REDNET D64R

Focusrite ®

64-channel bridge between MADI and Dante Networks

MADI is widely used for large-scale digital audio systems such as audio consoles and conversion systems, allowing multiple channels to be carried along a single interface. RedNet D64R provides the link between a Dante Ethernet-based audio system and any MADI / AES10 setup. D64R supports up to 64 channels of both coaxial and optical MADI interfaces and is completely bi-directional, allowing the use of any Dante components including RedNet's high quality interface products with a MADI system – or MADI components with a Dante system.

D64R features a sample rate converter (SRC) on each input and output allowing interfacing between MADI and Dante irrespective of the sample rate at which either system is operating. Connect a Dante network to MADI-based digital consoles, computer cards, converters and much more. In addition to both coax and optical MADI interfaces, RedNet D64R provides Word Clock in and out.

PSU and Ethernet redundancy
Dual Ethernet ports are provided, with locking etherCON connectors and several operating modes including daisy-chaining and redundancy confirmed by front-panel indicators. Two separate power supplies with fault detection capability are included, with separate power input sockets (including retaining clips) on the rear of the unit. Power status is indicated both remotely and on the front panel. The D64R features a rugged, roadworthy exterior and high internal build quality. In addition, it offers a compact 1U rack-mount form factor for a full 64 channels of I/O.

Key Features

• Connects a MADI system and a Dante network seamlessly together. Connect Dante to digital mixing consoles, interfaces and cards that use MADI; or extend a MADI system with RedNet's versatile, superb-quality audio interfaces and connectivity – or any other Dante compatible devices.

• Built-in redundancy with dual locking power and etherCON network connectors.

• Supports both coax and optical interfaces – connect simply to any MADI equipment

• Slave either the Dante system or MADI streams to an external clock

• Supports up to 64 channels of digital audio I/O at standard sample rates (44.1/48kHz) from a MADI system, 32 channels at 96kHz and 16 at 192kHz.

• Sample rate conversion (SRC) on each input and output, allowing MADI and Dante systems to operate simultaneously at different sample rates.

• Simple 1U rack-mount module with the classic red aluminium faceplate.

• RedNet Control and Dante software allow remote routing and control from the audio computer system via a software control panel – no hardware patching required.

About RedNet

Launched in 2012, Focusrite's RedNet range was one of the first to adopt the Dante audio-over-IP network as the infrastructure for a new and versatile range of products.

Since then, RedNet has become increasingly popular for a diverse range of audio applications, from theme parks to opera, from studio to major live events.

RedNet has become known for its quality and reliability – the latter a feature that is brought even more to the fore by the inclusion of redundancy capabilities – as well as proving exceptionally simple to operate and offering the best-sounding audio-over-IP solution availablend full operability with other Dante devices.

Powered by

1 – Dual AC inlets with cable clips   2 – Dual locking etherCON Ethernet connectors
3 – Coaxial I/O to MADI system 4 – Optical I/O to MADI system 5 – Word Clock I/O

Up to 64 channels

D64R supports up to 64 channels of digital audio from a MADI system at standard (44.1/48kHz) sample rates, 32 channels at 88.2/96 kHz, or 16 channels at 176.4/192.

Varispeed capability

D64R fully supports the MADI varispeed (56-channel) mode.
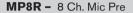
Add MADI to Dante – or Dante to MADI

D64R bridges a MADI system and a Dante network – and, like the rest of the Focusrite RedNet range, it is fully interoperable with all other Dante network components. The bridging facility means that you can use RedNet's expanding range of high-quality audio interfaces to put analogue or digital I/O, as well as third-party Dante-compatible products, exactly where you need it – which is as close as the nearest Ethernet port. It also means that you can connect Dante components to digital mixing consoles, interfaces and cards that use MADI.

Developed from the RedNet 6, Focusrite's D64R is a second-generation bridging module that can significantly expand the options and possibilities of both MADI and Dante networks.

Related products:

MP8R – 8 Ch. Mic Pre

D16R – AES3 Bridge

HD32 – HD Bridge

See the rest of the range at
www.focusrite.com/rednet

Specifications

Connectors (Rear panel)

2x etherCON locking Ethernet connectors – also compatible with standard RJ45 connectors
2x BNC Word Clock In and Out
2x BNC MADI Coaxial In and Out
Duplex-SC MADI Optical connector In and Out
2x IEC power connector: 100–240Vac, 50/60 Hz, cord retaining clips included

Controls (front panel)

Power on/off

Indicators (front panel)

Green LED power indicator
Network Status: Primary/Secondary/Locked
PSU: A/B

Sample rate: 44.1/48kHz, x2, x4, Pull
Clock Source: Internal, MADI, Word Clock
MADI Input: Coax, Optical, Auto
Clock Source: SRC, RedNet, MADI Input, Word Clock
Signal: In, Out, Varispeed

MADI Coaxial

Electrical standard: as per AES10:2008
Connector: BNC 75Ω
Recommended cable: 75Ω characteristic impedance

MADI Optical

Optical standard: as per AES10:2008 (ISO/IEC 9314-3, FDDI, ANSI X3.166)
Recommended Cable: Multi-mode, Graded-index, 62.5µm core, 125µm cladding

Connector: Duplex-SC
(Single Mode available on request)

Supported Sample Rates

44.1, 48, 88.2, 96, 176.4, 192 kHz

Channel Count

Single rate: 64 (56)
Double rate: 32 (28)
Quad rate: 16 (14)

SRC

Lock range: 41kHz to 216kHz (MADI)
Sample rate ratio limit: 6:1
THD: −130dB (typical)
Latency: 43 to 192 samples (sample rate dependent)
E&OE

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