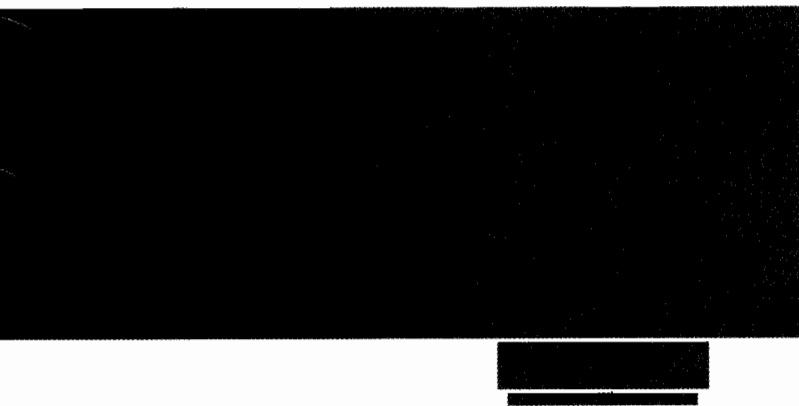# PX-612

Multi-Room Amplifier

AUDIOACCESS

OWNER'S MANUAL

GENERAL

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is 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.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

Use 120-volt AC only.

▲ U.S. and Canadian customers should use 120 volt AC only. Other customers should use voltages appropriate to their area. Connecting the unit to an outlet supplying a higher voltage may create a fire hazard.

Do Not Open the Cabinet.

▲ Do not attempt to service this unit. Tampering with internal components can cause a fire or shock hazard, and may void your warranty.

Save all packing material.

▲ It is essential for shipping should you ever move, or in the event the unit ever needs repair.

Cleaning.

▲ Remove dust by wiping the unit with a soft, dry cloth. If necessary, use a soft cloth lightly dampened with mild soapy water; then wipe with a dry cloth. Never use benzene, thinner, alcohol or other volatile agents, and avoid spraying insecticides near the unit.

INFORMATION

Power Source.

▲ The PX-612 is intended to operate from a power source that does not apply more than the specified volts RMS indicated on the rear panel of the unit, as referenced between the supply conductors or between either supply conductor and ground.

Grounding.

▲ The PX-612 is grounded through the ground conductor of the power cord. To avoid the potential of electrical shock, plug the power cord into a properly wired and grounded receptacle before operating the PX-612. A protective ground connection, by way of the ground conductor in the power cord, is essential for safe operation. A standard 3-pin IEC type, in good operational condition is the *only* acceptable cord that may be used to connect the PX-612 to a power source.

Operating Environment.

▲ For the best results, install the PX-612 in an area where it will not be exposed to direct sunlight or any heat source. The unit should be operated in a temperature range from 40° to 95°F (5° to 35°C).
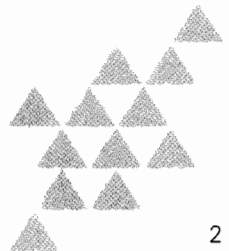
Service.

Your PX-600 should be serviced only through authorized Audioaccess dealers.

Companion Products.

Although not necessarily shipped together, the PX-612 is designed to work with our PX-600 Multi-Room Preamp/Controller.

The following accessories are part of the PX-600/612 family of products:

▲ KPS — Wall mounted keypad (available in white, ivory or black)

▲ RT-A — Dedicated handheld IR remote control

▲ URC-5000 — Programmable handheld IR remote control

▲ KPT — Keypad Termination Board

▲ MCI — Multi-room Computer Interface
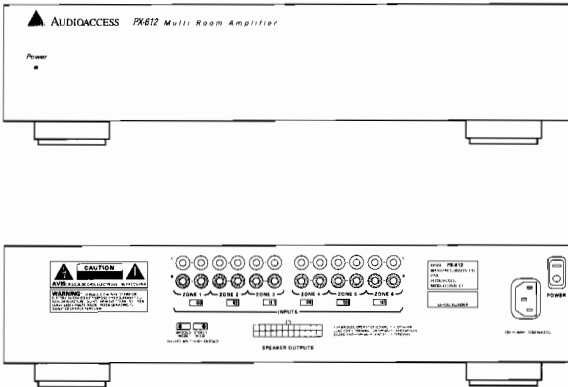
▲ PDM — Page/Doorbell Module

PX-612
MULTI-ROOM

Thank you for choosing the Audioaccess PX-612 Multi-Room Amplifier.

And congratulations. Your new unit is an exceptionally well-engineered product that will give you years of superb performance.

The Audioaccess PX-612 Multi-Room Amplifier has been designed to meet the specialized requirements of a total home/multi-room environment. Unlike conventional audio amplifier designs, multi-room amplifiers must reject interference from power circuits, lighting, RF, and even other audio/video system components. The PX-612 6-zone/12-channel, bridgeable amplifier readily meets these challenges while delivering a level of audio performance that rivals far more esoteric amplifier designs. To ensure reliability, each of the twelve identical audio channels is manufactured using discrete transistor driver and output stages. PX-612 flexibility is further enhanced by a built-in pass through and its channel bridging capabilities. The PX-612 has been thermally and mechanically engineered to allow simultaneous operation of all twelve channels into four-ohm loads without compromising sonic performance.
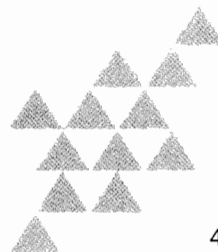
AMPLIFIER ▪ ▪ ▪ ▪ ▪ ▪ ▪ ▪ ▪ ▪ ▪

The PX-612 is silent in operation. Crosstalk between channels is reduced to completely inaudible levels. The sophistication of the PX-612 power supply and muting circuit assures freedom from audible ticks and pops. Signal sensing relays on the speaker outputs mute the signal when a zone is not in use. A power line spike or a refrigerator turning on at 3am won't create a sleep-disturbing "pop" throughout an entire installation!
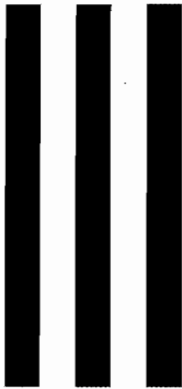
PX-612 turn-on and off is automatic. Built-in signal sensing provides unattended, transparent system operation. The PX-612 is housed in a compact 4" high chassis which matches the Audioaccess PX-600 Multi-Room Preamp/Controller. Each PX-612 is supplied with a speaker harness and an external termination board which allows hookup of the speakers at the pre-wire stage of installation. RCA-type audio input jacks accept signals from the matching PX-600 or any other high-quality audio source.

PX-612 features, performance, and reliability make it the perfect amplifier choice for a wide range of home theater and multi-room applications.
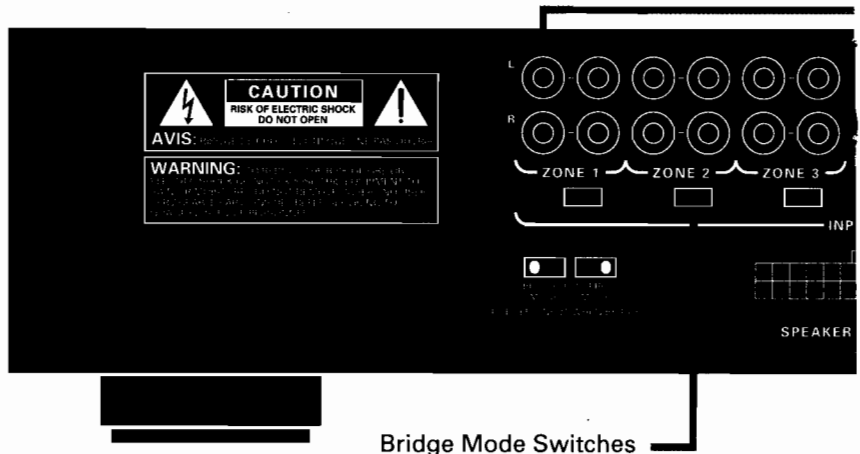
Features:

▲ Six Stereo Zones, Twelve Channels (Six Channels Via Switches)

▲ Pass Through Inputs for Daisy-Chaining Additional Channels/PX-612s

▲ Hybrid Design with Rugged, Discrete Driver and Output Stages

▲ Reliable Operation with Over-Current, Short-Circuit, Thermal and DC Protection Automatic Resetting

▲ Quiet, Convection Cooling (When Properly Installed According to Factory Recommendations)

▲ 24-Conductor Wiring Harness Connects Speaker Outputs to Speaker Termination Board (Allows for Early Construction Speaker Pre-Wire)

▲ RF Filtering on Audio Inputs

▲ AC Main Input is Fused and EMI Filtered

▲ Tri-Color LED Status Indicator on Front Panel Illuminates GREEN for Normal Operation; AMBER for Standby Operation and RED for DC and/or Thermal Protection
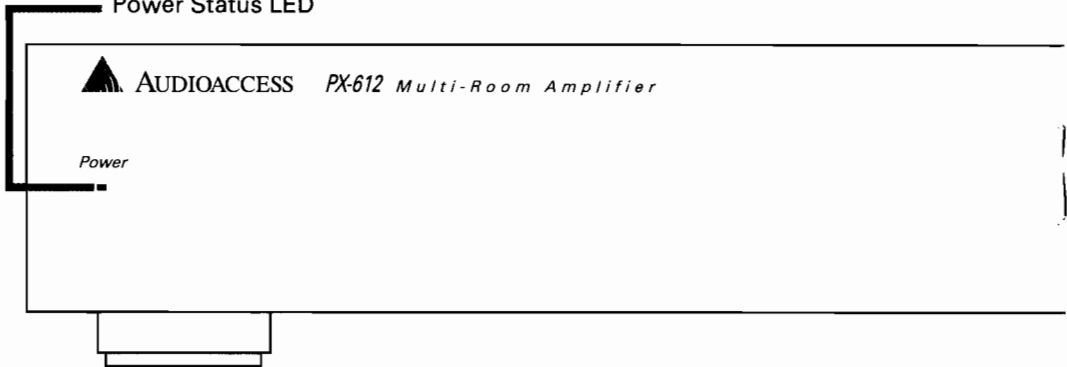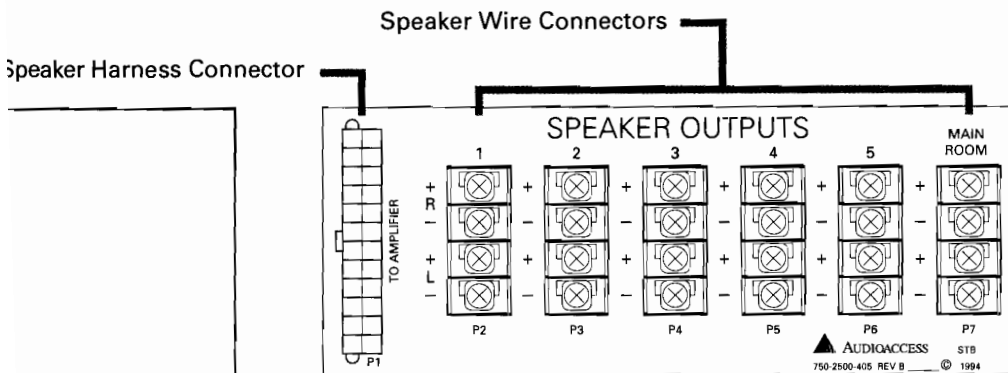
▲ AC Main Switch on Back Panel

Signal Inputs ——

L

R

ZONE 1   ZONE 2   ZONE 3

INP

SPEAKER

Bridge Mode Switches ■—

——— Power Status LED

▲ AUDIOACCESS   *PX-612 Multi-Room Amplifier*

Power

Power Switch

AC Power Cord Connector

ZONE 4 ZONE 5 ZONE 6

PX-612

POWER

PUTS

Speaker Harness Connector

Speaker Wire Connectors

Speaker Harness Connector

SPEAKER OUTPUTS

	1	2	3	4	5	MAIN ROOM

TO AMPLIFIER

P1

+ R −

+ L −

+ + + + +
− − − − −
+ + + + +
− − − − −

P2 P3 P4 P5 P6 P7

AUDIOACCESS STB
750-2500-405 REV B _____ © 1994
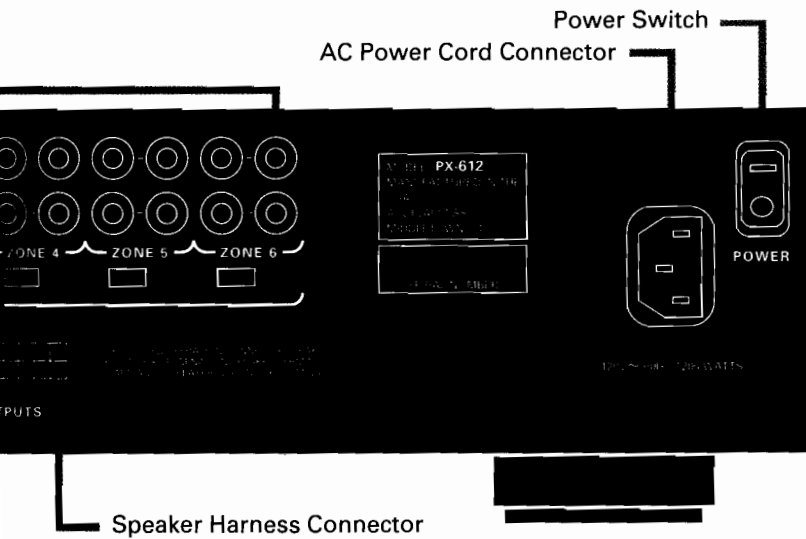
STB — Speaker Termination Board

INSTALLATION

The **PX-612** is configured as six independent stereo amplifiers. The signal sensing circuitry detects the presence of signal on either the right or left input of each amplifier and controls a relay which connects the right and left channel amplifier output stages to the rear panel speaker connector. When the input signal falls below the sensing threshold, the relays will continue to be engaged for approximately 40 seconds. This same relay is also used by the DC protection circuitry to instantaneously disconnect the speakers if DC is detected at the amplifier output.

Inputs.

▲ The input of each stereo amplifier has two sets of RCA connectors wired in parallel, forming a built-in Y connector. Either set of jacks may be used to input signal to the amplifier and the other set may be used to route the input signal to another zone of the same PX-612 or to a totally separate PX-612 or other amplifier. To strap zones of a PX-612 together, simply plug the input source into the left set of inputs for a zone, then jump the right set of inputs on this zone to the left set of inputs on the next zone with a 14mm jumper (available at electronics supply outlets) or a short RCA cable. Multiple

zones may be interconnected in this way. To connect to another amplifier, use an RCA cable of appropriate length. *Caution: If you do use both sets of inputs, make sure that only one of the sets is connected to an output. If equipment outputs are connected to both sets of inputs, damage may result.*

Speaker Outputs.

▲ The PX-612 is connected to speakers via an outboard Speaker Terminator Board and a 48" long, 24-conductor speaker harness, both supplied with the unit. Plug either end of the harness into the back of the amplifier and the other end into the Speaker Terminator Board. Connect the wiring from the speakers to the screw terminals on the Speaker Terminator Board as indicated by the legend on the STB. In an installation, the Speaker Terminator Board can be connected to the speaker wiring at the pre-wire stage, and connected to the PX-612 during final installation. The snap track should be screwed to a convenient location near the amplifier (remember the harness is only 48" long) with the STB snapped into place after the speaker wiring is connected.

& OPERATION

Do not strip more than 3/8" of insulation from the speaker wire. Excess bare wire can easily cause shorts. Twist wire ends carefully and make sure all strands are under the square clamp pad.
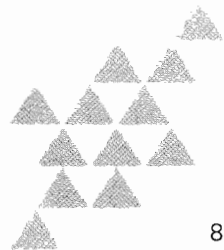
Bridged Mode Operation.

▲ In bridged mode, the amplifier channels normally used for the left and right sides of a zone are combined to form one channel. When using bridged mode, connect input signals only to the left RCA input jacks of that zone. If you wanted to bridge two zones for stereo operation, for example, use the left channel of the set of inputs marked "Zone 1" for the left channel and the left channel of the set of inputs marked "Zone 2" for the right channel. Be sure to set the bridging switch on the zones you want to bridge to the "bridged mode" position (to the left).

For zones that have been bridged, connect your speaker's positive (+) lead to the Right positive (+) terminal on the Speaker Terminator Board. Connect your speaker's negative (–) lead to the Left positive (+) on the Speaker Terminator Board.

Powering Up.

▲ The main power switch is on the rear panel next to the IEC connector for the AC power cord. Plug the supplied cord into this connector and into a grounded AC outlet. Turn the power on at the power switch and leave it on. This places the amplifier in a "standby" condition, ready to "turn on" when a signal is sensed. When the main power is turned on, the amplifier will mute for approximately 60 seconds, preventing turn on transients from reaching the speakers. The amplifier will also automatically mute when the main power is turned off.

The tri-color LED on the front panel indicates the status of the PX-612. AMBER indicates the amplifier is in standby. GREEN means the amplifier has at least one zone "turned on" and RED indicates that either thermal or DC protection is active on at least one zone. Thermal protection will reset after the amplifier has had a chance to cool, and the LED will turn green at that time. If the LED stays red, a fault has occurred in the amplifier, and you should contact your authorized Audioaccess dealer for service.

SPECIFICATIONS

Number of Channels:

▲ Twelve Unbridged (Six Stereo Pairs); Six Bridged

Power Output (Unbridged):

▲ 50 Watts @ 8 Ohms, 65 Watts @ 4 Ohms, from 20Hz—20kHz, Two Channels Driven

Power Output (Unbridged):

▲ 30 Watts @ 8 Ohms, 40 Watts @ 4 Ohms, from 20Hz—20kHz, All Channels Driven

Power Output (Bridged):

▲ 130 Watts @ 8 Ohms, 20Hz—20kHz, Two Channels Driven

Power Output (Bridged):

▲ 80 Watts @ 8 Ohms, 20Hz—20kHz, All Channels Driven

THD & Noise:

▲ 0.2% or Less, at Rated Power, 20Hz—20kHz

Frequency Response:

▲ 20Hz—20kHz, +0/-0.5dB, at Rated Power

Signal/Noise:

▲ 100dB (ref: Rated Power), Measured with Amplifier Operating Unbridged into 8 Ohm Loads

Muting:

▲ Turn-On, Turn-Off and Signal Sensing (Each Stereo Pair Output Mutes with No Input Signal)

Slew Rate:

▲ 35 Volts/Microsecond

Damping Factor:

▲ Over 200

Input Impedance:

▲ 10k Ohms

Input Sensitivity:

▲ 1 Volt for Rated Output

Power Requirements:

▲ 115 volts AC, 60Hz, 1200 watts

Dimensions:

▲ 173/8" W x 4" H x 15" D (442mm x 102mm x 381mm) Includes Connectors and Feet

Weight:

▲ 271/2 lbs. (12.5 kg)

OWNER'S RECORD

Please take a moment and complete the Limited Warranty Registration Card and return it to Audioaccess.

The serial number is located on the rear panel. Record this number in the space provided below. Refer to this number whenever you call upon your authorized Audioaccess custom installation dealer regarding this product.

Model No. **PX-612**   Serial No. _____

Should you have any questions or be in need of service, please contact the Audioaccess dealer that installed your system. The area provided below is for you to record your Audioaccess dealer information.

DEALER: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP CODE: _____

CONTACT PERSON: _____ TELEPHONE: (____) _____

DATE INSTALLED: _____