The DPM 3SE Plus+

Addendum
To The DPM® 3SE
Owner's Manual

Congratulations and thank you for purchasing the DPM®3SE plus. We have taken opinions and comments from customers, musicians, and dealers worldwide and created the next generation of DPM 3SE software, all with ease of use and creative potential our top priority.

The DPM 3SE plus encompasses many changes in both the sound generation and voice editing areas, as well as increased sequencer capacity. Also, the DPM 3SE plus includes improvements to the user interface to minimize the steps between creative inspiration and its realization.

This addendum to the DPM 3SE manual covers the major points of change in the DPM 3SE plus in a tutorial fashion. If the tutorials don't answer all of your questions about the new features, we encourage you to experiment with the programmable values this will allow you to develop a further understanding than we could relate to you.

As a general overview, the major features we have added to the DPM 3SE are as follows:

1. **Addition of looping envelopes to voice generation and modulation capabilities**

2. **Addition of dual sequencer bank capacity**

3. **Redesigned COMBI programming pages with the addition of programmable PAN locations per COMBI linked program**

4. **Octave pitch bend capability**

5. **Effect programming access through voice edit screens**

6. **All notes off filtering capability**

7. **Redesigned MIDI multi setup screen**

8. **Redesigned STORE screen and Internal/Cartridge program swap function**

9. **Improved sample editing with WYSIWYH (What You See Is What You Hear) select and delete screens, as well as real-time audition of edits and real-time loop update capability**

10. **Programmable filter cutoff per drum piece in the Drum Kit programming screens**

11. **Enhanced editing featuring parameter entry from the keyboard where applicable**

Tutorials

About Looping Envelopes

Although looping envelopes have appeared on several synthesizers in the past from different manufacturers, we feel the implementation of this feature on the DPM 3SE is the most flexible ever presented.

When holding a key, a normal envelope on the DPM 3SE stops its progression at Level 3, the sustain level. In the DPM 3SE plus , the envelope can be programmed to repeat steps in the envelope between the sustain level and any of the previous points in the envelope. The progression between Level 3 and the programmed previous point can be looped as a forward progression, or a backward-forward progression.

Programming Envelopes 1, 2, and 3 to repeat infinitely throughout the release phase of Envelope 4, the amplitude envelope, is now possible. Repeating Envelope 4 is only possible while holding the note.

Example: **Infinite repeating forward progression 0 -> 3 Envelope.**

```
ENV1 L0= 99 L1= 99 L2= 90 L3= 60 L4= 00
-time-   vel * +00  key * +70 loop= 0→→3I
```
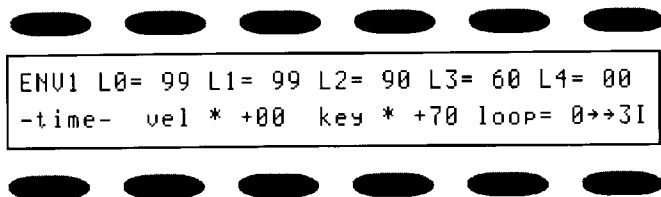
As programmed above, the Envelope 1 points that you would hear while holding the key and after its release would be:

0 -> 1 -> 2 -> 3 -> 0 -> 1 -> 2 -> 3 -> 0 ... ad infinum

Looping envelopes add texture and dynamic movement of the sounds. When used in conjunction with oscillator mixes, filtering, or pan position, enables you to create new sounds previously unattainable on the DPM 3SE.

About the Dual Sequencer Bank Capacity and Internal/Cartridge Program Swap

The DPM 3SE plus has added the ability to increase the total available internal sequencer memory by allowing the use of the factory installed 64K bytes of Sample RAM to be used as a sequencer Ram disk. This allows the user to access two 64K (20,000 note) banks of sequencer data without performing a time consuming disk load.

Access to the use of Sample RAM for sequencer memory is on the *Sequencer CONTROL* page:

```
[#Banks:01] Tempo= 120 Clk= INT Met= OFF
50K Free  Loop= ON  XSysR= ON  Res= 1/4
```
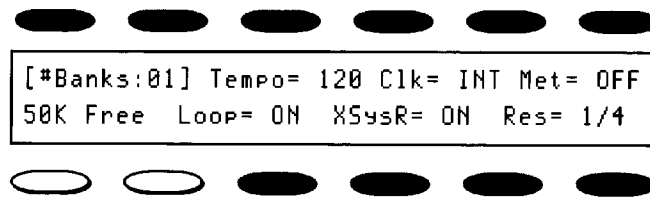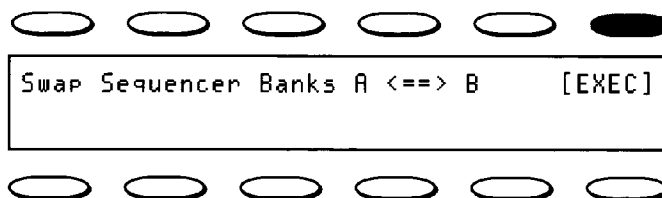
By depressing the soft key above **[#Banks:01]** field in the display, the allocation of Sample RAM memory to the sequencer can occur. When the number of banks allocated to the sequencer is equal to two, the first 64K bytes of DPM 3SE Sample RAM are being used for the second sequencer bank.

Note: If samples are loaded into Sample RAM at the time you attempt to set up the second bank of Sequencer RAM, you will get an error message asking you to "Save/Delete RAM Waves first!", if this occurs, remember that the sequencer is attempting to use the Sample RAM as memory, so it must be empty before being used. Also, note, that if you have more than the standard 64K of Sample RAM installed, toggling the number of sequencer banks still allows you to load samples into RAM above the 64K byte section that the sequencer is using.

This sequencer bank field can be toggled at any point during use of the DPM 3SE, except when there are samples loaded in the lower 64K bytes of Sample RAM, or when the sequencer is active.

Once you have selected two banks of sequencer memory, an additional screen now appears as you scroll through the sequencer select pages.

```
  ⊂⊃    ⊂⊃    ⊂⊃    ⊂⊃    ⊂⊃    ⬤
┌─────────────────────────────────────────┐
│                                         │
│  Swap Sequencer Banks A <==> B    [EXEC] │
│                                         │
└─────────────────────────────────────────┘
  ⊂⊃    ⊂⊃    ⊂⊃    ⊂⊃    ⊂⊃    ⊂⊃
```

The function on this screen allows the user to copy the accessed or active 64K of Sequencer RAM to the Sequencer Sample RAM buffer *and* copy the stored sequencer data in Sample RAM to the active 64k buffer. In other words, you can swap between banks of sequencer data. Used in conjunction with the "SwapIntCart" function, this allows you to have two separate banks of songs and sequences, as well as their respective program and effect blocks (if they differ), loaded in the DPM 3SE at the same time.

Example: Loading and using two sequencer banks

Once you have enabled the sequencer to have two banks of memory on the CONTROL page, load a setup file from the floppy disk with both patches and sequencer data.

By pressing the [+page] button from the Sequence1 Select Menu or [-page] on the Song Select Menu, the *Swap Sequence Bank* function will appear.

Press the [EXEC] soft key. The swap function will indicate that it is in progress. After about five seconds, the transfer of data to the second bank of Sequencer RAM will have taken place.

At this point, if you possess a Peavey Cache Card, you can use the *SwapIntCart* function under the STORAGE button to transfer the program and effect data to the cartridge.

You may now load a second setup file into the DPM 3SE for use. This will allow you to hold two simultaneous banks of 64K sequencer data (40,000 notes) in the DPM 3SE without having to access the disk drive again.

About PAN Assignments in COMBI Programs

There have been many changes in the COMBI programming pages. At first glance, you can see that linked page selection now takes place on the same page as the SINGLE/COMBI toggle occurs, eliminating a button press or two. The **[+page]** and **[-page]** buttons are still active on these screens. The appearance of a "-+-" symbol in the lower left corner of the COMBI screen indicates that there is another screen above or below the current screen.

Combined on a single screen are the *DETUNE* and *DELAY* parameters, as well as the individual KEY and *VELOCITY* range parameters. Incidentally, the *KEY* and *VELOCITY* parameters are programmable from the keyboard.

Beyond cosmetic differences, each linked program in the COMBI patch being edited is now assignable to its own position in the PAN field from the LVL/PAN page. The pan positions can be programmed from **-7** to **+7**, **-7** being full left and **+7** being full right. Zero is the centered value.

```
LVL/PAN  12= 99      13= 99      14= 99
-+-         P2= +00   P3= +00    P4= +00
```
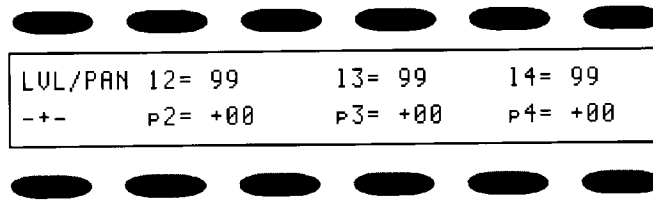
To achieve this effect in previous versions of the DPM 3SE, you had to reprogram the pan locations in each linked program by editing those programs themselves. Now the linked program integrity is maintained while still adding the pan spacing if desired.
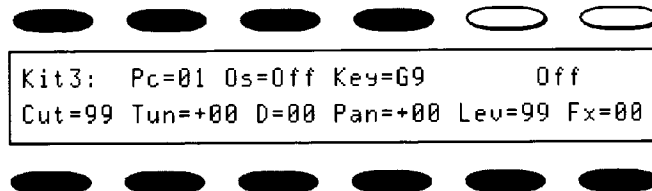
About Sample Editing and WYSIWYH

We've also improved the user interface in the sample editing area for the DPM 3SE plus. First, we've created a What-You-See-Is-What-You-Hear environment that allows you to audition each sample as you are scrolling through the EDIT or DELETE screens. This enables you to easily select the exact sound you wish to work with.

In addition to WYSIWYH, we've added real-time updating of the Sample Loop Points when on the LOOP Edit pages. While altering the Loop Start or End, you will hear the loop point being updated without having to re-trigger the note from the keyboard. The updating occurs whether using the AUTO or MANUAL loop search functions.

About Programmable Filter Cutoffs per Kit

In the DPM 3SE plus, each piece of the five kits accessible can now be programmed to have an individual filter cutoff. This enables you to add the filter to shape your drum sounds to your liking. Velocity, keyboard, and other filter modulation that previously affected the cutoff programmed on the Filter menu will now use the programmed filter per piece as the initial value to modulate.

One note of caution is in order. Previously, the lower left soft key was used to decrement the current kit number. In the DPM 3SE plus, only the upper left soft key allows you to switch displayed kits. The lower left soft key has been allocated to selecting the cutoff field to edit the current piece.

```
Kit3:   Pc=01 Os=Off Key=G9          Off
Cut=99 Tun=+00 D=00 Pan=+00 Lev=99 Fx=00
```

PERVEY