

LIMITED WARRANTY

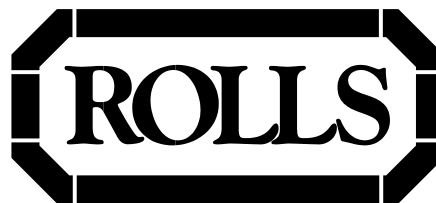
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The obligation of Rolls Corporation under this warranty shall be limited to repair or replacement (at our option), during the warranty period of any part which proves defective in material or workmanship under normal installation, use and service, 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.

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HR11C Mic Processor



ROLLS CORPORATION
SALT LAKE CITY, UTAH

7/02

OWNERS MANUAL

Introduction

The HR11C Mic Processor is a microphone and line level preamp for individual control of a signal before a main mixing console or as a single channel in a distributed system or even as part of a single channel P.A.. Parameters under control are high/low impedance, phantom power, compression/limiting, anti feedback notch filter, 10 band ISO equalizer and level control. It also includes a signal present, overload, and power LED's. Switches on the rear are for XLR phantom power and MIC/line in/out. It is powered by a 12 VAC adapter, which contributes to its low noise level.

Applications

Ideal applications for the HR11C include amplifying acoustic instruments, controlling podium or pulpit microphones or processing a microphone signal with a line signal. If the HR11C is put with the ROLLS HR100 Power amplifier it makes a useful P.A. engine with a great deal of control as might be useful in auctions, rodeos, etc.. Since both inputs can be used at the same time one can be used for music the other for voice such as in aerobics studios and square dance calling.

Using the HR11C

Compressor

After plugging the signal source into the input jack, push the switch to the right of the compressor knob. The compressor is now engaged. With the knob at 0 dB it works as a limiter, supplying no gain reduction below its threshold. It has a soft "knee" as is hardly noticeable when engaged. As you rotate the knob toward 10 dB there is more gain for helping maintain a more constant output level as the input signal is varied.

Notch Filter

The notch filter is useful for suppressing the first feedback fundamental. The sound system is adjusted until there is a "threshold" of feedback, then press the button to the right of the notch control and adjust the control until the point where the feedback goes away. A three to ten dB increase in volume can be achieved this way.

10 Band Equalizer

The equalizer is mainly for adjusting the tone of the sound source for taste or to cut noise. In a noisy environment such as on stage or at a noisy location the sliders can be adjusted to cut sounds that are not wanted. For example if there is loud background noise and you need only voice frequency response then you could cut all bands except the 500, 1K, and 2K for improved speech clarity.

Input Level

The input level is really an intermediate level between the head amplifier and the processing, so it can also serve as a compressor threshold level. The HiZ input can be used as a line input and can accept a level up to +17 dBV. The microphone input can accept a microphone or line level depending on the MIC/LINE switch position.

LED's

The PWR LED lights whenever the unit is powered up. The SGNL lights whenever there is a signal to the inputs, and the OUTPUT LEVEL is on. The OVLD lights whenever there is an overload in the processing circuitry. There is about 6 dB of headroom left when the OVLD lights. The limiter might be engaged to decrease the level if necessary.

Installation

The HR11C should be installed in a clean dry environment. The 12VAC adapter may be used or any 12VAC source supplying 300 Ma. or more may be connected to the rear power jack. The unit may be mounted with the rack ears supplied in a 1/2 rack standard rack or it may be joined with another piece with brackets to make a 19" installation. The output of the HR11C is 50 ohms for driving line inputs or a power amplifier directly. If mike level out is desired set the output switch to MIC.

HR11C SPECIFICATIONS

Input Impedance	1/4" XLR	50K ohms unbalanced 50K line, 600 ohms mike balanced
Input Level		-12 dBV max mic bal., +17 dBV line
Output Level		+17 dBV balanced line, -14 dbv line
Gain	Mic line	60 dB max (EQ flat) 20 dB max (EQ flat)
Phantom Power		+12 VDC
Notch Frequency		300Hz - 3000Hz adjustable
Notch Depth		> 20dB
Notch Width		.1 octaves or less
Compression Ratio		1/1 to 4/1
Equalizer Range		+ - 12 dB
Equalizer Freqs.		32Hz, 64Hz, 125Hz, 250Hz, 500Hz, 1KHz,2KHz, 4KHz, 8KHz, 16KHZ
Equalizer Filter Q		2.2
IMD		.03 % (compressor out)
THD (SMPTE)		.03 % (compressor out)
CMRR (low bal)		52 dB
I/O Connectors		1/4 & XLR (both in & out)
Power Requ.		12 VAC 50/60 Hz (adapter included)
Size		8.5" X 1.75" X 6.5" (22 X 4.5 X 17 CM)
Weight		2.5 LBS (1.14 KG)