk (1.62 Mb)».

   The following dialog window appears:

3. Press ENTER to start the formatting procedure.

   . . . .
   ▶ *WARNING: All the Disk initializing procedures cancel the entire contents of a used disk - be absolutely sure that the contents include files that you don't mind losing.*
   . . . .

FORMAT MS-DOS DISK (1.44 MB)

This operation formats a 3.5" HD floppy disk in MS-DOS format (capacity: 1.44 megabytes).

This format permits file exchange with computers running MS-DOS, Windows, OS/2, Macintosh, Atari, Amiga, and all computers capable of reading MS-DOS format disks.

The procedure is identical to that described for the «Format work disk (1.62 Mb)» operation.

. . . .

FORMAT MS-DOS/ATARI DISK (720 KB)

This operation formats a 3.5" DD floppy disk in MS-DOS / Atari ST format (capacity: 720 kilobytes), suitable in particular for MIDI file exchanges.

The procedure is identical to that described for the «Format work disk (1.62 Mb)» operation.

CHANGE DISK NAME

Use this operation to assign a name to a floppy disk. Giving your disks a specific name allows quick recognition of the contents during a search through disks without labels. If you write the disk's name on the index label, you can reduce the search times even further.

SK760/880 assigns a generic code name to disks formatted with the Utility formatting procedures - the name depending on the size.

For example, a 1.62 Mb work disk will be assigned a code name such as the one shown below:
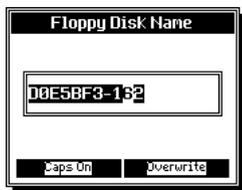
Use the standard name entry procedure to give your disks a name.

Confirm the entry with ENTER or cancel with Escape.

FORMAT HARD DISK

This operation formats the Hard disk and is used in two cases:

1) as an essential operation after installing a new Hard disk kit (if you install a Hard Disk supplied by Generalmusic, do not format the unit as it will contain factory loaded files);

2) when a rapid cancellation of the HD contents is required.

1. From page 6 of the "Utility page", press the page scroll button (▼) to page to page 7.

2. Select (if necessary) the «Format hard disk» function.

   The following dialog window appears:
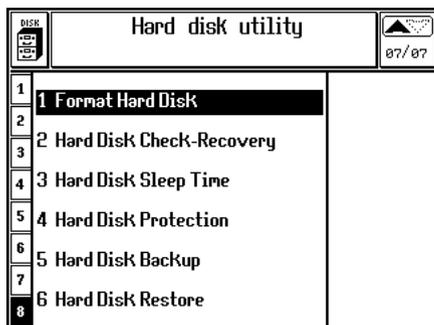
Hard Disk Utility page

3. Press ENTER to confirm or ESCAPE to cancel.

As a security measure, a second confirmation request appears (for security reasons):

```
Confirm Format Hard Disk

WARNING !!!

Are you sure you want
to format the Hard Disk ?

F1 to confirm    ESCAPE to abort
```

4. Press the Soft button F1 (not ENTER) to start the hard-disk format procedure, or ESCAPE to cancel.

HARD DISK CHECK/RECOVERY

This procedure can restore a damaged Hard Disk to its original status. Damage to the Hard Disk can be caused by:

- a power failure during a Save operation;
- physical defects of the disk.

If the Hard disk is damaged, attempting to access it prompts a message similar to the following:

```
Hard Disk Check

Disk access error!

Check version : XXXXXXX
Error repaired : XXXXXXX
```

Use the following recovery procedure as soon as possible.

1. Enter «Edit Disk» and go to the «Hard Disk Utility» page.

2. Select «Hard disk check/recovery» .

The following dialog window appears:

```
Are you sure?
(Enter) to confirm
(Escape) to cancel
```
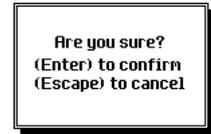
3. Press ENTER to start the recovery of the data.

Shortly after, another dialog window appears similar to the one below:

```
Hard Disk Check

OK !

Check version : 00013F07
Error repaired : none
```

In this case, the message shows no errors. In cases where errors exist, make a note of the numbers shown in the dialog window as they are useful to provide information for technical assistance.

• **Check version** - Version of the test program and data recovery.

• **Error found** - Code relating to the error found. "None" appears in cases where no errors are encountered.

. . . .
► *WARNING - Never turn off the instrument while the Hard disk or disk drive are writing data (Save, Copy, Move, Erase operations).*
. . . .

HARD DISK SLEEP TIME

To avoid hearing the noise caused by the rotation of the hard disk, you can set this parameter to turn the hard disk off after an operation.

Options: Off (always on), 5 sec ... 60 sec.

HARD DISK PROTECTION

As a safety measure to prevent unwanted file loss, use the Hard Disk Protection function to protect your hard disk

Note: All **SK760/880** instruments with factory fitted Hard Disks leave the factory with the Hard Disk Protection active.

In order to use the Save, Erase or Move operations on the Hard Disk, the protection must be removed.

Select the Hard Disk Protection function and press ENTER to activate the protection function. Use the right/left cursor arrows to toggle between the two options (Unprotect/Protect).

Press ENTER to save the selected status to memory.
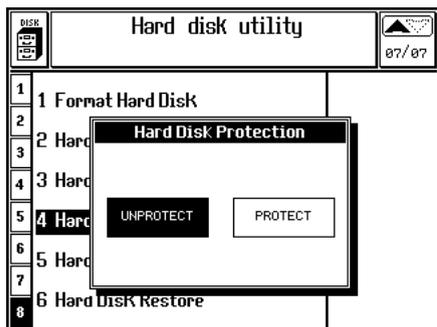
Hard Disk not protected
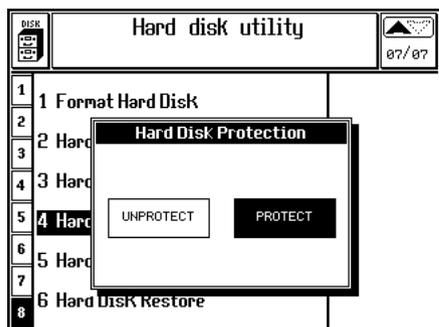
Hard Disk protected

HARD DISK BACKUP

This option allows you to backup part or all the Hard disk data to floppy disk in compressed or decompressed form. By default, the "Compress" option is selected.

At the end of a work session, always remember to copy all newly elaborated data present on Hard disk to floppy disks. Should the Hard disk suffer damage and data loss, you will always be able to recuperate the data from disks.

How to back up your Hard Disk data

1. Have some empty formatted data disks ready.

    As a general rule, 1000 Kb of Hard Disk data are compressed to approx. 50% of the original value in the case of Songs, and 30% in the case of Sounds. Use this conversion to calculate approximately how many disks you will require to backup your data.

    The size of each selected Block file is shown at the bottom of the directory.

2. Select **Hard Disk Backup** and press ENTER to activate the function.

    Selecting this function opens a second level display showing the Hard disk directory on the left and a column on the right where you can prepare a list of data to backup and compress.

    The backup list can consist of Block files only, not individual files normally found in a block.
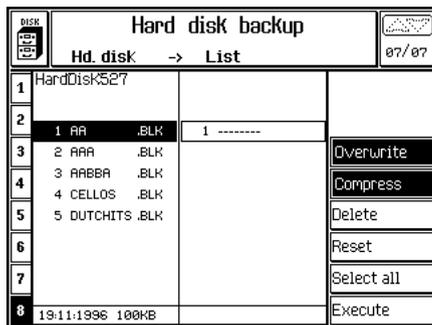
Hard Disk Backup - list

3. Prepare a list containing the block(s) to backup.

   Select a Block with the Up/Down cursor arrows and press ENTER to insert it into the list.

   The cursor moves down to the next empty location automatically.

   Repeat the operation for other blocks

   If you attempt to insert a Block that has already been inserted, an appropriate warning is displayed.   Press ESCAPE to cancel the warning and select a different Block.

4. Press EXECUTE to start the backup process.

   See EXECUTE below.

Overwrite (F1)

Select OVERWRITE (F1) if you want to overwrite data on disks previously used for other backups.

This function is selected by default.

Deselect this function if you want the backup floppies to retain any data currently stored in them.

Compress (F2)

Select COMPRESS (F2) to compress the files of the backup list.

This function is selected by default.

Delete (F5)

Select DELETE (F5) to cancel a block from the list.

The Delete option does not cancel a Block from the Hard Disk directory.

Reset (F6)

Select RESET (F6) to cancel a list containing two or more Blocks in a single step.

Select All (F7)

Use Select All (F7) to select all the Block contained in the Hard disk

Execute (F8)

• Press EXECUTE (F8) to start the backup process.

   After a short period, the unit is ready to backup the data and a dialog appears requesting you to insert Disk n. 1:

• Insert a disk into the drive and press ENTER to start saving to the disk.

   When the Backup has finished, a message is displayed saying:

   "Operation completed".

   If the Backup procedure requires more than one disk, a dialogue appears requesting the insertion of disk n. 2 and so on..

HARD DISK RESTORE

Use the HARD DISK RESTORE function to load backup data from floppy disk back into the Hard Disk.

How to restore backup data to the Hard disk

1. Insert the Floppy disk containing the backup file or files into the drive.

2. Select Hard Disk Restore and press ENTER to activate the function.

   The floppy disk may contain more than one backup file (shown with the ".AR" extension),

   ```
   ┌─────────────────┐
   │   File Select   │
   ├─────────────────┤
   │ B:\FILE_771.AR  │
   │ B:\FILE_789.AR  │
   │ B:\FILE_802.AR  │
   └─────────────────┘
   ```

3. Select the file to restore to the Hard disk and press ENTER to confirm.

   Confirming the backup file selection opens a second level display showing the Floppy disk directory on the left and a column on the right where you can prepare a list of backup data to decompress.


```
┌──────────────────────────────────────┐
│DISK   Hard disk restore        ┌────┐ │
│       Fl. disk    ->   List    │07/07│
├──────────────────────────────────────┤
│L│WKBACK# 001     │          │         │
│O│                │          │         │
│W│                │          │         │
│E│ 1 AA     .BLK  │ 1 ------- │        │
│R│                │          │         │
│2│                │          │         │
│L│                │          │         │
│O│                │          │         │
│W│                │          │         │
│E│                │          │         │
│R│                │          │         │
│1│                │          │         │
│U│                │          │Delete   │
│P│                │          │         │
│P│                │          │Reset    │
│E│                │          │         │
│R│                │          │Select all│
│2│                │          │         │
│U│                │          │         │
│P│                │          │         │
│P│                │          │Execute  │
│E│                │          │         │
│R│19:11:1996 100KB│          │         │
│1│                │          │         │
└──────────────────────────────────────┘
```
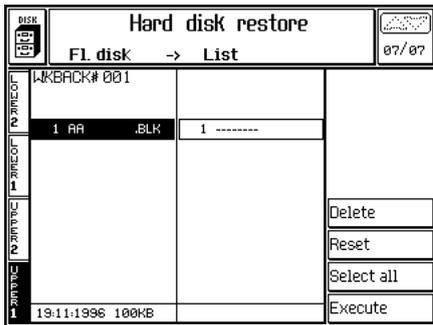
Hard Disk Restore - list

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4. Prepare a list containing the block(s) to restore.

   Select a Block with the Up/Down cursor arrows and press ENTER to insert it into the list.

   The cursor moves down to the next empty location automatically.

   Repeat the operation for other blocks

   If you attempt to insert a Block that has already been inserted, an appropriate warning is displayed.   Press ESCAPE to cancel the warning and select a different Block.

5. Press EXECUTE to start the hard disk restore process.

   When the Hard Disk restore procedure is finished, a message is displayed saying:

   "Operation completed".

   If the Hard disk restore procedure requires more than one disk, a dialogue apppears requesting the insertion of disk n. 2 and so on..

Delete (F5)

Select DELETE (F5) to cancel a block from the list.

The Delete option does not cancel a Block from the Restore directory.

Reset (F6)

Select RESET (F6) to cancel a list containing two or more Blocks in a single step.

Select All (F7)

Use Select All (F7) to select all the Blocks contained in the Restore directory.

Execute (F8)

Press EXCECUTE (F8) to start the restore process.

Additional functions

This section explains the various options found in the main Disk pages and in the File Selector, some of which are permanent, others specific to a particular command or disk page.

NEW FL. DISK (F5)

Updates the current directory after changing a disk inserted in the drive, allowing the instrument to recognize the disk change.

Pressing the F5 Soft button opens the following dialog window:

You can also see the new directory by closing the «Edit Disk» environment with ESCAPE then re-entering «Edit Disk».

FREE MEMORY (F6)

This option displays the amount of memory remaining in the floppy disk, Hard disk, System-RAM, volatile Sample-RAM and in the Backed Sample-RAM.

SAMPLE-RAM... (F8)

This option is active only if the instrument has been installed with one or both optional Sample RAM kits.

The Sample-RAM option, which appears in all the main Disk pages except Utility, selects the type of Sample-RAM required to access.
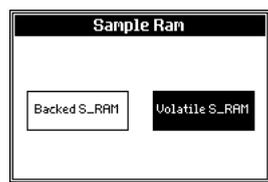
Select the type of Sample-RAM with the cursor buttons and press ENTER to confirm.

Once a RAM ∿-Sound is loaded into memory, a 'flag' is applied to it to indicate which Sample-RAM contains the sound's associated sample.

When you save the RAM ∿-Sound, the 'flag' is retained in the disk. When you load the Sounds again with the Load All Sound or Load Single Block operations, the RAM ∿-Sounds are directed to the Sample-RAM indicated by the 'flag'.

. . . .
▶ *Note* - *The samples saved in a Block with successive Save Single Sound operations may be too large to reside in the Backed S-RAM. In this case, the instrument attempts to load all the samples into the Volatile S-RAM. If in this case also the samples are too large for the available memory, the loading operation will be interrupted.*
. . . .

BLOCK RENAME (F7)

This option, which appears in all File Selectors, allows you to modify the name of the selected Block. Use the standard method of name entry as described in the Data Entry paragraph in Chapter 1.

BLOCK SIZE (F8)

This option, which appears in all File selectors, determines the dimensions of the currently selected Block. The information appears under the directory of the active File Selector.

The dimensions of the same Block residing in RAM and in disk can differ by a few kilobytes, due to the fact that some Setup data in RAM is not saved to disk.

SEARCH RESOURCE (F4)

This option appears in all second level pages of all Single File operations. The second level pages are those that appear after confirming a File Selector selection.

The Search Resource function is particularly useful if your instrument is fitted with a Hard Disk containing a large number of files.

For example, if you do not remember in which Block of the Hard disk you stored a user-programmed Sound, or you want to go directly to a Block name without scrolling through the entire Hard Disk contents, press the Sound Search option to open an insertion window where you can specify a name.
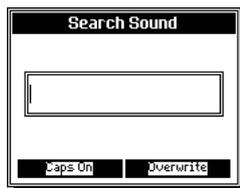
The name can be of the particular file you are looking for, or part of the entire name. For example, if your Sound name includes the word "organ" or a Block contains a particular sequence of letters, you can search for all files which include the inserted name.

Press ENTER to start the search and the first Sound which includes the written name will appear, showing its location:
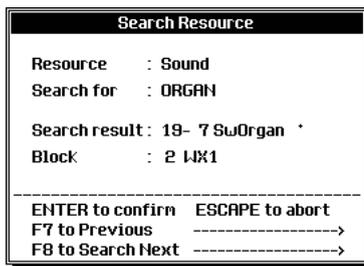
If the displayed file is not the one you are looking for, use the "F7 to Previous" and "F8 to Next options" are required.

When you find the file you are looking for, press ENTER to pass directly to the file location or ESCAPE to abort the search operation.

Sound Search will also inform you of the absence a specified name by showing "Not Found".

SOUND SEARCH... (F7)

The Sound Search function appears in the third level directory displays for the following operations:

- Load Single Sound;
- Save Single Sound;
- Erase Single Sound;
- Copy Single Sound;:
- Move Single Sound.

The function recalls the nearest Sound having the string of characters specified in the active zone.

1. Press Soft button F7.

    The following dialog window appears:
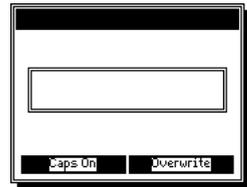
2. Insert the string of characters that relate to the Sound you are looking for.

    2 or 3 letters are sufficient.

3. Press ENTER.

    The cursor goes directly to the first Sound found containing the specified characters.

SEARCH NEXT (F8)

This option recalls the next Sound on the search list containing the string of characters specified in the Sound Search option.

General disk handling information

If you're new to working with floppy disks and are not sure as to how you should handle these delicate accessories, please read this section for some useful information.

Inserting a Disk into the disk drive

Floppy disks must be inserted into the disk drive label side up and shutter first. Push the disk firmly into the drive until it "clicks" into place.
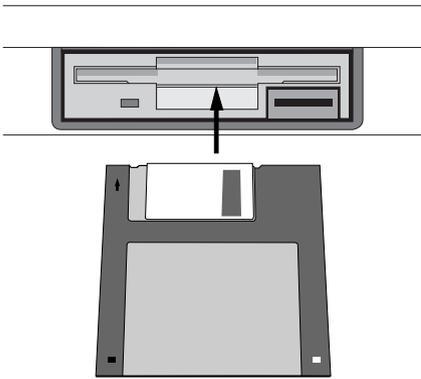
Avoid forcing a disk into the drive and hold the disk straight while inserting it.

Ejecting a Floppy Disk

Before ejecting a disk, make sure that the disk drive operating led is off and that the **SK760/880** display is not currently showing a "Loading" or "Saving" message.

To extract the disk, press the eject button and remove the disk.

The Write Protect Tab

Floppy disks contain a write protect tab which allows you to protect valuable data from being accidentally overwritten.

To prevent writing data to disk and so avoid accidental erasure, slide the tab fully down to "open" the window.

To permit writing data to disk, slide the tab fully up to "close" the window.

Disk not protected   Disk protected
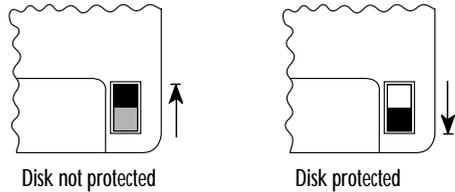
Use a pen or other pointed object to set the tab as shown.

Handling Floppy Disks

When handling floppy disks, certain precautions should be taken to avoid damage or data loss.

• Do not open the metal protection shutter or touch the surface of a disk

• If your **SK760/880** has to be transported, make sure that a floppy disk is not inserted in the disk drive. Vibration may cause the disk drive head to scratch the disk, rendering it unusable.

• Do not store or place floppy disks in close proximity of television sets, computer monitors, loudspeakers, or other devices that are potential sources of magnetic fields. Doing so may render the disk unusable.

• Do not store or place floppy disks in locations subject to extremes of temperature and humidity, direct sunlight, or excessive dust and dirt.

• Do not place objects on top of a floppy disk.

• Return disks to their protective cases after use.

Backup copies

At the end of a work session, always remember to copy all elaborated data present on RAM or Hard disk to Floppy Disks.

Should you accidentally erase some files from RAM, or should the hard disk suffer damage and data loss, you will always be able to recuperate the data from your disks.

It is advisable to keep backup copies of all your disk data. "Backup" is technical jargon for "a second copy". Backup copies stored in a safe place are extremely important. Disks can become damaged or lost, so please backup your work.

Disk Drive Head Cleaning

After a prolonged period of use, disk save and load errors may become frequent due mainly to dirty disk drive heads, indicating that the disk drive head may need cleaning. This can be done using a good-quality fluid-type head cleaning kit for 3.5 inch (double-sided) disk drives. Do not use a cleaning kit intended for single-sided disk drives.

1. Moisten the cleaning disk with cleaning fluid.

2. Insert the cleaning disk into the disk drive.

3. Execute a load function. An error message will appear. This is normal.

4. After approximately 10 seconds, eject the disk.

Do not use the disk drive for about 5 minutes.

Precautions to observe when using SK760/880 disks with a computer

In name write situations, the **SK760/880** allows file names of up to 10 characters, except the Block which accepts 8, in compatibility with MS-DOS and Windows 3.1 OS. Block files also include the extension «.BLK». If your files are to be used in MS-DOS devices (IBM PC's and compatibles), bear in mind the 8 character limit of these systems when naming your files.

In the Macintosh, OS/2 and Windows 95 systems, file names can include more that 8 characters. When a name is modified on a computer, the following rules should be remembered:

• do not change the Block file extension.

• avoid Block names longer that 8 characters.

• the maximum number of files in a Block cannot exceed the limit imposed by the **SK760/880** RAM.

• do not change the names of the permanent files contained in the Blocks (e.g. the ROM Style Group names). **SK760/880** requires standard names to recognize the structure of the data.

Furthermore, owing to some limitations of MS-DOS, Windows 3.1 and Atari, it is essential to bear in mind the following advice:

• do not insert spaces within a file name (e.g.: «MY FILE.BLK»). To separate a name into two parts, you can either:

   1) separate two parts by the "underscore" symbol (e.g.: MY_FILE.BLK»).

   2) Use Uppercase (capital) letters for the first letters of both parts of the name, lowercase for the others (e.g.: «MyFile.BLK»).

• do not assign two files the same name using uppercase and lowercase letters (e.g. «MYFILE» and «myfile»).

The aspect of the Blocks are as folders (Macintosh, Atari) or sub-directories (MS-DOS, Windows, OS/2). Other sub-directories or folders can be found in a Bloc.

• 4 Preload

THE PRELOAD FUNCTION

The Preload function is a background loading facility which allows you to playback all the Songs and/or MIDI Files contained in a floppy disk or Hard disk with a single command, without having to load all the data to memory beforehand.

. . . .
► **Note**: *if the disk or Hard disk contains more than one Block, only the songs contained in the first Block will be played while those of other Blocks are ignored.*
. . . .

Furthermore, if the «Auto Preload» option is enabled, Preload loads a Song together with all associated RAM-Sounds and RAM⌁-Sounds to ensure the correct playback.

It is also possible to prepare a "Preload" list consisting of Songs and MIDI files, provided that both files types are present on the source device (floppy or Hard disk); you can select files from different Blocks.
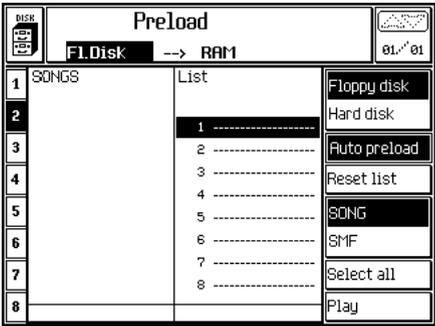
Preload: Song or MIDI File playback from disk

PLAYBACK ALL THE SONGS OR MIDI FILES ON DISK

If you have a **SK760/880** Songs disk, or have purchased a MIDI File data disk, or your Hard disk contains Song files, you can playback all the files in a Block with a single command, without having to load them to memory beforehand. Preload plays back up to 16 Songs or MIDI files one after the other.

1. Insert the disk into the disk drive and press PRELOAD.

   After short disk scanning period, the first Song on the disk starts to play. During playback, the background loading procedure for the second song begins (the message "Preloading Song" appears for an instant).

   Playback continues non-stop until all the Songs or MIDI Files on disk have been played. During playback, the Song view page is shown, where you can select a track and set it to key-play in order to play along with the Song. Use the **<<** and **>>** buttons to advance or rewind the Song at will.

   Playback stops automatically when the last Song or MIDI File reaches the end.

2. During playback, press PRELOAD to enter the Preload display.

   Once you have entered the Preload display, you will have access to the available options using the corresponding Soft buttons F1…F8.

3. Press STOP at any time during playback to stop the current song and return to the Song view page.

   This will, however, cancel the Preload operation.

. . . .

Create a Preload list

1. If the Preload window is not showing, press PRELOAD with a disk inserted in the drive, press PRELOAD again then press RESET LIST (F4).

   Reset List cancels all the Songs from the current list and stops playback instantly.

   The PRELOAD window shows the Songs or MIDI files disk directory on the left, and the destination directory on the right, represented by the Preload list.

2. If necessary select the source device using the Soft buttons F1 («Floppy disk») and F2 («Hard disk»).

3. Select the type of file to include in the list using the soft buttons F5 («SONG») and F6 («SMF», Standard MIDI File).

4. Use the cursor buttons to select the Song or MIDI file to include in the list and press ENTER. The selected file is added to the first available space in the list and the destination frame moves one step forward.

   If the disk contains more than one Block, press ESCAPE to exit from the current directory, select another block and press ENTER to gain access.

5. Select other files and press ENTER each time to include them in the list.

   ▶ **IMPORTANT: If you are working from Floppy disk, do not extract the disk during the file insertion procedure; doing so will provoke the cancellation of the list.**

6. If you want to change an inserted file, take the cursor over to the right of the display, select the file that needs replacing, return the cursor over to the left, select the file to insert and press ENTER.

Return the cursor to the right again and select an empty location for the next file on the list. Return the cursor to the left to select the next file and continue as before until your list is complete.

You can fill the list in a single step using the «Select All" function (F7).

7. Press F8 («Play») to start the playback of the Songs in the list.

   During playback, the Song View page is shown. You can select a track and set it to key-play in order to play along with the Song. Use the **<<** and **>>** buttons to advance or rewind the Song at will.

   Press STOP only if you want to stop playback, otherwise you will cancel the Preload operation.
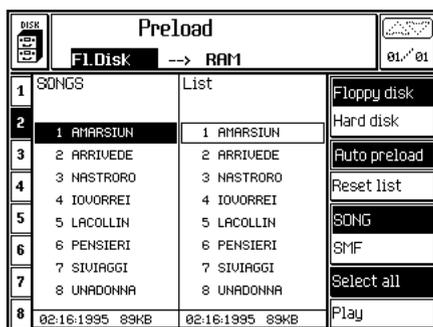
Preload display showing a list of 8 Song files

The Preload functions

FLOPPY DISK (F1)

Selects the floppy disk. The list on the left corresponds to the disk directory showing the files contained in the disk (Block files or Song/SMF files). The files that appear depend on whether the SONG (F5) or SMF (F6) option is selected.

HARD DISK (F2)

Selects the Hard disk (if installed). The list on the left corresponds to the Hard disk directory showing the files contained in the disk (Block files or Song/SMF files). The files that appear depend on whether the SONG (F5) or SMF (F6) option is selected.

AUTO PRELOAD (F3)

When this option is selected (negative highlight), Songs are loaded into memory together with all associated RAM-Sounds and RAM ∿Sounds. If there is not sufficient memory in RAM to accept the associated Sounds, ROM Sounds will be used instead and the Song may playback incorrectly.

If the Auto Preload option is not selected, the Songs associated RAM-Sounds and RAM ∿Sounds will not be loaded.

RESET LIST (F4)

Cancels the current list and stops the playback instantly.

SONG (F5)

When this option is selected, the left part of the display shows **SK760/880** or WX/SX format Songs only.

SMF (F6)

When this option is selected, the left part of the display shows the MIDI files contained in the disk, identified by the extension '.MID', together with any other sub-directories present (shown with the .<DIR> extension).

SELECT ALL (F7)

Selects all the files shown in the left part of the display and inserts them directly into the list. The list can contain a maximum of 16 files.

If the SMF option is selected, Select All inserts all MIDI files present in the current directory. The list will show the Song names without the .MID extension.

PLAY (F8)

Starts the playback of the Songs contained in the list, after a short period. If the songs shown originate from Midi files, the preloading period takes more time due to the conversion process.

During playback, you can advance or rewind the Song using the **<<** and **>>** buttons. You can select one or more tracks, set them to key-play and play along with the Song. It is not possible, however, to select the Song-Performances.

To stop the playback, press the STOP button.

The instant you start the playback, all Songs currently residing in memory are cancelled, except the one currently playing.

Preload exploits the Song memory locations 1 and 2 for playback and stand-by of the background loaded files.

If the «Auto Preload» option is selected, a Song will load with its associated RAM Sounds and

. . . .

RAM‿‿-Sounds contained in the Block housing the Song. If there is not sufficient memory in RAM for the operation, the Song will play incorrectly using ROM-Sounds.

. . . .
▶ **Hint:** *When the samples of a Song are loaded, the Auto Preload utilizes the free Sample-RAM, then starts to substitute the samples of the Song in playback with the samples of the new Song. At a certain point, the Song in playback will start to play incorrectly. It is advisable, therefore, to avoid using an excessive amount of samples (not more than half the available Sample-RAM).*
. . . .

• 5 Selection/Help

Selection

SELECTING PERFORMANCES

Panel selection

Panel selection is preferable when playing live. If the STYLE LOCK button is off, selecting Performances from the Performance Groups also changes the Style, the Variation and Tempo.

1. Press one of the PERFORMANCE GROUPS buttons to open a «Select Performance» window.

2. Select a Performance with the corresponding Soft button.

. . . .
▶ *Note: When you select a Performance,* **SK760/880** *sends CC00 [value 48]-PC messages in rapid succession on the Common Channel . The BankSelect, ProgramChange, Volume and Pan messages of the tracks are sent on the normal MIDI channels.*
. . . .

Selection via MIDI

SK760/880 must receive the relative selection messages on the Common Channel. Send Control Change 00 (value = 48) and Program Change messages in rapid succession to **SK760/880**.

Message...	selects...
CC00 [48] - PC [0...7]	Performance 1...8
CC00 [48] - PC [8...15]	Performance 9...16
...	
CC00 [48] - PC [56...63]	Performance 57...64

Name of the selected
Performance group

PERFORMANCE GROUP: 1	
GrandPiano	St.Guitar
St.E.Piano	GaryOnVibe
NightSax	MileStone
SlowToFast	Duet

Performance (selected with the
corresponding Soft button)
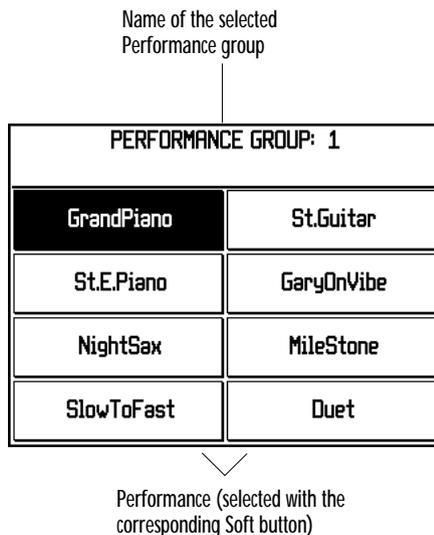
SELECTING STYLES

Panel selection

1. Press one of the STYLE GROUPS buttons to open a «Style Select» window.

2. Use the Page scoll buttons (▲▼) to pass to the second bank of Rom Styles or to return to the first bank.

3. Select a Style with the corresponding Soft button.

. . . .
▶ *Note: When you select a Style,* **SK760/880** *sends CC00 [value 32, 33 or 44]-PC messages in rapid succession on the Common Channel . The BankSelect, ProgramChange, Volume and Pan messages of the tracks are sent on the normal MIDI channels.*
. . . .

Recalling Styles by selecting the Performances

If the LED of the STYLE LOCK button is OFF when you select a Performance, you also recall a Style, Variation and Tempo. If STYLE LOCK is ON, the current Style rests unchanged when you select a Performance.

As well as track data (Bank Select, Program Change, Volume, Pan) the Programmable Performances memorize *(a)* the selection of a Style, *(b)* the selection of a Variation of the Style, *(c)* the Tempo.

1. Deactivate the STYLE LOCK button.

2. Press one of the PERFORMANCE buttons of the PERFORMANCE GROUPS to open a «Select Performance» window.

3. Select a Performance with the corresponding Soft button. The memorized Style and Variation will be recalled.

Selecting Styles via MIDI

SK760/880 must receive the relative selection messages on the Common Channel. The Common Channel is set in «Edit MIDI »

To select ROM Styles, send Control Change 00 (value = 32) and a Program Change.

To select USER Styles, send Control Change 00 (value = 44) and a Program Change.

Message..	selects...
CC00 [32] - PC [0...15]	8 BEAT - Style 1...16
...	
CC00 [32] - PC [112..127]	US.TRAD - Style 113...128
CC00 [33] - PC [0…15]	TRAD 1 - Style 129…144
…	
CC00 [33] - PC [48…63]	LATIN 2 - Style 177…192
CC00 [44] - PC [0...7]	USER 1 - Style 1...8
...	
CC00 [44] - PC [24...31]	USER 4 - Style 25...32

Name of the selected
Style Group

```
STYLE GROUP: Jazz        [▼]
                         Bank:01

    Swing          Big Band 2

  Mid Swing        Dixieland

  Slow Swing        Broadway

  Big Band 1        Foxtrot
```

Style (select with the
corresponding Soft buttons)
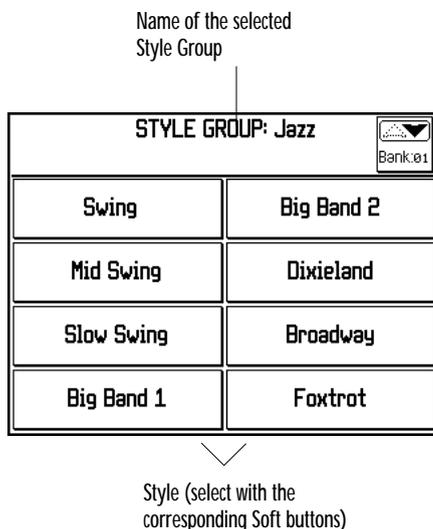
SELECTING STYLE-PERFORMANCES

Panel selection

To select a ROM Style-Performance or a User Style-Performance, the Single Touch Play button should be on. If this button is not on, selecting a Style Performance sets S.T. PLAY to on automatically.

1. In Style mode, press the STYLE.P button to open the «Select Style-Performances» window.

2. Select a Style-Performance with the corresponding Soft button.

. . . .
▶ **Note:** *When you select a Style-Performance,* **SK760/880** *sends CC00 [value 36 or 40]-PC messages in rapid succession on the Common Channel. The BankSelect, ProgramChange, Volume and Pan messages of the tracks are sent on the normal MIDI channels.*
. . . .
▶ **Note:** *If a Style-Performance is selected in record mode, the selection number specified is recorded in the Master Track.*
. . . .

SELECTION VIA MIDI

To select a Style-Performance (ROM or User) via MIDI, the selection message must be sent to **SK760/880** on the Common Channel. Send the Control Change 00 [Value 36 for ROM, value 40 for User] and a Program Change message in rapid succession.

Message...	selects...
CC00 [36] - PC [0...7]	ROM Style-Perfs 1...8
CC00 [40] - PC [0...7]	User Style-Perfs 1...8

STYLE P.

STYLE PERFORMANCES	
Vibes	User
E.Guitar	User
Sax	User
Piano	User

Style Performances (select with the corresponding Soft button)

SELECTING SOUNDS

Recall Sounds by selecting Performances or Styles

Refer to the previous sections relating to the selection of Performances or Styles.

While playing, Sounds are instantly recalled by selecting Performances or Styles. Program your Performances or Style-Performances accordingly before you play.

Panel selection

1. Press one of the SOUND GROUPS buttons to open a «Sound Select» window.

2. Scroll through the Banks with the ▲▼ buttons. The Bank number corresponds to the Control Change 00 MIDI message (CC00/BankSelect MSB).

3. Select a Sound with the corresponding Soft button.

. . . .
▶ **Note:** *When you select a Sound,* **SK760/880** *sends CC00-CC32-PC messages in rapid succession on the MIDI channel assigned to the track.*
. . . .

Name of the selected Sound Group

Bank (select it with ▲▼)

```
         SOUND GROUP:           ▲▼
            Piano              Bank:02
┌─────────────────┬─────────────────┐
│ PianoMk1   1-2  │ ThinRhodx   5-2 │
├─────────────────┼─────────────────┤
│ PianoW2    2-2  │ E.Piano3    6-2 │
├─────────────────┼─────────────────┤
│ E.G.Piano1 3-2  │ Harpsich2   7-2 │
├─────────────────┼─────────────────┤
│ DetPiano   4-2  │ SynClav     8-2 │
└─────────────────┴─────────────────┘
```

ProgramChange

CC00/BankSelect MSB

Selecting with the Numeric keypad

It is possible to specify a Sound selection message on the numeric keypad (EDIT/NUMBERS section). This section can send a MIDI message consisting of Control Change 00 (CC00/BankSelect MSB), Control Change 32 (CC32/BankSelect LSB), ProgramChange (PC) to an external unit connected to the **SK760/880** MIDI OUT.

To select a **SK760/880** Sound, it is sufficient to specify the message CC00-PC. The CC32 message can be ignored.

The keypad insertion zone will close automatically after a few seconds of inactivity.

Keypad selection procedure

1. Select the track to which a Sound is to be assigned.

2. Press KEY PAD (LED on) to activate the EDIT/NUMBERS section as a numeric keypad. An insertion zone opens in the display showing the number of the current sound assigned to the track.

3. Specify the Program Change number of the Sound to select.

   If the Sound belongs to a different Bank, add a separating hyphen (symbol «-») followed by the corresponding bank number (BankSelect MSB).

   In MIDI situations, if necessary, add another separating hyphen and a BankSelect MSB number (not for **SK760/880** internal Sounds).

4. Confirm the entry with KEY PAD or ENTER, or press ESCAPE to cancel the entry. The LED on the KEY PAD button goes off.

5. Press STORE PERF followed by ENTER to memorize the modification to the current Performance.

   . . . .
   ► *Note: Sound selection messages are transmitted and received via MIDI in the order CC00-CC32-PC with the ProgramChange last. For practical purposes, the reverse order has been adopted for the panel selection procedure, given that the ProgramChange on its own is sufficient to select all the Sounds of the current Bank.*
   . . . .
   When working with an external sequencer, messages must be entered in the order CC00-CC32-PC. If it is intended to select only the **SK760/880** *Sounds, the PC32 part of the message can be ignored.*
   . . . .

Insertion Zone

CC32/BankSelect LSB

CC00/BankSelect MSB

PC/ProgramChange

PC/ProgramChange

CC00/BankSelect MSB

Selection via MIDI

The Sound selection message must be received on the MIDI channel assigned to the track to which the Sound is assigned.

To select a **SK760/880** Sound, you must send a Control Change 00 (CC00/BankSelect MSB) and Program Change (PC) message.

The relative numbers are also displayed in the main page (Multi mode) and the selection window that appears when you select a SOUND GROUPS button.

The Sound table in the Appendix lists all the **SK760/880** Sounds and corresponding MIDI selection messages.

SELECTING SONGS

Panel selection

Selecting a Song sets **SK760/880** to Song mode.

1. Press the SONG button to open the «Select Song» window.

2. Select a Song with the corresponding Soft button.

. . . .
▶ **Note:** *When you select a Song,* **SK760/880** *sends CC00 [value 55]-PC messages in rapid succession on the Common Channel . The BankSelect, ProgramChange, Volume and Pan messages of the tracks are sent on the normal MIDI channels.*
. . . .

SONG BANKS	
ALSOSPCH	User
TWILIGHT	User
PETEGUNN	User
BALLGAME	User
PIZZMYST	User
CAMPTOWN	User
RUSTIC__	User
WILLTELL	User

Song (select with the corresponding Soft buttons)

SELECTION VIA MIDI

SK760/880 must receive the relative selection messages on the Common Channel. Send Control Change 00 (value = 55) and Program Change messages in rapid succession to **SK760/880**.

Message..	selects...
CC00 [55] - PC [0...15]	Song 1...16

. . . .

SELECTING SONG-PERFORMANCES

Panel selection

To select a Song Performance, **SK760/880** must be set to Song mode.

1. Press the SONG P. button with the F4 Soft button to open the «Song-Performance» selection window.

2. Select a Song-Performance with the corresponding Soft button.
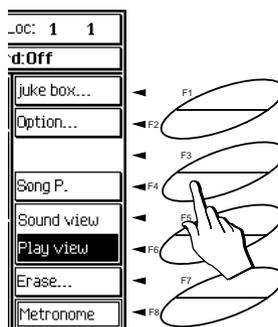
. . . .
► **Note:** When you select a Song-Performance, **SK760/880** sends CC00 [value 64]-PC messages in rapid succession on the Common Channel.. The BankSelect, ProgramChange, Volume and Pan messages of the tracks are sent on the normal MIDI channels.
: :
► **Note:** If PLAY or STOP are pressed, the Song-Performance recorded in the Song is recalled (the initial one or the most recent one). All temporary modifications will, therefore, be cancelled.
. . . .
► **Note:** If a Song-Performance is selected in record mode, the selection number specified is recorded in the Master Track.
. . . .

SELECTION VIA MIDI

To select a Song-Performance via MIDI, the selection message must be sent to **SK760/880** on the Common Channel. Send the Control Change 00 [Value 64] and a Program Change message in rapid succession.

Message...	selects...
CC00 [64] - PC [0...7]	Song-Perfs 1...8

Song-Performance (select with the corresponding Soft buttons

Display Hold

You can select items from a selection display without closing the selection window by pressing the D. HOLD button.

The LED of the button turns on to indicate the activation of the function.
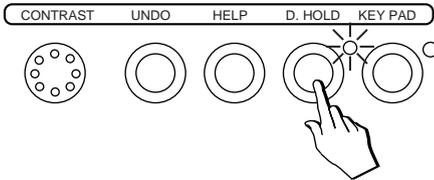
D. HOLD remains active (LED on) until the button is pressed again.

Use ESCAPE to close the current selection window without deactivating D. HOLD.

Use Display Hold when selecting Sounds, Styles, Programmable Performances and Songs.

Effects Off

You can choose to select and play your Performances, Styles and Songs without the programmed effects by activating the EFFECTS OFF button.

The LED of the button turns on to indicate the activation of the function. When the LED is on, the effects are bypassed and the current Performance, Style or Song plays "dry" (i.e. without effects).
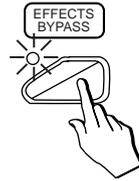
EFFECTS OFF remains active (LED on) until the button is pressed again.

Help

SK760/880 incorporates an on-line-help system which provides brief information on the basic functions of the instrument. This feature is particularly helpful if you get stuck and do not have access to the owner's manual at the time.

Also incorporated is a PANIC function which helps to unlock the instrument in MIDI situations.

Generally, pressing HELP opens a page showing information regarding the currently set mode.

Therefore, if you are in Style/Performance mode, press HELP to get information concerning the default situation (main page).

Similarly, if you are currently working in one of the Edit environments, (Edit Effects, for example), press HELP to get information on the Effects section.

Some Help pages consist of a General information page and one or more 'Detail' pages which provide detailed information regarding the current topic.

HOW TO USE HELP

1. Press the HELP button when you want general information regarding the current mode.

   A GENERAL page will open showing information regarding the current operating mode.

2. If available, press DETAILS (F7/F8) to open a sub-page with specific details concerning the current help topic.

   Depending on the current mode, a NEXT page (F3/F4) may or not be available.

   Once you have entered a NEXT page, the PREVIOUS option (F1/F2) will be available.

   Options not available will be shown with broken lines.

3. To return to a GENERAL page, press F5/F6.

4. To pass to another HELP topic, regardless of the current operating mode, press NEXT (F3/F4) or PREVIOUS (F1/F2).

5. Press ESCAPE to close the current HELP page.
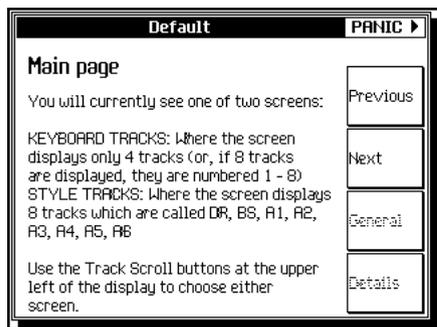
Help - General Default - main page information
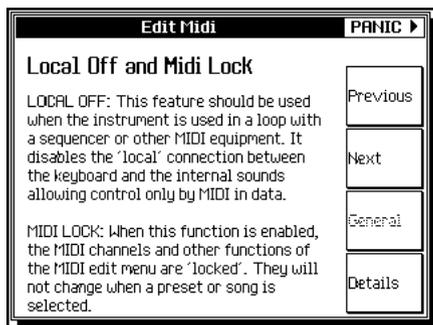
Help - EDIT Midi - Details information

• 6 Songs, MIDI files & Song recording

ABOUT SONGS

A Song is a multitrack recording of several instrumental parts, each corresponding to a track. **SK760/880** can load Songs from disk in its own format (Song), in previous compatible formats (WK, SK, PS, WX, SX), in standard MIDI file format 0 or 1 and in Tune1000™ format.

SK760/880 Songs are 'free', that is, tracks can be recorded starting from any point, without start or end segment limitations, which characterize most sequencers. Your recorded Songs can also be saved as MIDI Files.

Tracks contain MIDI events, that is, notes and control data. Control data can include PitchBend and Aftertouch messages, ProgramChange and BankSelect messages for sound changes, ControlChange messages to control the effects sends, Sustain pedal and other control parameters. MIDI events recorded on tracks are not the internal Wave sounds, but messages which activate the **SK760/880** internal sound generator or an expander controlled by **SK760/880**. A Song is a MIDI event list – a list for each track.

General control messages are recorded in the Master Track. These messages relate to the instrument in general, such as effects change or Performance selections.

ABOUT STANDARD MIDI FILES

A Standard MIDI File is a storage format created to maintain data compatibility among different devices complying with the Standard MIDI File format. This format allows Songs to be exchanged between different instruments and computers. If you save your recorded Songs as MIDI files on an MS-DOS disk, you can be certain that all the most recent generation of instruments and sequencers/computers will be able to load and read your **SK760/880** Songs.

General MIDI

To facilitate compatibility between different makes of instruments, MIDI files should be in General MIDI standard, a common platform for sounds and the way they are selected. General MIDI stipulates common standards regarding the listing of sounds, Program Change numbers for sound selection, the percussive sound configuration in the Drumkits, the assignment of MIDI channel 10 to the Drumkits, a minimum polyphony (24) and a maximum number of tracks (16).

In **SK760/880**, Sound Banks 1 and Drumkit Bank 2 are fully GM compatible. **SK760/880** recognizes GM compatible MIDI Files, thanks to a messages contained in the MIDI File (General MIDI ON flag). If this message is not detected, sounds that differ to a Drumkit may be assigned to MIDI channel 10.

To ensure correct loading of GM compatible MIDI files that do not contain the General MIDI ON flag, be sure that the General MIDI parameter is set to ON in the "General Set" parameter of «Edit MIDI» before loading.

SK760/880 can save GM compatible MIDI Files when the General MIDI parameter is set to ON. MIDI Files loaded into the **SK760/880** memory are converted to **SK760/880** Songs.

GMX format

GMX refers to the "General MIDI eXtended" format, specifically created by Generalmusic, which renders the first three sound banks of the **SK760/880** with previous series instruments (WK, SK, PS) completely compatible.

To program **SK760/880** Songs that are perfectly compatible with all WK, SK, PS Series instruments, use the Sounds of the first three Sound banks and record the Songs using 16 tracks only (MIDI channels A1…A16).

SONG-PERFORMANCES

Normally, Sound change messages (ProgramChange and BankSelect) are inserted in the single track. Effects change messages are inserted in the Master Track.

Using the Song-Performance is an alternative and rapid method of changing Sounds and Effects. Song-Performances instantly reset the instrument, therefore, they are very useful during a real time Song recording.

Generally, when programming a Song from an external computer, it is convenient to insert all the messages in the tracks, while during a real time Song recording, it is better to program several Song-Performances and select them during the recording. The selection message is recorded in the Master Track as a ProgramChange.

Each Song contains up to 8 Performances, which are loaded and memorized with the corresponding Song.

When a MIDI file is saved, Performances are converted in track data (ProgramChange, Pan, Volume, effects send).

To select Song Performances, refer to the Selection chapter of the Reference Gide.

PROGRAMMING SONG-PERFORMANCES

The method used to program Song-Performances is identical to that used for the Performances of the Performance Groups (Real). Refer to the Store Performance procedure discussed on page 2.38 in the Quick Guide.

A Song has a maximum of 32 tracks.

. . . .
▶ **Note:** *After having programmed or modified a Song-Performance, press STORE PERFORMANCE to save it to RAM. The selection of another or the same Performance or pressing STOP and PLAY, will erase the modifications.*
. . . .

Song Playback/Jukebox

Song playback control buttons
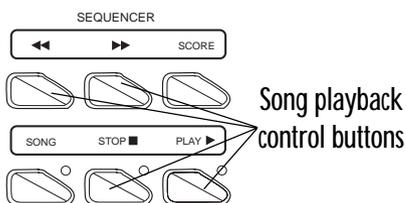
PLAYBACK CONTROL BUTTONS

The buttons which control the playback of Songs in memory are in the SEQUENCER section.

PLAY

This button starts the Song playback (or recording). During the playback, the LED on the PLAY button is on. The location (LOC) in the display shows the current position of the Song. If the Song is not playing, pressing PLAY starts the Song from the current position.

<</>>

The **<<** and **>>** buttons rewind or advance one measure (bar) at a time. If you hold these buttons pressed, the Song rewinds or advances at high speed. These buttons are active either in Song play or stop status.

During playback, the DIAL changes the Song's playing speed (tempo).

STOP

This button stops the Song playback (or recording). When the Song has been stopped at a position that differs to the initial Song start position, the LED on the STOP button flashes. When the Song is not playing and at its initial starting position, the LED on the STOP button remains on.

. . . .

«Play view» parameters

The main page of Song mode («Play View») contains position pointers and performance control parameters.

SONG VIEW/PLAY VIEW

You can opt to see the Song in «Play View» mode in order to modify the playing parameters, or in «Sound View» mode in order to see the sounds assigned to the tracks of the current Song-Performance. You can pass from one mode to another by pressing the corresponding Soft button (F5 or F6).

Sound View	Sound View
Play View	**Play View**

Song: **TURNBEAT**	♩= **126** i	Loc: 1 1	
Perf.: SMFPRES___		Chord:**Off**	
1 ♫☺ Piano1		1-1-1	juke box...
2 ♫☺ FingeredBs		34-1-1	Option...
3 ♫☺ Strings		49-1-1	
4 ♫☺ Flute		74-1-1	Song P.
5 ♫☺ SteelGtr		26-1-1	**Sound view**
6 ♫☺ Organ3		19-1-1	Play view
7 ♫☺ Brass		62-1-1	Erase...
8 ♫☺ SoftSax		66-1-1	Metronome

«Sound View» page

Song: **TURNBEAT**	♩= **126** i	Loc: 1 1	
Perf.: SMFPERF___		Chord:**Off**	
1 ♫☺	**Play**		juke box...
2 ♫☺	Loc : **1** 1 1		Option...
3 ♫☺	Play/Rec. mode :Linear		
4 ♫☺	Start :1		Song P.
5 ♫☺	End :1		Sound view
6 ♫☺	Time Signature :4 /4		**Play view**
7 ♫☺	Tempo :126		Erase...
8 ♫☺	Song Memory :102156 bytes		Metronome

«Play View» page

Tempo

Metronomic Tempo. The value represents the playing speed (beats per second) at the current song position. During the playback, the Tempo can be modified with the DIAL.

The [i] or [e] symbols, shown after the tempo value, are an indication of the status of the synchronizing MIDI clock: [i] = internal (**SK760/SK880**) or [e] = external (external sequencer connected to the **SK760/SK880** MIDI IN). The synchronization is programmed in «Edit MIDI», «General settings» page.

. . . .
▶ **Note:** *The starting tempo can be changed by modifying the Master Track in «Edit Song», or by using the DIAL in «Play View». The selected value remains in memory.*
. . . .

Locator (Song position pointer)

This section shows the current Song position expressed in measures and beats. When the Song is not playing, the Locator can be modified in the «Play View» page in order to select a starting point for the playback. It can be also modified with the [**<<**] and [**>>**] buttons regardless of the status of the sequencer (playing or off).

Locator (programmable)

Repeats the same information of the locator shown in the status bar, but also contains the sequencer resolution (or 'tick').

When the sequencer is off, the three parts can be individually modified (if selected) by rotating the DIAL.

Play/Rec mode

There are three Play or Record options to choose from:

• **Linear:** the Song starts at the point indicated by the locator and stops at the natural Song end.

. . . .

- **Forced stop:** the Song starts at the point indicated by the locator and stops at the specified End.

- **Loop: t**he Song starts at the point indicated by the locator, stops at the End, then repeats from the Starting point. The loop repeats continuously until stopped with the Stop button.

Start

Determines the start measure and can be modified only if the Play mode is set to «Loop». If Loop is selected, this parameter indicates the starting point of the loop. Modify this parameter when it is in a selected state, or when the Song has already been recorded, by rotating the DIAL.

End

Determines the end measure and can be modified only if the Play mode is set to «Forced stop» or «Loop». If Loop is selected, this parameter indicates the point at which the sequence ends before looping back to the Start locator. If Forced stop is selected, it indicates the automatic Stop point.

This parameter can be modified when it is in a selected state by rotating the DIAL.

Time Signature (programmable with an empty Song)

This parameter can only be modified before recording the Song.

Start Tempo (programmable when the Song is off)

Determines the starting tempo of a Song. This parameter can be modified when the Song is off. The value of the setting is recorded in the Master Track, as the *Start Parameter*.

Song memory (not programmable)

Shows the Song dimensions expressed in Kilobytes. Each Song is limited to 400 kb of memory, independent of the memory remaining in the System RAM.

. . . .

Play view Soft buttons

JUKEBOX... (F1)

Recalls the Jukebox function (explained afterwards).

OPTION... (F2)

Metronome options.

> **Countdown** - activates a one measure lead into the recording of a sequence during which events cannot be captured. *Options: On, Off.*
>
> **Metr. volume** - Sets the metronome volume. *Options: Off, 10...127.*

SOUND VIEW (F5)

Recalls the «Sound View» page, where you can see and change the sounds of the current Performance.

PLAY VIEW (F6)

Recalls the «Record View» page, where you can control the record/playback parameters.

ERASE... (F7)

Track or Song erase parameter.

> **Track**- Cancels the selected track.
>
> **Song** - Cancels all tracks (all Song) leaving an empty Song, ready to start another recording.. The Song-Performances are not cancelled.

METRONOME (F8)

Activates/deactivates the metronome.

Jukebox Soft buttons

Delete (F4)

Removes a selected Song from the Jukebox list.

Insert (F5)

Inserts the Song selected in the left part of the display into the Jukebox list on the right, moving the names which follow afterwards one step forward. This command can be used instead of ENTER to insert a Song without cancelling another at the same location.

Reset list (F6)

Removes all the names from the Jukebox list.

All Song (F7)

Includes all the Songs contained in memory to the Jukebox list. An existing list will be cancelled and substituted with the new.

Execute (F8)

Starts the playback of the Jukebox. Once pressed, this button appears in the Play View page of the Song.

To stop the playback of Jukebox press STOP.

Recording a Song

SK760/880 offers two principal Song recording methods: **Quick Rec** and **Record.**

Quick Rec recording

The "Quick Rec" method exploits existing Styles in order to record your keyboard tracks with automatic accompaniments. This method is a quick and easy way of recording which does not involve the more advanced options common to the more traditional Song Record method explained afterwards. The Quick Rec method is an excellent way of recording backing tracks for vocalists.

Record method

The more traditional "Record" method allows you to record one track at a time and does not exploit existing structures.

For example, to record a Drum track, you must build the drum accompaniment note for note using the individual percussive instruments of a Drumkit assigned to one of the tracks.

THE QUICK REC METHOD

(N.B. See also page 2.50).

1. Press SONG to open the «Songs» dialog window and select a free location (User).

2. Select the QuickRec option from the «New Song» dialog window by pressing the soft button F2.

   The RECORD LED lights up and the Quick Record page activates showing a negative highlight page.

   A new Song and Song Performance is created based on the starting Performance (if modifications were previously applied, entering record mode saves the modifications to the new Song-Performance).

3. Select a Style and set the accompaniment controls (MIXER LOCK, TEMPO LOCK, ARRANGE ON/OFF, ARRANGE MEMORY, LOWER MEMORY, ARRANGE MODE OPTIONS).

4. Program the Performance as required and save the changes with STORE PERFORMANCE.

5. If necessary, activate KEY START, INTRO, FILL or ENDING.

6. Press START/STOP to start the recording. The PLAY button activates automatically.

7. Play the keyboard sounds with the automatic accompaniment, using the Fills and Intro at will.

8. Conclude your song (use the Ending).

9. Press STOP. The LED on the RECORD button goes off. At this point it is possible to modify the song recording in «Edit Song», or to record other tracks using the normal Record method described on the next page.

tracks   menu

«QuickRecord» page

The Record method

PREPARATION

1. Press SONG. In the «Select Song» dialog window and select an empty location (User - see display example below).

2. In the «New Song» dialog window, select the Record option.

NEW SONG	F1: Record
	F2: Quick rec.
❓ Create a new song. Select the recording mode.	
	F5: abort
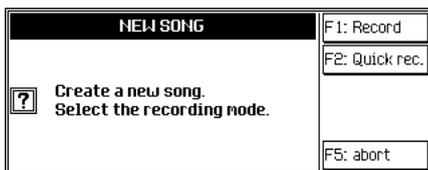
3. The LED of the RECORD (ST/SONG) button lights up and the display shows the «Record View» page for Song mode in negative highlight.

4. Program the recording options.

• Press F1 («Rec Mode») to open the «Rec Mode» dialog window, select the mode required and press ENTER to confirm.

Rec Mode
Replace
Overdubb
Punch in

SONG BANKS

AUTUMN_L	User
MIDNHOUR	User
UNDRSKIN	User
TURNBEAT	User
User	User
User	User
User	User
User	User

free locations

«Select Song» window

• Press F2 («Option») to open the «Option» dialog window where

Option	
Count Down	:On
Metr.Volume	:90

you can program the metronome and count-down options. Press ENTER to confirm the settings.
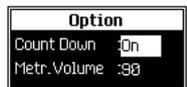
• Press F3 («Controls rec...») to activate or deactivate the recording of the Tempo, Pedal Volume, Effect Change events. Press

Control Rec	
Tempo	: Off
P. Volume	: Off
Effect	: Off

ENTER to confirm the settings.
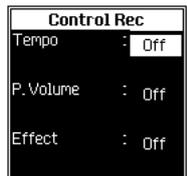
5. Select and program the initial Song parameters:

• «Time Signature» to modify
Time Signature :4 /4
the time signature (metronome).

• «Tempo» to modify the playing speed.
Tempo :120

Song name
Song-Performance name
Tempo
locator (measure counter)

Song:SONG_02	♩= **120** i.	Loc: 1 1
Perf:Init_Perf		Chord:Off

1 Mute	**Record**	Mode:Ovrdb...
2 Mute	Loc: 1 1 1	Option...
3 Mute	Play/Rec. mode :Linear	Controls rec...
4 Mute	Start :1	Select all trk.
5 Mute	End :1	Sound view
6 Mute	Time Signature :4 /4	Rec view
7 Mute	Tempo :120	Erase...
8 🔊	Quantize :free	Metronome

tracks
menu
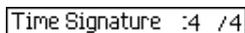
Song Mode - Record View display
(record/play parameters display)

. . . .

6. Select the `Quantize     :free` «Quantize» parameter to modify the pre-quantization (auto-correction of timing errors) during the recording phase.

7. If necessary, select «Play/ Rec Mode» to alter the Song Play/Rec mode:

   ```
   Play/Rec.mode: Linear
   Play/Rec.mode: Forced stop
   Play/Rec.mode: Loop
   ```

   • The **Linear** option causes the Song to play or be recorded once only, from the beginning to the point at which you press STOP.

   • The **Forced Stop** option causes the song to play or be recorded from the specified start locator to the end locator.

   • The **Loop** option allows you to play or record in a cyclic manner from the Start point to the End point.

8. If necessary, modify the Start and End locators.

   ```
   Start          :¦
   ```
   ```
   End            :¦
   ```

   These parameters can be modified only if the Song contains recorded data (it will not be possible to specify the measures if no re-corded events exist).

   The Start locator can be modified only when the Play/Rec mode is set to Loop. The End locator can be modified only if the Play/Rec mode is set to Forced Stop or Loop.

9. Select the track(s) to record and set it (them) for recording. Only tracks marked by the record icon will capture data and be heard:

   To place all the tracks in record, press F4 («Select all tracks»). All the tracks will be activated for recording and the parameter changes to «Deselect all tracks».

10. To change sounds, select the «Sound View» option by pressing F5.

    After assigning your Sounds, save the Performance with STORE PERFORMANCE. Press F6 («Rec View») to return to the «Rec View» page.

11. Activate the metronome with F8 («Metro-nome»).

Song:**SONG_02**	♩= **120**	Loc: **1 1**
Perf: ´Init_Perf	Chord:**Off**	
1 Mute Piano1	1-1-1	Mode:Ovrdb...
2 Mute FingeredBs	34-1-1	Option...
3 Mute Strings	49-1-1	Controls rec...
4 Mute Flute	74-1-1	Select all trk.
5 Mute SteelGtr	26-1-1	Sound view
6 Mute Organ3	19-1-1	Rec view
7 Mute Brass	62-1-1	Erase...
8 SoftSax	66-1-1	Metronome

Song Mode - Sound View display
(Sounds display)

RECORDING

1. Press PLAY to start the recording. If Count-down is ON wait for the countdown to finish before playing (events are not recorded dur-ing the countdown phase).

2. Start to play after the countdown. Events will be recorded in the track or tracks active for recording.

3. When you have finished, stop the recording with STOP.

. . . .
▶ *Note: Pressing STOP twice rewinds the Song back to the beginning.*
. . . .

4. To add additional events to the same tracks, press STOP again to take the song pointer to the starting point and repeat points 1 - 3.

. . . .
▶ *Note: To add notes to existing ones in a track, select the Overdub option. To substitute existing notes in a recorded track with new ones, select the Replace option.*
. . . .

5. If you are satisfied with the recording, con-firm the track or tracks by pressing the corre-sponding Soft buttons. The recording will be confirmed and the tracks set to «seq-play».

6. Repeat the recording procedures for other tracks.

7. Press RECORD to escape «Record» mode. The LED of the RECORD button goes off and the display returns to normal.

UNDO

If, during the recording phase, you want to can-cel the last performed recording task, use UNDO to cancel the last performed task. The UNDO button is located to the right of the display, just after the Contrast knob.

For example, after adding new events to an ex-isting drum pattern, you might want to return to the original pattern and just cancel the new events. A quick an easy way is to use UNDO. Just press UNDO and confirm the request with ENTER or cancel with ESCAPE.

1. If, after recording a track, you wish to return to the previous situation, press UNDO.

You are prompted with a request to confirm the operation.
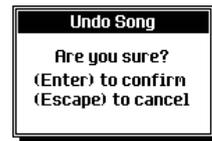
2. Press ENTER to cancel the last performed operation, or ESCAPE to cancel the request and retain the last operation.

. . . .

The «Record View» page in detail

Mode... (F1)

Opens the «Record Mode» dialog window where you can select various recording options.

Replace - The new notes substitute "old" notes already present in the tracks being recorded.

Overdubb - New notes are merged with those already present in the tracks being recorded.

Punch In/Out - A means of inserting a correction without repeating a recording. Punch recording is activated by pressing an appropriately programmed pedal (in «Controllers/ Pads» of «Edit Performance»).

Activate the recording with PLAY. When the song reaches a position just before the point at which the correction must be inserted, press the pedal. At this point, the recording proceeds in "replace" mode. When the correction is complete, release the pedal to stop the replace recording.

Option... (F2)

Metronome options.

Countdown - A lead into the recording during which time no events can be captured.. *Settings: On, Off.*

Metronome vol. - Volume setting of the metronome tick. *Settings Off, 10...127.*

Controls rec... (F3)

Recording options for Tempo, Master Volume, effects changes. These events are captured in the Master Track.

Tempo - To record the Tempo variations. *Settings: On, Off.*

P.Volume. - To record the general Volume of the instrument using the Volume pedal . These events are recorded as CC07 (see Appendix). *Settings: On, Off.*

Effect - To record the changes of the effects assigned to the Performance and respective effect volume levels. These events are captured as CC16, CC17, CC48, CC49 (see Appendix). *Settings: On, Off.*

Select all tracks (F4)

► Select all tracks (F4)

► *Once pressed, the option changes to «Deselect all tracks».*

Activates all the tracks for recording. «Deselect all tracks» resets all the tracks in «key-play» or «seq-play» status.

Sound View (F5)

Recalls the «Sound View» page in which it is possible to see and change the sounds assigned to the Performance.

Rec View (F6)

Recalls the «Record View» page in which it is possible to control the record/play parameters.

Erase... (F7)

Cancellation of the track or Song.

Track - Cancels the selected track.

Song - Cancels all the tracks (entire Song) and leaves an "empty" Song, ready to capture recorded events. The Song Performance remains intact.

Metronome (F8)

Activates/deactivates the metronome.

LOC

Locator. Indicates the current position of the Song, expressed in measures, beats and resolution (tick).

Loc: **1**   **1**   **1**

    measure (bar)   beat   resolution
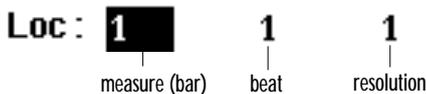
The measure can be modified with the DIAL. It is not possible to select the next measure after the Song end point. For example, if the recorded Song terminates at measure 10, the Locator cannot be given a value greater than 10 -1 -1.

PLAY/REC MODE

Recording and playback options for the Song. The options are:

    Linear - A linear recording or playback of the Song, starting from the current locator to the Song end. In record mode, new events are recorded as the recording proceeds.

    Forced stop - The Song is played back or recorded from the current Locator to a specified End locator. With Forced Stop active, the Loc and End indicators determine the start and end point of the recording.

    Loop - Song playback or recording repeats continuously. When the Song reaches the end, it loops back to the beginning and starts again and continues to repeat until stopped with STOP.

. . . .
▶ *Note: The loop requires an additional memory buffer. When this mode is selected, the memory progress bar shows an increased amount of used memory.*
. . . .

START

Starting indicator. If Loop is active (Play/Rec Mode= Loop) this parameter indicates the point at which the Song starts to repeat. The parameter can be modified with the DIAL.

END

End point marker. If Loop is active (Play/Rec Mode= Loop) this parameter indicates the point at which the repeating song ends before looping back to the Start marker. If the Play/Rec Mode=Forced Stop, this parameter indicates the automatic Stop point.

The parameter can be modified with the DIAL.

TIME SIGNATURE

Metro. This parameter can be modified only before starting a recording. If the Song contains recorded events, the parameter cannot be modified.

TEMPO

Initial playing/recording speed. The parameter can be modified with the DIAL in the «Play View» or «Record View» page, or in the Master Track.

Tempo changes can be carried out during the recording by using the DIAL. The events are captured in the Master Track, provided that the appropriate option is active («Controls rec», dialog window F3).

The Master Track always contains the initial Tempo of the Song. The value can be modified but not cancelled.

. . . .

QUANTIZE

An auto-corrector of timing errors during the recording phase. The selection values are normal, triplets or swing.

Value	Quantization
1/4	♩
1/8	♪
1/12	♪ triplet
1/16	♫
1/24	♫ triplet
1/32	♬
1/48	♬ triplet
1/64	(1/64)
1/96	(1/64 triplet)
free	no quantization
1/8 B...F*	♩. ♪ (swing)
1/16 B...F*	♪. ♫ (swing)
free	no quantization

* B … F indicate an adjustment of the Swing feel.

MEMORY PROGRESS BAR

A bar graph which monitors the amount of memory being used up by the song as it is being recorded. In Play mode, the parameter changes to SONG MEMORY, expressed as a numerical value and is independent of the total amount of memory remaining in RAM. Each Song is limited to 400 kb.

If the RAM already contains a large amount of data, a dialog window may appear showing the message «Memory full!», which indicates that the recording cannot proceed further. The recording is instantly interrupted.

You can increase the amount of space in RAM by deactivating the Undo function.

. . . .

EDITING YOUR SONGS

The "Edit Song" functions allow you to modify the recorded song, by copying or moving entire parts of a song, by correcting timing errors, by inserting events in 'event edit' environments (Microscope and Master Track). For detailed information, refer to the Edit Song chapter 7.

RESTORING THE SONGS MEMORY

If you have loaded disk-based Songs or recorded Songs and used up all the memory dedicated to the storage of Songs, a quick and easy way of clearing Song memory and making room for other Songs is to use the Restore Songs operation.

Naturally, you must remember to save the Songs that you don't want to lose to disk before proceeding with the restore procedure.

1. Press GENERAL in the EDIT section to gain access to the «Edit General» environment.

2. Press F6 («Restore Songs») to cancel all the Songs (and relative Song-Performances) in RAM.

    You are prompted with a request to reconfirm your choice.

3. Press ENTER to confirm, or ESCAPE to cancel.

    With ENTER, the Songs are cancelled from memory.

    With ESCAPE, the song data are retained.

. . . .
► **Hint**: *To cancel the entire contents of RAM in a single operation, use the «Restore All» command.*
. . . .

• 7 Edit Song

After recording a Song using either the «Record» method or the «QuickRec» method, it can be edited by entering «Edit Song».

HOW TO ENTER «EDIT SONG»

Select the Song that requires editing.

The name of the Song will appear in the title bar of the display.

Song name

Song: TURNBEAT	♩= **126** i.	Loc: **1** **1**
Perf.: SMFPERF___		Chord:Off
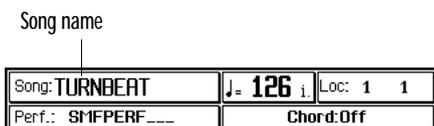
Press the ST./SONG button in the EDIT section to enter «Edit Song».

Entering this section the first time opens the main menu (page 00/10). On all successive occasions, the last page selected is recalled.

ST. / SONG

Page name   Editors   Locator

	Edit Song: TURNBEAT	L:1 1	
	Menu		00/10

1		**1** Erase	**2** Move	
2				Undo
3		**3** Copy	**4** Quantize	
4		**5** Ins. Meas.	**6** Del. Meas.	
5				
6		**7** Velocity	**8** Transpose	Edit score
7		**9** Microscope	**10** Master Trk	
8				Song name
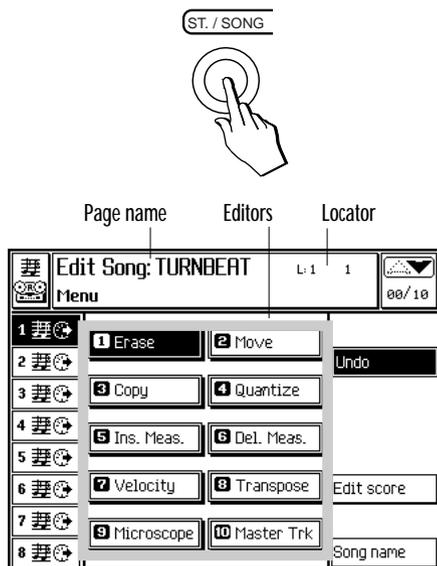
Edit Song: Main menu

THE EDIT PROCEDURE

1. In Song mode, press ST./SONG to enter «Edit Song». The main menu appears.

2. Select the editor that you wish to edit using the DIAL or the cursor buttons. It is also possible to enter an editor by specifying the relative number on the numeric keypad.

3. Press ENTER to gain access to the editor.

4. Select the desired option with the soft buttons.

5. Select the parameters with the directional arrows. Modify the parameter with the DIAL or the numeric keypad.

6. Confirm the operation with ENTER.

7. Pass to another editor with the buttons ▲▼. Otherwise, return to the main menu with ESCAPE and select another editor.

ESCAPE «EDIT SONG»

To escape from «Edit Song» press ESCAPE (once or twice, depending on the currently selected level). To escape without closing the edit page, press the ST./SONG button. To pass to another edit environment, press the corresponding button in the EDIT section.

The main Menu Options

UNDO (F2)

When this parameter is selected (shown in negative highlight), the UNDO function is enabled. Undo cancels the last operation or series of operations carried out. This function consumes exactly the same amount of RAM memory as the Song. If there is a shortage of memory in RAM, it is a good idea to deactivate UNDO.

Press the UNDO panel button to execute the desired Undo operation.

You will be prompted with a request to confirm the operation with ENTER or cancel with ESCAPE.
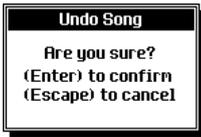
If UNDO is disabled, pressing the UNDO button and confirming with ENTER activates the following user message:

Press ESCAPE to close the window and repeat the UNDO operation, this time with UNDO enabled.

EDIT SCORE (F6)

Opens the Score Edit function.

Score Edit is described separately in detail in the «Score & Edit Score» section towards the end of this chapter.

SONG NAME (F8)

Modifies the name of the Song.

The characters are insereted using the method described on page 1.4 of the «Data Entry» section of chapter 1. You can move the cursor with the Soft buttons or the DIAL and insert the characters with the keys of the keyboard.

Name - Name of the Song which appears in the **SK760/880** file selector. This name does not appear when the disk is read by a computer. Maximum character length: 10.

Title - Full name of the Song.

Author - Name of the composer.

Pub - Song Publisher.

Erase

Cancels the events from a single track or from all tracks.

▶ *Set the parameters and press ENTER to confirm the cancellation.*

SOFT BUTTONS F3 ... F8

Use the Soft buttons F1...F8 to select the track from which events will be cancelled. Depending on the type of track selected, the following parameters may or may not appear.

Track (F3) - Single track. Select the track with the Soft buttons A...H.

Master track (F4) - The Master Track records events pertaining to the general controls of the Song (Tempo, Time Signature, selected Performance, selected effects).

Chords track (F5) - Track for the chord symbols inserted in the score.

Music track (F6) - Track for the notes of the score (standard notation).

Lyrics track (F7) - Track for the lyrics of the score.

All tracks (F8) .
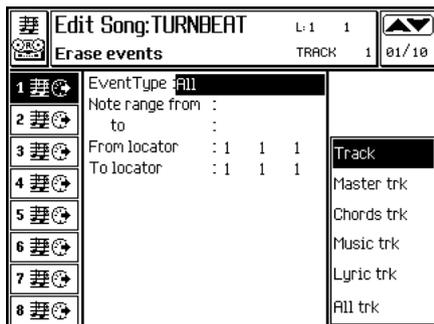
ERASE PARAMETERS

Event type

(Only for tracks which capture note events). Selects the type of event to cancel.

«Duplicate note» eliminates the note with the lowest velocity value when two notes of the same pitch start at the same position.

Options: All, Duplicate note, Note, Pitch Bend, Mono touch, Poly touch, Velocity Off, ProgramChange, ControlChange 00...31, ControlChange 64...127.

Note range from... to...

The highest and lowest limits of the note range to cancel. To cancel a single percussive instrument from the Drum track, assign the same value to the "from" and "to" parameters. For example, to cancel the snare (D2), set the parameter as «Note range from D2 to D2».

Assignable values: C-1 ... G9.

From locator... To locator...

Determines the start and end point of the part to cancel. In some cases it is possible to specify the measure, beat and resolution (tick), in others, only the measure.

Assignable values: within the limits of the Song. It is not possible to specify a point before the start or after the end of the Song.
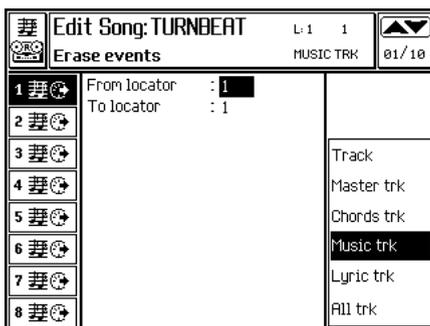
Move

Shifts events from one point of the selected track to another.

▶ *Set the parameters and press ENTER to confirm the movement.*

PARAMETERS

From locator... To locator...

Determines the start and end point of the part to move. It is possible to specify the measure, beat and resolution (tick).

Assignable values: within the limits of the Song. It is not possible to specify a point before the start or after the end of the Song.

Start locator

Determines the new position of the part that is to be moved.

Assignable values: any point, even after the end point of the Song.
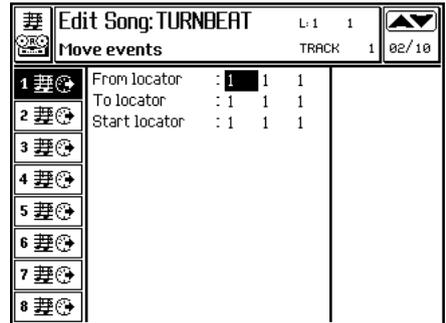

```
┌──┬─────────────────────────────────────────┐
│ 囍│ Edit Song: TURNBEAT    L·1   1    ▲▼    │
│ 囧│ Move events            TRACK   1  02/10 │
├──┼──────────────────────────────────────────┤
│1 囍↻│ From locator  : 1   1   1              │
│    │ To locator    : 1   1   1              │
│2 囍↻│ Start locator : 1   1   1              │
│3 囍↻│                                        │
│4 囍↻│                                        │
│5 囍↻│                                        │
│6 囍↻│                                        │
│7 囍↻│                                        │
│8 囍↻│                                        │
└──┴──────────────────────────────────────────┘
```

Copy

Copies events from a single track or from all tracks.

▶ *Set the parameters and press ENTER to confirm the copy.*

SOFT BUTTONS F3 ... F8

Use the Soft buttons F1...F8 to select the track from which events will be copied. Depending on the type of track selected, the following parameters may or may not appear.

Track (F3) - Single track. Select the track with the Soft buttons A...H.

Master track (F4) - The Master Track records events pertaining to the general controls of the Song (Tempo, Time Signature, selected Performance, selected effects).

Chords track (F5) - Track for the chord symbols inserted in the score.

Music track (F6) - Track for the notes of the score (standard notation).

Lyrics track (F7) - Track for the lyrics of the score.

All tracks (F8) .
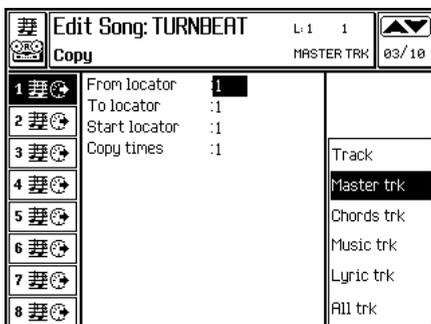
COPY PARAMETERS

Copy mode

Determines the copy mode. «Merge» unites the copied events to those already present at the destination. «Replace» substitutes the events present at the destination with those copied.

Options: Merge, Replace.

From track... to track...

Specifies the source and destination track of the copy. The «From track...» part is selected with the Soft buttons A ... H. The «To track...» part is modified with the DIAL.

Assignable values: any track (1...32).

To Song...

Determines the destination Song for the copy. If the selected Song is non existent, it will be created by the act of confirming the copy command.

Assignable values: any Song (1...16).

Note range from... to...

Determines the highest and lowest limits of the note range to copy. To copy a single percussive instrument from the Drum track, assign the same value to the "from" and "to" parameters. For example, to copy the snare (D2), set the parameter as «Note range from D2 to D2».

Assignable values: C-1 ... G9.

From locator... To locator...

Determines the start measure and end measure of the part to copy. Bars and Resolution cannot be specified.

Assignable values: within the limits of the Song. It is not possible to specify a measure after the end of the Song.

Start locator

Determines the new position of the copied part.

Assignable values: any point, even after the end point of the Song.

Copy times

Specifies the number of consecutive copies. Each copy starts exactly where the previous one ends.

Assignable values: 1...998.

Quantize

An auto-corrector of timing errors. Includes triplet and swing quantize values.

▶ *Set the parameters and press ENTER to confirm the quantization.*

SOFT BUTTONS F1 AND F2

These select the «Note On Quantize» and «Note Off Quantize» parameters.

Note On Quantize - Quantization of the Note On event.

Note Off Quantize - Quantization of the Note Off event. After a Note On quantization, a Note Off quantization affects the duration of the notes, adapting them to the quantization grid.


```
Edit Song: TURNBEAT        L:1    1     ▲▼
Note on quantize           TRACK   1  04/10

1    Note on quantize : 1/4        Note on qnt.
2    Note range from : C-1         Note off qnt.
3       to          : G9
     From locator    : 1
4    To locator      : 1
5
6
7
8
```



```
Edit Song: TURNBEAT        L:1    1     ▲▼
Note off quantize          TRACK   1  04/10

1    Note off quantize: 1/4        Note on qnt.
2    From locator    : 1           Note off qnt.
3    To locator      : 1
4
5
6
7
8
```
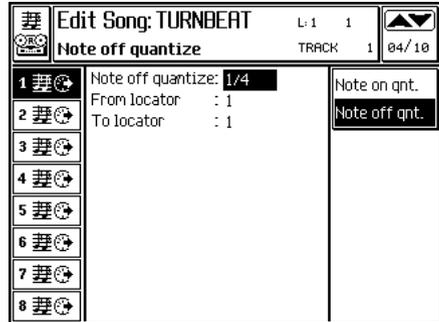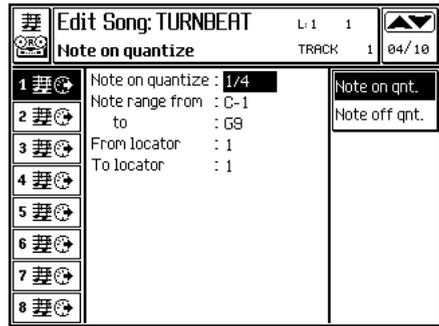
QUANTIZE PARAMETERS

Note On quantization

Determines the Note On quantize values.

Value	Quantization
1/4	♩
1/8	♪
1/12	♪ triplet
1/16	♬
1/24	♬ triplet
1/32	♬
1/48	♬ triplet
1/64	(1/64)
1/96	(1/64 triplet)
free	no quantization
1/8 B...F*	♩ ♪ (swing)
1/16 B...F*	♪. ♬ (swing)
free	no quantization

* B … F indicate an adjustment of the swing feel.

Note Off quantization

Determines the Note Off quantize value. Same as Note On.

Note range from... to...

Determines the highest and lowest note range to quantize. To quantize a single percussive instrument of the Drum track, assign the same note to the highest and lowest limit. For example, to quantize the snare (D2), set the parameter to «Note range from D2 to D2».

Assignable values: C-1 ... G9.

From locator... To locator...

Determines the start and end point of the part that requires quantizing. Only measures can be selected.

Assignable values: within the limits of the Song. It is not possible to specify a point after the end of the Song.

Insert measures

Inserts a specified number of measures. The part of the Song after the insertion point shifts forward the same number of bars as those inserted. Given that the Time Signature of the inserted measures can differ to the Time Signature of the Song, the Insert Measures parameter permits the creation of a Song with multiple Time Signatures.

▶ *Set the parameters and press ENTER to confirm the insertion.*

PARAMETERS

Measures to insert

Specifies the number of measures to insert. *Assignable values: 1...999.*

Time Signature

Determines the Time Signature of the measures to insert.

Insert from locator

Specifies the measure at which the new measures will be inserted.

Assignable values: from the first measure of the Song, to the first measure after the end measure of the Song (coda insertion).
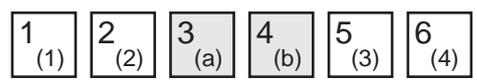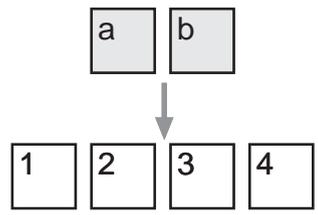
Insert measures example. Two measures are inserted at measure 3. Measure 3 and all successive measures are moved forward.

Delete measures

Cancels a specified number of measures. The measures directly after the point of cancellation shift towards the beginning of the Song and join with the measures preceding the cancellation point.

▶ *Set the parameters and press ENTER to confirm the cancellation.*

. . . .
▶ **Hint:** *To cancel measures without shifting those after the deletion point, use the Erase events function.*
. . . .

PARAMETERS

Measures to delete

Specifies the number of measures to delete.

Assignable values: any number that does not exceed the total number of measures in the Song. For example, if the Song is 50 measures long, the maximum value that can be assigned is 50.

Delete from locator

This parameter indicates the first measure of those to be deleted.

Assignable values: within the actual limits of the Song. The parameter is linked to the previous one, which can be modified if the measures between the deletion start point and the end of the Song are less than those shown in «Measures».
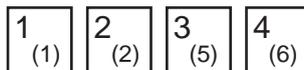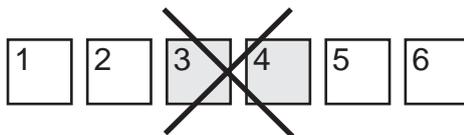
Example of Delete measures. Measures 3 and 4 are cancelled. All the measures after the delete point shift towards the beginning of the song.

Velocity

Modifies the key Velocity. This parameter represents the speed with which a note is played, or its intensity. Generally, the greater the velocity the higher the volume. Velocity also affects the filter of many sounds, rendering them brighter with increased velocity.

▶ *Set the parameters and press ENTER to confirm the dynamic changes.*

```
┌──────────────────────────────────────────┐
│ 霙 │ Edit Song: TURNBEAT    L:1    1  ▲▼ │
│ 🎵 │ Velocity              TRACK   1  07/10│
├────┬─────────────────────────────────────┤
│1霙🕀│ Velocity Mode   : Fixed             │
│2霙🕀│ Change Velocity : 1                 │
│3霙🕀│ Note range from : C-1               │
│4霙🕀│    to           : G9                │
│5霙🕀│ From locator    : 1   1   1         │
│6霙🕀│ To locator      : 1   1   1         │
│7霙🕀│                                     │
│8霙🕀│                                     │
└────┴─────────────────────────────────────┘
```

PARAMETERS

Velocity mode

Provides two velocity modes to choose from which affect the way the "Change Velocity" function operates.

> **Normal** - The value indicated in «Velocity change» is added to or subtracted from the key Velocity values.

> **Fixed** - The key Velocities are all set to the value specified in the «Change Velocity» parameter.

Change Velocity

Specifies the amount by which the velocity values can be changed. This depends on the option selected in «Velocity Mode».

Note range from... to...

Assigns the upper and lower limits of the notes to be affected. To modify the velocity of a single percussive instrument of the Drum track, assign the same note to the highest and lowest limit. For example, to change the snare (D2) set the parameter to «Note range from D2 to D2».

Assignable values: C-1 ... G9.

From locator... To locator...

Determines the start and end point of the part to be affected. It is possible to specify Measure, Beat and 'tick'.

Assignable values: within the actual limits of the Song. It is not possible to specify a point beyond the end of the Song.

Transpose

Transposition of a recorded track by semitones.

Also available are options to transpose the Chords and Music tracks of the Score of a song. This allows you to see the score in the correctly transposed status after a transpose operation.

Track (F6)

Transposition of a Song track by semitones.

Chords trk (F7)

Transposition of the Chords track of the Score by semitones.

Music trk (F8)

Transposition of the Music track of the Score by semitones.

▶ *Set the parameters and press ENTER to confirm the operation.*
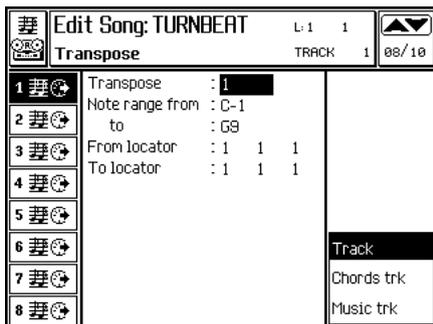
Transpose value

Determines the value of the transposition (in semitones).

Note range from... to...

Assigns the upper and lower limits of the notes to be affected. To transpose a single percussive instrument of the Drum track, assign the same note to the highest and lowest limit. For example, to change the snare (D2) set the parameter to «Note range from D2 to D2».

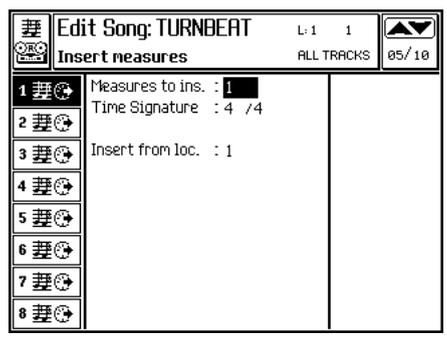*Assignable values: C-1 ... G9.*

From locator... To locator...

Determines the start and end point of the part to be affected. It is possible to specify Measure, Beat and 'tick'.

Assignable values: within the actual limits of the Song. It is not possible to specify a point beyond the end of the Song.

Microscope

The Microscope allows you to modify every single event recorded in the tracks. The Event List at the centre of the display shows all the events recorded.

ACCESSING THE EVENT EDIT MODE

1. Select the track whose events you wish to see in the Event List.

2. Use the ▲/▼ buttons to scroll through the events. The selected notes are played automatically.

3. Select the parameter to modify using the cursor buttons ◀/▶.

4. Use the DIAL to modify the selected parameter.

EVENTS AND PARAMETERS WHICH CAN BE CHANGED

The «Status» column shows the type of event. One or more parameters can be modified for each event.

Refer to the events table on the following page for an explanation of each event.

Event List   track in edit

measure
beat
resolution
Value 1
Value 2
Value 3
event type (Status)
Gate

SHOW... (F2)

Recalls a dialog window where it is possible to select the events that will be displayed in the Event List.

Set the events that you want to mask to OFF.

Show Event		
Note	:	On
Prog. Change	:	On
Controller.	:	On
Pich bend	:	On
Mono after touch	:	On
Poly after touch	:	On

Set the parameters and press ENTER.

EVENTS TABLE AND RELATED PARAMETERS

STATUS	VALUE 1	VALUE 2	VALUE 3	GATE
Note	Note name [C–1 … G9]	Key On Velocity [1 … 127]	Key Off Velocity [1 … 127]	Note Length expressed as the Sequencer resolution (q=192) [0 … 63323]
Program Change	Program change message. The PC contained in the tracks and shown in the Microscope has priority over the PC recorded in the Performance. [1 … 128]	Bank Select MSB message. To select the **SK760/880** banks, use numbers 1 … 16 [1 … 128]	Bank Select LSB message. Not necessary to select the **SK760/880** sounds [1 … 128]	
Control Change	Type of Control Change (or MIDI controller). Example: CC00 = BankSelect MSB, CC32 = BankSelect LSB, CC01 = Modulation, CC07 = Volume [1 … 128]	Control Change Value		
Pitch Bend	Value of LSB (Least Significant Byte). [0= Off, 1…127 = On]	Value of MSB (Most Significant Byte). Effectifve value of bending. [0…63 = down 64 = neutral 65…127 = up]		
Mono Touch	Channel Aftertouch intensity [0 … 127]			
Poly Touch	Note to which Aftertouch is applied. [C–1 … G9]	Note Aftertouch intensity. [0 … 127]		

. . . .

INS: (X) (F3)

Inserts the event specified in the "INS. TYPE" function at the current cursor position. To position the inserted event precisely, modify its locator accordingly (the parameters to the left of the Status).

The events are inserted with the following default parameter values:

Status	1V	2V	3V	Gate
Note:	C4	64	64	128
P. Ch	1	1	1	
Contr.	1	0	----	
P.Bend	0	64	----	
M.Tch	0	----		
P.Tch	C4	0	----	

After inserting the desired event, modify its parameters accordingly.

INS TYPE... (F4)

Recalls a dialog window where you can select the type of event to insert manually with the «Ins(x)» function.
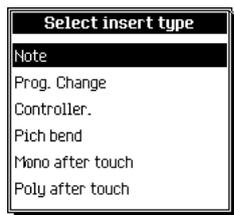
Select the event type to insert and press ENTER.

DELETE (F6)

Cancels the selected event.

CATCH LOCATOR (F7)

Selects the event currently playing (when the Song is in playback mode), or the event immediately after the current Song position.

GO TO LOC... (F8)

Takes the cursor directly to the first event of the specified locator (measure). The number can be specified with the DIAL.

Specify the locator and press ENTER to confirm.

Master Track

The Master Track editor allows you to modify the events recorded in the Master track which contains events pertaining to the general controls of the Song. This Track records changes in Performance, general Volume (Pedal Volume), Effect Changes, Effect Volume, Scale, Tempo changes, initial Time Signature and the Score Key.

The structure of the page is analogous to the Microscope. The events are shown in the Event List at the center of the display.

Accessing the Event Edit Mode

1. Use the cursor buttons ▲/▼ to scroll through the events.

2. Select the parameter to modify using the cursor buttons ◄/►.

3. Use the DIAL or the numeric keypad to modify the selected parameter.

INITIAL PARAMETERS OF THE SONG

The events that define the Song at the start point can be modified but not deleted. To access and modify the events press F1 («Start param»).
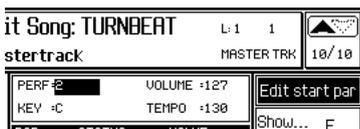
PERF - Initial Performance. Sets the initial values of some of the track parameters (Program Change, Volume, Pan, Effects). If the same parameters are also found at the beginning of each track, the sound, volume and pan settings are selected and controlled by the events contained in the tracks and not by the initial Performance.

Assignable values: one of the 8 (max) Song Performances.

Initial parameters Event List

bar
beat value
resolution
event type
(Status)
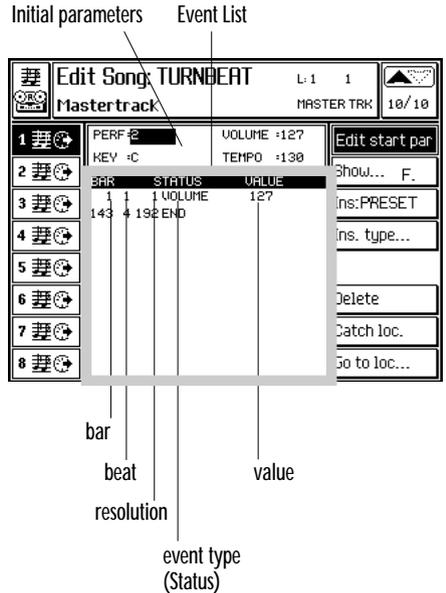
. . . .
► **Note:** *When loading a MIDI file, normally the Performance settings are ignored, due to the fact that commercially available MIDI files contain initializing events at the start of each track*
. . . .

VOLUME - Overall volume, controlled by the Damper pedal set for continuous control and assigned the Volume function.

KEY - Key for the correct visualization of the score. Alters the score according to the specified key (inserts the correct accidentals), rendering the score easier to read. For example, if the score was captured in the key of C, you can display the score in the key of F# with all the correct accidentals shown in the initial key signature by setting the Key parameter to F#.

TEMPO - Metronome pulse. Can also be set on «Play View» or «Record View» pages.

. . . .

PROGRAMMABLE EVENTS AND PARAMETERS

The «Status» column shows the type of event. One or more parameters can be modified for each event. The table shown opposite lists the events and parameters which can be modified.

START PARAMETERS (F1)

Enters the edit of the Song's start parameters. Press F1 again to return to the edit of the successive parameters.

SHOW... (F2)

Recalls a dialog window where it is possible to select the events that will be displayed by the Event List.

Set the events that you want to mask to OFF.

Show Event	
Tempo	: On
Performance	: On
Volume	: On
Eff. Device Sel.	: On
Eff. Type	: On
Eff. Device Vol.	: On
Eff. Vol.	: On
Rotary A	: On
Rotary B	: On
Scale	: On
Key Sign	: On
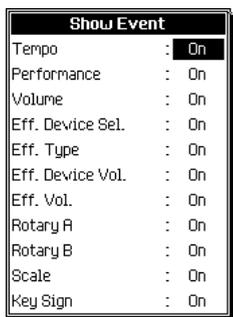
INS: (X) (F3)

Inserts the specified event type at the cursor position. To position the inserted event precisely, modify its locator (the parameters to the left of the Status).

STATUS	VALUE
TEMPO	Metronomic Tempo. If the Tempo Rec option is enabled during the recording, all tempo variations are recorded. [20 … 250]
PERFORMANCE	Change of Performance [1 … 8]
VOLUME	Volume variation via MIDI (through the Common channel) or by means of the Volume Pedal. Does not record Volume changes made with the M.VOL slider. [0 … 127]
EFF. DEVICE SEL.	Selection of a DSP device. Corresponds to CC18.
EFF. TYPE	Type of effect assigned to the selected DSP. Corresponds to CC48. The tables of the assignable effects are in the Appendix.
EFF. DEVICE VOLUME	General Effect Volume of the effect type assigned to the DSP. The Effect Sends (amount of effect applied) for each track is regulated in the Microscope by means of the Control Change messages CC91 & CC93.

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The events are inserted with the following default parameter values:

Status	Value
Tempo	120
Performance	1
Volume	64
Eff. Dv. Sel	0

Status	Value
Eff. Type	0
Eff. Vol	0
RotaryA	Slw/Fst
RotaryB	Slw/Fst
Scale	1
Key Sign	C

After inserting the desired event, modify its parameters accordingly.

INS TYPE... (F4)

Recalls a dialog window from which you can select the type of event to insert manually with the «Ins(x)» function.

Press the ▼ cursor arrow to bring other events into view.
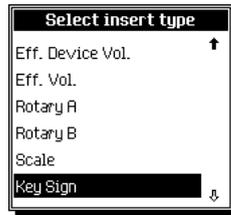
Select the type of event and press ENTER.

DELETE (F6)

Cancels the selected event.

CATCH LOCATOR (F7)

Selects the event currently playing (when the Song is in playback mode), or the event immediately after the current Song position.

GO TO LOC... (F8)

Takes the cursor directly to the first event of the selected measure. The number can be specified with the DIAL.

Specify the required number and confirm with ENTER.

Score & Edit Score

THE SCORE BUTTON

Press SCORE to view the notes, lyrics and chord symbols on the display and/or on an external monitor.

SCORE

Press F8 («Score controls...») to select the viewing options and the video standard.

When a Song containing a Score is in playback, an indicator (⌒) monitors the current position of the score.

Press ESCAPE to exit Score.

THE SCORE TRACK

The Score track is a "ghost" track that is added to the tracks of a Song. This track allows the insertion and viewing of notes (Music), words (Lyrics) and chord symbols (Chords).

The Score displays a **melody line** and not chords. A track of chords is analyzed, the highest notes are extracted and a melody line is generated.

The score can be viewed on the instrument's display, or projected onto an external monitor by pressing SCORE. To view on an external monitor, the **SK760/880** must be fitted with Generalmusic's optional Audio/Video card.

The Score is created in «Edit Song».

Score page - All mode
(notes, lyrics and chord symbols)

Score page - Lyrics 1 mode
(lyrics in large type)

Score Controls

In the «Score» page, press F8 to open the «Score Control» dialog window.
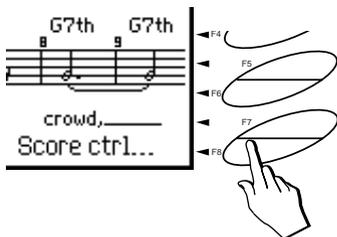
Score control dialog window
(viewing options for external monitor)

When finished, press ENTER to confirm or ES-CAPE to cancel.

PARTS OF THE DISPLAYED SCORE

Select the parts of the Score to display with the Soft buttons F3 … F8.

All - Notes, lyrics, chord symbols.

Lyric 1...Lyric4 - Lyrics only across the display, with characters of various dimensions.

Chords - Traditional chord symbols without notes. This option refreshes the display very quickly which can be useful for guitarists and bassists.

VIDEO CONTROLS

Viewing options for an external monitor.

Echo LCD

ON: the external monitor displays exactly what is shown on the **SK760/880** display.

OFF: the monitor displays only the Score parts (music, lyrics, chords).

Options: On, Off.

View mode

Selects a color for the lyrics and for the background. This option is valid for the external monitor only.

Options: 1…16.

Video mode

RGB: the RGB port transmits RGB and Composite Video signals.

CV: the RGB port transmits Composite Video signals. For a correct Composite Video image, this option is recommended.

Options: RGB, CV.

Y shift

Controls the vertical alignment.

Score split

ON: the notes are displayed on a staff.

OFF: the notes are displayed on the treble clef only. Notes that normally occupy the bass clef are shown with the symbol « 𝄢 ⎯ » (bass 8ve).

Chords on lyrics

If ON, the viewing options Lyric 1 ...Lyric 4 show chord symbols together with lyrics on the external monitor.

SPECIAL SYMBOLS

At times, the music score will show special symbols.

☐━━   The «octave lower» symbol. The displayed note or notes are in reality one octave lower.

▲   The «note too high» symbol. The note at the position corresponding to the displayed symbol is too high to appear in the staff.

▼   The «note too low» symbol. The note at the position corresponding to the displayed symbol is too low to appear in the staff. This symbol rarely appears with a standard music staff («Score split» option in the «Score controls" window set to ON).

Edit Score

HOW TO ENTER EDIT SCORE

1. Press SONG and select a Song.

2. Press ST./SONG in the EDIT section to enter «Edit Song».

3. Press F5 («Edit Score») in the main menu of «Edit Song» to open Edit Score.

   If the Song does not contain a score, select the «Get Score» command (F4) to create one (*this procedure is explained afterwards*).

HOW TO EXIT EDIT SCORE

Press ESCAPE to return to «Edit Song». Press ESCAPE once again to return to the «Play View» or «Record View» page.
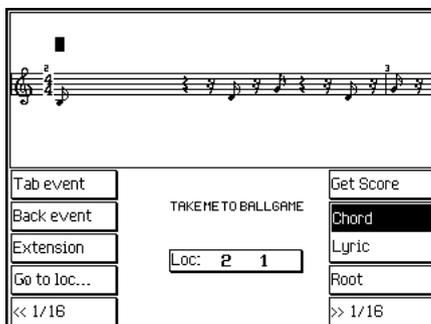
Score Edit - Chord mode
(chord symbol edit)

INSERTING NOTES

To create a Score, notes are withdrawn from a Song track.

1. Press F4 («Get Score»):

```
    Get Score
From track :  1
```

2. User the DIAL to select the track to transcribe.

3. Press ENTER to confirm. Wait a few seconds for the score to be generated.

INSERTING CHORD SYMBOLS

Chord symbols correspond to the MIDI 'Text' event. These are loaded and saved with MIDI files. Chord symbols can be inserted into a new Song using the procedure explained on the next page.
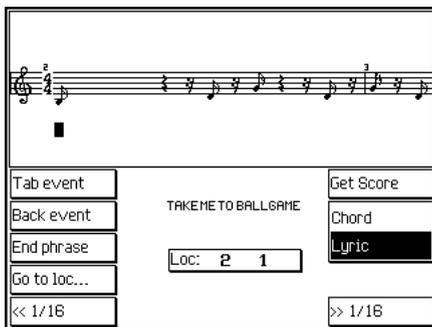
Score Edit - Lyrics mode

1. Press F5 («Chords») to take the cursor to the chord line (above the staff).

2. Press the soft button G («Go to loc...») to go to a specific measure:

```
  Go to Loc
     1
```

Specify the measure with the DIAL then press ENTER to confirm or ESCAPE to cancel.

3. Move the insertion point to the previous or next note using the soft buttons D («Next event») and E («Previous event»).

4. Each note is ideally subdivided into 1/16ths. In addition to a symbol at the beginning of a note (first 1/16th), you can insert symbols in one of the 1/16ths which follow. Press F8 to open the symbol insertion zone:
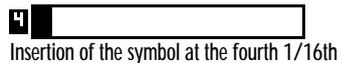
```
2
```
Insertion of the symbol at the second 1/16th

```
3
```
Insertion of the symbol at the third 1/16th

```
4
```
Insertion of the symbol at the fourth 1/16th

The number shown on the left of the insertion zone indicates the current 1/16th. To move the insertion point to one of the other 1/16ths, use the soft buttons H («<<1/16») and F8 («>>1/16»).

To escape and return to the note, press the soft button E («Previous event»). To escape and pass to the next note press the soft button D («Next event»).

5. Play the chord below the Split Point. The chord symbol appears, in the following form: CMaj, Dmin, E7th...

6. If you want to indicate a bass extension, or a pedal note, press the function button F («Extension») and play the alternative chord. The

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Score/Edit Score   7•23

bass extension will appear in the following form: CMaj/D, Dmin/G...

Press the soft buttons D («Next event» or E («Previous event») to pass to another event.

7. You can modify the selected symbol by playing a different chord.

8. You can modify a chord by transforming it, for example, from a major to minor chord to seventh. Press F7 («Root») repeatedly to alternate between the bass of the chord (the root: A, B, C, etc.) and the abbreviation of the chord (min, 7th, dim, aug...).

Emin
The entire symbol is selected.
Press F7 («Root»).

Emin
The root note is selected.
Press F7 («Root»).

Emin
The chord abbreviation is selected.
Press F7 («Root»).

Emin
The entire symbol is selected again.

Rotate the DIAL or play another chord to modify the selected element (the root or abbreviation).

INSERTING LYRICS

Lyrics corresponds to the MIDI Lyrics event. This type of event is loaded and saved with MIDI files. Lyrics can be inserted into a new Song in the following manner:

1. Press F6 («Lyrics») to take the cursor to the lyrics line (below the staff).

2. Press soft button G («Go to loc...») to go to a specific measure (bar):

Go to Loc
1

Specify the measure with the DIAL then press ENTER confirm or ESCAPE to cancel.

3. Move the insertion point to the previous note or the next note with the soft buttons D («Next event») and E («Previous event»).

4. Each note is ideally subdivided into 1/16ths. In addition to syllables at the beginning of the note (first 1/16th), you can insert syllables in one of the 1/16ths which follow. Press F8 to open the syllable insertion zone.

2
Insertion of the syllable at the second 1/16th

3
Insertion of the syllable at the third 1/16th

4
Insertion of the syllable at the fourth 1/16th

The number shown on the left of the insertion zone indicates the current 1/16th. To move the insertion point to one of the other 1/16ths, use the soft buttons H («<<1/16») and F8 («>>1/16»).

To escape and return to the note, press the soft button E («Previous event»). To escape and pass to the next note press the soft button D («Next event»).

At this point, «Next event» and «previous event» pass from 16th to 16th instead of from note to note.

5. In this operating mode, the keyboard transforms into a source of alphanumeric data (see the «Data Entry» paragraph on page 1.4 of Chapter 1). Write the required syllable using the keys of the keyboard.

6. Press soft button F («End phrase») to terminate the verse. The end of the verse is indicated by the "end phrase" symbol 'l'.

   Do not write lines consisting of more than 20 characters. This is to avoid the incorrect syllabisation of words when you are viewing lyrics in large type. For example, the word "Ballgame" may syllabize to "Bal-lgame", or "Ballg-ame" or other, instead of "Ball-game".

7. You can modify a selected syllable by rewriting it entirely or partially.

   To replace one character with another, remain in Overwrite mode (rectangular cursor). If you are in Insert mode (cursor in the form of a vertical line), press note D#2 («INS/OVER») to pass to Overwrite mode. Move the cursor with the DIAL, then insert the new character.

   To insert a character without cancelling another, pass to Insert mode. Press note D#2 («INS/OVER»); the cursor will take the form of a vertical line. Move the cursor with the DIAL, then insert the new character. Press D#2 to return to Overwrite mode.

The «Edit Score» page

CHORDS (F5)

Takes the cursor to the Chords line (above the staff).

LYRICS (F6)

Takes the cursor to the Lyrics line (below the staff).

NEXT EVENT (D)

Takes the cursor to the next event (note or pause).

PREV. EVENT (E)

«Previous event». Takes the cursor to the previous event (note or pause).

GO TO LOC... (G)

Takes the cursor to the beginning of the specified measure. Press soft button G to open the dialog window:

Specify the measure with the DIAL.
Press ENTER to confirm or ESCAPE to cancel.

>> 1/16 (F8)

Each note greater than a sixteenth (*demisemiquaver*) is ideally subdivided into sixteenths; this button takes the cursor to the next sixteenth. For example, a quaver (8th) is divided into two 1/16ths, a crotchet (quarter) into four 1/16ths, etc..

. . . .

Score/Edit Score 7•25

The edit takes place in an active zone:

E▮

To escape and return to the normal edit of the note, press soft button E ("Previous event»). To escape and pass to the next note, press soft button D («Next event»).

<< 1/16 (H)

See above. Takes the cursor to the previous sixteenth

GET SCORE... (F4)

Creates a score from the selected track from which the melody is transcribed. Press F4 to open the dialog window:

Get Score

From track : **1**

Specify the track with the DIAL.
Press ENTER to confirm or ESCAPE to cancel.

If the track contains chords, the analyser withdraws the highest notes, attempting to eliminate notes not related to the melody. A score is obtained with excellent results from a track containing a melody line only.

EXTENSION (F)

This command allows you to add an alternative bass extension to the chord. Select a chord and press soft button F, then play a complete chord which contains the alternative bass root required to insert.

Emin/B

You can modify the extension with the DIAL, or play a different chord.

Play the chords below the Split Point.

ROOT (F7)

This command allows you to modify the root note of a chord and its related abbreviation separately. Select a chord and press F7 repeatedly to place the chord parts in edit, first the root, then the abbreviation, then to return to the edit of the entire chord symbol.

Emin   Emin   Emin   Emin

You can modify the selected part with the DIAL, or by playing a different chord.

Play the chords below the Split Point.

END PHRASE (F)

This command inserts an 'End phrase' symbol ('I') at the end of a verse. In the viewing modes Lyrics 1 … Lyrics 4, when the verses that end with the "End phrase" symbol are reached, the next verse starts on a new line.

We recommend that you write lines using not more than 20 characters, to avoid displaying incorrectly syllabized words when the Lyrics 1 option (large types) is used.

This symbol can be cancelled as any other character by selecting the syllable with D («Next event») or E («Previous event»). Select the symbol with the DIAL and cancel the symbol with note F2 (DELETE).

• 8 User Style recording

The four USER buttons (1, 2, 3 and 4) of the STYLE/SONG GROUPS section recall User-programmable Styles, or free locations that allow you to record your own auto accompaniments. Up to 32 User Styles can reside in memory, 8 in each User Group.

A new Style can be created by recording every part yourself, or by modifying a copy of an existing Style. This second option is discussed in the Edit Style chapter.

Disk based User Styles can be loaded into memory and user-programmed Styles can be saved to disk, using the methods described in the Disk chapter 3 of the Reference Guide.

THE BASIC STRUCTURE OF A STYLE

Styles provide automatic accompaniments based on the system of chords. In particular, the Major, Minor and Seventh chords trigger three completely different arrangement patterns.

There are 4 Variations of the Major, minor and 7th chords and each Variation breaks down into several different elements: basic, Intro, Fill, Ending. These four elements form the basis of a structure consisting of 48 short sequences, or "Riffs", for each Style.

WHAT IS A RIFF?

A Riff is a musical motif capable of repetition (looping). It can also be expressed as a "phrase" or "lick", but it is important to understand that the Riff must be capable of repetition. In fact, when you play with Styles, you will note that the patterns are short repeating sequences.

The table shown below lists all the Riffs that make up a Style.

The basic Riff is the principal pattern of the Style which repeats continually until stopped, or until it is "broken" by a Fill, Intro or Ending pattern.

The Fills, Intros and Endings are triggered by pressing the relative FILL, INTRO, or ENDING buttons.

A Riff can vary in length from one to sixteen measures long.

Each Riff consists of up to 8 Style tracks: Drum, Bass, Acc1, Acc2, Acc3, Acc4, Acc5, Acc6.

Var1	Var2	Var3	Var4
Basic Major	Basic Major	Basic Major	Basic Major
Basic Minor	Basic Minor	Basic Minor	Basic Minor
Basic 7th	Basic 7th	Basic 7th	Basic 7th
Fill Major	Fill Major	Fill Major	Fill Major
Fill Minor	Fill Minor	Fill Minor	Fill Minor
Fill 7th	Fill 7th	Fill 7th	Fill 7th
Intro Major	Intro Major	Intro Major	Intro Major
Intro Minor	Intro Minor	Intro Minor	Intro Minor
Intro 7th	Intro 7th	Intro 7th	Intro 7th
End Major	End Major	End Major	End Major
End Minor	End Minor	End Minor	End Minor
End 7th	End 7th	End 7th	End 7th

Riffs of a Style

Recording

PREPARATION

1. Select a USER Style. Select a free location (User) to create a new Style.

2. You are prompted to create a new style. Press F1 («Ok»).

NEW STYLE	F1: ok
☐ Create a new style	
	F5: abort

3. The Style «Record View» page activates and the «Select Riff» dialog window is also shown:

Select Riff			
VAR.1	VAR.2	VAR.3	VAR.4
BASIC	FILL	INTRO	ENDING
MAJOR	MINOR		7 TH

4. Select the Variation, element and chord with the cursor buttons and press ENTER to confirm. The LED on the RECORD button lights up and the «Record View» page is shown in negative highlight.

5. Once the dialog window closes, press F1 («Mode») to select the recording mode. The «Record Mode» dialog window opens where you can select the required mode.

Rec Mode
Replace
Overdubb
Punch in
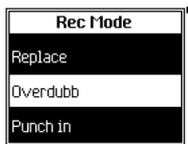
Select the record mode and press ENTER to confirm.

6. Select and program the basic Style parameters:

• «Time Signature» to modify the time signature.

`Time Signature  :4  /4`

. . . .

---

environment name

Style name

Tempo

locator (measure counter)
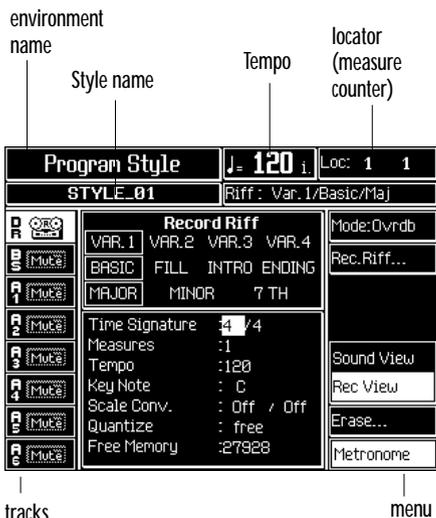
Style Mode - Record View display
(record/play parameters display)

tracks

menu

Style Mode - Sound View display

• «Tempo» to
modify the playing
speed.

`Tempo          :120`

• «Key note» to
specify the refer-
ence key. When a chord is played, **SK760/880** transposes the riffs. You must, there-fore, indicate the key in which the riffs are programmed.

`Key Note       : C`

7. Set both parts of the «Scale conversion» parameter. The Scale Converter reconstructs the riffs of two chords starting from the complementary chord. For example, you can program the *Basic Major* riff and the Scale Converter en-gages the task of reconstructing the *Basic Minor* and *Basic 7th*. Refer to the Scale Converter tables at the end of this chapter.

`Scale Conv.    : Min / 7th`

8. Select the «Quantize» pa-rameter to modify the pre-quantization set-ting (auto-correction of the timing) during the recording.

`Quantize       :free`

9. Select the tracks that you want to record and set them to Record mode. Only Tracks show-ing the record icon will capture events:

10. If you want to assign different Sounds, open the «Sound View» page with the F5 Soft but-ton

After assigning the sounds, save the Perform-ance with STORE PERF. Return to the «Rec View» page with Soft button F6.

11. Activate the metronome with F8 («Metro-nome»).

RECORDING

1. Press START/STOP to start the recording. A one-measure countdown with start.

2. Start playing after the lead-in. The recording proceeds in a cyclic manner: once the end of the riff is reached, the recording starts again from the beginning.

3. Stop the recording with START/STOP.

4. To add notes to the same tracks, repeat points 1 - 3.

   Note: If the Overdubb recording mode is se-lected, new notes will be added to the tracks each time the recording repeats. If Replace is selected, new notes will cancel those al-ready existing on the next cycle. In Replace mode, the recording returns to Overdubb mode at the end of the first cycle.

5. Select the tracks shown in «record» and set them to «seq-play».

6. If necessary, repeat the procedure for other tracks.

7. Press RECORD to escape «Record» mode. The LED on the RECORD button goes off.

UNDO

If, during the recording phase, you want to can-cel the last performed recording task, use UNDO.

For example, after adding new events to an ex-isting drum pattern, you might want to return to the original pattern and just cancel the new events. A quick and easy way is to use UNDO.

Just press UNDO and confirm with ENTER to return to the previous status, or ESCAPE to re-tain the last task.

RESTORING THE USER STYLES MEMORY

If you have loaded disk-based User Styles or recorded User Styles and used up all the memory dedicated to the storage of Styles, a quick and easy way of clearing User Style memory and making room for other Styles is to use the Restore Styles operation.

Naturally, you must remember to save the User Styles that you don't want to lose to disk before proceeding with the restore procedure.

1. Press GENERAL in the EDIT section to gain access to the «Edit General» environment.

2. Press F5 («Restore Styles») to cancel all the User Styles (and relative User Style-Performances) in RAM.

   You are prompted with a request to reconfirm your choice.

3. Press ENTER to confirm, or ESCAPE to cancel.

   With ENTER, the User Styles are cancelled from memory.

   With ESCAPE, the User Styles are retained.

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► **Hint**: *To cancel the entire contents of RAM in a single operation, use the «Restore All» command.*
. . . .

The «Record View» page

MODE... (F1)

Opens the «Record Mode» dialog window where you can select various recording options.

> **Replace** - The new notes substitute "old" notes already present in the tracks being recorded.

> **Overdubb** - New notes are merged with those already present on the tracks being recorded.

> **Punch In/Out** - A means of inserting a correction without repeating a recording. Punch recording is activated by pressing an appropriately programmed pedal (in «Edit Controllers/Pads»).

> Activate the recording with PLAY. When the song reaches the point at which the correction must be inserted, press the pedal. At this point, the recording proceeds in "replace" mode. When the correction is complete, release the pedal to stop the recording.

REC RIFF... (F2)

Opens a dialog window where you can select a riff to record.

Select the Variation, section and chord with the cursor buttons and press ENTER to confirm.

SOUND VIEW (F5)

Recalls the «Sound View» page where you can see and change the sounds assigned to the Performance.

REC VIEW (F6)

Recalls the «Record View» page where it is possible to control the record/play parameters.

ERASE... (F7)

Cancellation of a track, riff, variation or Style.

> **Track** - Cancels the selected track.
> **Riff** - Cancels the selected riff.
> **Variation** - Cancels the selected variation.
> **Style** - Cancels the entire Style.

METRONOME (F8)

Activates/deactivates the metronome.

TIME SIGNATURE

Valid for the entire Style. This parameter can be modified only before starting a recording. If the Style contains recorded events, this parameter cannot be modified.

MEASURES

Determines the length of a riff expressed in measures (max 16).

TEMPO

The playing speed (metronomic Tempo). Valid for the entire Style.

KEY NOTE

Reference key. Indicates the key in which the original riff is recorded. When you play the indicated chord, the riff will play back in exactly the same manner as recorded. If other chords are played, the riff will be transposed accordingly.

SCALE CONVERSION

If you program a Style accompaniment based on the Major scale, the **SK760/880** arranger will automatically convert a minor or 7th chord accordingly. This allows you to limit your User Style recording times by, for example, recording only the Major riff of Variation 1, in order that when you play with the recorded style, a minor or 7th chord will be automatically adjusted for the change. However, in harmonic terms, this type of 'over-simplification' creates errors when using the more complex chord structures. To overcome this problem, the **SK760/880** Scale Converter provides a selection of chord inversion systems, based on algorithms in order to render the conversion more musical.

You can program the Major chord only and set the scale converter for the other two chords (minor and/or 7th). If, on a future occasion, you wish to program also the respective riffs, the relative Scale conversion will be ignored. The parameter consists of two variable parts, corresponding to the two complementary chords with respect to the one being recorded.

If the "Off" setting is selected, the arranger carries out the simplified conversion referred to. The tables at the end of this chapter show how the Scale Converter operates, both in the off status, as well as for the Minor and 7th chords. Several different solutions for each chord are provided for.

The tables on pages 7 and 8 refer to chord and bass patterns played in the key of C and shows which notes are converted. The changes are expressed in semitones, therefore, if the note C shows a conversion of –2, the note is converted 2 semitones down (Bb). Notes not converted are shown blank.

QUANTIZE

An auto-corrector of timing during the recording phase. The selection values are normal, triplets or swing.

Value	Quantization
1/4	♩
1/8	♪
1/12	♪ triplet
1/16	♬
1/24	♪ triplet
1/32	♬
1/48	♬ triplet
1/64	(1/64)
1/96	(1/64 triplet)
free	no quantization
1/8 B...F*	♩ ♪ (swing)
1/16 B...F*	♪. ♬ (swing)
free	no quantization

* B … F indicate an adjustment of the Swing feel.

FREE MEMORY (CANNOT BE MODIFIED)

The amount of memory remaining to record the riff. Each riff can occupy up to 30.000 bytes (30 kilobytes).

If the RAM contains a large amount of data, a dialog window may appear showing the message «Memory full!» indicating that the recording cannot proceed further. The recording is instantly interrupted.

You can increase the amount of space in RAM by deactivating the Undo function.

SCALE CONVERSION TABLES

Scale Converter in OFF status: C Major riff –> C 7th riff

	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
accomp.	−2									+1		−1
bass										+1		−1

Scale Converter in OFF status: C Major riff –> C minor riff

	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
accomp.					−1					+1		−1
bass					−1					+1		−1

Scale Converter active: C Major riff –> C 7th riff

	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
7th 1 accomp.	−2											
7th 1 bass												
7th 2 accomp.	−2											−1
7th 2 bass												−1
7th 3 accomp.	−2									+1		
7th 3 bass										+1		
7th 4 accomp.	−2											
7th 4 bass												

Scale Converter active: C Major riff –> C minor riff

	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
min 1 accomp.					−1							
min 1 bass					−1							
min 2 accomp.					−1						−1	
min 2 bass					−1						−1	
min 3 accomp.					−1					+1		
min 3 bass					−1					+1		
min 4 accomp.				−1	−1							
min 4 bass				−1	−1							
min 5 accomp.				−1	−1						−1	
min 5 bass				−1	−1						−1	
min 6 accomp.				−1	−1					+1		
min 6 bass				−1	−1					+1		
min 7 accomp.				−1	−1				−1	−1		
min 7 bass				−1	−1				−1	−1		

Complex chords

The logic applied to the conversion of the more complex chords follows similar lines to that used for the standard Major, minor and 7th chords indicated above. The user is invited to experiment with the Scale Converter in order to discover the most suitable conversion for the Style being programmed.

• 9 Edit Style

After recording a User Style, the Style riff can be modified in «Edit Style».

ENTERING «EDIT STYLE»

In Style/RealTime mode, select the Style you wish to modify.

If you select a User Style, all the Edit Style functions will be available. The Style name appears in the status bar of the display.

Style name

Style:	**0bt Std**	♩= **90**	i.	Loc:	**1**		**1**
Perf.:	´GrandPiano		Chd:	***********			

Press the ST./SONG button in the EDIT section to enter «Edit Style».

Entering this section the first time opens the main menu page. On all successive occasions, the last page selected is recalled.

page name   Editors

Edit Style - Main menu

ST. / SONG

EDIT PROCEDURE

1. Press ST./SONG to enter «Edit Style». The main menu appears.

2. Select the editor that you wish to edit using the DIAL or the cursor buttons. It is also possible to enter an editor by specifying the relative number on the numeric keypad.

3. Press ENTER to enter the editor.

4. Select the desired option with the soft buttons.

5. Select the parameters with the cursor buttons and modify their value with the DIAL or the numeric keypad.

6. Confirm the operation with ENTER.

7. Pass to another editor with the ▲/▼ buttons. Otherwise, return to the main menu with ESCAPE and select another editor.
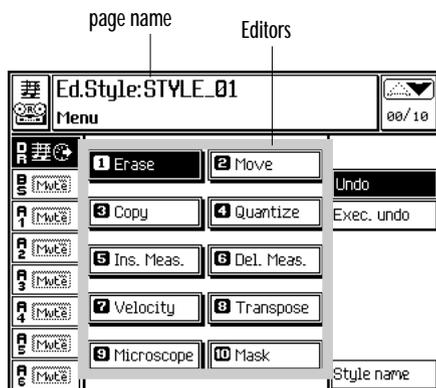
ESCAPE FROM «EDIT STYLE»

To escape from «Edit Style» press ESCAPE (once or twice, depending on the currently selected level). To escape without closing the edit page, press the ST./SONG button. To pass to another edit environment, press the corresponding button in the EDIT section.

UNDO (F2)

When this parameter is selected (shown in negative highlight), the UNDO function is enabled. Undo cancels the last operation or series of operations carried out. This function consumes exactly the same amount of RAM memory as the Style. If there is a shortage of memory in RAM, it is a good idea to deactivate UNDO.

Press the UNDO panel button to execute the desired Undo operation.

You will be prompted with a request to confirm the operation with ENTER or cancel with ESCAPE.

If UNDO is disabled, pressing the UNDO button and confirming with ENTER activates the following user message:

Press ESCAPE to close the window and repeat the UNDO operation, this time with UNDO enabled.

STYLE NAME (F8)

Changes the name of a Style. This function only applies to USER Styles; the names of the ROM Styles are permanent and cannot be modified.

The method used to insert characters is described in the «Data Entry» paragraph of chapter 1, page 1.4. You can move the cursor with the soft buttons or the DIAL. Insert the characters with the keys of the keyboard.

«EMPTY TRACK» INDICATION - NOTES PRESENT IN THE TRACK

The presence of notes in a track is indicated by the seq-play icon:

In play mode, this status icon indicates the presence of notes in at least one riff. If the current riff of the track does not contain notes, the «empty track» message is displayed at the bottom of the Edit Style page:

-Empty Track-

In record mode, tasks are performed directly on a riff, and the icon indicates the presence of notes in the track and in the riff being recorded.

Erase

Cancellation of events.

▶ *Set the parameters and press ENTER to confirm the cancellation.*

SOFT BUTTONS F5...F8

Use the Soft buttons F5...F8 to select the part of the Style to cancel the events from. Depending on the part selected, the following parameters may or may not appear.

Track (F5) - Single track, the current riff.

Riff (all tracks) (F6) - An entire riff (all the tracks of the riff).

Var (all riffs) (F7) - An entire Variation (all the riffs of the Variation).

Style (all vars) (F8) - An entire Style (the 4 Variations of the Style).

PARAMETERS

Variation

Selects one of the 4 Variations. Only Variations that contain at least one recorded riff can be selected.

Riff

Selects one of the riffs of the selected Variation. Only existing riffs can be selected. If the Style is empty, the phrase «No Riff» appears.
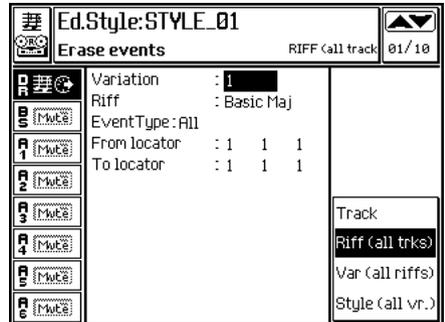
Event type

Determines the type of event to be erased.

«Duplicate note» eliminates the note with the lowest velocity value when two notes of the same pitch start at the same position.

Options: All, Duplicate note, Note, Pitch Bend, Mono touch, Poly touch, Velocity Off, ProgramChange, ControlChange 00...31, ControlChange 64...127.

Note range from... to...

Sets the upper and lower limits of the notes to cancel. To cancel a single percussive instrument of the Drum track, assign the same note to the highest and lowest limit. For example, to cancel the snare (D2) set the parameter to «Note range from D2 to D2».

Assignable values: C-1 ... G9.
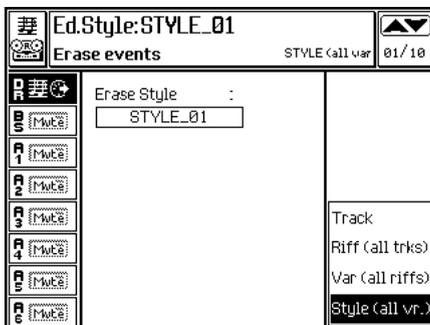
From locator... To locator...

Determines the start and end point of the part to cancel. It is possible to specify the measure, beat and resolution.

Assignable values: within the actual limits of the riff. It is not possible to specify a point beyond the end of the riff.

Erase Variation

Selects the Style Variation to cancel [«Var (all riffs)» option].

Erase Style

Selects the Style to cancel [«Style (all Vars)» option].

....

9•4 Reference Guide

Move

Shifts events from one point to another within the selected track.

▶ *Set the parameters and press ENTER to confirm the operation.*

PARAMETERS

Variation

Selects one of the 4 Style Variations. Only Variations that contain at least one recorded riff can be selected.

Riff

Selects one of the riffs of the current Variation. Only existing riffs can be selected. If the Style is empty the phrase «No Riff» appears.
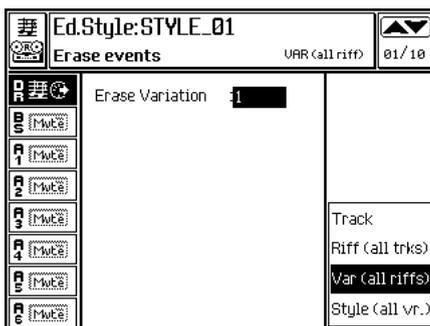
From locator... To locator...

Sets the start and end points of the part to be moved. The measure, beat and resolution can be specified.

Assignable values: within the actual limits of the riff. It is not possible to specify a point beyond the end of the riff.

Start locator

Sets the new position of the section being moved.

Assignable values: any point within the riff.

. . . .

Copy

Copies events from a single tracks or from all the tracks.

▶ *Set the parameters and press ENTER to confirm the operation*

SOFT BUTTONS F5...F8

Use the Soft buttons F5...F8 to select the type of track to copy events from. Depending on the type of track selected, the following parameters may or may not appear.

Track (F5) - Single track, the current riff.

Riff (all tracks) (F6) - An entire riff (all the tracks of the riff).

Var (all riffs) (F7) - An entire Variation (all the riffs of the Variation).

Style (all vars) (F8) - An entire Style (the 4 Variations of the Style).

PARAMETERS

Copy to Style...

Selects the destination Style to copy the current Style (part or whole) to.

Assignable values: any USER Style.

From var... to var...

Selects the source and destination Variations for the part to be copied.

Assignable values: 1 ... 4.
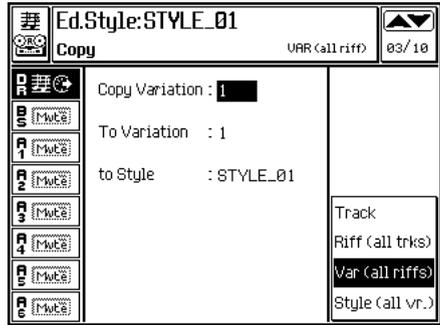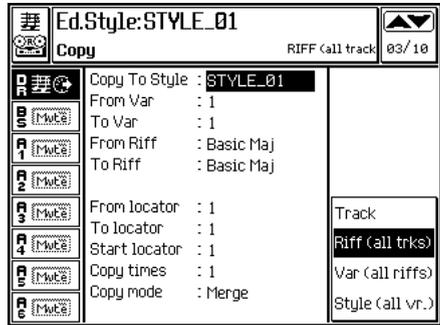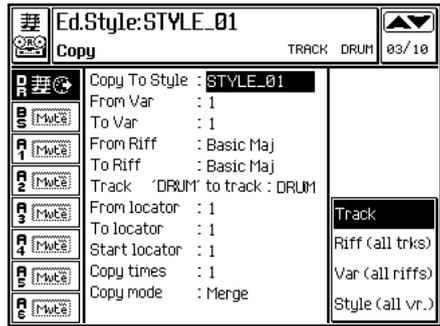
From riff... to riff...

Selects the source and destination riffs for the part to be copied. For example, it is possible to copy the patterns of a Basic Major riff to a minor Fill riff.

Assignable values: any riff.

Track... to track...

Specifies the source and destination tracks for the copied elements. «From track» shows the track selected using soft buttons A...H. «To track...» can be modified using the DIAL.

Assignable values: any accompaniment track (9...16).

From locator... To locator...

Sets the start and end point of the part to be copied. Only the measure (bar) can be specified.

Assignable values: within the actual limits of the riff..

Start locator

Sets the new position of the copied part.

Assignable values: within the actual limits of the destination riff.

Copy times

Sets the number of consecutive copies. Each copy starts exactly where the previous one ends.

Assignable values: depends of the length of the riff. The copy must not exceed the riff length.

Copy mode

Determines the copy mode. «Merge» unites the copied events to those already present at the destination. «Replace» substitutes the events present at the destination with those copied.

Options: Merge, Replace.

Copy Variation... to Variation...

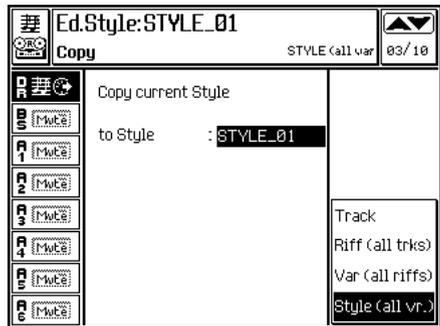The source and destination of the copied Variation («Var (all riffs)» option).

Assignable values: 1 ... 4.

To Style...

The destination Style of the copy.

Assignable values: any of the USER Styles.

Copy current Style to Style

Selects the USER location where the entire current Style is to be copied to («Style [all Vars]» option).

Quantize

The Quantize function is an auto-corrector of timing errors. Includes triplet and swing quantize values.

► *Set the parameters and press ENTER to confirm the quantize operation.*

SOFT BUTTONS F1...F2

These select the «Note On Quantize» and «Note Off Quantize» parameters.

Note On Quantize - Post-Quantization of the Note On event.

Note Off Quantize - Post-Quantization of the Note Off event. After a Note On quantization, a Note Off quantization affects the duration of the notes, adapting them to a quantization grid.

PARAMETERS

Variation

Selects one of the 4 Variations. Only existing Variations can be selected (those with at least one riff recorded).

Riff

Selects one of the riffs from the chosen Variation. Only existing riffs can be selected. If the Style is empty, the phrase «No Riff» appears.
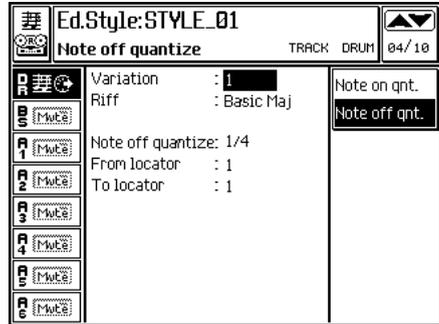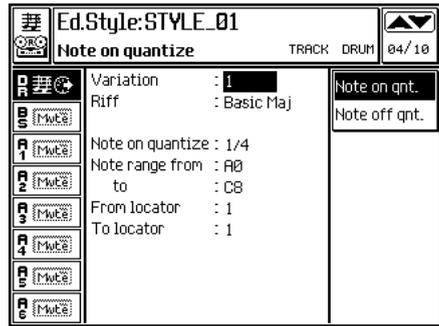
Note On quantize

Specifies the Note On quantize values.

Value	Quantization
1/4	♩
1/8	♪
1/12	♪ triplet
1/16	♬
1/24	♬ triplet
1/32	♬
1/48	♬ triplet
1/64	(1/64)
1/96	(1/64 triplet)
free	no quantization
1/8 B...F	♩ ♪ (swing)
1/16 B...F	♪. ♪ (swing)
free	no quantization

*B … F indicate an adjustment of the Swing feel.

Note Off quantize

Determines the Note Off quantize value. Same as Note On.

Note range from... to...

Sets the highest and lowest note range to quantize. To quantize a single percussive instrument of the Drum track, assign the same note to the highest and lowest limit. For example, to quantize the snare (D2), set the parameter to «Note range from D2 to D2».

Assignable values: C-1 ... G9.

From locator... To locator...

Determines the start and end point of the part that requires quantizing. Only measures can be selected.

Assignable values: within the actual limits of the Riff.

Insert Measures

Inserts a specified number of measures. The part of the Riff that follows the insertion point shifts forward the same number of measures as those inserted. The length of the Riff changes.

► *Set the parameters and press ENTER to confirm the insertion.*
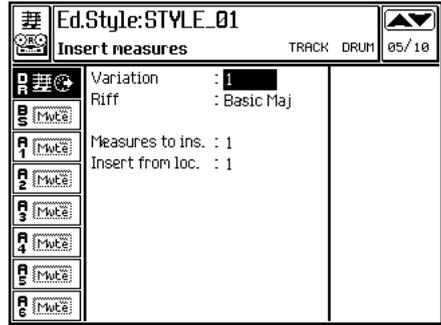
PARAMETERS

Variation

Selects one of the 4 Variations. Only existing Variations can be selected (those with at least one recorded Riff).

Riff

Selects one of the riffs from the selected Variation. Only existing riffs can be selected. If the Style is empty, the phrase «No Riff» appears.

Measures to insert

Specifies the number of measures to insert.

Assignable values: depends on the length of the riff (max 16 measures).

Insert from locator

Specifies the measure at which the new measures will be inserted.

Assignable values: from the first measure (bar) of the Riff, to the first measure after the end measure of the Riff.
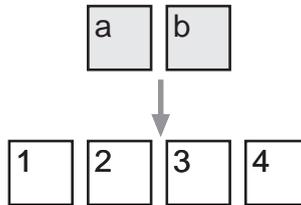
Insert measures example. Two measures are inserted at measure 3. Measure 3 and all successive measure are moved forward.

Delete measures

Cancels a specified number of measures. The measures directly after the point of cancellation shift towards the beginning of the Riff and join with the measures preceding the cancellation point.

▶ *Set the parameters and press ENTER to confirm the cancellation.*

. . . .
▶ *Hint: To cancel measures without shifting those after the deletion point, use the Erase events function.*
. . . . .

PARAMETERS

Variation

Selects one of the 4 Variations. Only existing Variations can be selected (those with at least one recorded Riff).

Riff

Selects one of the riffs from the chosen Variation. Only existing riffs can be selected. If the Style is empty, the phrase «No Riff» appears.

Measures to delete

Specifies the number of measures to delete.

Assignable values: a number that does not exceed the length of the Riff. For example, if the Riff is 4 measures long, the maximum assignable value if 4.

Delete from locator

This parameter indicates the first measure of those to be deleted.

Assignable values: within the actual limits of the riff. Dependent on the previous parameter.
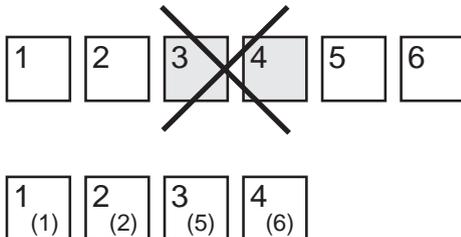
Delete measures example. Measure 3 and 4 are cancelled. All the measures after the deletion point shift towards the beginning of the Riff.

Velocity

Modifies the key Velocity value. This parameter represents the key-strike velocity, or its intensity. Generally, the greater the velocity the higher the volume. Velocity also affects the filter of many sounds, making them brighter with increased velocity.

▶ *Set the parameters and press ENTER to confirm the dynamic changes.*

PARAMETERS

Variation

Selects one of the 4 Variations. Only existing Variations can be selected (those with at least one recorded Riff).

Riff

Selects one of the riffs from the chosen Variation. Only existing riffs can be selected. If the Style is empty, the phrase «No Riff» appears.

Velocity mode

Provides two velocity modes to choose from which affect the way the "Change Velocity" function operates.

Normal - The value indicated in «Velocity change» is added to or subtracted from the Velocity values of the notes.

Fixed - The note Velocities are all set to the value specified in «Velocity change»

Change Velocity

Specifies the amount by which the velocity values can be changed. This depends on the option selected in «Velocity Mode».

Note range from... to...

Sets the upper and lower limits of the notes to be affected. To modify the velocity of a single percussive instrument of the Drum track, assign the same note to the highest and lowest limit. For example, to change the snare (D2) set the parameter to «Note range from D2 to D2».

*Assignable values: C-1 ... G9.*

From locator... To locator...

Determines the start and end point of the part to be affected. It is possible to specify measure, beat and resolution.

Assignable values: within the actual limits of the Riff.

Transpose

Transposition in semitone steps.

Variation

Selects one of the 4 Variations. Only existing Variations can be selected (those with at least one recorded Riff).

Riff

Selects one of the riffs from the chosen Variation. Only existing riffs can be selected. If the Style is empty, the phrase «No Riff» appears.

Transpose

Determines the value of the transposition (in semitone steps).

Assignable values: -64 ... +64.

Note range from... to...

Sets the upper and lower limits of the notes to be affected. To transpose a single percussive instrument of the Drum track, assign the same note to the highest and lowest limit. For example, to change the snare (D2) set the parameter to «Note range from D2 to D2».

Assignable values: C-1 ... G9

From locator... To locator...

Defines the start and end point of the part to be affected. It is possible to specify the measure, beat and resolution.

Assignable values: within the actual limits of the Riff.


```
┌──────────────────────────────────┐
│ 差 ║Ed.Style:STYLE_01       ▲▼   │
│ ║Transpose       TRACK DRUM 08/10│
├───────┬──────────────────────────┤
│ 譜 ⊕  │Variation    : 1          │
│ ⊟Mute │Riff         : Basic Maj  │
│ ⊟Mute │Transpose    : 0          │
│ ⊟Mute │Note range from : C-1     │
│ ⊟Mute │   to        : G9         │
│ ⊟Mute │From locator : 1  1  1    │
│ ⊟Mute │To locator   : 1  1  1    │
│ ⊟Mute │                          │
└───────┴──────────────────────────┘
```
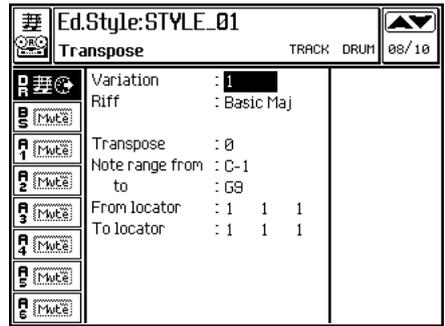
Microscope

The Microscope allows you to modify every single event recorded in the tracks. The Event List shown at the center of the display shows all the events recorded.

ACCESS TO THE EVENT EDIT

1. Select the track where you want to edit the events in the Event List.

2. Use the ▲/▼ cursor buttons to scroll through the events. The selected notes are played automatically.

3. Select the parameter to be changed using the ◀▶ cursor buttons.

4. Use the DIAL to change the selected parameters.

PROGRAMMABLE EVENTS AND PARAMETERS

The «Status» column shows the type of event. One or more parameters can be changed for each event. See the next page for a table of events and their parameters.

SELECT RIFF... (F1)

Selects the riff to edit. Select the variation and the riff in the dialog window

SHOW... (F2)

Opens a dialog window where it is possible to select the events that will be displayed in the Event List.

Set the events to mask to «Off»

Set the parameters and press ENTER.

EVENTS TABLE AND RELATVE PARAMETERS

STATUS	VALUE 1	VALUE 2	VALUE 3	GATE
Note	Note name [C–1 … G9]	Key On Velocity	Key Off Velocity	Note Length expressed as the Sequencer resolution (q=192) [0 … 63323]
Program Change	Program change message. The PC contained in the tracks and shown in the Microscope has priority over the PC recorded in the Performance. [1 … 128]	Bank Select MSB message. To select the **SK760/880** banks, use numbers 1 … 16 [1 … 128]	Bank Select MSB message. Not necessary to select the **SK760/880** sounds [1 … 128]	
Control Change	Type of Control Change (or MIDI controller). Example: CC00 = BankSelect MSB, CC32 = BankSelect LSB, CC01 = Modulation, CC07 = Volume [1 … 128]	Control Change Value		
Pitch Bend	Value of LSB (Least Significant Byte). [0= Off, 1…127 = On]	Value of MSB (Most Significant Byte). Effectifve value of bending. [0…63 = down 64 = neutral 65…127 = up]		
Mono Touch	Channel Aftertouch intensity [0 … 127]			
Poly Touch	Note to which Aftertouch is applied. [C–1 … G9]	Note Aftertouch intensity. [0 … 127]		

INS: (X) (F3)

Inserts the event specified in the "INS. TYPE" function at the current cursor position. To position the inserted event precisely, modify its locator (the parameters to the left of the «Status» column).

The events are inserted with the following default parameter values:

Status	1V	2V	3V	Gate
Note:	C4	64	64	128
P. Ch	1	1	1	
Contr.	1	0	----	
P.Bend	0	64	----	
M.Tch	0	----		
P.Tch	C4	0	----	

After inserting the desired event, modify its parameters accordingly.

INS TYPE... (F4)

Opens a dialog window where you can select the type of event to insert manually with the «Ins: (x)» function.
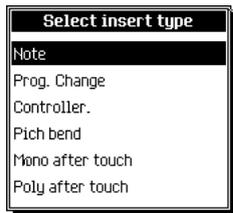
Select the type of event and press ENTER.

DELETE (F6)

Deletes the selected event.

CATCH LOCATOR (F7)

Selects the event currently playing, or the event immediately after the current riff position.

GO TO LOC... (F8)

Takes the cursor directly to the first event in the specified measure. The number can be entered using the DIAL.

Specify the locator and press ENTER to confirm.

Mask

The Mask function allows you to program the Basic elements of two Variations (Var 2 and 4) in order to automatically obtain the Basic elements of the remaining two Variations (Var 1 and 3).

The Basic Variation 2 generates the Basics of Variations 1 and 2. The Basic Variation 4 generates the Basics of Variations 3 and 4. To obtain the best results, program your Variations with all 6 accompaniment tracks (Acc.1,2,3,4,5,6) as well as Drums and Bass.

The idea is to reduce your Style recording times by recording 2 Variations and exploit the automatic features to create a Style with 4 Variations. Then, using the Arranger Tracks function, mask one or two accompaniment sections in one or two Variation to reduce the instrumental content of the respective accompaniments.

The Bass tracks rest unchanged and cannot be altered.

Program the Intro, Ending and Fill of the 4 Variations to create a complete Style.

PARAMETERS

Mask

Activates the Mask function.

When the Mask parameter is enabled (ON), the Basic Variation 2 automatically generates Basic Variation 1, while Basic Variation 4 generates the Basic Variation 3.

Options: On, Off.
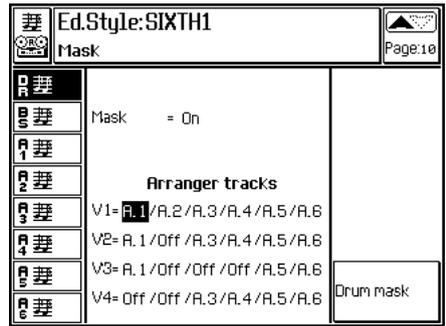
Arranger tracks

Deactivates the individual Arrangement parts (A1...A6) of each Variation.

For example, if you have programmed tracks A1...A6 of Variation 2 and you want to mask A4, A5 and A6 for Variation 1, A2 and A3 for Variation 2, program the first two lines as follows:

V1 = Off/Off/Off/A4/A5/A6

V2 = Off/A2/A3/Off/Off/Off

DRUM MASK (F7/F8)

Opens the «Drum mask» dialog window.

As in the Mask function for the Arrangement tracks, the Drum Mask excludes individual percussive sounds from the Drum tracks of the Variations.

Four keyboards (or drumkits) appear in the dialog window, each representing the Drum track (DR) of the four different variations.

Select the variation with the cursor buttons ◀▶. Play the notes corresponding to the percussion instruments to exclude them from the selected variation.

The excluded notes are denoted by a small black line on white notes and a white line on the black notes.

Play the same note to cancel the line and to play the sound in the selected variation.

Press ENTER to confirm the programming, or ESCAPE to cancel.
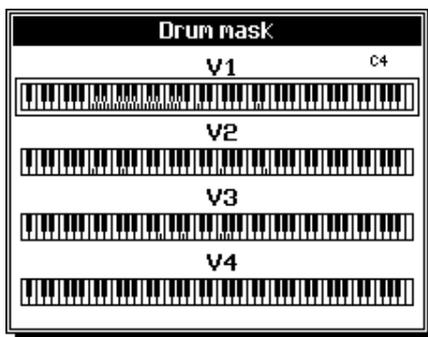
Drum track of Variation 1 showing masked Percussive instruments

• 10 Edit Effect

Press the EFFECTS button in the EDIT section followed by ENTER (or the page ▼ button) to gain access to the «Edit Effect» environment.

The «Edit Effect» environment contains general parameters that affect the instrument as a whole (amount of general reverb), Performance parameters (effects assigned to the DSPs), and track parameters (amount of effects sends).

The **SK760/880** models (without the optional Audio/Video card) show the Edit Effect environment with only one editor. The **SK760/880** with A.V card, shows two editors; Effect and Vocal Processor (see page 10. 7).

. . . .

▶ **Note:** Save the modifications with STORE PERFORMANCE. The parameter configurations that are memorized to the Performances show the letter ▣ in the top left hand corner of the Edit I.D. Icon.

. . . .

EFFECTS TYPE (F1) ▣

This function assigns the effects to the DSP. Each Performance can have its own effect and the general level (volume) can be regulated. The effect levels for each track are adjusted using the «Send level» function.

Group A & B
Eff1. The Reverb selector. Rotating the Dial when this parameter is selected scrolls through the 24 available Reverb effects.
Reverbs: refer to the table on page 5 for a detailed list of the Reverb effects.
Vol. General Reverb level (volume).
Assignable values: 0 ... 127.

Page stored in Performance   Performance
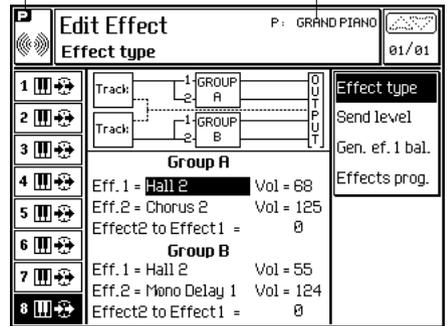
Edit Effects - Effects type selection

Group A & B
Eff2. The modulation effect selector (delay/chorus/flanger, etc). Rotating the Dial when this parameter is selected scrolls through the 32 available Modulation effects.
Effects: refer to the table on page 6 for a detailed list of the modulation effects.
Vol. General Modulation effect Level (volume).
Assignable values: 0 ... 127.

Group A & B
Effect 2 to Effect 1: Determines the quantity of feedback of Eff2 into Eff1.
Assignable values: 0 (no feedback) ... 127 (maximum feedback of the signal).

. . . .

SEND LEVEL (F2) ▣

This function controls the amount of effect assigned to each track. The zero level corresponds to a deactivated effect for the track.

Grp (Group)

In Style/RealTime mode, the Group parameter cannot be selected. The accompaniment tracks are processed by the Group B effects. The keyboard tracks are processed by the Group A effects.

In Song mode, the Group parameter can be switched from A to B and vice versa.

E1 (Effect 1 - Reverbs)

Regulates the send level of Effect 1 (reverb) for each track.

Assignable values: 0 (dry) ... 127 (wet).

E2 (Effects 2 - Modulations)

Regulates the send level of Effect 2 (modulations) for each track.

Assignable values: 0 (dry) ... 127 (wet).

GENERAL EFF1 BALANCE (F3)

Value added or subtracted from the general reverb level, regardless of the selected Performance. Allows you to adapt the reverberation of the **SK760/880** to the natural reverb of the surroundings.

The reverb duration varies according to the dimensions and absorption characteristics of the surroundings in which you play. You can program the **SK760/880** reverb in order to obtain the best results over headphones, or for home listening, and then regulate this parameter to adapt the reverb to the surroundings in which you play in public.

The setting is not retained in memory at power down.

Assignable values: 0% (all dry) ... 100% (all wet). The value of 70% corresponds to the factory set value.

Track in edit

Edit Effects - Send level (Style/RealTime mode)
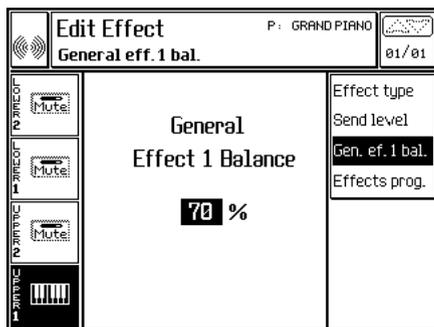
Edit Effects - General Effect Balance

EFFECTS PROGRAMMING (F4) ▣

Editor of the currently selected effect. The parameter values and parameter configurations vary according to the «Effect type» selected.

The tables at the end of this chapter list the Effect types and relative values of the parameters.

Rev.Time (Reverb Time)

Decay time of the reverb.

Delay (reverbs)

Initial delay between the emission of the original sound (dry signal) and the reverb (wet signal).

H.F.Decay (High Frequency Decay)

Decay of the high frequencies. The parameter indicates the final frequency of the filter. The decay of the high frequencies has a longer duration than that of the low frequencies.

Room Size

Dimensions of the simulated room. The time lapse between the first reflection and the remainder of the reverb.

Diffusion

Duration of the reverb (Early type reverbs).

L.P.Filter (Low Pass Filter)

Determines the cutoff frequency of the filter.

Delay (delays)

Velocity of the delay repetition.

Feedback (delays)

Interaction of the delay with itself. Determines the number of repetitions of the delay.

Feedback (phasers and flangers)

Interaction of the phaser or flanger with itself. Determines the harmonic amount of the effect.

Freq.Modul. (Frequency Modulation)

Modulation velocity of chorus and flanger effects.

Depth

Depth of the action of the effect.

Feedback (Distortion)

Saturation of the distortion.

Speed (rotary effects)

Time required to pass from slow to fast or vice versa.

Rotary

Slow/fast velocity.

DSP1 Parameters
(GrpA-Eff1)

DSP3 Parameters
(GrpB-Eff1)

DSP2 Parameters
(GrpA-Eff2)

DSP4 Parameters
(GrpB-Eff2)

Edit Effects - Effect programming
(Edit of the Effect assigned to the Performance)

. . . .

Edit Effect 10•3

Semitone

Transposition in semitone steps.

Detune

Detuning over a range of $\pm$100 Cents.

Low Gain

Enhancement of the low frequencies.

Medium Gain

Enhancement of the mid frequencies.

High Gain

Enhancement of the high frequencies.

Effect 1 - Reverb table

Effect 1 - Reverbs			
1 Hall 1	Rev. Time [0 (0.1 s) … 99 (10s)]	Delay [0 ms … 99 ms	H.F.Decay [0=Bypass … 10 kHz]
2 Hall 2	"	"	"
3 Hall 3	"	"	"
4 Warm Hall	"	"	"
5 Long Hall	"	"	"
6 Stereo Concert	"	"	"
7 Chamber	"	"	"
8 Studio Room 1	"	"	"
9 Studio Room 2	"	"	"
10 Studio Room 3	"	"	"
11 Club Room 1	"	"	"
12 Club Room 2	"	"	"
13 Club Room 3	"	"	"
14 Vocal	"	"	"
15 Metal Vocal	"	"	"
16 Plate 1	"	"	"
17 Plate 2	"	"	"
18 Church	"	"	"
19 Mountains	"	"	"
20 Falling	"	"	"
21 Early 1	Room Size [0 … 64]	Diffusion [0 … 127]	L.P.Filter [0-Bypass…10-16kHz]
22 Early 2	Room Size [0 … 64]	Diffusion [0 … 127]	L.P.Filter [0-Bypass…10-16kHz]
23 Early 3	Room Size [0 … 64]	Diffusion [0 … 127]	L.P.Filter [0-Bypass…10-16kHz]
24 Stereo	Room Size [0 … 64]	Diffusion [0 … 127]	L.P.Filter [0-Bypass…10-16kHz]

Effect 2 - Delay/Chorus/Flanger/Modulation table

Effect 2 - Delay/Chorus/Flanger/Modulations			
1 Mono Delay 1	Delay [0 (0ms)…125 (500ms)]	Feedback [0% … 99%]	L.P.Filter [0-bypass…10-16kHz]
2 Mono Delay 2	"	"	"
3 Stereo Delay 1	"	"	"
4 Stereo Delay 2	"	"	"
5 Multitap Delay 1	"	"	"
6 Multitap Delay 2	"	"	"
7 Ping-pong	"	"	"
8 Panmix	Delay [0-(0ms)…125-(500ms)]	Freq.Mod [0-bypass…30-6kHz]	Depth [0 … 100]
9 Chorus 1	Freq.Mod [0-0kHz…30-6kHz]	Depth [0 … 100]	L.P.Filter [0-bypass…10-16kHz]
10 Chorus 2	"	"	"
11 Ensemble 1	"	"	"
12 Ensemble 2	"	"	"
13 Phaser 1	Freq.Mod [0-0kHz…30-6kHz]	Depth [0 … 100]	Feedback [0% … 99%]
14 Phaser 2	"	"	"
15 Flanger 1	"	"	"
16 Flanger 2	"	"	"
17 Chorus/Delay1	Delay [0-(0ms)…125-(500ms)]	Freq.Mod [0-bypass…30-6kHz]	Depth [0 … 100]
18 Chorus/Delay2	"	"	"
19 Flanger/Delay1	"	"	"
20 Flanger/Delay2	"	"	"
21 Dubbing	Delay [0-(0ms)…125-(500ms)]	Feedback [0% … 99%]	L.P.Filter [0-bypass…10-16kHz]
22 Distortion	Depth [0% … 100%]	Feedback [0% … 100%]	L.P.Filter [0-bypass…10-16kHz]
23 Distortion/Delay	Depth [0% … 100%]	Delay [0-(0ms)…125-(500ms)]	Feedback [0% … 99%]
24 Pitch Shifter 1	Semitone [-12 … +12]	Detune [-100c … +100c]	L.P.Filter [0-bypass…10-16kHz]
25 Pitch Shifter 2	"	"	"
26 Shift/Delay	Delay [0-(0ms)…125-(500ms)]	Feedback [0% … 99%]	Detune [-100c … +100c]
27 Rotary 1	Speed [1s … 11s]	Rotary [slow/fast]	L.P.Filter [0-bypass…10-16kHz]
28 Rotary 2	"	"	"
29 EQ Jazz	Low Gain	Medium Gain	High Gain
30 EQ Pop	"	"	"
31 EQ Rock	"	"	"
32 EQ Classic	"	"	"

• Vocal Processor (Edit Effect)

INTRODUCTION TO THE VOCAL PROCESSOR

The Vocal Processor function allows solo vocalists to add vocal harmonies to their performance. Up to 4 extra melody lines can be added to any kind of sound source (voice, guitar, synth, etc.).

If your **SK** does not have the on-board Vocal Processor, it can be easily upgraded with the Vocal Processor function by installing the optional Audio/Video + Vocal Processor and loading the relative disk-based Operating System software.

FEATURES OFFERED BY THE VOCAL PROCESSOR

1. The Vocal Processor is a function which can add vocal harmonies to your voice according to various preset configurations which enrich the vocal backings automatically.

2. The Vocal Processor implements new controlling functions assignable to the Pads and Pedals. Also implemented are specific MIDI Controllers to control the Vocal Processor via MIDI.

3. In the Edit General environment, the Vocal Processor implements an Equalizer (the Mic/Line editor) which affects the Microphone signal only.

4. The rear-panel MIC/LINE INPUT 1 is predisposed to accept a Microphone signal in order to be processed by the Vocal Processor function.

If your **SK760/880** contains the Vocal Processor function, in «Edit Effect» you'll find parameters for Effects editing (Effect editor) and the Vocal Processor (Vocal Proc. editor).

Press the EFFECTS button in the EDIT section to gain access to «Edit Effect», select the Vocal Proc. editor and press ENTER to gain access.
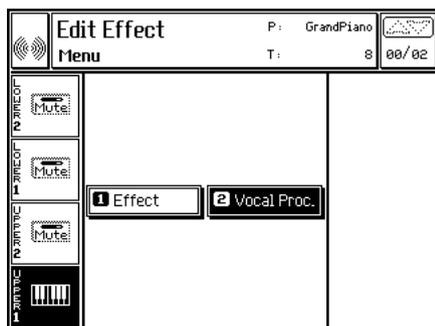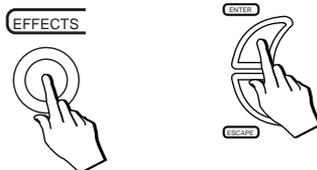
Edit Effect- Main Menu

CONNECTIONS

To work with the Vocal Processor, the minimum amount of equipment you will need is:

1. A low impedance microphone with a standard jack connector on the output end of the cable.

2. A switch-action pedal (optional).

3. An amplification system for instrument not fitted with internal amplification (domestic hi-fi unit, amplified speakers, mixer, etc.).

Switch Pedal: plug the switch pedal into PEDAL 1 or 2 jack and assign the pedal one of the Pedal functions to control the Vocal Processor (Vocal On/Off, Vocal Mute, Mode recall, etc.). The Mute function can also be assigned to the Pads.
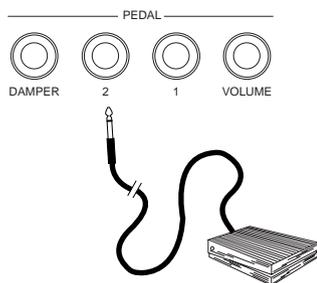
Microphone: connect the Microphone to the MIC/LINE 1 jack. You can regulate the microphone's sensitivity (Gain) with the small knob 1. In Edit General, Mic/Line editor, you will find the Mic/Line On/Off and Vocal On/Off options and an Equalizer which affects the microphone input signal only.
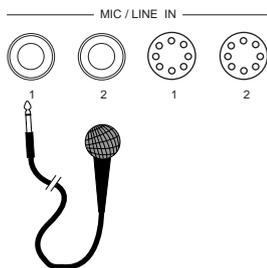
ACTIVATE THE VOCAL PROCESSOR

The Vocal Processor operates only if both the Mic/Line On/Off and Vocal Processor On/Off options in Edit General are enabled. For example if, after loading the Vocal Processor operating system, you attempt to use the Vocal Processor, you'll find that it will not respond.

Therefore, before gaining access to the Vocal Processor editor, it is more convenient to go into «Edit General», enter the Mic/Line editor and enable the Mic/Line On/Off and Vocal On/Off options with the corresponding Soft buttons.
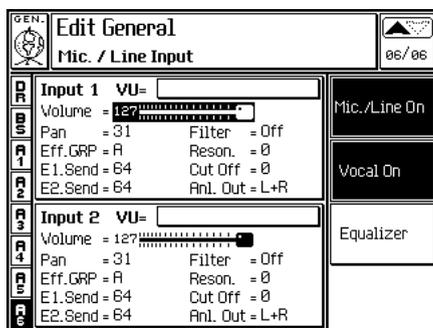
Press ESCAPE or EFFECTS to exit Edit General and return to the Edit Effects section.

The instrument will memorize the status of the selected parameters even after power down.

Vocal Processor

Select the Vocal Processor editor from the main Edit Effects menu with the cursor buttons (◀▶) and press **Enter** to access the editor.

It is also possible to enter the editor directly using the Page scroll buttons (▲▼).

The parameter configuration displayed depends on the mode selected.

Three operating modes are available: **Chord / Vocoder / Unison.**

CHORD (F5)

N.B. THIS MODE IS OPERATIVE ONLY IN STYLE MODE

CHORD mode recognizes the chords you play and determines the most appropriate harmony intervals for your singing. This mode produces up to four voices according to the recognized chord and chord type (Close or Smart - see Vocal Processor Edit). The harmonic voices are generated within the octaves above and below the input note with two different intervals: one interval near the input note (Close) and another further away (Extreme). The interval extensions vary according to the chord played .

The four voices can be selected from the six available:

Voice 1 : Extreme Lower octave

Voice 2 : Close Lower octave

Voice 3 : Extreme Upper octave

Voice 4 : Close Upper octave

Main : "doubles" the input voice

Bass : "doubles" the input voice one octave down.

You can regulate the Volume and Pan parameters of each single voice (F1/F2).

You can mute or activate the various voices with the function buttons A-F.

Ex: an active voice shows the icon 罪

a muted voice shows the icon ⌊M♪♫⌋

The Harmony parameter controls the general volume of the Vocal Processor:

Harmony   127▓▓▓▓▓▓▓▓▓▓▓▓▓●

The Volume page operates in the same manner as the same page in «Edit Mixer»; in other words, you can regulate the levels with the Dial or Sliders.

The Volume and Pan controls are common to all three operating modes.

Vocal Processor - Chord mode, Volume option

Vocal Processor - Chord mode, Pan option

NB. The number of voices produced by the Vocal Processor is always a maximum of 4.

Example: if voices 1, 2, 3 and 4 are active in order to activate the Main or Bass voice, you must mute one of the active voices.
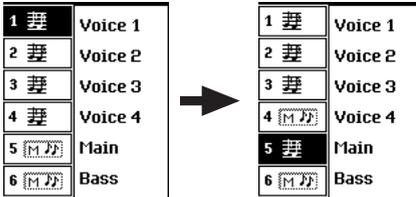
VOCODER (F6)

VOCODER mode operates both in Style mode as well as Song mode.

The VOCODER mode operates by referring to the notes played in real time on the keyboard, or reproduced by the sequencer, and the Vocal Processor responds by shifting the pitch of your voice exactly to the notes played.

The Vocoder is always tied to one of the tracks (see Vocal Processor - Edit).

You can regulate the Volume and Pan parameters of each single voice (F1/F2).

You can mute or activate the various voices with the function buttons A-F.

In VOCODER mode, the Main and Bass voices are not present.

The assigned Vocoder track is able to receive Pitch and Modulation messages.
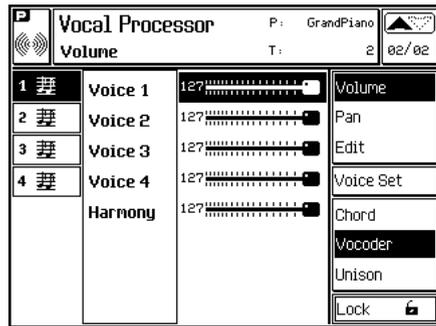
Vocal Processor - Vocoder mode, Volume option
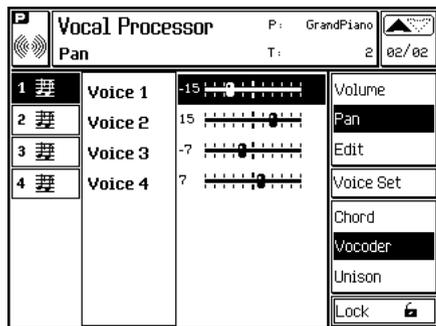
Vocal Processor - Vocoder mode, Pan option

UNISON (F7)

UNISON mode operates both in Style mode as well as Song mode. In this mode, the Vocal Processor automatically produces the same note as the input note, doubling up to 4 Voices.

Each voice is doubled with a slight detune effect above and below the input note according to the following scale.

Voice 1 = +12 cents

Voice 2 = + 7 cents

Voice 3 = – 7 cents

Voice 4 = – 12 cents

You can regulate the Volume and Pan parameters of each single voice (F1/F2).

You can mute or activate the various voices with the function buttons A-F.

In UNISON mode, the Main and Bass voices are not present.
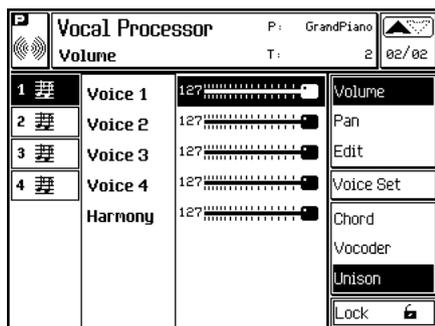
Vocal Processor - Unison mode, Volume option
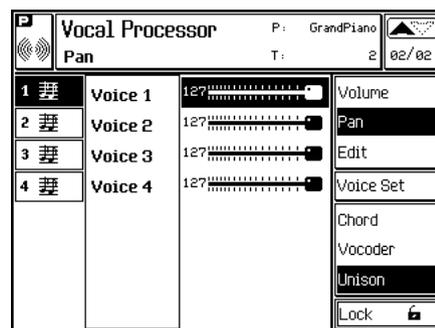
Vocal Processor - Unison mode, Pan option

EDIT (F3)

The Edit page allows you to apply a Low Frequency Oscillator (LFO) to the voices produced by the Vocal Processor. The modifications affect the voices globally, not individually.

The parameters of the Edit page are common to all three operating modes.

About the LFO

LFO is a periodic (repeating) control source which produces a low speed (low frequency) waveform which is applied to the voice Pitch to obtain a cyclic modulation.

Because of its periodic nature, the LFO applied to the pitch creates the Vibrato effect to simulate the natural vibrations of the human voice.

Vocal Processor - Edit

Sine   *Triangle*   *Saw-tooth*

Square   *Random*   *Sample&Hold*

THE EDIT PAGE PARAMETERS

LFO Wave

Selects the waveform of the low frequency oscillation.

Assignable values: Off, Sinus, Triangle, Saw, Square, Random, Sample/Hold.

LFO Rate

Determines the velocity of the LFO.

Assignable values: 1 … 200.

LFO Depth

Determines the depth of action of the LFO.

Assignable values: 0 … 7.

LFO Delay

Determines the delay before the entry of the LFO. Entry of the LFO is gradual.

Assignable values: 0 … 64.

Pitch Filter

Checks the pitch of the voices. In Free mode, all pitch imperfections detected due to minor changes in the pitch of the voice rest unchanged. In Auto Correction mode, the imperfections are automatically corrected.

Assignable values: Free, Auto Correction.

Chord Type

Selects from two different modes of harmonization according to the chord played.

Assignable values: Close and Smart..

[*See also Harmony Type in «Edit Tracks/Splits»*].

Vocoder Track

Selects the track exploited by the Vocoder.

Assignable values: 1 … 32.

Transpose

Transposes the Vocoder track one octave above standard pitch.

Assignable values: Off, Octave+.

. . . .

VOICE SET (F4)

In this page, it is possible to recall up to 16 Custom configurations.

Each Custom recalls a different setting of all the Vocoder parameters (Volume, Pan, Mute, Mode, lfo,...). The Custom settings are not programmable.

You can use the Custom Voice Sets as a starting point for your configurations and, any subsequent changes to the settings can be memorized to the Performances.

Vocal Processor - Voice Set

LOCK (F8)

The LOCK function locks the current Vocal settings to protect them from subsequent Performance changes.

To lock the current setting, press the function button F8 to activate the Lock. The icon is shown in negative highlight and the small lock closes.

Vocal Processor - Chord mode, Volume option, Lock on

Additional changes

In addition to the above, the following additional modifications are implemented by the Vocal Processor:

PADS AND PEDALS

In «Edit Controllers/Pads".

The following additional assignable functions are implemented for the pads and pedals:

- Vocal On/Off (Pedals/Pads)
- Vocal Volume (solo Pedals Assign.)
- Vocal Custom 1-16 (Pedals/Pads)
- Vocal Mute (Pedals/Pads)
- Vocal Chord/Vocoder/Unison (Pedals/Pads)

NB. All the parameters described above can be memorized to the Performances.

VOCAL ON/OFF AND EQUALIZER

In «Edit General», the Mic/Line editor with the Audio/Video card and vocal Processor installed.

The Mic/Line In editor includes an Equalizer which prompts the following window when activated:

- High gain
- Middle Freq
- Middle gain
- Low gain

```
         Equalizer
High Gain    : 0dB
Middle Gain  : 0dB
Middle Freq  : 250Hz
Low Gain     : 0dB
```
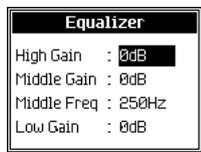
The Equalizer parameters exclusively affect the Microphone signals at input 1 of the Mic/Line interface.

The Vocal On/Off option enables/disables the Vocal Processor

The Mic/Line On/Off option enables/disables the MIC/LINE interface.

NB. These parameters are memorized in Edit General.

Edit Controllers/Pads - Vocal Volume and Vocal On/Off assigned to the pedals
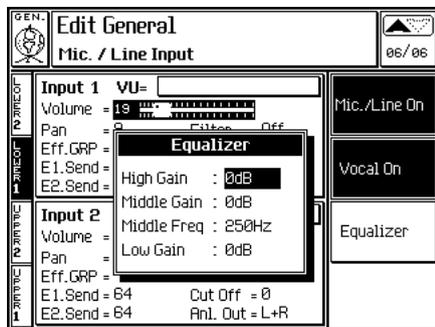
Edit General - Equalizer

SPECIAL MIDI CONTROLLERS ASSOCIATED TO THE VOCAL PROCESSOR

To control the Vocal Processor via MIDI, the following special MIDI controllers (Common Channel) are available:

Cntrl No.	Description	Value
12	Vocal volume	0 … 127
13	Vocal On/Off	0 Off/On (toggle)
		64-127 On
14	Mode recall	0 = Chord mode
		1 - Vocoder mode
		2 = Unison
15	Voice Set recall	1 = 1
		2 = 2
		3 = 3
		…
		15 = 15
		16 = 16
85	Voice Mute mode	0 = Voice 1
		1 = Voice 2
		2 = Voice 3
		3 = Voice 4
		4 = Main
		5 = Bass

LOADING MIDI FILES CONTAINING A VOCODER TRACK

When a MIDI File containing a Vocoder track is loaded from disk, the Vocoder track sets to track 5 by default.

• 11 Edit MIDI

The «Edit MIDI» environment contains general parameters and parameters pertaining to single tracks.

Press the MIDI button in the EDIT section to gain access to the «Edit MIDI» environment.

. . . .
▶ *Note: Save any modifications with STORE PERFORMANCE. The Performance memorizes pages whose icons shows the symbol* ▣*.*
. . . .

Page memorized to the Performance   Performance

Track in edit

▣ Edit Midi		P:	'GrandPiano	⚙
⊕ Midi channels		T:	1	01/01
1 ▥⊕	NylonGtr	➡Ⓐ 1	Ⓐ➡ 1	Midi channels
2 ▥⊕	SlwStrings	➡Ⓐ 2	Ⓐ➡ 2	Configuration
3 ▥⊕	Harmonica	➡Ⓐ 3	Ⓐ➡ 3	Midi filters
4 ▥⊕	Marimba	➡Ⓐ 4	Ⓐ➡ 4	General set
5 ▥⊕	E.Piano1	➡Ⓐ 5	Ⓐ➡ 5	Common/arrg.
6 ▥⊕	SoftSax	➡Ⓐ 6	Ⓐ➡ 6	Midi dump
7 ▥⊕	SlwStrings	➡Ⓐ 7	Ⓐ➡ 7	Local on
8 ▥⊕	Piano1	➡Ⓐ 8	Ⓐ➡ 8	Midi lock

Edit MIDI - MIDI Channels
(MIDI Channels and ports for each track)

MIDI CHANNELS (F1)

This parameter assigns the MIDI channel (1…16) and MIDI port (A or B) to each track.

The Performances are independently programmable for a MIDI configuration.

The «MIDI Lock» option (soft button F8) locks the current configuration for all Performances, overriding the individual MIDI configurations of the Performances when you change Style or Performance.

➡Ⓐ 2   Ⓐ➡ 2

MIDI IN port (A or B)

MIDI OUT channel (1...16)

MIDI OUT channel (1...16)

MIDI OUT port (A or B)

. . . .

CONFIGURATION (F2)

This function sets the track configuration which determines how the tracks are connected to MIDI IN, to the keyboard, to the sound generator and MIDI OUT.

The keyboard icon also indicates the Common Channel (equivalent to the incorporated keyboard of **SK760/880**).

Pass from one icon to another with the cursor buttons. Modify the status of the icons with the DIAL (when the icon shows, the parameter is on; when the parameter is deactivated, the icon is substituted by OFF).

MIDI IN icon

When on (icon showing), the track responds to MIDI data received at the MIDI IN port. When OFF, the track does not receive external MIDI data.

Keyboard/Common Channel icon

When on (icon showing), the track can be played from the keyboard. When OFF, the track cannot be played from the keyboard, but can receive data via MIDI, or it can be exploited by a Song or Style.

The icon also corresponds to a master keyboard connected via the Common Channel, which simulates the **SK760/880** keyboard and on-board controllers (pedals).

Internal sound generator icon

When on (icon showing), the events generated by the track are sent to the internal sound engine. When OFF, the track is not connected to the internal sound engine, but can send data to an expander via MIDI OUT.

MIDI OUT icon

When on (icon showing), the events generated by the track are sent to an external MIDI device via the MIDI OUT port. When OFF, the track does not transmit MIDI data to external units.
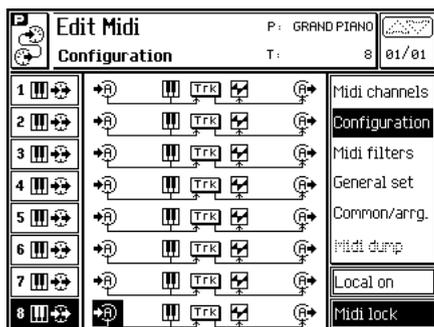
Edit MIDI - Configuration
(track configuration - internal/external connections)

MIDI IN   keyboard/Common Channel   internal sound generator   MIDI OUT
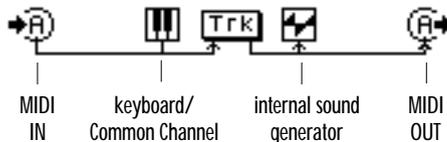
MIDI FILTERS (F3)

This function programs MIDI Filters for data received at MIDI IN and data sent via MIDI OUT.

It is possible to program up to 7 MIDI IN filters and 7 MIDI OUT filters for each track.

Options: Off, Program Change, Pitchbend, Mono touch, Poly touch, ControlChange 00...31, ControlChange 64...127.

. . . .
► *Hint: To avoid transmitting ProgramChange data to an expander connected to the* **SK760/880** *MIDI OUT, activate the MIDI OUT ProgramChange filter for the track.*
. . . .

GENERAL SETTINGS (F4)

This function provides settings that influence the instrument as a whole (saved to the Setup).

MIDI Clock

A MIDI synchronizer to synchronize **SK760/880** with external rhythm units and sequencers.

Setting **"Internal"** renders **SK760/880** independent from the Clock of external MIDI devices.

Setting **"External"** places **SK760/880** on standby, waiting to receive the PLAY, START or STOP command from the external device connected to the instrument's MIDI In port. The external device also controls the tempo.

The Song Position Pointer is received and transmitted with the same precision as MIDI (1 tic = 1/24th of a beat). This parameter allows a Song to be stopped at a precise point.

Options: Internal, External.

. . . .
► *Note:* **SK760/880** *receives or transmits MIDI Clock on the same MIDI port (A or B) as the Common Channel.*
. . . .
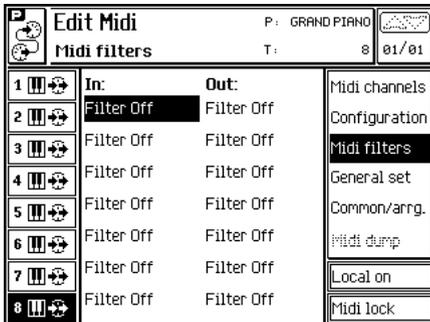
Edit MIDI - MIDI Filters
(filters of data in reception and transmission for each track)
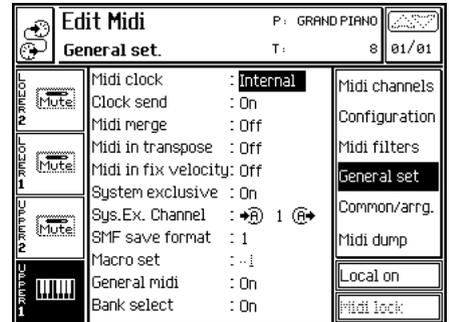
Edit MIDI - General settings

. . . .

Clock send

Determines whether or not the **SK760/880** MIDI Clock is transmitted to external MIDI devices. If deactivated, **SK760/880** cannot control the tempo and the Start/Stop of MIDI devices connected to the **SK760/880** MIDI OUT.

Options: On, Off.

MIDI Merge

Enables data received at MIDI IN to be merged with data transmitted at MIDI OUT.

If Merge=Off, the data received at MIDI IN are directed to the internal sound engine and to MIDI THRU.

If Merge=On, the data received at MIDI IN are directed to the internal sound engine, to MIDI THRU and MIDI OUT. Unlike data sent from MIDI THRU, the data transmitted via MIDI OUT are processed by the tracks (volume, pan, transpose, velocity curve, MIDI filters).

Options: On, Off.

. . . .
► **Note:** *The parameter cannot be programmed when the COMPUTER port is active («Computer» editor of «Edit General»).*
. . . .

MIDI IN Transpose

Enables the transposition of data received at MIDI IN. Deactivating this parameter can be useful to avoid unwanted transpositions when you program Songs with a computer.

A computer operates as a THRU device. After receiving data by a **SK760/880** track which has been transposed, the computer can return the notes to the same track which will transpose them further. This will not occur if MIDI IN Transpose is deactivated.

Options: On, Off.

MIDI IN fix velocity

Enables the Velocity switch. If this parameter is set to OFF, notes are received via MIDI IN with the correct velocity value. Other values set the indicated value to the notes received.

Options: Off, 1 ... 127.

. . . .
► **Hint:** *Some accordions transmit velocity at a fixed level, not able to be regulated. With this parameter, it is possible to modify the velocity value received by the accordion.*
. . . .

System Exclusive

Enables the transmission and reception of system exclusive messages. System Exclusive data control the editing parameters of the instrument, and can cause radical changes in the way **SK760/880** works. These messages are widely used in the most recent MIDI files, to send editing messages before the start of a Song.

Options: On, Off.

. . . .
► **Note:** *To transmit and receive system exclusive messages, connect both MIDI IN and MIDI OUT of **SK760/880** to the MIDI OUT and MIDI IN respectively of the external sequencer (commonly known as the «Closed MIDI Loop» connection).*
. . . .

System Exclusive Channel

Sets the MIDI In and Out port and MIDI channel for system exclusive transmissions. The default setting is MIDI ports A and channel 1.

SMF Save format

Set the function to format 0 or format 1 when you save **SK760/880** Songs as MIDI files.

Options: 0, 1.

General MIDI

Represents the General MIDI compatibility switch which requires setting when loading or saving MIDI files.

Set this parameter to ON in the following situations:

• before loading a GM compatible MIDI file which does not contain the GENERAL MIDI ON flag.

• before saving a perfectly GM compatible MIDI file (the General MIDI On flag is inserted in the file and the Program Changes of the drumkits are converted to Program Changes compatible with General MIDI).

The table shown below lists the drumkit Program Changes according to the status of the parameter.

Options: On, Off.

BankSelect

Enables the reception and transmission of the BankSelect MSB (CC00) and BankSelect LSB (CC32) message.

Options: On, Off.

MIDI channel 10, General MIDI On - conversion table (automatic)

PC-GM	PC-BS SK760/880	Drumkit GM	Drumkit SK760/880
1 … 8	113-2	Standard	DK-STAND1
9 … 16	114-2	Room	DK-ROOM
17 … 24	115-2	Power	DK-POWER
25	116-2	Electronic	DK-ELECT
26 … 32	117-2	TR-808	DK-HOUSE
33 … 40	118-2	Jazz	DK-JAZZ1
41 … 48	119-2	Brush	DK-BRUSH
49 … 128	120-2	Orchestra	DK-ORCH

COMMON CHANNEL/ARRANGEMENT (F5)

This page presents parameters common to all Performances.

The Common Channel is a MIDI channel dedicated to special operations:

- simulation of the keyboard and on-board controllers (pedals).

- transmission of Effects, Performance, Style and Song selected messages to **SK760/880**.

- transmission to **SK760/880** of chord data for the automatic accompaniment.

As an alternative to the Common Channel, chord messages for the accompaniment can be received on the MIDI channels specified by Chord to Arr.1 and Chord to Arr.2, conceived principally for the connection of a MIDI accordion.

Common Channel

Enables the Common Channel. This parameter is divided into three parts:

Ch - MIDI channel assigned to the Common Channel (IN and OUT).

In - MIDI IN port (A or B).

Out - MIDI OUT port (A or B).

The channel assigned to the Common Channel is no longer available for the tracks of the external sequencer. The Common Channel is reserved to special tracks dedicated to the control of effects and other parameters.

ProgramChange and ControlChange data received on the Common Channel select Style, Song, Performance, Effects and other parameters listed in the Appendix.

Options: Off, 1 ... 16.

Chord to Arr.1 / Chord to Arr.2

Enables the parameters dedicated to the control with a MIDI accordion. They are divided into two parts:

Ch - MIDI channel.

In - MIDI IN port (A or B).

Chord to Arr.1 is dedicated to the chords, **Chord to Arr.2** is dedicated to the Bass. The accordionist can send notes for the automatic accompaniment from the chord section, from the bass section, or from both sections.

The Common Channel unites to these two channels and their notes contribute to the formation of the chord for the automatic accompaniment.

Options: Off, 1 ... 16.
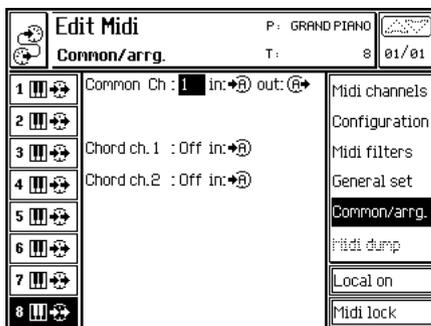
Edit MIDI - Common/Arrangement
(Common Channel and arrangement control)

MIDI DUMP... (F6)

Opens the «MIDI Dump» file selection window, which allows you to select the data to send to another **SK760/880**, to a MIDI Data Filer, to a sequencer or an editor for computers.

Use the directional Up/Down buttons to select the desired file type and press ENTER to enter the second level file selector. Use the direction arrows to select the desired file and press ENTER again to send the Dump.

The options are:

Setup - the current general settings of the instrument.

Sound - opens a selection window where you can select either "All files" (including RAM-Waves, RAM-Sounds and RAM-⌂⌂-Sounds) or a single file from the **SK760/880** Sound Library.

Real Performance - opens a selection window where you can select either "All files" or a single Performance.

Style Performance - opens a selection window where you can select either "All files" or a single user-programmed file.

User Style - opens a selection window where you can select either "All files" or a single user-programmed file.

Song - opens a selection window where you can select either "All files" or a single Song (including relative Song-Performance).

. . . .
▶ *Note:* **SK760/880** *receives and transmits the Dump on the same MIDI ports (A or B) as the Common Channel.*
. . . .
▶ *Note: The System Exclusive parameter in the General Set option of «Edit MIDI» must be set to ON (ON by default).*
. . . .
▶ *Note: The MIDI DUMP operation must be carried out while* **SK760/880** *is in Style/RealTime mode - Style not playing.*
. . . .

MIDI Dump: file type selection window.
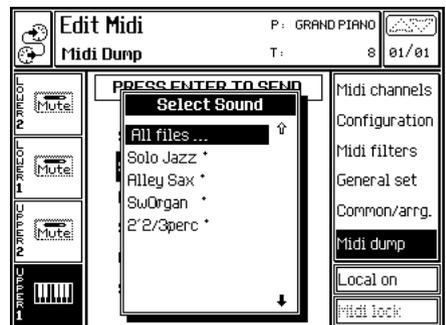
MIDI Dump: second level file selection window.

Transmission of data to another SK760/880

1. Connect the MIDI OUT of the transmitting instrument to the MIDI IN of the receiving instrument. Use the MIDI port (A or B) assigned the Common Channel.

2. In the transmitting instrument, select the data to transmit from the «MIDI Dump» selection window.

3. Press ENTER to start transmitting. A bar graph shows the progression of the transmission. Wait until the data transfer operation is complete.

   If the «MIDI Dump aborted! - Check connections» message appears, the transfer was unsuccessful. Check the cable connection and try again.

Transmission of data to a sequencer

Check that the external sequencer is able to record System Exclusive data.

1. Connect the **SK760/880** MIDI OUT to the sequencer MIDI IN. Use the MIDI port (A or B) assigned the Common Channel.

2. In the **SK760/880**, select the data to transmit from the «MIDI Dump» selection window.

3. In the sequencer, dedicate a track to the system exclusive data with a generic MIDI channel (Any, All, or similar).

4. Activate the recording in the sequencer.

5. Press ENTER to start transmitting. A bar graph shows the progression of the transmission. Wait until the data transfer operation is complete.

   If the «MIDI Dump aborted! - Check connections» message appears, the transfer was unsuccessful. Check the cable connection and try again.

6. Stop the sequencer and check that the data has been received.

. . . .

Reception of data from a sequencer

1. Connect the **SK760/880** MIDI In to the sequencer MIDI OUT. Use the MIDI port (A or B) assigned the Common Channel.

2. Set the sequencer to playback mode.

3. Wait until the data transfer operation is complete and stop the sequencer.

4. Check that **SK760/880** has received the system exclusive data correctly.

. . . .
► *WARNING - Sending system exclusive data to* **SK760/880** *cancels all data of the same type currently residing in memory. Save the data you wish to conserve before receiving the system exclusive data from the sequencer.*
. . . .

LOCAL ON, LOCAL OFF (F7)

The Local On setting (the default status of the instrument) corresponds to the situation when the keyboard is connected to the internal sound engine.

Press F7 to set the instrument for Local Off operation (shown in negative highlight). Local Off operation disconnects the **SK760/880** keyboard from the internal sound generator. The keyboard sends data from the Group A MIDI OUT on channel 1. In Local Off mode, the internal sound engine responds only to data received at MIDI IN. **The keyboard cannot play the internal SK760/880 sounds directly.**

Activate Local Off to program Songs on an external sequencer. **SK760/880** transmits data to the external sequencer, and the sequencer returns the data to the **SK760/880** internal sound engine.
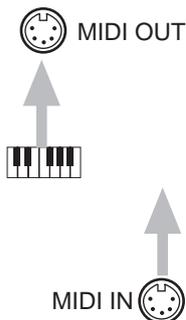
MIDI LOCK (F8)

When this function is selected (shown in negative highlight), the current MIDI channel configuration and filters of the tracks is locked for all Performances. The individual situations of Performances are overridden.

When the option is not selected, the tracks are reset to the settings of the current Performance.

The MIDI Lock setting is conserved in memory after power down. It is saved to the Setup.

Local on

Midi lock

MIDI OUT

MIDI IN

. . . .
Edit MIDI 11•9
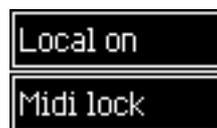
• 12 Edit Mixer

«Edit Mixer» allows you to control volume, pan, effect send and output assignment for each track. Also included is an equalizer that is applied to all tracks.

Press the MIXER button in the EDIT section to gain access to the «EDIT MIXER» environment.

. . . .
▶ **Note**: *Save the changes with STORE PERFORMANCE. The Performances memorize the pages whose icon shows the symbol* ▣.
. . . .

MIXER

VOLUME (F1) ▣

You can regulate the track volume with the DIAL or the sliders A…H.

In edit, each slider corresponds to a track (the LED near the A ... H letters is on).

Value range: 0 ... 127.

PAN (F2) ▣

Track position in the stereo panorama. Moving the Pan all to the left or all to the right, you can direct the sound to one output instead of both outputs.

Value range: -31 (all to the left) ... 0 (center) ...+31 (all to the right).

Performance

Track in edit
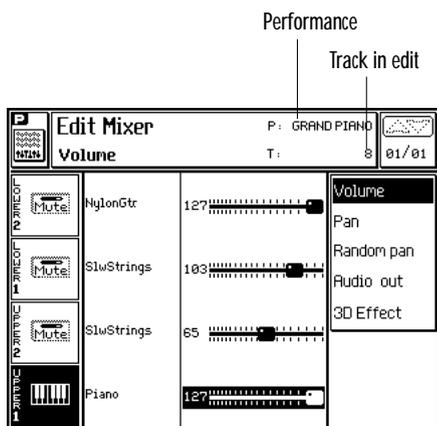
Edit Mixer - Volume
(track volume)
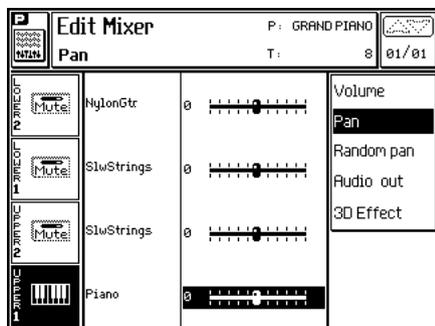
Edit Mixer - Pan
(track position in the stereo panoramic)

. . . .

RANDOM PAN (F3) ▣

Random changes of the sound position in the stereo panorama. This change renders the sound more realistic.

Value range: 0 (no effects) ... 7 (maximum randomness).

AUDIO OUT (F4) ▣

Routing of the tracks to the audio outputs. The parameter is important only when the tracks are connected to the internal sound generation.

Normally the **SK760/880** sends sounds to both LEFT and RIGHT outputs, but it is possible to send some tracks to the auxiliary 1 and 2 outputs, for an external mixing operation and a wider sound 'opening'.

The outputs selection also affects the internal amplification.

Options: Left+Right, Out1+Out2, Out1, Out2.
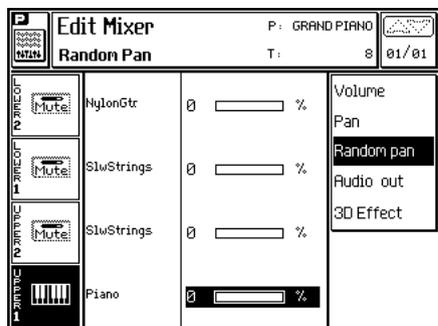
Edit Mixer - Random Pan
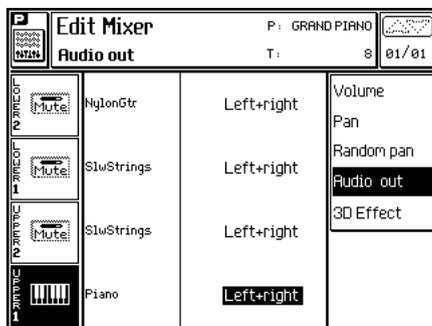
Edit Mixer - Audio Outputs
(track audio outputs)

3D EFFECT (F5)

The 3D effect is a spacializer which adds dimension to the **SK760/880** Sounds.

Bass

A Bass equalizer which adds or removes the bass frequencies.

Value range: –12dB … +12dB

3D

Spatializer which affects the stereo outputs of the instrument. The effect is not heard if the instrument is connected to an amplification system in mono.

Value range: –3dB ... –12dB.
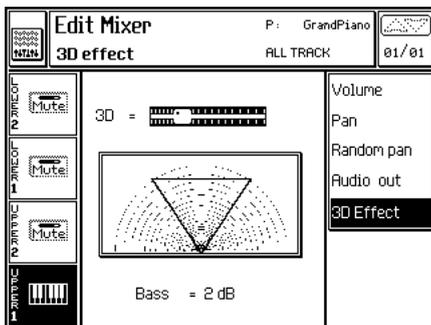
Edit Mixer - 3D

• 13 Edit Controllers/Pads

In «Edit Controllers/Pads» you can program how the individual tracks of a Performance react to the Trackball, the programmable Pedals and programmable Pads.

Press the CNT./PADS button in the EDIT section to gain access to the «Edit Controller/Pads" environment.

CNT / PADS

. . . .
▶ *Note: Save the changes with STORE PERFORMANCE. The Performances memorize the pages whose icon shows the symbol* 📄.
. . . .

WHEELS (F1) 📄

Activates the action of the Wheels for single tracks.

Each track can be independently programmed for the action of the Pitchbend Wheel (1) and/or the Modulation Wheel (2).

PitchBend ⬦ 1

Pitch Bend is applied by vertical movements of Wheel 1 (the left wheel). The PitchBend wheel is spring loaded to return the control to the central position (corresponding to standard pitch). The parameter offers a maximum pitch excursion of 12 semitones and Off.

The same control can be assigned to a continuous control pedal. *See "Pedals Programming (F2)".*

Modulation ⬦ 2

Modulation is applied by vertical movements of Wheel 2 (the right wheel). The Modulation Wheel is centre-dented for easy positioning at the central position. The parameter can be set to either On of Off.

The same control can be assigned to a switch action pedal. *See "Pedals Programming (F2)".*

Options: Pitch Bend: Off, 1...12.
Modulation: Off, On.

Performance
Track in edit

Edit Controllers/Pads - Wheels
Pitch/Mod assignment for each track

. . . .

PEDALS PROGRAMMING (F2) ▣

Here you can assign a function to the pedals 1, 2 and 3. All three Pedals can be set to operate as either Switch or Continuous controls.

Switch action pedals control on/off functions such as Soft, Sostenuto, Damper, Start/Stop, Fill, Rotary Slow/Fast, etc.

Continuous control pedals control functions such as Volume, Expression, Pitch and Modulation.

Type of pedal

The first column on the left of the display selects the type of pedal (Switch or Continuous).

Options: Switch, or Continuous.

Parameters assignable to the pedals

The control functions assignable to the pedals depend on the type of pedal.

- «SWITCH»: Off, Damper, Sostenuto, Soft, Start/Stop, Key Start, Intro, Fill <, Fill =, Fill >, Ending, Var 1, Var 2, Var 3, Var 4, Var >, Var <, Perf >, Perf <, Harmony, Bass to Low., Arrange On/Off, Fade In/Out, Tempo >, Tempo <, Punch, Rotary Slow/Fast, Minor, 7th, Dim, Min 7th, Maj 7th, Freeze Chord.

- «CONTINUOUS»: Off, PitchBend, Pitch+, Pitch–, Filter Cutoff Frequency (CC74), Resonance (CC71), Modulation (CC01), Breath controller (CC02), Volume (CC07), Pan (CC10), Expression (CC11).

Refer to the Pedal function tables at the end of this chapter for brief explanations of each function.

PEDALS ASSIGNMENT (F3) ▣

This parameter enables or disables the tracks for the action of pedals 1, 2 and 3.

Options: On, Off.
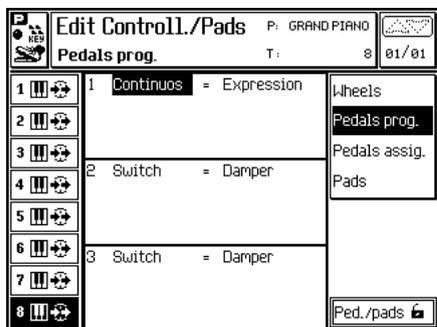
Edit Controllers/Pads - Pedals programming
(Function assignments for the Pedals)
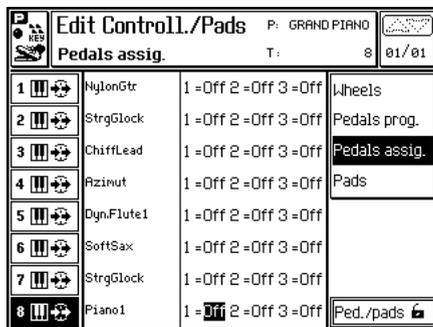
Edit Controllers/Pads - Pedals assignment
(pedal enable/disable)

PADS (F4) ⊟

The four PAD buttons are independently programmable. Each button can be configured to react according to the settings of various parameters.

Pad

Determines the Function to assign to the pad.

Functions assignable: Off, KeyAssign, Rotary slow/fast, Hardcopy.

Off - pad deactivated.

KeyAssign - The pad plays the assigned note. The Volume, Pan, Transposition and MIDI OUT channel settings correspond to those of track 6. The Note and ProgramChange are defined by the following parameters which appear only when this option is selected

PC - Program Change. Range 1…128.

C#0 - CC00: Control Change 00 (Bank Select MSB). Range 1…128.

C#32 - CC32: Control Change 32 (Bank Select LSB). This parameter does not require a setting to play an internal **SK760/880** sound. Range 1…128.

Note - Determines the note played. Range: C-1 to G9

Edit Controllers/Pads - Pads
(pad programming tasks)

Dynamic - Note velocity. Range 0…127

Rotary slow/fast - Switches the Rotary velocity from slow to fast or vice versa.

Hardcopy - Captures a bitmap image of the current display (.BMP) into RAM. The images can be saved to an MS-DOS disk and elaborated by a graphic program running on a personal computer.
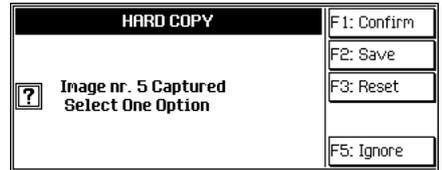
Confirm (F1) - confirms the captured display.
Save (F2) - saves the captured image to an MS-DOS disk.
Reset (F3) - cancels all captured images and liberates the RAM. Each image uses approx. 6 KBytes of RAM.
Ignore (F5) - closes the dialog window without capturing the image.

PED./PAD 🔒 (PEDALS/PADS LOCK) (F8)

When selected, the Pedals/Pads Lock conserves the current pedal and pad programmed status for all Performance and Style selections.

To enable the recall of the Pedal/Pads parameters, make sure the Padlock is open (unlocked).

The Pedals/Pads Lock remains in memory after power down. It is saved to the Setup.

THE SWITCH PEDAL FUNCTIONS

(affect enabled tracks of the current Performance)

Off	No effect
Damper	Applies the sustain effect to released notes.
Sostenuto	Sustains only the notes played at the time of pressing the pedal; notes played after pressing the pedal are not affected.
Soft	Attenuates the sound.
Start/Stop	Simulates the Start/Stop button.
Key Start	Activates/deactivates the Key Start function.
Intro	Activates the Intro.
Fill <	Activates the Fill< function.
Fill =	Actvates the Fill function.
Fill >	Activates the Fill> function.
Ending	Activates the Ending function.
Variation 1	Switches to Variation 1.
Variation 2	Switches to Variation 2.
Variation 3	Switches to Variation 3.
Variation 4	Switches to Variation 4.
Var. >	Switches to the next Variation.
Var. <	Switches to the previous Variation.
Perf. >	Advances to the next Performance. **N.B.** To select several Performances in increasing order, all the Performances you intend to recall must be programmed for the action of the Perf > function.
Perf. <	Returns to the previous Performance. **N.B.** To select several Performances in decreasing order, all the Performances you intend to recall must be programmed for the action of the Perf < function.
Harmony	Activates/deactivates the Harmony button.
Bass to Low.	Activates/deactivate the Bass to Lowest function.

Arrange On/Off	Activates/deactivates the Arrange On/Off button.
Fade In/Out	Activates/deactivates the Fade In/Out function.
Tempo >	Increases the Tempo setting by one unit at a time.
Tempo <	Decreases the Tempo setting by one unit at a time.
Punch	Activates/deactivates the Punch recording function during recording operations.
Rotary s/f	Changes the speed of the Rotary effect from Slow to Fast or vice versa.
Minor	Converts the currently held chord to the minor chord.
Dim	Converts the currently held chord to the diminished chord.
Min 7th	Converts the currently held chord to the minor 7th chord.
Maj 7th	Converts the currently held chord to the Major 7th chord.
Freeze Chord	'Locks' the current chord (pedal held), allowing you to play freely with both hands across the entire keyboard without triggering changes in the Style auto-accompaniment. The function deactivates at pedal release.

THE CONTINUOUS PEDAL FUNCTIONS

(affect enabled tracks of the current Performance)

Off	No effect
Pitch Bend	Applies Pitch Bend to the notes. The Pitch Bend sweeps from the maximum negative to maximum positive value of the Pitch setting in the Wheels Pit/Mod function. The central position of the continuous pedal corresponds to 0 pitch.
Pitch +	Increases the Pitch up the value set in the Pit/Mod parameter.
Pitch –	Decreases the Pitch down the value set in the Pit/Mod parameter.
Filter	Opens/closes the Filter Cutoff parameter in Edit Perf Sound.
Resonance	Affects the Resonance parameter
Modulation	Applies Modulation (CC01) to tracks activated for the effect (in Pit/Mod).
Breath Cnt.	Generates Breath controller (CC02) data (useful for external MIDI devices capable of recognizing the controller).
Volume	Controls the general volume (CC07).
Pan	Controls the Pan (CC10) from left to right.
Expression	Controls the volume from 0 level to the maximum setting of the mixer levels.

• 14 Edit Tracks

In «Edit Tracks» you can program parameters that are exclusive to the tracks and set the Harmony function which is exploited by the Styles.

Press the TRACKS button in the EDIT section to gain access to the «Edit Tracks».

This section consists of two menus. Pass from one to the other with the scroll menu buttons (▲▼).

. . . .
► *Note: Save the changes with STORE PERFORMANCE. The Performances memorize the pages whose icon shows the symbol* ▣.
. . . .

TRANSPOSE (F1) ▣

A track transposer which transposes in steps of one semitone. The maximum transposition obtainable is ±5 octaves.

Assignable values: –60…0…+60.
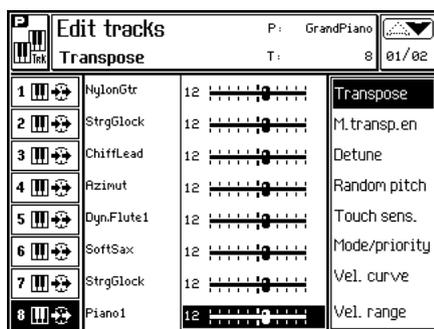
Edit Tracks - Transpose (track transposition)

MASTER TRANSPOSE ENABLE/DISABLE (F2) ▣

Master Transpose (general transpose) enable/disable for the track. Tracks set to Enable are tuned to the scale selected in «Edit General». Tracks set to Disable play with the Equal temperament.

The Master Transpose parameter is disabled for the drum track to avoid drum remappings due to transpositions.
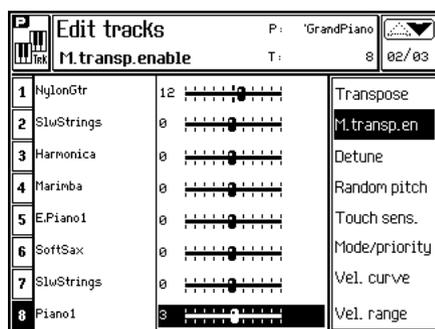
Edit Tracks - Master Transpose enable/disable

. . . .

DETUNE (F3) ▣

A fine tune function for single tracks. Each step is equivalent to 1/64th semitone.

Assignable values: - 63…0…+63.
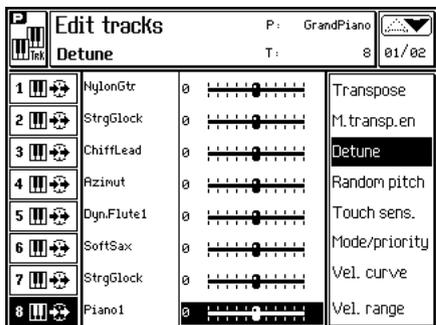
Edit Tracks - Detune
(Track fine tuning operations)

RANDOM PITCH (F4) ▣

Creates slight pitch variations freely and is useful to simulate the pitch instability typical of acoustic instruments. It is advisable to assign a value of 1 or 2 to wind instruments.

Assignable values: 0 (no effect) ... 7 (maximum randomness).
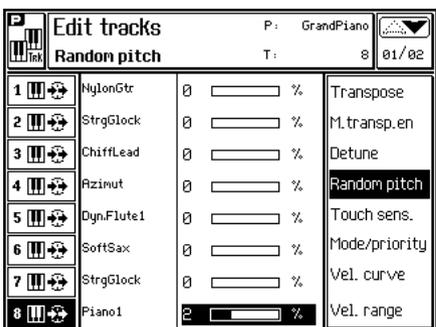
Edit Tracks - Random pitch

MODE/PRIORITY (F5) ▣

(1) Selects the polyphonic/monophonic mode for the tracks. *(2)* Activates/deactivates the Priority option (guaranteed minimum polyphony for the track).

Mode

This parameter sets a track to play monophonically (one note at a time) or polyphonically (two or more simultaneous notes). Mono R gives priority to the right note, Mono L to the left note, Mono T to the last note played.

Options: Poly, Mono L, Mono R, Mono T.

Priority

Priority guarantees a minimum polyphony to a track with respect to others and avoids "note-stealing". In complex arrangements, a track set with Priority=Off can remain without notes, while those with Priority=On will not be subjected to "note-stealing".

Options: On, Off.

▶ **Note:** *Avoid assigning Priority=On to too many tracks, as this will cancel the function due to conflicts between the assigned tracks.*
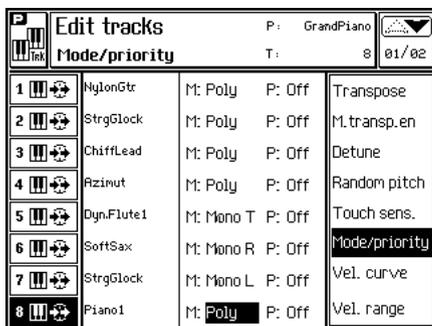
Edit Tracks - Mode/Priority
(polyphonic/monophonic Mode and Priority)

VELOCITY CURVE (F6) ▣

Provides a selection of Velocity response curves. As well as modifying the velocity data, velocity curves allow the creation of crossfade effects between two tracks.

For example, it is possible to assign two tracks with opposing dynamic curves (for example, two opposing linear curves [ex. 1 & 4], or two opposing exponential curves [ex. 2 & 5]. The resulting effect is one of hearing the sound of the second track fade in by gradually increasing the keystrike velocity while the sound of the first track fades out. Playing softly triggers one sound and playing hard triggers the second. Playing with "in between" values creates a blend of both sounds.

VELOCITY RANGE (F7) ▣

Sets velocity limits for each track above and below which the sound will not play. These limits allow the creation of cross-switching effects by assigning tracks different velocity ranges.

For example, to one track, assign a piano sound softened by a closed filter, while to another track, assign the same piano sound with an open filter to enhance the higher frequencies. Program the first track to respond across a low velocity range and the second track across a higher range. The result obtained is a piano which changes timbre depending on the velocity applied.

Assignable values: Low range 0…127 - High range: 127…0.

Press the right ▲▼ button to pass to the second page of options.

Edit Tracks - Dynamic Curve
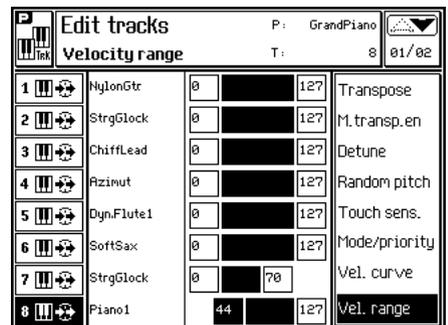
Edit Tracks - Velocity Range

HARMONY (F1) ▣

Allows you to choose from a selection of harmony types. The Harmony function is enabled and disabled by pressing the HARMONY button on the control panel. Harmony is a function that affects the instrument set to Styles/Performance mode when the keyboard is split (Upper/Lower and Multi modes). Songs are not affected.

Harmony type

Provides a selection of harmony types (defined by the structure chart shown below).

Close: the notes of a chord played below the Split Point harmonize the melody of the right hand. The harmonizing chord is a closed (or tight) position and the notes of the left hand are copied to the right hand (see table).

Open 1: an open chord (see table).

Open 2: similar to Open 1 (see table).

Smart: similar to Close, but based on the harmonizing tables.

Duet: similar to Smart, but limited to two notes.

Block: based on the harmonizing tables.

Octave 1: doubles the note of the right hand by playing an octave higher. No left hand chord required.

Octave 2: doubles the note of the right hand, one octave above as well as one octave below. No left hand chord required.

Peterson: doubles the note of the right hand with a note two octaves below. No left hand chord required.

Jazz: adds two notes above the note played by the right hand, at intervals of a fourth and a minor seventh. No left hand chord required.

Rock: adds three notes of the perfect chord below the note played with the right hand. No left hand chord required.

Track

Selects the track to which the harmony type is assigned.

Options: tracks 3…8

Edit Tracks - Harmony

Harmony example. The left hand plays a chord in C Major. The black notes represent the melody, the white note the harmony added by the Harmony option.

DELAY (F2) ⊡

Programmes a delayed entry for a sound after striking a key and is valid for tracks set for key-play. After striking the keys, the sound is reproduced after the time indicated by this parameter. The value is expressed in 1/192nds of a quarter note (crotchet) and the [+] sign appears when the value exceeds that of the indicated musical note.

Delay is synchronized with the Clock and affects the internal generation as well as MIDI OUT.

Assignable values: 0 (off)…192 (1♩) … 384 (2♩) … 576 (3♩) … 768 (4♩).
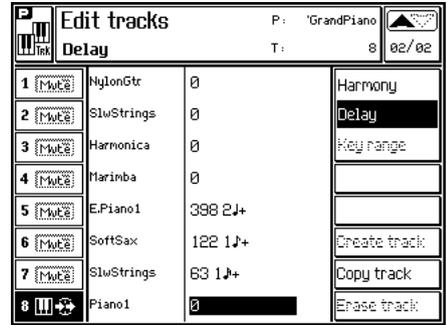
Edit Tracks - Delay

KEY RANGE (F3) ⊡

This parameter is valid only when the instrument is set to Song Mode.

Assigns a keyboard extension (highest and lowest notes) to a track.

Assignable values: A0) … C8.
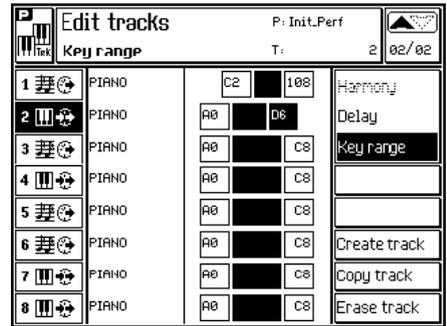
Edit Tracks - Key Range

CREATE TRACK (F5)

This parameter is valid only when the instrument is set to Song Mode.

Creates a track with default values. Use this function to create Song Performances with more than 16 tracks. Pressing the Soft button F6 opens the «Create Track» dialog window:

Create track
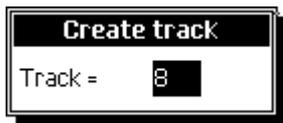
Track = 8

Procedure:

1. Press F5 (Create track).
2. Specify the number of the track to create with the DIAL or numeric keypad. If the track that you specify already exists, the relative parameters are assigned default values.
3. Press ENTER to confirm or ESCAPE to cancel.

COPY TRACK (F6)

Copies one track to another. The destination track assumes all the programmed settings of the source track.

Press the corresponding Soft button to open the «Copy track» dialog window.

Copy from

Track   8   To = 8

Create track

Copy track

Erase track
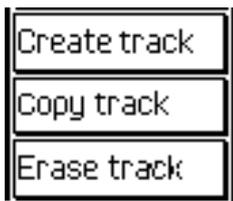
Procedure:

1. Select the track to copy.
2. Press F6 (Copy track).
3. Specify the number of the track to copy with the DIAL or numeric keypad.
4. Press ENTER to confirm the copy or ESCAPE to cancel the operation. The settings of the source track are copied to the destination track.

. . . .
▶ **Note:** *This operation does not copy the notes captured by the sequencer but only the settings such as sound, transposition, pan. To copy the notes, use the «Copy events» function (in «Edit Style» or «Edit Song»).*
. . . .

ERASE TRACK (F7)

This parameter is valid only when the instrument is set to Song Mode.

Cancels the selected track.

Procedure:

1. Select the track to cancel. <u>A track engaged by the sequencer cannot be erased</u>.
2. Press F7 to cancel the track.

   You are prompted to confirm the operation:

   Are you sure?
   (Enter) to confirm
   (Escape) to cancel
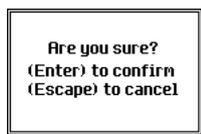
3. Press ENTER to confirm or ESCAPE to cancel.

. . . .
▶ **Note:** *This command is valid for Song mode. In Style/RealTime mode, it is not possible to cancel tracks.*
▶ **Note:** *It is not possible to cancel track that contains note information. If a track shows the seq-play or mute icon with notes, it cannot be cancelled.*
▶ **Hint:** *Cancel Song tracks that are not used. The resulting Song file will occupy less memory on disk.*
. . . .

• 15 Edit Perf Sound/Sound Patch

«Edit Perf Sound» and «Edit Sound Patch» are both edit facilities which permit the rapid modification of a Sound or a Sound Patch by means of 'macro' edit parameters.

The modifications are associated to the tracks and not to the Sound or Sound Patch, therefore, any **SK760/880** Sound that you assign to the edited track will inherit the same modifications. If the same Sound/Sound Patch is recalled by a different track or Performance, it will not play with the same modifications. Modified Sounds are identified by the symbol ▨.

In Performances and Style-Performances, the Drumkit/Sound Patch is conserved in the accompaniment tracks. When you change Style or Performance and cause a change in the accompaniment tracks, the Drumkit/Sound Patch also changes. Performances which contain a modified Drumkit/Sound Patch are identified by the symbol ▯.

Advanced Edit Sound

The advanced Edit Sound environment, accessed via the Synth button (in the Edit/Numbers section), allows you to intervene directly on the sound parameters, not on track parameters as in «Edit Perf Sound». Refer to the «Edit Sound» chapter in the Reference Guide.

Sound and Sound Patch

The term "Sound" refers to all the **SK760/880** Sounds that are not Drumkits, nor contain a dynamic switch. "Sound Patch" is a generic term used to describe a Drumkit or a Sound containing a dynamic switch.

THE GENERAL EDIT PROCEDURE:

1. Select or create a Performance containing the Sound or Drumkit/Sound Patch that requires editing.

2. Select the track to which the Sound/S.Patch to be edited is assigned.

3. Press SOUND in the EDIT section to enter the «Edit Perf Sound» or «Edit Sound Patch» editor.

4. Modify the parameters according to your requirements.

5. Press SOUND or ESCAPE to exit the editor.

6. Save the modifications to the current Performance by pressing STORE PERFORMANCE then ENTE R.

   During the editing tasks, you can periodically store to the current Performance by pressing STORE PERFORMANCE + ENTER.

7. Save the Performance to disk for future use.

. . . .
► **Note:** *If you fail to store your modifications, they will be irremediably lost when you select another Performance, or reselect the same one.*
. . . .

. . . .

Edit Perf Sound

In «Edit Perf Sound», you can program the parameters that are exclusive to the tracks. Any Sound, therefore, that you assign to the track will inherit the modifications applied.

Select a track containing the Sound that you wish to modify and press the SOUND button in the EDIT section to gain access to the «Edit Perf Sound» environment.

. . . .
▶ **Note**: *Save the changes with STORE PERFORMANCE. The Performances memorize the page whose icon shows the symbol* ▣ .
. . . .

SOUND

OSCILLATORS AND LAYERS

The **SK760/880** Sounds can comprise 1, 2 or 3 layers. The layers are sound generating units consisting of 1 or 2 oscillators and each oscillator elaborates a Wave sample. Consequently, each polyphonic voice can be generated by 6 simultaneous oscillators.

Given that the higher number of oscillators per voice the lower the overall polyphony of the instrument, most of the **SK760/880** Sounds comprise one or two oscillators.

The structure of the Sounds is represented in the diagram below. The «Edit Perf Sound» tasks modify all layers and all oscillators simultaneously. This allows all the parameters of a Sound to be edited by means of a few, simple operations.

Performance

Track in edit

	Edit perf. sound	P:	Init_perf.	
	Piano1	T:	1	01/01

1
2 Attack : 0   Decay : 0
3
   Release : 0   Filter cutoff : 0
4
5 Resonance : 0 LFO depth : 0
6
   LFO rate : 0   LFO delay : 0   Copy to
7   Restore track
8   Restore all
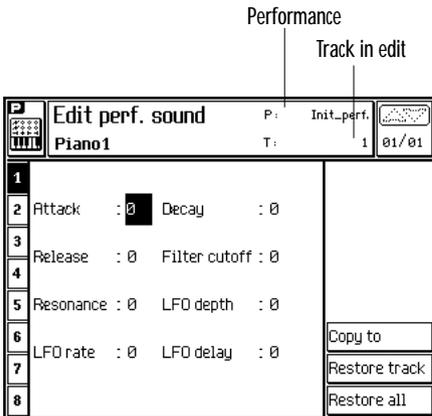
Edit Perf Sound: the edit parameters

SOUND

Layer 3
Layer 2
Layer 1

Oscillator 2
Oscillator 1

Wave → Filter → Envelope
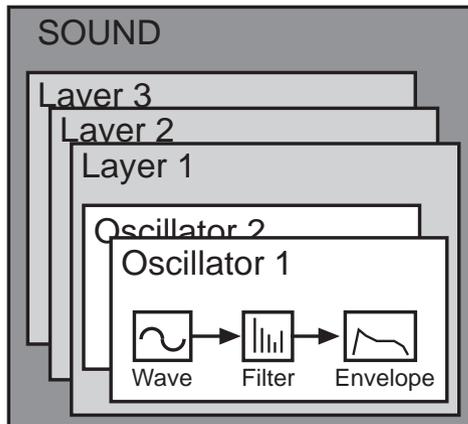
Sound structure. The number of layers and oscillators can change from a Sound to another.

. . . .

THE PERF SOUND PARAMETERS

Attack

Represents the attack phase of the sound. This parameter modifies the time taken (rate) for the sound to pass from the silent state to maximum volume when a note is pressed. The modifications are expressed as relative values, subtracting or adding them to the normal attack of the Sound.

Assignable values: -63 (maximum rate) ... 0 (unchanged) ... +63 (minimum rate).

Decay

Represents the decay phase of the Sound. This parameter modifies the time taken (rate) for the sound to pass from its maximum volume level to silence after the attack phase. The modifications are expressed as relative values, subtracting or adding them to the normal decay of the Sound.

Assignable values: -63 (maximum rate) ... 0 (unchanged) ... +63 (minimum rate).

Release

Represents the release phase of the Sound. This parameter modifies the time taken (rate) for the sound to pass to total silence after note release. The modifications are expressed as relative values, subtracting or adding them to the normal release of the Sound.

Assignable values: -63 (maximum rate) ... 0 (unchanged) ... +63 (minimum rate).

Filter Cutoff

Modifies the cutoff frequency. Changes the frequency at which the filter intervenes on the sound. The action of the filter varies according to the filter:

Low-pass - Cuts into the higher frequencies. As a result, if you use Sounds with a low harmonic content, the notes at the higher end will be cut. This parameter regulates the "brilliance" of the Sound. Lowering the cutoff frequency produces a mellow sound while an increase produces a bright sound.

High-pass - Cuts into the lower frequencies, making the sound brighter. The higher the value, the "lighter" the sound.

Band-pass - Allows the entire band to pass. Modifies the phase of the Sound and is useful when two oscillators that read the same Wave are used.

Parametric boost - Enhances the frequencies around the cutoff frequency, rendering a sound brighter and stronger at the higher end.

Parametric cut - Attenuates the frequencies around the cutoff frequency. Higher values renders the sound weaker at the high end.

Assignable values: -63 (maximum decrease of the cutoff frequency) ... 0 (unchanged) ... +63 (maximum increase of the cutoff frequency).

Resonance

Resonance creates a peak of emphasis at the cutoff frequency to the point of sending it in "auto-oscillation". The higher values of resonance produce effects that were common in the analog synths.

Assignable values: -63 (least intensity) ... 0 (unchanged) ... +63 (highest intensity).

▶ *Note: The higher values of resonance causes the filter to enter into "auto-oscillation". If used wisely, the auto-oscillation can create very suggestive synthetic sounds, but can also increase the output level excessively causing disturbing distortion.*

LFO Rate

The Low Frequency Oscillator is normally used to produce vibrato. In the **SK760/880,** the LFO can also create a cyclic variation of the parameters of the filter.

The «LFO Rate» parameter determines the velocity of the oscillation.

Assignable values: -63 (minimum rate) ... 0 (unchanged) ... +63 (maximum rate).

LFO Depth

«LFO Depth» determines the depth of the action of the LFO, and, therefore, its audibility.

Assignable values: -63 (minimum rate) ... 0 (unchanged) ... +63 (maximum rate).

LFO Delay

Determines the delay of the entry of the LFO. In acoustic instruments, vibrato generally enters after the attack phase, and mainly forms part of the sustain phase of the sound.

Assignable values: -63 (minimum rate) ... 0 (unchanged) ... +63 (maximum rate)..

THE PERF SOUND OPTIONS

Copy to... (F6)

Copies the modifications applied to the Sound of a track to a different Track of the same Performance. The parameter values are copied, NOT the Sound, therefore, if a Piano sound is at the source and a Bass is at the destination, the Bass sound will inherit the parameter modifications.
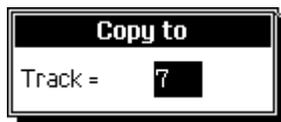
Track - Select the track with the DIAL. In Style/RealTime mode, the maximum number of tracks is 16, in Song mode, 32.

Restore track (F7)

Cancels the modifications of the selected track.

1. Press F7 to cancel. You are prompted to reconfirm the operation.
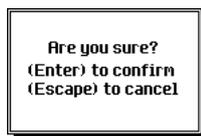
2. Press ENTER again to confirm, or ESCAPE to cancel.

Restore all tracks (F8)

Cancels the modifications applied to all the tracks of the Performance.

1. Press F8 to cancel. You are prompted to reconfirm the operation.
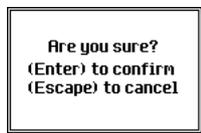
2. Press ENTER again to confirm, or ESCAPE to cancel.

Edit Sound Patch

In «Edit Sound Patch», you can program the parameters that are exclusive to the tracks. Any Drumkit or Sound Patch, therefore, that you assign to the track will inherit the modifications applied.

Select a track containing the Drumkit or Sound Patch that you wish to modify and press SOUND in the EDIT section to gain access to the «Edit Sound Patch» environment.

. . . .
▶ *Note: Save the changes with STORE PERFORMANCE. The Performances memorize the page whose icon shows the symbol* ▣.
. . . .

The parameters in «Edit Sound Patch» differ to those of «Edit Perf Sound».

Although structurally identical, Drumkits and Sound Patches differ as described:

• In a Drumkit, a percussive instrument is assigned to each note of the keyboard. This allows a Drumkit to be controlled across a single MIDI channel.

• In a Sound Patch, two different sounds are separated by a dynamic threshold in order that playing harder recalls the sound at the higher dynamic level. Try playing, for example, the sound ORCHESTRA 48-3; play softly first, then harder and listen to the change in timbre.

Sound Patches, therefore, allow you to vary the timbre of a Sound by varying the keystrike velocity.

SELECTING/MUTING THE DYNAMIC LAYER

Drumkits and Sound Patches have two dynamic Layers. Normally, Sound Patches exploit both Layers (1 & 2) while Drumkits limit themselves to Layer 1. The soft buttons A and B select and mute the Layers. In Switch sounds, this allows you to work on a Layer without hearing the sound on the other layer. Once you enter into «Edit Sound Patch» to select the Layers, it is not possible to select the tracks of the current Performance.

Edit Sound Patch: the parameters.
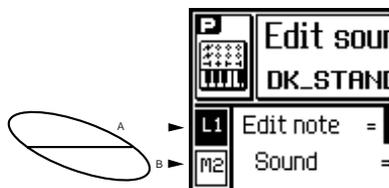
Dynamic Layer options to select and mute the layers. Press the same soft button repeatedly to toggle between L and M.

. . . .

THE EDIT SOUND PATCH PARAMETERS

Edit note

Determines the note to edit.

Assignable values: A0 ... C8 (respectively the lowest and highest note in an 88 note master keyboard).

Sound

Determines the Sound assigned to the note. It is possible to select any sound from the ROM-Sounds, RAM-Sounds or RAM ∿ -Sounds.

Volume

Determines the volume of the note in edit. This parameter can be useful to balance Sounds which differ greatly in volume.

Assignable values: 0 ... 127.

Pan

Determines the position of the note in the stereo panorama. In Drumkits, it is important to pan single percussive instrument correctly. For example, the toms are normally positioned in order that a snare drifts from one stereo channel to the other.

Assignable values: -32 (all left) ... 0 (balanced) ... +32 (all right).

Transpose

Transposes the Sound assigned to the note. At the zero value, a percussive instrument can be distant from the sampled note, which is normally around note C4. If the note in edit is below C4, the Sound will require transposing upwards (positive), while if above will require transposing down (negative).

Assignable values -64 ... +63.

Tuning

Fine tune control, in steps of 1/64 of a semitone. *Assignable values: -64 ... +63.*

Filter

Regulates the cutoff frequency of the filter.

Assignable values: -64 (maximum decrease) ... 0 (unchanged) ... +63 (maximum increase).

Exclude

A linking number between two notes that exclude each other. Playing a note will interrupt another note with the same exclude number. For example, if a Closed Hi-Hat and an Open Hi-Hat have the same exclude number, they interrupt each other, exactly as occurs in reality.
You can create as many linked percussive instrument groups as there are Exclude numbers assignable.

Assignable values: Off, 1, 2, 3.

Eff. 1 (Reverb)

Effects send for the reverbs. The maximum value corresponds to a perfect balance between the original sound and the processed one.

Assignable values: 0 ... 127.

Eff 2 (Delay/Chorus/Flanger/Modulation)

Effect sends for the modulation effects. The maximum value corresponds to a perfect balance between the original sound and the processed one.

Assignable values: 0 ... 127.

Audio Out

Allows you to direct the sound assigned to the note in edit to a preferred output.

Assignable values: Main, Left+Right, Out1+Out2, Out1, Out2.

Dynamic switch

Threshold level that divides Layer 1 from Layer 2. When you play with a low velocity, the Sound assigned to Layer 1 is triggered. By playing harder, the Sound assigned to Layer 2 is triggered. The value "0" causes the Sound assigned to Layer 2 while the value "127" causes the Sound assigned to Layer 1.

Assignable values: 0 ... 127.

THE SOUND PATCH OPTIONS

Catch note... (F1)

Selects the note to place in edit by playing it on the keyboard.

1. Press F1 («Catch note...»).

   The following message appears.

```
┌─────────────────────────────┐
│        Catch note           │
│                             │
│                             │
│     Press any key . . .     │
│                             │
└─────────────────────────────┘
```

2. Play the note to place in edit.

   The dialog window closes and the «Edit note» parameter is modified.

Copy to Layer... (F2)

Copies an entire Layer to the other.

1. Select the Layer to copy with the soft buttons A and B.

2. Press F2 («Copy to Layer...»). You are prompted to reconfirm the operation.

```
┌─────────────────────────┐
│     Are you sure?       │
│   (Enter) to confirm    │
│   (Escape) to cancel    │
└─────────────────────────┘
```
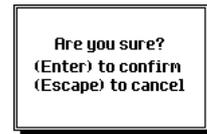
3. Press ENTER to confirm or ESCAPE to cancel.

   . . . .
   ► **WARNING** - *The copy will cancel the programmed data in the destination Layer.*
   . . . .

Expand... (F3)

Extends the programmed parameters of the note in edit to a specified keyboard zone.

1. Select the note whose parameters require copying.

2. Press F3 («Expand...»).

   The «Expand» dialog window opens:

```
┌─────────────────────────────────────┐
│               Expand                 │
│ ▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐  │
│                                      │
│     From: A0        To: A0           │
│                                      │
└─────────────────────────────────────┘
```
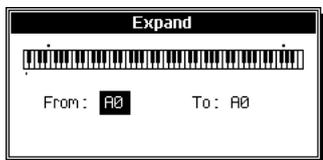
3. With the «From» parameter selected, rotate the DIAL, or play a note to specify the lowest note of the required keyboard zone.

4. Pass to the «To» parameter with the cursor button ▶. Rotate the DIAL, or play a note to specify the highest note of the required keyboard zone.

```
┌─────────────────────────────────────┐
│               Expand                 │
│ ▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐▐  │
│                                      │
│     From: A0        To: C4           │
│                                      │
└─────────────────────────────────────┘
```
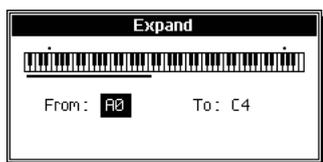
5. Press ENTER to confirm the Expand command, or ESCAPE to cancel.

   Confirming extends the programmed parameters of the original note to the specified keyboard zone.

Compare... (F4)

ON/OFF switch. When active, the original parameter values of the Drumkit/Sound Patch in edit are temporarily recalled in order to compare them with the current edited ones.

Restore (F6)

This option restores the original Sound Patch or cancels the last modifications applied after saving to the Performance.

1. Press F6 to open the following dialog window:

```
┌─────────────────────────────────────┐
│               Restore                │
│ S.P. performance                     │
│                                      │
│ Current edit                         │
└─────────────────────────────────────┘
```

2. Select the function required with the directional arrows and press ENTER to confirm or ESCAPE to cancel to abort.

   S.P. Performance - Restores the Drumkit/Sound Patch in edit to its original status (cancels all editing operations applied to all notes).

   Current edit - Cancels the current modifications and recalls the last saved parameter settings of the Drumkit memorized in the Performance.

Store... (F8)

This option allows you to save the modifications to a Performance or creates a new Drumkit/Sound Patch file that can be used by any Performance.

To conserve the modifications, save them before selecting a Performance. Selecting a Performance before saving cancels all modifications applied.

Save the modifications as a new Drumkit/Sound Patch file

1. Press F8 («Store...»).
   The «Store» dialog window opens:

   ```
   Store
   File
   Performance
   ```

2. The "File" option is shown selected. Press ENTER to confirm.
   An insertion zone appears:

   ```
   Drum Kit Store
   Prog. change : 48
   Bank        : 3
   Script Name : Dyn.Orch IIII
   Press F7/F8 to change name
   ```

   The insertion zone shows the Program-Change and BankSelect MSB (CC00) to which the new Drumkit/SoundPatch will be saved.

3. Press ENTER to confirm the current location, or use the DIAL or numeric keypad if you wish to select a different location.

4. If you want to change the name of the file, press the soft button F7 or F8.

   ```
   Drum Kit Store
   Prog. ch       DK Name
   Bank
   Script N
   Press F7   Dyn.Orch
   Effect1
   Audio Out
              Caps On    Overwrite
   Dyn suite
   ```

5. Insert a name using the method described in the Data Entry paragraph of Chapter 1 (page 1.4). Press ENTER to confirm the name and return to the Store window.

6. Press ENTER to save the new file to the selected location.
   The new Drumkit/SoundPatch is now available as a RAM-Sound.

   As any new RAM-Sound, the new Drumkit/SoundPatch will remain in memory after power down. To conserve it and safeguard it against future cancellation, save it to disk using the Save Single Sound, Save All Sound or Save All procedures.

Save the modifications to a Performance

1. Press F8 («Store...»). The «Store» dialog window appears:

   ```
   Store
   File
   Performance
   ```

2. Select the Performance option with the cursor button ▼ and press ENTER to confirm.

   The «Drumkit store» dialog window opens:

   ```
   Drumkit store
   Performance  Style
   Store to Group : 1
            Perf  : 1      GrandPiano
   ```

3. Select the Performance or Style-Performance option with the ◀/▶ cursor arrows.

4. Rotate the DIAL to select the Performance or Style Performance Group to store to.

5. Move down to the Perf option with the ▼ cursor button and select the Performance to save to with the DIAL.

6. Press ENTER to confirm or ESCAPE to cancel.

• 16 Edit Sound

GENERAL INFORMATION

THE FIRST FEW PAGES OF THIS CHAPTER DISCUSS THE
EDIT SOUND ENVIRONMENT FROM A GENERAL POINT OF
VIEW. IF YOU WANT TO SKIP THE PRELIMINARIES AND GO
STRAIGHT INTO SOUND EDITING, GO TO PAGE 9.

Difference between Edit Perf Sound and Edit Sound

Unlike the «Edit Perf Sound» environment, where
any the Sound assigned to a Track of a Perform-
ance inherits the modifications applied to the
tracks, the «Edit Sound" environment allows you
to modify the Sound parameters. The result is a
RAM-Sound that you can store to the **SK760/880**
sound library, assign to any track of any Perform-
ance and save to Disk.

The oscillators and layers

SK760/880 Sounds can comprise 1, 2 or 3 lay-
ers. Each layer is elaborated by an associated
"Algorithm" of synthesis (explained afterwards).
The layers can be simultaneously edited and the
results can be instantly heard.

Layer 1	Algorithm X
Layer 2	Algorithm X
Layer 3	Algorithm X

Each layer can comprise 1 or 2 oscillators, de-
pending on the algorithm selected for the layer.
Each oscillator has an Amplitude envelope, a
Pitch envelope, a Pan envelope, a Low Fre-
quency Oscillator (LFO) and a Filter with relative
envelope. Depending on the algorithm selected,
the amplitude envelope can be shared by both
oscillators with a balance control, and the filters
can be connected in series or in parallel.

Given that the **SK760/880** Sounds can comprise
up to 3 layers, the left column of all the Edit Sound
displays is dedicated to their selection by means
of the corresponding soft button (A1, A2, A3). The
layers can also be muted to isolate the layer cur-
rently in edit, allowing you to listen to the modi-
fied sound on its own.
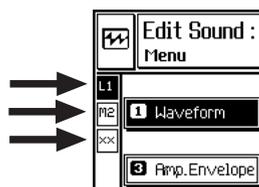
Press the corresponding soft button repeatedly to toggle
between the "L" ad "M" status.

For each layer, it is possible to program the key
range and set the maximum key velocity.

The Algorithms

An Algorithm is the "signal path" of a sample to
the audio outputs, through a series of process-
ing functions that you select during the course of
the editing tasks.

The processing functions which you assign dur-
ing the various editing stages are the synthesis
tools (oscillators, filters, amplitude envelopes,
etc.).

While you cannot change the path of an Algo-
rithm, you can choose from a selection of 5 dif-
ferent Algorithms, each representing a fixed sig-
nal path, and assign a wide variety of processing
functions to the individual stages of the algo-
rithm's path. The following graphical represen-
tations illustrate the signal path of the Algorithms.

. . . .

Edit Sound   16•1

Single Algorithm - one oscillator only

Editors available for the oscillator: Waveform, Volume, Amplitude envelope, Filter, Filter envelope, Pitch envelope, LFO, Pan envelope.

Dual 1 Algorithm - two oscillators in parallel
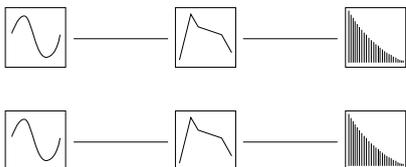
Editors available for each oscillator: Waveform, Volume, Amplitude envelope , Filter, Filter envelope, Pitch envelope, LFO, Pan envelope.

Dual 2 Algorithm - two oscillators with independent Amplitude envelopes for each oscillator and with the Filters connected in series
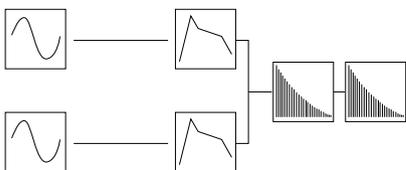
Editors available for each oscillator: Waveform, Volume, Amplitude envelope , Pitch Envelope.
Editors available for each layer: Filter 1 & 2 (separate); Filter envelope 1 & 2 (separate), LFO, Pan envelope.

Dual 3 Algorithm - two oscillators. An Amplitude envelope for the two oscillators with a Balance control and the Filters connected in parallel
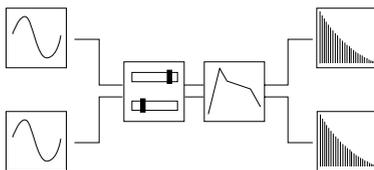
Editors available for each oscillator: Waveform, Filter, Filter envelope, Pitch envelope, LFO.
Editors available for each layer: Volume/Volume balance, Amplitude envelope/Balance envelope.

Dual 4 Algorithm - two oscillators. An Amplitude envelope for the two oscillators with a Balance control and the Filters connected in series
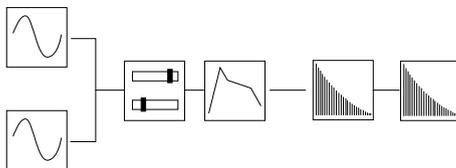
Editors available for each oscillator: Waveform, Filter, Filter envelope, Pitch envelope, LFO.
Editors available for each layer: Volume/Volume balance, Amplitude envelope/Balance envelope.

THE EDIT SOUND MAIN MENU EDITORS

The configuration of the Editors changes according to the Algorithm selected, but the basic functions remain the same.

The principal editors of the edit sound menu

Waveform	Selects the Wave sample (the fundamental waveform).
Volume	Volume of the Sound. Some situations also include a Balance editor.
Amplitude envelope	Varies the sound's volume over time. Can be defined by Key On and Key Off Envelopes, a Tracking curve and some situations include an Env. Balance editor.
Filter	Modifies the Sound's timbre, attenuating or enhancing certain frequencies, such as in an equalizer. Can be defined by Key On and Key Off Filter Envelopes, Filter CutOff tracking and Filter Envelope tracking curves.
Pitch envelope	Variation of the Sound's Pitch over time. Can be defined by Key On and Key Off Pitch envelopes and a Tracking curve.
LFO	Low Frequency Oscillator to provide Modulation. Generates cyclic variations in the amplitude or in the cutoff frequency of the filters.
Pan	Position of the Sound within the Stereophonic panorama. It is possible to program the Key On and Key Off Pan envelope and the Tracking curve.

THE MAIN MENU OPTIONS

These are listed in the right column of the main menu and selected with the corresponding Soft button (F1…F8). See also page 16.36 for detailed explanations.

Sample Translator	Activates the program which is able to read samples from previous Generalmusic Series instruments (S, WX, SX) and disk-based samples of various formats. Sample Translator also permits the reception and transmission of samples via Midi and the creation of new Waveforms. Sample Translator is discussed separately on page 40.
Algorithm	Allows you to choose one of the 5 Algorithms available.
Layer Utility	Allows you to Create, Import or Delete layers as required.
Layer Range	Allows you to assign a keyboard range and a dynamic range to the currently selected Layer.
Abort	Escapes definitely from the Edit of the Sound.
Save	Allows you to save your modified Sound to the **SK760/880** Sound Library (RAM) and escapes from Edit Sound definitely.
Compare	This option, which appears in all Edit pages, temporarily assigns the original parameter status of the current edit page to the Sound in edit to compare the Sound before and after the modifications. Pressing Compare activates two new commands: **Copy (F7)** Copies the recalled parameter status to the Sound in edit, cancelling all modifications applied in the current edit page and escapes from "Compare" mode. **Compare exit (F8)** Escapes from "Compare" and retains all modifications applied to the sound in the current edit page.

ENTERING «EDIT SOUND»

You can choose to enter «Edit Sound» either with a "solo'd" Sound (SOLO button LED on), or with two or more tracks of the current Performance active.

This second option allows you to listen to the Sound currently in edit together with other active tracks of the Performance to give you an idea of what your edited Sound is like when combined with other Sounds.

Once you enter «Edit Sound», you cannot activate or deactivate the SOLO button; you must set the SOLO button according to your requirements <u>before</u> entering Edit Sound.

You can enter Edit Sound while the instrument is in any playing mode.

1. Select the Sound (track) you wish to edit from the main display.

2. Press the SOLO button if you want to isolate the Sound from the rest.

3. Press SYNTH in the EDIT section.

   You are prompted to confirm the request to enter «Edit Sound».

4. Press ENTER to enter Edit Sound

   Press ESCAPE to cancel the request.

   With ENTER, the main EDIT SOUND menu is displayed.

   When you enter «Edit Sound» with a new Sound, the configuration of the Editors depends on the Sound in edit.
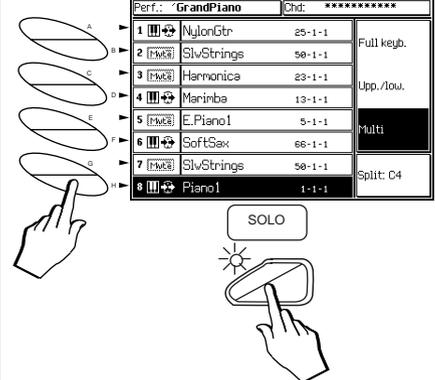
ESCAPE FROM EDIT SOUND

Temporary escape
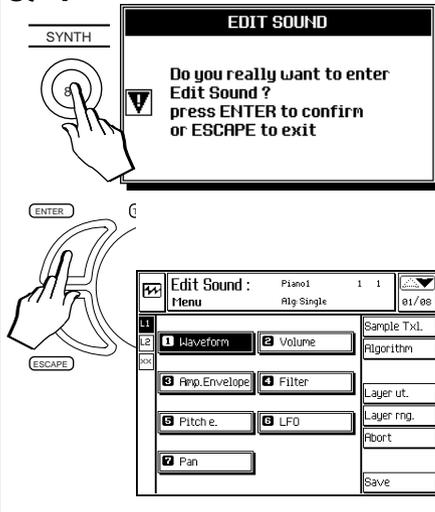
Thanks to multitasking, you can temporarily escape «Edit Sound» by pressing the SYNTH button or ESCAPE, or by entering the edit of another section by pressing the corresponding button of the EDIT section.

The Sound remains in edit and the selected track plays the Sound in its modified status.

To return to the sound in edit press SYNTH. If you escape Edit Sound temporarily, you will not be permitted to change Sound, or select a Song or Style.
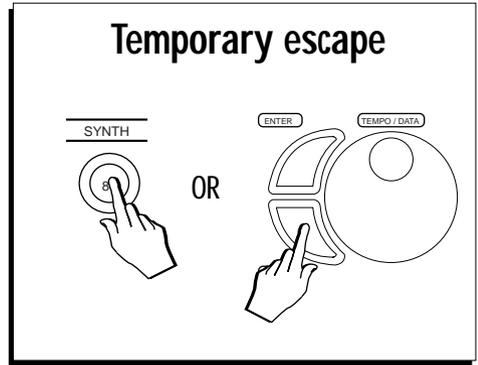
Permanent escape without saving

To escape «Edit Sound» permanently, use the "Abort" option in the main menu (F6).

An "Are you sure" dialog appears requesting confirmation of the escape command. Confirming the Escape command with Enter escapes «Edit Sound" and cancels all modifications made to the Sound in edit.

To escape permanently without losing the modifications, use the "Save" command explained on the next page.
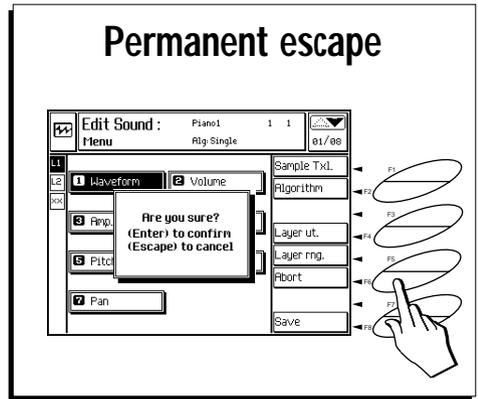
SAVING AND NAMING THE MODIFIED SOUND

Once you have completed your editing tasks, you can save the modified Sound to RAM (the **SK760/880** Sound Library).

1. Press the soft button F8 to select "Save" from the main Edit Sound menu.

   The «Bank Prog. Change» window opens where you can select the destination of the new Sound in the **SK760/880** Sound library. The **SK760/880** Sounds are stored in the order of Bank Select and Program Change numbers. You can choose to store the modified sound with its original name, or with a new name.

   RAM-Sounds based on ROM-Wavesamples are saved with an asterisk (*) attached after the name to identify the Sound from the original. New sounds based on new Wavesamples loaded from disk or created with the Sample Translator are called RAM~ᵥ·Sounds, identified by the small graphical representation of a wave (~ᵥ·).

2. Use the directional ▼/▲ arrows to select the "Bank" and "Prog. Change" entry zones and rotate the Dial to select the numbers corresponding to an empty location (shown as "No Sound").

   You can also specify an absolute number on the numeric keypad (KEYPAD LED on).

3. To change the Sound's name, press the Soft button F7/F8 .

   Use the standard name entry procedure (see "Data Entry" on page 1.4 of Chapter 1). Press ENTER to confirm the new name.

4. Press ENTER again to memorize the Sound to the selected location.
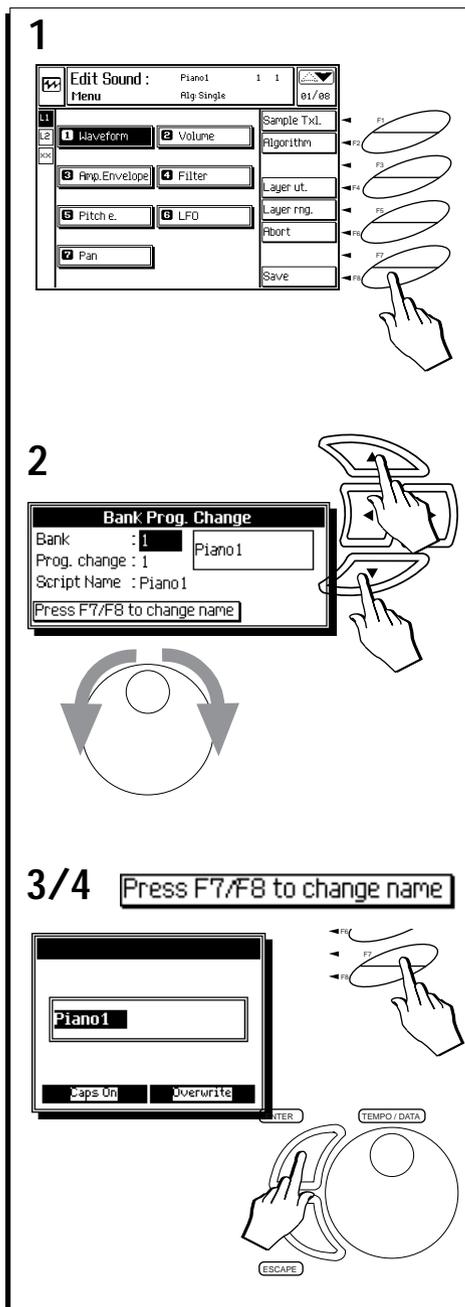
NAVIGATION AND DATA ENTRY IN THE EDIT SOUND ENVIRONMENT

The navigational tools are the page scroll buttons (▲▼) and the directional arrows (◀▌▶ & ▲/▼).

Select the Editors with the directional arrows and press ENTER to gain access to the selected function.

Alternatively, enter the editors directly using the page scroll buttons (▲▼). These buttons allow you to scroll through the editors in increasing or decreasing numerical order without having to return to the main menu.

Another direct entry method from the main menu is to specify the editor number on the numeric keypad (with the KEYPAD LED on) and press ENTER to gain access.

Select the options in the right options column with the corresponding soft buttons (F1…F8).

Select the parameters of an editor with the directional arrow buttons.

DATA ENTRY

To enter a value for the selected parameter, use either the DIAL for continuous data change, or the numerical keypad to insert an absolute value (with the KEY PAD LED on).

To confirm a new entry, use the ENTER button. Use the ESCAPE button to exit from a selected parameter without confirming a new entry.

Once you enter an Editor, press ESCAPE to exit the editor and return to the main menu.
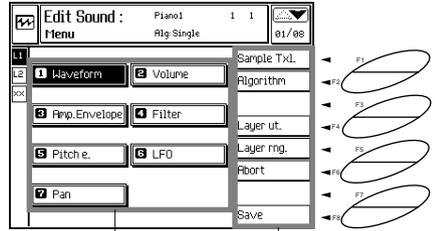
Editors

Main Menu options

Navigation and Data Entry tools
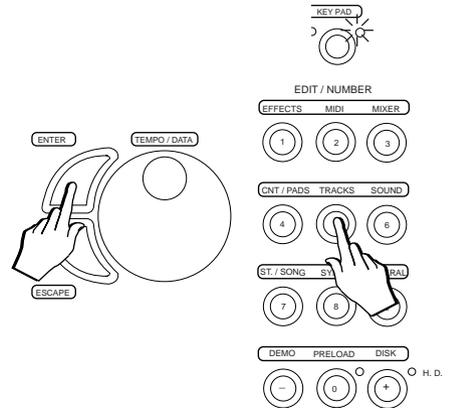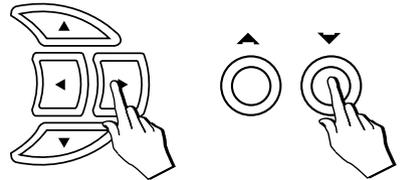
STATUS OF THE INSTRUMENT IN EDIT SOUND MODE

The settings of the Trackball, Pedals, Aftertouch, Transpose and the other parameters are those of the currently selected Performance.

If you attempt to select a Song, Style, Performance or Sound while you have temporarily escaped Edit Sound, the display will show the following message:

```
┌─────────────────────────────┐
│        INFORMATION          │
│                             │
│ ┌─┐  This operation isn't permitted │
│ │i│  while a Sound is in edit │
│ └─┘                         │
│                             │
└─────────────────────────────┘
```

Press ENTER or ESCAPE to close the window and press SYNTH to return to «Edit Sound» and escape permanently, either with "Abort" or "Save".

IMPORTANT REMINDERS

1. You cannot overwrite a Rom-Sound.

    A modified ROM-Sound generates a RAM-Sound which can be stored to either an empty location, or to an existing RAM-Sound.   If you attempt to store a RAM-Sound to a ROM-Sound destination, the display will show the following message:

    ```
    ┌─────────────────────────────┐
    │           ERROR             │
    │                             │
    │ ┌─┐  ROM SOUND cannot be    │
    │ │▼│  overwritten            │
    │ └─┘  press ENTER or ESCAPE  │
    │                             │
    └─────────────────────────────┘
    ```
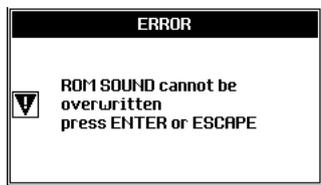
    Repeat the operation and select an empty location.

2. If you save the new RAM-Sound to an existing RAM-Sound, the existing file will be irremediably lost without warning.

    Be absolutely sure, therefore, that you have stored the existing RAM-Sound to disk or Hard disk before confirming the save procedure.

3. If you Abort «Edit Sound» without storing the modified sound, you will loose all edited Sound data.

    When you select the Abort option, you are prompted to reconfirm the operation. If you do not want to save the modifications, proceed as required.

    If you escape «Edit Sound» temporarily, the modified status of the Sound will be retained but you will not be permitted to select a Song, Style, Performance or Sound.

Waveform

Valid for all Algorithms. Single activates a single Waveform editor while all Dual Algorithms activate Waveform 1 and Waveform 2.

The Waveform editor provides access to the principal control parameters of the basic wave sample of the Sound.

The Waveform parameters

Waveform	Selects the basic waveform of the Sound. Here you can select one of the Rom Waveforms, or a Waveform loaded to memory with a disk-based Ram-～\:-Sound, or one created with the Sample Translator.
	You can select the waveforms by scrolling one by one with the DIAL, or by specifying their number on the numeric keypad, making reference to the ROM Wave table in the Appendix.
	You can also use the Search, Search Previous and Search Next functions to pass directly to a specified name.

Wave Vector	Allows you to choose from a selection of 4 wave vectors: **Forward** reads the wave from the start point to the end; **Reverse** reads the wave from end to start point; **Alternate 1** reads the wave from start point to the end and loops back to the beginning and repeats continually; **Alternate 2**, similar to Alternate 1.
Tuning mode	Assigns the Waveform to a specific note of the keyboard. Assignable values: Normal, A0…C8. **Normal** transposes the wave according to the note played. Assigning a note fixes the Wave to the same note across the entire keyboard.
Transpose	Transposes the Waveform in semitones. Assignable values: –64 ... +64. Ø corresponds to standard pitch.
Fine pitch	Fine tunes the Wave's pitch in steps of 1/64th of a semitone. Assignable values: –64 ... +64. Ø corresponds to standard pitch.

Edit Sound - main menu - Waveform editor selected
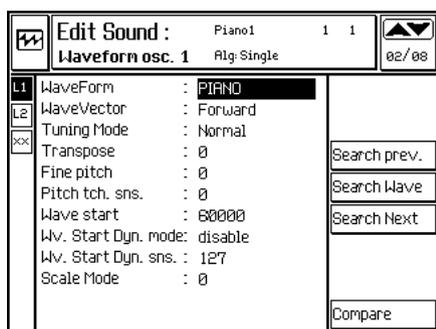
Edit Sound: Waveform editor programming

. . . .

Pitch touch sensitivity	Links Pitch to **Aftertouch** variations. The Pitch of the Sound can be varied by applying pressure on the notes of the keyboard after key on. Positive values increase the Pitch while negative ones have the inverse effect. Assignable values: –7 (lowest sensitivity = –2 semitones) ... +7 (highest sensitivity = +2 semitones).
Wavestart	Represents the actual (default) starting point of the wave sample in the **SK760/880** memory. Use this parameter to determine the point at which the sample will start its playback. Depending on the waveform, values above the default starting point may cause the sample to start at a later point, removing some or all of its attack. Values below the default value may cause the sample to start before its normal start point, adding part or all of the samples stored at lower memory addresses.
Wv. Start Dyn mode	Selects the mode in which the Wavestart parameter is linked to key velocity. **Disable**: not linked to key velocity. **Switch**: either the entire Wave, or the part of the Wave following the programmed Wave Start is read above or below a certain key velocity setting. **Floating**: fluctuates the Wave Start according to the key velocity.
Wv. Start Dyn sns.	With the "**Switch**" mode setting, the value (0…127) represents the dynamic switch. Above the dynamic switch setting, the entire Wave is read while below, only the part of the Wave that follows immediately after the programmed Wave Start is considered. Switch assignable values: 0…127 If the mode is "**Floating**", the value determines the distance from the point at which the Wave is read at the programmed Wave Start, or towards the end of the Wave. (The Wave is always read from the Wave start setting, not before). With positive values, the higher the key velocity, the nearer the Wave is read at the Wave start setting. Floating assignable values: –7…+7.
Scale Mode	Selects a scale (temperament). Value 0 corresponds to Equal temperament; Value 1 corresponds to 1/4 tone difference between each note; Value 2 corresponds to a 1/16 tone difference between each note. Assignable values: 0, 1, 2.

Volume & Balance

Valid for all Algorithms. Dual 1 and Dual 2 activate Volume 1 and Volume 2, Dual 3 and Dual 4 share a single Volume editor with a Balance control.

The Volume editor controls the volume of a single oscillator, or the volume of two oscillators in situations where the algorithm provides a Balance control (Dual 3 & 4). This function corresponds to the maximum volume level available of the Sound in any situation.

The Volume parameters

Volume	Sets the Volume of oscillator 1 or 2, or the general volume of the layer if the Algorithm comprises the Balance editor. Assignable values: 0 … 127.
Dynamic sensitivity	Links the Volume response to velocity variations. Positive values increase the Volume with increased key velocity, while negative values create the inverse effect. Assignable values: –7 ... +7. 0 = no response.

Volume touch sensitivity	Links Volume response to Aftertouch. Positive values increase the Volume with increased aftertouch pressure, while negative values create the inverse effect with increased aftertouch. Assignable values: –7 ... +7. 0 = no response.
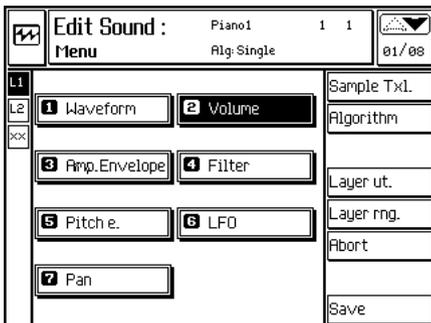
Edit Sound - main menu Volume editor selected
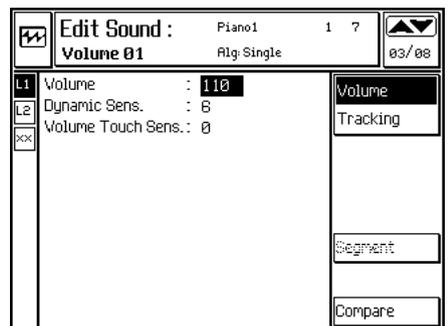
Edit Sound - Volume page

VOLUME TRACKING

Valid for all Algorithms. Tracking allows you to determine how the volume varies across the keyboard. Here you can enhance the presence of a sound more or less across the keyboard in order to simulate to a greater degree that which occurs in reality. For example, an acoustic piano can reach a higher sound level in the bass region, while the higher notes are less intensive.

Segment (F6)

Using the SEGMENT option, you can divide the Tracking curve into several different segments, in order to obtain a more refined Tracking across the keyboard.

1 segm	The Tracking curve is essential, representing a constant Volume offset across the keyboard. The parameter "Key" cannot be modified.
3 segm	The Tracking curve consists of 3 segments which allow the construction of a situation offering different variations across the keyboard.
6 segm	The Tracking curve is divided into many parts (maximum resolution); allowing a more complex programming of the Volume offsets across the keyboard.

3 display parameters, selected with the Up/Down cursor buttons and modified with the Dial, define the tracking:

Point	Corresponds to one of the extreme ends of a segment. Point 1 represents the lowest note of the keyboard. The highest note of the keyboard is represented by the last Point (depending on the number of segments inserted).
Key	Defines the note at the selected Point. The extreme points (A#0, C8) cannot be modified.
Level	The value of this parameter is a relative value which represents the change in volume with respect to the actual setting of the Volume function. A level of 0 corresponds to the maximum setting of the Volume function and all other values are negative. A value of –127 corresponds to 0 volume at the note defined by the selected Point. A straight line running from point 1 to point 2 corresponds to the lowest possible resolution. Assignable values: 0 … –127
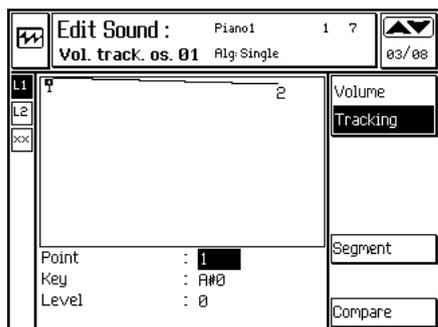
Edit Sound - Volume Tracking curve
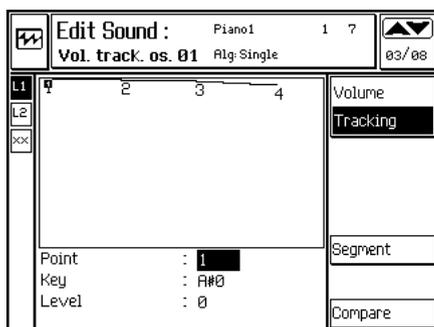
Edit Sound - Volume Tracking curve showing 3 segments

EXAMPLE OF HOW TO PROGRAM A TRACKING ENVELOPE

1. Press F6 to open the SEGMENT selection window, select 3 or 6 segments with the down (▼) cursor arrow and press ENTER to confirm.

2. Rotate the DIAL to select the Point that you wish to modify.

3. Select the KEY parameter with the down (▼) cursor arrow and rotate the DIAL to set the required value.

4. Select the LEVEL parameter with the down (▼) cursor arrow and rotate the DIAL to set the required value.

1
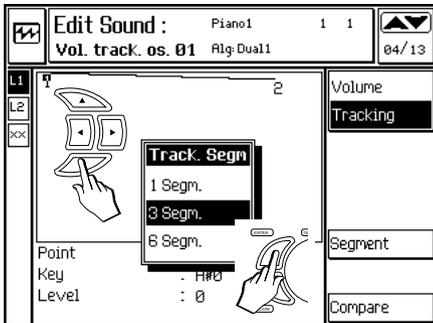
Edit Sound - Volume Tracking: add 3 segments

3
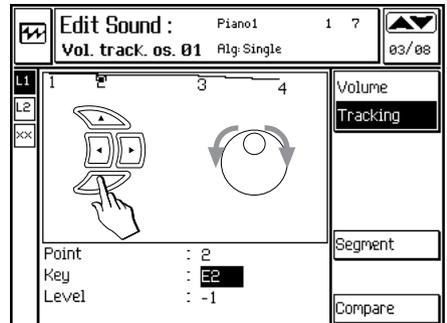
Edit Sound - Volume Tracking: program the Key parameter

2
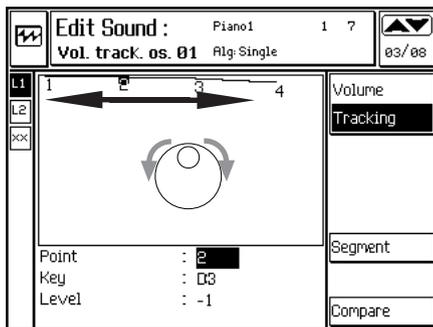
Edit Sound - Volume Tracking: program the Point parameter

4
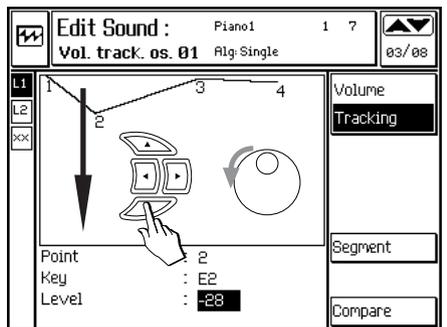
Edit Sound - Volume Tracking: program the Level parameter

. . . .

BALANCE (F1)

Valid for Dual 3 and Dual 4 Algorithms only.

The Balance parameters

Balance	Balances the Volume of the two oscillators of the current layer. Positive values render the first Waveform louder, negative values enhance the second Waveform. Assignable values: –127 ... +127.
Balance dyn. sensitivity	Links the Balance response to key velocity variations. Positive values enhance the presence of the first Waveform with increased key velocity while negative values enhance the presence of the second Waveform with increased key velocity. Value range: –7 ... +7. 0 = no response.
Balance touch sensitivity	Links the Balance response to aftertouch variations. Positive values enhance the presence of the first Waveform with increased Aftertouch pressure while negative values enhance the presence of the second Waveform with increased Aftertouch pressure. Value range: –7 ... +7. 0 = no response.
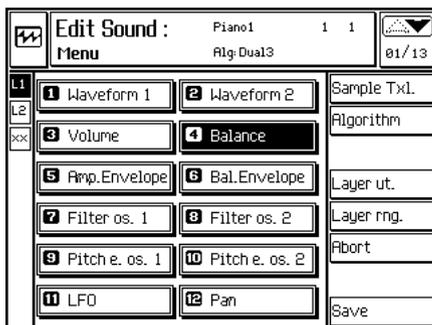
Edit Sound - Dual 3 configuration showing Balance Editor
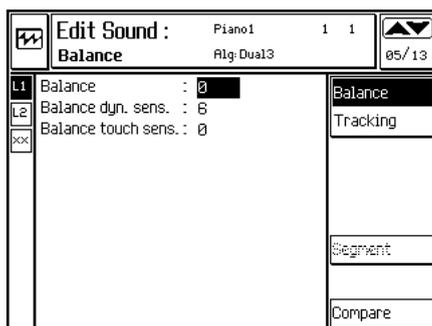
Edit Sound - Balance parameters

BALANCE TRACKING (F2)

Balance Tracking allows you to program a Balance offset, or the variation of the Balance (programmed in the Balance page) across the keyboard.

For information regarding how to program the SEGMENT option (1, 3, 6 Segments) and the tracking parameters (Point, Key, Level), refer to the Volume Tracking example on the previous page.
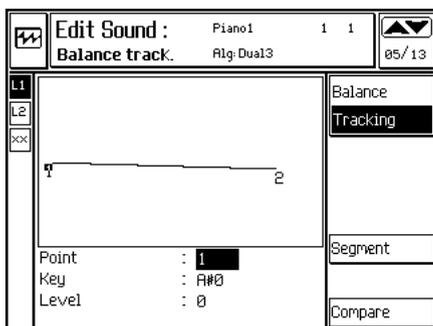
Edit Sound - Balance tracking curve (1 segment)

Amplitude Envelope & Balance Envelope

Valid for all Algorithms. Dual 1 and Dual 2 activate the Amp. Envel. 1 and Amp. Envel. 2 editors; Dual 3 and Dual 4 share an Amp. Envelope with a Balance control.

The Amplitude Envelope represents the volume displacement of the Sound over time. This editor allows you to program the Key On Envelope, the Key Off Envelope and the Envelope Tracking. In practice, the Key On and Key Off Envelopes correspond to the traditional ADSR parameters (Attack, Decay, Sustain, Release).

Amplitude Envelope Control

Envelope finish Determines the note from which the Key Off envelope cannot interrupt the Amp. envelope on its natural course to completion, indispensable to simulate, for example, the acoustic piano where no dampers are applied from the note A6 onwards; the sound continues indefinitely after release.

When this parameter is <u>not</u> set to "Off", the last segment of the Key On Envelope sets to 0 automatically and cannot be modified; this is to prevent the sound from playing continually after release due to the deactivated Key Off Envelope.

Assignable values: Off, A0 … C8.

Segment 1 rate dynamic sens. Segment 1 corresponds to the Attack phase. This parameter ties the Attack rate of the Sound to key velocity. Positive values increase the Attack rate with increased key velocity while negative values produce the inverse effect with increased key velocity.
Assignable values: –7 ... +7.
0 = no response.

Key Off rate dynamic sens. Links the response of the Key Off Envelope rate to the release velocity. The Key Off Envelope corresponds to the Release phase. Positive values increase the completion speed of the Key Off Envelope with increased key release velocity, while negative values slow down the completion speed with increased key release velocity.
Assignable values: –7 ... +7.
0 = no response.

Sustain (F5) This parameter fixes a sustain level independent of the release envelope. Activation of this parameter depends on the status of the Sustain function. Press soft button F5 to activate Sustain (shown in negative highlight). Press again to deactivate Sustain.
Assignable values: 0 … 127.
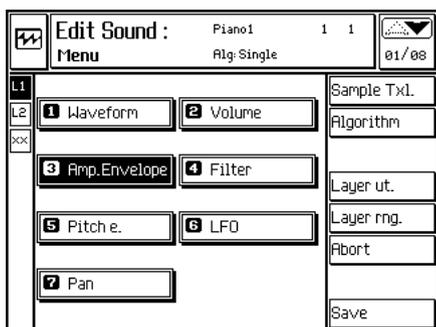
Edit Sound - Amplitude Envelope Editor

Edit Sound - Amplitude Envelope control with Sustain active

AMPLITUDE ENVELOPE KEY ON

The Key On Envelope is a 10 segment curve (maximum) that represents the variation of the sound's volume for the entire duration that the notes are held pressed.

Some examples of typical Amplitude Envelopes appear opposite, shown in various Zoom situations.

ZOOM (F7)

Using the ZOOM option, you can enlarge the field of vision of the envelope up to 4 times at a selected Point.

Pressing the soft button repeatedly selects the Zoom options in cyclic order (1, 2, 3, 4, 0). Zoom 0 corresponds to "actual size".

USING THE SEGMENT OPTION

Add segment	insert a new segment immediately after the currently selected segment. A maximum of up to 10 segments is permitted.
Del segm	cancels the current segment. **N.B.**: The Key On Envelope must have at least one segment (the Attack phase), which cannot be cancelled.
Loop segm	loops the current segment (envelope repetition), provided that the Envelope Finish parameter in the Envelope control page is set to "OFF". When it reaches the terminal point, it loops back to the beginning. The cycle repeats continually until key release. The initial Loop point is represented by an arrow. To eliminate the loop, select the segment and select "del segm.".
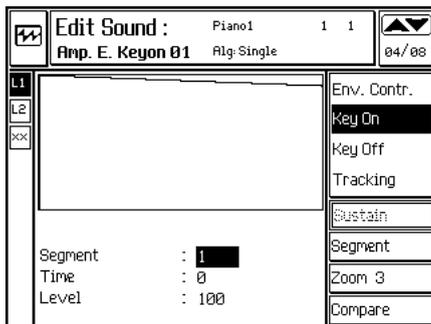
Edit Sound - KeyOn Ampl. Envelope in Zoom 3 status showing segment 1 (Attack phase) with a time value of 0
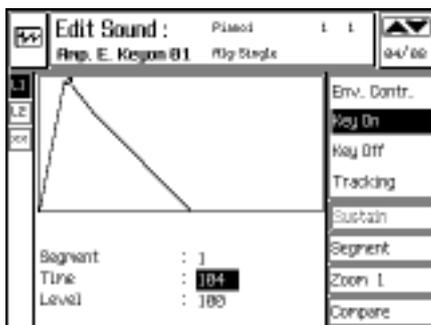
Edit Sound - KeyOn Ampl. Envelope in Zoom 1 status showing segment 1 (Attack phase) programmed with a Time value of 104
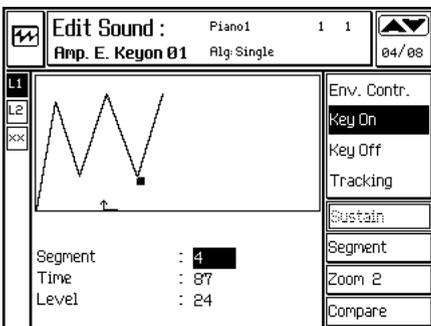
Edit Sound - Ampl. Envelope showing segment 4 set to Loop. In practice, the Sound's volume starts at 0, proceeds to the first peak of segment 1 (attack phase), drops to the lowest point of segment 2, rises to the second peak of segment 3, drops again to the lowest point of segment 4 then loops back to the highest peak of segment 3 and repeats continually until the key is released.

3 display parameters, selected with the cursor buttons, define the Key On Amp. Envelope.

Segment	Allows you to selects the segments with the Dial. The one selected corresponds to the flashing terminal point.
Time	Determines the duration of the Segment. The maximum segment time is approximately 21 seconds. Assignable values: 0 ... 127.
Level	Sets the Sound level of the segment at its terminal point. The maximum level corresponds to the volume programmed in the Volume editor *N.B.*: the initial level of the first segment at the starting point is always zero (it cannot be modified). Assignable values: 0 ... 127.
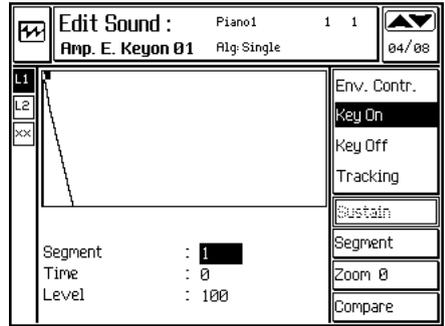
Edit Sound - KeyOn Ampl. Envelope in Zoom 0 status showing segment 1 (Attack phase) with a time value of 0
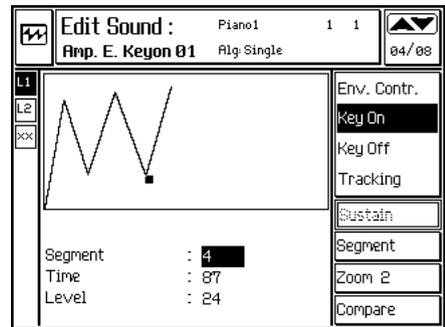
Edit Sound - Ampl. Envelope showing a 5 segment curve with segment 4 selected

AMPLITUDE KEY OFF

Valid for all Algorithms.

The Amplitude Key Off Envelope is a 10 segment curve (maximum) that represents the variation of the sound after the notes have been released. This envelope phase is often called Release. For details regarding the display parameters (Segment, Time, Level) and soft options (Segment, Zoom), refer to the section on the Key On Amp. Envelope of the previous pages.

N.B.: the level at the terminal point of the Key Off Envelope is always zero.

An example of how to program a Key On & Key Off Envelopes appears on the next page.
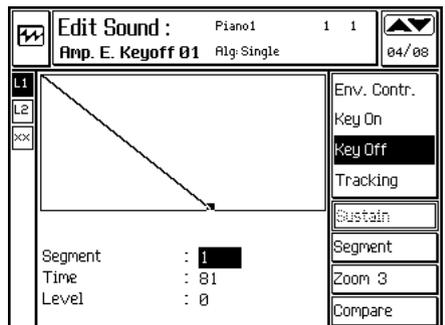
Edit Sound - Amp. Key Off Envelope

EXAMPLE OF HOW TO PROGRAM A KEY ON OR KEY OFF ENVELOPE

1. To insert a segment, press F6 to open the SEGMENT selection window and press ENTER to confirm the 'Add Segm' option (shown selected).

2. Rotate the DIAL to select the envelope segment that you wish to modify. If necessary, use the ZOOM option to zoom in on the selected segment.

3. Select the KEY parameter with the down (▼) cursor arrow and rotate the DIAL to set the required value.

4. Select the LEVEL parameter with the down (▼) cursor arrow and rotate the DIAL to set the required value.

1
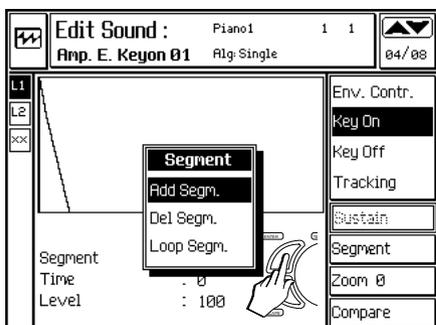
Edit Sound - Key On Envelope: add a segment

3
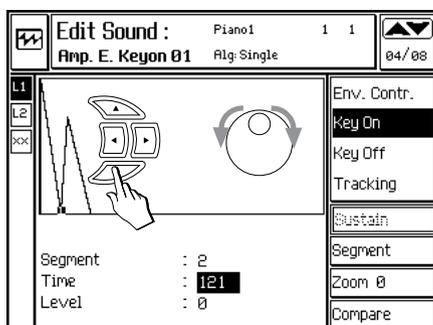
Edit Sound - Key On Envelope: program the Time parameter

2
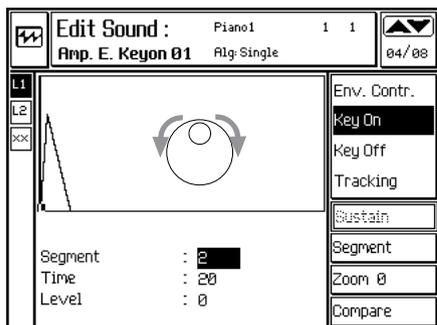
Edit Sound - Key On Envelope: select a Segment

4
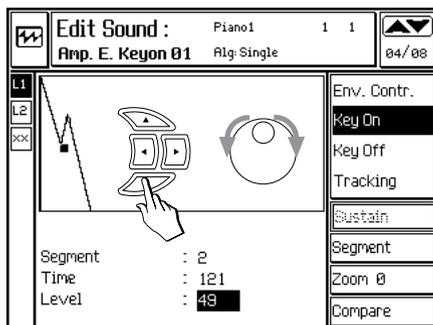
Edit Sound - Key On Envelope: program the Level parameter

AMPLITUDE ENVELOPE TRACKING

Valid for all Algorithms

The tracking "curve" represents the change in the completion velocity of the Amplitude Envelope across the keyboard.

SEGMENT (F6)

Using the SEGMENT option, you can divide the Tracking curve into several different segments, in order to obtain a more refined Tracking across the keyboard.

1 segm	The Tracking curve is essential, representing a constant variation of the envelope completion velocity across the keyboard. The parameter "Key" cannot be modified.
3 segm	The Tracking curve consists of 3 segments which allow the construction of a situation offering different variations across the keyboard.
6 segm	The Tracking curve is divided into many parts (maximum resolution); allowing a more complex programming of the envelope completion velocity across the keyboard.

3 display parameters, selected with the Up/Down cursor buttons, define the tracking:

Point	One of the extreme ends of a segment. Rotation of the Dial selects one of the points of the Tracking curve (1, 2, or 1, 2, 3, 4, or 1, 2, 3, 4, 5, 6, 7).
Key	Determines the keyboard position for the point in edit. The extreme points (A#0, C8) cannot be modified.
Level	The envelope completion velocity offset (Key On and Key Off). Positive values increase the completion velocity, negative values slow it down. 0 corresponds to the "standard" duration of the segments programmed in the previous pages. Assignable values: -63 … 0…+63.

The Envelope completion velocity (Key On and Key Off) can be faster or slower across the note range of acoustic instruments. For example, the bass notes of a piano or an acoustic guitar sound for a longer period than the high notes.

For details of how to program the Amplitude Envelope Tracking, refer to the Volume Tracking example on page 16. 13**.**
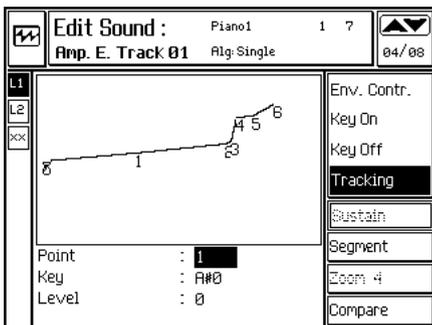
Edit Sound - Amplitude Envelope Tracking

BALANCE ENVELOPE

Valid for Dual 3 and Dual 4 Algorithms only.

The Balance Envelope corresponds to a mixer for the two oscillators which share a single Amplitude Envelope. The Key On and Key Off envelopes allow you to enhance the presence of one Waveform with respect to the other in the key on and release situations.

The Balance Tracking allows you to vary the Balance setting across the keyboard.

Balance parameters

Balance envelope	Activates (On) or deactivates (Off) the Balance envelope. Assignable values: On, Off.
Balance env. am. sensitivity	Depth of the action of the Amplitude envelope on Balance. The envelope is activated by the Balance Envelope parameter above. Positive values increase the depth of the action of the envelope on Balance while negative values have the inverse effect. Assignable values: –7 ... +7. 0 = no effect.
Balance env. dyn. sensitivity	Links the Balance envelope response to key velocity variations. Positive values increase the response of the Balance envelope with increased key velocity while negative values have the inverse effect. Assignable values: –7 ... +7. 0 = no effect.
Key off balance env. rate dyn. sens.	Links the response of the key off Balance envelope completion velocity to key velocity variations. Positive values increase the completion velocity of the Key Off Balance envelope with increased key velocity while negative values have the inverse effect. Assignable values: –7 ... +7. 0 = no effect.
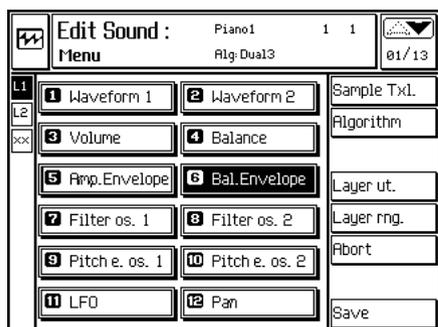
Edit Sound - Balance Envelope editor
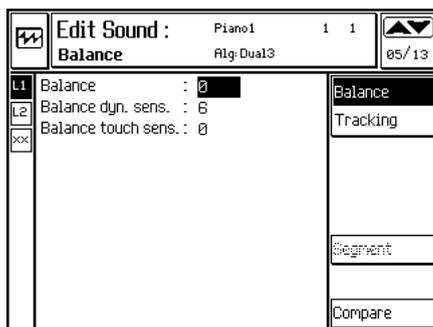
Edit Sound - Balance parameters

BALANCE ENVELOPE KEY ON & KEY OFF

The Balance Key On and Key Off Envelopes are 10 segment curves (maximum).

The Key On envelope represents the variation of the Balance for the entire duration that the notes are held pressed while the Key Off Envelope, the variation of the Balance after the notes have been released.

ZOOM (F7)

Using the ZOOM option, you can enlarge the field of vision of the envelope up to 4 times at a selected Point.

Pressing the soft button repeatedly selects the Zoom options in cyclic order (1, 2, 3, 4, 0). Zoom 0 corresponds to "actual size".

USING THE SEGMENT OPTION

|	
Add segment	insert a new segment immediately after the currently selected segment. A maximum of up to 10 segments is permitted.
Del segm	cancels the current segment.
Loop segm	loops the current segment (envelope repetition). When it reaches the terminal point, it loops back to the beginning. The cycle repeats continually until key release. The initial Loop point is represented by an arrow. ↥ To eliminate the loop, select the segment and select "del segm.".

3 display parameters, selected with the cursor buttons, define the Key On Amp. Envelope.

|	
Segment	Allows you to select the segments with the Dial. The one selected corresponds to the flashing terminal point.

Time	Determines the duration of the Segment. The maximum segment time is approximately 21 seconds. Assignable values: 0 ... 127.
Level	Sets the Balance level of the segment at its terminal point. The values are relative and represent the enhancement of one oscillator with respect to the other. Assignable values: -50 ... 0... +50.

For details of how to program the Balance Key On & Key Off Envelopes, refer to the Amplitude Envelope example on page 16. 18.
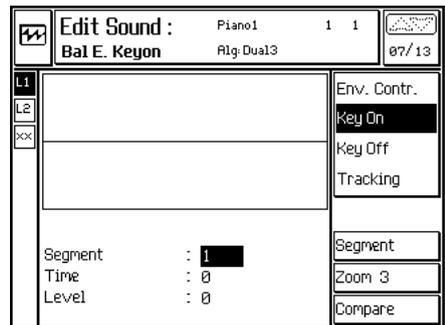
Edit Sound - Balance Key On envelope, Zoom 3
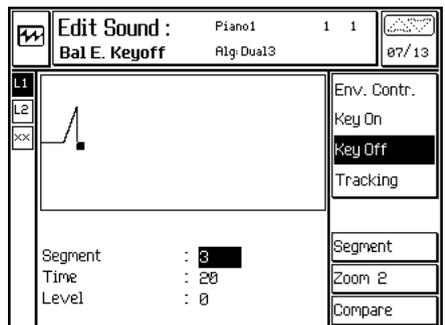
Edit Sound - programmed Balance Key Off envelope, Zoom 2

. . . .

Edit Sound   16•21

BALANCE TRACKING

Balance Tracking allows you to determine how the Balance varies across the keyboard.

SEGMENT (F6)

Using the SEGMENT option, you can divide the Balance Tracking curve into several different segments, in order to obtain a more refined Tracking across the keyboard.

1 segm	The Tracking curve is essential, representing a constant Balance offset across the keyboard. The parameter "Key" cannot be modified.
3 segm	The Tracking curve consists of 3 segments which allow the construction of a situation offering different variations across the keyboard.
6 segm	The Tracking curve is divided into many parts (maximum resolution); allowing a more complex programming of the Balance offsets across the keyboard.

3 display parameters, selected with the Up/Down cursor buttons and modified with the Dial, define the tracking:

Point	Corresponds to one of the extreme ends of a segment. Point 1 represents the lowest note of the keyboard. The highest note of the keyboard is represented by the last Point (depending on the number of segments inserted).
Key	Defines the note at the selected Point. The extreme points (A#0, C8) cannot be modified.
Level	The value of this parameter is a relative value which represents the change in Balance across the keyboard. A level of 0 corresponds to an equal Balance setting for both oscillators of the layer. Positive values enhance the presence of one oscillator with respect to the other while negative values give the inverse effect. Assignable values: –63… 0 … +63.

For details of how to program the Balance Tracking, refer to the Volume Tracking example on page 16. 13.
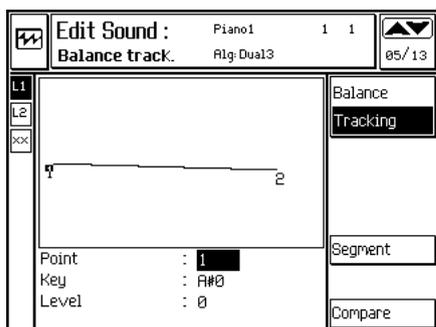
Edit Sound - Balance Tracking

Filter

Valid for all Algorithms. For the Dual 1 and Dual 3 algorithms, two Filters are connected in parallel [Filter os. 1, Filter os. 2]. For the Dual 2 and Dual 4 Algorithms, the Filters are connected in series [Filter 1, Filter 2].

Filters enhance or attenuate certain frequencies of the Waveforms. The sound changes according to the type of filter selected. The **SK760/880** filters are 2 pole filters with roll off curves at 12 dB per octave.

In the Dual 1 and Dual 3 Algorithms, the Filters are connected in parallel, so that Filter 1 operates on oscillator 1 and Filter 2 on oscillator 2.

In the Dual 2 and Dual 4 Algorithms, the Filters are connected in series, so that Filter 2 operates on the sound already processed by Filter 1. If both filters are programmed with identical parameter values, they become a single 4 pole filter with a roll off curve of 24 dB per octave, perfect for those classic analog synth sounds.

Some additional information on "Filters" appears on page 39 of this chapter.

Filter Control parameters

Type	Selects the Filter type. "Off" deactivates the filter. Assignable values: Off, Low Pass, High Pass, Band Pass, Parametric boost, Parametric cut.
Cutoff Frequency	Sets a value for the Cutoff Frequency, or the frequency at which the filter intervenes. The Cutoff Frequency is the same for all the notes of a Sound, unless you programme Filter Tracking. Assignable values: 0 ... 191.
Resonance	Applies resonance to the Cutoff frequency, creating a peak of emphasis at the Cutoff frequency. A high value of resonance can place the filter on "auto-oscillation", producing a whistling sound rich in harmonics. Assignable Values: 0 ... 127.
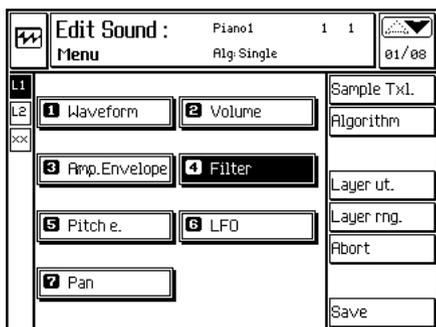
Edit Sound - Main menu - Filter Editor selected
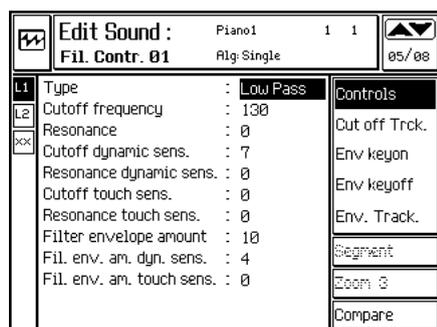
Edit Sound - Filter Control parameters

Cutoff dynamic sensitivity	Links the Cutoff Frequency to Key On Velocity. Positive values increase the Cutoff Frequency by playing harder (the filter opens resulting in a brighter sound), negative values produce the inverse effect (the filter closes and the sound becomes "dull"). Assignable values: –7 ... 0 … +7. 0 = no effect.
Resonance dynamic sens.	Links Resonance to Key On Velocity. Positive values enhance the Resonance with increased key velocity while negative values give the inverse effect. Assignable values: –7 ... 0 … +7. 0 = no effect.
Cutoff touch sensitivity	Links the Cutoff Frequency to Aftertouch. Positive values increasingly open the filters with increased Aftertouch pressure, negative values have the inverse effect. Assignable values: –7 ... 0 … +7. 0 = no effect.
Resonance touch sensitivity	Links the Resonance to Aftertouch. Positive values increases the amount of Resonance applied with increased Aftertouch pressure, negative values have the inverse effect. Assignable values: –7 ... 0 … +7. 0 = no effect.
Filter envelope amount	Activates the envelope for the Filter in edit and sets the depth of action of the Filter envelope. The envelope consists of two parts: "Filter Key On Envelope" and the "Filter Key Off Envelope". Negative values invert the Filter Envelope. Assignable values: –10 ... +10.

|	
Filt. env amount dyn. sens.	Links the depth of action of the Filter envelope to changes in key velocity. Positive values enhance the depth of action of the Filter envelope with increased key velocity, negative values produce the inverse effect. Assignable values: –7 … 0 … +7. 0 = no effect.
Filt. env amnt. touch. sens.	Links the depth of action of the Filter envelope to changes in Aftertouch pressure. Positive values enhance the depth of action of the Filter envelope with increased Aftertouch pressure, negative values produce the inverse effect. Assignable values: –7 … 0 … +7. 0 = no effect.

FILTER CUTOFF TRACKING

Valid for All Algorithms.

The Filter Cutoff Tracking curve allows you to vary the Cutoff Frequency across the keyboard, in order that it does not remain fixed for all the notes of a Sound, but moves according to the note played.

Segment (F6)

Using the SEGMENT option, you can divide the Tracking curve into several different segments, in order to obtain a more refined Tracking across the keyboard.

1 segm	The Tracking is essential and provides a constant variation of the Cutoff frequency across the keyboard. The "Key" parameter cannot be modified.
3 segm	The Tracking consists of 3 segments which can create a curve with different variations across the keyboard.
6 segm	The Tracking curve provides the highest possible resolution, allowing a complex programming of the Cutoff Frequency across the keyboard.

3 display parameters, selected with the Up/Down cursor buttons, define the tracking.

Point	Defines one of the extreme ends of a segment. Rotation of the Dial selects one of the points of the Tracking curve (1, 2, or 1, 2, 3, 4, or 1, 2, 3, 4, 5, 6, 7).
Key	Determines the keyboard position for the point in edit. The extreme points (A#0, C8) cannot be modified.
Level	Determines the Cutoff Frequency offset with respect to the value programmed on the controls page. Normal use of this parameter requires that the Tracking curve be an ascending whole or broken line. Assignable values: –63 … 0…+63

For details of how to program the Filter Cut Off Tracking, refer to the Volume Tracking example on page 16.13.

Edit Sound - Filter Cut Off Tracking - 1 segment

FILTER ENVELOPE KEY ON & KEY OFF

Valid for all Algorithms.

The Key On and Key Off Filter Envelopes are 10 segment curves (maximum). The Key On envelope represents the variation of the Filter cutoff frequency for the entire duration that the notes are held pressed, while the Key Off envelope controls Filter variations after releasing the notes.

Zoom (F7)

Using the ZOOM option, you can enlarge the field of vision of the envelope up to 4 times at a selected Point.

Pressing the soft button repeatedly selects the Zoom options in cyclic order (1, 2, 3, 4, 0). Zoom 0 corresponds to "actual size".

USING THE SEGMENT OPTION (F6)

Using the SEGMENT option, you can divide the Filter Key On & Key Off Envelope curves into several different segments, in order to obtain a more refined envelope across the keyboard.

Add segment	insert a new segment immediately after the currently selected segment. A maximum of up to 10 segments is permitted.
Del segm	cancels the current segment.

Loop segm	loops the current segment (envelope repetition). When it reaches the terminal point, it loops back to the beginning. The cycle repeats continually until key release. The initial Loop point is represented by an arrow.

⥣

To eliminate the loop, select the segment and select "del segm.".

3 parameters, selected with the cursor buttons, define the Filter Key On & Key Off Envelopes.

|	
Segment	Allows you to select the segments with the Dial. The one selected corresponds to the flashing terminal point.
Time	Determines the duration of the Segment. The maximum segment time is approximately 21 seconds. Assignable values: 0 ... 127.
Level	The Cutoff Frequency offset which the end point of the selected segment must reach. 0 corresponds to the Cutoff Frequency programmed in the Filter Controls page, including the Filter Cutoff Tracking. Assignable values: −50 ... +50 *N.B.*: the initial level of the first segment at the starting point is always zero (it cannot be modified)

For details of how to program the Filter Key On & Key Off Envelopes, refer to the Amplitude Envelope example on page 16.18.
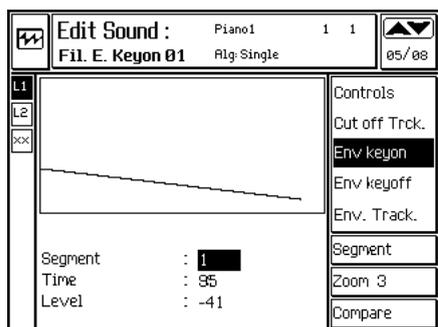
Edit Sound - Filter Key On, Zoom 3
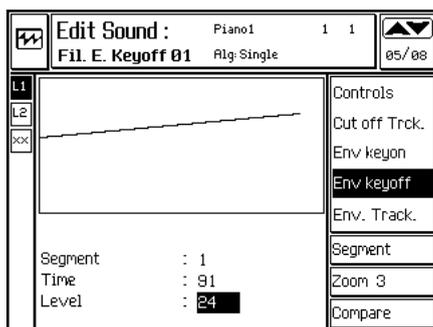
Edit Sound - Filter Key Off, Zoom 3

FILTER ENVELOPE TRACKING

Valid for all Algorithms.

The Filter Envelope Tracking "curve", valid both for the Key On and Key Off Filter Envelopes, increases or reduces the speed of action of the Filter envelope across the keyboard.

Segment (F6)

Using the SEGMENT option, you can divide the Tracking curve into several different segments, in order to obtain a more refined Tracking across the keyboard.

1 segm	The Tracking curve is essential, representing a constant variation of the speed of action of the Filter envelope across the keyboard. The parameter "Key" cannot be modified.
3 segm	The Tracking curve consists of 3 segments which allow the construction of a situation offering different variations across the keyboard.
6 segm	The Tracking curve is divided into many parts (maximum resolution); allowing a more complex programming of the envelope completion velocity across the keyboard.

3 display parameters, selected with the Up/Down cursor buttons, define the tracking:

Point	One of the extreme ends of a segment. Rotation of the Dial selects one of the points of the Tracking curve (1, 2, or 1, 2, 3, 4, or 1, 2, 3, 4, 5, 6, 7).
Key	Determines the keyboard position for the point in edit. The extreme points (A#0, C8) cannot be modified.
Level	The envelope velocity offset (Key On and Key Off). Positive values increase the speed of action of the Filter envelope, negative values slow it down. 0 corresponds to the "standard" duration of the segments programmed in the previous pages. Assignable values: -63 … 0…+63.

For details of how to program the Filter Envelope Tracking, refer to the Volume Tracking example on page 16.13.
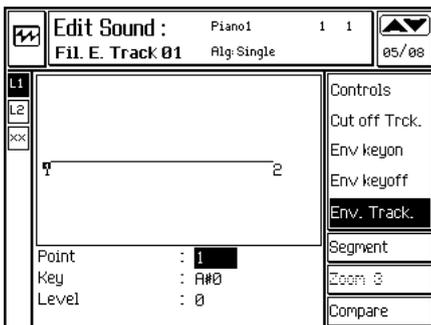
Edit Sound - Filter Envelope Tracking

Pitch Envelope

Valid for all Algorithms. The Dual options activate separate Pitch Envelopes for the two oscillators of each layer (Pitch Envelope Os. 1 and Pitch Envelope Os. 2).

The tuning (pitch) of the Oscillators can vary over time, thanks to Pitch Envelope which is divided into two parts: the "Pitch Key On Envelope" and the "Pitch Key Off Envelope".

The Pitch Envelope can have different completion velocities across the keyboard extension, thanks to the "Pitch Envelope Tracking".

Pitch Envelope Control

Envelope Amount	Activates the Pitch envelope and sets the depth of the Pitch to apply to the oscillator. The maximum value corresponds to a Pitch excursion of 2 semitones. Negative values invert the Pitch Envelope. Assignable values: –7 ... +7. "0" excludes the action of the envelope.
Dynamic rate	Sensitivity of the Pitch Envelope to key velocity variations. With positive values, increasing the key velocity (playing harder) speeds up the Envelope development (the completion velocity). Negative values act inversely with increased key velocity. Value range: –-7 ... +7. "0" excludes the action.
Env. amount touch sens.	Links the depth of action of the Pitch Envelope (defined in the Env. Amount setting) to variations of Aftertouch pressure. Positive settings increase the velocity of the action with increased aftertouch pressure. Negative settings create the inverse effect. Assignable values: –7 ... +7. "0" excludes the action of aftertouch.
Env. amount dyn. sens.	Links the depth of action of the Pitch Envelope (defined in the Env. Amount setting) to variations of key velocity. Positive settings increase the velocity of action with increased key velocity. Negative settings create the inverse effect. Assignable values: –7 ... +7. "0" excludes the action.
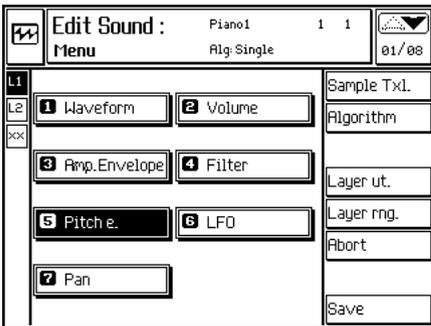
Edit Sound - main menu - Pitch Envelope selected
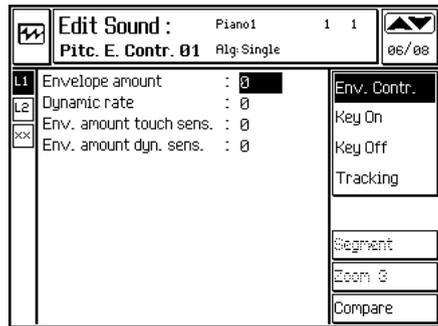
Edit Sound - Pitch Envelope control page

PITCH ENVELOPE KEY ON & KEY OFF

The Pitch Key On and Key Off Envelopes are 10 segment maximum) curves. The Key On envelope regulates the Pitch for the entire duration that the notes are held pressed, while the Key Off envelope controls Pitch variations after releasing the notes.

Zoom (F7)

Using the ZOOM option, you can enlarge the field of vision of the envelope up to 4 times at a selected Point.

Pressing the soft button repeatedly selects the Zoom options in cyclic order (1, 2, 3, 4, 0). Zoom 0 corresponds to "actual size".

USING THE SEGMENT OPTION (F6)

Using the SEGMENT option, you can divide the Pitch Key On & Key Off Envelope curves into several different segments, in order to obtain a more refined envelope across the keyboard.

Add segment	insert a new segment immediately after the currently selected segment. A maximum of up to 10 segments is permitted.
Del segm	cancels the current segment.

Loop segm	loops the current segment (envelope repetition). When ir reaches the terminal point, it loops back to the beginning. The cycle repeats continually until key release. The initial Loop pont is represented by an arrow. ⇑ To eliminate the loop, select the segment and select "del segm.".

3 display parameters, selected with the cursor buttons, define the Pitch Key On & Key Off. Envelopes.

Segment	Allows you to select the segments with the Dial. The one selected corresponds to the flashing terminal point.
Time	Determines the duration of the Segment. The maximum segment time is approximately 21 seconds. Assignable values: 0 ... 127.
Level	Sets the Pitch offset (the difference with respect to the standard value) at a given point. 0 represents the standard pitch. Assignable values: −50 ... +50 *N.B*: the initial level of the first segment at the starting point is always zero (it cannot be modified).

For details of how to program the Pitch Key On & Key Off Envelopes, refer to the Amplitude Envelope example on page 16.18.
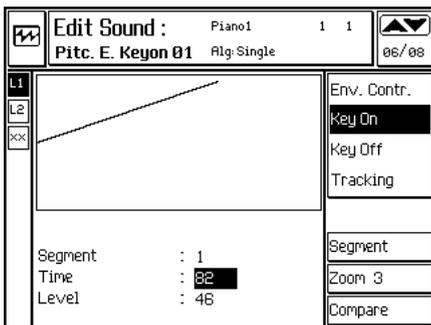
Edit Sound - programmed Pitch Key On Envelope, Zoom 3
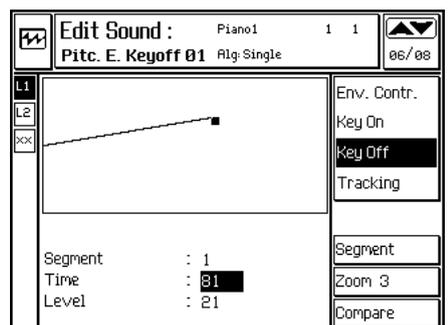
Edit Sound - programmed Pitch Key Off Envelope, Zoom 3

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PITCH ENVELOPE TRACKING

The Pitch Envelope Tracking "curve", valid both for the Key On and Key Off envelopes, increases or reduces the speed of action of the Pitch envelope across the keyboard.
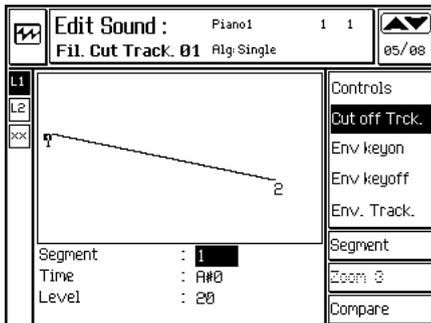
Segment (F6)

Using the SEGMENT option, you can divide the Tracking curve into several different segments, in order to obtain a more refined Tracking across the keyboard.

1 segm	The Tracking curve is essential, representing a constant variation of the speed of action of the Filter envelope across the keyboard. The parameter "Key" cannot be modified.
3 segm	The Tracking curve consists of 3 segments which allow the construction of a situation offering different variations across the keyboard.
6 segm	The Tracking curve is divided into many parts (maximum resolution); allowing a more complex programming of the envelope completion velocity across the keyboard.

3 display parameters, selected with the Up/Down cursor buttons, define the tracking:

Point	One of the extreme ends of a segment. Rotation of the Dial selects one of the points of the Tracking curve (1, 2, or 1, 2, 3, 4, or 1, 2, 3, 4, 5, 6, 7).
Key	Determines the keyboard position for the point in edit. The extreme points (A#0, C8) cannot be modified.
Level	The Pitch envelope velocity offset (Key On and Key Off). Positive values increase the speed of action of the pitch envelope, negative values slow it down. 0 corresponds to the "standard" duration of the segments programmed in the previous pages. Assignable values: -63 … 0…+63.

For details of how to program the Pitch Envelope Tracking, refer to the Volume Tracking example on page 16.13.
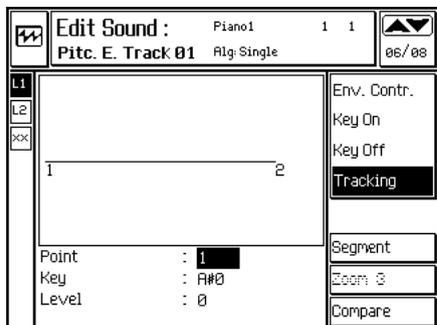
Edit Sound - Pitch Envelope Tracking showing no pitch change across the keyboard

LFO (Low Frequency Ocillator)

A single Low Frequency Oscillator generator for all Algorithms.

The LFO's depth of action on the Pitch, Amplitude and Filter is independently programmable for each oscillator.

LFO is a periodic (repeating) control source. It produces a low speed waveform (low frequency) that can be applied to various aspects of the sound to cause patterns of cyclic change. Because of its periodic nature, the LFO can be used to create effects like Tremolo (cyclic amplitude modulation), Vibrato (cyclic pitch modulation) or, for example, "Wah-wah" (applied to the filter cutoff-frequency).

LFO parameters

Wave	Selects the waveform of the low frequency oscillation. Given the low frequency of the oscillation, the waveform is clearly perceptible. You can choose from the following waves: Sinus, Triangle; Saw, Square, Random, Sample/Hold.

Sine   *Triangle*   *Saw-tooth*

Square   *Random*   *Sample&Hold*

Rate	Determines the velocity of the LFO. Assignable values: 1 ... 200.
Delay	Determines the delay before the entry of the LFO. Entry of the LFO is gradual. Value range: 0 ... 64.
Sync	When set to ON, the LFO is synchronized for all the notes played. When set to MIDI, the LFO is tied to the MIDI Clock. Assignable values: Off, On, MIDI.
Pitch s.o.1 Pitch s.o.2	Applies LFO to the Pitch to produce a Vibrato effect on the selected oscillator. This parameter determines the modulation depth of LFO on Pitch. Positive and negative values indicate an opposed sense of vibration at the starting phase (upwards or downwards respectively). Assignable values: –7 ... +7. 0 = no effect.
Touch pitch s.o.1 Touch pitch s.o.2	Links the depth of the Pitch modulation to Aftertouch pressure. By applying aftertouch pressure to the keys, the "Delay" parameter is ignored and the oscillation starts immediately. Positive and negative values indicate an opposed sense of vibration at the starting phase (upwards or downwards respectively). Assignable values: –7 ... +7. 0 = no effect.

Edit Sound - main menu, LFO editor selected

Amplitude s.o.1
Amplitude s.o.2 Applies Lfo to the Amplitude to produce Tremolo effects. This parameter determines the modulation depth of the LFO on the Amplitude (the output level).

The positive and negative values indicate an opposed sense of increase/decrease of the Tremolo output level (the choice between positive or negative values give perfectly equivalent results).

Higher positive or negative values increase the modulation depth.
Assignable values: –7 ... +7
0 = no effect.

Touch ampl. s.o.1
Touch ampl. s.o.2 Links the depth of the Amplitude modulation to Aftertouch pressure, permitting you to control of the amount of Tremolo by varying the aftertouch pressure applied to the keys.

The "Delay" parameter is ignored when pressure is applied to the keys and the oscillation starts immediately. The positive and negative values indicate an opposed sense of increase/decrease of the Tremolo output level (the choice between positive or negative values give perfectly equivalent results).

Higher positive or negative values increase the modulation depth.
Assignable values: –7 ... +7.
0 = no effect.

Filter s.o.1
Filter s.o.2 Applies Lfo to the Cutoff Frequency of the Filter (1 or 2) to produce a "Wha-Wha" effect, caused by the "opening" and "closing" of the Filter. This parameter determines the modulation depth of the Lfo on the Cutoff Frequency.

The positive and negative values indicate an opposed sense of "opening" and "closing", otherwise, the choice between a positive or negative value give perfectly equivalent results. Higher positive or negative values increase the Filter modulation depth.

Assignable values: –7 ... +7.
0 = no effect.

Touch filt s.o.1
Touch filt s.o.2 Links the depth of the Filter modulation to Aftertouch pressure. By applying aftertouch pressure to the keys, the "Delay" parameter is ignored and the oscillation starts immediately (toggles between open and closed filter).

The positive and negative values indicate an opposed sense of "opening" and "closing", otherwise, the choice between a positive or negative value give perfectly equivalent results. Higher positive or negative values increase the Filter modulation depth.

Assignable values: –7 ... +7.
0 = no effect.

Pan

Valid for all Algorithms. In Dual situations, regardless of whether the Filters are connected in series or in parallel, there is only one pan envelope for both oscillators.

The position of the sound in the "stereo panorama" can be controlled dynamically by means of the Pan envelope divided in two parts: the "Pan Key On Envelope" and the "Pan Key Off Envelope".

Pan Envelope Control

Envelope amount	Activates the Pan Envelope and determines its depth of action. Assignable values: 0 … 7. 0 = no envelope.
Env amount dyn sensitivity	Links the envelope amount to key velocity variations. Positive values increase the envelope amount by increasing the key velocity while negative values act inversely with increased key velocity. Assignable values: –7 ... +7. 0 = no response.

Env. amount touch sens.	Links the envelope amount to variations in the Aftertouch pressure. Positive values increase the envelope amount by increasing the Aftertouch pressure, while negative values act inversely with increased Aftertouch. Assignable values: –7 ... +7. 0 = no response.
Pan dynamic sensitivity	Links the sensitivity of the Pan envelope to key velocity variations. Positive values move the sound further right by increasing the key velocity while negative values act inversely with increased key velocity. Assignable values: –7 ... +7. 0 = no response.
Pan touch sensitivity	Links the sensitivity of the Pan envelope to variations in the Aftertouch pressure. Positive values move the sound further right by increasing the Aftertouch pressure, while negative values act inversely with increased Aftertouch. Assignable values: –7 ... +7. 0 = no response.

Edit Sound - main menu, Pan editor selected
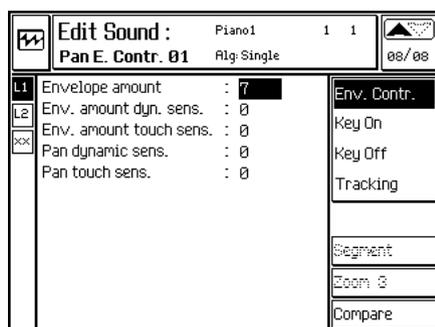
Edit Sound - Pan Envelope Control parameters

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PAN ENVELOPE KEY ON & KEY OFF

The Pan Key On and Key Off Envelopes are 10 segment maximum) curves. The Key On envelope regulates the Pan for the entire duration that the notes are held pressed, while the Key Off envelope controls Pan variations after releasing the notes.

Zoom (F7)

Using the ZOOM option, you can enlarge the field of vision of the envelope up to 4 times at a selected Point.

Pressing the soft button repeatedly selects the Zoom options in cyclic order (1, 2, 3, 4, 0). Zoom 0 corresponds to "actual size".

USING THE SEGMENT OPTION (F6)

Using the SEGMENT option, you can divide the Pan Key On & Key Off Envelope curves into several different segments, in order to obtain a more refined envelope across the keyboard.

Add segment	insert a new segment immediately after the currently selected segment. A maximum of up to 10 segments is permitted.
Del segm	cancels the current segment.

Loop segm	loops the current segment (envelope repetition). When it reaches the terminal point, it loops back to the beginning. The cycle repeats continually until key release. The initial Loop point is represented by an arrow.
	To eliminate the loop, select the segment and select "del segm.".

3 display parameters, selected with the cursor buttons, define the Key On & Key Off. Envelopes.

Segment	Allows you to select the segments with the Dial. The one selected corresponds to the flashing terminal point.
Time	Determines the duration of the Segment. The maximum segment time is approximately 21 seconds. Assignable values: 0 ... 127.
Level	Sets the Pan offset (the difference with respect to the central position) at a given point. 0 represents the centre of the stereo panorama. Assignable values: −50 ... +50 *N.B.*: the initial level of the first segment at the starting point is always zero (it cannot be modified).

For details of how to program the Pan Key On & Key Off Envelopes, refer to the Amplitude Envelope example on page 16.18.
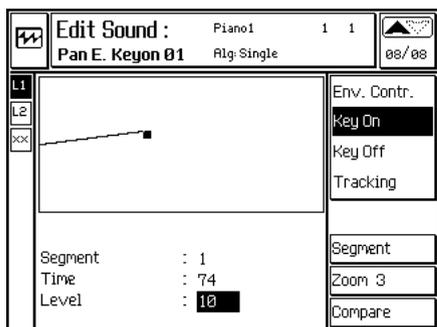
Edit Sound - programmed Pan Key On Envelope, Zoom 3
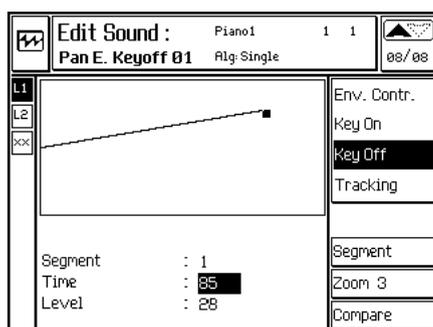
Edit Sound - programmed Pan Key Off Envelope, Zoom 3

PAN ENVELOPE TRACKING

The Pan Envelope Tracking curve, valid both for the Key On and Key Off envelopes, modifies the relative position of the sound across the keyboard extension with respect to the central point. For example, the sound in the bass section may be further to the left while in the treble section, it may be further to the right.

Segment (F6)

Using the SEGMENT option, you can divide the Tracking curve into several different segments, in order to obtain a more refined Tracking across the keyboard.

1 segm	The Tracking curve is essential, representing a constant variation of the speed of action of the Filter envelope across the keyboard. The parameter "Key" cannot be modified.
3 segm	The Tracking curve consists of 3 segments which allow the construction of a situation offering different variations across the keyboard.
6 segm	The Tracking curve is divided into many parts (maximum resolution); allowing a more complex programming of the envelope completion velocity across the keyboard.

3 display parameters, selected with the Up/Down cursor buttons, define the Pan Envelope tracking:

Point	One of the extreme ends of a segment. Rotation of the Dial selects one of the points of the Tracking curve (1, 2, or 1, 2, 3, 4, or 1, 2, 3, 4, 5, 6, 7).
Key	Determines the keyboard position for the point in edit. The extreme points (A#0, C8) cannot be modified.
Level	Sets the Pan offset (the position with respect to the centre) at a given point. 0 represents the centre of the Stereo panorama. Assignable values: –63 … 0…+63.

For details of how to program the Pan Envelope Tracking, refer to the Volume Tracking example on page 16.13.
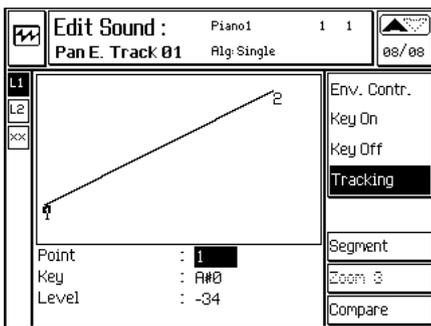
Edit Sound - Pan Envelope Tracking for the Piano1 sound

The Main Menu options

SAMPLE TRANSLATOR (F1)

The Sample Translator is explained separately in detail from page 16.40 onwards.

ALGORITHM (F2)

This option allows you to select the Algorithm.

Pressing F2 activates a dialog box showing the current Algorithm.

```
┌──────────────────┐
│  Select Algorithm │
│                  │
│                  │
│      Dual1       │
│                  │
│                  │
└──────────────────┘
```
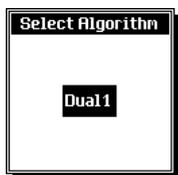
Rotate the Dial to select a different Algorithm and confirm with ENTER or cancel the operation with ESCAPE.

Algorithms available: Single, Dual 1, Dual 2, Dual 3, Dual 4.

LAYER UT. (F4)

The Layer Utility option allows you to create a new Layer for the current Sound in edit, to import a Layer from another Sound, or delete a Layer.

Pressing F4 activates a dialog box where you can select the option required with the Up/Down cursor buttons.

```
┌──────────┐
│  Utility │
│ Create   │
│ Import   │
│ Delete   │
└──────────┘
```

The **Create** option adds a second or third layer to the current sound in edit.

The Import option opens a second level dialog window where you can select the source and destination layer.

```
┌───────────────────────────────┐
│       IMPORT UTILITY          │
│ Import Layer n. :  1          │
│ Program Change :  1           │
│ Bank           :  1           │
│ Sound Name     : Piano1       │
│                  TO           │
│ Sound Name     : Piano1       │
│ Layer n.       :  3           │
└───────────────────────────────┘
```
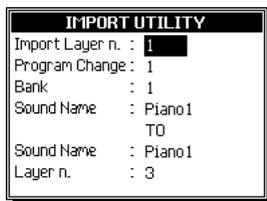
The **Delete** option cancels the currently selected Layer.

This option limits itself to cancelling one or two layers. It is not possible to cancel all layers - at least one must be present.

Program the options as required and confirm with ENTER or cancel the operation with ESCAPE.

LAYER RNG (F5)

The **Layer Range** option allows you to assign a Key range and a Dynamic range for the current layer.

Pressing F5 activates a dialog box where you can select the option required with the Up/Down cursor buttons.

```
┌───────────────────────────┐
│     Key-Dyn. Range        │
│ Key range    A0    C8     │
│ Dyn. range   0     127    │
│                           │
└───────────────────────────┘
```

The **Key Range** option assigns the lowest and highest keyboard limits for the current Layer.

The **Dynamic Range** option assigns the lowest and highest key velocity limits for the current Layer.

Program the options as required and confirm with ENTER. Press ESCAPE to cancel the operation.

ABORT (F6)

Press this soft button to escape permanently from the Edit Sound environment without saving eventual modifications.

See "Escape from Edit Sound" on page 16.5 of this chapter.

SAVE (F8)

Press this soft button to save your programmed sound to the **SK760/880** Sound Library and escape from Edit Sound permanently.

See "Saving and Naming the modified Sound" on page 16.6 of this chapter.

Notes and suggestions on Sound Editing

WAVEFORM

Not all Waveforms cover the entire extension of the keyboard. This becomes particularly evident when you use an 88 note keyboard.

The "problem" is caused by a lack of samples at the extremes of the keyboard. During the creating phase of a Waveform, considerations are made for the quality of the sound and the amount of memory necessary to store all the samples which constitute the Waveform; if some high or low end samples are lacking in musical quality (e.g., the lower notes of a violin Waveform, or the higher notes of a double bass Waveform), it is preferable to eliminate them to avoid using up precious memory.

VOLUME, VELOCITY & AFTERTOUCH

The Volume of a Sound can be controlled in live situations by velocity and aftertouch variations (*the relative parameters are found in the Volume editor*).

If you set very sensitive values for both controls (e.g. +7 assigned to both dynamics and aftertouch), the Sound will be very difficult to control and easily susceptible to sudden volume variations.

LOOP AND LFO

By programming a loop on two segments of a Key On Envelope which create an ascending and descending ramp (∧) you can simulate a Tremolo effect, without using the Lfo editor.

A loop of this kind on a Pitch Key On Envelope will simulate a more realistic Vibrato effect than the effect obtained with the LFO.

KEY OFF ENVELOPE

Thanks to the articulated Key Off Envelopes (Release phase) of the **SK760/880** Series, you can create some very interesting effects. In practice, you can render a Sound "live" after releasing the keys.

For example, try programming an Amplitude Key Off Envelope of the following kind with a Sound such as 12StrGtr (26-2):
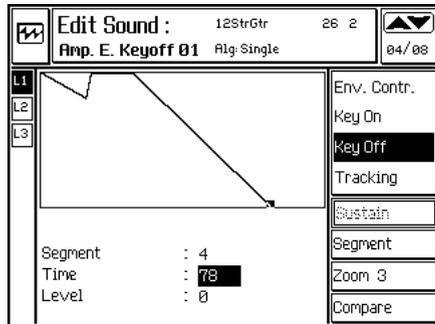
When you release the key the sound begins to fade and then reappears, it is held for an instant and then fades away gradually.

LFO

Lfo can be applied to several different sound parameters. The effect produced depends on the parameter affected:

Amplitude	–>	*Vibrato*
Pitch	–>	*Tremolo*
Cutoff Freq.	–>	*'Wha-wha'*

FILTERS

The action of the filters on the sound is represented by curves:

Low Pass (attenuates the high end frequencies).

High Pass (attenuates the low end frequencies).

Band Pass (attenuates the frequencies above and below the C.F.).

Parametric Boost (enhances the frequencies around the Cutoff Frequency).

Parametric Cut (attenuates the frequencies around the Cutoff Frequency).
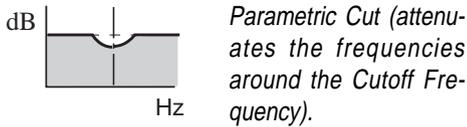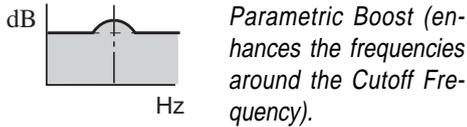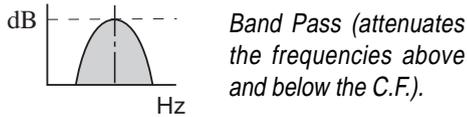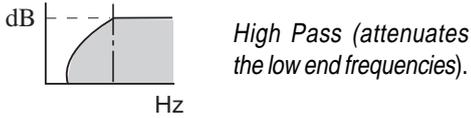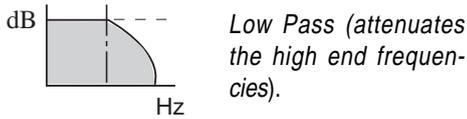
The slope of these curves is determined by the attraction capacity of the "poles". The **SK760/880** Series can have two 2-pole filters connected in parallel (Dual 1, Dual 3 Algorithms), or one 4-pole filter, corresponding to two 2-pole filters connected in series (Dual 2, Dual 4 Algorithms). A 4-pole filter creates a clearer slope and consequently a fuller and more aggressive sound.

To obtain a 4-pole Filter:

Programme identical parameter values for the "Filter 1" and "Filter 2" editors of the Dual 2 or Dual 4 Algorithms.

RESONANCE

Resonance enhances the frequencies in close proximity of the Cutoff Frequency, rendering the filter curves more complex:
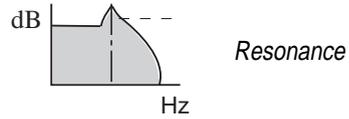
Resonance

Resonance was a very typical feature of classic analog synthesizers.

As an example, listen to the Sound "Resonance (102-2)".

Sample Translator

ABOUT SAMPLE TRANSLATOR

The Edit Sound menu includes the Sample Translator command, situated in the right options column, which permits the importation and exportation of RAM Samples of various formats, and the edit of RAM Samples to create new RAM Waveforms to add to the **SK760/880** Wave Library. Using the new Waveforms, it is then possible to create new RAM⌇-Sounds, increasing **SK**'s sonic potential.

Recognized formats

Sample Translator is able to recognize the following sample formats:

• Wave, Sample Vision, Sound Designer 1, Akai, Aiff, Kurzweil.

Sample loading methods

Samples can be loaded from disk, via MIDI from computers, samplers, etc., or dumped from external devices. The "Sample dump to and from external devices" is a high speed transfer process which works on the handshake principal.

Samples can also be loaded directly from RAM⌇-Sounds, provided that you enter Edit Sound with the same sound (Sounds based on Ram waveforms, identified by the ⌇ symbol).

Entering Sample Translator

Access to the Sample Translator is always via the Edit Sound environment (press the SYNTH button; see also page 16.4).

You can enter the Sample Translator in two ways:

1. With a RAM⌇-Sound. This allows you select Sample Translator and load the Waveform associated to the selected RAM⌇-Sound, then proceed to edit the sample in order to create a new RAM Waveform that can be added to the Wave Library.

2. With a Rom-Sound (for example, select the default Grand Piano Performance). This allows you to enter Sample Translator and load disk-based samples, or receive them via a Dump from an external device.

Don't forget the Solo button!

In either case, if the current keyboard situation corresponds to two or more tracks set in "key-play" status, you must remember to isolate the track with which you enter Edit Sound by pressing the SOLO button. This is to avoid hearing other Sounds when you are working with the samples.

Temporary escape from Sample Translator

By pressing the ESCAPE button, you can escape temporarily from Sample Translator, to access other edit environments without losing current edit data in Sample Translator, but you will not be permitted to select a new Sound, Performance, Style or Song.

Press the SYNTH button to return directly to the Sample Translator.
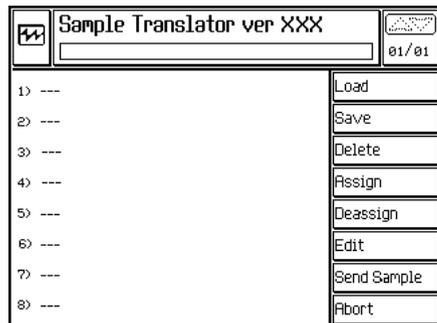
Edit Sound - Sample Translator display, no samples loaded

THE MAIN SAMPLE TRANSLATOR DIS-PLAY

The main Sample Translator display consists of 16 slots, each able to house a sample that can compose a Waveform. A Waveform may consist of one or more samples covering different keyboard ranges.

The display example below shows the sample configuration of a Waveform originating from a previous series instrument.
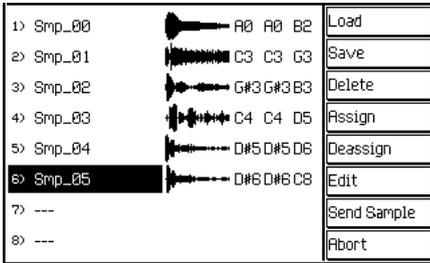
Here, the original RAM‿-Sound contains a Waveform consisting of 6 samples, each assigned to a specific range of the keyboard:

Locations without samples are numbered and shown with three dashes (– – –).

Selecting Samples from the waveform display

Select the Samples with the Up/Down cursor buttons.

Next to each sample, three notes are usually
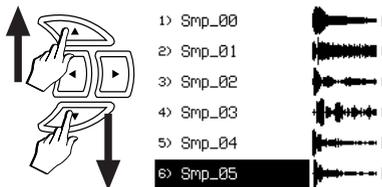
shown, representing the lower limit of the keyboard range to which the sample has been assigned, the original sample pitch, and the upper keyboard limit:

The Sample Translator options

Load:	Loads a sample into the selected location, directly from the selected Ram‿-Sound, from floppy disk or via MIDI from an external source (computer, sampler, etc.).
Save:	Saves a sample to the instrument's Wave Library. Only samples which have been assigned a keyboard extension are saved. Saving also escapes the Sample Translator and returns to Edit Sound where you can create a new Sound with the new Waveform.
Delete:	Cancels the selected Sample from the main Sample Translator display.
Assign:	Assigns the selected sample to a keyboard range. This "assigned" sample plays together with the other "assigned" samples that make up the Waveform. Sample keyboard range overlaps are not permitted.
Deassign:	Cancels the extension limits of the selected sample.
Edit:	Opens a page showing information regarding the Waveform (Sample name and type, properties, size, pitch, Sample rate, Loop Start, Loop End points and the Loop status). Several parameters can be edited in this page and other options are activated (Tuning, Normalize, Gain, Cut, Export).
Send Sample:	Activates a sample Dump process to transfer (via MIDI) the sample to an external device (for example, another **SK760/880** keyboard).
Abort:	Escapes the Sample Translator, erasing all the samples present, and returns toEdit Sound.

Loading samples

LOAD (F1)

The Load option allows you to load Samples into the Sample Translator directly from a RAM∿-Sound, or from disk.

1. Loading a sample a RAM∿-Sound

This operation should be carried out with RAM∿-Sounds originating from previous Series instruments (S, SX, **SK760/880** Series) or from Ram∿-Sounds containing a Waveform created by Sample Translator.

1. Assign a RAM∿-Sound to a track of a Performance.

It is preferable to set the instrument in Style/RealTime mode with the keyboard mode set to Full Keyboard and a single track selected. If two or more tracks are selected, you can isolate the Sound with which you enter Edit Sound using the SOLO button.

2. Enter Edit Sound (as already explained on page 16.4 of this chapter).

3. Press F1 to enter the Sample Translator.

A dialog window is displayed informing that a Ram-Sound has been found the associated Waveform is ready to be loaded.

4. Press ENTER to confirm the operation, or escape to cancel.

Confirming with Enter starts the loading process. The time taken depends on the size of the sample. A dialog window showing an animated clock keeps you informed of the samples being loaded:

Shortly after, the display shows a situation similar to the example below, with one or more samples which constitute the Waveform.
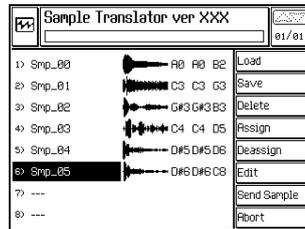
2. Loading disk-based samples

To load samples from disk, in practice you can enter with any sound, including a RAM∿-Sound, because once you enter the Sample Translator, you can override the sound assigned to the track and listen to a sample loaded from disk. If, instead, other tracks are active, you will hear these as well. The most important point, therefore, is to remember to isolate a track from other active tracks with the SOLO button before starting.

1. Insert a disk containing samples.

2 Enter «Edit Sound» (as already explained on page 16.4 of this chapter).

3. Press F1 to enter the Sample Translator.

   A. If you enter Edit Sound with a RAM-✧-Sound, you are prompted to load the associated Waveform. Press ESCAPE to ignore the prompt and pass to the load phase (point 4).

   B. If you entered with a Rom-Sound, the dialog window does not appear and you pass directly to the load phase.

4. Press LOAD (F1) to load a sample from disk.

   If a disk is not inserted in the drive, an appropriate " Disk Error!" message is shown. Cancel the message with Escape and insert the disk into the drive.

   If a disk is inserted in the drive, pressing LOAD opens a selection window showing all data contained in the disk. An example of what may appear is shown below:
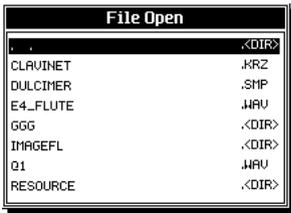
   The various sample formats are identified by appropriate extensions.

5. Use the Up/Down cursor arrows to select the sample to load and press ENTER to confirm.

   Some sample formats allow you to load individual samples or Programs. (See "Sample and Programs" afterwards).

   Confirming with Enter starts the loading process. A dialog window showing an animated clock keeps you informed of the samples be-

ing loaded. A bar graph also appears at the top of the display to monitor the loading phase.

When the operation is complete, the display will show a situation that depends on the sample loaded. An example of what may appear is shown below:
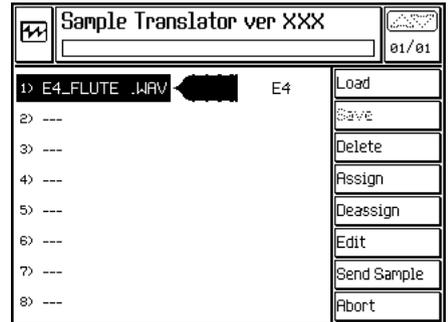
This example shows a single unassigned Flute Wave sample.

Loading other Samples

You can load other samples to the Sample Translator, provided that you select an empty location to load to.
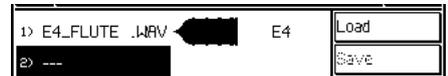
If you load to an existing sample location, a dialog window is displayed requesting the cancellation of the selected sample before proceeding.

Use this method only if you want to cancel an existing Sample in order to replace it with another.

Loading Samples and Programs

Some sample formats, such as Akai and Kurzweil, allow you to load individual Samples (equivalent to the **SK760/880** Series samples) and Programs (similar to the **SK760/880** Series Waveforms).

In such cases, when you select a file type from the "File Open" window, a second selection window appears:

```
┌─────────────────────┐
│   Select Sample     │
├─────────────────────┤
│ F3               ↑  │
│ F4                  │
│ F5                  │
│ F2H                 │
│ F3H                 │
│ F4H                 │
│ F5H                 │
│ all samples ...  ⇩  │
└─────────────────────┘
```
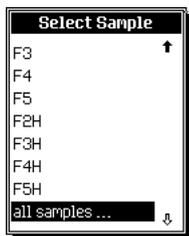
Use the Up/Down cursor arrows to select an individual sample, or select "All samples" and press ENTER to confirm.

A Program organizes the Samples by defining the keyboard ranges to which they are assigned. Unlike the Waveform of the **SK760/880** Series, a Program can distribute the Samples over several different "Levels" (dynamic levels).

Sample Translator can load single Samples, or it can convert, in a single operation, an entire "level" of the Program into a **SK760/880** Series Waveform. If a Program contains more than one "level", it can be converted entirely in successive phases, using *(a)* a Sound Patch, *(b)* a multi track configuration, *c)* a Sound containing a key-dynamic assignment (executed in Edit Sound).

Conversion limitations

A **SK760/880** Waveform can contain only 16 samples. For example, an Akai S1000™ level can contain up to 99 Samples, therefore, when a conversion is carried out, only the 16 Samples from the lowest register are loaded.

These kind of Samples can overlap even inside a dynamic Level. Sample Translator eliminates this overlap, using the lowest limit-note of the highest pitched sample as the limit between samples.

Receiving Samples via a Dump

You can also Dump samples into Sample Translator via the Sample Request option (F7). This is discussed in detail on page 16.53.

Saving your Samples

SAVE (F2)

The SAVE operation is used to save assigned Samples to the **SK760/880** Wave Library. A Waveform can contain one or more assigned samples, provided that each is assigned to a specific keyboard range.

Once your samples have been assigned, press the soft button F2 to Save the Waveform to the **SK760/880** Wave Library.

The display shows the Save Sample dialog window:

```
┌─────────────────────────────────┐
│         Save Sample             │
│                                 │
│ Wave name :  WAVE               │
│                                 │
│ Sound name:                     │
│                                 │
│ Bank    : 5        Sound Group  │
│ Program : 1       ┌──────────┐  │
│                   │  Piano   │  │
│                   └──────────┘  │
│   Caps On          Overwrite    │
└─────────────────────────────────┘
```
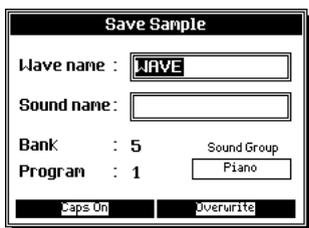
Here you can write a name for the waveform (Wave name) and a name for the new RAM-⌁-Sound (Sound name) based on the Waveform. The name given to the Waveform is automatically assigned to the sound once you select the Sound Name entry zone. You are free, however, to write a different name for the Sound.

Also shown is the first available empty location in RAM for the new RAM-⌁-Sound, defined by the Bank and Program numbers.

Whatever Bank and Program number you select with the Dial, it will always correspond to an empty location in RAM. **SK760/880** does not allow you to overwrite existing Ram-Sound or RAM-⌁-Sounds.

If you attempt to save the Waveform with a name that already exists, an message appears saying that the Wave Name already exists.

Press Enter or Escape to cancel the message and return to the Save Sample window and write a different name for the Wave.

Confirm with ENTER to save the Waveform to the **SK760/880** Wave Library. The new Ram-⌁-Sound is simultaneously saved to the **SK760/880** Sound Library at the selected location. Pressing Enter also escapes the Sample Translator and returns to Edit Sound where you can start to edit the new Ram-⌁-Sound using all the methods already described.

You'll find the new Ram-⌁-Sound assigned to the currently selected track, and the new Waveform selected in the Waveform editor.

Un-assigned Samples

If, among the assigned samples of the Sample Translator, one or more unassigned samples are present, pressing SAVE prompts a message requesting the cancellation of unassigned samples before proceeding with the Save operation.

```
┌─────────────────────────────────┐
│    Sample Translator Save       │
│                                 │
│  ┌─┐                            │
│  │!│   Erase not assigned samples ? │
│  └─┘                            │
│                                 │
└─────────────────────────────────┘
```
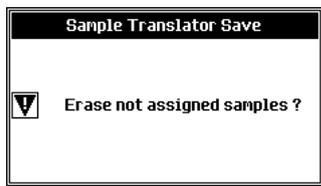
Press ENTER to confirm and proceed with the saving of the Waveform as described above.

If, instead, you want to assign the un-assigned samples, press Escape to cancel the message, assign the samples (explained afterwards), then press Save again to proceed with the save operation.

Cancelling samples

DELETE (F3)

The Delete option allows you to cancel the selected Sample from the Sample Translator.

After listening to your Samples and assigning the relative key ranges, you may want to eliminate those not required.

Simply select the sample you wish to cancel and press the soft button F2.

You are prompted with a message to reconfirm the operation with ENTER or cancel with Escape.

```
┌─────────────────────┐
│    Delete Sample     │
│                      │
│    Are you sure?     │
│   (Enter) to confirm │
│   (Escape) to cancel │
└─────────────────────┘
```

Press ENTER to delete the Sample.

Assigning samples

ASSIGN (F4)

The Assign option lets you select a sample, then specify the key range to which the sample is to be assigned. Only assigned samples become a part of a Waveform which you can then save to the **SK760/880** Wave Library.

When you load a new Waveform into Sample Translator, the samples that constitute the Waveform are shown assigned to specific key ranges. In such cases, three values are shown, the lowest key limit, the sample pitch and the highest key limit:

Highest Key limit ─────

Lowest Key limit ─────

┼┤┿┼╫┿┿ C4 C4 D5
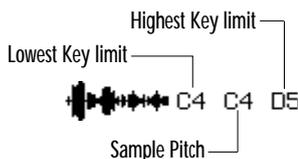
Sample Pitch ─────

If you load new Samples from disk or receive them via MIDI, they will normally be shown with no key range assignment, but only with the sample pitch. In such cases, although shown with no specific key range, Sample Translator allows you to listen to the sample across the entire keyboard, to help you decide in what keyboard area you can obtain the best results.

Once you have decided in which keyboard area the sample sounds best, press the ASSIGN option using the soft button F4.

At this point, the display shows a graphical representation of a keyboard and the Sample (or Samples) currently in edit.

The display example shown on the next page is a typical situation which may be encountered.

```
                    Assign
        ▐▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌
F2  ▐ A0 ─────────────────────┼──────────────
F3
F4
F5
F2H
F3H
F4H
F5H
---
---
---
---
---
---
---
```
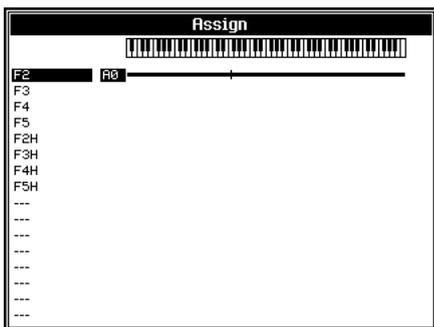
The selected Sample is shown with a temporary
key range, represented by the black line. The
"notch" shown in the line represents the Sample
Pitch. If the selected Sample is not shown with a
black line, simply strike the left cursor button (◀).

1. Rotate the Dial to assign the lowest key limit:

```
        ▐▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌
F2  ▐          F3 ──────────────────────────
F3
F4
```
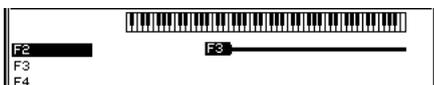
2. Strike the right cursor button (▶) and assign the
    upper key limit with the Dial.

```
        ▐▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌
F2  ▐                              C8
F3
```
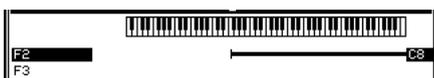
3. Press ENTER to confirm.

4. Select the next Sample to assign with the up/
    down cursor buttons (▲/▼) then strike the left
    cursor button (◀) to activate the lowest key limit
    of the selected sample (A0).

```
        ▐▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌
F2  ▐                         ┬
F3  ▐ A0 ─────────────────────┼──────────────
F4
```
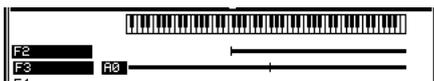
Repeat the assignment procedure for all the
samples that are to be part of the new Wave-
form, and avoid overlapping.

Overlapping samples

If you overlap the key range of two samples,
pressing ENTER will prompt a message indicat-
ing the presence of an overlap.


```
        ┌─────────────────────────────┐
        │       Note Assign Error      │
        ├─────────────────────────────┤
        │                             │
        │  ⚠  Note range overlapped !  │
        │                             │
        └─────────────────────────────┘
```
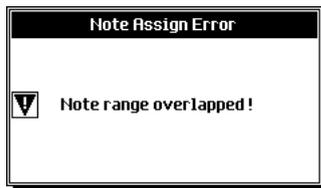
Press Escape to cancel the message and assign
the correct key range before confirming with
ENTER.

A typical assignment consisting of several sam-
ples that constitute a **SK760/880** Waveform may
look like this:


```
                    Assign
        ▐▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌▐▌
---
Smp_01                    ┬─
Smp_02  ▐          G#3├─
Smp_03                      ├──
Smp_04                         ├──
Smp_05                            ├─────
---
---
---
---
---
---
---
```
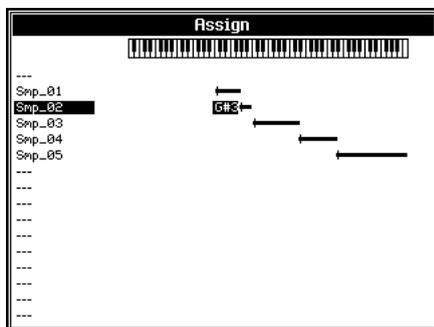
Each sample covers a specified key range and
the "notch" at the beginning of each range corre-
sponds to the Root Key Number, also called the
Sample Pitch.

Once you have completed the sample key range
assignments, press ESCAPE to close the AS-
SIGN display and return to the Sample Transla-
tor.

. . . .
Edit Sound-Sample Translator   16•47

Cancelling assignments

DEASSIGN (F5)

The Deassign command cancels the assigned key range of the selected sample.

1. Select the Sample to deassign.

2. Press the soft button F5 to deassign the sample.

After deassigning, the sample will play across the entire keyboard range only if it is selected.

If you wish to save the deassigned sample as part of the final Waveform, you must reassign a key range before proceeding.

Sample Editing

EDIT (F6)

The Edit option opens a display showing non-programmable information relating to the original sample, and gives access to some programmable parameters which allow you to change some characteristics of each individual sample.
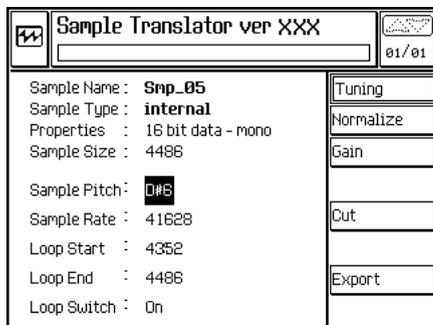
The first four items of the display correspond to the sample information:

Sample name

Shows the original name of the wave sample.

Sample Type

Identifies the sample format.

Properties

Shows the technical characteristics of the sample.

Sample size

Shows the size of the sample expressed as the total number of samples.

The remaining items of the display correspond to settings for the sample assigned to the currently selected key range. All these parameters are programmable.

Sample Pitch

Indicates the pitch at which the sample was originally recorded. This parameter also defines the Root Key number, or the key where the sample root for the current key range is assigned.

If the **SK760/880** does not recognize the Sample Pitch of a sample you've loaded from disk, you can use this parameter to specify the key which will play the sample at its normal pitch (the pitch at which it was sampled). To help you with this operation, use the Tuning function, activated with the F1 soft button, which plays the original sample pitch with a sinusoidal that is superimposed on the sample.

You can also use this parameter to make the sample play its normal pitch on a different key from the one to which it was assign when it was recorded. This, however, will pitch shift the sample and change its playback rate, which can affect the timbre of the sample.

Sample Rate

This parameter defines the frequency with which the Sample is read. If the Sampling Rate is modified, the sample pitch is also proportionally modified. For example, if the Sample Rate is raised in value, the sample pitch will also become higher.

Basically, this function provides a fine tuning for the sample, avoiding dissonance between the samples that make up the Waveform.

Loop Start

This parameter causes samples to replay indefinitely until you release the note, or they decay to silence. Each sample, when triggered, begins at the Loop Start point and plays through to the Loop End, then loops to the Loop start point and plays again. This cycle will continue until the note is released. If the Loop Switch is set to Off (see below), when the sample plays to the Loop End on its first cycle, it stops when it reaches the Loop End.

Changing the Loop Start (and Loop End) points can have a small or great effect on the sample timbre, depending on the nature of the sound at the Loop Start point. You may hear a click as the sample loops back from the Loop End to Sample Start. In such cases, vary the Loop Start value until you reduce the click to an acceptable value.

Loop End

This parameter represents the end of the current sample and the point where the sample, once played, loops back to the Loop Start point. If the Loop Switch is set to Off, the Loop End parameter changes to "Sample End".

Loop Switch

This parameter toggles between the On and Off status of the Loop. If set to ON, the sample loops continually from Loop Start to Loop End until the keys are released. If OFF, the sample plays from Loop Start to Sample End and stops.

GENERAL NOTES ON SAMPLE EDITING

When you trim samples by changing the values of Loop Start and Loop End, you'll hear the effect with the next note you play. However, the Sample is not actually changed in the **SK760/880** memory until you save it.

THE SAMPLE EDI T OPTIONS

Entering the Sample Edit page activates several options.

TUNING (F1)

The Tuning option provides a reference for the sample pitch, producing the exact note with a sinusoidal, superimposed on the sample. This is useful in situations where the original sample pitch is required when assigning a sample to a key range.

Press the soft button F1 to activate the Tuning function (shown in negative highlight) and play a note on the keyboard.

Press F1 to deactivate Tuning.

NORMALIZE (2)

If the volume of the selected sample seems to be too low, it is quite probable that the original sample Gain (Volume) has a setting that needs to be adjusted. Normalize takes the sample gain to its maximum setting in a single step.

1. Press F2 to select NORMALIZE.

    The display shows the current status of the sample Gain.

    Sample Normalize

    Gain % **22**
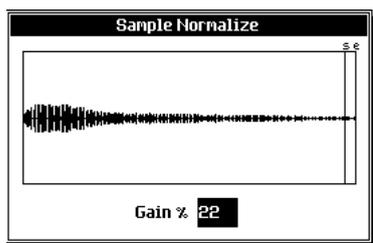
    In this display situation, the Gain setting is not programmable.

2. Press ENTER to set the sample Gain to its maximum setting (100%).

    After a short period, the sample Gain setting sets to 100%.

    Sample Normalize

    Gain % **100**
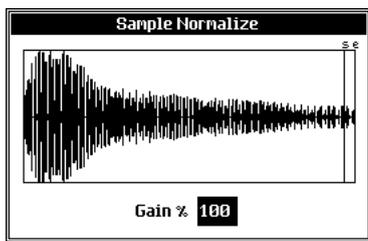
GAIN (F3)

This option allows you to modify the volume of the sample with respect to the other samples of the Waveform. One of the primary uses of Gain is to equalize the volume levels between different key ranges.

1. Press F3 to select Gain.

    The display shows the status of the Sample Gain setting.

    Sample Gain

    Gain % **48**
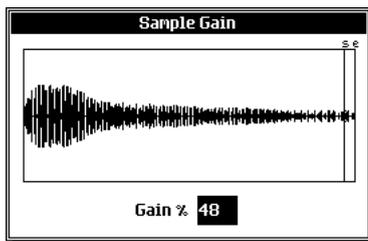
2. Rotate the Dial, or use the numeric keypad (with the KEYPAD LED on) to set the Gain to a suitable level, playing the sample as you regulate the setting.
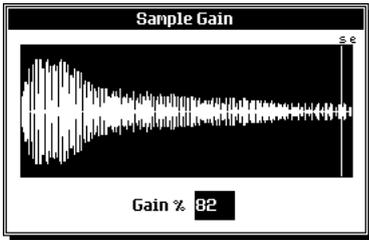
3. Press ENTER to confirm the setting.

   After a short period, the sample Gain setting is memorized.

CUT (F5)

This option allows you to trim the Sample at a specified Loop End in order to "cut off" the last portion of the Sample.

If you vary the current setting of the Loop End and wish to eliminate the portion of the sample that follows, press F5 to trigger the CUT option.

After using CUT, you'll find that the Loop End point cannot be taken to a higher value.

EXPORT (F7)

Use the Export option to save the Sample currently in edit to disk.

You can chose to save in two of the most commonly recognized formats: Sound Designer 1 or Windows RIFF Wave.

1. Press EXPORT to open a dialog where you can specify a name and select the format.
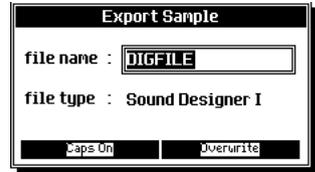
2. Select the File Type parameter and rotate the Dial to select the other format.
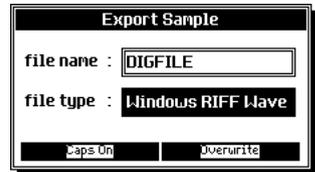
3. Insert a floppy disk into the disk drive and press ENTER to start the export procedure.

   Shortly after, the Sample is saved to disk.

Press ESCAPE to exit the Sample Edit display.

Sample MIDI Dump

SEND SAMPLE / SAMPLE REQUEST (F7)

Samples can be transferred between **SK760/880** and most other samplers and computer sampling programs using the Send Sample/Sample Request option which operates according to the MIDI Sample Dump Standard. This feature works on the handshake principal and requires only that the transmitter and receiver conform to the standard. Both units must be connected via a closed MIDI loop The operation proceeds smoothly and at high speed without freezing either the external device or the **SK760/880**. It is not necessary to set MIDI channels. If the external device does not conform to the Sample MIDI Dump Standard, this operation cannot be performed.

The Send Sample option is shown when a Sample is selected in the main Sample Translator display.

```
Send Sample
Abort
```

The option changes from Send Sample to Sample Request when an empty location is selected.

```
Sample Req
Abort
```
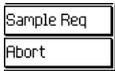
To load a Sample (Sample Request - F7)

1. To load a sample into SK's Sample Translator from an external source (such as another **SK760/880**, or a computer or sampler), first connect the external device's MIDI OUT port to the **SK760/880** MIDI IN and the MIDI IN port to the **SK760/880** MIDI OUT (MIDI Loop).

2. Select an empty location in the Sample Translator's main display.

3. Press SAMPLE REQ (F7).

    A selection window opens where you can select the sample number.

```
Requested Sample
       7
```

If you are requesting a sample from another **SK760/880**, you can specify the numbers from 0 to 15 which correspond to the 16 locations of the Sample Translator.

If you are requesting a sample from an external computer or sampler, you can specify a number from 0 to 255, depending on the sample numbers stored in the external unit.

Press ENTER and shortly after, the sample transfer process begins. During the transfer, the process is monitored on the bar graph of the main Sample Translator display.

While the transfer is taking place, the Sample Req option changes to "Dump Stop". Use Dump Stop to stop the sample transfer from the external device.

To save a Sample (Send Sample)

• To transfer a selected sample from **SK760/880** to an external device, press SEND SAMPLE (F7).

    Shortly after, the sample transfer process begins. During the transfer, the process is monitored on the bar graph of the main Sample Translator display.

    While the transfer is taking place, the Send Sample option changes to "Dump Stop". Use Dump Stop to stop the sample transfer to the external device.

Abort (F8)

Use the Abort option to escape from Sample Translator without saving your samples.

Pressing Abort activates a prompt to confirm the abort process with ENTER and cancel all samples.

```
┌─────────────────────────────────┐
│    Sample Translator Abort      │
│                                 │
│  ┌─┐   ENTER to erase samples   │
│  │▼│     or ESC to continue     │
│  └─┘                            │
│                                 │
└─────────────────────────────────┘
```
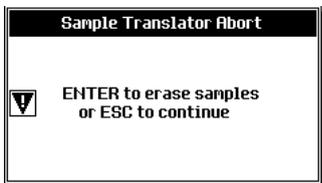
Pressing ENTER cancels all samples and returns to the Sound Edit environment.

Press ESCAPE to cancel the display and retain the samples. Save the samples with SAVE to escape the Sample Translator (see page 45).

• 17 Edit General

«Edit General» is where you can modify global parameters that affect the instrument as a whole and which are not memorized to a Performance. A part of the general parameter settings are conserved in RAM and saved to disk as a Setup.

Press the GENERAL button in the EDIT section to gain access to the «Edit General» environment.

«Edit General» is a complex structure environment. When you press GENERAL for the first time, the main menu page appears where you can access one of the 6 editors using one of the following methods:

a) rotate the DIAL to select the editor and press ENTER;

b) use the directional arrows to select the editor and press ENTER;

c) use the page scroll buttons ▲▼ to pass directly from one editor to another;

d) specify the editor number on the keypad (with the KEY PAD LED on) and press ENTER.

GENERAL

DESCRIPTION OF THE MAIN MENU PAGE

The menu page shows 6 editors at the centre: General Controls, Tuning/Scale, Pedalboard/Computer, Date & Time, Display Controls and Mic/Line In.

On the right hand side are 8 options which can be selected with the corresponding Soft buttons F1…F8: Battery & Release, Auto Help, System Info, Restore All, Restore Styles, Restore Performances, Restore Songs, Restore Style Performances.

After entering the editors, the options shown in the options column change according to the editor.

The description of the main menu options is at the end of this chapter.
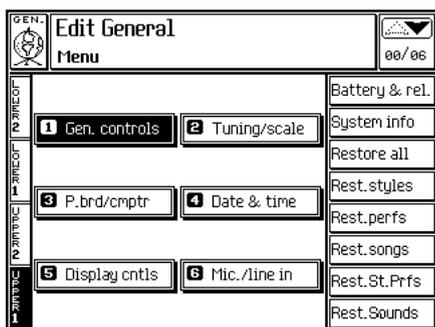
Edit General - Main menu

General Controls

KEYBOARD SENSITIVITY

Determines the response of the keyboard to velocity changes.

Assignable values: Soft, Medium soft, Medium, Medium hard, Hard.

FOOTSWITCH POLARITY

Footswitch 1, 2, 3

Sets the polarity of the programmable pedals 1, 2, 3. Generalmusic pedals are of the NC type.

Options: NC (Normally Closed), NO (Normally Open).

Tuning/Scale

MASTER PITCH

Fine tunes the instrument as a whole in fractions of 1/64 of a semitone.

Assignable values: -63...+63.

KEYBOARD SCALE

Provides a selection of Temperaments (Scales).

Options: Equal, Inverse, Meantone, Werkmeister III, Arabian 1, Arabian 2, User1 ... User8.

USER PROGRAMMABLE SCALES

You can program your own scale using the keyboard map shown at the bottom of the display. This graphical representation shows the current pitch of the notes of an octave. The octave currently in edit is shown in the title bar directly above the keyboard (e.g. Octave C-1/B-1). Each note shows the coarse tune and fine tune status. The programming tasks allow you to alter the pitch of one or more notes by modifying the coarse and fine tuning parameters of the current scale.

Actual note
Coarse tuning

Octave (select F5 for «Octave Up» or F6 for «Octave Down»).
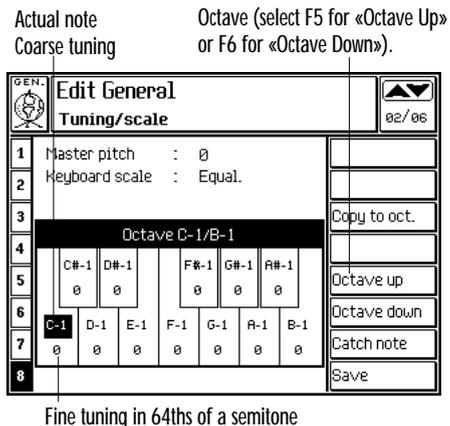
Fine tuning in 64ths of a semitone

Edit General: Master pitch & Keyboard Scale

Edit General: General controls

The final configuration can then be copied to selected octaves of the keyboard, or to all octaves.

Example - to program a scale by fine tuning one or more notes:

1. With the "Octave Up" function (F5), select the octave to program.

2. Use the directional arrows to select the fine tune parameter (in this case "0") and rotate the Dial to fine tune the note according to your requirements. While tuning, play the note repeatedly.

3. Repeat the microtuning operation for other notes.

4. Select the "Copy to oct." function (F3), select "Fine Tune" in the "Copy" parameter and "ALL" in the "to octave" parameter, then press ENTER to confirm.

5. When the scale has been programmed, save it to the Setup by pressing F7 («Save»). You will be prompted to select a User location.

THE TUNING/SCALE OPTIONS

Copy to octave... (F3)

Copies the current setting to another octave. The «Copy to octave» dialog window is opened where you can specify the elements to copy and the octave to copy the user programmed data to.
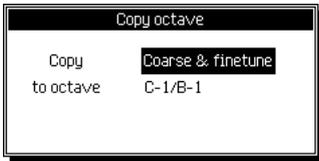
Coarse&Fine - Copies both the coarse tuned notes as well as the fine..

Coarse - Copies only the coarse tuned notes.

Finetune - Copies only the fine tuning.

To octave - Selects the octave to copy to. Select the ALL option to copy a programmed octave to the entire keyboard.

Octave Up (F5)

Selects the next highest octave to edit.

Octave Down (F6)

Sets the next lowest octave to edit.

Catch Note... (F7)

Selects the note to edit. Press F7. The following message appears:

Play the note to edit.

Save... (F8)

Saves the User programmed scale to the Setup. The «Save» dialog window is opened where you can choose from 8 User scale destinations.

Select the User scale with the DIAL. Press ENTER to confirm or ESCAPE to cancel.

Pedalboard / Computer

The PEDALBOARD and COMPUTER connectors cannot operate at the same time. Selecting one renders the other inoperative.

To activate one of the two connectors, select the corresponding option («Pedalboard» or «Computer») with the cursor buttons.

PEDALBOARD

If you have purchased Generalmusic's optional 13-note pedalboard, connect it to the Pedalboard connector and program the unit for how it will be used by pressing F8 («Mode»).

Mode (F8) for Pedalboard options

Options for the pedalboard.

```
        Pedalboard mode
Off
Pedalbass
Pedalchord
Multifunction
```
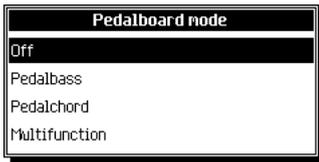
Off - Pedalboard deactivated.

Pedalbass - The automatic bass of the auto-accompaniments is deactivated and the BASS track is assigned to the Pedalboard, allowing you to play the bass with the pedalboard.

Pedalchord - Chord recognition on the keyboard is disabled and passed over to the pedalboard. To play minor and sevenths, play two bass notes at the same time. Alternatively, you can program the Pedals 1, 2, or 3 to select minor and sevenths.

Multifunction - Each note of the pedalboard recalls a function associated to the Styles:

Note	Function	Note	Function
C2	Start/Stop	C#2	Tempo –
D2	Intro	D#2	Tempo +
E2	Ending	F2	Var 1
F#2	Fill <	G2	Var 2
G#2	Fill =	A2	Var 3
A#2	Fill >	B2	Var 4
C3	Key Start		

Bass Sustain (F1)

Sustain for the notes of the pedalboard.

COMPUTER

Instead of using the MIDI interface, you can connect via a single serial cable to a computer. Program the connector for the type of computer used by pressing F8 («Mode»).
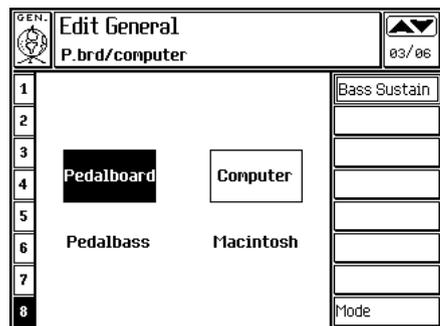
Edit General: PedalBoard/Computer

Mode (F8) Computer options

Options to communicate with a computer

```
        Computer mode
Off
Macintosh
Pc1
Pc2
```
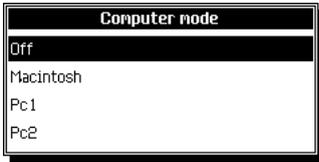
Off - Connection deactivated.

Macintosh - To connect to an Apple Macintosh™ computer. A standard Mac serial cable is required to connect to the Modem port. In the computer software, set a communication velocity of 1 MHz.

PC1 - Allows serial connection with an IBM™ computer or compatible, with a communication velocity of 31250 baud. A standard PC serial cable must be connected to the RS-232 port of the computer.

PC2 - As above, but with a communication velocity of 38400 baud.

Date & Time

Sets the internal calendar and clock.

SET DATE (F1)

Sets the date in edit. Take the cursor to the day, month and year and specify the value of each parameter with the DIAL.

Confirm with ENTER or F1.

SET TIME (F2)

Sets the time in edit. Take the cursor to the hour, minute and seconds with the cursor buttons and specify the value of each parameter with the DIAL.

Confirm with ENTER or F2.

```
GEN.  Edit General                  ▲▼
      Date & time                  04/06
┌───┐                          ┌────────┐
│LOWER2│                       │Set date│
├───┤                          ├────────┤
│LOWER1│                       │Set time│
├───┤      Date:  25 2 97      ├────────┤
│UPPER2│                       │        │
├───┤                          ├────────┤
│UPPER1│   Time:  14 43 44     │        │
└───┘                          └────────┘
```
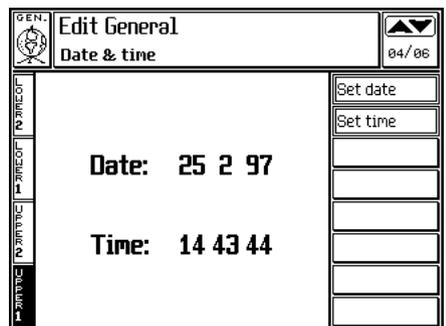
Edit General; Date & Time

. . . .

Display controls

Viewing controls for the display. The settings are conserved to memory after power down. They cannot be saved to disk.

CHORD LANGUAGE

Determines the viewing language (English/Italian/French/Germa) of the chord notation in the Score.

HELP LANGUAGE

Selects the language for the Help file.

Your model may not contain a file in a different language.

DISPLAY MODE

Offers the choice of viewing black text on a white background (Positive) or white texts on a black background (Negative).

LAST SELECTION MEMORY

If enabled (ON), the last selected carried out in either Style, Performance or Sound mode is memorised. If disabled (off), the selection window of these modes to not show the last selection made.
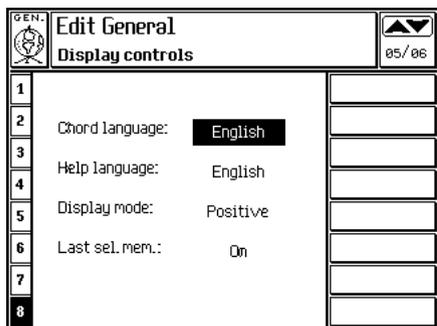
Edit General - Display controls

Mic/Line Input

This page contains bar graphs to monitor the level of signals fed into the Mic/Line inputs 1 and 2.

The contents of the display change according to the absence or presence of the optional Audio Video card.

AV CARD NOT INSTALLED

You can plug a microphone or musical instrument (or other audio source) into the Mic/Line jacks (IN1, IN2) to play through the instrument's internal pre-amplifier. The input signals are directed to the instrument's internal speakers and to the LEFT and RIGHT audio outputs, but are not processed by the on-board Digital Effects processor.

You can regulate the signal gain with the twin GAIN knob located to the left of the Mic/Line jacks. An optimum signal level can be obtained when the input signal, at maximum volume, almost reaches the extreme right of the VU bar graph (the clipping zone).

Regulate the volume of the signal at the LEFT and RIGHT outputs with the MIC/LINE front panel slider. The M. VOL slider will have no effect on the MIC/LINE signal.
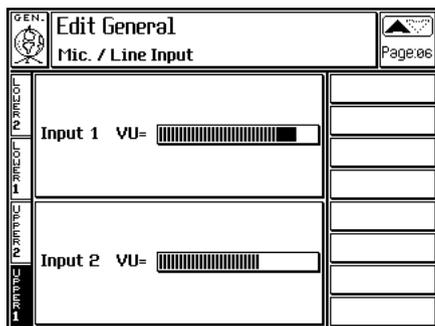
Edit General - Mic/Line In *(AV interface not installed)*

A/V INTERFACE INSTALLED

Instruments fitted with the Audio/Video interface show a completely different Mic/Line Input page with several parameters to control the input signals.

The input signal is directed to the internal sound generator and effects processor before being directed to the LEFT and RIGHT outputs and the speaker system.

You can regulate the signal gain with the twin GAIN knob located to the left of the Mic/Line jacks. An optimum signal level can be obtained when the input signal, at maximum volume, almost touches the extreme right of the VU bar graph (the clipping zone).

Regulate the maximum volume with the MIC/LINE panel slider. The M. VOL slider regulates the sum of the internal sound generator output level (**SK760/880** sounds and signal of the MIC/LINE IN inputs).
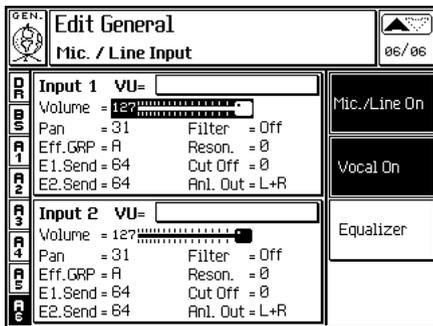
Edit General - Mic/Line In *(AV interface installed)*

PARAMETERS WITH OPTIONAL AV INTERFACE

Input VU

Monitors the level of the input signal. Controls the signal gain of the two signals fed into the Mic/Line IN1 and IN2 jacks with the twin knob 1 and 2 located to the left of the inputs.

Maximum volume levels can produce "clipping", a distortion which can be eliminated by controlling the gain.

The VU-meter indicates the level of the input signal. The dark zone to the extreme right represents clipping (distortion).

Volume

Separate volume control for each input.

Assignable values: 0 ... 127.

Pan

Determines the position of the input signal within the stereo panorama.

Assignable values: -32 (all to the left) ... 0 (centre) ... +31 (all to the right).

Eff Group

Selects the Group of effects A or B.

E1 Send

Determines the amount of Reverb effect to apply to the signal.

Assignable values: 0 ... 127.

E2 Send

Determines the amount of modulation effect to apply to the signal.

Assignable values: 0 ... 127.

. . . .

Filter

Selects a filter type.

Assignable values: Off, LP (Low Pass), HP (High Pass), BP (Band Pass), PB (Parametric Boost), PC (Parametric Cut).

Cutoff

Sets the cutoff frequency.

Assignable values: 0 ... 191.

Resonance

Sets the filter resonance. *Assignable values: 0 ... 127.*

Audio Out

Directs the signal to the audio output or outputs. *Assignable values: L+R (Left+Right), L, R.*

MIC/LINE ON/OFF (F1)

Switch to activate/deactivate the Mic/Line IN1 and IN2 jacks. When the inputs are active, the overall polyphony is reduced by two voices; if you do not intend using the Mic/Line inputs, deactivate them in order to direct the two voices to the internal **SK760/880** sounds.

VOCAL ON/OFF (F3/F4)

Switch for the activation/deactivation of the Vocal Processor. See also the Vocal Processor section in the Edit Effects chapter.

EQUALIZER (F5/F6)

The Equalizer parameters affect the Mic/Line input signals only.

The Edit General Main Menu Options

BATTERY & RE.... (F1)

This option shows the date and time of the latest release of the operating system and the charge level of the rechargeable backing battery.

Press F1 once to show the release date and battery charge level:

```
┌─────────────────────────────────────┐
│   Battery check & software rel.      │
│        Release: 14-02-1997           │
│                                      │
│   Battery charge level:  100%        │
└─────────────────────────────────────┘
```
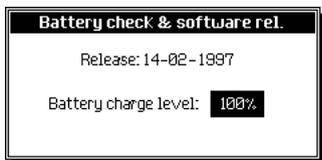
Press F1 once again to show the date and time of the release:

```
┌─────────────────────────────────────┐
│   Battery check & software rel.      │
│     Release: 14-02-1997 17:20        │
│                                      │
│   Battery charge level:  100%        │
└─────────────────────────────────────┘
```
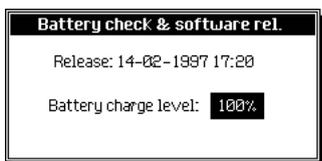
If the battery charge level is low, leave the instrument turned on for at least 15 hours to recharge the battery completely.
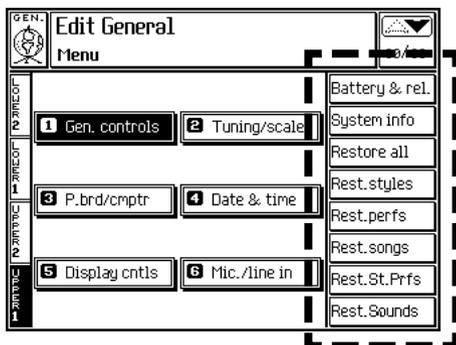
Edit General main menu options column

SYSTEM INFO (F2)

This option displays information regarding the presence or absence of the various accessories that can be installed in **SK760/880**.

```
┌─────────────────────────────────────┐
│        System Information            │
│                                      │
│  Volatile Ram Size   Not present     │
│                                      │
│  Backed Ram Size     2048 KB         │
│                                      │
│  Hard Disk           Present         │
│                                      │
│  Video               Not present     │
└─────────────────────────────────────┘
```
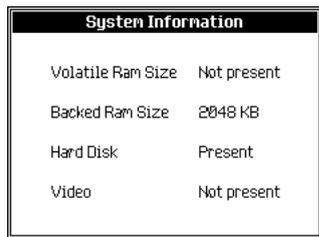
RESTORE

The «Edit General» environment offers several dedicated RESTORE commands which are useful to restore part or all the instrument's RAM to the factory set status.

User-programmed data (Performances, User Styles, Songs, Performance-Sounds, Sounds) can be cancelled, either as an individual block (Performances, Style-Performances, User Styles, Songs, Sounds) or entirely (All) by means of a single command. Cancelling user programmed data from memory restores the instrument's original default parameter status.

For example, if you use the Restore Performance command, you will cancel all user-programmed Performances and restore the original factory settings.

. . . .
▶ **WARNING**: *use the RESTORE commands with caution because user-programmed data is irremediably lost. Make sure that you have saved any data you so not wish to cancel to disk or Hard disk before proceeding with a restore operation.*
. . . .

. . . .

RESTORE ALL (F3)

This operation cancels all user programmed data currently in RAM (Performances, User Styles, Style-Performances, Songs) and restores the instrument to its factory-set status (RAM empty).

Pressing F3 prompts a request to confirm the operation with ENTER or cancel with ESCAPE.

RESTORE STYLES (F4)

This operation cancels all User Styles in RAM (including User Style-Performances) residing in the User 1, 2, 3 and 4 buttons of the STYLE GROUPS. The User slots are restored to the factory-set conditions (empty: "User").

Pressing F4 prompts a request to confirm the operation with ENTER or cancel with ESCAPE.

RESTORE PERFORMANCE (F5)

This operation cancels all user-programmed Performances in RAM residing in the 8 buttons of the PERFORMANCE GROUPS. The status of the Performance parameters are restored to the factory-set values.

Pressing F5 prompts a request to confirm the operation with ENTER or cancel with ESCAPE.

RESTORE SONGS (F6)

This operation cancels all Song in RAM. The Songs memory is restored to the factory-set status (empty: "User").

Pressing F6 prompts a request to confirm the operation with ENTER or cancel with ESCAPE.

RESTORE STYLE-PERFORMANCE (F7)

This operation cancels all user-programmed Style-Performances associated to the ROM STYLES. The status of the Style-Performance parameters are restored to the factory-set values. ROM Styles associated to modified Style-Performances are identified by an asterisk (*) after the Style name.

Pressing F7 prompts a request to confirm the operation with ENTER or cancel with ESCAPE.

RESTORE SOUNDS (F8)

This operation restores the Sound configuration to the original factory-set situation, cancelling all User edited Sounds previously stored to user locations. This operation is particularly useful to restore the original SK760/880 sound set (over 1,000 sunds) after loading a sound configuration from a previous WK4 disk (about 600 sounds) using the Load All Sounds or Load Block procedures.

Pressing F8 prompts a request to confirm the operation with ENTER or cancel with ESCAPE.

Appendix

- Sound tables
- Drum tables
- Style tables
- Performance tables
- Effects tables
- Wave tables
- MIDI Implementation
- MIDI Controllers
- System Exclusive implementation
- Index (alphabetical)

SK760 WORLD KEYBOARD
POWERSTATION

SK880 WORLD KEYBOARD
POWERSTATION

GEM
by GENERALMUSIC

ROM-Sounds

Bank	1	2	3	4	5	6	7	8
PIANO group								
1	Piano1[2]	PianoMk1[2]	PickPiano[2]	PianoStage[2]	InharPiano[2]			
2	Piano2[2]	PianoW2[2]	Pianoctave[3]	PianoTine[3]	TonePiano[2]			
3	Piano3[2]	E.G.Piano1[2]	E.G.Piano2[2]	AtkPiano1[2]	ArcoPiano[3]			
4	HonkyTonk[2]	DetPiano[2]	Western[2]	AtkPiano2[2]				
5	E.Piano1[1]	ThinRhodx[2]	E.Piano4[2]	RhodxFilt[2]	E.PianoMk[2]	E.PianoX[2]	FM Pro	
6	E.Piano2[2]	E.Piano3[2]	E.Piano5[2]	E.PianoSft[2]	DetuneE.P.[2]	DynE.P.[1]	MezzoPiano	
7	Harpsichor[1]	Harpsich2[2]	Harpsich3[1]	LogPiano[2]	ElPianoSeq[1]			
8	Clavinet[1]	SynClav[1]	WowClav[2]	PercPiano[2]				
CHROM PERC. group								
9	Celesta[2]	CelestaPlk[2]	ToyPiano[2]	Balarimba[1]				
10	Glockenspl[2]	GlockVibes[2]	GlockChoir[2]	ToyOrgan[2]				
11	MusicBox[2]	WineGls1[2]	MusicBell[2]	GlockSeq[1]				
12	Vibraphone[1]	Vibes2[1]	SynVibes[2]					
13	Marimba[1]	Marimba2[2]	Mallet[2]	Marimba3[1]				
14	Xylophone[1]	Xylophone2[1]	XyloTribal[2]	SynthMarim[1]				
15	TubularBel[2]	SoftBell[2]	Oohlalaa[2]	VibeSeq[1]	Quasimodo			
16	Santur[2]	BarChimes[1]	Climbing[2]					
ORGAN group								
17	Organ1[2]	16'1'Draw[1]	Organ1WX[2]	OrgTheatre[1]	16'1'Vib3[2]	8'[1]	2'[1]	RockOrgSeq[1]
18	Organ2[1]	16'8'5'Drw[1]	JazzOrgan3[2]	Organ3W[1]	16'[1]	4'[1]	OctaDrawbr[3]	TheatreSus
19	Organ3[2]	SwOrgan[2]	SynOrg1[2]	OrganC3[2]	5'1/3[1]	2'2/3[1]	FiltDrawbr[3]	RotaryPress
20	ChurchOrg1[2]	Church2[1]	Organ3WX[2]	Organ1W[2]	PipeOrg3[2]	Hamclick[2]	SixtDrawbr[3]	
21	ReedOrgan[1]	PipeOrgan[2]	Organ4[2]	PipeChiff[2]	HamDrw[1]	EvocativOr[2]	Bandoneon3[1]	
22	Musette[1]	Accord1[1]	Accord2[2]	Accord3[1]	Accord4[2]	Accord5[1]	Trekzak	Fuzztain
23	Harmonica[1]	Blusette[1]	WestHarmon[1]	Farfis[1]	Hamperc[1]	PercOrgan[2]	DirtyOrgan[3]	The Strat
24	Bandoneon[1]	Cassotto[1]	OrganLfo[2]	Bandoneon2[2]	Diatonic[2]	AccordEnv[1]	OctAccordn[2]	
GUITAR group)								
25	NylonGtr[1]	SoloGtr[1]	VocalGtr[2]	PedalSteel[2]	CrunchGt[1]	NylonGtr2[3]		
26	SteelGtr1[1]	12StrGtr[2]	SteelGtr1[1]	SteelGtr2[1]	Mandolin[1]	Mandolin2[1]	SteelGtr3[1]	
27	JazzGtr1[1]	OctJzGtr[1]	Hawaiian[2]	JazzGtr2[1]	MutedClean[1]	JazzStrato[2]		
28	CleanGtr[1]	ElGuitar1[1]	ChorusGtr[2]	ElGuitar2[2]	Dyn.Clean[2]	ElGuitar3[2]	ElGuitar4[2]	
29	MutedGtr[1]	Muted2[2]	Dyn.Muted[1]	MutedWha[1]	MutedFunk[1]	MandolinSeq[1]		
30	Overdrive[1]	WhaGtr1[2]	5thOverdr[2]	CrunchStb[2]	5thDistort[3]			
31	DistGtr[1]	FuzzGtr[2]	HeavyGt[2]	LeadDist[3]	LeadDist2[3]	LeadDist3[3]		
32	HarmonxGtr[1]	SlowHarmx[2]	HarmGtr3[2]	StratoGt[1]	JazzPick[2]			

The suffix [3] = 3 oscillators per voice. The suffix [2] = 2 oscillators per voice. The suffix [1] = 1 oscillator per voice. The prefix DK = DrumKit

. . . .

ROM-Sounds

Bank	9	10	11	12	13	14	15	16
PIANO group								
1								
2								
3								
4								
5								
6								
7								
8								
CHROM PERC. group								
9								
10								
11								
12								
13								
14								
15								
16								
ORGAN group								
17								
18								
19								
20								
21								
22								
23								
24								
GUITAR group)								
25								ST_Nylon[1]
26						ST_Mandolin[1]	ST_Steel1[1]	ST_Steel2[1]	ST_Steel3[1]
27								ST_12Strng[1]
28								ST_Steel4[1]
29								
30								
31								
32								

ROM-Sounds

Bank	1	2	3	4	5	6	7	8
BASS group								
33	AcoustcBs1[1]	AcoustcBs2[1]	AcousticBs3[2]	Dyn.AcoBs[1]	HarmAcBs[1]	FingerdBs2[1]	DanceBass[2]	TheChopper[2]
34	FingeredBs[1]	Dyn.Fingrd[2]	Dyn.Bass1[1]	Dyn.Baxx[1]	HarmAcBs2[1]	Fretless3[1]	FingerdBs3[2]	LowPassed[2]
35	PickBass[1]	Dyn.Bass2[1]	PckBass2[2]	PkBsMute[1]	HarmElBs[1]	WedgeBass[1]	SubBass[2]	SerialBass[2]
36	Fretless[2]	AcidBass1[2]	Flanged[1]	Fretless2[1]	RezoBass[1]	SynBass5[1]	WowBass[1]	ContraSynB[2]
37	SlapBass1[1]	Dyn.Bass3[1]	SlapSynBs[2]	PckBass3[1]	ClickBass[1]	ToneBass[1]	FingAndSlp[2]	DigiBass[2]
38	SlapBass2[2]	WXBass[2]	StopBass[2]	ThumBass[1]	BleapBass[1]	BassMik[1]	DubbedRezo[2]	PriorBass[2]
39	SynBass1[1]	SynBass3[1]	TecknoBass[2]	AcoustcBs4[1]	SynSlapBs[1]	SpaceBass1[2]	Popcorn[2]	SynBass6[2]
40	SynBass2[2]	SynBass4[2]	RaveBass[2]	SynthBass[2]	HitBass[2]	SpaceBass2[2]	NylonBass[2]	RazorBass[2]
STRINGS group)								
41	Violin[1]	SlowViolin[1]	ViolinOrch[2]					
42	Viola[1]	BowedViola[2]	ViolaPad[2]					
43	Cello[1]	SlowCello[1]	CelloEns[2]	Quartet[1]				
44	Contrabass[1]	BowedBass[2]	Staccato[1]					
45	TremoloStr[1]	OctTremolo[2]	Plectra[1]					
46	Pizzicato[1]	OctPizz[2]	EchoPizz[1]					
47	Harp[1]	HarpDelay[2]	Spacehar[2]					
48	Timpani[1]	TimpaniEFX[2]	Dyn.Orch I'I'I[2]					
ENSEMBLE group)								
49	Strings[1]	StereoStrg[2]	StrgGlock[2]	DualStrgs[2]	StereoOctv[3]			
50	SlwStrings[1]	StrgOrch[2]	St.SlwStrg[2]	Strings2[1]	SlwString2[1]			
51	SynStrg1[2]	SynStrg3[2]	SynStrg5[2]	OrchHits2[1]	SawStrings[2]			
52	SynStrg2[2]	SynStrg4[2]	Strings3[2]	StrEthnic[2]	NoiseUuh[2]			
53	Choir[1]	VoiceUuh[2]	SlowUuh[2]	BackVocals[1]	PannedVox[4]			
54	VoiceOohs[2]	VoiceAah[2]	SlowAah[2]	SimStrings[2]	WideEnsemb[2]			
55	SynVox[2]	SkatVoices[1]	Vocoder[2]	SympMemory[2]	StereoSlow[2]			
56	OrchHits[2]	Rave[2]	Dyn.St.Hit[3]	HitsRev[2]	OctSlowStr[2]			
BRASS group								
57	Trumpet[1]	FlugelAttk[1]	FlugelHorn[1]	DynSection[2]	NoiseTrp[3]			
58	Trombone[1]	Trombone3[1]	WowTromb2[1]	TrombSwell[1]	TrombSlop[2]	TrombSwel2		
59	Tuba[2]	ShortTuba[1]	WowTuba[1]	ClassicBrs[1]	OctBrass1[3]			
60	MutedTrp1[1]	MutedTrp2[1]	Dyn.MtTrp[2]	ModernBrs[1]	OctBrass2[3]			
61	FrenchHorn[2]	Dyn.FrHorn[3]	TotoHorns[2]	FrHrnSwell[2]	FrenchFlut[3]	ColorBrass[2]		
62	Brass[2]	Brass2[2]	BrassRips[1]	BrassFall[2]	BrassTrp[2]	StereoBrs[2]		
63	SynBrass1[2]	SynBras2[2]	SyntHorn[2]	SynBrass3[2]	PercSynBrs[3]			
64	SynBrass2[2]	SlowHorn[2]	AttkHorn[2]	SynBrass4[2]	SynBrass5[2]			

ROM-Sounds

Bank	9	10	11	12	13	14	15	16
BASS group								
33	Vang.Bass							ST_AcousBs[1]
34	DanceFing[2]	Vang.Bass2						ST_FngrdBs[1]
35	SoftBass[2]							ST_PickBs2[1]
36								ST_Fretls1[1]
37								ST_Fretls2[1]
38								ST_FngrBs2[1]
39							ST_PickBs1[1]	ST_Fretls3[1]
40							ST_SynBas4[2]	ST_Fretls4[1]
STRINGS group)								
41								
42								
43								
44								
45								
46								
47								
48								
ENSEMBLE group								
49								
50								
51								
52								
53								
54								
55								
56								
BRASS group								
57								
58								
59								
60								
61								
62								
63								
64								

ROM-Sounds

Bank	1	2	3	4	5	6	7	8
REED group								
65	Soprano[1]	Soprano2[2]	SoprFilter[1]	AltoSax[1]	Safe Sax			
66	SoftSax[1]	SaxNoise[2]	SoftFilt[1]	LiscioSax[1]				
67	TenorSax[1]	OctaveSax[2]	TenFilter[1]	TouchSax[2]				
68	BaritonSax[1]	BaritDet[2]	BariFilter[1]	BaritnSax2[1]				
69	Oboe[1]	OboeChiff[2]	OboeFilter[1]	SaxQuartet[1]				
70	EnglisHorn[2]	EngHorn2[2]	HornFilter[2]	TenSaxSolo[1]				
71	Bassoon[1]	Bassoon2[1]	BassoonFlt[1]	BreathSopr[2]				
72	Clarinet[1]	ClarSolo[2]	ClarFilter[1]	LiscioClar[1]				
PIPE group								
73	Piccolo[1]	HardFlute1[2]	HardFlute2[2]	PanFilter[1]				
74	Flute[1]	Dyn.Flute1[2]	DynHiFlute[2]	ColorWind[2]				
75	Recorder[2]	Recorder2[2]	Bubbler[1]					
76	PanFlute[1]	PanFlute2[2]	Dyn.Pan[2]	Panfluit				
77	BottleBlow[2]	BottleNois[2]	Tube[1]					
78	Shakuhachi[2]	Shakupad[2]	ShakuVoice[2]					
79	Whistle[1]	Whistle1WX[1]	Whistle3WX[2]					
80	Ocarina[2]	OcarinaPan[2]	OcarinaSyn[2]					
SYNTH LEAD group								
81	SquareWave[2]	Pulse1[2]	Pulse2[2]	ProphSaw[1]	SnapSynth[1]	BirAttak[1]	RdPhas[1]	Boss[1]
82	SawWave[2]	ObxFilter[2]	Lyle[2]	TrianWave[1]	SeqTone[1]	Boink[1]	StrnNoise[1]	PannedSeq[2]
83	SynCalliop[2]	Azimut[2]	SynLead1[2]	ClavWave[1]	SeqWoody[1]	Gring[1]	SevenSynth[1]	Joe4lead[2]
84	ChiffLead[3]	Chopper[2]	Digital[2]	PulseWave[1]	SeqStick[1]	Thin[1]	SynthLead[1]	OlFaithful[3]
85	Charang[2]	Jump[2]	SoundTrk[2]	MiniSaw[1]	Inharm1[1]	Buzz[1]	MKSynth[1]	Saw-Me[3]
86	SoloVox[2]	FiltRes1[2]	FiltRes2[2]	MiniPulse[1]	Inharm2[1]	LfxSynth[1]	StlSynth[1]	Saw-You[3]
87	5thSawWave[4]	Decay1[2]	Decay2[2]	DigiWave1[1]	Inharm3[1]	Sharp[1]	Fmlsh[1]	PowerPop[2]
88	BassLead[3]	Obx2[2]	Obx3[2]	DigiWave2[1]	Inharm4[1]	Shape[1]	BtSynth[1]	TooAnalog[3]
SYNTH PAD group								
89	Fantasia[3]	NewAge[2]	PPG[2]	Fantasy1[3]	Form1[1]	LogStr[1]	PrettyPad1[2]	RichForm[2]
90	WarmPad[2]	Obx1[2]	AnlgPad[2]	Waveaura[2]	Form2[1]	MarimVox[2]	PrettyPad2[3]	BellPad01[2]
91	Polysynth[2]	Fantasy2[2]	Fantasy3[2]	Awala[1]	Form3[1]	Pad4U[1]	Fantasy4[3]	BellPad02[2]
92	SpaceVoice[2]	VocBells[2]	Angels[2]	OcBreath[2]	Form4[1]	MyVox[1]	StereoFrm1[2]	StereoFrm3[2]
93	BowedGlass[2]	Prophet1[2]	Prophet2[2]	Panch[1]	Form5[1]	PadZone1[1]	FizzyPad[2]	BellPad03[2]
94	MetalPad[2]	Bright2[2]	Analogic[2]	Bright3[3]	Form6[1]	PadZone2[1]	BandSweep[2]	BellPad04[2]
95	HaloPad[3]	Slave[2]	Atmosphere[2]	Ppg[1]	Form7[1]	PluckPad[1]	EpicPan[2]	BellPad05[2]
95	SweepPad[2]	Machiner[2]	Decay3[2]	Waiting[2]	Budweis[2]	Tibet[2]	StereoFrm2[2]	StereoFrm4[2]

ROM-Sounds

Bank	9	10	11	12	13	14	15	16
REED group								
65								
66								
67								
68								
69								
70								
71								
72								
PIPE group								
73								
74								
75								
76								
77								
78								
79								
80								
SYNTH LEAD group								
81	FatSynth[2]	MinBitSyn1[2]	FxShape[2]	Eerie1[2]	Vangelis1			
82	WhaSynth[2]	MinBitSyn2[2]	SharpBuzz[2]	Eerie2[2]	Vangelis2			
83	Outburst[2]	DigGrunge1[2]	MinStack[4]	Eerie3[2]	An A.Logic			
84	Its1985[2]	DigGrunge2[2]	MajStack[4]	Eerie4[2]	Spiral			
85	FMbefore[2]	ToneZone1[2]	DimStack[4]	VocoWah[2]	Phat Pulse			
86	CrossShape[2]	ToneZone2[2]	Maj5Stack[4]	ThinWha[2]	Soft Seq.			
87	CrossSharp[2]	ToneZone3[2]	Min7Stack[4]	FatAttak1[2]	Soft Lead			
88	CrossWires[2]	ToneZone4[2]	Maj7Stack[4]	FatAttak2[2]	Alf's Lead			
SYNTH PAD group								
89	IcePad1[2]							
90	IcePad2[2]	Alf's Pad						
91	BassPad[2]	Alf's Pad2						
92								
93								
94								
95								
96								

ROM-Sounds

Bank	1	2	3	4	5	6	7	8
SYN SFX group								
97	IceRain[3]	Noiseres[2]	BigRoom[2]	Submarin[2]	Impact[1]	Mech-Lp[1]	Yowww[3]	HitThePipe[2]
98	Soundtrack[2]	MoonWind[2]	Slope[2]	Ekoendls[2]	SynRain[2]	Mech-Wv[1]	Stars[2]	StabSynth[2]
99	Crystal[2]	Wind[2]	SynLead2[2]	Jets[2]	SeqSnap[1]	SeqCook[1]	Babbling[1]	MetalWork[2]
100	Atmosphere[2]	Arp26000[2]	GlockAthm[2]	Smak[2]	ColorBlast[2]	BounSync[2]	Synkro[2]	DigiDrops[2]
101	Brightness[3]	WithGas[2]	PopUp[2]	OnOff[2]	Spect1[1]	Atomic[2]	JimisDream[2]	WoodCutter[2]
102	Goblin[2]	Resonance[2]	NoGravity[2]	Synthex3[2]	Spect2[1]	SawModula[2]	TunedNoise[1]	SnapOff[2]
103	EchoDrops[2]	Synthex1[2]	Synthex2[2]	Synthex4[2]	Synthex5[2]	Synthex6[2]	BlasteRel[2]	SilicaPick[2]
104	StarTheme[2]	StarTheme2[2]	PowerBad[2]	StarTheme3[2]	Spect3[1]	HiJoe[2]	StarTheme4[3]	Yourimba[2]
ETHNIC group								
105	Sitar[1]	SitarDet[2]	SynSitar[2]	Kalimba2[1]				
106	Banjo[2]	BanjoOct[2]	EthnicGtr[2]	KalimShot[1]				
107	Shamisen[1]	ShamSitar[2]	SynSham[2]					
108	Koto[1]	Kanoun[2]	TrpClarin[1]					
109	Kalimba[1]	ShrtKalimb[2]	SaxTrumpt[1]	Kalimba3[1]				
110	Bagpipe[1]	BagpipeEns[2]	BrassEns[2]					
111	Fiddle[1]	Hukin[2]	FiddleBell[2]					
112	Shanai[1]	BacktoWS[2]	VoiceSpect[2]					
PERCUSSIVE group								
113	TinkleBell[2]	DK_STAND.1	DK_STAND.2	DK_STAND.3	DK_STD.2WX	DK_STAND.5	DK_HOUSE2	Vang. Kit
114	Agogo[1]	DK_ROOM	DK_WS	DK_ROOM1WX	DK_ROOM2WX	DK_STD'70	DK_HIPHOP	DK_ROCK
115	SteelDrums[2]	DK_POWER	DK_STD.1WX	DK_POWER1WX	DKPOWER2WX	DK_HYBRID1	DK_DANCE2	DK_STAND.9
116	Woodblock[1]	DK_ELECT	DK_DANCE	DK_ELECT1WX	DKELECT2WX	DK_FUSION	DK_TEK'90A	DK_STAND10
117	Taiko[2]	DK_HOUSE	DK_TECHNO	DK_HOUSE1WX	DKHOUSE2WX	DK_STAND.6	DK_TEKBRSH	DK_TEK'90B
118	Melo.Tom1[1]	DK_JAZZ1	DK_JAZZ2	DK_JAZZ_WX	DK_STAND.4	DK_STAND.7	DK_ELECT.2	DK_TUNED
119	SynthDrum[1]	DK_BRUSH	DK_M1	DK_BRUSHWX	DK_BRUSH2	DK_STAND.8	DK_DNC1999	DK_HYBRID2
120	ReverseCym[1]	DK_ORCH	DK_SY77	DK_ORCH_WX	SD_ONLY_KT	DK_JAZZ3	DK_POLY	BD_ONLY_KT
SFX group								
121	GtFretNois[1]	Gtr.WhaWha|'|'|[1]	GtrNoise[1]					
122	BreathNois[1]	Zapp[1]	KeyClick[1]					
123	Seashore[2]	TickTack[1]	Drop[1]					
124	Bird[2]	Scratch1[1]	Water[1]					
125	Telephone1[1]	Telephone2[1]	Door[1]					
126	Helicopter[2]	SynPerc3[2]	Clackson[2]					
127	Applause[2]	HeartBeat[2]	PickScrape[1]					
128	GunShot[1]	Explosion[2]	Bomb[2]					

ROM-Sounds

Bank	9	10	11	12	13	14	15	16
SYN SFX group								
97	BDHOUSE1[1]	BDHOUSE2[1]	BDELECT1[1]	BDJAZZ[1]	BDROOM1[1]	BDSTD1[1]	BDSTD2[1]	BDSTD3[1]
98	BDTEKNO[1]	BDORCH[1]	BDPOWER[1]	ACOUST_KIK[1]	BD_KIK[1]	BD_70_P[1]	BD_70_F[1]	CLAP_MIX[1]
99	RIMSHOT1[1]	RIMSHOT2[1]	HOUSERIM[1]	STICK[1]	RIM_70[1]	RIM_1[1]	RIM_2[1]	EFF_RIM[1]
100	SDELECT[1]	DYNSDJAZZ[1]	SDJAZZ2[1]	SDJAZZ3[1]	SDORCH[1]	SDROOM1[1]	SDROOM2[1]	SDSTD1[1]
101	SDSTD2[1]	SDSTD3[1]	SDSTD4[1]	HOUSSD1[1]	HOUSESD2[1]	ROLL_70[1]	ROLL_F_LN[2]	ROLL_F[1]
102	HOUSECLAP[1]	CLAP[1]	BD_AC_1DYN[1]	BD_AC_2DYN[1]	BD_AC_1A[1]	BD_AC_1B[1]	BD_AC_2A[1]	BD_AC_2B[1]
103	ROLLSNARE[1]	BRUSREV[1]	BRUSRIG[1]	BRUSHSLP[1]	BRUSHTAP[1]	TOM_14[1]	TOM_13_DYN[2]	TOM_10_DYN[2]
104	TOMELEC[1]	TOMHIGH[1]	TOMJAZZ[1]	TOMROOM[1]	TIMP_JM[1]	TOMLOW[1]	TIMPANI[1]	OPSURDO2[1]
ETHNIC group								
105	HHCLO1L[1]	HHCLO1S[1]	HHOPEN1[1]	HHPEDAL[1]	HHTGHT1[1]	HHTGHT2[1]	HOUSEHH[1]	HHCLO2[1]
106	HHOPEN2[1]	HHCL_70[1]	HHFT_70[1]	HHOP_70[1]	HH_CL1_DR[1]	HH_CL2_DR[1]	HH_PED_DR[1]	HH_OP_DR[1]
107	CRASHORCH[1]	CRASH[1]	HOUSERIDE[1]	RIDECUP[1]	RIDECYM[1]	SPLASH[1]	CHINA[1]	SMASH[1]
108	TAMBOURINE[1]	TAMBSLP[1]	COWBELL[1]	VIBRASLAP[1]	HOUSECOWB[1]	COWBL2[1]	RIDE[1]	RIDECUP[1]
109	BONGOHISL[1]	CONGALSLAP[1]	BONGOLOW[1]	CONGAHSLAP[1]	CONGALSLAP[1]	CONGAHIGH[1]	CONGALOW[1]	HOUSETCON[1]
110	TIMBALES[1]	TIMBLOW[1]	AGOGO[1]	CABASA[1]	CABASAL[1]	MARACAS[1]	WHISTLE[1]	MUTBELL[2]
111	GUIROLONG[1]	GUIROSHORT[1]	CLAVES[1]	WOODBLOCK[1]	QUICAHIGH[1]	QUICALOW[1]	TRIANLONG[1]	TRIANSHORT[1]
112	SHAKER[1]	JINGLEBELL[1]	WINDCHIMES[1]	CASTANETS[1]	MTSURDO[1]	OPSURDO1[1]	DARBKHIGH[1]	DARBKLOW[1]
PERCUSSIVE group								
113	FINGERSNAP[1]	DROP[1]	NOISE2[1]	WATER[1]	DOOR[1]	KITCHEN[1]	LOGDRUM[1]	CLAKSON[1]
114	VOICES1[1]	VOICES2[1]	VOICES3[1]	VOXHHCL[1]	VOXTAP[1]	VOXTIP[1]	DOLLYVOX[1]	BABYVOX[1]
115	FINGBELL[1]	ZAPP[1]	SCRATCH1[1]	SCRATCH2[1]	TOMBRUSH[2]	HOU_TOM[1]	SQCLICK[1]	DYTEK_TIMB[2]
116	NOISEPERC[1]	RASPYRIDE[1]	CRASH_18[1]	HARD_CLAP[1]	SD_BB[1]	D_SD[1]	BEAT_SD[1]	SD_909[1]
117	SD_STD1[1]	SD_STD2[1]	SD_STD3[1]	SD_STD4[1]	SD_P70[1]	SD_F70[1]	SD_BR[1]	SD_BR_DYN[2]
118	SD_SH1[1]	SD_SH2[1]	SD_SH3[1]	SD_FSN[1]	EFF_SD2[1]	808_CL_HH[1]	808_OC_HH[1]	808_OPHHLP[1]
119	REZO_IT[3]	LNG_BD1[1]	BD_DMGD_LN[1]	BD_DNC2_LN[1]	BD_DNC3[1]	BD_Z1_LAYL[2]	DNC_BD1[1]	BD_Z2[1]
120	LONG_REVRS[1]	BD_Z1_LAYH[2]	9091_CHH[1]	9091_OCHH[1]	9092_CHH[1]	9092_OPHH[1]	HH_LOOP_CL[1]	HH_LOOP_OP[1]
SFX group								
121	WhaWha1[1]	WhaWha2[1]	WhaWha3[1]	WhaWha4[1]	Noisnare1[2]	SD_HEAVY1[2]	SD1[2]	BD_DEEP_DN[2]
122	Glasses[1]	ReverseBd1[1]	ReverSnar1[1]	ReverShrt1[1]	Noisnare2[2]	SD_HEAVY2[2]	SD2[2]	TOMLOW2[2]
123	TekBrush[2]	ReverseBd2[1]	ReverSnar2[1]	ReverShrt2[1]	Noisnare3[2]	SD_HEAVY3[2]	SD3[2]	TOMHIGH2[2]
124	Highhh[1]	ReverseBd3[1]	ReverSnar3[1]	ReverShrt3[1]	Noisnare4[2]	SD_HEAVY4[2]	909_SD_LNG[2]	BD1[1]
125	PhoneWave[1]	SCRATCH3[1]	DYNA_PERC[2]	NOISE_C1HH[1]	BrokeNoise[2]	BD_DN1_ZP[2]	BD_Z1_HHC[2]	BORDER_1[2]
126	RndEnArm[2]	SCRATCH4[1]	SD_ROCK[2]	NOISE_C2HH[1]	HatOrSnare[2]	BD_DN2_ZP[2]	BD_DN3_HI[2]	BORDER_2[2]
127	OddSpace[2]	SCRATCH5[1]	BD_ROCK[2]	NOISE_OPHH[1]	FallingBD[2]	BD_DN3_ZP[2]	BD_DN2_HI[2]	Sinus[1]
128	GlassalG[2]	SCRATCH6[1]	WEEP[1]	NOISE_OPRV[1]	WayaW[2]	BN_DN3_SD[2]	BD_DMG_SD[2]	Empty[1]

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Drumkits

Note	Instrument
C5 = 72	
72	WHISTLE 110-15
73	GUIROSHORT 111-10
74	GUIROLONG 111-9
75	CLAVES 111-11
76	WOODBLOCK 111-12
77	WOODBLOCK 111-13
78	QUICAHIGH 111-13
79	QUICALOW 111-14
80	TRIANSHORT 111-16
81	TRIANLONG 111-15
82	SHAKER 112-9
83	JINGLEBELL 112-10
84	WINDCHIMES 112-11
85	CASTANETS 112-12
86	MTSURDO 112-13
87	OPSURDO 112-14
88	^
89	^
90	^
91	^
92	^
93	^
94	^
95	^
C7 / 96	^
97	^
98	^
99	^
100	^
101	^
102	^
103	^
104	^
105	^
106	^
107	^
C8 / 108	^

"<" = same as DK_STAND1 113-2-1

A•10 Appendix

Drumkits

#	DK_STAND1 113-2-1	DK_ROOM 114-2-1	DK_POWER 115-2-1	DK_ELECT 116-2-1	DK_HOUSE 117-2-1	DK_JAZZ 118-2-1
25	ROLLSNARE 103-9	^	^	^	^	^
26	FINGERSNAP 113-9	^	^	^	^	^
27	ZAPP 115-10	^	^	^	^	^
28	GunShot 128-1	^	^	^	^	^
29	SCRATCH2 115-12	^	^	^	^	^
30	SCRATCH1 115-11	^	^	^	^	^
31	STICK 99-12	^	^	^	^	^
32	SQCLICK 115-15	^	^	^	^	^
33	HOUSERIM 99-11	^	^	^	^	^
34	MUTBELL 110-16	^	^	^	^	^
35	BDSTD2 97-15	BDROOM2 97-15	BDELECT1 97-11	BDELECT1 97-11	BDHOUSE2 97-10	BDJAZZ 97-12
36 (C2)	BDSTD1 97-14	BDROOM1 97-13	BDROOM1 97-13	BDELECT1 97-11	BDHOUSE	^
37	RIMSHOT1 99-9	^	^	^	HOUSERIM 99-11	^
38	SDSTD1 100-16	SDROOM1 100-14	SDROOM1 100-14	SDELECT 100-9	SDELECT 100-9	SDJAZZ3 100-12
39	HOUSECLAP 102-9	^	^	^	^	^
40	SDSTD4 101-11	SDROOM2 100-15	SDSTD3 101-10	SDROOM2 100-15	HOUSESD2 101-13	SDSTD3 101-10
41	TOMLOW 104-14	TOMROOM 104-12	TOMROOM 104-12	TOMELEC 104-9	HOUSETON 109-16	TOMJAZZ 104-11
42	HHCLO1S 105-10	HHTGHT1 105-13	HHTGHT1 105-13	^	HOUSEHH 105-15	HHTGHT1 105-13
43	TOMLOW 104-14	TOMROOM 104-12	TOMROOM 104-12	TOMELEC 104-9	HOUSETON 109-16	TOMJAZZ 104-11
44	HHPEDAL 105-12	^	^	^	HOUSEEHH 105-15	^
45	TOMLOW 104-14	TOMROOM 104-12	TOMROOM 104-12	TOMELEC 104-9	HOUSETON 109-16	TOMJAZZ 104-11
46	HHOPEN2 106-9	^	^	HHOPEN1 105-11	HHOPEN1 105-11	HHOPEN1 105-11
47	TOMLOW 104-14	TOMROOM 104-12	TOMROOM 104-12	TOMELEC 104-9	HOUSETCON 109-16	TOMJAZZ 104-11
48 (C3)	TOMHIGH 104-10	TOMROOM 104-12	TOMROOM 104-12	TOMELEC 104-9	HOUSETCON 109-16	TOMJAZZ 104-11
49	CRASH 107-10	^	^	^	^	^
50	TOMHIGH 104-10	TOMROOM 104-12	TOMROOM 104-12	TOMELEC 104-9	HOUSERIDE 107-11	TOMJAZZ 104-11
51	RIDECYM 107-13	^	^	HOUSETCON 109-16	HOUSETCON 109-16	^
52	CHINA 107-15	^	ReverseCym 120-1	^	^	^
53	RIDECUP 107-12	^	^	^	^	^
54	TAMBSLP 108-10	^	^	^	^	^
55	SPLASH 107-14	^	^	^	^	^
56	COWBELL 108-11	^	^	HOUSECOWB 108-13	^	^
57	CRASH 107-10	^	^	^	^	^
58	VIBRASLAP 108-12	^	^	^	^	^
59	RIDECYM 107-13	^	^	^	^	^
60 (C4)	CONGASLAP 109-10	^	^	^	^	^
61	BONGOLOW 109-11	^	^	^	^	^
62	CONGAHSLAP 109-12	^	^	^	HOUSETCON 109-16	^
63	CONGAHIGH 109-14	^	^	^	HOUSETCON 109-16	^
64	CONGALOW 109-15	^	^	^	HOUSETCON 109-16	^
65	TIMBALES 110-9	^	^	^	HOUSETCON 109-16	^
66	TIMBLOW 110-10	^	^	^	HOUSETCON 109-16	^
67	AGOGO 110-11	^	^	^	^	^
68	AGOGO 110-11	^	^	^	^	^
69	CABASA 110-12	^	^	^	^	^
70	MARACAS 110-14	^	^	^	VOXHHCL 114-12	^
71	WHISTLE 110-15	^	^	^	^	^

Tables A•11

Keyboard map (C5, C6, C7, C8):

Key numbers: 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108

Sound
BONGOLOW 109-11 < <
BONGOLOW 109-11 < <
CONGASLAP 109-12 < <
CONGAHIGH 109-14 < <
CONGALOW 109-15 < <
GUIRLONG 111-9 < <
QUICALOW 111-14 < <
TIMBALES 110-9 < <
TIMBALES 110-9 < <
AGOGO 110-11 < <
TRIANLONG 111-15 < <
WHISTLE 110-15 < <
BDHOUSE1 97-9 < <
NOISEPERC 116-9 < <
HOUSSD1 101-12 < <
VOICES1 114-9 < <
VOICES1 114-11 < <
VOICES2 114-10 <
VOICES3 114-11 <
VOXHHCL 114-12 <
VOICES2 114-10 <
VOXTIP 114-14 <
VOXTAP 114-13
CLAKSON 113-16
DOLLYVOX 114-15
TAMBSLP 108-10
ROLLSNARE 103-9
SDORCH 100-13
HHCLO1S 105-10
CLAVES 111-11
CONGALOW 109-15
QUICAHIGH 111-13
AGOGO 110-11
STICK 99-12
STICK 99-12
STICK 99-12
STICK 99-12
STICK 99-12

Applause 127-1

"<" = same as DK_STAND1 113-2-1

Drumkits

Note	DK_BRUSH 119-2-1	DK_ORCH. 120-2-1	DK_STAND2 113-3-1	DK_WS 114-3-1	DK_STD.1WX 115-3-1	DK_DANCE 116-3-1
25	^	^	^	^	^	^
26	^	^	^	^	^	^
27	^	^	^	^	^	^
28	HHTGHT1 105-13	HHTGHT1 105-13	^	^	^	^
29	HHPEDAL 105-12	HHPEDAL 105-12	^	^	^	^
30	HHOPEN2 106-9	HHOPEN2 106-9	^	^	^	^
31	RIDECYM 107-13	RIDECYM 107-13	^	^	^	^
32	^	^	^	^	^	^
33	^	^	^	^	^	^
34	^	^	^	^	^	^
35	^	^	^	^	^	^
36 (C2)	BDJAZZ 97-12	BDORCH 98-10	BDSTD3 97-16	BDPOWER 98-11	BDELECT1 97-11	BDELECT1 97-11
37	^	BDSTD3 97-16	BDSTD3 97-16	SDELECT 100-9	BDROOM1 97-13	BDELECT1 97-11
38	BRUSHTAP 103-13	SDORCH 100-13	SDSTD4 101-11	SDROOM2 100-15	SDROOM2 100-15	SDELECT 100-9
39	BRUSHSLP 103-12	CASTANETS 112-12	^	TOMHIGH 104-10	SDROOM1 100-14	SDROOM2 100-15
40	BRUSREV 103-10	SDORCH 100-13	SDSTD3 101-10	SDSTD3 101-10	SDSTD3 101-10	SDROOM1 100-14
41	TOMBRUSH 115-13	TOMPANI 104-15	TOMHIGH 104-10	TOMHIGH 104-10	SDROOM2 100-15	SDROOM2 100-15
42	HHTGHT1 105-13	TOMPANI 104-15	HHCLO2 105-16	CABASA 110-12	HHTGHT1 105-13	HHTGHT1 105-13
43	TOMBRUSH 115-13	TOMPANI 104-15	^	TAMBSLP 108-10	TOMELEC 104-9	TOMELEC 104-9
44	TOMBRUSH 115-13	TOMPANI 104-15	^	^	HHOPEN1 105-11	^
45	TOMBRUSH 115-13	TOMPANI 104-15	^	COWBELL 108-11	TOMELEC 104-9	TOMELEC 104-9
46	TOMBRUSH 115-13	TOMPANI 104-15	^	RIMSHOT2 99-10	HHOPEN1 105-11	^
47	TOMBRUSH 115-13	TOMPANI 104-15	^	BDJAZZ 97-12	TOMELEC 104-9	TOMELEC 104-9
48 (C3)	TOMBRUSH 115-13	TOMPANI 104-15	^	BRUSRIG 103-11	TOMELEC 104-9	TOMELEC 104-9
49	TOMBRUSH 115-13	TOMPANI 104-15	^	DYNSDJAZZ 100-10	^	^
50	TOMBRUSH 115-13	TOMPANI 104-15	^	BRUSHTAP 103-13	TOMELEC 104-9	TOMELEC 104-9
51	TOMBRUSH 115-13	TOMPANI 104-15	^	TOMJAZZ 104-11	^	^
52	^	TOMPANI 104-15	^	TOMJAZZ 104-11	ReverseCym 120-1	^
53	^	TOMPANI 104-15	^	TOMJAZZ 104-11	^	^
54	^	TOMPANI 104-15	^	HHCLO1S 105-10	TOMELEC 104-9	TOMELEC 104-9
55	^	TOMPANI 104-15	^	HHCLO1S 105-10	TOMELEC 104-9	TOMELEC 104-9
56	^	TOMPANI 104-15	^	HHPEDAL 105-12	^	^
57	TOMBRUSH 115-13	TOMPANI 104-15	^	TOMJAZZ 104-11	TOMELEC 104-9	TOMELEC 104-9
58	TOMBRUSH 115-13	TOMPANI 104-15	^	^	TOMELEC 104-9	TOMELEC 104-9
59	^	CRASHORCH 107-9	^	HHOPEN2 106-9	^	^
60 (C4)	CRASHORCH 107-9	^	^	HOUSCLAP 102-9	^	^
61	^	^	^	BDSTD1 97-14	^	^
62	^	^	^	RIDECYM 107-13	^	^
63	^	^	^	SDSTD1 100-16	^	^
64	^	^	^	RIDECUP 107-12	^	^
65	^	^	^	TOMROOM 104-12	^	^
66	^	^	^	TOMROOM 104-12	^	^
67	^	^	^	TOMROOM 104-12	^	^
68	^	^	^	SPLASH 107-14	^	^
69	^	^	^	CRASH 107-10	^	^
70	^	^	^	VIBRASLAP 108-12	^	^
71	^	^	^	CHINA 107-15	^	^
				FINGERSNAP 113-9		

Note	Column 1	Column 2	Column 3
72 (C5)	CONGAHIGH 109-14	BreatNois 122-1	GUIRLONG 111-9
73	TIMBALES 110-9	VIBRASLAP 108-12	
74	TRIANSHORT 111-16	VOICES1 114-9	
75	TIMBALES 110-9	VOICES1 114-9	
76	TRIANLONG 111-15	VOICES1 114-9	
77	NOISEPERC 116-9	VOICES1 114-9	
78	NOISEPERC 116-9	VOICES1 114-9	
79	DOOR 113-13	VOICES1 114-9	
80	NOISEPERC 116-9	VOICES1 114-9	
81	SDSTD2 101-9	VOICES1 114-9	
82	ROLLSNARE 103-9	VOICES1 114-9	
83	SDSTD3 101-10	VOICES1 114-9	FINGERSNAP 113-9
84 (C6)		VOICES1 114-9	CELESTA 9-1-9
85		VOICES1 114-9	BARCHIMES 16-2-1
86		VOICES1 114-9	DARBKHIGH 112-15
87		VOICES1 114-9	DARKLOW 112-16
88		VOICES1 114-9	DROP 113-13
89		VOICES1 114-9	WATER 113-12
90		VOICES1 114-9	VOICES1 114-9
91		VOICES1 114-9	VOXTAP 114-13
92		VOICES1 114-9	VOXTIP 114-14
93		VOICES1 114-9	CLACKSON 113-16
94		VOICES1 114-9	DOOR 113-13
95		VOICES1 114-9	RASPY RIDE 116-10
96 (C7)		VOICES1 114-9	BABYVOX 114-16
97		VOICES1 114-9	EMPTY
98			
99			
100			
101			
102			
103			
104			
105			
106			
107			
108 (C8)			

"<" = same as DK_STAND1 113-2-1

A•14 Appendix

Note	DK_TECHNO 117-3-1	DK_JAZZ 118-3-1	DK_M1 119-3-1	DK_SY77 120-3-1	DK_STAND.3 113-4-1	DK_ROOMWX 114-4-1
25	^	^	^	^	^	ZAPP 115-10
26	^	^	^	^	^	ZAPP 115-10
27	^	^	^	^	^	KITCHEN 113-14
28	^	^	^	^	^	SCRATCH1 115-12
29	^	^	^	^	^	^
30	^	^	^	^	^	^
31	^	^	^	^	^	^
32	^	^	^	^	^	^
33	^	^	^	^	^	RIMSHOT1 99-9
34	^	^	^	^	^	BABYVOX 114-16
35	BDTEKNO 98-9	^	^	^	^	^
36 (C2)	BDJAZZ 97-12	BDJAZZ 97-12	^	BDSTD2 97-15	BDSTD2 97-15	BDSTD1 97-14
37	HOUSERIM 99-11	RIMSHOT2 99-10	BDROOM1 97-13	BDROOM1 97-13	RIMSHOT1 99-9	^
38	HOUSSD1 101-12	SDJAZZ3 100-12	BDELECT1 97-11	BDELECT1 97-11	SDORCH 100-13	SDSTD2 101-9
39	^	^	BDHOUSE1 97-9	BDPOWER 98-11	^	^
40	HOUSESD2 101-13	DYNSDJAZZ 100-10	BDPOWER 98-11	TOMLOW 104-14	SDJAZZ3 100-12	SCSTS3 101-10
41	HOUSETCON 109-16	TOMJAZZ 104-11	TOMLOW 104-14	TOMLOW 104-14	^	TOMROOM 104-12
42	HHCLO2 105-16	HHTGHT1 105-13	SDSTD1 100-13	TOMHIGH 104-10	HHTGHT1 105-13	^
43	HOUSETCON 109-16	TOMJAZZ 104-11	SDORCH 100-13	TOMHIGH 104-10	^	TOMROOM 104-12
44	HHTGHT1 105-13	TOMJAZZ 104-11	SDSTD3 101-10	TOMHIGH 104-10	^	TOMROOM 104-12
45	HOUSETCON 109-16	TOMJAZZ 104-11	BDHOUSE1 97-9	BDHOUSE1 97-9	^	TOMROOM 104-12
46	HOUSERIDE 107-11	HHOPEN1 105-11	SDROOM2 100-15	SDSTD1 100-16	HHOPEN1 105-11	HHOPEN1 105-11
47	HOUSETCON 109-16	TOMJAZZ 104-11	RIMSHOT1 99-9	TOMROOM 104-12	^	TOMROOM 104-12
48 (C3)	HOUSETCON 109-16	TOMJAZZ 104-11	SDROOM2 100-15	TOMROOM 104-12	^	TOMROOM 104-12
49	HHOPEN2 106-9	^	TOMLOW 104-14	SDSTD3 101-10	^	^
50	HOUSETCON 109-16	TOMJAZZ 104-11	TOMROOM 104-14	TOMROOM 104-12	^	TOMROOM 104-12
51	ReverseCym 120-1	^	TOMLOW 104-14	TOMROOM 104-12	^	TOMROOM 104-12
52	HOUSETCON 109-16	TOMJAZZ 104-11	TOMROOM 104-14	TOMROOM 104-12	^	TOMROOM 104-12
53	^	^	HHCLO1S 105-10	SDELECT 100-9	^	^
54	^	^	HOUSEHH 105-15	TOMROOM 104-12	^	^
55	HOUSECOWB 108-13	^	HHPEDAL 105-12	COWBELL 108-11	^	^
56	^	^	HOUSERIDE 107-11	CABASA 110-12	^	^
57	^	^	HOUSERIDE 107-11	RIDECUP 107-12	^	^
58	^	^	HHOPEN2 106-9	HHCLO1S 105-10	^	^
59	^	^	TAMBOURINE 108-9	TAMBOURINE 108-9	^	^
60 (C4)	^	^	HHOPEN2 106-9	HHOPEN2 106-9	^	^
61	^	^	CRASH 107-10	CRASH 107-10	^	^
62	HOUSETCON 109-16	^	CHINA 107-15	ROLLSNARE 103-9	^	^
63	HOUSETCON 109-16	^	RIDECYM 107-13	RIDECYM 107-13	^	^
64	HOUSETCON 109-16	^	RIDECUP 107-12	RIDECUP 107-12	^	^
65	DYNSDJAZZ 100-10	^	CABASA 110-12	TubularBel 15-1	^	TIMBALES 110-9
66	SDJAZZ 100-11	^	VOXHHCL 114-12	TubularBel 15-1	^	^
67	^	^	HOUSCLAP 102-9	TubularBel 15-1	^	^
68	^	^	BONGOLOW 109-11	KITCHEN 113-14	^	^
69	^	^	BONGOLOW 109-11	KITCHEN 113-14	^	^
70	VOXHHCL 114-12	^	DARBKLOW 112-16	DARBKLOW 112-16	^	VOXHHCL 114-12
71	^	^	CONGALOW 109-15	BreathNois 122-1	^	^

Drumkits

Note					
C5 72	^	^	^	^	^
73	^	^	^	^	^
74	GUIROLONG 113-9	GUIROLONG 113-9	GUIROLONG 113-9	GUIROLONG 113-9	GUIROLONG 113-9
75	^	^	^	^	^
76	^	^	^	^	^
77	^	^	^	^	^
78	^	^	^	^	^
79	^	^	^	^	^
80	^	^	^	^	^
81	^	^	^	^	^
82	^	^	^	^	^
83	FINGERSNAP 113-9	FINGERSNAP 113-9	CABASAL 110-13	FINGERSNAP 113-9	FINGERSNAP 113-9
C6 84	CELESTA 9-1	CELESTA 9-1	CELESTA 9-1	CELESTA 9-1	CELESTA 9-1
85	BARCHIMES 16-2	BARCHIMES 16-2	BARCHIMES 16-2	BARCHIMES 16-2	BARCHIMES 16-2
86	DARBKHIGH 112-15	DARBKHIGH 112-15	DARBKHIGH 112-15	DARBKHIGH 112-15	DARBKHIGH 112-15
87	DARBKLOW 112-16	DARBKLOW 112-16	DARBKLOW 112-16	DARBKLOW 112-16	DARBKLOW 112-16
88	DROP 113-10	DROP 113-10	DROP 113-10	DROP 113-10	DROP 113-10
89	WATER 113-12	WATER 113-12	WATER 113-12	WATER 113-12	WATER 113-12
90	VOICES1 114-9	VOICES1 114-9	VOICES1 114-9	VOICES1 114-9	VOICES1 114-9
91	VOXTAP 114-13	VOXTAP 114-13	VOXTAP 114-13	VOXTAP 114-13	VOXTAP 114-13
92	VOXTIP 114-14	VOXTIP 114-14	VOXTIP 114-14	VOXTIP 114-14	VOXTIP 114-14
93	CLAKSON 113-16	CLAKSON 113-16	CLAKSON 113-16	CLAKSON 113-16	CLAKSON 113-16
94	DOOR 113-13	DOOR 113-13	DOOR 113-13	DOOR 113-13	DOOR 113-13
95	RASPYRIDE 116-10	RASPYRIDE 116-10	RASPYRIDE 116-10	RASPYRIDE 116-10	RASPYRIDE 116-10
C7 96	BABYVOX 114-16	BABYVOX 114-16	BABYVOX 114-16	BABYVOX 114-16	BABYVOX 114-16
97	EMPTY 128-16	EMPTY 128-16	EMPTY 128-16	EMPTY 128-16	EMPTY 128-16
98					
99					
100					
101					
102					
103					
104					
105					
106					
107					
C8 108					

"< " = same as DK_STAND1 113-2-1

Drumkits

Note		DK_POWER1WX 115-4-1	DK_ELECT1WX 116-4-1	DK_HOUSE1WX 117-4-1	DK_JAZZNWX 118-4-1	DK_BRUSHWX 119-4-1	DK_ORCHWX 120-4-1
25		ZAPP 115-10	ZAPP 115-10	ZAPP 115-10	ZAPP 115-10	ZAPP 115-10	ZAPP 115-10
26		ZAPP 115-10	ZAPP 115-10	ZAPP 115-10	ZAPP 115-10	ZAPP 115-10	ZAPP 115-10
27		^	^	^	^	^	HHCLOIS 105-10
28		KITCHEN 113-14	KITCHEN 113-14	KITCHEN 113-14	KITCHEN 113-14	KITCHEN 113-14	HKCLOIS 105-10
29		SCRATCH1 115-12	SCRATCH1 115-12	SCRATCH1 115-12	SCRATCH1 115-12	SCRATCH1 115-12	HHCLOIL 105-9
30		^	^	^	^	^	HHOPEN2 106-9
31		^	^	^	^	^	RIDECYMB 107-13
32		^	^	^	^	^	^
33		RIMSHOT1 99-9	RIMSHOT1 99-9	RIMSHOT1 99-9	RIMSHOT1 99-9	RIMSHOT1 99-9	RIMSHOT1 99-9
34		BABYVOX 114-16	BABYVOX 114-16	BABYVOX 114-16	BABYVOX 114-16	BABYVOX 114-16	BABYVOX 114-16
35		BDSTD1 97-11	BDSTD1 97-11	BDHOUSE 97-9	BDJAZZ 97-12	BDSTD2 97-15	BDELECT1 97-11
36	C2	BDELECT1 97-11	BDELECT1 97-11	HOUSERIM 99-11	HOUSERIM 99-11	BRUSHTAP 103-13	SDJAZZ3 100-12
37		SDROOM2 110-15	SDROOM2 110-15	HOUSSD1 101-12	SDJAZZ2 100-11	BRUSHSLAP	FINGERSNAP 113-8
38		SDROOM2 110-15	SDROOM2 110-15	HOUSSD1 101-12	SDJAZZ2 100-11	^	SDJAZZ3 100-12
39		^	^	^	^	^	^
40		SDSTD3 101-10	SDSTD2 101-9	SDSTD2 101-9	SDJAZZ3 100-12	BRUSHREV 103-10	SDJAZZ3 100-12
41		TOMROOM 104-12	TOMROOM 104-12	HOUSEHH 105-15	^	TIMPANI 48-1	TIMPANI 48-1
42		TOMROOM 104-12	^	HOUSEHH 105-15	^	TIMPANI 48-1	TIMPANI 48-1
43		TOMROOM 104-12	TOMROOM 104-12	HOUSETCON 109-16	^	TIMPANI 48-1	TIMPANI 48-1
44		TOMROOM 104-12	^	HOUSETCON 109-16	^	TIMPANI 48-1	TIMPANI 48-1
45		TOMROOM 104-12	TOMHIGH 104-10	HOUSERIDE 107-11	^	TIMPANI 48-1	TIMPANI 48-1
46		TOMROOM 104-12	TOMHIGH 104-10	HOUSETCON 109-16	^	TIMPANI 48-1	TIMPANI 48-1
47		TOMROOM 104-12	TOMROOM 104-10	HOUSETCON 109-16	^	TIMPANI 48-1	TIMPANI 48-1
48	C3	^	HOUSETCON 109-16	HOUSETCON 109-16	^	TIMPANI 48-1	TIMPANI 48-1
49		^	HOUSETCON 109-16	HOUSEHH 105-15	^	TIMPANI 48-1	TIMPANI 48-1
50		TOMROOM 104-12	HOUSETCON 109-16	HOUSEHH 105-15	^	TIMPANI 48-1	TIMPANI 48-1
51		TOMROOM 104-12	HOUSETCON 109-16	HOUSETCON 109-16	^	TIMPANI 48-1	TIMPANI 48-1
52		^	^	^	^	TIMPANI 48-1	TIMPANI 48-1
53		^	^	^	^	TIMPANI 48-1	TIMPANI 48-1
54		^	^	^	^	^	TIMPANI 48-1
55		^	^	^	^	^	TIMPANI 48-1
56		^	^	^	^	^	^
57		^	^	^	^	^	^
58		^	^	^	^	^	^
59		^	^	^	^	^	^
60	C4	^	^	^	^	^	^
61		^	^	^	^	^	^
62		^	^	^	^	^	^
63		^	^	^	^	^	^
64		^	^	HOUSETCON 109-16	^	^	^
65		TIMBALES 110-9	TIMBALES 110-9	TIMBALES 110-9	TIMBALES 110-9	TIMBALES 110-9	TIMBALES 110-9
66		TIMBALES 110-9	TIMBALES 110-9	TIMBALES 110-9	TIMBALES 110-9	TIMBALES 110-9	TIMBALES 110-9
67		^	^	COWBELL 108-11	^	^	^
68		^	^	^	^	^	^
69		^	^	^	^	^	^
70		VOXHHCL 114-12	VOXHHCL 114-12	VOXHHCL 114-12	VOXHHCL 114-12	VOXHHCL 114-12	VOXHHCL 114-12
71		^	^	^	^	^	^

Note				
C5 72	GUIROLONG 113-9	GUIROLONG 113-9	GUIROLONG 113-9	GUIROLONG 113-9
73	^	^	^	^
74	^	^	^	^
75	^	^	^	^
76	^	^	^	^
77	^	^	^	^
78	^	^	^	^
79	^	^	^	^
80	^	^	^	^
81	^	^	^	^
82	FINGERSNAP 113-9	FINGERSNAP 113-9	CABASAL 110-13	FINGERSNAP 113-9
83	CELESTA 9-1	CELESTA 9-1	CELESTA 9-1	CELESTA 9-1
C6 84	BARCHIMES 16-2	BARCHIMES 16-2	BARCHIMES 16-2	BARCHIMES 16-2
85	^	^	^	^
86	DARBKHIGH 112-15	DARBKHIGH 112-15	DARBKHIGH 112-15	DARBKHIGH 112-15
87	DARBKLOW 112-16	DARBKLOW 112-16	DARBKLOW 112-16	DARBKLOW 112-16
88	DROP 113-10	DROP 113-10	DROP 113-10	DROP 113-10
89	WATER 113-12	WATER 113-12	WATER 113-12	WATER 113-12
90	VOICES1 114-9	VOICES1 114-9	VOICES1 114-9	VOICES1 114-9
91	VOXTAP 114-13	VOXTAP 114-13	VOXTAP 114-13	VOXTAP 114-13
92	VOXTIP 114-14	VOXTIP 114-14	VOXTIP 114-14	VOXTIP 114-14
93	CLAKSON 113-16	CLAKSON 113-16	CLAKSON 113-16	CLAKSON 113-16
94	DOOR 113-13	DOOR 113-13	DOOR 113-13	DOOR 113-13
95	RASPYRIDE 116-10	RASPYRIDE 116-10	RASPYRIDE 116-10	RASPYRIDE 116-10
C7 96	BABYVOX 114-16	BABYVOX 114-16	BABYVOX 114-16	BABYVOX 114-16
97	EMPTY 128-16	EMPTY 128-16	EMPTY 128-16	EMPTY 128-16
98				^
99				^
100				^
101				
102				
103				
104				
105				
106				
107				
C8 108				

"<" = same as DK_STAND1 113-2-1

Drumkits

Note	DK_STAND2WX 113-5-1	DK_ROOM2WX 114-5-1	DK_POWER2WX 115-5-1	DK_ELECT2WX 116-5-1	DK_HOUSE2WX 117-5-1	DK_RIDE IT 118-5-1
25	ZAPP 115-10	ZAPP 115-10	ZAPP 115-10	ZAPP 115-10	ZAPP 115-10	^
26	ZAPP 115-10	ZAPP 115-10	ZAPP 115-10	ZAPP 115-10	ZAPP 115-10	^
27	^	^	^	^	^	^
28	KITCHEN 113-14	KITCHEN 113-14	KITCHEN 113-14	KITCHEN 113-14	KITCHEN 113-14	^
29	SCRATCH1 115-12	SCRATCH1 115-12	SCRATCH1 115-12	SCRATCH1 115-12	SCRATCH1 115-12	^
30	^	^	^	^	^	^
31	^	^	^	^	^	^
32	RIMSHOT1 99-9	RIMSHOT1 99-9	RIMSHOT1 99-9	RIMSHOT1 99-9	RIMSHOT1 99-9	^
33	^	^	^	^	^	^
34	BABYVOX 114-16	BABYVOX 114-16	BABYVOX 114-16	BABYVOX 114-16	BABYVOX 114-16	^
35	^	^	^	^	^	^
36 (C2)	^	BDROOM1 97-13	BDROOM1 97-13	BDELECT1 97-11	BDHOUSE2 97-10	^
37	SDSTD2 101-9	SDSTD2 101-9	SDROOM1 100-14	SDSTD2 101-9	SDSTD2 101-9	^
38	^	^	^	^	^	^
39	SDSTD3 101-10	SDSTD3 101-10	SDELECT 100-9	SDSTD3 101-10	SDJAZZ3 100-12	^
40	^	^	^	^	^	^
41	TOMROOM 104-12	SDROOM2 110-15	TOMROOM 104-12	TOMHIGH 104-10	TOMHIGH 104-10	^
42	TOMROOM 104-12	TOMROOM 104-12	TOMROOM 104-12	TOMHIGH 104-10	TOMHIGH 104-10	^
43	^	^	^	HOUSEHH 105-15	^	^
44	TOMROOM 104-12	TOMROOM 104-12	TOMROOM 104-12	HOUSEHH 105-15	TOMHIGH 104-10	^
45	TOMROOM 104-12	TOMROOM 104-12	TOMROOM 104-12	TOMHIGH 104-10	TOMHIGH 104-10	^
46	TOMROOM 104-12	TOMROOM 104-12	TOMROOM 104-12	TOMHIGH 104-10	^	^
47 (C3)	^	^	^	TOMHIGH 104-10	^	^
48	TOMROOM 104-12	TOMROOM 104-12	TOMROOM 104-12	^	^	^
49	TOMROOM 104-12	TOMROOM 104-12	TOMROOM 104-12	TOMHIGH 104-10	^	^
50	^	^	^	^	^	^
51	TOMROOM 104-12	TOMROOM 104-12	TOMROOM 104-12	TOMHIGH 104-10	^	^
52	^	^	^	^	^	^
53	^	^	^	^	^	^
54	^	^	^	^	^	^
55	^	^	^	^	^	^
56	^	^	^	^	^	^
57	^	^	^	^	^	^
58	^	^	^	^	^	^
59	^	^	^	^	HOUSETCON 109-16	^
60 (C4)	^	^	^	^	HOUSETCON 109-16	^
61	^	^	^	^	HOUSETCON 109-16	^
62	^	^	^	^	HOUSETCON 109-16	^
63	^	^	^	^	HOUSETCON 109-16	^
64	^	^	^	^	HOUSETCON 109-16	^
65	TIMBALES 110-9	TIMBALES 110-9	TIMBALES 110-9	TIMBALES 110-9	TIMBALES 110-9	^
66	TIMBALES 110-9	TIMBALES 110-9	TIMBALES 110-9	TIMBALES 110-9	TIMBALES 110-9	^
67	^	^	^	^	^	^
68	VOXHHCL 114-12	VOXHHCL 114-12	VOXHHCL 114-12	VOXHHCL 114-12	VOXHHCL 114-12	^
69	^	^	^	^	^	^
70	VOXHHCL 114-12	VOXHHCL 114-12	VOXHHCL 114-12	VOXHHCL 114-12	VOXHHCL 114-12	^
71	^	^	^	^	^	^

ROM-Styles

CC00	PC	Style	CC00	PC	Style	CC00	PC	Style	CC00	PC	Style
8 BEAT		**Bank 1**	**ROCK**		**Bank 2**	**DANCE2**		**Bank 1**	**U.S. TRAD**		**Bank 2**
32	00	8Beat 1	32	40	Rock 3	32	80	70' Disco	32	120	TheatreOrg
	01	8Beat 2		41	Rock 4		81	Disco 01		121	Org.March
	02	8Beat 3		42	Shuffle		82	Disco 02		122	Welkish
	03	8Beat 4		43	SlowRock 3		83	Disco 03		123	Organsel
	04	8Beat 5		44	SlowRock 4		84	Disco 04		124	Hawaiian
	05	8Beat 6		45	Rock 5		85	Latin D.1		125	KidsMarch
	06	8Beat 7		46	Blues		86	Latin D.2		126	Mod.Evngls
	07	8Beat 8		47	SlowBlues		87	Rap		127	Praise
8 BEAT		**Bank 2**	**FUNK**		**Bank 1**	**DANCE2**		**Bank 2**	**TRAD 1**		**Bank 1**
32	08	8Beat 9	32	48	Funk 1	32	88	BakerPop	33	00	Slow Waltz
	09	8Beat 10		49	Funk 2		89	Harpy		01	Waltz 1
	10	8Beat 11		50	Funk 3		90	PartyPop		02	Waltz 2
	11	8Beat 12		51	Funk 4		91	EuroPop		03	Romagna
	12	8Beat 13		52	Funk 5		92	SynthDance		04	Mazurka
	13	SlowBeat		53	Funk 6		93	SoulB.B.		05	RealVienna
	14	SlowBallad		54	Funk 7		94	80' Disco		06	Orch.Waltz
	15	6_8Ballad		55	Funk 8		95	Open Disco		07	ItalyMarch
16 BEAT		**Bank 1**	**FUNK**		**Bank 2**	**JAZZ**		**Bank 1**	**TRAD 1**		**Bank 2**
32	16	16Beat 1	32	56	Funk 9	32	96	Swing	33	08	Cnt.Gospel
	17	16Beat 2		57	Funk 10		97	Mid Swing		09	G.de.Oory
	18	16Beat 3		58	Funk 11		98	Slow Swing		10	CountryBop
	19	16Beat 4		59	Funk 12		99	Big Band 1		11	Cajun
	20	16Beat 5		60	Funk 13		100	Big Band 2		12	Cnt.Rock
	21	16Beat 6		61	Funk 14		101	Dixieland		13	SteamTrain
	22	16Beat 7		62	NewAge		102	Broadway		14	Cowboy
	23	16Beat 8		63	Fusion1		103	Foxtrot		15	Cnt.Waltz
16 BEAT		**Bank 2**	**DANCE1**		**Bank 1**	**JAZZ**		**Bank 2**	**TRAD 2**		**Bank 1**
32	24	16Beat 9	32	64	TMerengue	32	104	SwingBand	33	16	Twist 1
	25	16Beat 10		65	PianoDance		105	BourBonStr		17	HullyGully
	26	16Beat 11		66	FunkDance		106	EasySwing		18	Reggae 1
	27	16Beat 12		67	DiscoHit		107	LatinBand		19	Reggae 2
	28	16Beat 13		68	FastDance		108	QuickStep		20	PasoDoble
	29	16Beat 14		69	Pulsing		109	BBandXmas		21	Polka
	30	16Beat 15		70	SambaDance		110	Foxtrot 2		22	Tarantella
	31	16BtBallad		71	House		111	Shuffle		23	Pop '60
ROCK		**Bank 1**	**DANCE1**		**Bank 2**	**U.S. TRAD**		**Bank 1**	**TRAD 2**		**Bank 2**
32	32	Rock 1	32	72	DigitHall	32	112	Gospel 1	33	24	Bajon
	33	Rock 2		73	Rap'nShift		113	Sacred		25	Mex. 3_4
	34	R. and B.		74	DownBeat		114	Gospel 2		26	Charleston
	35	SlowRock 1		75	DiscoFun		115	Western		27	Germ.Polka
	36	SlowRock 2		76	HeavyDance		116	Bluegrass1		28	Boehmisch
	37	Rock'nRoll		77	Techno		117	Bluegrass2		29	Twist
	38	Boogie		78	DancePop		118	Country		30	Folk 2_4
	39	LovelyRock		79	DiscoPop		119	March USA		31	Polka 6_8

Styles/Style Performances

CC00	PC	Style
LATIN 1		*Bank 1*
33	32	Bossa Nova
	33	SoftBossa
	34	ChaCha 1
	35	ChaCha 2
	36	Rhumba 1
	37	Rhumba 2
	38	Rhumba 3
	39	Rhumba 4
LATIN 1		*Bank 2*
33	40	Tango
	41	Stand.Tango
	42	Samba
	43	Beguine
	44	Salsa 1
	45	Salsa 2
	46	Cumbia 1
	47	Cumbia 2
LATIN 2		*Bank 1*
33	48	Merengue 1
	49	Merengue 2
	50	Mambo 1
	51	Mambo 2
	52	DiscoSamba
	53	Disco Cha
	54	Meneito 1
	55	Meneito 2
LATIN 2		*Bank 2*
33	56	El Tic Tac
	57	Makarena
	58	Caliente 1
	59	Caliente 2
	60	Limbo
	61	Gipsy
	62	Guaracha
	63	Calypso

CC00	PC	Style-Perf. †
36	00	
	01	
	02	
	03	
	04	
	05	
	06	
	07	

† On MIDI Common channel only

User Styles/Songs

CC00	PC	User Style
USER 1		
44	00	
	01	
	02	
	03	
	04	
	05	
	06	
	07	
USER 2		
44	08	
	09	
	10	
	11	
	12	
	13	
	14	
	15	
USER 3		
44	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
USER 4		
44	24	
	25	
	26	
	27	
	28	
	29	
	30	
	31	

CC00	PC	User Style-Perf. †
40	00	
	01	
	02	
	03	
	04	
	05	
	06	
	07	

CC00	PC	Song †
55	00	
	01	
	02	
	03	
	04	
	05	
	06	
	07	
	08	
	09	
	10	
	11	
	12	
	13	
	14	
	15	

CC00	PC	Song-Perf. †
64	00	
	01	
	02	
	03	
	04	
	05	
	06	
	07	

Performances (RealTime)

CC00	PC	Performances†
Group 1		
48	1	GrandPiano
	2	EPSymphony
	3	CoolPiano
	4	Heavenly
	5	Cathedral
	6	Warm Grand
	7	Grit Organ
	8	St. Guitar
Group 2		
48	9	CleanSweep
	10	L.R.Ballad
	11	TheBrass
	12	Digilogue
	13	PopSynth
	14	Matrix 98
	15	Secrets
	16	EvenDeeper
Group 3		
48	17	Piano
	18	E.Piano1
	19	E.Piano2
	20	E.Piano3
	21	PianoStrgs
	22	E.PianoStrg
	23	Clavinet
	24	Vibraphone
Group 4		
48	25	Marimba
	26	ManualBas1
	27	ManualBas2
	28	SoloGuitar
	29	JazzGtr1
	30	OctJ.Gtr
	31	LeadDist
	32	FunkGuitar

CC00	PC	Performances†
Group 5		
48	33	ChrousGtr
	34	RockOrgan
	35	JazzOrgan
	36	ClickOrgan
	37	VintageOrg
	38	Fisa
	39	Musette
	40	Harmonica
Group 6		
48	41	SoftSax
	42	Trumpet
	43	Brass1
	44	Brass2
	45	Brass3
	46	Brass4
	47	BrassSec
	48	SaxSection
Group 7		
48	49	SynBrass
	50	Strings1
	51	Strings2
	52	Strings3
	53	Choir
	54	Vocal
	55	SynthPad1
	56	SynthPad2
Group 8		
48	57	Hamn'Bass
	58	Swingin'
	59	SoftOrgan
	60	PercusOrgan
	61	PrettySplit
	62	BlueSplit
	63	JazzSplit
	64	HrmoncSplt

Effects

CC16	DSP A/B select †
0	Eff1 (Reverbs GrpA)
1	Eff1 (Reverbs GrpB)

CC48		Rev Eff type select †
48	0	Hall 1
	1	Hall 2
	2	Hall 3
	8	Warm Hall
	9	Long Hall
	10	St. Concert
	16	Chamber
	32	Studio Room 1
	40	Studio Room 2
	41	Studio Room 3
	48	Club Room 1
	56	Club Room2
	57	Club Room3
	64	Vocal
	65	Metal Vocal
	72	Plate 1
	73	Plate 2
	80	Church
	88	Mountains
	89	Falling
	104	Early 1
	105	Early 2
	106	Early 3
	112	Stereo

CC16	DSP A/B select †
64	Eff2 (Mod. GrpA)
65	Eff2 (Mod. GrpB)

CC48		Mod. Eff type select †
48	0	Mono Delay 1
	1	Mono Delay 2
	8	Stereo Delay 1
	9	Stereo Delay 2
	16	Multitap Delay 1
	17	Multitap Delay 2
	24	Ping Pong
	25	Pan Mix
	32	Chorus 1
	33	Chorus 2
	40	Ensemble 1
	41	Ensemble 2
	48	Phaser 1
	49	Phaser 2
	56	Flanger 1
	57	Flanger 2
	36	Chorus Delay 1
	37	Chorus Delay 2
	60	Flanger Delay 1
	61	Flanger Delay 2
	28	Dubbing
	64	Distortion
	65	Distortion Delay
	80	Pitch Shifter 1
	81	Pitch Shifter 2
	82	Shift Delay
	96	Rotary 1
	97	Rotary 2
	104	EQ Jazz
	105	EQ Pops
	106	EQ Rock
	107	EQ Classic

† On MIDI Common channel only

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Wavetables

0.	PIANO	45.	HOU_COWB	90.	VIBRASLP	135.	BARCHIME	180.	ELBASS_H	225.	PKBSMUTE
1.	MARTELLO	46.	HOU_TCON	91.	VOICES_1	136.	BOTTLE	181.	EL_BASS_L	226.	16_1DRAW
2.	AGOGO	47.	HOUS_RIM	92.	VOICES_2	137.	BRS_RIP	182.	THUMBASS	227.	ORJAZZ_S
3.	BABYVOX	48.	HOUS_SD1	93.	VOICES_3	138.	CASSOTTO	183.	HARMELBS	228.	BD_ORCH
4.	BD_ELECT1	49.	HOUS_SD2	94.	VOX_HHCL	139.	CHOIR	184.	BASSLAP_H	229.	FINGBELL
5.	BD_HOUS1	50.	HOUSCLAP	95.	VOX_TAP	140.	CLARINET	185.	BASSLAP_L	230.	CELLO
6.	BD_HOUS2	51.	HOUSEHH	96.	VOX_TIP	141.	STEL_GTR	186.	FRETLES	231.	HH_CLO2
7.	BD_JAZZ	52.	HOUSRIDE	97.	WATER	142.	CLAVINET	187.	FLUTE	232.	HH_OPEN2
8.	BD_ROOM1	53.	JNG_BELL	98.	WHISTLE	143.	BIRDS	188.	HARMGT_H	233.	DOOR
9.	BD_STD_1	54.	MARACAS	99.	WIND_CHI	144.	GUN_SHOT	189.	HARMGT_L	234.	KITCHEN
10.	BD_STD_2	55.	MT_SURDO	100.	WOODBLCK	145.	ELICOPT	190.	DIST_GTR	235.	LOGDRUM
11.	BD_STD_3	56.	OP_SURDO	101.	DIGIT1WV	146.	PHONE_1	191.	JAZZ_GT2	236.	CRAS_ORC
12.	BD_TECNO	57.	QUICA_HI	102.	DIGIT2WV	147.	PHONE_2	192.	GTR_KURZ	237.	KNELGT_L
13.	BONG_SLH	58.	QUICA_LO	103.	1685DRAW	148.	SCRATCH1	193.	ICE_RAIN	238.	APPLAUSE
14.	BONGO_HI	59.	RIDE_CUP	104.	EL_PIAN7	149.	SCRATCH2	194.	KOTO	239.	HARPSI_S
15.	BONGO_LO	60.	RIDE_CYM	105.	ORGAN_2W	150.	SEA	195.	OR_THEAT	240.	VIOLA
16.	BRUS_REV	61.	RIMSHOT1	106.	ORGAN_3W	151.	TICKTACK	196.	ORROCK_F	241.	VIOLIN
17.	BRUS_RIG	62.	RIMSHOT2	107.	ORGAN_4W	153.	ZAPP	197.	SAX_BARI	242.	FKG_G_WS
18.	BRUSHSLP	63.	ROLL_SN	108.	FROG_WV	153.	ELGTR_S2	198.	VOC-DUKN	243.	GT_HARMO
19.	BRUSHTAP	64.	SD_ELECT	109.	ORGAN_5W	154.	FAGOTTO	199.	FLANGED	244.	PIK_GRT1
20.	CABASA	65.	SD_JAZZ1	110.	ORGAN_6W	155.	FLHARD_H	200.	BANJO	245.	PIK_GRT2
21.	CABASA_L	66.	SD_JAZZ2	111.	VIBES_2W	156.	FLHARD_L	201.	KALIUMBA	246.	WHAWHA1
22.	CASTAGNT	67.	SD_JAZZ3	112.	E_PIANO4	157.	FLUGE_S2	202.	SHAMISEN	247.	WHAWHA2
23.	CHINA	68.	SD_ORCH	113.	E_PIANO5	158.	FNKGSTOP	203.	SITAR	248.	WHAWHA3
24.	CLAKSON	69.	SD_ROOM1	114.	FORMANT	159.	SCRAP_GT	204.	GLOCKEN	249.	WHAWHA4
25.	CLAVES	70.	SD_ROOM2	115.	ORGAN_1W	160.	HARP	205	ELPN_KNH	250.	ORCH_HIT
26.	CON_H_SL	71.	SD_STD1	116.	PIP_ORG3	161.	JAZZ_GT1	206.	ELPN_KNL	251.	PIK_GTWS
27.	CON_L_SL	72.	SD_STD2	117.	SQUARE	162.	MUTE_TR1	207.	FLICORNO	252.	PIPE_S2
28.	CONGA_HI	73.	SD_STD3	118.	PULSE_O5	163.	SPECTR_1	208.	GTR_MUTE	253.	TROMBO_K
29.	CONGA_LO	74.	SD_STD4	119.	PULSE_10	164.	NOISE	209.	ELPN_MKS	254.	ORG_PIP1
30.	COWBELL	75.	SMASH	120.	PULSE_15	165.	OBOE	210.	RHODES_H	255.	MARIMBA
31.	CRASH	76.	SPLASH	121.	PULSE_20	166.	OCT_JGT	211.	RHODES_L	256.	ORROCK_S
32.	DARBK_HI	77.	STICK	122.	PULSE_25	167.	PANFLUTE	212.	TRUMPET	257.	MANDOL2
33.	DARBK_LO	78.	TAMB_SLP	123.	PULSE_30	168.	PICKBASS	213.	VIBES	258.	BD_POWER
34.	DOLLYVOX	79.	TAMBOURI	124.	PULSE_35	169.	SOFT_SAX	214.	XILOPHNO	250.	ACO_GTR2
35.	DROP	80.	TIMB_LOW	125.	PULSE_40	170.	SOPRANO	215.	ACCORD2	260.	STELGTR2
36.	FINGERSP	81.	TIMBALES	126.	PULSE_45	171.	TENORSAX	216.	BRASS	261.	PIANO_H
37.	GUIRO_LG	82.	TIMPANI	127.	SAW	172.	PIZZICATO	217.	VOCAL_DU	262.	PIANOL2
38.	GUIRO_SH	83.	TOM_ELEC	128.	SINUS	173.	TROMBONE	218.	VOCAL_BA	263.	BRASS_2
39.	HH_CLO1L	84.	TOM_HIGH	129.	SUPERSAW	174.	VOCALBOY	219.	FRHORN_H		
40.	HH_CLO1S	85.	TOM_JAZZ	130.	TRIANGLE	175.	STRINGS	220.	FRHORN_L		
41.	HH_OPEN1	86.	TOM_LOW	131.	TUB_WAVE	176.	ACBASS_L	221.	ELPNKURZ		
42.	HH_PEDAL	87.	TOM_ROOM	132.	ACCORDIO	177.	ACBASS_H	222.	A_MUSETT		
43.	HH_TGHT1	88.	TRIAN_LO	133.	ACO_STR	178.	HARMACBS	223.	PLECTRA		
44.	HH_TGHT2	89.	TRIAN_SH	134.	ARMONICA	179.	BAGPIPE	224.	MANDOL		

Function		Transmitted	Recognized	Remarks
		93 Chorus depth	93 Chorus depth (send)	
		98,99 NRPN	98,99 NRPN	
		100,101 RPN	100,101 RPN	
Program Change	True number	0-127 *****	0-127	0-127
System Exclusive		o	o	
System Common	Song Position	o	o	
	Song Select	o	o	
	Tune	o	o	
System Real Time	Clock	o	o	Start, Stop
	Commands	o	o	Continue
Aux Messages	Active sensing	o	o	
	All Sound Off	o	o	
	Reset All Contr.	o	o	
	Local ON OFF	o	o	
	All Note Off	o	o	

Recognized — Control Change detail:

Cntrl 80 (ONE SHOT):
- 0†   Fill><
- 1†   Fill<
- 2†   Fill>
- 8†   Intro
- 16†   End
- 24-27†   Variations 0-1-2-3
- 40†   Key start
- 61†   Rotary 1 slow/fast [GrpA]
- 62†   Rotary 2 slow/fast [GrpB]
- 64   Start/Stop
- 66,67†   Tempo inc. dec.
- 68,69†   Preset inc. dec.

Cntrl 81:
- OFF [0.63] ON[64,127]
- 0,1,2†   Fill><-Fill<-Fill>
- 61†   Rotary 1 (Off=slow) [GrpA]
- 62†   Rotary 2 (Off=slow) [GrpB]

Remarks:
- 0 = Fill>< Off,   64 = Fill>< On
- 1 = Fill< Off,   65 = Fill< On
- 2 = Fill> Off,   66 = Fill> On
- 61 = Rotary 1 Slow,   125 = Rotary Fast
- 62 = Rotary 2 Slow,   126 = Rotary 2 Fast
- Start, Stop
- Continue

Notes

† These messages are available on the Common channel only

(1) Vocal Processor Controllers

Mode 1 OMNI ON - POLY   Mode 2 OMNI ON - MONO
Mode 3 OMNI OFF - POLY   Mode 4 OMNI OFF - MONO

o: YES   x: NO

MIDI Implementation Chart

Manufacturer: Generalmusic S.p.A.

Model: SK760/SK880 World Keyboard   Version: 1.00

FUNCTION		Transmitted	Recognized	Remarks
Basic Channel	Default	1-16	1-16	2 MIDI IN; 2 MIDI OUT
	Changed	1-16	1-16	EXTRA COMMON/CHORD CH.
Mode	Default	Multimode	Multimode	
	Messages	X	X	
	Altered	X *****	X	
Note Number		0-127	0-127	true voice depends on
	True voice	*****	0-127	selected sound
Velocity	Note ON	o	o	
	Note OFF	o	o	
After Touch	Key's	x	o	
	Ch's	o	o	
Pitch Bender		o	o	
Control Change		0,32 Bank change	0,32 Bank change	Bank change recognized on
		1 Modulation	1 Modulation	common channel, only in reception:
		6,38 Data Entry	6,38 Data Entry	Bank-Change
		7 Volume	7 Volume	C#0 C#32 PC
		10 Pan	10 Pan	32 0 0-95 Internal Styles
		11 Expression Contr.	11 Expression Controller	36 0 0-7 Int. Style Performances
		12† Vocal Volume (1)	12† Vocal Volume (1)	40 0 0-7 User Style Performances
		13† Vocal On/Off (1)	13† Vocal On/Off (1)	44 0 0-31 User Styles
		14† Mode Recall (1)	14† Mode Recall (1)	48 0 0-63 Programmable Performances
		15† Voice Set Recall (1)	15† Voice Set Recall (1)	55 0 0-15 Songs
			16,48† Effects selection	64 0 0-7 Song-Performances
			17,49† Effects volume	C#16 DSP select
		18,50† Tuning control	18,50† Tuning control	0 Eff1 Reverb GroupA
		64 Damper Pedal	64 Damper Pedal	1 Eff1 Reverb Group B
		66 Sustain (Sostenuto)	66 Sustain (Sostenuto)	64 Eff2 Mod. Group A
		67 Soft pedal	67 Soft pedal	65 Eff2 Mod. Group B
			71 Resonance	C#48 Eff Type select
			72 Release time	(See Effects charts for selection
			73 Attack time	values of individual Eff types)
			74 Filter 1 cut-off freq.	
		85† Voice Mute Mode (1)	85† Voice Mute Mode (1)	
		91 Reverb depth	91 Reverb depth (send)	

RECOGNIZED CONTROL CHANGE MESSAGES (MIDI CONTROLLERS)

A ControlChange message activates a Controlller, determined by the first ControlChange value.

The ControlChange consists of three parts:

- *status byte* - (status) determines the status of the ControlChange message.

- *data byte 1* - (value 1) MIDI Controller activated by the ControlChange message. This is the number by which the ControlChanges are identified in the following tables.

- *data byte 2* - (value 2) value of the activated MIDI Controller.

CONTROL CHANGE ON TRACKS

CC00,32	Bank change.
CC01	Modulation.
CC06,38	Data Entry.
CC07	Main Volume.
CC10	Pan (panorama).
CC11	Expression.
CC12†	Vocal Volume (Vocal Processor)
CC13†	Vocal On/Off (Vocal Processor)
CC14†	Mode Recal (Vocal Processor)
CC15†	Voice Set recall (Vocal Processor)
CC16,48†	Effects selection
CC17,49†	Effects volume
CC18,50†	General Purpose (Tuning control)
CC32	BankSelect LSB.
CC64	Damper pedal.
CC66	Sostenuto (sustain) pedal.
CC67	Soft pedal.
CC71	Resonance.
CC72	Release Time.
CC73	Attack Time.
CC74	Filter Cutoff Frequency.
CC80	One Shot control
CC81	On/Off control
CC85†	Voice Mute mode (Vocal Processor)
CC91	Effect 1 send (E1, reverb depth).
CC93	Effect 2 send (E2, modulation depth).
CC98,99	NRPN
CC100-101	RPN

† = travels on MiIDI Common channel only

SK760/SK880 System Exclusive Implementation

UNIVERSAL NON-REAL TIME SYSTEM MESSAGES

SAMPLE DUMP STANDARD

The transfer of data relating to the samples contained in the sounds of the instrument ias based on the standard protocol, called SDS (Sample Dump Standard). The formats of the various commands available are as follows:

ACK (handshake message):

F0H	=	System Exclusive Message status
7EH	=	Non-Real Time extension
cc	=	device ID
7FH	=	**ACK ID**
pp	=	packet number
F7H	=	EOX

NACK (handshake message):

F0H	=	System Exclusive Message status
7EH	=	Non-Real Time extension
cc	=	device ID
7EH	=	**NACK ID**
pp	=	packet number
F7H	=	EOX

CANCEL (handshake message):

F0H	=	System Exclusive Message status
7EH	=	Non-Real Time extension
cc	=	device ID
7DH	=	**CANCEL ID**
pp	=	packet number
F7H	=	EOX

WAIT (handshake message):

F0H	=	System Exclusive Message status
7EH	=	Non-Real Time extension
cc	=	device ID
7CH	=	**WAIT ID**
pp	=	packet number
F7H	=	EOX

DUMP HEADER:

F0 7E cc 01 ss ss ee ff ff ff gg gg gg hh hh hh ii ii ii jj F7

cc	=	device ID
ss ss	=	Sample number (LSB first)
ee	=	Sample format(# of significant bits from 8-28)
ff ff ff	=	Sample period in nanoseconds (LSB first)
gg gg gg	=	Sample length in words (LSB first)
hh hh hh	=	Sustain loop start point word number (LSB first)
ii ii ii	=	Sustain loop end point word number (LSB first)
jj	=	Loop type (00=forward,01=backward/forward,7F=loop off)

DUMP REQUEST:

F0H	=	System Exclusive Message status
7EH	=	Non-Real Time extension
cc	=	device ID
03H	=	**DUMP REQUEST ID**
ss ss	=	Request sample (LSB first)
F7H	=	EOX

F0H	=	System Exclusive Message status
7EH	=	Non-Real Time extension
cc	=	device ID
02H	=	**DATA PACKET ID**
kk	=	running packet count (0-127)
<120 bytes>	=	data (7 bit data format)
ll	=	checksum (XOR of 7E cc kk <120 bytes>)
F7H	=	EOX

DEVICE INQUIRY

To be able to identify a MIDI device, the following two messages are utilized; the first used for the inquiry:

INQUIRY MESSAGE:

F0H	=	System Exclusive Message status
7EH	=	Non-Real Time extension
cc	=	device ID
06H	=	**INQUIRY ID**
01H	=	Identity Request
F7H	=	EOX

and the second for the device response:

RESPONSE MESSAGE:

F0 7E cc 06 02 mm ff ff dd dd ss ss ss ss F7

cc	=	device ID
mm	=	Manufactures Sistem Exclusive id code
ff ff	=	Device family code (14 bits, LSB first)
dd dd	=	Device family member code (14 bits, LSB first)
ss ss ss ss	=	Software revision (format device specific)

UNIVERSAL REAL TIME SYSTEM MESSAGES

DEVICE CONTROL

These messages are used to control the general functions of the system, without refering to a specific MIDI channel and, therefore, inserted in the context of the Universal messages.

Master Volume:

F0H	=	System Exclusive Message status
7FH	=	Real Time extension
cc	=	device ID
04H	=	**Device Control ID**
01H	=	**Master Volume ID**
vv vv	=	Volume (LSB first)
F7H	=	EOX

. . . .

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SYSTEM REALTIME MESSAGES

ADDRESS DATA INTERFACE

The MIDI System Exclusive capabilities of the SK Series instruments allow you to manipulate all parts of the instrument's memory from a computer system.

The following is a reference to the SysEx protocol used by the SK Series instruments. This Data Address Interface is based on two principal functions: **SET** and **GET**. **SET** is used to set the contents of some of the instrument's resources while **GET** is used to withdraw them.

At the reception of a **GET** message, the instrument replies with an appropriate **SET** message containing the values of the requested data and relative checksums.

	status	data		EOX
GET	F0	2F 3c 00 id aa1 aa2 aa3 ss1 ss2 ss3 cc		F7
SET	F0	2F 3c 01 id cf aa1 aa2 aa3 dd1 ... ddn cc		F7

F0H	=	System Exclusive Message status
2FH	=	ID number (manufacturer ID) = GENERAL MUSIC
3cH	=	Command ID: 3 RealTime, c = Device ID (0-F)
00H/**01**H	=	**Get** subfunction / **Set** subfunction
id	=	Model ID, 00 = WK4
cf	**=**	c = checksum (0:1), f = Data Format (0:4) [1]
		c=1 checksum present, c=0 absent;
aa1:3	=	starting address code (MSB first)
ss1:3	=	amount of required data bytes (MSB first)
dd1	=	Data byte : first data byte to be sent
ddn	=	Data byte : last data byte to be sent
cc	=	checksum (optional)
F7H	=	EOX (End Of Exclusive)

EXTREMELY IMPORTANT: when parameters have positive values that exceed 127 (=7FH), always enter **f=2** in the *cf* field of the SET stream and transform the data into nibble format as in the example: **134 = 0x86** becomes **0x08 0x06.**

N.B.: in the following address map, the undefined value xx that parameterizes some of the addresses is the number relating to the structure (typically track or note).

EXAMPLES OF EXCLUSIVE MESSAGES AND CHECKSUM CALCULATIONS

(relating to the structure of the Address Data Interface)

<**Example 1**> : The setting for the 1st Effect Type of Group A on Hall 3 using the common channel 7, the format 0 (7 bit data value) and without checksum.

According to the address map relating to the *Performance Parameters* -EFFECTS A the address is 00 13 00H (effctnr1) and the value relating to HALL3 is 02H; therefore the *set* streams is as follows:

```
F0    2F   36   01   00   00   00 13 00    02    F7
(1)   (2)  (3)  (4)  (5)  (6)  address     data  (7)
```

(1)Exclusive Status
(2)manufacturer ID=GENERAL MUSIC
(3)Command ID(3=RealTime) + device ID (6=7° device ID)
(4)Set Subfunction
(5)Model ID (0=WK4)
(6)c=0(No checksum),f=0(7 bit data value)
(7)EOX

<**Example 2**> : The setting for the *Attack of track 11 to +13* using common channel 2 (N.B. the 1st channel is 0), format 0 (7 bit data value) and with checksum.

According to the address map relating to *Performance Parameters* - T_SLIDER the address relating to track 11 (the first track is 0) is 0A 1C 00H (Attack) and the value to set is 4DH; therefore the *set* stream is as follows:

```
 F0   2F   31   01   00   10   0A 1C 00    4D     cc=??      F7
(1)   (2)  (3)  (4)  (5)  (6)  address     data   checksum   (7)
```

(1)Exclusive Status
(2)manufacturer ID=GENERAL MUSIC
(3)Command ID(3=RealTime) + device ID (1=2° device ID)
(4)Set Subfunction
(5)Model ID (0=WK4)
(6)c=1(Yes checksum),f=0(7 bit data value)
(7)EOX

The checksum value is obtained with an XOR of all the bytes starting from the GeneralMusic ID (2FH) included; using **^** as the operator XOR (OR Exclusive), then:

$$cc=checksum = 2F \; \verb|^| \; 31 \; \verb|^| \; 01 \; \verb|^| \; 00 \; \verb|^| \; 10 \; \verb|^| \; 0A \; \verb|^| \; 1C \; \verb|^| \; 00 \; \verb|^| \; 4D = 54$$

the message to send is:

F0 2F 31 01 00 10 0A 1C 00 4D 54 F7 .

<*Example 3*> : Setting the *M.Transpose* to -6 using common channel 2, format 0 (7 bit data value) with and without checksum.
According to the address map relating to the *Global Parameters* - GLOBSET the address is 00 09 02H (transpose) and the value to set is 24-6=18=12H; therefore the *set* stream without checksum is as follows:

F0	2F	31	01	00	00	00 09 02	12	F7
(1)	(2)	(3)	(4)	(5)	(6)	address	data	(7)

(1)Exclusive Status
(2)manufacturer ID=GENERAL MUSIC
(3)Command ID(3=RealTime) + device ID (1=2° device ID)
(4)Set Subfunction
(5)Model ID (0=WK4)
(6)c=0(No checksum),f=0(7 bit data value)
(7)EOX

with the checksum, the stream will be:

F0 2F 31 01 00 10 00 09 02 12 16 F7 .

<*Example 4*> : setting the parameter *FltCutoff* of the group AUDIOIN1 to 147 (>127) on command channel 2 and format 2 (data in nibble) with and without checksum.
According to the address map relating to *Global Parameters* - AUDIOIN1 the address is 00 0B 05H (FltCutoff) and the value to set in nibble format is, 09 03H; infact 147=93H, therefore the value is sliced in two nibbles 9 and 3 obtaining 09 03H; therefore the *set* stream without checksum is as follows:

F0	2F	31	01	00	02	00 0B 05	09 03	F7
(1)	(2)	(3)	(4)	(5)	(6)	address	data	(7)

(1)Exclusive Status
(2)manufacturer ID=GENERAL MUSIC
(3)Command ID(3=RealTime) + device ID (1=2° device ID)
(4)Set Subfunction
(5)Model ID (0=WK4)
(6)c=0 (No checksum), f=2 (nibble)
(7)EOX

with the checksum, the stream will be:

F0 2F 31 01 00 12 00 0B 05 09 03 09 F7 .

<*Example 5*> : To know the value of the parameter *HighGain* of the Equalizer using common channel 9 and format 0 (7 bit data value).
According to the address map relating to the *Global Parameters* - EQUALIZER the addrress is 00 00 01H (HighGain) and the size is 00 00 01H; therefore, the *get* stream is as follows:

. . . .

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```
F0   2F   38   00   00   00 00 01        00 00 01    F7
(1)  (2)  (3)  (4)  (5)  address         size        (6)
```

(1)Exclusive Status
(2)manufacturer ID=GENERAL MUSIC
(3)Command ID(3=RealTime) + device ID (8=9° device ID)
(4)Get Subfunction
(5)Model ID (0=WK4) (6) EOX

If, for example, the value of the parameter equals 1 dB, the instrument will respond with the appropriate Set stream containing the value requested and with the checksum; therefore, the stream returned will be:

F0 2F 38 01 00 10 00 00 01 0D 0A F7.

REFERENCE TABLE

GLOBAL PARAMETERS

MIXER EQUALIZER

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
00 00 00	00 00 01	00	18	LowGain	-12 -> +12 [dB]	0EH= 2dB
00 00 01	00 00 01	00	18	HighGain	-12 -> +12 [dB]	0DH= 1dB
00 00 02	00 00 01	00	0C	LowFrequency	100 -> 400 [Hz]	2=150KHz
00 00 03	00 00 01	00	0C	HighFrequency	3.0 -> 15.0 [KHz]	0 = 3KHz

SCORE CONTROL

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
00 01 00	00 00 01	00	04	video_display	[2]	01
00 01 01	00 00 01	00	03	lyrics_fonts	char size (if video_display=3)	00
00 01 02	00 00 01	00	15	view_mode	monitor bkgrnd col	00

GENERAL CONTROLS

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
00 02 00	00 00 01	01	05	dynamic		3=Medium
00 02 01	00 00 01	01	05	a.touch		3=Medium

ARRANGE MODE

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
00 03 00	00 00 01	00	01	FixCh_Mode	on/off	01
00 03 01	00 00 01	00	02	ChordMode1	Up/low-multi (Auto chord mode)	01
00 03 02	00 00 01	03	04	ChordMode2	Full keyboard (Auto chord mode)	03
00 03 03	00 00 01	00	04	ChordMode3	Fix chord mode	01
00 03 05	00 00 01	00	01	DynamArrg	on/off	00
00 03 09	00 00 01	00	01	Autobacking	on/off	01
00 03 0B	00 00 01	15	6C	Chord_split		3BH = 59

(GENERAL CONTROLS) FOOTSWITCH POLARITY

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
00 04 00	00 00 01	00	01	Footswitch[1]	0=Normally closed, 1=open	0=NormClosd
00 04 01	00 00 01	00	01	Footswitch[2]	0=Normally closed, 1=open	0=NormClosd
00 04 02	00 00 01	00	01	Footswitch[3]	0=Normally closed, 1=open	0=NormClosd

(GENERAL) DISPLAY CONTROLS

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
00 05 00	00 00 01	00	01	ChordLanguage	0 = English, 1 = Italiano	0=English
00 05 01	00 00 01	00	01	Help_Language	0 = English, 1 = Italiano	0=English
00 05 02	00 00 01	00	01	Display_Mode	0 = Positive 1 = Negative	0=Positive

(GENERAL) NOTE TUNING/SCALE (xx = NOTE = 0 - 7F)

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
xx 06 00	00 00 01	00	7F	coarse	0 -> 127	
xx 06 01	00 00 01	01	7F	finetune	-63 -> +63;	

(GENERAL) TUNING/SCALE

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
00 07 00	00 00 01	01	7F	Master_pitch	-63 -> +63;	0
00 07 01	00 00 01	00	0D	kbd_scale	0 -> +13	0=Equal

MIDI CLOCK

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
00 08 00	00 00 01	00	01	MidiClock	Int/Ext	0=Internal

GLOBAL SET

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
00 09 02	00 00 01	00	30	transpose	-24 +24 [semitones]	18H = 0

MIDI GENERAL SET

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
00 0A 00	00 00 01	00	10	Common_ch	0=Off; 1->10 = chan 1->16	0 = Off
00 0A 01	00 00 01	01	02	Common_In	1 = MidiIn A, 2= MidiIn B	1 = In A
00 0A 02	00 00 01	01	02	Common_Out	1 = MidiOut A, 2= MidiOut B	1 = Out A
00 0A 03	00 00 01	00	01	Midi_lock		1 = On
00 0A 04	00 00 01	00	01	Clock_Send		1 = On
00 0A 05	00 00 01	00	01	Midi_Merge		0 = Off
00 0A 06	00 00 01	00	01	MidiInTran		0 = Off
00 0A 07	00 00 01	00	7F	MidiFixedDyn	0 -> 127	0 = Off
00 0A 08	00 00 01	00	01	Midi_sysex	0=Excl System OFF, 1=ON	1 = On
00 0A 09	00 00 01	00	01	SMF saveFrm	0 = GMidi, 1 = smfformat	0=GMidi
00 0A 0A	00 00 01	00	01	Bank_select		1

(GENERAL) MIC/LINE INPUT 1

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
00 0B 00	00 00 01	00	7F	Volume	0 -> 127	7FH =127
00 0B 01	00 00 01	00	01	EffGroup		0
00 0B 02	00 00 01	00	7F	Eff1Send	0 -> 127	40H = 64
00 0B 03	00 00 01	00	7F	Eff2Send	0 -> 127	40H = 64
00 0B 04	00 00 01	00	05	FltType		0
00 0B 05	00 00 01	00	BF	FltCutoff	0 191, Use nibblized if > 127	0
00 0B 06	00 00 01	00	7f	FltResonance	0 -> 127	0
00 0B 07	00 00 01	00	3E	Pan	-31 -> +31	3EH = 31
00 0B 08	00 00 01	00	03	AnalogOut		0
00 0B 09	00 00 01	00	01	Mic/Line	On/Off	0

(GENERAL) MIC/LINE INPUT 2

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
00 0C 00	00 00 01	00	7F	Volume	0 -> 127	7FH=127
00 0C 01	00 00 01	00	01	EffGroup		0
00 0C 02	00 00 01	00	7F	Eff1Send	0 -> 127	40H= 64
00 0C 03	00 00 01	00	7F	Eff2Send	0 -> 127	40H= 64
00 0C 04	00 00 01	00	05	FltType		0
00 0C 05	00 00 01	00	BF	FltCutoff	0->191, Use nibblized if >127	0
00 0C 06	00 00 01	00	7f	FltResonance	0 -> 127	0
00 0C 07	00 00 01	00	3E	Pan	-31 -> +31	3EH= 31
00 0C 08	00 00 01	00	03	AnalogOut		0
00 0C 09	00 00 01	00	01	Mic/Line	On/Off	0

MIDI_CHANNELS (xx = CHANNEL[3] = 0 - 1F)

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
xx 0D 00	00 00 01	01	02	Midi_IN_Port	1 = MidiIn A, 2= MidiIn B	1=In A
xx 0D 01	00 00 01	01	10	Midi_IN_Ch	1->10 = channels 1->16	
xx 0D 02	00 00 01	01	02	Midi_OUT_Port	1 = MidiOut A, 2= MidiOut B	1=Out A
xx 0D 03	00 00 01	01	10	Midi_OUT_Ch	1->10 = channels 1->16	

(GENERAL) PEDALBOARD/COMPUTER MODE

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
00 0E 00	00 00 01	00	03	Computer Mode	0=Off, 1=Mac, 2=PC1, 3=PC3	0 = Off
00 0E 01	00 00 01	00	03	Pedalb. Mode	0=Off,1=Pdbass, 2=Pdchord, 3=MFun	0 = Off
00 0E 02	00 00 01	00	01	PcIfcPedB	Mode switch	0

MIDI FILTERS IN (xx = CHANNEL = 0 - 1F , Midi Lock ON)

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
xx 0F 00	00 00 01	00	64	filter_1	0 -> 100 (see Appendix C)	00H
xx 0F 01	00 00 01	00	64	filter_2	0 -> 100 (see Appendix C)	00H
xx 0F 02	00 00 01	00	64	filter_3	0 -> 100 (see Appendix C)	00H
xx 0F 03	00 00 01	00	64	filter_4	0 -> 100 (see Appendix C)	00H
xx 0F 04	00 00 01	00	64	filter_5	0 -> 100 (see Appendix C)	00H
xx 0F 05	00 00 01	00	64	filter_6	0 -> 100 (see Appendix C)	00H
xx 0F 06	00 00 01	00	64	filter_7	0 -> 100 (see Appendix C)	00H

MIDI FILTERS OUT (xx = CHANNEL = 0 - 1F , Midi Lock ON)

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
xx 10 00	00 00 01	00	64	filter_1	0 -> 100 (see Appendix C)	00H
xx 10 01	00 00 01	00	64	filter_2	0 -> 100 (see Appendix C)	00H
xx 10 02	00 00 01	00	64	filter_3	0 -> 100 (see Appendix C)	00H
xx 10 03	00 00 01	00	64	filter_4	0 -> 100 (see Appendix C)	00H
xx 10 04	00 00 01	00	64	filter_5	0 -> 100 (see Appendix C)	00H
xx 10 05	00 00 01	00	64	filter_6	0 -> 100 (see Appendix C)	00H
xx 10 06	00 00 01	00	64	filter_7	0 -> 100 (see Appendix C)	00H

MIDI COMMON/ARRG NoteToArrang

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
00 11 00	00 00 01	00	10	Chord Ch.1	0=Off, 1->10 = chans 1->16	0 = Off
00 11 01	00 00 01	00	01	IN_1		0
00 11 02	00 00 01	00	10	Chord Ch.2	0=Off, 1->10 = chans 1->16	0 = Off
00 11 03	00 00 01	00	01	IN_2		0

MIDI CTRL PADS (xx = CHANNEL = 0 - 1F)

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
xx 12 00	00 00 01	00	01	ped_ftsw[1]		1
xx 12 01	00 00 01	00	01	ped_ftsw[2]		1
xx 12 02	00 00 01	00	01	ped_ftsw[3]		1

PERFORMANCE PARAMETERS

EFFECTS A

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
00 13 00	00 00 01	00	17	Eff_Type1	0 -> 23	5=St.Concert
00 13 01	00 00 01	00	7F	eff_vol1	0 -> 127	5AH = 90
00 13 02	00 00 01			par#1_1		
00 13 03	00 00 01			par#2_1		
00 13 04	00 00 01			par#3_1		
00 13 05	00 00 01	00	1F	Eff_Type2	0 -> 31	9 = Chorus2
00 13 06	00 00 01	00	7F	eff_vol2	0 -> 127	79H = 121
00 13 07	00 00 01			par#1_2		
00 13 08	00 00 01			par#2_2		
00 13 09	00 00 01			par#3_2		
00 13 0A	00 00 01	00	7F	Eff2ToEff1	0 -> 127	0

EFFECTS B

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
00 14 00	00 00 01	00	17	Eff_Type1	0 -> 23	2= Hall3
00 14 01	00 00 01	00	7F	eff_vol1	0 -> 127	37H = 55
00 14 02	00 00 01			par#1_1		
00 14 03	00 00 01			par#2_1		
00 14 04	00 00 01			par#3_1		
00 14 05	00 00 01	00	1F	Eff_Type2	0 -> 31	0=MonoDelay1
00 14 06	00 00 01	00	7F	eff_vol2	0 -> 127	79H = 121
00 14 07	00 00 01			par#1_2		
00 14 08	00 00 01			par#2_2		
00 14 09	00 00 01			par#3_2		
00 14 0A	00 00 01	00	7F	Eff2ToEff1	0 -> 127	0

TRACK SOUND (xx = CHANNEL = 0 - 1F)

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
xx 15 00	00 00 02	0:	7F+0:F	Soundnr	Prog.Change(MSB) + Bank(LSB)	
xx 15 01	00 00 01	0		Ctrl32	no sound if no zero	
0						

MIDI CONFIGURATION (xx = CHANNEL = 0 - 1F)

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
xx 16 00	00 00 01	00	03	source	Track source [4]	
xx 16 01	00 00 01	00	03	destination	Track destination [5]	
xx 16 04	00 00 01	01	02	Midi_In_Port	1 = MidiIn A, 2= MidiIn B	
xx 16 05	00 00 01	01	10	Midi_In-Ch	1->10 = channels 1->16	
xx 16 06	00 00 01	01	02	Midi_Our_Port	1 = MidiOut A, 2= MidiOut B	
xx 16 07	00 00 01	01	10	Midi_out-Ch	1->10 = channels 1->16	

COMMON (xx = CHANNEL = 0 - 1F)

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
xx 17 00	00 00 01	00	7F	volume		
xx 17 01	00 00 01	00	78	transp	-60 -> +60	3CH = 0
xx 17 02	00 00 02	00	0300	delay	0 -> 768 Use nibblized if > 127	0
xx 17 03	00 00 01	00	07	dyn_resp		0
xx 17 04	00 00 01	00	01	m_transp		1

INTERNAL (xx = CHANNEL = 0 - 1F)

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
xx 18 00	00 00 01	00	02	mode		0
xx 18 01	00 00 01	00	01	m_priority	Poly.Mono	0
xx 18 02	00 00 01	00	7F	detune	-64 -> +63	40H = 0
xx 18 03	00 00 01	00	03	analog_out		0
xx 18 04	00 00 01	00	01	effect_group	Selection effects group A or B	
xx 18 05	00 00 01	00	7F	vol_group_A	Volume sent of eff. group A	

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Address(H)	Size (H)	Range(H)		Parameter	Description	Default	
xx 18 06	00 00 01	00	7F	vol_group_B	Volume sent of eff. group B		
xx 18 07	00 00 01	00	3E	pan	-31 -> +31		3EH =31
xx 18 08	00 00 01	00	07	rand_pitch		0	
xx 18 09	00 00 01	00	07	rand_pan		0	
xx 18 0A	00 00 01	01	0B	Harmony	1 -> 11	1	
xx 18 0B	00 00 01	00	0C	PitchRange	0 -> 12	0	

MIDI IN FILTER (xx = CHANNEL = 0 - 1F)

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
xx 19 00	00 00 01	00	64	filter_in1	0 -> 100	00H
xx 19 01	00 00 01	00	64	filter_in2	0 -> 100	00H
xx 19 02	00 00 01	00	64	filter_in3	0 -> 100	00H
xx 19 03	00 00 01	00	64	filter_in4	0 -> 100	00H
xx 19 04	00 00 01	00	64	filter_in5	0 -> 100	00H
xx 19 05	00 00 01	00	64	filter_in6	0 -> 100	00H
xx 19 06	00 00 01	00	64	filter_in7	0 -> 100	00H

MIDI OUT FILTER (xx = CHANNEL = 0 - 1F)

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
xx 1A 00	00 00 01	00	64	filter_out1	0 -> 100	00H
xx 1A 01	00 00 01	00	64	filter_out2	0 -> 100	00H
xx 1A 02	00 00 01	00	64	filter_out3	0 -> 100	00H
xx 1A 03	00 00 01	00	64	filter_out4	0 -> 100	00H
xx 1A 04	00 00 01	00	64	filter_out5	0 -> 100	00H
xx 1A 05	00 00 01	00	64	filter_out6	0 -> 100	00H
xx 1A 06	00 00 01	00	64	filter_out7	0 -> 100	00H

LOCAL (xx = CHANNEL = 0 - 1F)

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
xx 1B 00	00 00 01	00	01	ped_ftsw[1]		
xx 1B 01	00 00 01	00	01	ped_ftsw[2]		
xx 1B 02	00 00 01	00	01	ped_ftsw[3]		

SLIDER (xx = CHANNEL = 0 - 1F)

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
xx 1C 00	00 00 01	00	7F	Attack	-64 +63	40H = 0
xx 1C 01	00 00 01	00	7F	Release	-64 +63	40H = 0
xx 1C 02	00 00 01	00	7F	Flt Cutoff	-64 +63	40H = 0
xx 1C 03	00 00 01	00	7F	Flt Resonance	-64 +63	40H = 0
xx 1C 04	00 00 01	00	7F	Decay	-64 +63	40H = 0
xx 1C 05	00 00 01	00	7F	LFO Depth	-64 +63	40H = 0
xx 1C 06	00 00 01	00	7F	LFO Rate	-64 +63	40H = 0
xx 1C 07	00 00 01	00	7F	LFO Delay	-64 +63	40H = 0
xx 1C 08	00 00 02	0: 7F+0:F		Soundnr	Prog.Change(MSB) + Bank(LSB) 0	

DRUM KIT EDITING

LAYER1 SOUND PATCH (xx = NOTE = 0 - 7F)

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
xx 1D 00	00 00 02	0: 7F+0:F		Soundnr	Prog.Change(MSB) + Bank(LSB)	
xx 1D 01	00 00 01	00	7F	Level	00 127	
xx 1D 02	00 00 01	00	7F	Panorama	-64 +63	
xx 1D 03	00 00 01	00	7F	Transpose	-64 +63	
xx 1D 04	00 00 01	00	7F	Tune	-64 +63	
xx 1D 05	00 00 01	00	7F	FltCutOff	-64 +63	
xx 1D 06	00 00 01	00	03	Exclude	00 03	
xx 1D 07	00 00 01	00	7F	Effect 1	00 127	
xx 1D 08	00 00 01	00	7F	Effect 2	00 127	
xx 1D 09	00 00 01	00	04	Analog Out	00 04	

DYNAMIC SWITCH

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
00 1E 00	00 00 01	00	7F	DynSwitch	00 127	

LAYER2 SOUND PATCH (xx = NOTE = 0 - 7F)

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
xx 1F 00	00 00 02	0:	7F+0:F	Soundnr	Prog.Change + Bank	
xx 1F 01	00 00 01	00	7F	Level	00 127	
xx 1F 02	00 00 01	00	7F	Panorama	-64 +63	
xx 1F 03	00 00 01	00	7F	Transpose	-64 +63	
xx 1F 04	00 00 01	00	7F	Tune	-64 +63	
xx 1F 05	00 00 01	00	7F	FltCutOff	-64 +63	
xx 1F 06	00 00 01	00	03	Exclude	00 03	
xx 1F 07	00 00 01	00	7F	Effect 1	00 127	
xx 1F 08	00 00 01	00	7F	Effect 2	00 127	
xx 1F 09	00 00 01	00	04	Analog Out	00=track,1=L+R,2=O1+O2,3=O1,4=O2	

TRACK SELECT

Address(H)	Size (H)	Range(H)		Parameter	Description	Default
00 20 00	00 00 01	00	1F	Selected	00 31	

SYSTEM   OBJECT   ACCESS   MESSAGES

SYSTEM RESOURCE ACCESS

Messages relating to the RESOURCE ACCESS allow the transfer via MIDI of the same basic resources of the instrument that can be exported to disk, and which are:

Σ   System SETUP
Σ   SOUNDS
Σ   REAL PERFORMANCES
Σ   STYLE PERFORMANCES
Σ   USER STYLES
Σ   SONGS

Each type of resource can constitute several files, in which case, before transmitting, are compacted into a single data block..

The transmission can take place in handshake mode for higher speeds and better control of the data transmitted (the system automatically recognizes the mode utilized according to the reply given or not after the transmission of the File Header Message).

The MIDI message transmitted consists of the following structure:

F0H	=	System Exclusive Message status
2FH	=	ID number (manufacturer ID) = GENERAL MUSIC
5cH	=	Command ID: 5=Resource Access, c=device ID(0-F)[6]
ss	=	**Subfunction ID**
id	=	Model ID, 00 = WK4
cf	**=**	c = checksum (0-1), f = Data Format (0-3)
pp	=	packet number (optional)
<data>	=	(optional)
cc	=	checksum (optional)
F7H	=	EOX

Subfunction ID:		
	File Header	01H
	File Data	02H
	Resource Request	03H
	Parametr Request	40H
	Parameter Data	41H[7]

. . . .

```
ACK            7FH
NACK           7EH
CANCEL         7DH
WAIT           7CH
```

The transmission of one of the available resources starts by sending a message (**File Header message**) to indentify the successve blocks of data desired (**File Data message**).

Typically the files concerned can be relatively long, therefore it is better to subdevide the information into several brief packets which can be individually tested and eventually retransmitted (in the case of using the handshake mode and the reception of an **ACK** reply confirms the correctness of the packet received, while a reply of the type **NACK** forces the retransmission of the error packet).

Should it be necessar to interrupt the transmissoin, it is always possible to send the **CANCEL** command at any moment during the course of the communication.

A **WAIT** command has also beed included for future implementations.

File Header message:

F0H	=	System Exclusive Message status
2FH	=	ID number (manufacturer ID) = GENERAL MUSIC
5cH	=	Command ID: 5=Resource Access, c=device ID(0-F)
01H	=	Subfunction ID = FILE HEADER
00	=	Model ID, 00 = WK4
03H	**=**	not checksum, format 3 (octect)
<data> =		3 octects[8]
F7H	=	EOX

File Data message:

F0H	=	System Exclusive Message status
2FH	=	ID number (manufacturer ID) = GENERAL MUSIC
5cH	=	Command ID: 5=Resource Access, c=device ID(0-F)
02H	=	Subfunction ID = FILE DATA
00	=	Model ID, 00 = WK4
13H	**=**	checksum, format 3 (octect)
pp	=	packet number (00:7fH)
<data> =		15 octects
cc	=	checksum
F7H	=	EOX

Resource Request message:

F0H	=	System Exclusive Message status
2FH	=	Manufacturer ID = GENERAL MUSIC
5cH	=	Command ID: 5=Resource Access, c=device ID(0-F)
03H	=	Subfunction ID = RESOURCE REQUEST
00	=	Model ID, 00 = WK4
00	=	not checksum, format 0
tt	=	**Resourse ID**
ss	=	all files(0), selected(>0)[9]
F7H	=	EOX

Resource ID:	SETUP di sistema	0
	SOUNDS	1
	REAL PERFORMANCES	2
	STYLE PERFORMANCES	3
	USER STYLES	4
	SONGS	5

ACK message:

F0H	=	System Exclusive Message status
2FH	=	ID number (manufacturer ID) = GENERAL MUSIC
5cH	=	Command ID: 5=Resource Access, c=device ID(0-F)
7FH	=	Subfunction ID = ACK
00	=	Model ID, 00 = WK4
00	=	not checksum, format 0
pp	=	packet number (00:7fH)
F7H	=	EOX

NACK message:

F0H	=	System Exclusive Message status
2FH	=	ID number (manufacturer ID) = GENERAL MUSIC
5cH	=	Command ID: 5=Resource Access, c=device ID(0-F)
7EH	=	Subfunction ID = NACK
00	=	Model ID, 00 = WK4
00	=	not checksum, format 0
pp	=	packet number (00:7fH)
F7H	=	EOX

CANCEL message:

F0H	=	System Exclusive Message status
2FH	=	ID number (manufacturer ID) = GENERAL MUSIC
5cH	=	Command ID: 5=Resource Access, c=device ID(0-F)
7DH	=	Subfunction ID = CANCEL
00	=	Model ID, 00 = WK4
00	=	not checksum, format 0
pp	=	packet number (00:7fH)
F7H	=	EOX

WAIT message:

F0H	=	System Exclusive Message status
2FH	=	ID number (manufacturer ID) = GENERAL MUSIC
5cH	=	Command ID: 5=Resource Access, c=device ID(0-F)
7CH	=	Subfunction ID = WAIT
00	=	Model ID, 00 = WK4
00	=	not checksum, format 0
pp	=	packet number (00:7fH)
F7H	=	EOX

EXAMPLES of Resource Request message compositions

<*Example 1*> : System Setup request:

F0	2F	50	03	00	00	00		00	F7
(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)

(1)Exclusive Status
(2)manufacturer ID=GENERAL MUSIC
(3)Command ID(5=RESOURCE ACCESS) + device ID (0=1° device ID)
(4)Subfunction ID (3=RESOURCE REQUEST)
(5)Model ID (0=WK4)
(6)c=0(No checksum,f=0(7 bit data value)
(7)Resource ID (**0=Setup**)
(8)not used for Setup Req
(7)EOX

. . . .

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<*Example 2*> : System Sound request:

F0	2F	50	03	00	00	01		00	F7
(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)

(1)Exclusive Status
(2)manufacturer ID=GENERAL MUSIC
(3)Command ID(5=RESOURCE ACCESS) + device ID (0=1° device ID)
(4)Subfunction ID (3=RESOURCE REQUEST)
(5)Model ID (0=WK4)
(6)c=0(No checksum),f=0(7 bit data value)
(7)Resource ID (**1=Sound**)
(8)Selected (**00 = All files**)
(7)EOX

<*Example 3*> : Request for the 3rd Song in the System:

F0	2F	50	03	00	00	05		03	F7
(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)

(1)Exclusive Status
(2)manufacturer ID=GENERAL MUSIC
(3)Command ID(5=RESOURCE ACCESS) + device ID (0=1° device ID)
(4)Subfunction ID (3=RESOURCE REQUEST)
(5)Model ID (0=WK4)
(6)c=0(No checksum),f=0(7 bit data value)
(7)Resource ID (**5=Song**)
(8)Selected (**3 = 3^ file selezionato**)
(7)EOX

DEVICE PARAMETER ACCESS

Messages relating to the DEVICE PARAMETERS ACCESS allows access to specific information relating to the instrument; the protocol invludes the transmission of a request message which will be followed by the eventual reply.

Parameter Request message:

F0H	=	System Exclusive Message status
2FH	=	Manufacturer ID = GENERAL MUSIC
5cH	=	Command ID: 5=Resource Access, c=device ID(0-F)
40H	=	Subfunction ID = **PARAMETER REQUEST**
00	=	Model ID, 00 = WK4
00	=	not checksum, format 0
tt	=	**Parameter ID**
bs	=	**Bank Select**
ps	=	**PrChange Select** (only for SOUND)
F7H	=	EOX

Parameter ID:	STATUS of the system	0
	SOUND Name	1
	REAL PERF. Name	2
	STYLE PERF. Name	3
	USER STYLE Name	4
	SONG Name	5

Parameter Data message:

F0H	=	System Exclusive Message status
2FH	=	ID number (manufacturer ID) = GENERALMUSIC
5cH	=	Command ID: 5=Resource Access, c=device ID(0-F)

41H	=	Subfunction ID = **PARAMETER DATA**
00	=	Model ID, 00 = WK4
cf	**=**	checksum=1, format (5 per Status, 0 altrimenti)
pp	=	packet number (00:7fH)
<data>		
cc	=	checksum
F7H	=	EOX

The data sent refer to the structure as described below.

∑ **Status Data.** The data relates to the parameters contained in the following fields (the quantities of memory are expressed in Kbyte):

bytes	rel.addr.	name	description
1	0	iClass	see classification in **Tab.1**
1	1	iSubClass	see classification in **Tab.1**
1	2	iRelease instrument	release
1	3	peripherals	HD=b1, AV=b0
4	4	totalSysRam	Total System Memory
4	8	freeSysRam	Freee System memory
4	12	totalBackedRam	Backed Sample Ram Memory
4	16	freeBackedRam	Free Backed Sample Ram Memory
4	20	totalVolRam	Total Volatile Sample Ram Memory
4	24	freeVolRam	Free Volatile Sample Ram Memory

iClass / iSubClass	1	2	3	4	5	6	7	8
1 - Synth Expander	S2	S3	S2 Box	SK76	SK88			
2 - Masterkeyboards	MK88							
3 - Keyboards	WS2	WS1	WX2	WX2Box	CD	WX400	WK4	SX2	SX3	WK3
4 - Pianos	WS400		RPro1	RPro2	RPprox	Ps2500	PS1500	
5 - Home Organs								
6 - Classic Organs								
7 - Accessories	AS-1							

(TAB.1)

∑ **Parameter Data.** In this case the streams relating to the parameter names requested are returned and all the data is identifed by the following 16 bytes:

0	1	2	3-15
Parameter ID	Bank Select	Perf Select	Parameter Name (13 char Max)

The parameters **bs (bank select)** and **ps (prChange select)** contained in the request vary according to the parameter as in **Tab.2**, taking into accound that the request will have effectively followed only in the case in which what has been requested is actually present in the system; to be able to request all the values available for a given parameter, it is sufficient to send the values **bs=00** e **ps=00**.

	STATUS	SOUND	REAL PERF.	STYLE	SONG
Bank Select Range	00	1 - 16	1 - 8	1 - 96	1 - 16
PrCh Select Range	00	1 - 128	not used (nu)	nu	nu
(Tab.2)					

. . . .
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APPENDIX A

DATA FORMAT

The messages used to control the system exclusives accept data in the following formats:

format =0 (7 bit data value): the natural data format with values from 0 to 127. Does not require any form of treatment.

format =1 (7 bit wide word LSB_J): the value of the data present in the stream has a range defined by the number of bytes transmitted. For example, to transmit the hexadecimal value F123 (61731 decimal) three bytes configured as follows are required:
03 62 23. This format is useful to transmit single data (byte, short, int, long, float, double) which do not fall within the range 0-127.

format =2 (nibble): single byyes contain only 4 significant bits but which can represent much greater values. for example, to transmit the hexadecimal value F123 (61731 decimal) would require four bytes configured as: 0F 01 02 03; i practice, each single byte is sliced in two and transmitted on two bytes with the four most significant bits at 0.

format =3 (octect): the bytes are groups in sets of 8 Bytes with 7 significant bits to represent 7 real bytes in 8 MIDI bytes (56 bit). This format allows, therefore, to achieve maximum compactness of the data to transmit in cases of data consisting of a large number of bytes whose priory value is not known.

The procedure is as follows: from each bytes of the 7 in sequence, the least significan bit is extracted and saved in an eighth byte, therefore the same byte is shifted to the right; finally all is transmitted in the order. For example:

      7 real bytes = 0x11 0x22 0x33 0x44 0x55 0x66 0x77

then shifting to the right and memorizing in a byte the "extracted" bits:

$$
\begin{array}{lll}
0x11 = 0x09 + 1 \ (b0) & 8°byte: & 0x01 \\
0x22 = 0x11 + 0 \ (b1) & & 0x01 \\
0x33 = 0x1A + 1 \ (b2) & & 0x05 \\
0x44 = 0x22 + 0 \ (b3) & & 0x05 \\
0x55 = 0x2B + 1 \ (b4) & & 0x15 \\
0x66 = 0x33 + 0 \ (b5) & & 0x15 \\
0x77 = 0x3C + 1 \ (b6) & & 0x55
\end{array}
$$

      8 byte Midi = 0x09 0x11 0x1A 0x22 0x2B 0x33 0x3C 0x55.

format =4 (nibble data dump): the single bytes containing only 4 significant bits to be able to represent any data stream. For example, the stream "ciao" corresponds to the ASCII data 0x63 0x69 0x61 0x6f and will, therefore, be represented by the following bytes: 0x06 0x03 0x06 0x09 0x06 0x01 0x06 0x0f.

format =5 (BCD data dump): the single bytes are subdivided in two nibbles and subsequently converted in BCD; this is a format particularly useful with numerical data which does not permit direct visualization. For example, the number **0x12345678** corresponds to the ASCII data 0x12 0x34 0x56 0x78 which subdevided in nibbles give:

      0x01 0x02 0x03 0x04 0x05 0x06 0x07 0x08

which when conve rted in BCD give:

      0x31 0x32 0x33 0x34 0x35 0x36 0x37 0x38

which when shown on the terminal gives the stream **"12345678"**, representing the initial data.

Observations:

The Set function of the System Exclusive is able to automatically identify the amount of the field to update, regardless of the format with which the data is sent with the following exceptions:

Σ the **format 0** always modifies a bytes relating to the addres of the variable to update, therefore, if for example, we want to modify with format 0 a variable of 32 bits of the current value equalling 0x12345678 (hexadecimal value), after sending the data 0x**7F** we will obtain the variable updated to the value 0x**7F**345678. The correct method to update a variable with a value greate than 7 bit (correspnding to the decimal value 127) is to use the format 1 or 2; in the way, to update a 16 bit variable to the hexadecimal value 0x1234 you can send:

format 1:	0x24 0x34	(2 data bytes)
format 2:	0x01 0x02 0x03 0x04	(4 data bytes).

Σ the **formats 4 and 5** do not consider the limits accepted by the filed in memory for which case should be taken not to send a numder of data higher than the accepted limit.

APPENDIX   B

Creation of RESOURCE ACCESS files.

To control the resources via system exclusive (RESOURCE ACCESS) makes use of the solution of packaging the various files which constitute the same resource into a single buffer.

Generally, therefre, we would have the following situation:

Resource File	=	FILE.000
		FILE.001
		FILE.002
		...
		FILE.00n

for a total of (n+2) files (with n which can also be 0).

Each file can be identified by a set of three numbers which represente their own description:

File ID	=	**type** (Resource ID)
		bank (0xFF if not exist)
		perf (0xFF if not exist)

This document wants to indicate how to identify the files concerned for each resource to be accessed, how to operate to manipulate these files and, finally, the effective transmission mode.

Types of Resources

The resources can be classified as follows:

Resource ID:		
	system SETUP	0
	SOUNDS	1
	REAL PERFORMANCES	2
	STYLE PERFORMANCES	3
	USER STYLES	4
	SONGS	5

for each of which concern various files

For each of the resourcces available, it is possible to send a command requesting all the resources which make up the part of that groups (all the SOUNDS, all the SONGS, ...), or, it is possible to refer to a single resource of the currently selected group (send the selected SONG, the selected STYLE, ...).

. . . .

Referring to the **Resource Request Message** command detailed above, setting the value of **0** in the field **ss** we will obtain all the resources, while specifying a number **greater than 0** we will obtain the transmission of the single resource required.

for each group of rerouces the possible selection values are the following:

Resourse ID	Max Select Number
SOUNDS	16
REAL PERFORMANCES	8
STYLE PERFORMANCES	96
USER STYLES	32
SONGS	16

Creation of the Resource File

To create the Resource File it is necessary to write for each single file of a chunk consisting of a desription of the file and of the data that consistutes the file; the format of each chunk is the following:

bytes	rel.addr.	name	description
4	0	chunck id	"data"
4	4	chunck len	es.: 30^{10}
1	8	file type	
1	9	file bank	
1	10	file perf	
1	11	not used	
20	12	F_HEAD	vedi sotto
len-28	**32**	< data >	byte data

therefore the Resource File can be represented as:

"data" len0 ... < data > for FILE.000
"data" len1 = len0+4 ... < data > for FILE.001
"data" len2= len0+len1+8 ... < data > for FILE.002
"data" len3= len0+len1+len2+12 ... < data > for FILE.003
"data" len_n = S[len(i)] + 4*n ... < data > for FILE.00n

To calculate the totale length of the Resource File it is sufficient sum of the lengths of each file (Li) with the length of each single header chunk (32 bytes):

Resource File Length = S[Li] + n*32;

The variable **F_HEADER** present refers to the internal structure of how the file is effectively memorized within the system; to identify it we refer directly to the stuctures "C" used internally:

```
union TIME_INF {
        struct part {
                unsigned short hour : 5;
                unsigned short min  : 6;
                unsigned short sec  : 5;
                };
        ushort time;
        };                              // total 2 bytes

union DATE_INF {
        struct part {
                unsigned short year  : 7;
                unsigned short month : 4;
                unsigned short day   : 5;
                };
        ushort date;
```

```
        } ;                    // total 2 bytes

struct F_HEAD {
        unsigned char name[8],ext[3],flags;  // 12
        TIME_INF        time;                 // 2
        DATE_INF        date;                 // 2
        long            length;               // 4
        };                             // total 20 bytes
```

For completion, the description of the file inside the HEADER.hdr refers instead to a more complex stucture:

```
struct F_HEADER {
        F_HEAD f;
        char    name[16];
        long    offset;
        };
```

Creation of the Resource Header

Before sending the Resource File, a Resource Header is sent which describes the entire Data File which is then sent. The Format of the file is the following:

bytes	rel.addr.	name	description
1	0	resource type	Resource ID
1	1	nfile	number of file
4	2	len	total length of the effective binary resource file
15	6	name	name of the complete structure associated to the file

for a total length of files equal to **21 bytes**.

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APPENDIX C

MIDI FILTERS conversion table

N.	Description	N.	Description
0	Filter off	**50**	77 S.C. (Undef.)
1	Prg. change	**51**	78 S.C. (Undef.)
2	Pitch	**52**	79 S.C. (Undef.)
3	Mono touch	**53**	80 Gen. purp. c.5
4	Poly touch	**54**	81 Gen. purp. c.6
5	0 Bank sel	**55**	82 Gen. purp. c.7
6	1 Modulation	**56**	83 Gen. purp. c.8
7	2 Breath cnt.	**57**	84 Portam. cnt.
8	3 Undef. cnt.	**58**	85 Undef. cnt.
9	4 Foot cnt.	**59**	86 Undef. cnt.
10	5 Portamento time	**60**	87 Undef. cnt.
11	6 Data en. MSB	**61**	88 Undef. cnt.
12	7 Main vol.	**62**	89 Undef. cnt.
13	8 Balance	**63**	90 Undef. cnt.
14	9 Undef. cnt.	**64**	91 Eff. 1 (Rev.)
15	10 Panorama	**65**	92 Eff. 2
16	11 Expression	**66**	93 Eff. 3 (Chor.)
17	12 Control 1	**67**	94 Eff. 4
18	13 Control 2	**68**	95 Eff. 5
19	14 Undef. cnt.	**69**	96 Data incr.
20	15 Undef. cnt.	**70**	97 Data decr.
21	16 Gen. purp. c.1	**71**	98 NRPN LSB
22	17 Gen. purp. c.2	**72**	99 NRPN MSB
23	18 Gen. purp. c.3	**73**	100 RPN LSB
24	19 Gen. purp. c.4	**74**	101 RPN MSB
25	20 Undef. cnt.	**75**	103 Undef. cnt.
26	21 Undef. cnt.	**76**	104 Undef. cnt.
27	22 Undef. cnt.	**77**	105 Undef. cnt.
28	23 Undef. cnt.	**78**	106 Undef. cnt.
29	24 Undef. cnt.	**79**	107 Undef. cnt.
30	25 Undef. cnt.	**80**	108 Undef. cnt.
31	26 Undef. cnt.	**81**	109 Undef. cnt.
32	27 Undef. cnt.	**82**	110 Undef. cnt.
33	28 Undef. cnt.	**83**	111 Undef. cnt.
34	29 Undef. cnt.	**84**	112 Undef. cnt.
35	30 Undef. cnt.	**85**	113 Undef. cnt.
36	31 Undef. cnt.	**86**	114 Undef. cnt.
37	64 Damper ped.	**87**	115 Undef. cnt.
38	65 Portamento	**88**	116 Undef. cnt.
39	66 Sostenuto	**89**	117 Undef. cnt.
40	67 Soft pedal	**90**	118 Undef. cnt.
41	68 Legato foot	**91**	119 Undef. cnt.
42	69 Hold 2	**92**	119 Undef. cnt.
43	70 S.C. (Sn.v.)	**93**	120 All snd. off
44	71 S.C. (Res.)	**94**	121 Reset all c.
45	72 S.C. (Rel.)	**95**	122 Local cnt.
46	73 S.C. (Att.)	**96**	123 All note off
47	74 S.C. (Cut.)	**97**	124 Omni m. off
48	75 S.C. (Undef.)	**98**	125 Omni m. on
49	76 S.C. (Undef.)	**99**	126 Mono m. on
		100	127 Poly m. on

[1] see Appendix A on Data Format

[2] 0=Echo LCD, 1=All, 2=All on 2 lines, 3=Lyric only, 4=Chord only

[3] The values 00H-0FH relatve to the Midi Port-A and 10H-1FH to Port-B

[4] 00=No Midi, No Keyboard, 1=only Keyboard, 2=only Midi, 3=Midi & Keyboard

[5] 00=N0 Midi, No Generation, 1=only Generation, 2=only Midi, 3=Midi & Generation

[6] see Appendix A on Data Format

[7] see paragraph "Device Parameter Access"

[8] Infact the Resource File Header is composed of 21 byte (see Appendix B)

[9] See Appendix B regarding the composition of the various resources available

[10] 28 + byte data number

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FEDERAL COMMUNICATIONS COMMISSION

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this instrument does cause harmful interference to radio or television reception, which can be determined by turning the instrument off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Changes or modifications to this product not expressly approved by the manufacturer could void the user's authority to operate this product.

Stock Code 271219
Specifications are subject to change without prior notice.
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