

TNT® 115/TKO® 115

OPERATING GUIDE



PEAVEY



Intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



Intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

CAUTION: Risk of electrical shock — DO NOT OPEN!

CAUTION: To reduce the risk of electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

WARNING: To prevent electrical shock or fire hazard, do not expose this appliance to rain or moisture. Before using this appliance, read the operating guide for further warnings.



Este símbolo tiene el propósito, de alertar al usuario de la presencia de “(voltaje) peligroso” sin aislamiento dentro de la caja del producto y que puede tener una magnitud suficiente como para constituir riesgo de descarga eléctrica.



Este símbolo tiene el propósito de alertar al usuario de la presencia de instrucciones importantes sobre la operación y mantenimiento en la información que viene con el producto.

PRECAUCION: Riesgo de descarga eléctrica ¡NO ABRIR!

PRECAUCION: Para disminuir el riesgo de descarga eléctrica, no abra la cubierta. No hay piezas útiles dentro. Deje todo mantenimiento en manos del personal técnico cualificado.

ADVERTENCIA: Para evitar descargas eléctricas o peligro de incendio, no deje expuesto a la lluvia o humedad este aparato. Antes de usar este aparato, lea más advertencias en la guía de operación.



Ce symbole est utilisé dans ce manuel pour indiquer à l'utilisateur la présence d'une tension dangereuse pouvant être d'amplitude suffisante pour constituer un risque de choc électrique.



Ce symbole est utilisé dans ce manuel pour indiquer à l'utilisateur qu'il ou qu'elle trouvera d'importantes instructions concernant l'utilisation et l'entretien de l'appareil dans le paragraphe signalé.

ATTENTION: Risques de choc électrique — NE PAS OUVRIR!

ATTENTION: Afin de réduire le risque de choc électrique, ne pas enlever le couvercle. Il ne se trouve à l'intérieur aucune pièce pouvant être réparée par l'utilisateur. Confiez l'entretien et la réparation de l'appareil à un réparateur Peavey agréé.

AVERTISSEMENT: Afin de prévenir les risques de décharge électrique ou de feu, n'exposez pas cet appareil à la pluie ou à l'humidité. Avant d'utiliser cet appareil, lisez attentivement les avertissements supplémentaires de ce manuel.



Dieses Symbol soll den Anwender vor unisolierten gefährlichen Spannungen innerhalb des Gehäuses warnen, die von Ausreichender Stärke sind, um einen elektrischen Schlag verursachen zu können.



Dieses Symbol soll den Benutzer auf wichtige Instruktionen in der Bedienungsanleitung aufmerksam machen, die Handhabung und Wartung des Produkts betreffen.

VORSICHT: Risiko — Elektrischer Schlag! Nicht öffnen!

VORSICHT: Um das Risiko eines elektrischen Schlages zu vermeiden, nicht die Abdeckung entfernen. Es befinden sich keine Teile darin, die vom Anwender repariert werden könnten. Reparaturen nur von qualifiziertem Fachpersonal durchführen lassen.

ACHTUNG: Um einen elektrischen Schlag oder Feuergefahr zu vermeiden, sollte dieses Gerät nicht dem Regen oder Feuchtigkeit ausgesetzt werden. Vor Inbetriebnahme unbedingt die Bedienungsanleitung lesen.

ENGLISH

TKO® 115/TNT® 115 Bass Amplifiers

Congratulations on your purchase of the new TKO 115 or TNT 115 bass amplifier by Peavey. Both represent the finest in bass amplification available today. Utilizing the latest in semiconductor technology and power amp design, the TKO 115 and TNT 115 set the standard for exemplary performance.

Featuring an external speaker output, a balanced line level output, DDT™, and much more, each of these combo packages packs a heavy punch. The following list reflects the many features found on both the TKO 115 and TNT 115 bass amplifiers. Due to the similarities of both the TKO 115 and TNT 115, both products are covered in this manual. Where applicable, any differences in the two units are noted.

Please read this guide carefully to ensure your personal safety as well as the safety of your amplifier.

FEATURES:

- Active/Passive select switch
- Pre gain and volume controls
- Bright switch
- Contour bypass switch
- Send/Return patch (footswitchable on TNT 115)
- Low frequency shelving control
- High frequency shelving control
- Seven-band graphic EQ
- EQ In/Out switch
- Balanced line level output w/ground lift switch
- Headphone output
- Power/Status LED
- DDT speaker protection w/defeat switch
- External speaker output

Rear Panel



I. AC Power and External Speaker



Before you begin to play through your amp, it is very important to ensure the product has the proper AC line voltage supplied. You can find the proper voltage for your amp printed next to the IEC line (power) cord (1) on the rear panel of the unit. In this section, all features related to AC power are explained. Some are found on the rear of the unit and some are found on the front.

In addition, an external speaker jack is provided for the additional use of an external bass enclosure. This feature is located on the rear panel as well and is also explained in this section.

Each product feature is numbered. Refer to the front and rear panel diagrams in this manual to locate the particular features next to their number.

1. REMOVABLE AC POWER CORD

This receptacle is for the IEC line cord (included), which provides AC power to the unit.



Connect the line cord to this connector and to a properly grounded AC supply. Damage to the equipment may occur if an improper line voltage is used. (See voltage marking on unit.) Never remove or cut the ground pin of the line cord plug. This unit is supplied with a properly rated line cord. When lost or damaged, replace this cord with one of the proper ratings.

2. FUSE

The fuse is located in the cap of the fuse holder. If the fuse should fail, IT MUST BE REPLACED WITH A FUSE OF THE SAME TYPE AND VALUE IN ORDER TO AVOID DAMAGE TO THE EQUIPMENT AND TO PREVENT VOIDING THE WARRANTY. If the amp repeatedly blows fuses, it should be taken to a qualified service center for repair.



WARNING:

THE FUSE SHOULD ONLY BE REPLACED WHEN THE POWER CORD HAS BEEN DISCONNECTED FROM ITS POWER SOURCE.

3. GROUND POLARITY SWITCH (120V units only)

The ground switch is a three-position rocker switch which, in most applications, should be operated in its center or zero position. There may be some situations when audible hum and/or noise will come from the speaker. If this situation arises, position the ground switch to either the positive or negative (+/-) position or until the noise is minimized.

4. LINE CORD RETAINER

The rear of the unit is designed to allow storage of the IEC Line Cord (1) when not in use. To store, disconnect the cord from the AC supply and the rear IEC Connector. Carefully rap the cable around the retainers for storage.

5. POWER SWITCH

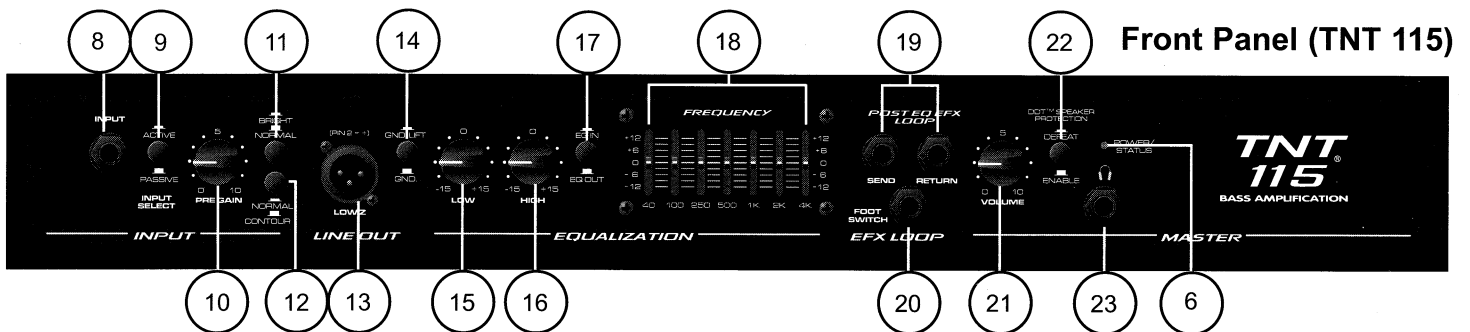
Press to "ON" position to turn on the amp.

6. POWER/STATUS LED (See Front Panel diagram below)

Illuminates GREEN when AC power is being supplied to the amp and illuminates RED when DDT is active. Note that when the DDT Speaker Protection System Switch (22) is in the "DEFEAT" position (IN), the Status LED illuminates RED when the amplifier goes into clipping.

7. EXTERNAL SPEAKER JACK

An external speaker cabinet may be connected to the amplifier. THE IMPEDANCE OF THE CABINET MUST **NOT** BE LOWER THAN 4 OHMS ON THE TNT 115 AND 8 OHMS ON THE TKO 115. Note that the external speaker jack is in parallel with the internal speaker to produce maximum power load. The internal speaker impedance of the TNT 115 is 4 ohms and the TKO is 8 ohms.



II. Front Panel

In this section each feature of the preamp is explained. These preamp features all function to develop and/or process your tone. For the best results, always use quality shielded instrument cables and patch cables when connecting to the amplifier. Refer to the Block Diagram on page 8 for a visual representation of how the signal flows through the preamp section to the power amp.

Input

8. INPUT JACK

This 1/4" mono input will accept signals from all types of bass pickups.

9. INPUT SELECT

When placed in the "ACTIVE" position, this switch activates a -10 dB pad for use with those bass guitars with active pickups. Often, the signal produced by active pickups is so strong that it overdrives the input stage of the preamp. In order to prevent this type of distortion this function is provided. Standard bass guitars with passive pickups (no battery) should use the "PASSIVE" position.

10. PRE GAIN

Controls the input gain of the preamp. If distortion is heard, the Pre Gain control may be set too high. In this situation, decrease the Pre Gain control (turn counterclockwise) and increase the Volume (21) control.

11. BRIGHT SWITCH

Placing this switch in the "BRIGHT" position provides an 8 dB boost to treble frequencies. To activate, depress the switch to the "IN" position.

12. CONTOUR BYPASS SWITCH

Placing this switch in the "BYPASS" (IN) position defeats the preset special EQ curve. Leaving the switch in the "ACTIVE" position allows for the popular Contour EQ curve to be present in the signal chain. The Contour EQ curve offers high frequency enhancement to complement the clarity and attack of your instrument. Experiment with this switch position to find the voicing that best complements your desired tone.

Line Out

13. LOW Z BALANCED OUTPUT

Provides an electronically balanced, low impedance signal source for use with external equipment. Though this source can be used to trigger lights or go to an effects rack, its designed function is to provide a direct balanced signal to the Low Z inputs of a mixer. This eliminates the need for external direct boxes.

14. GROUND LIFT SWITCH

Place this switch in the "GND LIFT" (IN) position to lift the ground on the Low Z Balanced Output (13). This is used to prevent hum when connecting the output to external equipment.

Equalization

15. LOW

An active tone control (shelving type, +/- 15 dB) that varies the low frequency boost or cut.

16. HIGH

An active tone control (shelving type, +/- 15 dB) that varies the high frequency boost or cut.

17. EQ IN/OUT SWITCH

The "IN" position of this switch routes the instrument signal through the 7-band equalizer. The "OUT" position removes the graphic equalizer from the signal path.

18. GRAPHIC EQUALIZER

This seven-band, graphic equalizer provides 12 dB of boost or cut at each center frequency.

Post EQ EFX Loop

19. SEND/RETURN

This is a low-level (0.3 V RMS) pre-EQ effects patch. To patch an effects unit, connect the SEND jack to the input of the effects unit. Next, connect the output of the effects unit to the RETURN jack. Remember to always use high-quality shielded cables for these connections.

20. REMOTE SWITCH JACK (TNT 115 only)

A single switch footswitch (mono 1/4" plug) can be used to switch the effects loop off and on. The recommended footswitch for this application is the Peavey model #00051000.

Master

21. VOLUME

Controls the overall volume level of the amplifier. The final level adjustment should be made with this control after the desired tone has been achieved.

22. DDT™ SPEAKER PROTECTION SYSTEM SWITCH

Your amplifier utilizes our DDT compression circuit to effectively eliminate the possibility of clipping (square wave) the power amplifier. The amplifier should be operated such that the DDT display is NOT lit constantly, but is lit intermittently. When the display is on all the time, this is an indication that the power amplifier is being driven excessively hard. To avoid this situation, either reduce the gain or reduce the EQ settings until the DDT display lights intermittently. To defeat the DDT speaker protection system, place the switch in the "DEFEAT" (IN) position.

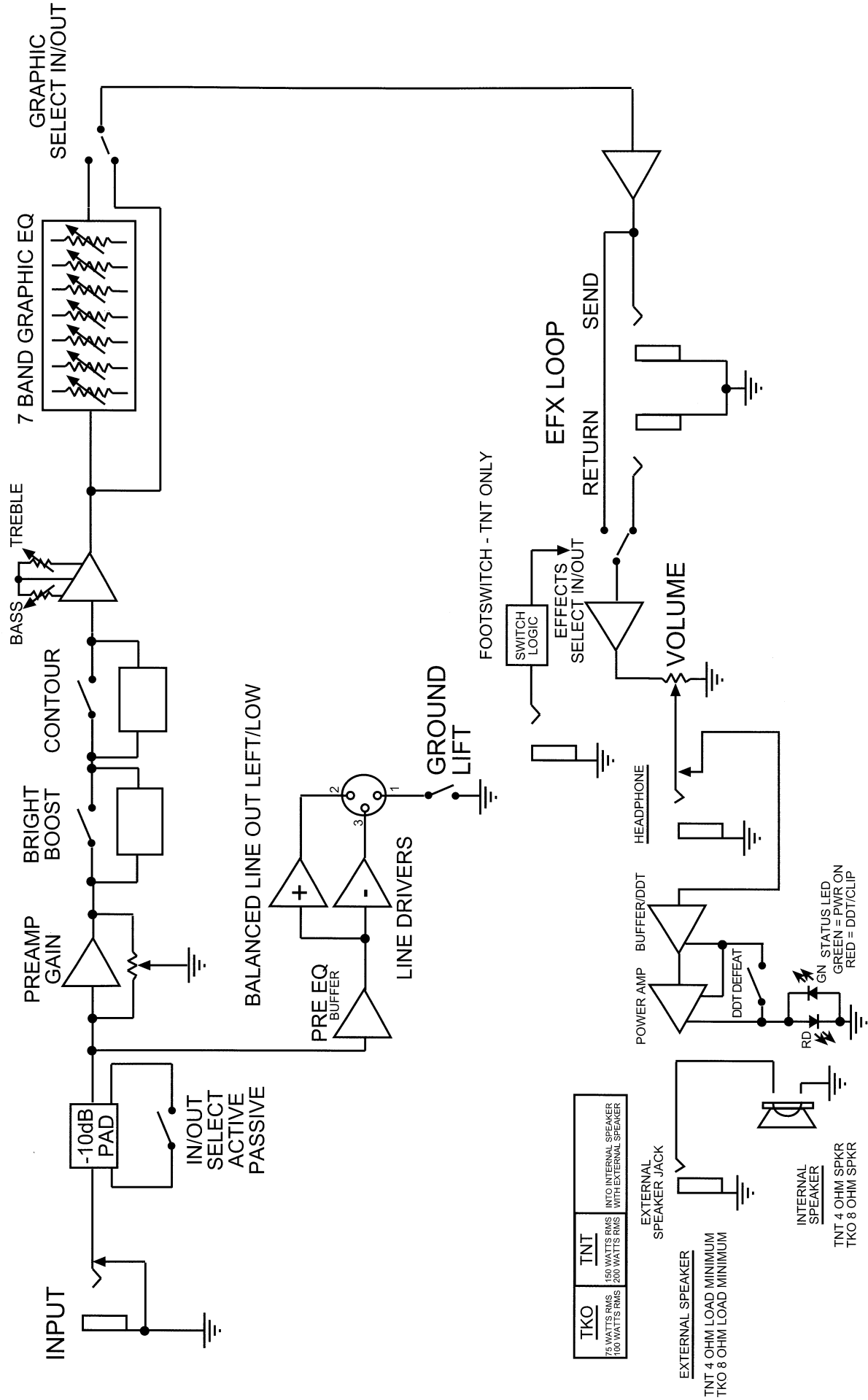
Note: It is highly recommended to utilize the DDT speaker protection system.

23. HEADPHONE JACK

This stereo 1/4" jack is designed to accept standard stereo headphones. This jack is a switching jack which defeats the output at the speaker when used. The Balanced Line Output (13) will not be defeated with the use of the Headphone Jack.

TKO®/TNT®

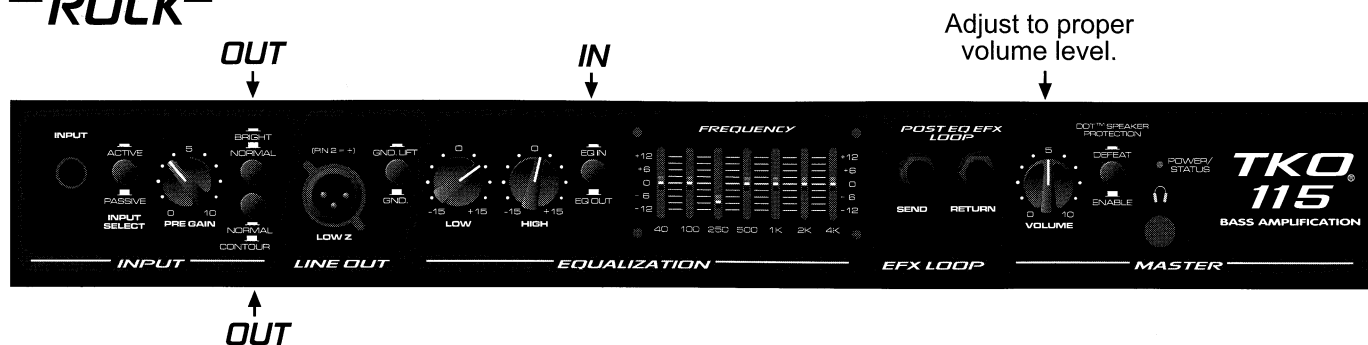
BLOCK DIAGRAM



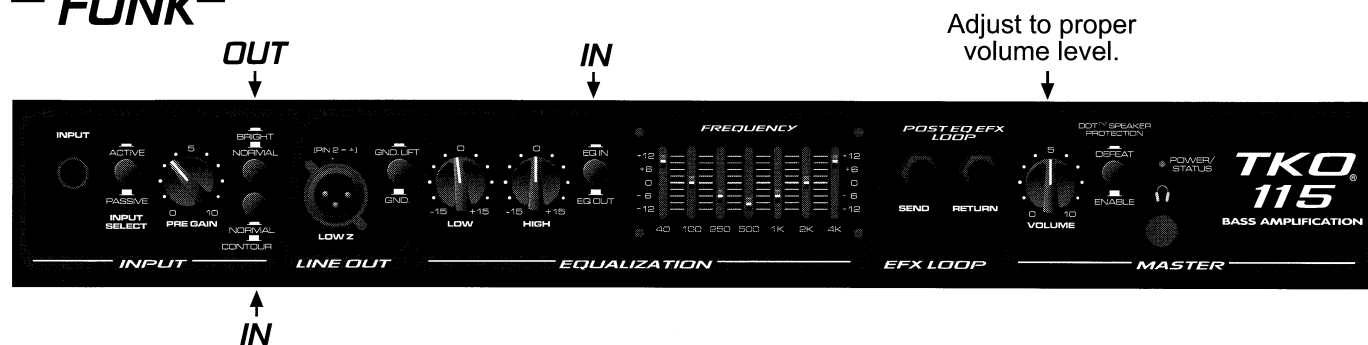
TKO®/TNT®

SETTING EXAMPLES

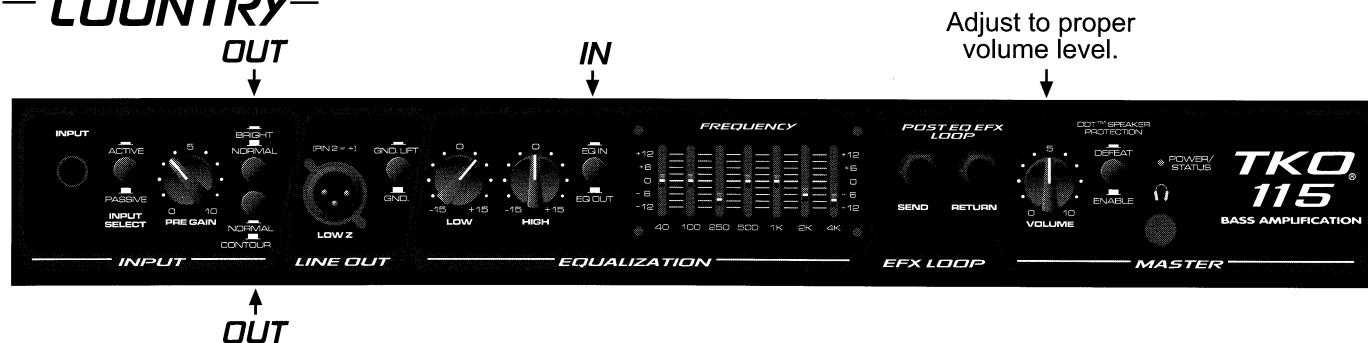
—ROCK—



—FUNK—



—COUNTRY—



These settings are general and will vary according to type of guitar, type of strings, type of pickup, and even type of pick. Personal taste, playing style and music genre contribute greatly to desired tonality. Use these settings only as a starting point to aid you in finding your ideal tone.

TKO® 115

SPECIFICATIONS

POWER AMPLIFIER

Rated Power & Load:

75W RMS/8 ohms
100W RMS/4 ohms

Power @ Clipping: (typically)

(1 kHz, 120 VAC line)
80W RMS/8 ohms @ 5%
110W RMS/4 ohms @ 5%

Frequency Response:

+0, -3 dB, 20 Hz to 20 kHz
@ 70W RMS/8 ohms

Total Harmonic Distortion:

Less than 0.1%, 100mW to
70W RMS/8 ohms, 20 Hz to
10 kHz, typically below 0.05%

DDT Dynamic Range:

Greater than 20 dB

DDT Maximum THD:

Below 0.6% THD for 6 dB
overload
Below 1% THD for 16 dB
overload

Hum & Noise:

Greater than 90 dB below
rated power

Power Consumption: (Domestic)

150W @ 120 VAC,
50/60 Hz

PREAMP

The following specs are measured @
1 kHz with the Bass, Treble & Graphic
EQ @ 0 dB; Push Bright out (off);
Contour "in" (off); Input Select "out"
(Passive); and Post Gain @ 10.

Nominal levels are with the Pre Gain
@ 5; minimum levels are with the
Pre Gain @ 10.

Preamp Input:

Impedance: Hi Z, 220K ohms
Nominal Input Level: -20 dBV,
100mV RMS
Minimum Input Level: -40 dBV,
10mV RMS
Maximum Input Level: +10 dBV,
3V RMS

Effects Patch Send:

Load Impedance: 10K ohms
or greater
Nominal Output Level: -10 dBV,
0.32V RMS
Maximum Output Level:
+8 dBV, 2.5V RMS

Effects Patch Return:

Impedance: Hi Z, 22K ohms
Designed Input Level: -10 dBV,
0.32V RMS

Headphone Output:

Load Impedance: 4 ohms or
greater
Nominal power output: 100mW/
4 ohms
(Stereo jack, monaural signal,
disconnects internal speaker
when phone plug is inserted.)

System Hum & Noise @

Nominal Input Level:

(20 Hz to 20 kHz
unweighted)
85 dB below rated power

Equalization:

Bass & Treble: +/-15 dB
@ 50 Hz & 6 kHz, shelving
7-Band Graphic: +/-12 @
40, 100, 250, 500, 1k, 2k, 4k
PEAK NOTCH
Push Bright: +8 dB @ 5 kHz
Contour: -17 dB @ 400 Hz
+6 dB @ 60 Hz

TNT® 115

SPECIFICATIONS

POWER AMPLIFIER

Rated Power & Load:

150W RMS/4 ohms
200W RMS/2 ohms

Power @ Clipping: (typically)

(1 kHz, 120 VAC line)
165W RMS/4 ohms @ 5%
230W RMS/2 ohms @ 5%

Frequency Response:

+0, -3 dB, 20 Hz to 20 kHz
@ 140W RMS/4 ohms

Total Harmonic Distortion:

Less than 0.1%, 100mW to
140W RMS/4 ohms, 20 Hz
to 10 kHz, typically below
0.05%

DDT Dynamic Range:

Greater than 20 dB

DDT Maximum THD:

Below 0.6% THD for 6 dB
overload
Below 1% THD for 16 dB
overload

Hum & Noise:

Greater than 95 dB below
rated power

Power Consumption: (Domestic)

220W @ 120 VAC,
50/60 Hz

PREAMP

The following specs are measured @
1 kHz with the Bass, Treble & Graphic
EQ @ 0 dB; Push Bright out (off);
Contour "in" (off); Input Select "out"
(Passive); and Post Gain @ 10.

Nominal levels are with the Pre Gain @
5; minimum levels are with the Pre Gain
@ 10.

Preamp Input:

Impedance: Hi Z, 220K ohms
Nominal Input Level: -20 dBV,
100mV RMS
Minimum Input Level: -40 dBV,
10mV RMS
Maximum Input Level: +10 dBV,
3V RMS

Effects Patch Send:

Load Impedance: 10K ohms or
greater
Nominal Output Level: -10
dBV, 0.32V RMS
Maximum Output Level:
+8 dBV, 2.5V RMS

Effects Patch Return:

Impedance: Hi Z, 22K ohms
Designed Input Level: -10 dBV,
0.32V RMS

Headphone Output:

Load Impedance: 4 ohms or
greater
Nominal power output: 100mW/
4 ohms
(Stereo jack, monaural signal,
disconnects internal speaker
when phone plug is inserted.)

System Hum & Noise @

Nominal Input Level:

(20 Hz to 20 kHz
unweighted)
85 dB below rated power

Equalization:

Bass & Treble: +/-15 dB
@ 50 Hz & 6 kHz, shelving
7-Band Graphic: +/-12 @
40, 100, 250, 500, 1k, 2k, 4k
PEAK NOTCH
Push Bright: +8 dB @ 5 kHz
Contour: -17 dB @ 400 Hz
+6 dB @ 60 Hz

PEAVEY ELECTRONICS CORPORATION LIMITED WARRANTY

Effective Date: July 1, 1998

What This Warranty Covers

Your Peavey Warranty covers defects in material and workmanship in Peavey products purchased and serviced in the U.S.A. and Canada.

What This Warranty Does Not Cover

The Warranty does not cover: (1) damage caused by accident, misuse, abuse, improper installation or operation, rental, product modification or neglect; (2) damage occurring during shipment; (3) damage caused by repair or service performed by persons not authorized by Peavey; (4) products on which the serial number has been altered, defaced or removed; (5) products not purchased from an Authorized Peavey Dealer.

Who This Warranty Protects

This Warranty protects only the original retail purchaser of the product.

How Long This Warranty Lasts

The Warranty begins on the date of purchase by the original retail purchaser. The duration of the Warranty is as follows:

Product Category	Duration
Guitars/Basses, Amplifiers, Pre-Amplifiers, Mixers, Electronic Crossovers and Equalizers	2 years *(+ 3 years)
Drums	2 years *(+ 1 year)
Enclosures	3 years *(+ 2 years)
Digital Effect Devices and Keyboard and MIDI Controllers	1 year *(+ 1 year)
Microphones	2 years
Speaker Components (incl. speakers, baskets, drivers, diaphragm replacement kits and passive crossovers) and all Accessories	1 year
Tubes and Meters	90 days

*[*denotes additional warranty period applicable if optional Warranty Registration Card is completed and returned to Peavey by original retail purchaser within 90 days of purchase.]*

What Peavey Will Do

We will repair or replace (at Peavey's discretion) products covered by warranty at no charge for labor or materials. If the product or component must be shipped to Peavey for warranty service, the consumer must pay initial shipping charges. If the repairs are covered by warranty, Peavey will pay the return shipping charges.

How To Get Warranty Service

(1) Take the defective item and your sales receipt or other proof of date of purchase to your Authorized Peavey Dealer or Authorized Peavey Service Center.

OR

(2) Ship the defective item, prepaid, to Peavey Electronics Corporation, International Service Center, 412 Highway 11 & 80 East, Meridian, MS 39301 or Peavey Canada Ltd., 95 Shields Court, Markham, Ontario, Canada L3R 9T5. Include a detailed description of the problem, together with a copy of your sales receipt or other proof of date of purchase as evidence of warranty coverage. Also provide a complete return address.

Limitation of Implied Warranties

ANY IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE LENGTH OF THIS WARRANTY.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Exclusions of Damages

PEAVEY'S LIABILITY FOR ANY DEFECTIVE PRODUCT IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE PRODUCT, AT PEAVEY'S OPTION. IF WE ELECT TO REPLACE THE PRODUCT, THE REPLACEMENT MAY BE A RECONDITIONED UNIT. PEAVEY SHALL NOT BE LIABLE FOR DAMAGES BASED ON INCONVENIENCE, LOSS OF USE, LOST PROFITS, LOST SAVINGS, DAMAGE TO ANY OTHER EQUIPMENT OR OTHER ITEMS AT THE SITE OF USE, OR ANY OTHER DAMAGES WHETHER INCIDENTAL, CONSEQUENTIAL OR OTHERWISE, EVEN IF PEAVEY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

If you have any questions about this warranty or service received or if you need assistance in locating an Authorized Service Center, please contact the Peavey International Service Center at (601) 483-5365 / Peavey Canada Ltd. at (905) 475-2578.

Features and specifications subject to change without notice.

IMPORTANT SAFETY INSTRUCTIONS

WARNING: When using electric products, basic cautions should always be followed, including the following:

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water. For example, near or in a bathtub, swimming pool, sink, wet basement, etc.
6. Clean only with a damp cloth.
7. Do not block any of the ventilation openings. Install in accordance with manufacturer's instructions. It should not be placed flat against a wall or placed in a built-in enclosure that will impede the flow of cooling air.
8. Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding plug. The wide blade or third prong is provided for your safety. When the provided plug does not fit into your inlet, consult an electrician for replacement of the obsolete outlet. Never break off the grounding. Write for our free booklet "Shock Hazard and Grounding". Connect only to a power supply of the type marked on the unit adjacent to the power supply cord.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point they exit from the apparatus.
11. Only use attachments/accessories provided by the manufacturer.
12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. If this product is to be mounted in an equipment rack, rear support should be provided.
16. Exposure to extremely high noise levels may cause a permanent hearing loss. Individuals vary considerably in susceptibility to noise-induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a sufficient time. The U.S. Government's Occupational and Health Administration (OSHA) has specified the following permissible noise level exposures:

Duration Per Day In Hours	Sound Level dBA, Slow Response
8	90
6	92
4	95
3	97
2	100
1 1/2	102
1	105
1/2	110
1/4 or less	115

According to OSHA, any exposure in excess of the above permissible limits could result in some hearing loss. Ear plugs or protectors to the ear canals or over the ears must be worn when operating this amplification system in order to prevent a permanent hearing loss, if exposure is in excess of the limits as set forth above. To ensure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels such as this amplification system be protected by hearing protectors while this unit is in operation.

SAVE THESE INSTRUCTIONS!



Features and specifications subject to change without notice.

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