

## MULTI-ZONE 12 CHANNEL AMPLIFIER 40WPC

Model: MA1240a



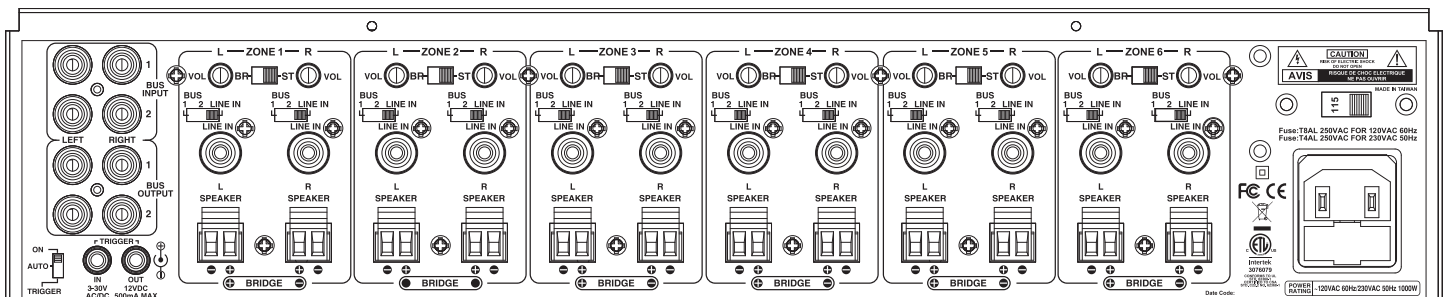
**Description:** The Dayton Audio MA1240a features a Class-AB output circuit that delivers superior audiophile sound quality and stable performance. Each of your installation's zones can benefit from the MA1240a's clean audio reproduction and exceptional functionality. The MA1240a can be stacked with other audio components and includes removable ears for mounting in standard audio racks (2RU).

Two common or BUS inputs feed audio signals from standard line-level audio sources to any or all channels. Each of the twelve channels has its own dedicated input and independent level adjustment to provide further flexibility. By simply flipping a single switch, two channels can be bridged to increase the total power output for that zone. This is helpful when extra power is needed in certain areas.

The MA1240a's manual, automatic on/off, or triggered 12V input turn-on modes facilitate easy integration into automated systems. For quick and easy troubleshooting of the system, each pair of channels or zones has a bi-color LED to indicate its operational status.

### Features:

- 12 channels (6 stereo zones) in one convenient enclosure
- Stable Class AB design delivers superior audiophile sound quality and performance
- 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
- Switchable 120/230V input voltage
- 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



## Technical Specifications:

Model	MA1240a
Rated power output	40 watts per channel RMS at 8 ohms
Bridged power output	80 watts per channel RMS at 8 ohms (8 ohm minimum)
Input sensitivity	380mV for full output with all level controls at max
Input impedance	18K ohm
Frequency response	5 Hz to 72 kHz
Distortion	.005% THD 20 Hz-20 kHz @ 30W (8 ohm)
Distortion (bridged)	.010% THD 20 Hz-20 kHz @ 80W (8 ohm)
Channel crosstalk	80 dB
Signal to noise ratio	105 dB A-weighted
Efficiency	63%
Power requirements	120/230 VAC, 60 Hz/50 Hz
Stand-by power rating	115V, 0.264W *
Auto turn-on sensitivity	13.7mV
Weight	33 lbs.
Dimensions	16.7" W x 14.25" D x 4" H (including feet)

## Architect & Engineer Specifications:

The multi-room sound distribution system shall be the Dayton Audio MA1240a, a twelve channel multi-zone amplifier for commercial install applications. The amplifier shall have an efficient Class AB amplifier design that is designed to deliver high quality performance. The amplifier shall be able to produce 40 watts per channel RMS of output power at 8 ohms. In bridged mode, the amplifier shall provide 80 watts of output power per channel RMS at 8 ohms (8 ohm minimum). The amplifier shall provide 12 line level RCA inputs and 2 stereo RCA common BUS input feeds.

The amplifier shall have a 380mV input sensitivity for full output with all level controls at maximum gain. The amplifier shall feature an input impedance of 18,000 ohms. The amplifier shall feature a frequency response of 5 - 72,000 Hz with a 0.005% THD 20 - 20,000 Hz at 30W (8 ohm). The amplifier shall have an 80 dB channel crosstalk, 105 dB A-weighted SNR, and 63% efficient.

The front panel of the amplifier shall provide a pushbutton power switch to power on and off the amplifier. The amplifier's LED shall provide power status feedback, when the LED is red the amplifier is in standby mode, when the LED is blue the amplifier is fully on. The amplifier shall provide zone status LED indicators indicating either the channel is fully operational (blue) or is shut down due to faulty operation (red), including failure due to overheating or low impedance.

The amplifier shall feature two common BUS inputs that receive audio signal from standard line-level audio sources and sends them to any or all channels. Each of the amplifier's channels shall provide a dedicated line level input connection. The amplifier shall have individual gain level controls on each channel for independent volume control. The amplifier shall feature input selection switches on each channel. The switch shall provide the user the ability to select whether the input source is BUS 1, BUS 2, or LINE IN. The amplifier provides the ability to bridge two channels via a switchable bridge control. The minimum impedance in bridged mode is 8 ohms, while in bridged mode the input and volume settings shall be controlled by the left channel.

The stereo BUS outputs shall provide the ability to send direct line-level to other amplifiers. Each channel of the amplifier shall provide speaker output terminals. The amplifier shall use 5 mm pitch Phoenix style connectors for the speaker outputs. Two-conductor 14-18 gauge loudspeaker wire shall be used with the speaker connectors.

The amplifier shall feature a remote turn-on switch. The switch allows for the user to select the turn-on stimuli that puts the amplifier in ready mode. In the "Trigger" selection the amplifier shall auto turn on when a 3-30V AC/DC voltage is supplied to the amplifier via a 3.5mm mini jack input. While in "Auto" turn-on mode, the amplifier shall be put into an active state when a signal from a line-level RCA input is sensed. The "Auto" mode shall feature a turn-on sensitivity of 13.7mV. The amplifier shall constantly be in ready mode in the "On" position for control via the master power switch. While in standby mode, the amplifier shall have a power rating 115V, 0.264W. The amplifier shall have the ability to provide an output trigger of 12 VDC at 500mA max.

The amplifier shall be powered by an IEC power cable. The amplifier shall also feature an AC voltage selector switch for use with 120V US operation as well as 230V operation. If used in 230V operation, the fuse located in the IEC socket shall be changed to meet operational requirements.

The amplifier shall have a heavy-duty steel chassis with brushed aluminum faceplate. The amplifier shall be able to be rack mounted with mounting tabs (2U) or installed on a level surface with optional resting feet. The amplifier shall weigh 33 lbs. and have dimensions of 16.7" W x 14.25" D x 4" H (including feet).

