

airScope AMP8-12



Thank you for purchasing the Audio A - Multi-Channel Multi-Zone Amplifier. The versatility of the HM8/HM12 makes it the perfect choice for almost every type of custom multi-room audio system. Its tabletop or rack-mountable design allows it to be integrated easily into high-end whole house audio systems.

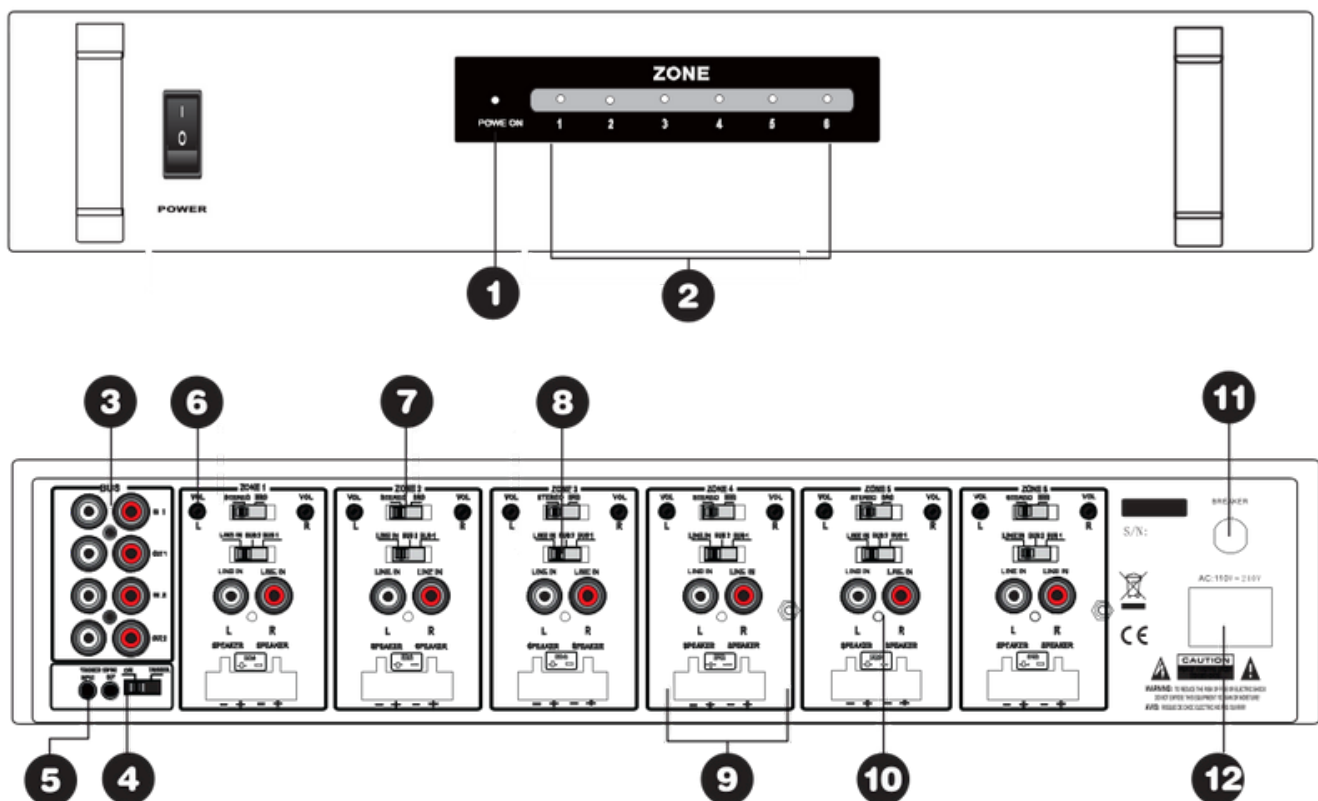
FEATURES:

- 8/12 channels (4/6 stereo zones) in one convenient enclosure
- Stable Class D design delivers superior audiophile sound quality and performance
- High efficiency, low heat, no fan, no noise, the latest technical design
- Independent and bus inputs provides unparalleled flexibility
- Bridgeable channel outputs provide additional power when needed
- Independent channel gain controls allow the output of each speaker to be perfectly matched
- Manual, auto, or triggered on/off for integration into any automated system
- Multi-stage protection circuitry for reliability and easy troubleshooting of audio system
- Installer-friendly setup and connections
- Can be converted easily between rack-mount and tabletop configurations
- Heavy-duty steel chassis with brushed aluminum faceplate
- AC100-240V wide voltage. Suitable for any region in the world

INSTALLATION:

TIC amplifiers are designed to help deliver a great audio experience. However, where you place the amplifier can have a large effect on the performance you receive, and the life of the unit. If you are not rack-mounting the amplifier, position it with all feet resting on a solid level surface. Be sure that the amplifier is in a well-ventilated area and **DO NOT** install the amplifier near a source of heat or in an extremely humid or wet location.

CAUTION: All connections and switching must be done with the amplifier's power switch positioned to 'Off'. Connect the power cord last to be sure that the amplifier is off during all of your connections and set up.



FRONT PANEL:

1. Master Power Switch / Indicator LED

Front panel pushbutton power switch turns the amplifier on and off. When the switch is on and the indicator LED is green.

2. Zone Status Indicators

Each pair of channels or zones has a green LED to indicate its operational status. These indicators provide quick and easy troubleshooting of the system. If the circuitry determines that a channel

must be shut down due to excessive heat or low impedance (a short), only the channels that are affected will be turned off causing the zone LED to go off. The remaining zones will continue to operate and maintain a green LED status. Once the condition has been corrected for the zone in question, the status LED will return to green.

Note: When the power LED is green the zone status LEDs are not lit (off), indicates the unit is in Fault area.

REAR PANEL:

3. BUS Line Inputs / Outputs

The HM-8/12 has two common or BUS inputs that receives audio signals from standard line-level audio sources and sends them to any or all channels. The BUS line outputs are direct feed-through to allow the BUS inputs to be fed to other amplifiers. Be sure to use high quality RCA cables that feature low impedance, shielding and high quality connectors.

4. Remote Turn-On Switch

This switch selects the turn-on stimuli that will put the amplifier in ready mode. "Trigger" setting relies on 5 - 15V DC voltage going into the trigger input to activate the amplifier, and automatically puts the amp in ready mode. "On" setting puts the amp constantly in ready mode so that it can be controlled by the master power switch on the front panel.

5. Trigger Input / Output

The trigger input is a handy feature when connecting the amplifier to an automated audio system. The 3.5mm mini-plug jack will accept a 5-15V DC output from another device, or from a separate power supply. When the trigger input is energized, the amp turns from standby to ON mode. When using the HM-8/12 with a receiver without a trigger output, the voltage can come from a 12V wall wart (3.5mm tip-positive connector) plugged into the receiver's switched outlet and the trigger input. The AMP-555/666 can also provide an output trigger voltage (12VDC @500mA max.) to turn on and off other devices in the audio system. When the amplifier turns off (standby mode), the voltage will drop to zero.

6. Channel Gain Control

Each channel has its own independent level adjustment. This allows the output level of each speaker to be perfectly matched to its area. It can also be used to limit the maximum audio level in a certain area.

7. Bridging Switch

By simply flipping a single switch, two channels can be combined to increase the total power output. This is helpful when extra power is needed in certain areas.

Note: The minimum impedance for bridged channels is 8 ohms. Also, please observe the proper speaker wiring when bridging channels. Input selection and volume settings for bridged channels will be controlled by the left channel. "BRG" is bridged mode and "STEREO" is non-bridged or stereo mode.

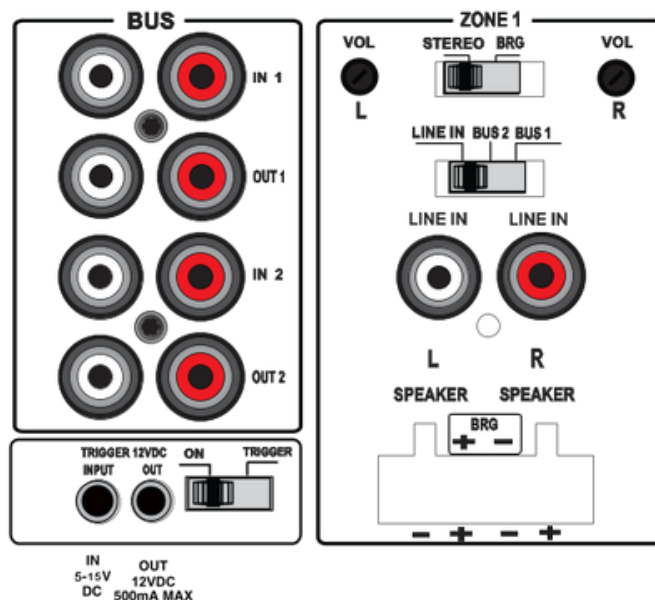
CAUTION: Only change switch positions when the amplifier is turned off.

8. Input Selection Switch

Each channel is capable of delivering the source from many inputs. The three main inputs are BUS 1, BUS 2 and LINE IN. The selection for these inputs is done via the Input Selection switch associated with each channel. Select the desired source input. Set the Input Selection switch to BUS 1 (will play source connected to the BUS 1 input), BUS 2 (will play source connected to the BUS 2 input) or LINE IN (will play source connected to that channel's LINE IN).

CAUTION: Only change switch positions when the amplifier is turned off.

CLOSE UP OF CONNECTIONS



9. Speaker Output Terminals

The HM-8/12 uses high quality Phoenix style connectors for the speaker connections. Use 14-18 gauge stranded two-conductor loudspeaker wire. Ensure that at least 2 inches of each conductor are separated. Strip away 1/4 inch of insulation from each conductor. Connect the appropriate conductor to each screw terminal, observing correct polarity. Also, please observe proper speaker wiring when bridging channels.

10. Individual Channel Input

All twelve channels have their own dedicated input that allows the connection of audio sources in addition to the common BUS inputs. This is useful when using the HM-8/12 with an audio matrix switcher.

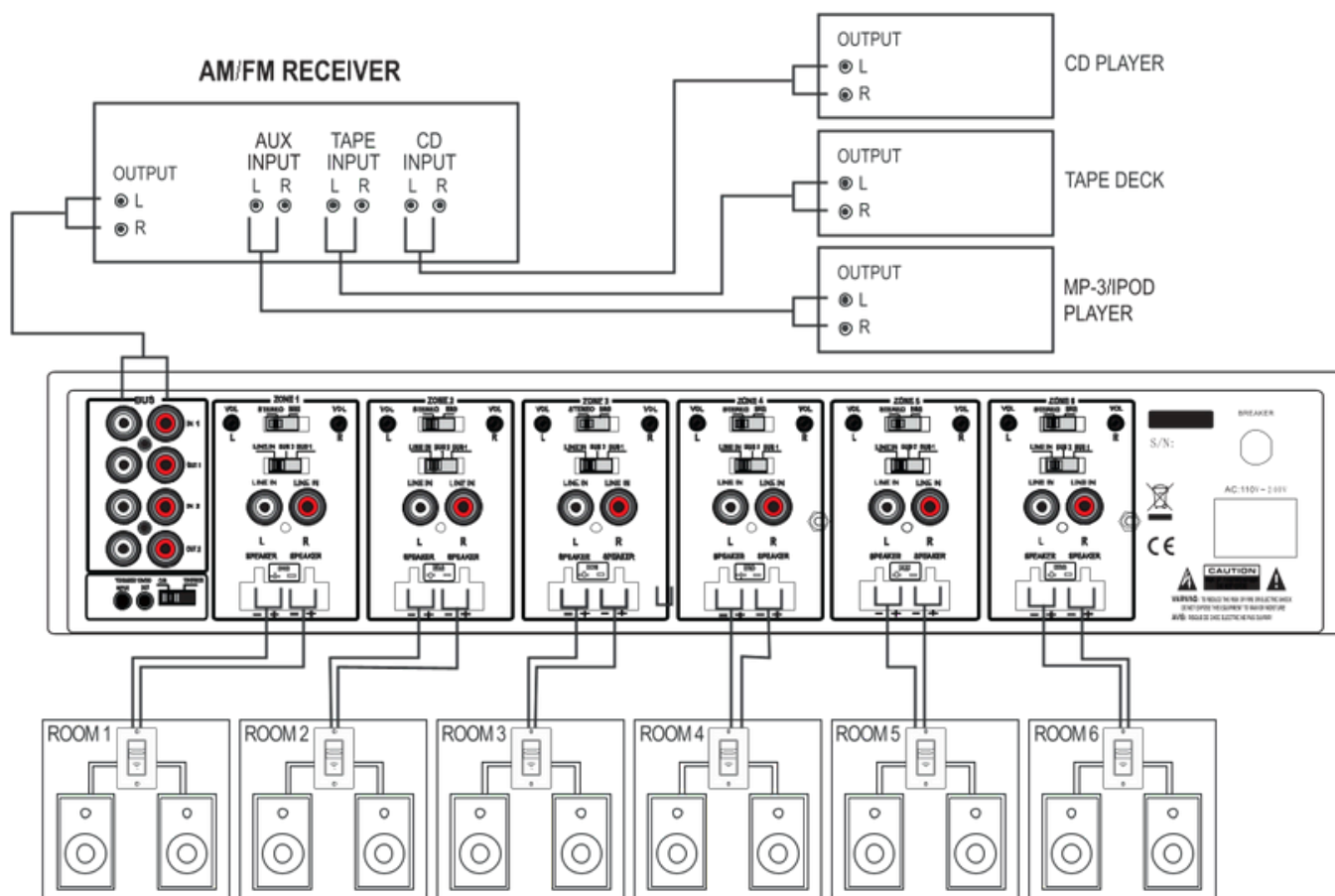
11. AC circuit breaker reset

If the amplifier works for a long time under the condition of overload, it will bounce and turn off automatically. Then the AC power switch should be turned off and check the circuit breaker. The circuit breaker button can be pressed again after a 30 second cooling period. If the circuit breaker repeatedly hops then may require a maintenance of the amplifier.

12. IEC Power Connector

The unit comes with an IEC jack that permits removal of the AC power cord. This allows the flexibility of changing the power cord for different countries. The IEC socket also houses the main fuse holder. Plug the power cord supplied with the amplifier into the amplifier and wall outlet or appropriate surge protector.

CAUTION: DO NOT plug the amplifier's power cord into a switched outlet, such as what is provided on some Surround Receivers. If you wish to have the amplifier turn on when the Receiver is powered up, use one of the power modes, such as Trigger or Auto.



NOTES ABOUT HUM:

While the HM-8/12 has been designed to minimize the possibility of hum in the audio system, it is still possible that a hum will occur in rare circumstances. Its safety grounding can create a path for small amounts of 60 Hz energy to travel through the line-level audio system. Although not dangerous, this energy can cause difficulty with the auto signal sensing circuit, and at the very least will interfere with the quiet enjoyment of your system. The first course of action should be trying to make sure that all of the audio components are connected to either the same electrical outlet, or at least into the same circuit branch. Next, cable TV systems are notoriously the culprit, so be sure to try disconnecting all coaxial feeds that are connected to the system. If this solves the problem, install a coaxial line isolator and reconnect the system. In the very worst case, a line-level audio isolator/transformer connected to the line-in of the amplifier will usually solve the problem.

SPECIFICATIONS:

	HM-8: 8 CH	HM-12: 12CH
Rated Power Output:	80 watts per channel RMS at 8 ohms	160 watts per channel RMS at 4 ohms
Rated Power Output:	160 watts per channel RMS at 4 ohms	300 watts per channel RMS at 8 ohms
Bridged Power Output:	300 watts per channel RMS at 8 ohms (8 ohm minimum)	
Input Sensitivity:	775 mV for full output with all level controls at max.	
Input Impedance:	10K ohm	
Frequency Response:	20 Hz to 20 kHz	
Distortion:	0.05% THD 20 Hz-20 kHz @ 10W (8 ohm)	
Distortion (Bridged):	0.1% THD 20 Hz-20 kHz @150W (8 ohm)	
Channel Crosstalk:	80 dB	
Signal to Noise Ratio:	100 dB A-weighted	
Efficiency:	85% (all CH FULL POWER)	
Power Requirements:	100-240V AC, 60 Hz/50 Hz	
Auto Turn-On Sensitivity:	13.7mV	
Dimensions:	16.7" W x 4" H (including feet) x 14.25" D	
Weight:	HM-8 (8 CH) 7KG	HM-12 (12 CH) 8KG

1-Year Limited Warranty
See daytonaudio.com for details