# REDNET A8R

Focusrite®

## 8×8 analogue line I/O for Dante audio-over-IP networks

RedNet A8R adds eight remote-controlled analogue channels in and out to any Dante audio-over-IP network. The product includes full power supply and network redundancy in a compact, rugged 1U enclosure, and is specifically designed for applications where high levels of reliability and specifications are required. These fundamental design considerations make RedNet A8R suitable for live sound and broadcast applications as well as educational and recording studio operation. Featuring Focusrite's precision 24-bit A-D and D-A conversion, RedNet A8R delivers superb audio performance with 119dB dynamic range at standard sample rates up to 192kHz, with pull up/down.

RedNet A8R is a 1U bi-directional Network Audio Interface providing eight analogue inputs and eight analogue outputs, plus an additional two channels of AES/EBU I/O – including sample rate conversion on the input, the XLR input socket for which may alternatively be used for DARS. Supporting both internal and external clocking, Word Clock in and out are also provided on BNC connectors.

Analogue inputs and outputs are converted with precision Focusrite A-D and D-A conversion technology to and from 24-bit digital signals, at user-selectable standard sample rates of 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz and 192kHz with pull-up and pull-down capability. 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.

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Dante™

## Key Features

• Adds eight channels of high-quality analogue line I/O conversion to any Dante network

• A-D and D-A dynamic range of 119dB

• Analogue I/O frequency response of 20Hz-20kHz ±0.05dB

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

• Supports sample rates between 44.1 and 192kHz with pull up/down

• Additional pair of AES/EBU I/O on rear-panel XLR connectors including input sample rate conversion

• 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

The analogue inputs and outputs are electronically-balanced and provided on 25-way female DB25 connectors wired to the AES59 standard, with internal signals fully-balanced throughout. The inputs and outputs may be configured remotely for either +18dBu or +24dBu operation.

Rear-panel dual etherCON locking Ethernet ports are provided, accepting standard RJ45 connectors, and offer full network redundancy. RedNet A8R 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 may be chained from the secondary connector. In Redundant mode, in the event of a network failure the unit switches automatically, without signal loss, between Primary and Secondary connections. 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.

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 A8R features a sturdy 1U industrial enclosure designed for installation in audio and communications systems.

## 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** | 8 |
| **Connector** | 25-way female DB25 x2, wired to AES59 |
| **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** | 8 |
| **Connector** | 25-way female Dsub x 2, wired to AES59 |
| **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

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