

LIMITED WARRANTY

This product is warranted to the original consumer purchaser to be free from defects in materials and workmanship under normal installation, use and service for a period of one (1) year from the date of purchase as shown on the purchaser's receipt.

The obligation of Rolls Corporation under this warranty shall be limited to repair or replacement (at our option), during the warranty period of any part which proves defective in material or workmanship under normal installation, use and service, provided the product is returned to Rolls Corporation, TRANSPORTATION CHARGES PRE-PAID. Products returned to us or to an authorized Service Center must be accompanied by a copy of the purchase receipt. In the absence of such purchase receipt, the warranty period shall be one (1) year from the date of manufacture.

This warranty shall be invalid if the product is damaged as a result of defacement, misuse, abuse, neglect, accident, destruction or alteration of the serial number, improper electrical voltages or currents, repair, alteration or maintenance by any person or party other than our own service facility or an authorized Service Center, or any use violative of instructions furnished by us.

This one-year warranty is in lieu of all expressed warranties, obligations or liabilities. ANY IMPLIED WARRANTIES, OBLIGATIONS, OR LIABILITIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED IN DURATION TO THE ONE YEAR DURATION OF THIS WRITTEN LIMITED WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

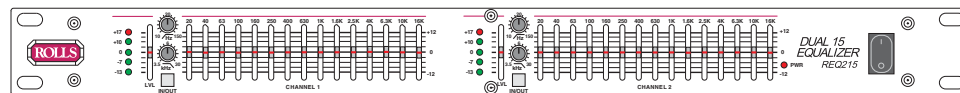
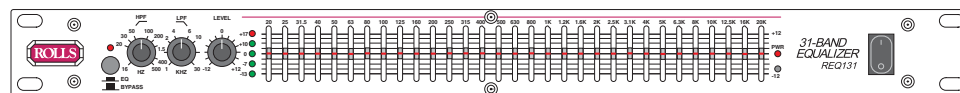
IN NO EVENT SHALL WE BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, WHATSOEVER. Some states do not allow the exclusion or limitation of special, incidental or consequential damages so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

ROLLS

REQ131

REQ215

GRAPHIC EQUALIZERS



ROLLS

ROLLS CORPORATION
SALT LAKE CITY, UTAH

2/05

OWNERS MANUAL

INTRODUCTION

The ROLLS REQ series equalizers are intended for room equalizing or sound shaping and the approximate frequency response curve can be seen graphically by the settings of the frequency controls. Recording and broadcasting studios, sound contractors and musicians will appreciate the low noise, straightforward design, and versatile signal control of the REQ series.

INSTALLATION

Your REQ series equalizer may be installed in a standard 19" rack or placed in any dry, well ventilated area. The 1/4" connectors are balanced with the tip being positive (+) and the ring negative (-), or will assume an unbalanced state with unbalanced (TS) connectors. The XLR connectors are pin 2 positive (+). The chassis is lifted from the circuit ground (as are all ROLLS products) to help prevent ground loops. Since there are three types of input/output connectors, one type may be used on the input and another on the output. This helps to eliminate the need for special cables.

FRONT PANEL

The POWER switch is on when the red portion is showing. The VOL control provides the boost or cut settings for the input signal level. The LED bargraph shows the actual output level in dB so the use will know when the headroom is exhausted. EQ IN/OUT is for bypassing the equalizer circuits. The HPF and LPF controls are shelving filters, their 3dB down frequencies are indicated on the dials. For widest bandwidth, the HPF should be on 10Hz and the LPF should be set to 30 kHz. Frequency band slider controls cut or boost the indicated frequency by +/- 12 dB for the REQ131, or +/- 6 dB for the REQ215. When the slider is in the center or detented position, the frequency is left unmodified.

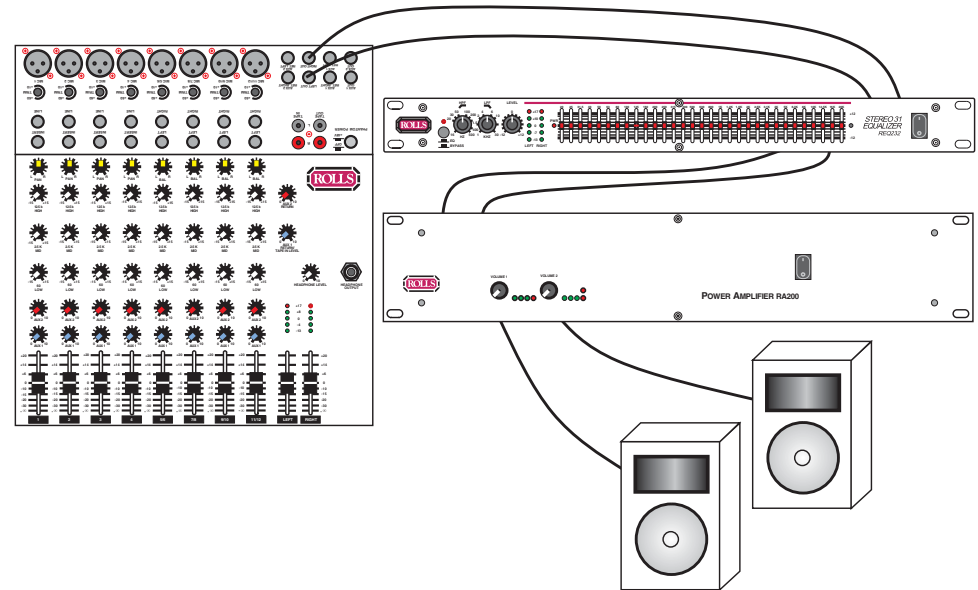
REAR PANEL

The rear panel contains the XLR, 1/4", and RCA input and output jacks. Connect the power cable to a properly grounded AC outlet.

OPERATION AND APPLICATIONS

The REQ equalizers are useful signal processing tools where precise frequency control is needed across the audio spectrum. The frequency band centers are ISO standard, so it is compatible with most real time analyzers. When used with an analyzer, the REQ units may be used to tune an acoustical environment to avoid ringing (feedback), increase clarity, and flatten the overall frequency response. An analyzer is useful in determining the amount of equalization needed. Insert the graphic equalizer between the signal source and the power amplifier or crossover. Adjust the level and equalization as required to yield the desired system response. The HPF and LPF are used to band-limit the frequency response to increase clarity and reduce noise.

EXAMPLE



SPECIFICATIONS

Frequency Response:	16 Hz to 30 kHz +/-3 dB
THD:	<.03%
S/N Ratio:	>90 dB
Max Input:	+21 dB (REQ131) +17 dB (REQ215)
Max Output:	+21 dB (REQ131) +17 dB (REQ215)
Input Impedance:	10K Ω (20K balanced)
Output Impedance:	50 Ω
LED Levels:	+17, +10, 0, -7, and -13 dB
Frequency Centers:	31 ISO standard 1/3 octave +/-3% (REQ131) 15 ISO standard 2/3 octave +/-5% (REQ215)
Shelving Slope:	12 dB / Octave (REQ131) 6 dB / Octave (REQ215)
Size:	19" x 6" x 1.75" (48.3 x 15.2 x 4.5 cm)
Weight:	5 lbs. (2 kg)