

# **Cover for UMA™ 35T<sup>II</sup>**



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" que no tiene aislamiento dentro de la caja del producto que puede tener una magnitud suficiente como para constituir riesgo de corrientazo.



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

**PRECAUCION:** Riesgo de corrientazo – No abra.

**PRECAUCION:** Para disminuir el riesgo de corrientazo, no abra la cubierta. No hay piezas adentro que el usuario pueda reparar. Deje todo mantenimiento a los técnicos calificados.

**ADVERTENCIA:** Para evitar corrientazos 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 pour indiquer à l'utilisateur la présence à l'intérieur de ce produit de tension non-isolée dangereuse pouvant être d'intensité suffisante pour constituer un risque de choc électrique.



Ce symbole est utilisé pour indiquer à l'utilisateur qu'il ou qu'elle trouvera d'importantes instructions sur l'utilisation et l'entretien (service) de l'appareil dans la littérature accompagnant le produit.

**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. Confier l'entretien à un personnel qualifié.

**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 les avertissements supplémentaires situés dans le guide.



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.

# UMA™ 35T<sup>II</sup>

## FEATURES

- Two mic/line inputs with screw terminals on each; one with XLR and one with dual RCA phono jacks
- One line level input with dual RCA phono jacks
- One dedicated 600 ohm transformer balanced paging input with screw terminals and rear panel screwdriver adjust level control
- Two mute lines, providing internal signal override or external switch closure, with adjustable thresholds and indicators
- Provisions for external master volume control
- 15 volt (DC) phantom power
- Bass, Treble, and Contour EQ controls
- Loop Out/Loop In patch point with RCA phono connectors and link switch
- Channel 3 output (RCA phono), which gives a non-mutable output of Channel 3
- AUX output for tape recorders, etc.
- Signal activity indicator
- Power indicator
- SPS™ (Speaker Protection System) circuitry with indicator
- 4 ohm, 8 ohm, 25 V and 70 V transformer-isolated outputs
- 600 ohm balanced line level output
- AC convenience outlet
- Powder coated steel chassis
- Optional rack-mounting kits available

Congratulations on your purchase of the Peavey UMA™ 35T<sup>II</sup>. The UMA™ 35T<sup>II</sup> is a versatile mixer/amplifier designed for numerous sound reinforcement applications. The flexible input configurations make this product an excellent choice for paging and/or back/foreground music systems. The UMA 35T<sup>II</sup> mixer/amplifier is ready for any job, utilizing an isolated transformer with multiple output configurations.



## **FRONT PANEL FEATURES:**

### **CHANNEL 1 LEVEL CONTROL (1)**

Controls the signal level of the Channel 1 input.

### **CHANNEL 2 LEVEL CONTROL (2)**

Controls the signal level of the Channel 2 input.

### **CHANNEL 3 LEVEL CONTROL (3)**

Controls the signal level of the Channel 3 input.

### **LOW EQ CONTROL (BASS) (4)**

Active equalization control that adjusts the low frequency response. Clockwise rotation boosts lows while counter-clockwise rotation provides a cut (reduction) of the low frequencies ( $\pm 10$  dB).

### **HIGH EQ CONTROL (TREBLE) (5)**

Active equalization control that adjusts the high frequency response. Clockwise rotation boosts highs while counter-clockwise rotation provides a cut (reduction) of the high frequencies ( $\pm 10$  dB).

### **CONTOUR SWITCH (6)**

The "in" position of this switch provides 6 dB boost at 100 Hz and 10 kHz. The "out" position removes boost from the system.

### **MASTER (7)**

Controls the overall volume level of the system.

### **POWER ON LED (8)**

Indicates when AC power is being supplied to the unit.

### **SPS™ COMPRESSION ACTIVE LED (9)**

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

### **ACTIVITY (SIGNAL PRESENT) LED (10)**

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

### **CHANNEL 1 LED (11)**

Indicates activity on Channel 1 mute line. Illuminates when signal is present on Channel 1 or when Mute 2 terminal is shorted to ground.

### **PAGE LED (12)**

Indicates activity on Page mute line. Illuminates when signal is present on Page input or when Mute 1 terminal is shorted to ground.

### **POWER SWITCH (13)**

Depress to "on" position to turn on.

## **Back Panel:**

### **BACK PANEL FEATURES:**

#### **PAGE INPUT (14)**

The Page input is a 600 ohm transformer balanced input. The telephone page input should be connected to the + and – terminals; if a shielded cable is used, the shield should be connected to the  $\perp$  terminal and not connected at the source.

#### **PAGE GAIN TRIM (15)**

Controls the signal level of the Page input.

#### **PAGE MUTE THRESHOLD (16)**

Adjusts the level of incoming signal from Page input required to activate the muting of Channels 1 to 3. Clockwise rotation decreases the amount of signal required for muting. Full counterclockwise rotation will disable muting.

**NOTE:** Signal at Page input with appropriate Mute Threshold setting will mute Channels 1 to 3.

#### **EXTERNAL REMOTE VOLUME (17)**

These terminals allow connection of an external volume control. To gain complete control of volume from the external volume control, the front panel Master volume control must be set to maximum. The external volume control should be connected as shown in Figure 1.

#### **CHANNEL 1 MUTE THRESHOLD (18)**

Adjusts the level of incoming signal from Channel 1 required to activate the muting of Channels 2 and 3. Clockwise rotation decreases the amount of signal required for muting. Full counterclockwise rotation will disable muting.

**NOTE:** Signal at Channel 1 input with appropriate Mute Threshold setting will mute Channels 2 and 3.

#### **CHANNELS 1 TO 3 SCREW TERMINAL INPUTS (19)**

Channels 1 to 3 have low impedance mic and high impedance line level input capability. The low impedance mic input ( $\perp$ , Low-Z +, Low-Z-) is an electronically balanced input with built-in 15 V DC phantom power. The high impedance line level input is a single-ended input. To use the High-Z screw terminals, a jumper **MUST** be placed from High-Z (-) to  $\perp$ .

#### **CHANNEL 1 XLR CONNECTOR (20)**

This input is in parallel with the Low-Z screw terminal inputs. Pin 2 on the XLR corresponds to the Low-Z (+) screw terminal. Phantom power is supplied.

#### **CHANNEL 2 AND CHANNEL 3 RCA INPUT JACKS (21)**

These inputs are resistively summed to mono and are in parallel with the High-Z screw terminal inputs. The shorting jumpers on the screw terminal inputs are shipped in place for these inputs.

## MUTING SCREW TERMINALS (22)

Provides connection for external switch closure to activate muting functions. A switch closure from terminal 1 to  $\perp$  mutes Channels 1 to 3. A switch closure from terminal 2 to  $\perp$  mutes Channels 2 and 3.

## CH 3 OUT RCA JACK (23)

Provides a direct output of Channel 3 that is independent of EQ and muting. This output is ideal for music on hold applications.

## AUX OUT RCA JACK (24)

Provides a line level output to drive external power amps, hearing assistance systems, or as a record output for taping. This output is after the EQ and Master Volume Control.

## LOOP IN/LOOP OUT JACKS (25)

Functions as a preamp out/power amp in patch point. The Loop Out signal is a post EQ/Master Volume line level output.

## LINK SWITCH (26)

Breaks the connection between the preamp and the power amp (Loop Out/Loop In). These two jacks are shorted together when the switch is in the "In" position. To use the Loop Out/In jacks as a patch point, the switch must be placed in the "Out" position. The line level output signal is present at the Loop Out jack regardless of switch setting.

## OUTPUTS (27)



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. One more output is provided on the UMA Series amplifiers. This is a balanced, transformer-isolated line level output. This output is provided for direct connection to booster power amplifiers, etc. This output is designed to deliver 1 V RMS into a 600 ohm load. See Figures 4 through 7 for possible output connections.

**NOTE:** Due to the high gain and frequency response of the UMA Series amplifiers, it is necessary that the input cables be routed away from the output cables to prevent instability.

## AC OUTLET (UNSWITCHED) (28)

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

## FUSE (29)



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

**CAUTION: USING A FUSE LARGER THAN THE RECOMMENDED SIZE COULD RESULT IN PERMANENT DAMAGE TO THE UNIT.**



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 unit repeatedly blows fuses, it should be taken to a qualified service center for repair.

## LINE CORD (30) (120 V products only)

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 overtighten. 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.

## ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

The mixer amplifier shall have two microphone/line inputs, one line input, and one dedicated Page input. Channel 1 shall have screw terminals and an XLR connector for the Low Z input; screw terminals for the High-Z input. Channel 2 shall have screw terminals for the Low-Z input; screw terminals and RCA phono connectors for the High-Z inputs. Channel 3 shall have RCA phono connectors. Channels 1 and 2 shall have 15 volt phantom power for the Low-Z inputs. The Page input shall be transformer balanced (600 ohms) and shall have screw terminals for the input connection.

The master section shall include one Master Volume level control, two EQ controls providing 10 dB boost or cut at 100 Hz and 10 kHz, and a "Contour" switch providing 6 dB of boost at 100 Hz and 10 kHz.

The unit shall have two levels of automatic muting. Mute 1 shall give precedence to the Page input, and it shall override Channels 1 through 3, with a threshold control on the Page input. Mute 2 shall give precedence to Channel 1, and it shall override Channels 2 and 3, with a threshold control on Channel 1. The two mute lines shall have screw terminals for external mute control.

The unit shall have a Channel 3 output that provides an RCA phono, non-mutable output of Channel 3. Provision for an external master volume control shall be made via screw terminals.

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 35 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  $\pm 1.5$  dB into 4 ohms at its direct output at 0.5% or less distortion with hum and noise at least 80 dB below rated output from line level inputs. The unit shall be called the Peavey Architectural Acoustics Division model UMA™ 35T<sup>II</sup>.

## SPECIFICATIONS

### Output Power:

35 watts

### Frequency Response:

#### Power Amplifier:

Direct:  $\pm 0.5$  dB, 20 Hz to 20 kHz

XFMR:  $\pm 0.5$  dB, 50 Hz to 20 kHz

#### Preamplifier:

$\pm 1.5$  dB, 50 Hz to 20 kHz

### Distortion:

#### Power Amplifier:

0.02% (1 kHz)

#### Preamplifier:

< 0.1% with nominal gain settings

### Signal-To-Noise Ratio:

#### Master Volume Min:

95 dB below rated power

#### Master Volume Max:

80 dB below rated power

#### High-Z Inputs:

75 dB below rated power

#### Low-Z Inputs:

65 dB below rated power

### Power Bandwidth:

Direct: 20 Hz to 20 kHz < 0.5% THD

XFMR: 50 Hz to 20 kHz < 0.5% THD

### Indicators:

Power Indicator (Red LED)

Activity Indicator (Green LED)

SPS™ Active Indicator (Yellow LED)

Mute 1 and Mute 2 Indicators (Yellow LEDs)

### 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)

Ch. 3 Output, Loop Out, AUX Out: 1 V @ 100 ohms

### Inputs:

#### Channel 1

Low-Z 500  $\mu$ V @ 1.8 K ohms (XLR or screw terminals)

High-Z 50 mV @ 9.5 K ohms (screw terminals)

#### Channel 2

Low-Z 500  $\mu$ V @ 1.8 K ohms (screw terminals)

High-Z 50 mV @ 9.5 K ohms (RCA or screw terminals)

#### Channel 3

High-Z 50 mV @ 9.5 K ohms (RCA)

#### Page

100 mV (600 ohm transformer balanced screw terminals)

#### Loop In

1 volt @ 3.6 K ohms

### Tone Controls:

Bass:  $\pm 10$  dB @ 100 Hz

Treble:  $\pm 10$  dB @ 10 kHz

Contour: +6 dB @ 100 Hz and 10 kHz

### Controls:

Channel 1 Volume Control

Channel 2 Volume Control

Channel 3 Volume Control

Page 1 Volume Control (rear panel screwdriver adjust)

Page Mute Threshold Control (rear panel screwdriver adjust)

Channel 1 Mute Threshold Control (rear panel screwdriver adjust)

Bass Control

Treble Control

Master Volume Control

Contour Switch

Link Switch

Power Switch

### Muting:

Mute 1: Page input overrides Channels 1 through 3 with adjustable threshold

Mute 2: Channel 1 overrides Channels 2 and 3 with adjustable threshold

### Power Consumption:

Domestic: 100 watts, 60 Hz, 120 V AC

Export: 100 watts, 50/60 Hz, 220/230-240 V AC

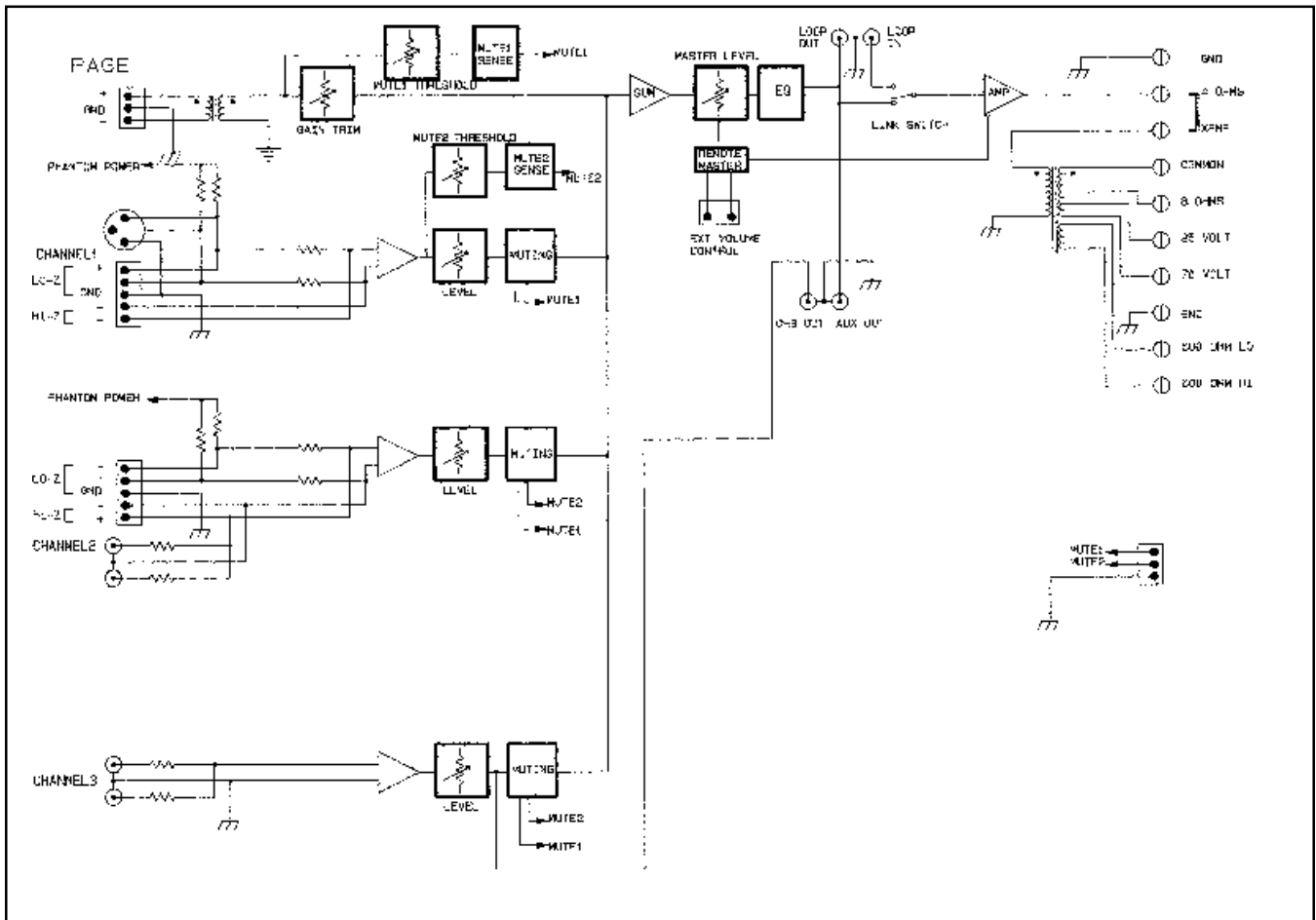
*U.S. Patent No. 5,509,080 for Bass Clipping Circuit*



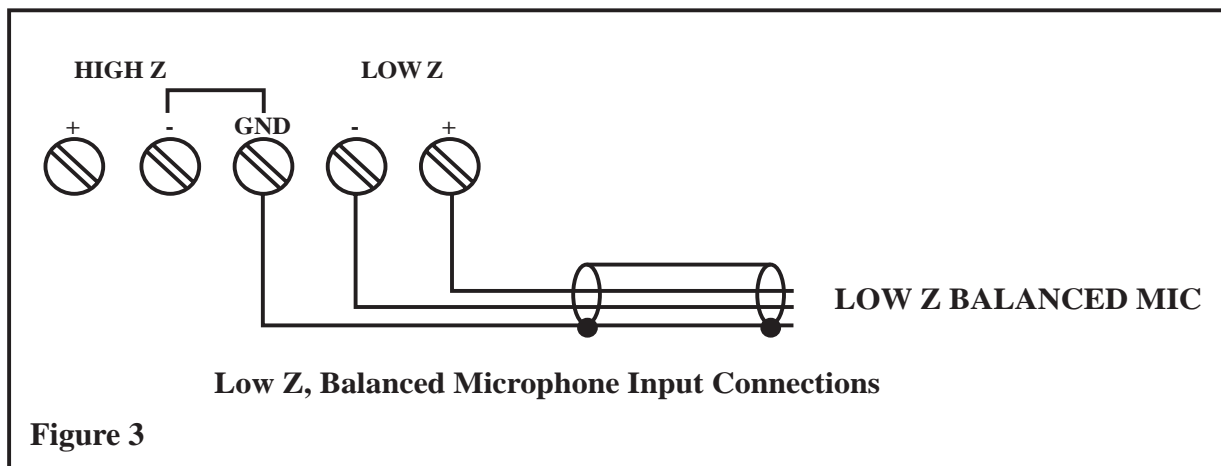
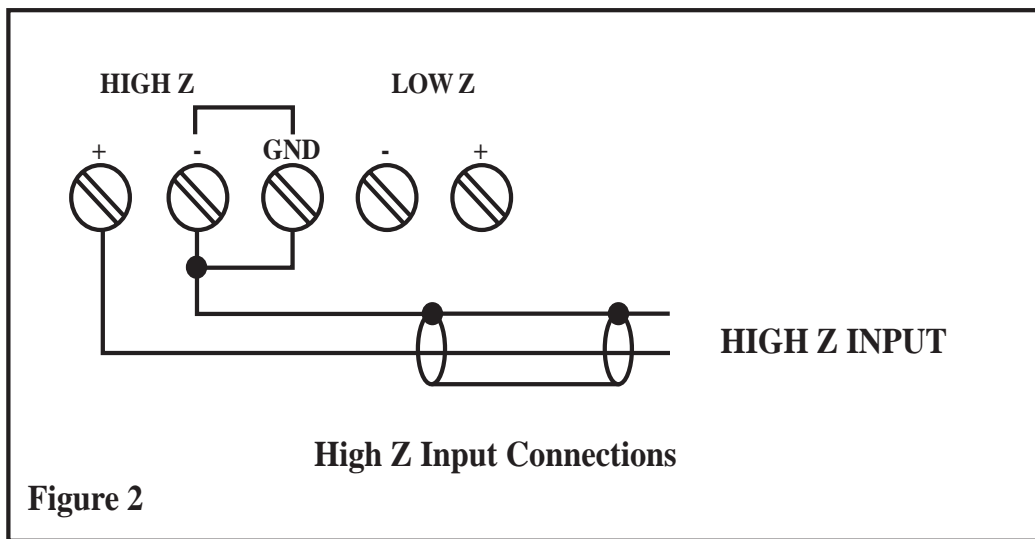
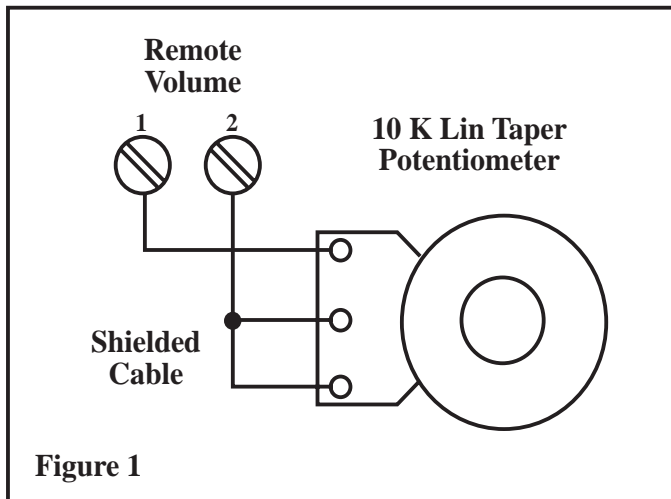
*Due to our efforts for constant improvements,  
features and specifications listed herein are subject to change without notice.*

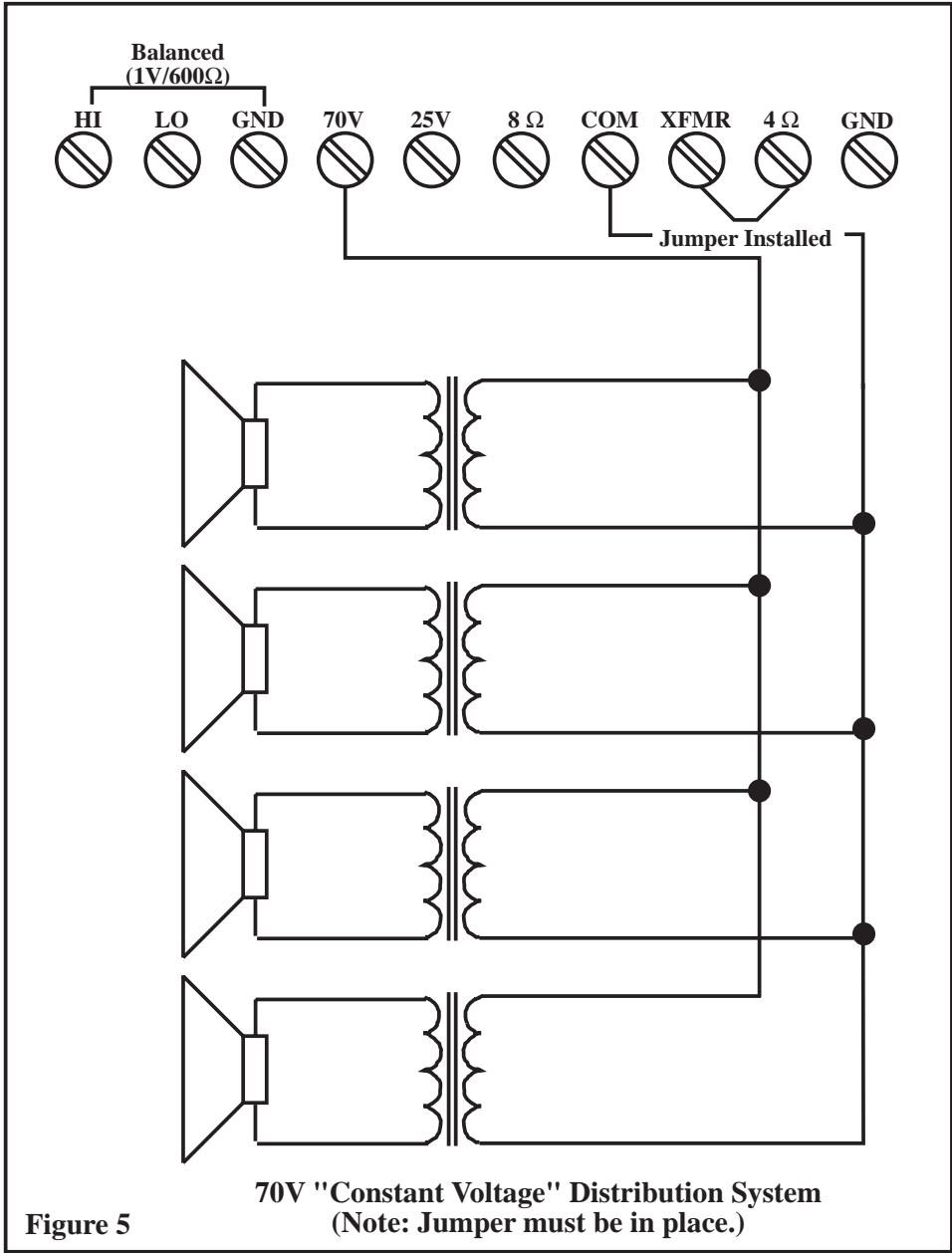
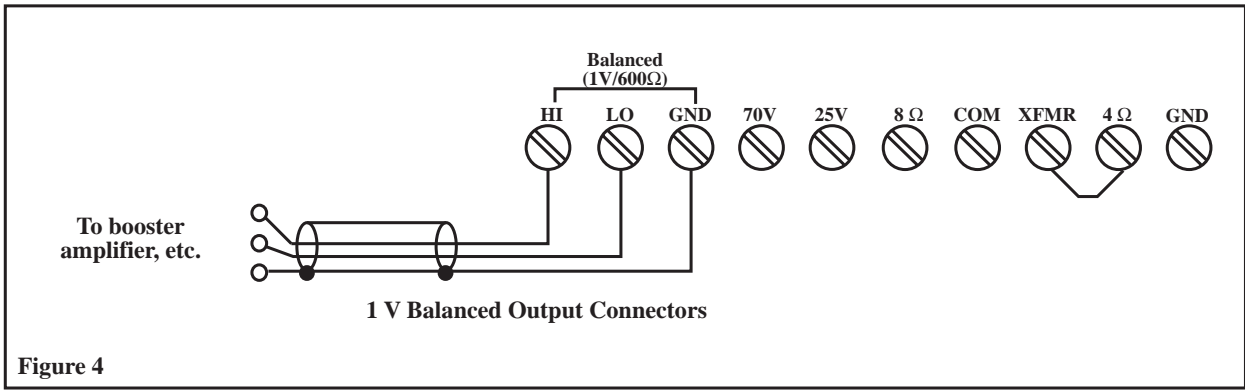


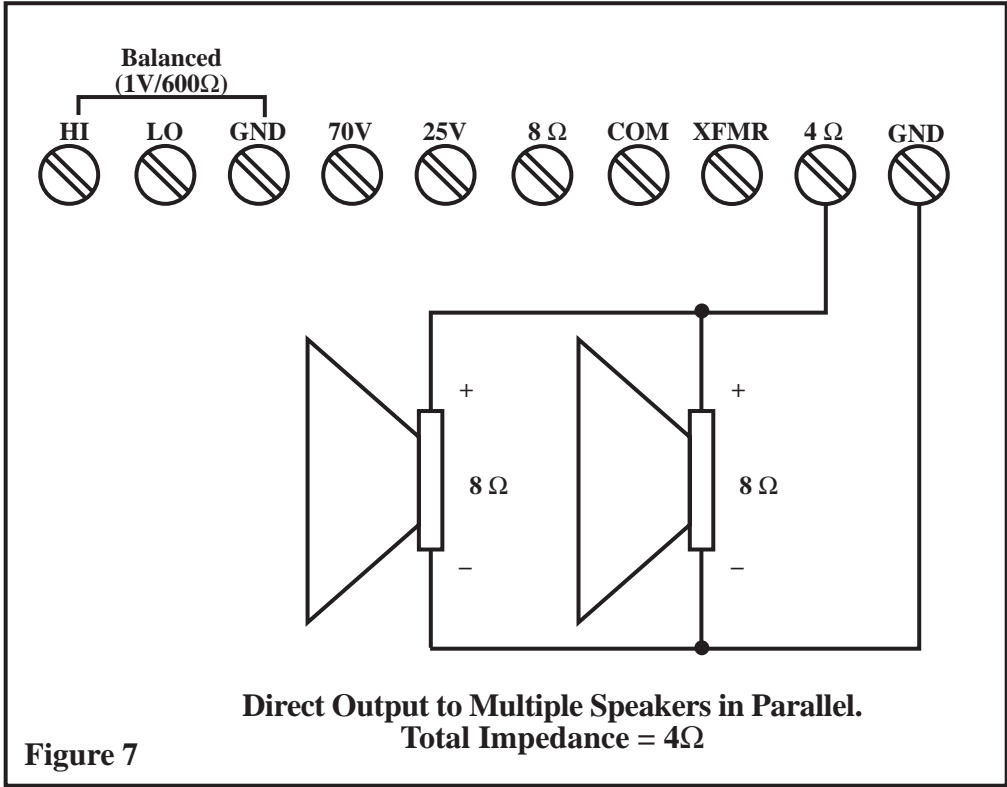
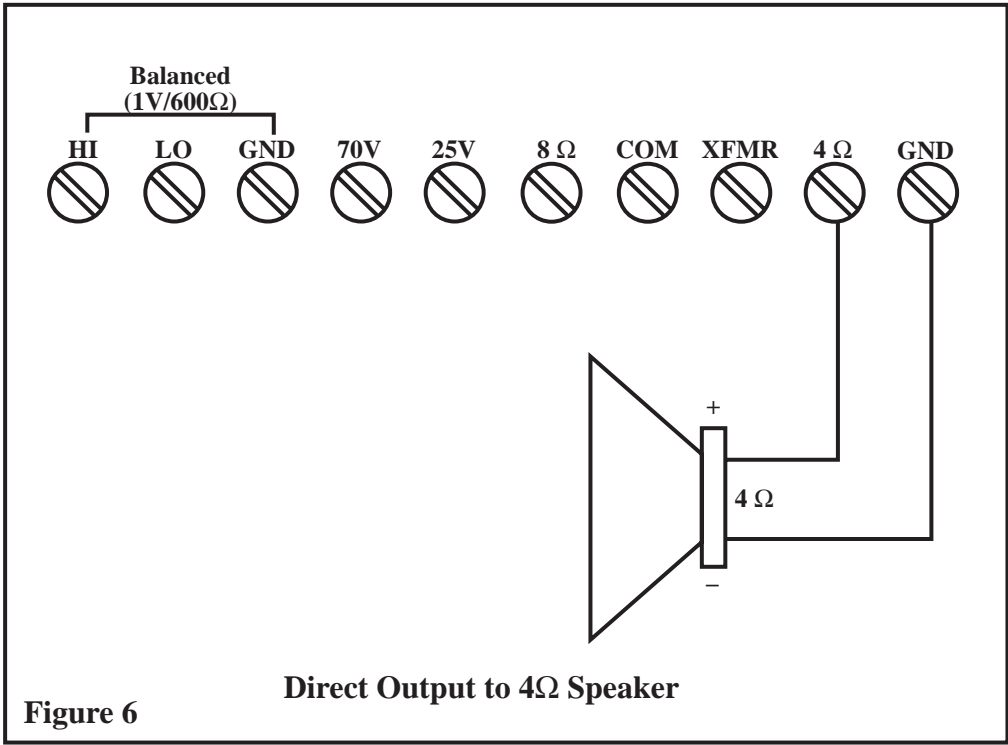
# Flow Diagram



# Wiring Diagrams







For further information on other Peavey Architectural Acoustics products, ask your Authorized Peavey Sound Contractor for the appropriate Peavey Architectural Acoustics catalog/publication.



The BluePrint  
Commercial Sound For Permanent Installations  
Engineered Sound Products For Permanent  
Installations

Be Sure To Ask About Products In The Following Categories:

Modular Series Mixer, Mixer/Amplifiers

Rack Kits for MA™ Series Products

Wall Mount Mixer/Amplifiers

Non-powered Mixers

Powered Mixers

Equalizers-Analog

Equalizers-Programmable

Electronic Crossover/Delay Processors

Power Amplifiers

Loudspeaker Systems

Acoustical Components

Utility Amplifiers, Mixer/Amplifiers

Rack Kits for UMA™ Series Products

Telephone Paging

Zone Paging Systems

Mixers and Mixing Consoles

Power Amplifiers

Loudspeaker Systems

Microphones

## 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.

A Division of **Peavey Electronics Corporation**  
711 A Street / Meridian, MS 39301 / U.S.A. / (601) 483-5376 / Fax 486-1154  
#80302222

