Rupert Neve Designs

RNDI

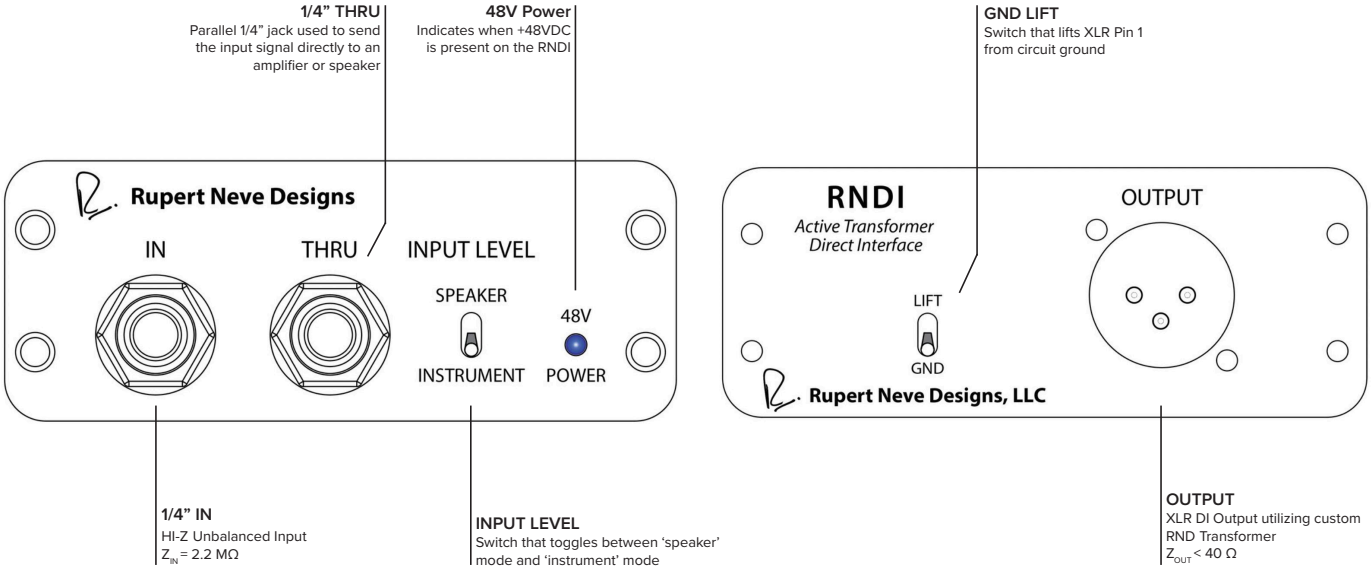
Active Transformer Direct Interface

RNDI Specifications

Note: All Specifications are typical

Noise (22Hz - 22kHz, Un-weighted)	Better than -110dBV
Input Impedance (Z_{IN})	
Instrument Mode	2.2 Megohm
Speaker Mode	200 Kilohm
Output Impedance (Z_{OUT})	Less than 40 Ohm
Frequency Response	
+/- 0.25 dB	28 Hz - 60 kHz
+/- 1dB	14 Hz - 90 kHz
-3dB	Below 5 Hz
Maximum Input Level	
Instrument Mode	+20.5 dBu (8.2 Volts RMS) Typical
Speaker Mode	+41 dBu (87 Volts RMS) Typical
Maximum Output Level	+11.5 dBu Typical
Total Harmonic Distortion + Noise	
@ 1 kHz, +20 dBu Input Level	0.25% Typical (2nd and 3rd Harmonic)
@ 1 kHz, -20 dBu Input Level	0.015% Typical (2nd and 3rd Harmonic)
@ 20 Hz, -20 dBu Input Level	0.75% Typical (2nd and 3rd Harmonic)
Power Requirements	4.5mA Per Channel @ +48VDC
Weights & Dimensions	
Product Dimensions (D x W x H)	6.25” (15.88 cm) x 4” (10.16 cm) x 1.5” (3.81 cm)
Shipping Dimensions (L x W x H)	10” (25.4 cm) x 8” (20.32 cm) x 3” (7.62 cm)
Shipping Weight	2 lbs (0.90 kg)

Front & Rear Panel



RNDI Overview

The RNDI is designed to provide instrument (electric guitar, bass, keyboard, piezo pickup, etc.) direct injection. The discrete Class-A circuit topology found in the RNDI is based around Mr. Rupert Neve's custom transformers, allowing for outstanding sonic performance and excellent noise rejection. The RNDI can handle extremely high input levels without clipping (up to +20.5 dBu), and the transformer-coupled output has a low impedance of less than 40 Ohms, thereby allowing the RNDI to drive long lines with minimal loss. The RNDI chassis is a formed steel "clamshell" construction designed to stand up to the rigors of stage and studio use.

Usage Notes

Power is supplied to the RNDI by standard 48V Phantom Power via the XLR output connectors. 48V Power Status is indicated by the front panel LED. Avoid placing this direct box near strong electromagnetic fields (such as those radiated by power amplifiers) to reduce any chance of picking up noise. If there is noticeable hum on the RNDI output, try switching the RNDI ground lift as well as ground lifts on other devices in the signal chain. If this doesn't alleviate the issue, remove individual devices from the same power circuit to isolate the source of the problem.

The RNDI has one 1/"4 input with two available modes, Speaker & Instrument:

In INSTRUMENT mode, the RNDI converts the impedance of the input signal, balances it, and then buffers the output to send to a separate Mic Preamp, while also splitting the input to the THRU in the case the input signal also needs to be sent to an amplifier. To get the best overall performance we recommend using the highest-quality cables and mic preamps, as well as providing the maximum output level of the instrument source to the RNDI.

In SPEAKER mode, the RNDI can be used post power amplifier to capture the tone of both the pre and power amplifier. Make sure the RNDI is set to 'speaker' mode and all cables are connected BEFORE turning on the amplifier. With tube amplifiers, the speaker MUST be connected to the THRU 1/4" jack to provide a load to the amplifier. Solid state amps can normally be run without a speaker connected.