

## 2U 240W RACK MOUNT MIXER-AMPLIFIER 70V/100V

Model: DA240R

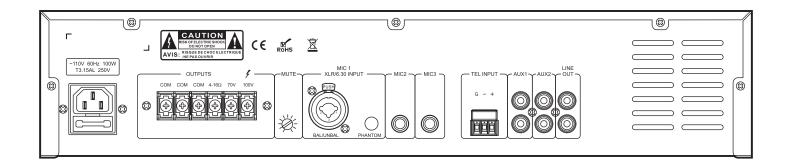


**Description**: The DA240R provides 240 watts of power for speakers which can be 70V, 100V, or 4 - 16 ohm speakers. Six inputs allow for three microphones, two line level inputs (BGM / AUX), and telephone paging with level controls for each input on the front panel. Bass, treble, and master volume controls are present so you can tailor the response to suit your specific needs.

Priority muting temporarily "ducks" your background music (BGM) or other material when the MIC 1 input or the telephone input receives signal. For MIC 1, the level of reduction is adjustable from 0 - 20 dB. The MIC 1 input also offers +48V phantom power, which may be engaged or disengaged as needed. Line output is delivered via RCA jacks to feed signal to outboard equipment such as a recorder or additional zone amplifier.

## Features:

- · Rated Power: 240W
- 100V, 70V constant voltage outputs and 4~16 ohms constant resistance output.
- Commercial-grade toroidal transformers produce high performance audio on a wide range of frequencies with minimum noise and high fidelity, even at high volume.
- · Protection against overload, short circuit, and power fluctuation for optimum reliability.
- VOX feature mutes AUX inputs when input is detected on MIC 1. Time adjust control allows resumption of music to be sharp or gradual.
- Phantom power available on MIC 1 input for condenser-type microphones.
- TELpriority: TEL override AUX 1-2 and MIC (2-3).



## Technical Specifications:

Model	DA240R
Rated power output	240W
Speaker line input	4~16 ohms, 70V, 100V
Input sensitivity/impedance	MIC1,2,3: 5mV/600 ohms
	AUX:350mV/10,000 ohms
S/N	Better than 90 dB
Frequency response (@ 1 kHz half power output, +3 dB)	50 – 18,000 Hz
Total harmonic distortion	Less than 0.3%
Line level output	~10 dB/3,000 ohms
Cooling mode	Air cooling
Power source	~110V, 60 Hz
Power consumption	400W
Weight	25.4 lbs.
Dimensions	19" W x 14" D x 3.466" H
MIC 1~2 input section (CH1~2 in @ 1 kHz, preamp out)	
Input sensitivity/impedance	5mV/600 ohms
S/N	Better than 62 dB
Tone control (Bass:100 Hz, Treble:10 kHz)	+10 dB
Phantom power	+48 VDC
AUX 1 input section (AUX in @ 1 kHz, preamp out)	
Input sensitivity/impedance	350mV/10,000 ohms
S/N	Better than 76 dB
Frequency response (+3 dB)	50 -18,000 Hz
Tone control (Bass:100 Hz, Treble:10 kHz)	+12 dB
Pre amp out	5 dBV/600 ohms

## **Architect & Engineer Specifications:**

The amplifier shall be the Dayton Audio DA240R, a 70V/100V constant voltage or 4-16 ohms constant resistance output contractor amplifier with 240 watt output power. The amplifier shall provide a frequency response of 50 - 18,000 Hz at 1 kHz half-power output, +3 dB and a <90 dB SNR.

The amplifier shall provide 1 XLR 1/4" combo MIC input as well as a front mounted 1/4" jack, 2 1/4" MIC 2 & MIC 3 inputs, Phoenix style telephone input, and 2 stereo RCA AUX inputs. Phantom power (+48V) shall be optional via a rear mounted button on MIC 1 input. MIC input sensitivity shall be 5mV, 600 ohms at 1 kHz. AUX input sensitivity shall be 350mV, 10,000 ohms at 1 kHz. Each input on the amplifier shall have a continuously adjustable input level control mounted on the front of the amplifier. The amplifier shall also feature a continuously adjustable master volume control.

The front of the amplifier shall feature a power on/off toggle switch with a LED power indicator that reflects the current power status of the amplifier. The front of the amplifier shall also provide LED feedback for signal output indicators, protection mode status (LED will illuminate when amplifier is in protection mode due to overheating or overload), and high temperature status indicator (LED will illuminate when the internal temperature of the amplifier becomes too high for normal operation). The amplifier shall provide an alarm sound if the amplifier is overloaded, short circuiting, or the input voltage is not stable, too high or too low.

The amplifier shall provide speaker terminals for either 70V, 100V, or 4-16 ohm operation. The amplifier shall drive ether the 70V, 100V, or 4-16 ohm output at a single time. If 70V/100V voltage is used the speakers must use a transformer. The total power wattage of the speakers must be 15% less than the power wattage of the amplifier. The total load impedance of the speaker system shall be 20 ohms in 70V configuration and 41 ohms in 100V configuration. The amplifier shall also feature a stereo RCA line output for connecting to other amplifiers. The amplifier shall have a line level output of  $10 \, dB / 3,000$  ohms with a 20.3% THD.

The front panel shall provide adjustable bass and treble controls for the output of the amplifier. The bass control shall provide an adjustable boost or cut of 12 dB at 100 Hz, the treble control shall provide an adjustable boost or cut of 12 dB at 10,000 Hz.

The amplifier shall provide a priority mute function where TEL has priority over all other inputs. MIC 1 is secondary priority, adjusting the mute level shall override all other input signals except for the TEL input. The amplifier shall provide a continuously adjustable mute level from  $0-20\,\mathrm{dB}$  during signal override of all channels by MIC 1 input. The amplifier shall feature a VOX function that mutes AUX inputs when input on MIC 1 is detected. A time adjust control allows for a desired fade in time when MIC 1 signal is complete.

The amplifier's internal circuity shall feature overload, short circuit, and power fluctuation protection. The amplifier shall be constructed with commercial-grade toroidal transformers that provide a large frequency range with minimal noise, even at high volumes. The amplifier shall also feature an air cooling configuration to minimize heat build-up.

The amplifier shall operate on 110 VAC, 60 Hz. The amplifier shall consume 400 watts of power while in operation.

The amplifier shall have dimensions of 19" W x 14" D x 3.466" H. The amplifier shall have a weight of 25.4 lbs. The amplifier shall feature rackmount tabs for a 20 rackmount design or rubber feet for installation on a flat surface.



daytonaudio.com tel + 937.743.8248 info@daytonaudio.com 705 Pleasant Valley Dr. Springboro, OH 45066 USA

