REDNET A16R

Focusrite®

16×16 analogue line I/O for Dante audio-over-IP networks

RedNet A16R adds 16 remote-controlled analogue channels in and out to any Dante audio-over-IP network. This interface includes full power supply and network redundancy in a compact, rugged 1U enclosure that make it ideal for demanding applications such as live, broadcast and education as well as in the recording studio industry. Featuring Focusrite's precision 24-bit A-D and D-A conversion, it delivers superb audio performance with 119dB dynamic range at standard sample rates up to 192kHz, with pull up/down.

The rear panel includes standard DB25 connectors for analogue patchbay or breakout cable interfacing.

RedNet A16R is a 1U bi-directional Network Audio Interface providing 16 analogue inputs and 16 analogue outputs, plus an additional two channels of AES/EBU I/O – the XLR input socket for which may alternatively be used for DARS. Word Clock in and out are also provided on BNC connectors.

Internally, analogue signals are converted using precision Focusrite conversion technology to and from 24-bit digital signals. User-selectable sample rates of 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz and 192kHz are supported for both A-D and D-A conversion, and Jet PLL® technology is employed to minimize conversion jitter. All analogue inputs and outputs offer a frequency response of 20Hz-20kHz ±0.05dB, with a dynamic range of 119dB A-weighted.

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 Dante™

Key Features

- Adds 16 channels of high-quality analogue line I/O conversion to any Dante network
- A-D and D-A dynamic range of 119dB with flat frequency response
- Built-in redundancy with dual locking power supplies and etherCON connectors
- Supports sample rates between 44.1 and 192kHz
- Additional pair of AES/EBU I/O on rear-panel XLR connectors including sample rate conversion for the input
- Word Clock I/O allows devices to synchronise with the network, or alternatively to synchronise the Dante network to an external clock
- Front panel status LEDs indicate signal level, clock source, PSU status and network status
- Robust 1U metal chassis featuring red anodised faceplate

Electronically-balanced analogue inputs and outputs are provided on 25-way female D-Sub connectors, wired to the AES59 standard, while internal signals are fully balanced throughout. Inputs and outputs may be configured remotely for either +18dBu or +24dBu alignment.

LED front panel indicators display the status of PSU A/B and Network Primary/Secondary connections, Sync Source, Pull Up/Down and Lock status, Sample Rate, AES/EBU I/O, and Input/Output Signal Levels.

RedNet A16R features a sturdy 1U industrial package designed for fixed installation in engineered audio and communications systems.

Rear-panel dual 8p8c/RJ45 etherCON locking Ethernet ports are provided with full network redundancy. The unit may be operated in Redundant or Switched mode: in the latter case the unit can be used with a single Ethernet connection and additional devices chained from the secondary connector. In Redundant mode the unit will switch between Primary and Secondary connections automatically without any signal loss in the unlikely event of a network failure.

Dual independent power supplies are also included and the unit will switch automatically between supplies in case of a failure. Retaining clips are provided for the power cables.

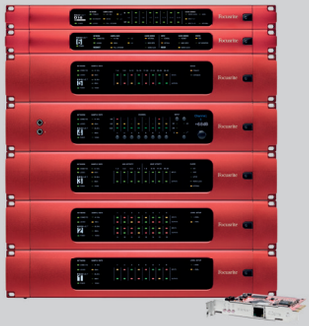
Related products:

RedNet MP8R – 8 Ch. Mic Pre

RedNet D16R – AES/EBU I/O

RedNet HD32R – HD Bridge

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



Specifications

Inputs
Analogue line inputs 16
Connector 25-way female Dsub x 2, wired to AES 59
0 dBFS reference levels +18 or +24 dBu (switchable)
Frequency response 20 Hz – 20 kHz ±0.05 dB
THD+N < 0.001% unweighted; -1 dBFS input, 20 Hz – 22 kHz
Dynamic range 119 dB 'A'-weighted (-60 dBFS method)
Converter dynamic range 120 dB
Signal-to-noise ratio 119 dB 'A'-weighted; 20 Hz – 20 kHz

Outputs
Analogue line outputs 16
Connector 25-way female Dsub x 2, wired to AES 59
0 dBFS reference levels +18 or +24 dBu (switchable)
Frequency response 20 Hz – 20 kHz ±0.15 dB
THD+N < 0.001% unweighted; -1 dBFS input, 20 Hz – 22 kHz
Dynamic range 119 dB 'A'-weighted (-60 dBFS method)
Converter dynamic range 120 dB
Signal-to-noise ratio 119 dB 'A'-weighted; 20 Hz – 20 kHz

Crosstalk
Input or Output to Input < -90 dB (all other channels at 0 dBFS)
Input or Output to Output < -100 dB (all other channels at 0 dBFS)

All specifications are subject to change

Focusrite's Finest Sound.
Networked.

Powered by Dante™

+44 (0) 1494 462 246
rednet@focusrite.com
www.focusrite.com/rednet