

LIMITED WARRANTY

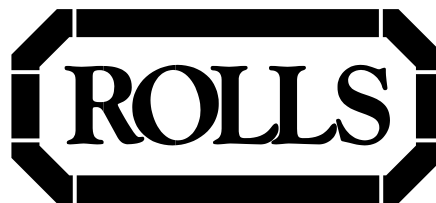
This product is warranted to the original consumer purchaser to be free from defects in materials and workmanship under normal installation, use and service for a period of one (1) year from the date of purchase as shown on the purchaser's receipt.

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.

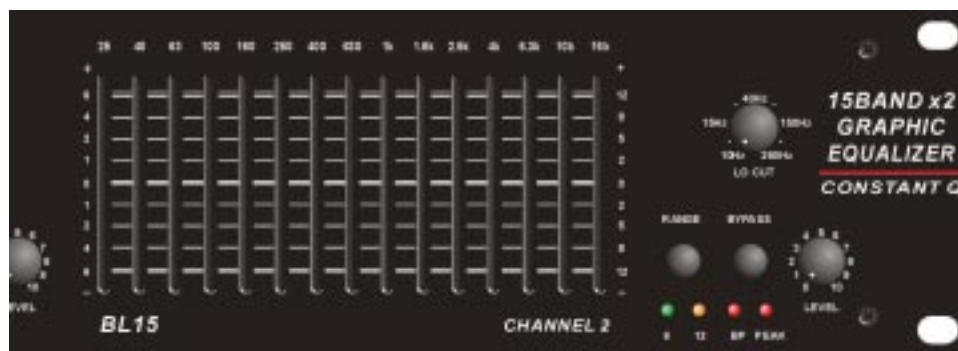
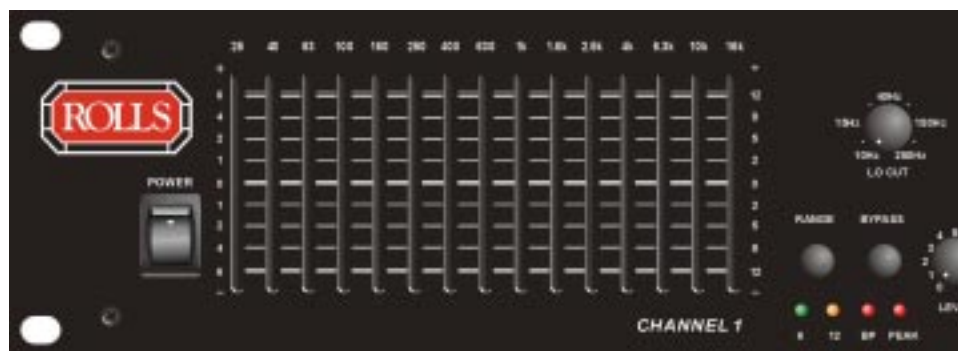
This warranty shall be invalid if the product is damaged as a result of defacement, misuse, abuse, neglect, accident, destruction or alteration of the serial number, improper electrical voltages or currents, repair, alteration or maintenance by any person or party other than our own service facility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



REQ315 GRAPHIC EQUALIZER Constant Q



ROLLS CORPORATION
SALT LAKE CITY, UTAH

3/02

OWNERS MANUAL

INTRODUCTION

The ROLLS REQ315 graphic equalizer is 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. The REQ315 frequency filters are “constant Q” meaning the width or shape of the filter curve does not change as the frequency level is increased or decreased. This provides much more accurate frequency adjustment.

INSPECTION

1. Unpack and inspect the REQ315 box and package.

If obvious physical damage is noticed, contact the carrier immediately to make a damage claim. We suggest saving the shipping carton and packing materials for safely transporting the unit in the future.

2. Please register online at www.rolls.com, or complete the Warranty Registration Card and return it to the factory.

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SPECIFICATIONS

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Equalizer:	
Bands	2x15 From 20Hz to 20kHz
Accuracy	3% Center Frequency
Range	+/-6dB or +/-12dB (Switch Selectable)
Inputs:	
Type	Active Balanced/Unbalanced
Connectors	3-Pin XLR, 1/4 “ TRS
Impedance	12k Ohms
Maximum Level	+22dB (Balanced) +15dB (Unbalanced)
Outputs:	
Type	Relay Balanced
Connectors	3-Pin XLR, 1/4”TRS
Impedance	600 Ohms
Maximum Level	+22dB (Balanced) +15dB (Unbalanced)
RFI Filters	Yes
Passive Bypass Switches	Yes
Overload LED Threshold	3dB (Below Clipping)
Low Cut Filter	10-250Hz, 12dB/Oct
Frequency response	20-20kHz +0.5dB
THD + Noise	.01% (20hZ-40kHz)
Signal-to-Noise Ratio	110dB below Max. level (A weighting)
Equivalent Input Noise	-95dB (20kHz Noise Bandwidth)
Dimensions:	3.5”H x 19”W x 8.5”D



1. Power Switch:

To turn the equalizer ON or OFF , press the upper or lower portion of this button.

CAUTION: Always turn on your equalizer BEFORE your power amplifiers are turned on , and always turn off your equalizer AFTER your power amplifiers have been turned off.

2. Filter 'Level Controls:

Each of these sliders controls the output level of each of the 15 bandpass filters. Center detent position is grounded for guaranteed flat response.

3. Filter Range Switch & Indicators:

The gain range of the filter sliders is switchable (as a group) from ± 6 dB to ± 12 dB

For maximum boost/cut capability. At 6dB the green LED will illuminate and at 12dB the yellow LED will illuminate.

4. Bypass Switch & Indicator:

When the red LED is illuminated, this indicates that the unit or channel is in the bypass mode. Signal is routed directly from the input to the output without passing through any circuit (often referred to as "hard-wire bypass"). Use this switch to compare equalized and unequalized material, or to bypass the EQ section in the event of power loss or unit failure.

5. Overload Indicator:

This red LED illuminates if any section of the equalizer is within 5dB of clipping. Occasional blinking of this LED is acceptable, but if it remains on more than intermittently you should turn down either the equalizer's level controls or reduce the output level of the preceding component to avoid audible distortion.

6. Low-Cut Frequency Control:

To cut down unwanted signal, this control determines the roll-off frequency of the High-Pass Filter (HPF) in the instrument. The roll-off frequency can be adjusted from 10Hz to 250Hz by turning this knob. Because of its high roll-off slope, the HPF can be efficiently used to cut down the "HUM" noise from preceding instruments, or to prevent the low-frequency resonance while the speakers are installed in an enclosed acoustic environment.

7. Level Control:

This controls the level of signal coming into the instrument. Turn this control down if the OVERLOAD LED illuminates steadily (meaning too strong an input signal). Unity gain can be set by turning this knob to its center detent position.



8. Power Cord:

This cord is used to connect the AC power source to your equalizer.

CAUTION: DO NOT REMOVE THE CENTER GROUNDING PIN.

9. Fuse Holder:

This fuse holder contains an AC primary fuse. This fuse should be replaced by the same type fuse when this is blown out. If they continuously blow, stop replacing fuse and refer servicing to qualified personnel.

10. Input/Output Connectors:

1/4" TRS

The TRS (Tip Ring Sleeve) connector is balanced and wired as tip=Lo (-), Ring=Hi (+), and the Sleeve = Ground.

CAUTION: Only one of these sockets can be chosen for audio connection at the same time.

XLR

The XLR input connector is balanced and wired as Pin2=Lo (-), Pin3=Hi (+), Pin1=Ground

CAUTION: Only one of these sockets can be chosen for audio connection at the same time.

EXAMPLE

Shown below is an example connection diagram for the REQ315. The main right and left outputs of the mixer are connected to Channel 1 and 2 Inputs via high impedance 1/4" unbalanced plugs. The equalizer is then connected to an amplifier.

Note: This is only an example. For improved performance, use balanced XLR connectors.

