



**RDL**®  
Radio Design Labs

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

## RACK-UP® SERIES Model RU-EQ2 & RU-EQ3 Audio Tone Controls

### ANYWHERE YOU NEED...

- 2-Band or 3-Band Audio Equalization
- Custom Tailored Audio Bandwidth
- User-accessible Adjustments
- High-Density Rack-Mount Convenience
- A Low-Noise, Low-Distortion Equalizer



### *You Need The RU-EQ2 or RU-EQ3!*

The RU-EQ2 and RU-EQ3 are part of the group of RACK-UP products from Radio Design Labs. The RACK-UP series features the advanced circuitry for which RDL products are known, combined with accessible user-friendly controls and displays. The ultra compact design permits high-density installations, with *three* products mounted in a single rack unit. Single RACK-UPs can be mounted right where they are needed using the adhesive method popularized by RDL's STICK-ON® series of products. Optional brackets permit mounting a RACK-UP module above, below, or in front of any flat surface!

**APPLICATION:** The RU-EQ2 and RU-EQ3 feature a balanced-bridging input, which may also be connected unbalanced if desired. The output driver is 150  $\Omega$  balanced, and is intended to drive unbalanced or balanced lines of low or high impedance. Front-panel knobs provide active equalization, each controlling a separate audio band. These bands were carefully selected to yield a module that works effectively in a wide variety of systems. Each band's center frequency can be either boosted or attenuated by at least 12 dB. The RU-EQ2 has two front-panel knobs. The Q of these low and high band equalizers was selected so that those controls can be functionally considered as a total bass-band or treble-band control. The RU-EQ3 has a third control knob. This midrange control is optimized to voice band adjustment, with the overlap tailored to provide smooth operation for wideband music applications.

A feature unique to the RU-EQ2 and RU-EQ3 is the **OVERLOAD** indication LED. When audio signals are equalized, the boosted level can cause the output circuit to clip. Alternatively, if prominent frequencies are attenuated, the input is likely to be turned up so that its amplifier can clip. In either event, there is a risk of distortion. Unlike many products which show only input clipping, the RU-EQ2 and RU-EQ3's **OVERLOAD** indicator flashes if *either* the input or output stage clips.

The RU-EQ2 and RU-EQ3 are the optimum choice for general equalization requirements with user-adjustable knobs in both music and voice applications. Its low-noise and low-distortion performance makes it suited to the most critical installations.

The RU-EQ2 or RU-EQ3 is the ideal choice wherever an audio equalization device is needed to provide superior audio clarity, user adjustments, reliability, compactness and unsurpassed versatility. Use the RU-RA3 or RC-1U rack-mount adapters to mount multiple RU-EQ2 or RU-EQ3s, or to combine related products (such as audio mixing, video distribution, or audio metering) into a single rack unit. Used in conjunction with other RDL modules, the RU-EQ2 or RU-EQ3 can provide the foundation for many creative audio systems!



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# RACK-UP<sup>®</sup> SERIES

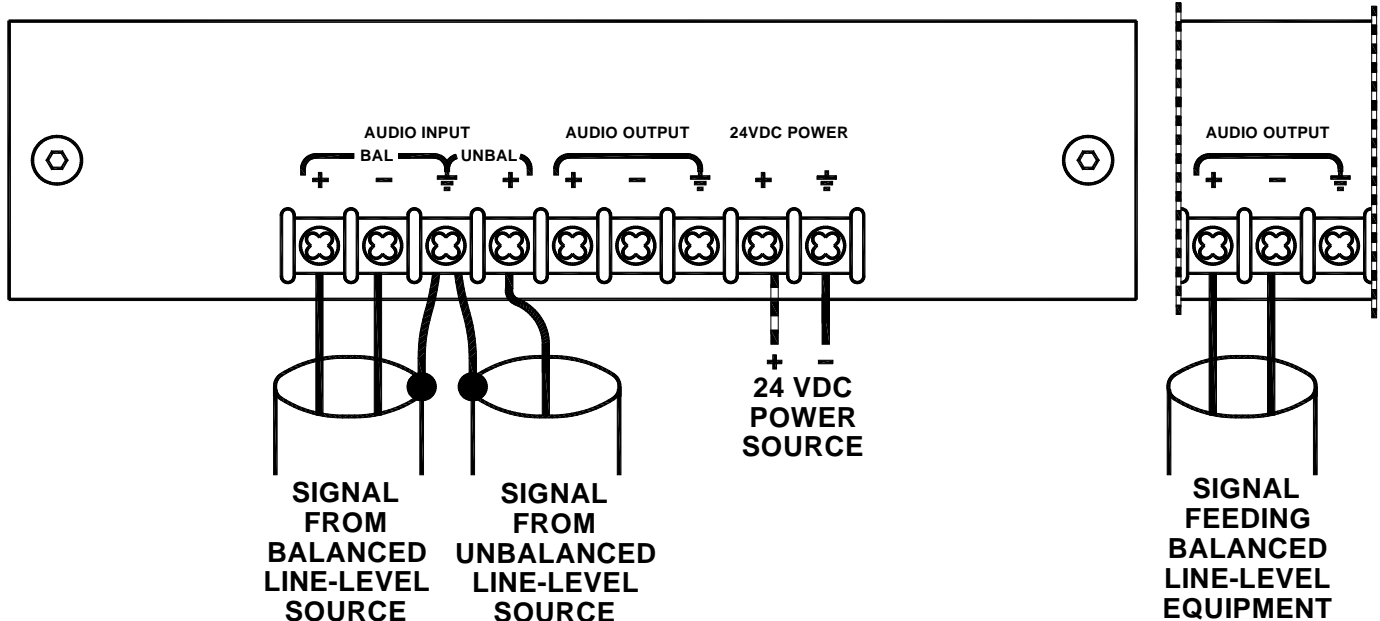
## Models RU-EQ2 & RU-EQ3

### Audio Tone Controls

## Installation/Operation



EN55103-1 E1-E5; EN55103-2 E1-E4  
Typical Performance reflects product at publication time exclusive of EMC data, if any, supplied with product. Specifications are subject to change without notice.



### TYPICAL PERFORMANCE

Input:	100 kΩ balanced or unbalanced bridging; line-level
THD:	< 0.030%; 0.010% typ. (1 kHz, +4 dBu ref.; flat response)
CMRR:	> 50 dB @ 100 Hz
Frequency Response:	20 Hz to 22 kHz (EQ set flat; +/- 0.5 dB) into 600 Ω
	10 Hz to 22 kHz (EQ set flat; +/- 0.5 dB) into 10 kΩ bridging load
Noise:	< -80 dB below +4 dBu
Center frequencies:	
Low Band:	80 Hz
Mid Band:	1 kHz (RU-EQ3 only)
High Band:	30 kHz
Bandwidth:	
Low Band:	20 Hz to 300 Hz
Mid Band:	200 Hz to 7 kHz (RU-EQ3 only)
High Band:	3 kHz to 30 kHz
Power:	24 to 33 Vdc @ 25 mA, Ground-referenced
Mounting:	Rack-mount using optional RU-RA3 triple rack mount or RC-1U rack chassis, (single rack unit); bottom mount using available adhesive strips; bottom or top mount to a flat surface using optional MB-2 mounting bracket set; front mount to a panel or backboard using optional MB-1 mounting set.
Dimensions:	
	Height: 1.7 in. 4.3 cm
	Length: 5.8 in. 15.0 cm
	Depth: 2.0 in. 5.1 cm (case only)
	2.5 in. 6.4 cm (including barrier block)

Radio Design Labs Technical Support Centers

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