

Data Sheet

R-SERIES AMPLIFIERS

R235LS, R290DS, R850MC, R1250MC



Russound's R-Series amplifiers employ a robust circuit design for stability under demanding loads. All models feature auto signal-sensing inputs and bridgeable channel pairs for increased power output and flexibility of application. All amplifier channels feature independent gain controls for precise level matching and dual speaker outputs for convenience. Optional rack-mount ears are included with all models except the R235LS, which features a low-profile design and mounting capability integrated into the chassis.

Two of the amplifiers have unique features for special applications. The compact R235LS provides automatic switching between a multiroom audio system and a local source, such as a TV or a computer. The R290DS takes the dual source concept even further with line and speaker audio inputs and auto sensing for both primary and secondary sources, a loop output, and more power.

Features	R235LS	R290DS	R850MC	R1250MC
Total channels	2	2	8	12
Bridgeable channel pairs	1	1	4	6
Auto signal-sensing inputs	✓	✓	✓	✓
Separate channel gain controls	✓	✓	✓	✓
Thermal protection	✓	✓	✓	✓
Short-circuit protection	✓	✓	✓	✓
Rack mount ears included		✓	✓	✓
12-volt trigger input & output	✓		✓	✓
Bus input & output			✓	✓
Source loop outputs		✓		
Automatic local source switching	✓	✓		
Power output per channel @ 4/8 Ohms	35W/50W	90W/110W	50W/80W	50W/80W
Multi-power AC outlet	✓	✓	✓	✓

Specifications

Two Channel/Local Source Amplifier R235LS



Stereo Continuous Output Power: 35W per channel at 8 ohms
50W per channel at 4 ohms

Bridged Mono Output Power: 100W at 8 ohms

Distortion: <0.05% THD+N from 20Hz to 20kHz

Signal-to-Noise Ratio: >100dB A-weighted

Frequency Response: 20Hz to 20kHz ± 0.3 dB

Input Sensitivity: 70mV for 1W at 8 ohms
420mV for 35W at 8 ohms

Line Input Impedance: 47 kilohms

Voltage Gain: 32dB

Delay Time: 5 seconds to 4.5 minutes

Input Trigger: 12VDC 10 kilohms

Output Trigger: 12VDC 100mA max

Power Requirements: North America: 120VAC 60Hz 1.2A
Europe: 230VAC 50Hz 0.6A

Power Connection: IEC 320 power connector with 3-pole detachable power cord

Dimensions: 8.625" W x 10" D x 2.375" H
(22 x 25.4 x 6 cm)

Weight: 8.5 lbs. (3.8 kg)

Two Channel/Dual Source Amplifier R290DS



Stereo Continuous Output Power: 90W per channel at 8 ohms
110W per channel at 4 ohms

Bridged Mono Output Power: 250W at 8 ohms

Distortion: <0.05% THD+N from 20Hz to 20kHz

Signal-to-Noise Ratio: >110dB A-weighted

Frequency Response: 20Hz to 20kHz ± 0.3 dB

Input Sensitivity: 70mV for 1W at 8 ohms
680mV for 90W at 8 ohms

Line Input Impedance: 47 kilohms

Voltage Gain: 32dB

Power Requirements: North America: 120VAC 60Hz 2.5A
Europe: 230VAC 50Hz 1.2A

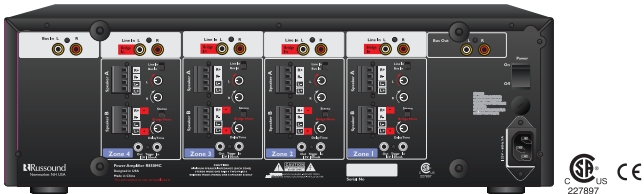
Power Connection: IEC 320 power connector with 3-pole detachable power cord

Dimensions: 17" W x 14" D x 4.125" H
(43 x 35.5 x 10.5 cm)

Rack space: 2U

Weight: 17.2 lbs. (7.8 kg)

Four Zone/Eight Channel Multiroom Amplifier R850MC



Single Zone Maximum Output Power (0.1% THD+N; 1 kHz): 50W per channel, 2 channels at 8 ohms
80W per channel, 2 channels at 4 ohms
140W at 8 ohms, 2 channels bridged

All Zones Continuous Output Power: 35W per channel, 8 channels at 8 ohms
50W per channel, 8 channels at 4 ohms
100W at 8 ohms, each zone bridged

Distortion: <0.05% THD+N from 20Hz to 20kHz

Signal-to-Noise Ratio: >100dB

Frequency Response: 20Hz to 20kHz ± 0.3 dB

Input Sensitivity: 70mV for 1W at 8 ohms
500mV for 50W at 8 ohms

Line Input Impedance: 47 kilohms

Voltage Gain: 32dB

Delay Time: 0.5 to 4.5 minutes

Input Trigger: 12VDC 10 kilohms

Output Trigger: 12VDC 100 mA

Power Requirements: North America: 120VAC 60Hz 5A
Fuse Rating: T10AL 250V
Europe: 230VAC 50Hz 2.5A
Fuse Rating: T7AL 250V

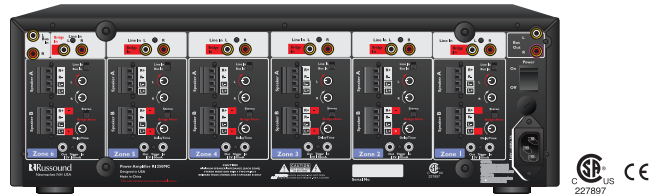
Power Connection: IEC 320 power connector with 3-pole detachable power cord

Dimensions: 17" W x 16.5" D x 5.875" H
(43 x 42 x 15 cm)

Rack space: 3U

Weight: 38.1 lbs. (17.3 kg)

Six Zone/Twelve Channel Multiroom Amplifier R1250MC



Single Zone Maximum Output Power (0.1% THD+N; 1 kHz): 50W per channel, 2 channels at 8 ohms
80W per channel, 2 channels at 4 ohms
140W at 8 ohms, 2 channels bridged

All Zones Continuous Output Power: 35W per channel, 12 channels at 8 ohms
50W per channel, 12 channels at 4 ohms
100W at 8 ohms, each zone bridged

Distortion: <0.05% THD+N from 20Hz to 20kHz

Signal-to-Noise Ratio: >100dB

Frequency Response: 20Hz to 20kHz ± 0.3 dB

Input Sensitivity: 70mV for 1W at 8 ohms
500mV for 50W at 8 ohms

Line Input Impedance: 47 kilohms

Voltage Gain: 32dB

Delay Time: 0.5 to 4.5 minutes

Input Trigger: 12VDC 10 kilohms

Output Trigger: 12VDC 100mA

Power Requirements: North America: 120VAC 60Hz 7A
Fuse Rating: T10AL 250V
Europe: 230VAC 50Hz 4A
Fuse Rating: T10AL 250V

Power Connection: IEC 320 power connector with 3-pole detachable power cord

Dimensions: 17" W x 16.5" D x 5.875" H
(43 x 42 x 15 cm)

Rack space: 3U

Weight: 48.9 lbs. (22.2 kg)



5 Forbes Road, Newmarket, New Hampshire 03857 USA

603.659.5170

www.russound.com

Since 1967, innovation, quality and reliability have been the core of the Russound product tradition. Today, Russound offers everything for enjoying multiroom audio-video in your home. All audio-video distributed solutions are built to high standards and designed with the unique consideration of making products that are a pleasure to live with and enjoy.