REDNET AM2



Stereo Dante headphone amplifier and line output interface with PoE

RedNet AM2 is a compact Dante-compatible stereo monitoring unit, combining headphone and balanced line outputs for monitoring of signals from the Dante network. RedNet AM2 features a 1/4" front-panel TRS headphone socket plus a pair of rear-mounted balanced line outputs with male XLR connectors for loudspeaker monitoring and other applications. RedNet AM2 can be powered via Power over Ethernet (PoE) or via an external DC power supply (included). RedNet AM2 is ideal for adding headphone outputs to a studio-based system as well as offering a valuable solution for education, live sound and broadcast.

High power headphone amp

Designed to drive a wide range of headphones, the headphone amplifier will drive high impedance (up to 600 ohms) headphones at substantial levels, making the unit suitable for use on-stage as well as front-of-house or in a studio environment. The XLR line-level outputs have software-switchable 0 dBFS reference levels of +18 or +24 dBu, allowing alignment to both EBU and SMPTE standards.

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 an expanding 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 studios 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 available and full operability with other Dante devices.

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Key Features

- Convenient headphone/loudspeaker stereo monitoring solution for Dante gives outputs wherever they are needed
- Superb digital to analogue conversion provides transparent and accurate audio quality
- Powerful headphone amp delivers plenty of level even with high-Z headphones for maximum high-quality audibility
- Independent headphone/line output level controls for maximum control
- Line output mute switch instantly kills the signal to external speakers or power amps
- Integrated Gigabit Ethernet switch allows connection of a second device for simpler cabling
- Built-in mic stand mount plus non-slip feet – mount RedNet AM2 to a mic stand or place securely on a surface
- 2x male XLR outputs (+18/+24 dBu software-switchable)
- Stereo headphone output (1/4" TRS)
- 2x etherCON connectors with integrated network switch
- 12V DC PSU (supplied) input
- Signal, Network, Power and Line Out Mute indicators
- Tough aluminium extruded chassis
- Mic stand mount



Superb-quality D/A conversion

RedNet AM2 features a 2-channel Dante receiver based around Audinate's 'Ultimo' hardware, and incorporates high-quality digital to analogue conversion at standard sample rates from 44.1 to 96 kHz, with >118 dB dynamic range. It is designed for stereo network audio monitoring via the line level outputs – for use with loudspeakers for example – and headphones. The unit may be clocked either internally or via the Dante network master. Two large volume control knobs are provided for Headphone and Line output levels, the latter featuring a mute button with associated LED.

Other indicators show the presence of power, network and signal. The signal indicator shows red for 0 dBFS, orange at -6 dBFS and green at -42 dBFS on either channel, while the network indicator illuminates when a valid network connection is present on either Port 1 or 2.

Power over Ethernet or external PSU

The two locking etherCON connectors are connected to an integrated gigabit switch, to connect to the device to the network and to daisy-chain to additional network devices.

RedNet AM2 is powered via Power over Ethernet (PoE) or via the rear-panel centre-positive barrel connector and included 12V DC power supply. The power LED indicates green when

powered via PoE and red when the external power supply is in use.

Mounting options

The compact unit is mounted in an enclosure based around a sturdy road-worthy aluminium extrusion and fitted with non-slip feet. It can either sit securely on a flat surface or be mounted on top of a mic stand using the standard 3/8" BSW threaded bush incorporated in the base.

Full Dante interoperability

Like the entire RedNet product range, RedNet AM2 interoperates seamlessly and fully with any other Dante audio-over-IP network components and infrastructure. Patching and interconnection can be managed with Dante Controller on Mac or PC.



Specifications

Line Outputs

Max output – Switchable +18/+24dBu; 0dBFS input Frequency Response – 20Hz - 20kHz ± 0.1dB

THD+n-<0.0007% (-103dB) unweighted; -1dBFS input, 20Hz - 22kHz

Dynamic Range -> 119dB 'A'-weighted (-60dBFS method)
Signal-to-noise ratio -> 119dB 'A'-weighted; 20Hz - 20kHz

Crosstalk - < -100dB; -20dBFS input, 20Hz - 20kHz

Headphone Outputs

Max output – +21.5dBu; 0dBFS input, R= 600Ω

Frequency Response - 20Hz - 20kHz ± 0.1dB

THD+n – < 0.001% (-100dB) unweighted; -1dBFS input, 20Hz - 22kHz

Dynamic Range -> 118dB 'A'-weighted (-60dBFS method)

Signal-to-noise ratio – > 118dB 'A'-weighted; 20Hz - 20kHz, $R=600\Omega$

Crosstalk - < -95dB; -20dBFS input, 20Hz - 20kHz