ROEMTECH®

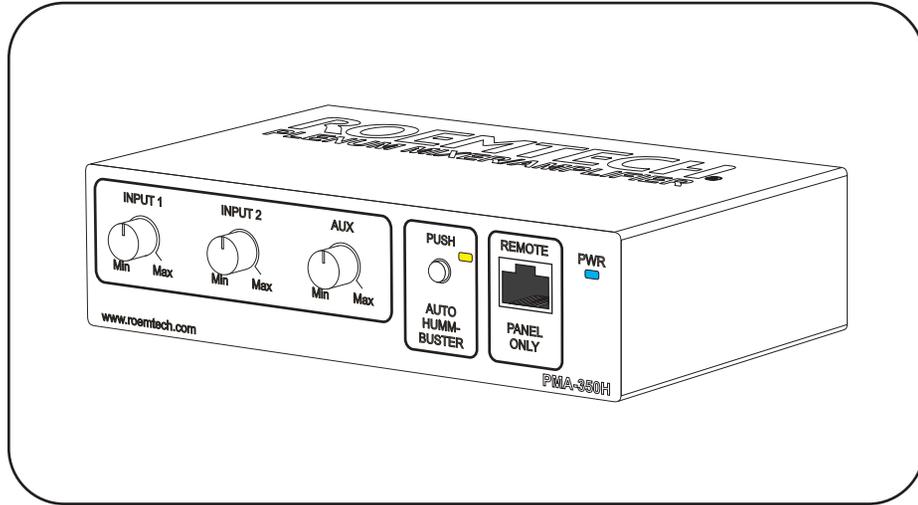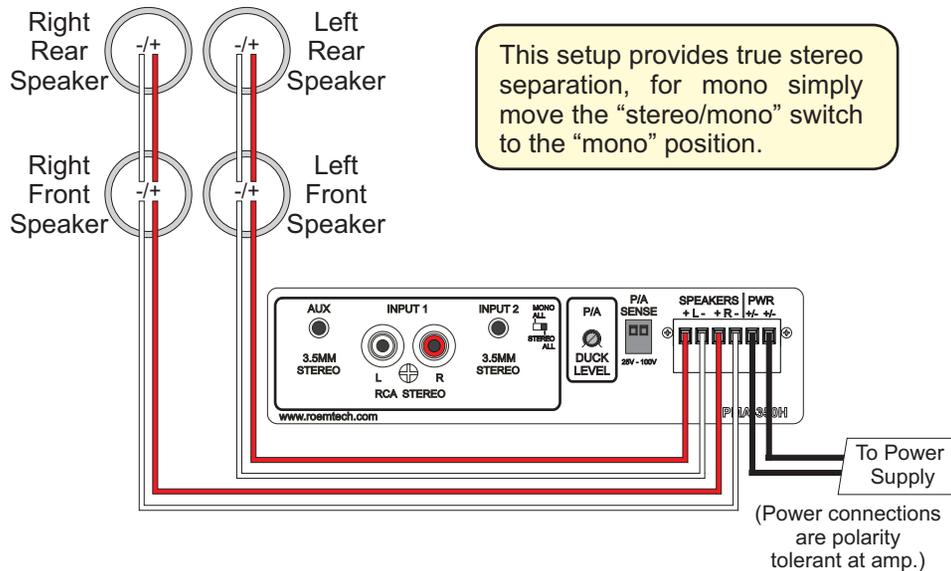## Instruction Manual
PMA-350H
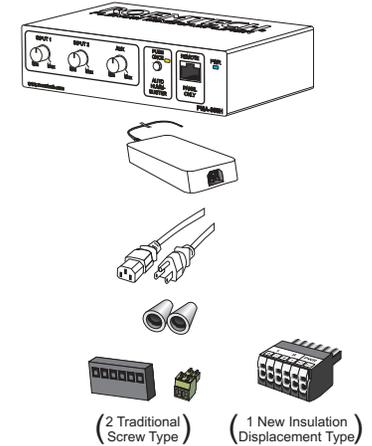

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List of Contents

1. Plenum Rated Stereo Mixer/Amplifier - 50 watts

2. Regulated 60 watt Power Supply (Not Plenum Rated)

3. Universal 5' Power Cord (Not Plenum Rated)

4. Pair of Wire Nuts

5. Three Detachable Terminal Blocks

(2 Traditional Screw Type) (1 New Insulation Displacement Type)

FCC Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential or commercial installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
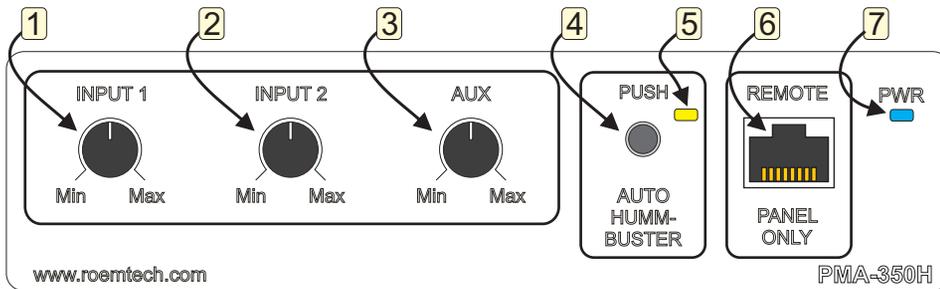- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- Or, call Roemtech, we would love to help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
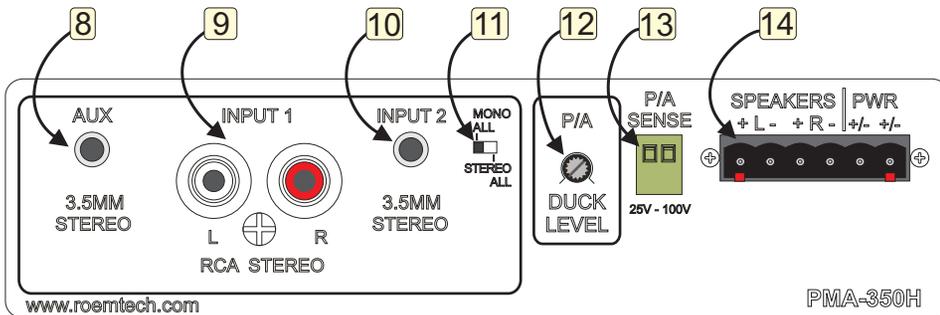
Typical Stereo Wiring Diagram

This setup provides true stereo separation, for mono simply move the "stereo/mono" switch to the "mono" position.

(Power connections are polarity tolerant at amp.)

Auto HummBuster® How it Works

Auto HummBuster technology (patent pending) is a state of the art troubleshooting system invented in the research labs of Roemtech outside of Dallas, Texas. Until now, when there was an unwanted hum or buzz in an audio system, it required a technician to come in and analyze the sound system. Typically, this required a modification of the existing setup, sometimes leading to many more hours of work and untold expenses. This sort of scenario is not uncommon. With Roemtech's new Auto HummBuster technology, unwanted noise issues can be resolved with the simple push of a button. When the Auto HummBuster button is pushed, the PMA-350H's internal circuitry intelligently analyzes each incoming audio signal. It next determines which audio source is guilty of generating the noise, then it safely and properly gets rid of it. Due to sophisticated and proprietary circuitry pioneered by Roemtech, it does all of this while leaving the original audio content pure and unaffected. The HummBuster feature should be operated during a time when the source material has been muted or is not being played but the sources have all been plugged in. It can then make a decision that is more acurate. For more information about Roemtech innovation and other Roemtech products, visit www.roemtech.com.
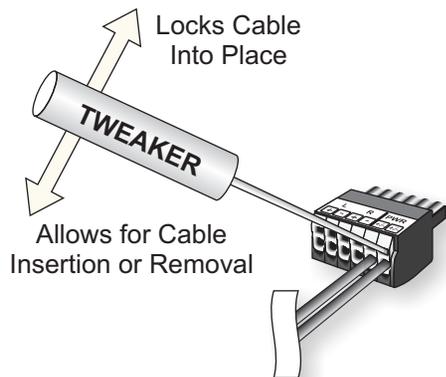
Features

Front Panel

INPUT 1 — Min / Max
INPUT 2 — Min / Max
AUX — Min / Max
PUSH — AUTO HUMM-BUSTER
REMOTE — PANEL ONLY
PWR

www.roemtech.com   PMA-350H

Rear Panel

AUX — 3.5MM STEREO
INPUT 1 — L R — RCA STEREO
INPUT 2 — 3.5MM STEREO
MONO ALL / STEREO ALL
P/A DUCK LEVEL
P/A SENSE — 25V - 100V
SPEAKERS | PWR — + L - + R - | +/- +/-

www.roemtech.com   PMA-350H

New RapidLock Connector

Locks Cable Into Place

TWEAKER

Allows for Cable Insertion or Removal

RapidLock Instructions

1. DO NOT strip wire. This is not optional. If wire is striped, cut off exposed copper.

2. Make sure levers are in the "open" position. (The RapidLock connector typically comes with the levers flipped out or "open".)

3. Each lever has two holes, one is square and one is round. Insert the cable into the round hole while inserting the tweaker into the square hole. Once both are fully inserted, pull the tweaker so that the lever is completely closed.

Features Explained

1 Input 1 Volume Control: Sets attenuation level for input 1 (aka - stereo RCA input).

2 Input 2 Volume Control: Sets attenuation level for input 2 (aka - stereo 3.5mm input).

3 AUX Input Volume Control: Sets attenuation level for AUX input (aka - stereo 3.5mm input).

4 Auto HummBuster Button: This button initiates the Auto HummBuster feature. For more information on this feature, see the section "Auto HummBuster - How it Works". This button also doubles as an EQ preset. If this button is held down for two seconds, the light will flash once, twice or three times. If the light flashes once, this indicates that the internal EQ is flat, if it flashes twice, this indicates the internal EQ has been set to perfectly match the SP-230N Roemtech ceiling speakers, if the light flashes three times, this indicates that the EQ has been set to perfectly match the Roemtech SP-340 cabinet speakers

5 Auto HummBuster Light: This yellow LED flashes quickly five times while the amplifier executes the Auto HummBuster feature to indicate that the function is successfully running.

6 Remote Volume Control Jack: This jack can **ONLY** be attached to a ROEMTECH wall volume control. The jack supplies 5V over one of the wires and uses it to be controlled by a 10K potentiometer. In addition, three of the wires can be used for an analog line level stereo signal that gets mixed in with Input 2 and is also attenuated by its volume knob. For more information regarding this feature, contact Roemtech technical support.

7 Power Light: This light indicates three possible conditions for the amplifier. 1). Steady on indicates amplifier is powered up and internal processor is functioning. 2). One short blink each second indicates that amplifier is in sleep mode (see "Sleep Mode" for more information). 3). Fast blinking indicates that the PA Override is currently engaged (see "PA Sense" for more information).

8 AUX Input: This input is a stereo 3.5mm jack that accepts most unbalanced stereo signals.

9 Input 1: This input is a stereo RCA jack that accepts most unbalanced stereo signals.

10 Input 2: This input is a stereo 3.5mm jack that accepts most unbalanced stereo signals.

11 Mono All - Stereo All: This switch determines whether the output will be separated stereo or combined mono. In the mono mode, all speakers output the same exact audio. In stereo mode, you get true stereo separation for left and right channels as indicated at the terminal block.

12 Duck Level: This feature allows you to control the sensitivity of the PA ducking threshold. For example: If there is some constant noise on the PA system that is tied to the amplifier, then the sensitivity can be decreased by turning the control clockwise until the noise no longer triggers the PA override function.

13 PA Sense: This connection should be made to the public address or alarm system via a two conductor wire. Polarity is not important. The impedance of this input is in the mega-Ohm range and will not create a detectable load on any system that it is tied to. This input is designed to automatically detect and adapt to any signal it sees from 3Vrms to 100Vrms (standard high-level distributed audio) without issue.

14 Speaker/Power Terminal Block Connector: This amplifier contains the new RapidLock connector. It is designed to eliminate the need to strip the incoming wires (see illustration to the left). It allows for incredibly fast installations without worrying about stray "hair" wires or stripping the wire. In addition we include the standard "screw" type terminal block for those that are more comfortable with the traditional connectors. Use caution not to connect the power cables into the speaker terminals, this will most likely destroy the amplifier and is **_not_** covered by the warranty.