

# Model D SERIES-RN22 Wall-Mounted Bi-Directional Mic/Line Dante Interface 2 x 2



- Single-Gang Dante or AES67 Network Interface for Two Audio Inputs and Two Audio Outputs
- Two Front-Panel Mic/Line Inputs on Balanced XLR Jacks
- Two Balanced Rear-Panel Outputs on Detachable Wiring Block
- Software-Selected Input Gain; Mic: 35 dB, 42 dB or 59 dB; Line: Unity or 12 dB
- P48 Mic Phantom Selected by Software for Mic Inputs

- Outputs Equipped with Software-Controlled Attenuator in 1 dB Steps
- Module is Configured and Adjusted Using RDL CONSOLE or Other Network Control Software
- Compatible with RDL Network Remote Controls
- High Resolution 24 Bit Analog to Digital and Digital to Analog Conversion
- Legendary RDL Studio Quality, Low-Noise Performance

**APPLICATION:** The D-RN22 is a complete wall-mounted Dante or AES67 audio network interface. It features two XLR mic or line inputs on the front panel and two balanced line outputs on a rear-panel detachable wiring block. The module is configured and adjusted using RDL CONSOLE or other network control software. The D-RN22 fits a standard US single-gang electrical box or an RDL WB-1U back box for installations in European or similar thinner walls. The D-RN22 is PoE powered and is available in multiple finishes with optional customized graphics.

#### Mic/Line to Network Section

The two XLR inputs are each converted to a separate Dante network transmit channel. Five gain settings are software-selectable for XLR inputs. Three gain settings are provided to match condenser or dynamic microphones. Two gain settings are provided to match standard line levels. P48 phantom voltage may be software enabled when an input is set for mic level.

#### Network to Line Section

Two Dante audio channels are converted to balanced line level feeding a rear-panel detachable wiring block. Each output provides +4 dBu balanced for a network digital audio level of -18 dBFS. Each output is equipped with a software-controlled attenuator adjustable in 1 dB steps to a maximum attenuation of 63 dB then OFF. The outputs may drive local power amplifiers or may feed additional XLR jacks mounted adjacent to the D-RN22 in a dual-gang box. Two XLR mic or line outputs may be provided using an RDL D-D2 equipped with two AMS-XLRMA jacks, available separately.

Valid PoE power and synchronization to the Dante network are indicated by green LEDs visible from the front of the unit.

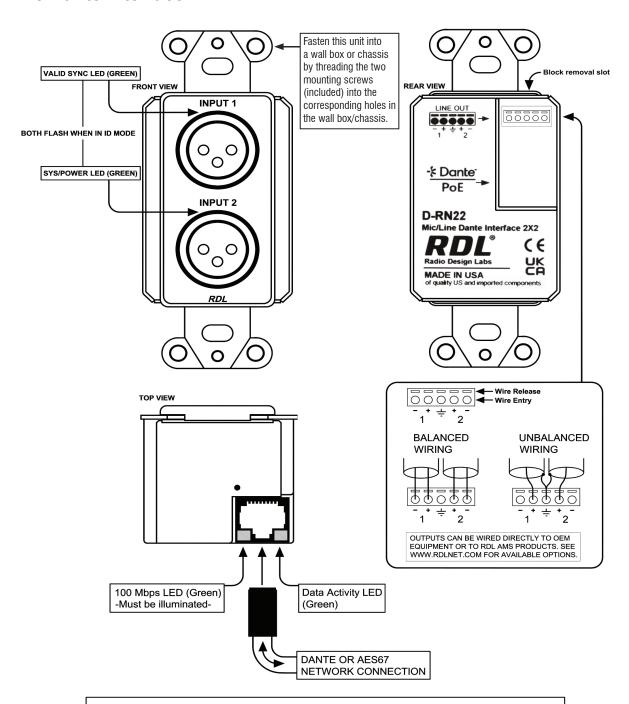
The D-RN22 is a professional grade product with RDL mic preamplifiers for studio quality fidelity and low noise performance, coupled through XLR jacks housed in a steel chassis with a powder-coated or stainless-steel Decora front plate.

The D-RN22's superior performance specifications make it ideally suited to installations requiring network control and exceptional value in commercial networked audio systems. This full-featured product is engineered and manufactured in the U.S.A. for continuous duty in demanding installations. Designed to outperform. Built to last.

### High Performance Audio Products. Made in America.

# Model D SERIES-RN22 Wall-Mounted Bi-Directional Mic/Line Dante Interface 2 x 2

This product is not specified to provide basic insulation from network cabling not installed wholly within the same building structure or terminated on equipment earthed to a different earthing network.



This product is not specified to provide basic insulation from network cabling not installed wholly within the same building structure or terminated on equipment earthed to a different earthing network.

High Performance Audio Products. Made in America.

## Installation/Operation



Declaration of Conformity available from rdlnet.com. Sole EMC specifications provided on product package. Specifications are subject to change without notice.

# Model D SERIES-RN22 Wall-Mounted Bi-Directional Mic/Line Dante Interface 2 x 2

#### **TYPICAL PERFORMANCE**

Network Connector:
Digital Audio Ethernet Protocol:
Transmission Rate:
Sample Rates Supported:
Bit Depth Supported:
Audio Operating Level:

Mic/Line Inputs to Network Section

Inputs (2): Gain:

Reference Level:

Input Level (for +4 dBu/-18 dBFS):

Input Level (maximum):

Input Impedance: Phantom Power: Standard for Phantom: Selectors per input (2): Frequency Response: Equivalent Input Noise:

Noise below -18 dBFS (20 to 20 kHz):

THD+N: CMRR: Crosstalk: RJ45 with Link and Speed indicators
Dante or AES67
100 Mbps

 $44.1\ kHz,\,48\ kHz$  (default),  $88.2\ kHz,\,96\ kHz$ 

24 bits

-18 dBFS = +4 dBu0 dBFS = +22 dBu

XLR (female)

Mic: 35 dB (LOW), 42 dB (MED), 59 dB (HIGH); Line: Unity (NORM),

12 dB (HIGH)

Mic: -31 dBu (LOW), -38 dBu (MED), -55 dBu (HIGH); Line: +4 dBu (LOW),

-8 dBu (HIGH)

Mic: -14 dBu (LOW), -21 dBu (MED),

-38 dBu (HIGH); Line: +23 dBu (LOW),

+10 dBu (HIGH)> 1.2 k $\Omega$ 

P48, software-selectable IEC 61938: 2013

Phantom, Gain, software-selectable 20 Hz to 20 kHz (± 0.5 dB) < -128 dBu (59 dB gain); < -130 dBu A-Weighted

Mic: < -88 dB (LOW), < -82 dB (MED),< -68 dB (HIGH); Line: < -88 dB (NORM),

< -88 dB (HIGH)

< 0.1% (20 Hz to 20 kHz, +4 dBu/-18 dBFS)

>65 dB (50 Hz to 120 Hz) Below Noise Floor (20 Hz to 20 kHz at operating level, input to input,

max. mic gain)

Network to Line Outputs Section

Outputs (2):

Output Level (operating): Output Level (maximum): Output Attenuator:

(analog output per received network channel)
150 Ω balanced

Balanced, detachable wiring block

+4 dBu (nominal) balanced

+22 dBu balanced

Software-controlled.

0 to -63 dB and OFF

Output Impedance:

Shipping Weight:

WEEE weight:

Frequency Response: 20 Hz to 20 kHz ( $\pm$  0.5 dB)

THD+N: < 0.1% THD: < 0.01% (1 kHz)

Noise: < -80 dB (below +4 dBu); < -100 dB (below +22 dBu)

Crosstalk: Below Noise Floor (20 Hz to 20 kHz at operating level, output to output)

Headroom above +4 dBu: > 18 dB

Indicators (4): Ethernet Link and Speed

(2, rear panel); Sync and Power (2, front panel)

Ambient Operating Environment: 0° C to 50° C
Power Requirement: PoE Class 0, IEEE 802.3af

Power Requirement: POE class 0, IEEE 802.3ar Specification Conditions: Gain/Level:  $\pm$  1 dB; Source termination: 150  $\Omega$ ;

A to D values

measured in digital domain
Dimensions: 1.80" (4.57 cm) W;

4.11" (10.44 cm) H; 2.09" (5.31 cm) D Cardboard Box

Package Type: Cardboard Box
Package Dimensions: 2.75" (6.99 cm)
x 6.7" (17.02 cm)

x 6.25" (15.88 cm) 0.7 lbs. (0.32 kg) 0.44 lbs. (0.2 kg)

Safety Instructions/Consignes de sécurité/ Instrucciones de seguridad/Sicherheitshinweise:



EU Importer: Importateur de l'UE: Importador de la UE: EU-Importeur:

RDL Europe B.V. Joan Muyskenweg 124 1114 AN Amsterdam