The DS10 Audio network bridge

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The DS10 Audio network bridge feeds up to 16 digital AES3 channels to d&b amplifiers via Ethernet using the Dante audio transport protocol. This 1 RU device integrates directly into the d&b system approach, positioned in front of the amplifiers within the signal chain, and is ideally suited to both mobile and installation environments. The DS10 sends meta data including Dante channel labels and cabling information via the AES3 channel stream to the d&b four channel amplifiers. As well as providing an interface from the Dante audio network to the digital inputs of the d&b amplifiers via Ethernet, the DS10 provides 4 digital AES3 input channels for applications such as a break in from a Front of House console.

The DS10 incorporates an integrated 5-port switch, offering a primary and redundant network for the Dante protocol, as well as advanced functions such as Multicast Filtering and VLAN modes. This switch flexibility provides extended connectivity for a laptop to control the d&b amplifiers using the R1 Remote control software via the OCA (Open Control Architecture) protocol. Using the DS10 Audio network bridge, audio signals and remote control data can be combined using a single Ethernet cable.

The front panel of the DS10 is designed to match the I/O panel of the D80 Touring rack assembly. This ensures a simple integration within existing system configurations.

The DS10 features a power supply suitable for mains voltages 100 V – 240 V, 50 – 60 Hz, with Overvoltage protection of up to 400 V.

Control and indicators

BYPASS/NETWORK ..... Toggle switch
Switch port modes/Audio loss ..... LED indicators
SYNC ERROR ..... Red LED indicator
SUBSCRIBED (RX Subscription) ..... Green LED indicator

Digital inputs

DIGITAL IN ..... 4 channels (2 x AES3)
..... 3 pin XLR female
Sampling ..... 32 - 192 kHz
Synchronization ..... Sample Rate Converter (SRC)

Digital outputs

DIGITAL OUT ..... 16 channels (8 x AES3)
..... 3 pin XLR male
Sampling ..... 48 / 96 kHz
Synchronization ..... Dante network

Network

Connectors ..... etherCON[1]
..... built-in 5-port Ethernet switch
..... 100/1000 Mbit

Power supply

Mains connector ..... powerCON[1]
Rated mains voltage ..... 100 - 240 V, 50 - 60 Hz

Dimensions, weight

Height x width x depth ..... 1 RU x 19" x 232 mm
Weight ..... 3.75 kg (8.26 lb)

[1] etherCON® and powerCON® are registered trademark of the Neutrik AG, Liechtenstein

d&b audiotechnik®

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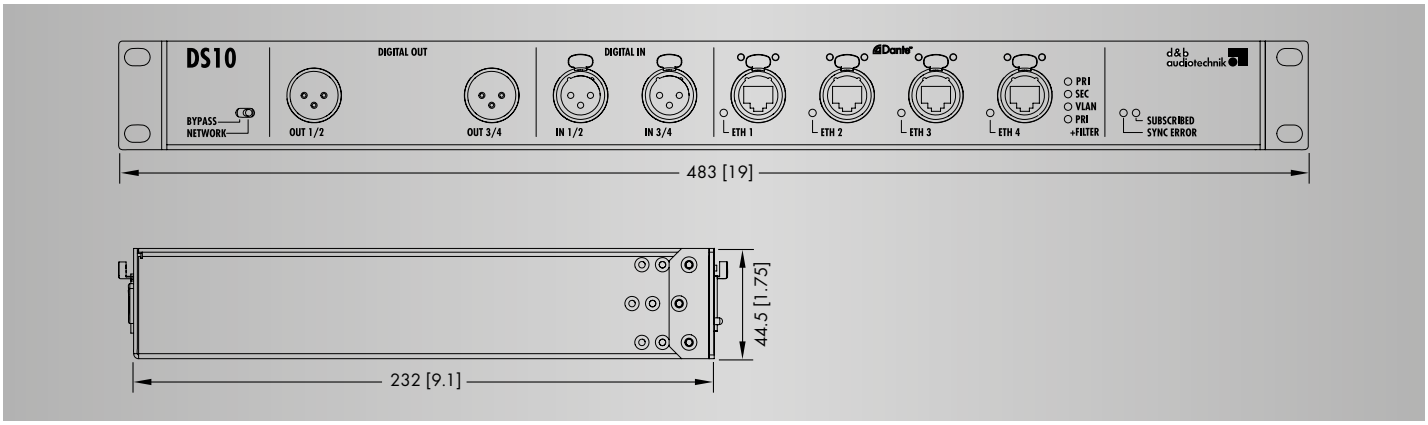

DS10 Audio network bridge dimensions in mm [inch]

Features and benefits

- Interface between the Dante audio transport protocol via Ethernet and the AES3 inputs of the d&b amplifiers
- Integrated 5-port Ethernet switch provides extended connectivity and advanced functions such as redundancy, VLANs and multicast filtering
- Four AES3 input channels for extended flexibility
- In bypass mode, the DS10 acts as an AES3 distribution device
- Dante meta data including channel label information sent through AES3 stream to the four channel d&b amplifiers

Applications

- Mobile and permanently installed music and live program reinforcement
- Theatre
- Concert halls
- Live performance venues
- Night clubs
- Stadiums and arenas
- Multipurpose suites
- Houses of Worship
- Corporate events
- All sound reinforcement applications with an audio via Ethernet networking approach

Architectural specifications

The device shall act as a 16 output channel break-out box connecting the Dante audio network to the AES3 digital audio standard.
In addition, 4 x AES3 input channels shall be provided, including Sample Rate Converters (SRC).
A Bypass/Network switch shall be provided to allow the device to be used either as a AES3 distribution amplifier (Bypass) or as a normal Dante device (Network) in conjunction with Dante Controller.
The device shall provide a 5-port Ethernet switch for different network topologies, redundancy and advanced functions, including Multicast filtering and VLAN modes.
The device shall support four different switch modes which shall be accessible within Dante Controller to allow different applications and network topologies.
The device shall provide meta data (e.g. Dante channel labels) via the AES3 output streams, and these meta data shall be interpretable by d&b audiotechnik 4-channel amplifiers (10D, 30D, D20, D80).

The device shall provide Overvoltage Protection for voltages up to 400 V.
The dimensions (H x W x D) shall not exceed 1 RU x 19" x 232 mm (1 RU x 19" x 9.1) and shall weigh no more than 3.75 kg (8.26 lb).

The device shall be the DS10 by d&b audiotechnik GmbH & Co. KG.