



P T 6 1 0 A m p l i f i e r

Owner's Manual

Your new Pyle Pro PT-610 600 Watt P.A. Amplifier gives you the power and versatility you need in a professional sound system. The amplifier's wide frequency response makes it suitable for amplifying music or vocal program material. It can be used for live bands, office paging systems, public announcement systems, or a variety of other installations.



TABLE OF CONTENTS

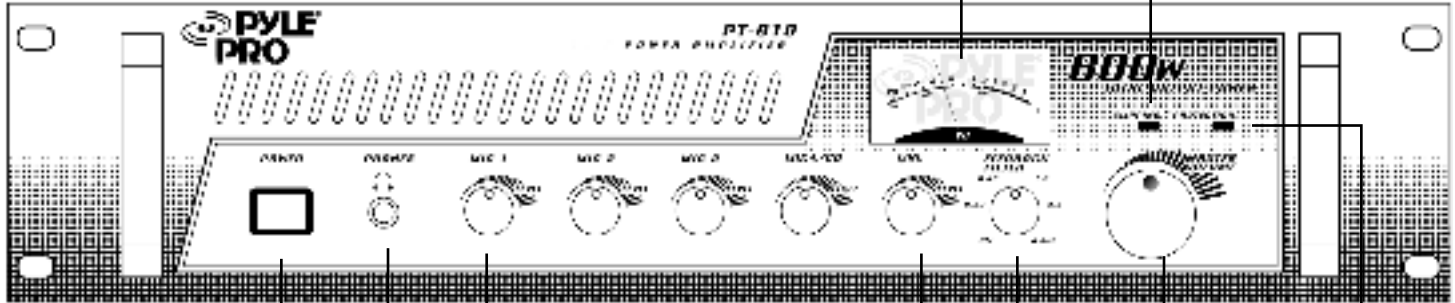
- 1 Features and controls
- 2 Installation Guidelines
- 2 Input Connections
 - 2 Connecting a CD or tape player or tuner
 - 2 Connecting an additional CD sound source
 - 2 Connecting an equalizer or signal processor
- 2 Connecting microphones
- 2 Speaker connections
- 2 Connector options
- 2 System 1: Single speaker system
- 3 System 2: Two speakers in series
- 3 System 3: Two speakers in parallel
- 3 System 4: Four speakers in series/parallel
- 4 System 5: Connecting speakers with transformers
- 4 Using headphones
- 4 Connecting to AC power
- 4 Mounting the amplifier
- 5 Turning the amplifier on
- 5 Using the power meter
- 5 Using the master volume control
- 5 About the internal clip circuitry
- 5 About the internal protection circuitry
- 5 About the feedback filter
- 6 Limited warranty
- 6 Specifications

Please read this manual thoroughly before you attempt to set up and use the amplifier. It contains a range of installation suggestions as well as instructions to ensure safe usage. Installed properly, you can expect years of trouble-free service from this product.



FEATURES AND CONTROLS

FRONT PANEL



Power Meter
Indicates the output signal level

Clip Circuit and Indicator
This special circuitry protects the amplifier and speaker system from being damaged by overdriving power levels. Indicator lights remind the user to reduce the volume when amplifier output is excessive.

Power On/Off

Phone Jack

Lets you connect a pair of stereo headphones for private listening or cueing (monitoring) sound prior to "airing" it.

Five Input Sources Mixing Controls
Controls the sound level for each of the audio input sources.

Mic4/CD Input allows you to select and connect an alternative high level audio sound for musical and special effects.

Feedback Filter

Controls the audio frequency.

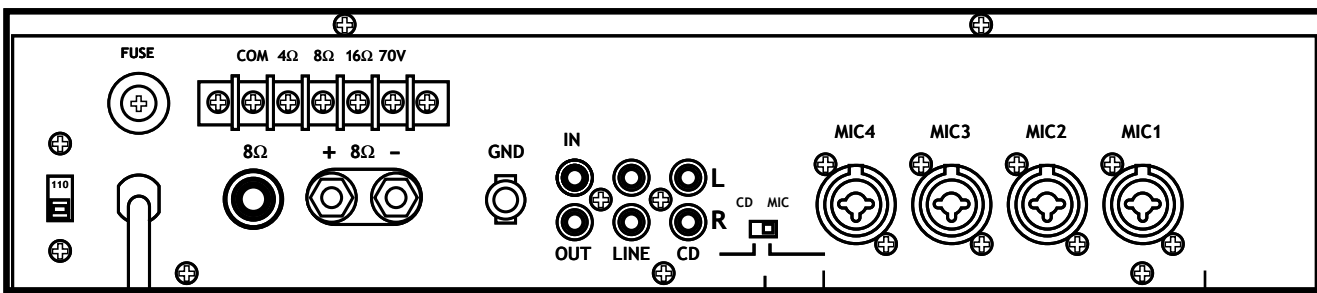
Master Volume

Lets you adjust the overall sound level

Protection Indicator

This LED is illuminated when a thermal overload condition is present.

REAR PANEL



Four Microphone Inputs
Allows you to connect up to four balanced or unbalanced of 6.35mm or XLR type.

Mic4/CD Input

Allows you to select and connect an alternative high level audio sound for musical and special effects.

INSTALLATION GUIDELINES

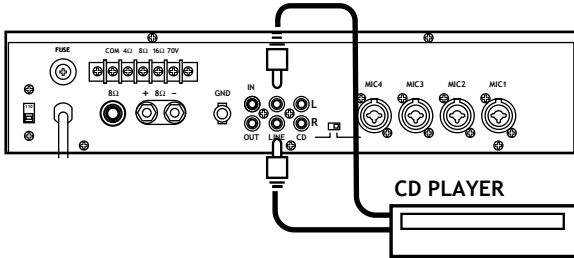
Input connections

The PT610 accepts a broad range of **input sources**, including:

Compact Disc (CD) player
 Cassette, Reel-to-Reel or other tape player
 Radio Tuner
 Microphones (up to 4 simultaneously)
 Equalizer
 Signal Processor

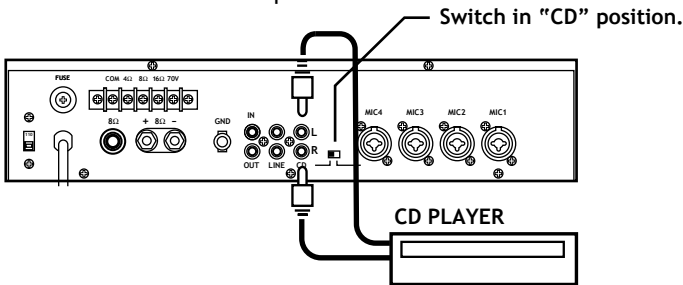
Connecting a CD or tape player or tuner

In a normal installation, one would use the **LINE JACK** for connecting a CD player, tape player or tuner



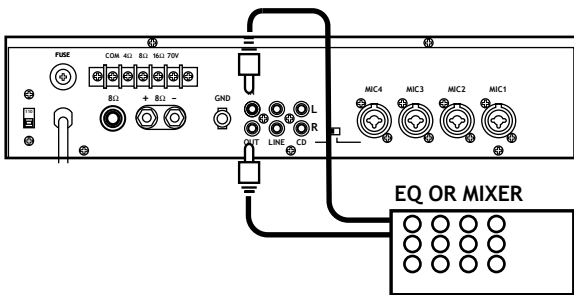
Connecting an additional CD sound source

In this situation, use the **MIC4 JACK**, and set the **MIC4/CD SELECTOR** switch to the CD position.



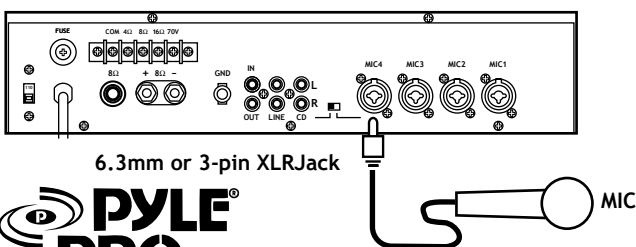
Connecting an equalizer or external signal processor

Connect the processor's **OUT** to the amplifier's **IN**, and the processor's **IN** connector to the amplifier's **OUT**.



Connecting microphones

The **MIC IN** jacks permit you to connect up to 4 low impedance microphones. The microphones can be used with either a 6.35mm plug, or a 3-pin XLR type plug.



Speaker connections

One or more speakers (4, 8 or 16 Ohm) speakers can be connected to the amplifier with or without transformers. However, before you connect any speakers to the amplifier, the total speaker impedance must be calculated in order to avoid damage to the amplifier. A total speaker impedance greater than 16 Ohms or less than 4 Ohms can cause this damage to occur.

To begin with, in order to ensure equal volume from each speaker, all connected speakers should have the same impedance.

A proper total impedance within the 4 to 16 Ohm range can be achieved by combining series and parallel speaker connections. Please see the diagrams which follow which explain how to accomplish this.

Finally, always use the shortest length of speaker wire possible of proper gauge. Usually, 18 gauge wire is adequate for lengths under 25 feet, while 16 gauge is used for greater lengths.

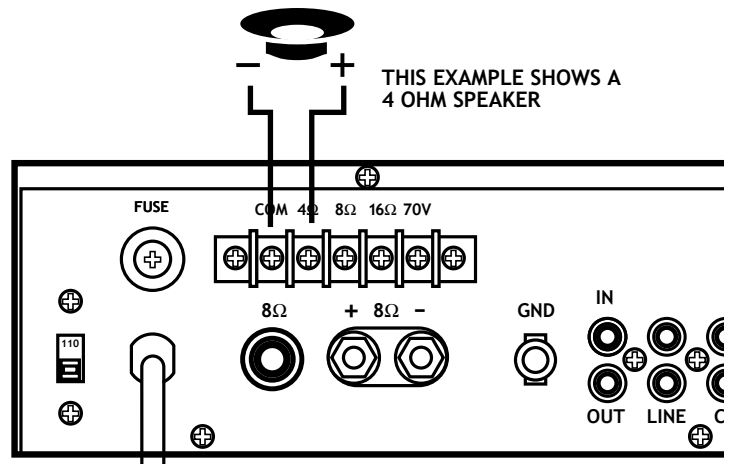
Connector options

The PT-610 offers several different connection points for speaker hookups. These include screw terminals, a 6.3mm jack, and a pair of banana plug connectors.

It is not proper or recommended to connect all the speaker outputs simultaneously. In addition, please note that when the 6.3mm jack is used, all the screw terminal and RCA signal outputs are disconnected.

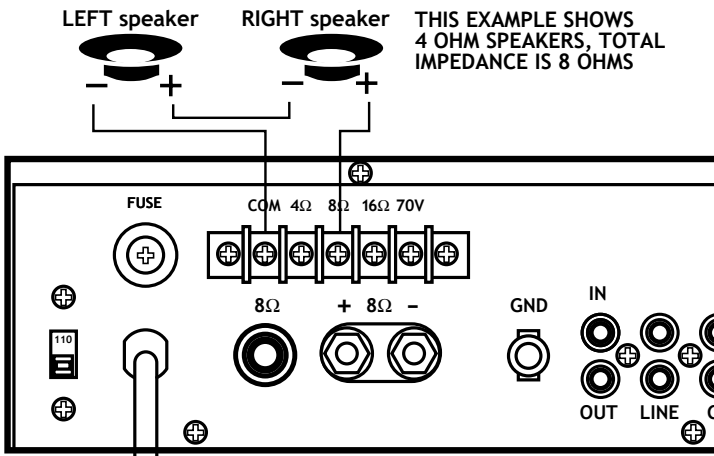
System 1: Single speaker system

1. Connect the speaker (-) terminal to the amplifier **COMMON** terminal.
2. Depending on the speaker being used, connect the speaker (+) terminal to the amplifier 4 Ohm, 8 Ohm or 16 Ohm amplifier terminal.



System 2: Two (or more) speakers in series

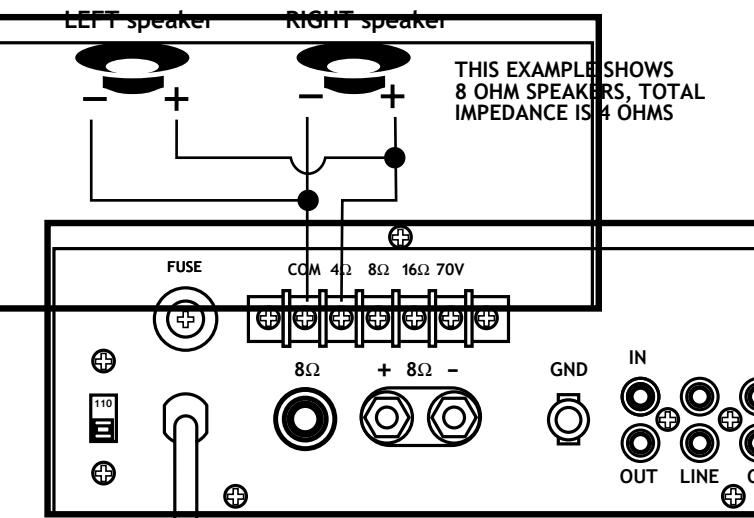
1. Connect the LEFT SPEAKER (-) to the amplifier COMMON terminal.
2. Connect the LEFT SPEAKER (+) to the RIGHT SPEAKER (-).
3. Connect the RIGHT SPEAKER (+) to the amplifier's 4 Ohm, 8 Ohm or 16 Ohm terminal, depending on the TOTAL IMPEDANCE of the two speakers. If each speaker has an impedance of 8 Ohms, the total speaker impedance in this series configuration is 16 Ohms.



NOTE: ADDITIONAL SPEAKERS MAY BE INCLUDED IN SERIES, BUT IT IS NECESSARY TO CALCULATE TOTAL IMPEDANCE, AND CONNECT THE SPEAKER CIRCUIT TO A TERMINAL OF APPROPRIATE IMPEDANCE. FOR EXAMPLE, IF THREE SPEAKERS OF 4 OHMS ARE USED, TOTAL IMPEDANCE IS 12 OHMS - YOU SHOULD CONNECT TO THE 16 OHM TERMINAL.

System 3: Two (or more) speakers in parallel

1. Connect the LEFT SPEAKER (-) to the RIGHT SPEAKER (-).
2. Connect both the LEFT SPEAKER (-) and the RIGHT SPEAKER (-) to the amplifier COMMON terminal.
3. Connect the LEFT SPEAKER (+) to the RIGHT SPEAKER (+).
4. Connect both the LEFT SPEAKER (-) to the RIGHT SPEAKER (+) to the amplifier 4 Ohm, 8 Ohm or 16 Ohm terminal, depending on the TOTAL IMPEDANCE of the two speakers. If each speaker has an impedance of 8 Ohms, the total speaker impedance in this parallel configuration is 4 Ohms.



System 4: Four speakers in series/parallel combination

1. Group the four speakers in two pairs.
2. Connect one pair of speakers in series (see system 2, above). Note total impedance in chart below.
3. Connect one pair of speakers in parallel (see system 3, above). Note total impedance in chart below.
4. Connect the speakers' (-) terminals to the amplifier COMMON terminal.
5. Connect the speakers' (+) terminals to amplifier's 4 Ohm, 8 Ohm or 16 Ohm terminal, depending on the TOTAL IMPEDANCE of the four speakers. See the chart below for some sample system suggestions:

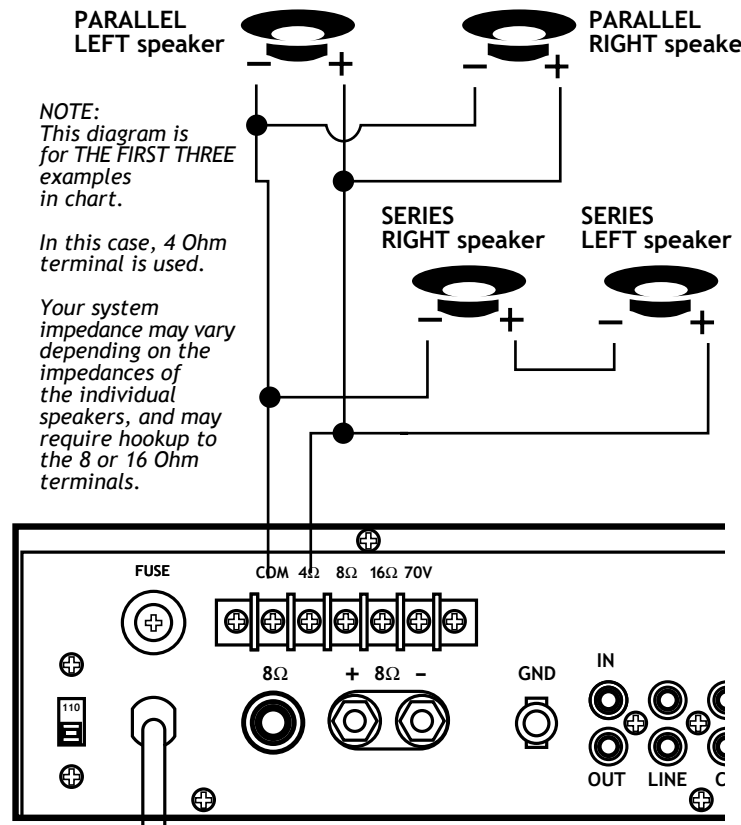
PARALLEL speaker pair (net impedance for pair)	SERIES speaker pair (net impedance for pair)	TOTAL IMPEDANCE in this type system	Use this amp terminal
$8\Omega * 8\Omega$ *4Ω*	$8\Omega * 8\Omega$ *16Ω*	8Ω	4Ω
$8\Omega * 8\Omega$ *4Ω*	$16\Omega * 16\Omega$ *32Ω*	8Ω	4Ω
$16\Omega * 16\Omega$ *8Ω*	$4\Omega * 4\Omega$ *8Ω*	8Ω	4Ω
$16\Omega * 16\Omega$ *8Ω*	$8\Omega * 8\Omega$ *16Ω*	8Ω	8Ω

PARALLEL LEFT speaker

NOTE: This diagram is for THE FIRST THREE examples in chart.

In this case, 4 Ohm terminal is used.

Your system impedance may vary depending on the impedances of the individual speakers, and may require hookup to the 8 or 16 Ohm terminals.



Series/parallel variations

Although the description above is for combining a series pair and a parallel pair in a parallel hookup, you may also elect to combine two series pairs in a parallel hookup. Simply be sure you have properly calculated the total impedance, and attach the (+) speaker circuit wire to the proper amp terminal. For example, if you use two pairs of 8 Ohm speakers in series each pair, the impedance for each pair is 16 Ohms. Connected in parallel to the amp terminals, the TOTAL impedance is 8 Ohms, so you should connect these to the 8 Ohm terminal.

Limited Warranty

All PYLE PRO products are carefully constructed and tested before shipment. Units purchased in the USA are warranted to be free of defects in material and workmanship for five (2) years from the date of purchase. This warranty is limited to the original retail purchaser of the amplifier.

Should the unit fail due to factory defects in material or workmanship, your unit will be repaired or replaced at the sole discretion of PYLE.

To obtain warranty service, you must first call our Consumer Return Hotline at (718) 236-6948 to obtain a Return Authorization Number. This R.A. # must appear on the outside of your package and on all paperwork relating to your return.

When returning the unit to us for warranty service, it must be carefully packed and shipped, prepaid, to:

R.A.#: _____
 PYLE PRO Service Center
 1600 63rd Street
 Brooklyn, NY 11204

You must also include the following items with your return:

- A copy of your sales receipt or other proof of purchase
- A brief letter, indicating the problem you are experiencing with the product
- Include in your letter your return address, daytime phone number and R.A. number
- Also include a check or money order for \$15.00 for return shipping, handling and insurance, or provide your Visa/MC number with expiration date.

Our obligation under this warranty is limited to the repair or replacement of the defective unit when it is returned to us prepaid. This warranty will be considered void if the unit was tampered with, improperly serviced or subject to misuse, neglect or accidental damage.

PT610 Specifications

Output Power at THD 2%, 8-Ohm Load, 1 kHz	100W
Maximum Power, 8-Ohm Load	200W
Maximum Output, 4-Ohm Load	600W

THD at 70W, 8-Ohm Load, 1 kHz, w/bandpass filter	
MIC (phone/XLR jack)	0.35%
CD	0.20%
Line	0.20%

Frequency Response (at 1 Watt, +/- 3 dB)	
MIC (phone/XLR jack)	75 Hz-20 kHz
CD	60 Hz-20 kHz
Line	60 Hz-20 kHz

Input Sensitivity (at 2% THD, 1 kHz)	
MIC	1 mV
CD	150 mV
Line	150 mV

Signal-to-Noise Ratio	
MIC	60 dB
CD	73 dB
Line	73 dB

Notch Filter Effect	
Range	300 Hz-3 kHz
Depth	-12 dB

Noise Level (with inputs shorted)	0.75 mV
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Power Requirement	120V AC, 60 Hz
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Power Fuse	3A/250V
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Dimensions H x W x D, inches	4 3/16 x 19 x 12
(mm)	(100 x 483 x 306)

Weight, lbs (kg)	22.3 (10.1)
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Thank you for purchasing this PYLE product. To activate your warranty, please mail this card within 10 days.

PYLE PRO

PYLE PRO AMPLIFIERS

warranty registration card

Name _____

Address _____

City, State ZIP _____

Model No. _____ **Serial # (if available)** _____

Date of Purchase _____

Purchased at:

<input type="radio"/> Music Products Store	<input type="radio"/> Sound Contractor/Installer	<input type="radio"/> Mail Order
<input type="radio"/> Catalog Merchandiser	<input type="radio"/> Other _____	

