

LIMITED WARRANTY

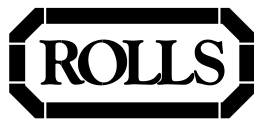
This product is warranted to the original consumer purchaser to be free from defects in materials and workmanship under normal installation, use and service for a period of one (1) year from the date of purchase as shown on the purchaser's receipt.

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 PREPAID. 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.

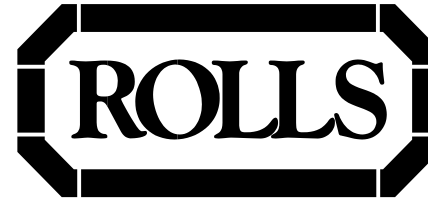
This warranty shall be invalid if the product is damaged as a result of defacement, misuse, abuse, neglect, accident, destruction or alteration of the serial number, improper electrical voltages or currents, repair, alteration or maintenance by any person or party other than our own service facility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

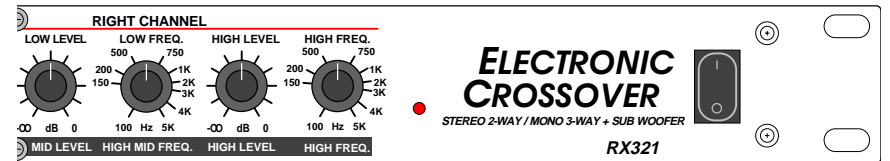
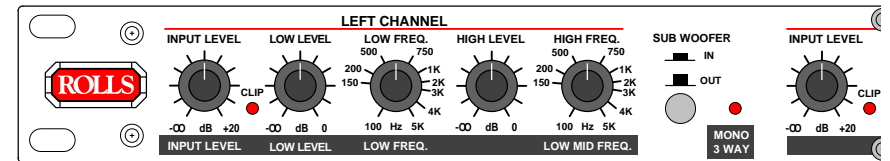
IN NO EVENT SHALL WE BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, WHATSOEVER. Some states do not allow the exclusion or limitation of special, incidental or consequential damages so the above limitation or exclusion may 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 Corporation
Salt Lake City, UT
1/97



RX321 Stereo Electronic Crossover



OWNERS MANUAL

FRONT PANEL DESCRIPTION

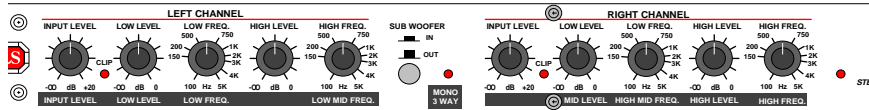
NOTE: Channel One descriptions are identical to Channel Two

INPUT LEVEL: Adjust the amount of input signal to the crossover circuits.

LOW, HIGH LEVEL: Sets the output signal level of the indicated output jack.

LOW, HIGH FREQUENCY: Adjusts the cut-off (3 dB down) frequency for each crossover filter.

SUBWOOFER SWITCH: Sets the frequency at which the low filters rolloff. Out is 20Hz, in is 80 Hz.



REAR PANEL DESCRIPTION

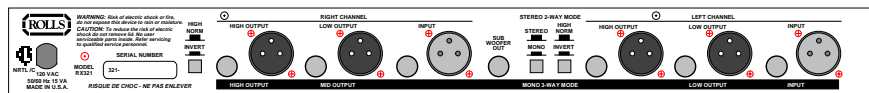
INPUT: 1/4" and XLR jacks for receiving the signal to be frequency divided.

HIGH, LOW OUTPUTS: 1/4" and XLR jacks containing the high-frequency and low-frequency material to be sent to the power amplifiers.

SUBWOOFER OUT: 1/4" unbalanced jack containing the subwoofer frequency signal.

INVERT/NORMAL switch: Reverses the phasing of the High Frequency output by 180 degrees.

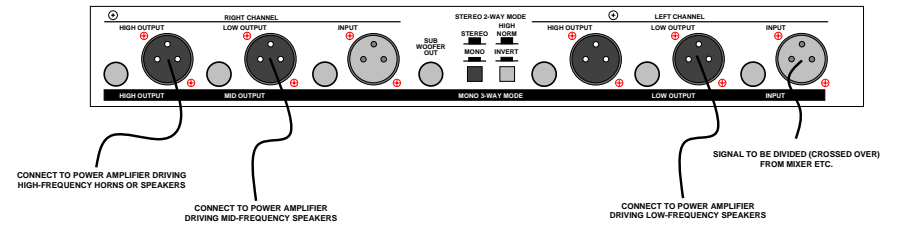
MONO/STEREO switch: Sets the mode of operation from Stereo 2-Way to Mono 3-Way.



INSTALLATION

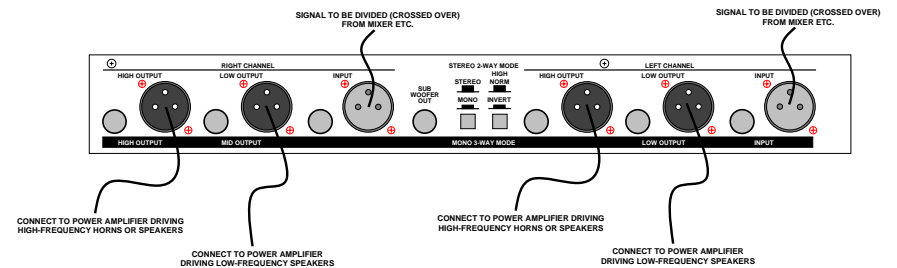
The RX321 will mount in a standard 19" single rack space. It requires no special ventilation but should be properly grounded and kept dry for safety reasons. Use good quality input and output cabling. The RX321 has plenty of level to drive most any line or power amplifier. The 1/4" outputs may be used TRS balanced or TS unbalanced.

MONO OPERATION



For mono operation, set the Stereo/Mono switch on the rear panel IN, and see that the MONO LED on the front panel is lit. Set all level controls to 0. Only the left channel input will be functional, and the labeling at the bottom of the front panel should be used for setup. Connections should be made using the reversed lettering on the rear panel as shown. After proper connections are made and power is applied to the system, adjust the Low, Mid and High Levels as needed.

STEREO OPERATION



For stereo operation, ensure that the Stereo/Mono switch on the rear panel is OUT, and the MONO LED on the front panel is not lit. Set all level controls to 0. Connect an input signal to each of the right and left inputs from your signal source (mixer, sound system etc.) as shown above. Set the frequency controls to the desired crossover points - consult speaker manufacturer's specifications for suggested crossover frequencies. Connect cabling to the High and Low output jacks and to their proper amplifier. Apply power to the entire system and adjust each channel's High and Low Levels as needed.

SPECIFICATIONS

Input Impedance:	10k Ω XLR or 1/4" bal.
Max Input Level:	+27 dB bal.
Max Output Level:	+27 dB bal. XLR
Output Impedance:	50 Ω
Max Gain:	20 dB
Filter Slope:	24dB/Oct.
Frequency Controls:	100Hz - 5kHz
Subwoofer Xover:	80Hz
Rumble Filter:	20Hz
S/N Ratio:	106dB
THD:	<.003%
IMD (SMPTE):	<.003%
CMRR:	52dB
Size:	1.75" x 6" x 19" (4.5cm x 15cm x 48.3cm)
Power	120VAC (230VAC) 15VA

INTRODUCTION

Thank you for your purchase of the Rolls RX321 Stereo Two-Way/Mono Three Way Crossover. The RX321 was designed with the most demanding audio applications in mind. The separate crossover controls and 24 dB/Octave rolloff rate provide a level of performance unmatched for the price. The subwoofer filter and CD eq put the RX321 in a class of its own. The frequency controls are a special 9-wiper design making them more reliable than two or three wiper potentiometer-based crossover designs.

Because the RX321 has separate Hi-Pass and Lo-Pass filter frequency controls, the sound engineer is no longer subjected to an "ideal" crossover curve. With the RX321, the actual crossover points may be overlapped or underlapped to provide the best solution for each specific sound system. The RX321 also has built in 18 dB subsonic filters at 20 Hz to help protect the sound system from low transients. The versatile inputs and outputs as well as commercial grade design make in an important problem solver wherever an electronic crossover is needed.

FEATURES

- Separate control of Hi-pass and Low-pass filter frequencies
- Right and Left mixed subwoofer output
- Overload lights to help prevent clipping
- Stereo 2-Way or Mono 3-Way operation
- +27 dB maximum output level to drive long lines
- Phase reversal switch on Hi-pass outputs
- Built-in subsonic filter at 20Hz
- Constant Dispersion (CD) Horn equalization available.
- True 24 dB/Octave rolloff rates, not state variable filters
- Subwoofer switch to start Low-pass filters at subwoofer frequency
- XLR balanced and 1/4" unbalanced inputs and outputs
- Professionally designed circuit board and chassis for durability
- One year limited warranty

INSPECTION

1. Unpack and Inspect the RX321 package

Your RX321 was carefully packed at the factory in a protective carton. Nonetheless, be sure to examine the unit and the carton for any signs of damage that may have occurred during shipping. 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 complete the Warranty Registration Card and return it to the factory.

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SCHEMATIC