

Cover for IPA 75/150T II



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.

The IPA™ 75T II and IPA™ 150T II are high-performance amplifiers designed to meet the needs of sound reinforcement installations. The circuit design assures reliable long-term operation and smooth trouble-free installation. The IPA Series power amplifiers are ready for any job, utilizing an isolated transformer with multiple output configurations.

FEATURES

- Switchable subsonic filter
- SPS™ (Speaker Protection System) circuitry with LED indicator
- LED indicator for signal activity
- Low current 24 V DC output
- Sensitivity switch
- Balanced screw terminal input
- Balanced line-level output
- Level control
- 8 ohm, 25 V and 70 V transformer-isolated outputs
- 4 ohm direct output
- AC convenience outlet
- Powder coated steel chassis
- Rack-mountable with optional ears (2U)

LEVEL (1)

Controls the volume level of the system.

SUBSONIC FILTER (2)

The "in" position of this switch activates the 18 dB/octave subsonic filter at 42 Hz. The "out" position removes the subsonic filter from the system.

POWER ON LED (3)

Indicates when AC power is being supplied to the unit.

SPS™ ACTIVE LED (4)

Illuminates when SPS™ circuitry is active. SPS™ eliminates power amplifier clipping.

ACTIVITY (SIGNAL PRESENT) LED (5)

Indicates signal presence at amplifier output. Illuminates when output is approximately 35 dB below full power.

POWER SWITCH (6)

Depress to "on" position to turn on.

INPUT SCREW TERMINALS (7)

Provides an electronically balanced input, nominally 100 mV to 1 volt (see Sensitivity Switch). For unbalanced inputs, use the (+) and (-) terminals.

24 V DC OUTPUT TERMINALS (8)

Provides connection for a low current (20 mA) 24 V DC output for powering low current external add-on equipment.

SENSITIVITY SWITCH (9)

Switches the input sensitivity from 100 mV to 1 volt.

OUTPUTS (10)

A direct output, as well as several isolated transformer outputs, are provided to allow the proper interface between the amplifier and the speaker system. The direct output allows direct connection to a 4 ohm speaker system. To use this output, disconnect the jumper between the 4 ohm terminal and the XFMR terminal. Connect the speaker (or speakers) from the GND terminal to the 4 ohm terminal.

Also provided are 8 ohm, 25 volt, and 70 volt balanced outputs. To use these outputs, the jumper between 4 ohm and XFMR must be installed. For 8 ohm speaker systems, connect between the COM terminal and the 8 ohm terminal. For "distributed" speaker systems, 25 volt and 70 volt outputs are provided. The connection for distributed systems is between the COM terminal and either the 25 volt or 70 volt terminals, depending on the required system voltage.

One more output is provided on the IPA Series amplifiers. This is a balanced, transformer-isolated line level output. This output is provided for direct connection to "music on hold" systems, booster power amplifiers, etc. This output is designed to deliver 1 V RMS into a 600 ohm load. See Figures 2 through 5 for possible output connections.

AC OUTLET (UNSWITCHED) (11)

Provides AC power for auxiliary equipment with power consumption — 300 watts maximum.

FUSE (12)

The fuse is located within the cap of the fuseholder. If the fuse should fail, **IT MUST BE REPLACED WITH 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.

LINE CORD (120 V PRODUCTS ONLY) (13)

For your safety, we have incorporated a three-wire line (mains) cable with proper grounding facilities. It is not advisable to remove the ground pin under any circumstances. If it is necessary to use the equipment without proper grounding facilities, suitable grounding adaptors should be used. Less noise and greatly reduced shock hazard exist when the unit is operated with the proper grounded receptacles.

INSTALLATION INFORMATION

INSTALLING THE RACK-MOUNT EARS

This unit can be rack-mounted with an optional rack-mount kit. To attach the rack-mount ears, simply remove the three screws already in the front on either side of the unit and align the ears with the rack-mount flange forward of the unit. Replace the screws and tighten securely, being careful not to over-tighten. The unit then mounts in a standard two-space 19" rack. You may find it desirable to remove the rubber feet from the bottom of the unit in rack-mount installations. The rack-mount ears may also be used to secure the unit in a shelf application to deter theft.

RACK-MOUNT RECOMMENDATION

To provide adequate ventilation, leave at least one rack space between units when multiple amplifiers are mounted in the same rack.

IPA 75T II ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

The power amplifier input shall have screw terminal connections and a sensitivity switch. The unit shall have LED indicators to show Power, Activity, and SPS™ compression. The unit shall have a front panel level control, as well as a defeatable subsonic filter.

The unit shall be packaged in a rugged metal chassis 17" wide by 3 1/2" high by 15 5/8" deep. The unit shall operate from standard 120 volts AC, 60 Hz power. The internal power amplifier shall be capable of delivering 75 watts into 4 ohms and 8 ohms, as well as providing 25 volt and 70 volt balanced line outputs. The unit shall be capable of delivering rated power from 20 Hz to 20 kHz ± 0.5 dB into 4 ohms at its direct output at 0.5% or less distortion with hum and noise at least 95 dB below rated output. The unit shall be called the Peavey Architectural Acoustics Division model IPA™ 75T II.

IPA 150T II ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

The power amplifier input shall have screw terminal connections and a sensitivity switch. The unit shall have LED indicators to show Power, Activity, and SPS™ compression. The unit shall have a front panel level control, as well as a defeatable subsonic filter.

The unit shall be packaged in a rugged metal chassis 17" wide by 3 1/2" high by 15 5/8" deep. The unit shall operate from standard 120 volts AC, 60 Hz power. The internal power amplifier shall be capable of delivering 150 watts into 4 ohms and 8 ohms, as well as providing 25 volt and 70 volt balanced line outputs. The unit shall be capable of delivering rated power from 20 Hz to 20 kHz ± 0.5 dB into 4 ohms at its direct output at 0.5% or less distortion with hum and noise at least 95 dB below rated output. The unit shall be called the Peavey Architectural Acoustics Division model IPA™ 150T II.

SPECIFICATIONS

Output Power (IPA 75T II):

75 watts

Output Power (IPA 150T II):

150 watts

Frequency Response:

Direct: ± 0.5 dB, 20 Hz to 20 kHz

XFMR: ± 0.5 dB, 50 Hz to 20 kHz

Distortion:

0.03% (1 kHz)

S/N Ratio (20 kHz BW):

95 dB

Power Bandwidth:

Direct: 20 Hz to 20 kHz $< 0.5\%$ THD

XFMR: 50 Hz to 20 kHz $< 0.5\%$ THD

Output Regulation:

Direct: < 0.5 dB

XFMR: < 1.0 dB

Outputs:

Direct: 4 ohms

XFMR: 8 ohms, 600 ohms, 25 V, and 70 V (balanced)

Input Sensitivity:

1 volt @ 40 K ohms or 100 mV @

3.6 K ohms (switchable)

Controls:

Level Control

Subsonic Switch

Power Switch

Indicators:

Power Indicator (Red LED)

Activity Indicator (Green LED)

SPS™ Active Indicator (Yellow LED)

(IPA 75T II)

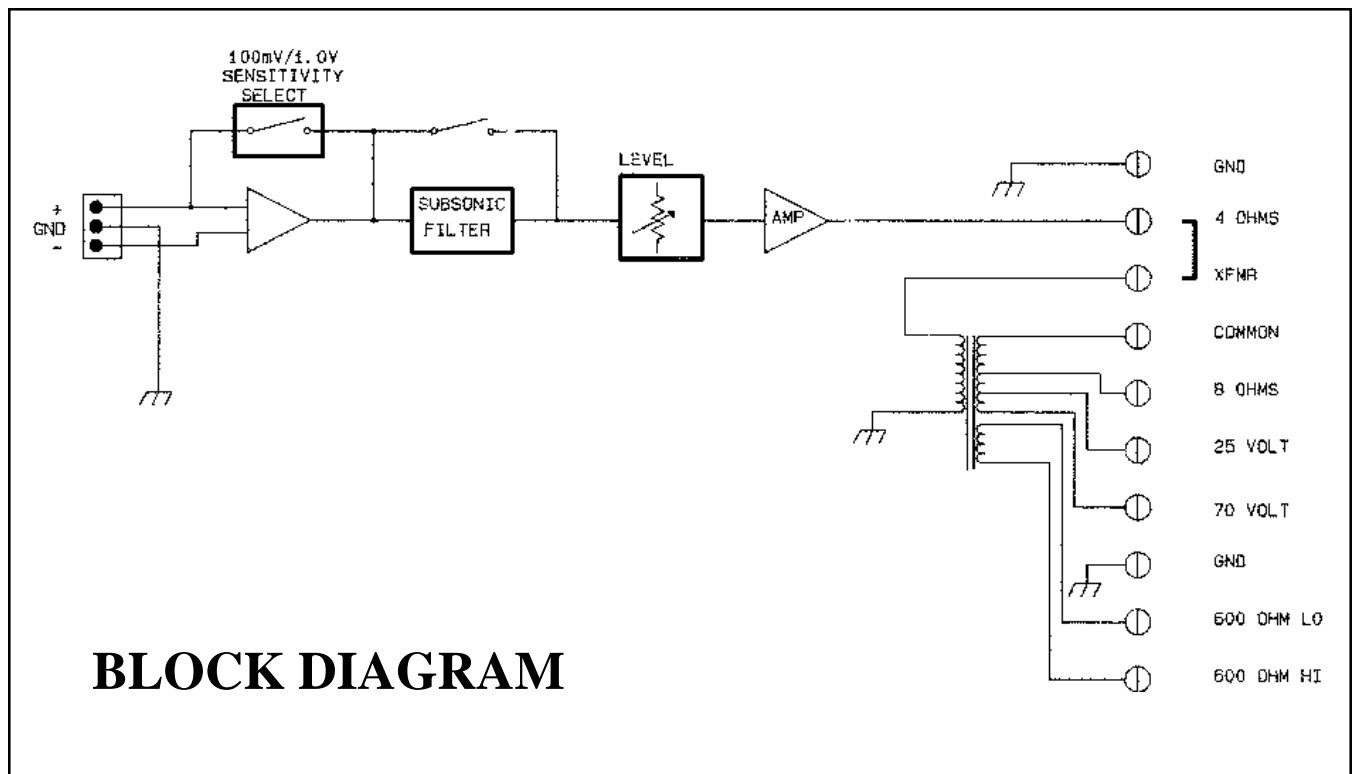
Power Requirements:

120 V AC, 60 Hz, 200 watts

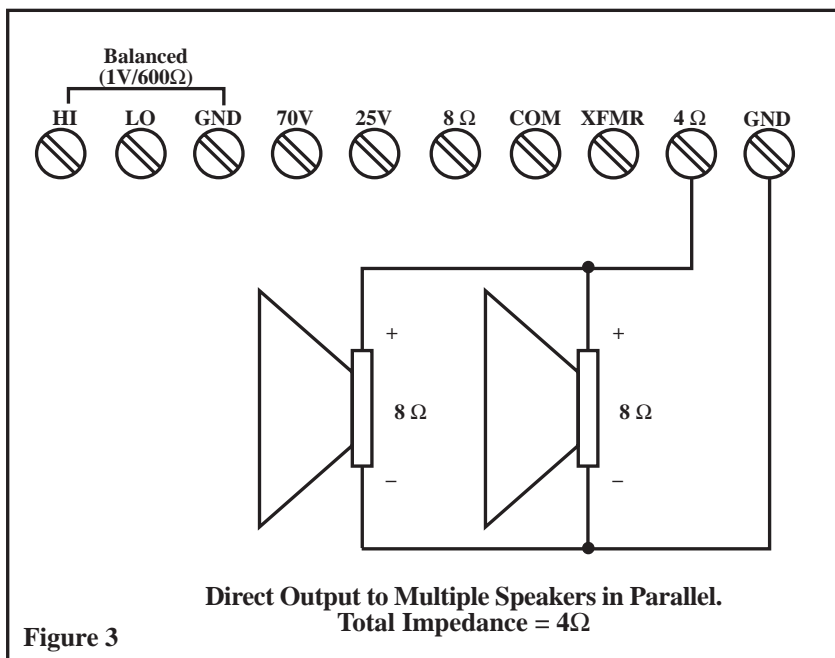
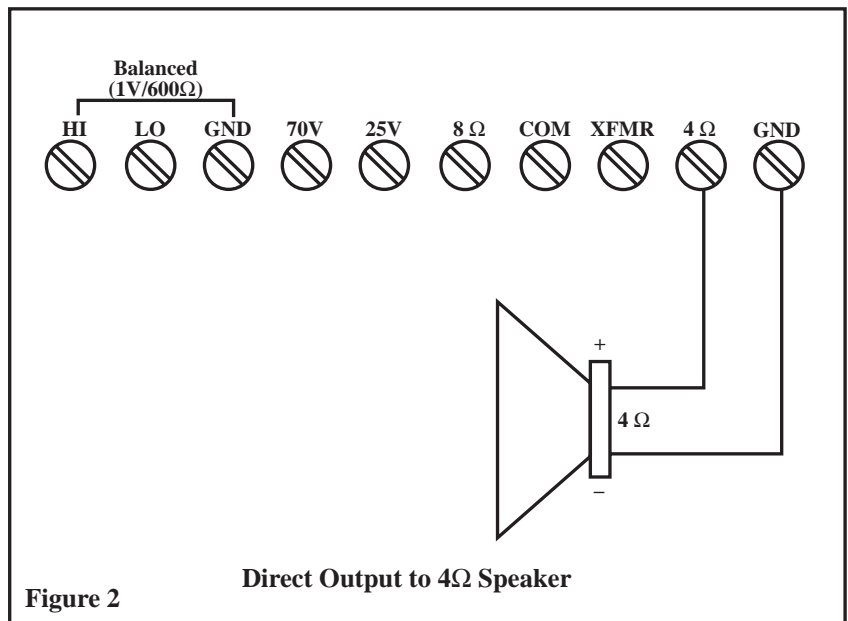
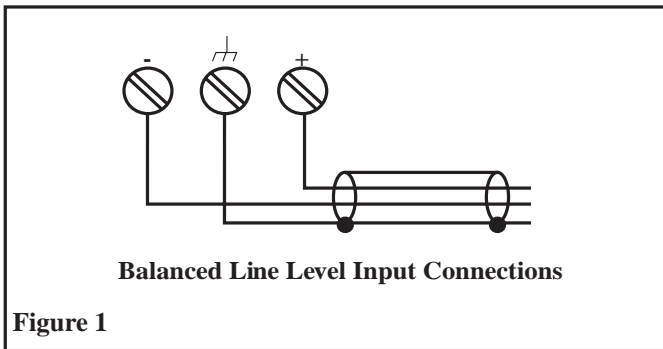
(IPA 150T II)

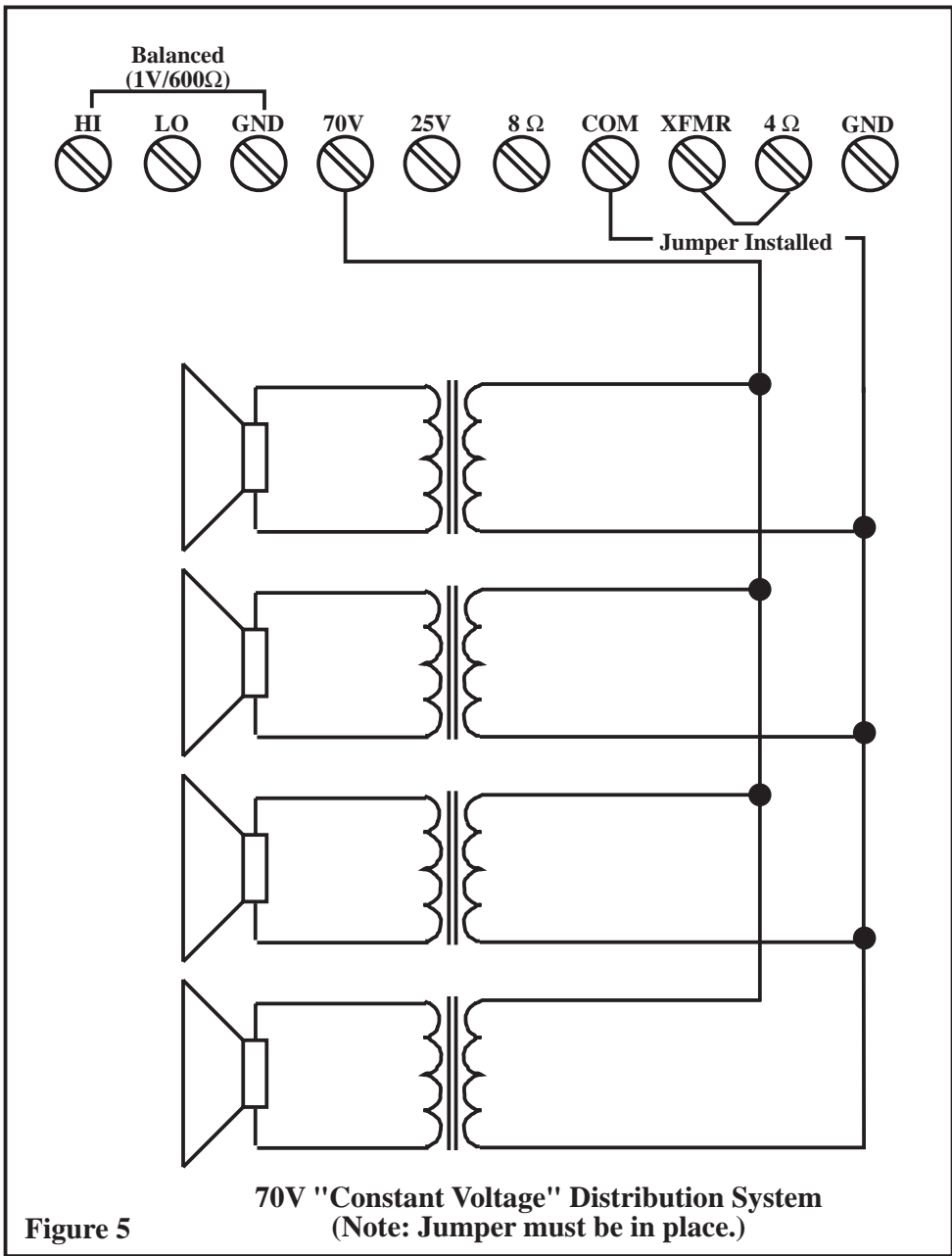
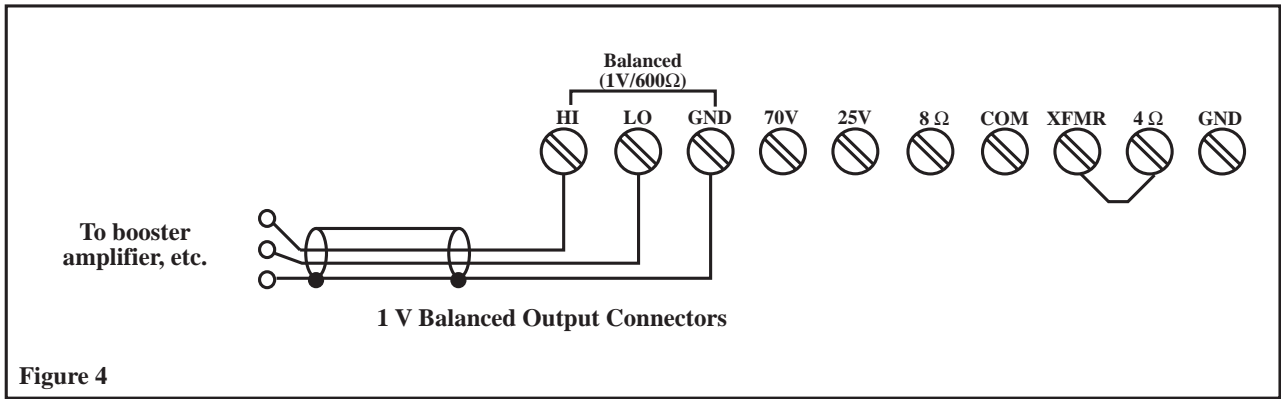
Power Requirements:

120 V AC, 60 Hz, 400 watts



WIRING DIAGRAMS





**For further information on other Peavey products,
ask your Authorized Peavey Dealer for the
appropriate Peavey catalog/publication:**

Bass Guitars

Guitars

Bass Amplification

Guitar Amplification

Sound Reinforcement Enclosures

Microphones

Keyboards

DJ

Lighting

Mixers, Powered/Non-Powered

Accessories/Cables

Effects Processors

Axcess™ Wear

The Peavey Beat™

Monitor® Magazine

Key Issues™

Low Down™

PM™ Magazine

IMPORTANT SAFETY INSTRUCTIONS

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

1. Read all safety and operating instructions before using this product.
2. All safety and operating instructions should be retained for future reference.
3. Obey all cautions in the operating instructions and on the back of the unit.
4. All operating instructions should be followed.
5. This product should not be used near water, i.e., a bathtub, sink, swimming pool, wet basement, etc.
6. This product should be located so that its position does not interfere with its proper ventilation. It should not be placed flat against a wall or placed in a built-in enclosure that will impede the flow of cooling air.
7. This product should not be placed near a source of heat such as a stove, radiator, or another heat producing amplifier.
8. Connect only to a power supply of the type marked on the unit adjacent to the power supply cord.
9. Never break off the ground pin on the power supply cord. For more information on grounding, write for our free booklet "Shock Hazard and Grounding."
10. Power supply cords should always be handled carefully. Never walk or place equipment on power supply cords. Periodically check cords for cuts or signs of stress, especially at the plug and the point where the cord exits the unit.
11. The power supply cord should be unplugged when the unit is to be unused for long periods of time.
12. If this product is to be mounted in an equipment rack, rear support should be provided.
13. Metal parts can be cleaned with a damp rag. The vinyl covering used on some units can be cleaned with a damp rag or an ammonia-based household cleaner if necessary. Disconnect unit from power supply before cleaning.
14. Care should be taken so that objects do not fall and liquids are not spilled into the unit through the ventilation holes or any other openings.
15. This unit should be checked by a qualified service technician if:
 - a. The power supply cord or plug has been damaged.
 - b. Anything has fallen or been spilled into the unit.
 - c. The unit does not operate correctly.
 - d. The unit has been dropped or the enclosure damaged.
16. The user should not attempt to service this equipment. All service work should be done by a qualified service technician.
17. This product should be used only with a cart or stand that is recommended by Peavey Electronics.
18. 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 Safety 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 in 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!

LIMITED WARRANTY

Peavey Electronics Corporation warrants to the original purchaser of this new Architectural Acoustics product that it is free from defects in material and workmanship. If within one (1) year from date of purchase a properly installed product proves to be defective and Peavey is notified, Peavey will repair or replace it at no charge. (Note: Batteries and patch cords not covered.) "Original purchaser" means the customer for whom the product is originally installed.

Damage resulting from improper installation, interconnection of a unit or system of another manufacturer, accident or unreasonable use, neglect or any other cause not arising from defects in material and workmanship is not covered by this warranty. The warranty is valid only as to products purchased and installed in the United States and Canada.

THIS LIMITED WARRANTY IS IN LIEU OF ANY AND ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE. UNDER NO CIRCUMSTANCES WILL PEAVEY BE LIABLE FOR ANY LOST PROFITS, LOST SAVINGS, INCIDENTAL DAMAGES OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT, EVEN IF PEAVEY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. THIS LIMITED WARRANTY IS THE ONLY EXPRESSED WARRANTY ON THIS PRODUCT, AND NO OTHER STATEMENT, REPRESENTATION, WARRANTY, OR AGREEMENT BY ANY PERSON SHALL BE VALID OR BINDING UPON PEAVEY.

Peavey's liability to the original purchaser for damages for any cause whatsoever and regardless of the form of action is limited to the actual damages up to the greater of Five Hundred Dollars (\$500) or an amount equal to the purchase price of the product that caused the damage or that is the subject of or is directly related to the cause of action. This limitation of liability will not apply to claims for personal injury or damage to real property or tangible personal property allegedly caused by Peavey's negligence. For information on service under this warranty, call a Peavey customer service representative at (601) 483-5376.



Features and specifications subject to change without notice.

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