

16 Channel AoIP Input Dante® Network/ AES67 Audio Interface



Network Audio
Analogue Input



DARK16AI
Network Audio Analogue Input 1RU Rack

Highlights

- Ideal For Broadcast, Theatre & Pro Audio
- 16 Low Noise Analogue Audio Inputs
- Dante® & AES67 Compatible
- Redundant Network Interface
- Up to 192kHz Sampling
- Redundant Mains Power Supplies

Overview

The DARK16AI is a 19" 1RU subrack that provides 16 high quality analogue audio inputs to a Dante®/ AES67 AoIP network. These audio inputs are balanced line level signals and for ease of installation are presented on rear panel XLRs.

Being designed originally for broadcast the DARK16AI has inbuilt resilience for both its network connections and power supplies. It is also suitable for Theatre, Installation and Pro Audio use.

The unit is part of our very popular DARK range of AoIP audio interfaces that have a proven reliable provenance, meaning that it is a safe fit and forget choice for your engineer. Your accountant will also be happy as it has a very long expected life span and a very competitive initial price.





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- Sixteen Audio Inputs**
The DARK16AI has 16 audio inputs to the network. Each input is on its own Neutrik 3 pin XLR socket. The inputs are electronically balanced and can be connected to unbalanced outputs if required.
- Dante® and AES67**
Although Dante® is by far the most popular current format for distributing audio across a standard Ethernet network, the DARK16AI is also AES67 compliant for users who prefer to use an open standard.
- Up to 192kHz Sampling**
Each audio input can be sampled at up to 192k, which is four times the 48k rate used by most broadcasters and double the 96k rate used by lots of professional audio systems.
- Easy Connection To Network Switches**
Having the Ethernet network copper and fibre interfaces located at the front of the rack mean they are presented on the same face as most Ethernet switches. This allows for easy patching between the Dark16AI and its associated network switch(s).
- 19" 1RU Subrack**
The DARK16AI is housed in a rugged custom built aluminium subrack, for long life it has laser etched anodised front & rear panels and powder coated lid and base. The subrack has been carefully designed to eliminate the need for noisy and unreliable cooling fans.

Now with AES67



Dante®
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DARK16AI Dante®/AES67 AoIP Analogue Audio Input

Features



- Network Interface**
 There are 4 network interfaces on the Dark16AI. There are 2 x Neutrik Ethercon (Rj45) connectors and there are also 2 x SFP slots for customers to fit their own preferred fiber interfaces.
- Redundant Network Interface**
 When using the Dante® protocol it is possible to set the Dark16AI to have a fully redundant network interface whereby a completely glitch free automatic redundant audio network link is provided across 2 off the network interfaces.
- Power**
 Two wide range switch mode power supplies are fitted as standard to provide redundant mains power supply solution. Either supply can provide power to the unit and two are fitted for extra resilience.
- Status LEDs**
 Front panel LEDs provide clear indication of the status (working (or not)) of both the power supplies and both the primary & secondary network circuits.
- Alarms**
 Solid state relay outputs are provided for triggering external equipment to indicate failure of any of the following: PSU1, PSU2, Primary Ethernet, Secondary Ethernet
- Selectable Full Scale**
 For compatibility with different international standards internal links are provided to set a range of different digital full scale levels.

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DARK16AI

Designed For Broadcast & Audio Professionals

Specification

ANALOGUE AUDIO

Frequency Response

+/-0.25dB 20Hz to 22kHz

Full Scale

0dBFs = +18dBu (factory default)

0dBFs = +20dBu

0dBFs = +24dBu

Full scale levels set by internal links. links can be changed by end user or can be factory preset to order.

Input Impedance

=>20k Ohms (factory default)

Internal link provides 600 Ohm termination

Distortion

0.0013% @ 100Hz

0.0022% @ 1kHz

0.00094% @ 10kHz

Reference to +8dBu output

Noise

-93dB @ line up A weighted

RMS (22Hz to 22kHz)

Interchannel Crosstalk

>101dB @ 0dB with 1kHz tone

Input Type

Electronically balanced (can be wired unbalanced)

POWER

Mains Inputs

2 off Filtered IEC, 100 to 240VAC

47 - 63Hz

AC Consumption

18 Watts @ 230VAC

Internal Mains Fuse

20mm 1A Anti Surge

MISC

Audio Connectors

3 Pin Neutrik XLR sockets

Alarm Connector

9 Way D Socket

Alarm Type

Solid State Relay

NETWORK/ Dante®

Physical Interface

2 off Rj45 Neutrik Ethercon

2 off SFP slots

Audio Sample Frequency

32 - 192kS/s

Transfer Rate

1000 Mbps

Dante™ Chipset

Brooklyn II

Note: suitable for acting as master clock for a network incorporating many Ultimo chipsets

AES67 Compliant

AES67 compliant

PHYSICAL

Size

1RU 19" 300mm deep (from rear of front panel to rear panel (excluding connectors))

Weight

2.8kg

Mechanics

All aluminium construction, anodized and laser etched front & rear panels

Shipping Carton

Rugged export quality cardboard carton

610 x 420 x 130mm LxDxH

Shipping Weight

4.3kg

INCLUDED ITEMS

Handbook

Physical A5 (download also available)

Rj45 Network Cable

2 metre Cat5 Rj45plug /Rj45plug cable

Mains Cable

2 metre IEC socket cable (UK & EU only)

Specification

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