

sDAB™ Series

Networkable Digital Audio Bridge

MediaMatrix®

8x8 | 16i | 16o | 16x16 | 32o



Description

The MediaMatrix® sDAB™ series of networkable digital audio bridges are audio break-in/ break-out devices supporting microphone/line level audio utilizing Dante™ and/or AES67 audio-over-IP in a single 1U rack mountable chassis.

sDAB series of devices allows for remote expansion of audio I/O from sDAB to sDAB or via the MediaMatrix family of DSP devices. Five (5) models of sDAB's are available supporting 8i x 8o, 16i, 16o plus special order 16i x 16o and 32o input and/or output configurations respectively.

sDAB devices supporting inputs accommodate both microphone and line level signals from -60 to +24dBu including assignable +48V phantom power at each input. Output levels are configurable up to +24dBu.

All sDAB versions feature a configurable General Purpose Input Output (GPIO) - 25 pin 'D' connector allowing for digital and dry contact closure connectivity. An optional DIN rail mounting system called the GPIO-25, ordered separately, is available for efficient rack wiring and service.

Front panels support two RGB LEDs per channel for audio levels plus LED's for power, system and audio streaming status. The sDAB series is configured using the award winning nWare™ software suite. Control and monitoring is also managed by nWare and/or the built-in Web UI. Audio routing is achieved using Dante Controller.

Power provided from a built-in universal AC power supply. Redundant power available using optional external 12VDC supply.

Features

- Supports Dante® audio-over-IP with AES67 interoperability.
- Dante Domain Manager 'DDM' ready
- 44.1, 48 or 96kHz sample rates @ 32bit A/D and D/A conversion. (AES67 @ 48kHz Only)
- Balanced microphone/line level inputs with level range of -60 to +24dBu
- Switchable +48V phantom power on each input.
- Balanced line level outputs 0 to +24dBu.
- 3.81mm phoenix / euroblock connectors with individual plus (+), minus (-) and ground (G) for each audio connection.
- DB-25 GPIO connector supports optional GPIO-25 DIN rail mounting system.
- RGB front panel LEDs provide per channel metering, power, system and audio streaming status.
- Supports MediaMatrix® nWare™ software suite for monitoring and control.
- Dual RJ-45 network jacks can be operated in redundant or switched mode.
- Built-in universal 90-260VAC 50/60Hz power supply @ 60W maximum.
- Optional auxiliary +12VDC power supply provides redundancy via locking 2.1mm jack.





MODEL

sDAB™ 8x8
sDAB™ 16i
sDAB™ 16o
sDAB™ 16x16*
sDAB™ 32o*

INPUTS

8 x Mic/Line
16 x Mic/Line
N/A
16 x Mic/Line
N/A

OUTPUTS

8 x Line
N/A
16 x Line
16 x Line
32 x Line

ANALOG AUDIO

Type: Balanced audio
Connector: 3.81mm phoenix/euroblock
Input level: -60 to +25dBu mic/line
Input impedance: 10K ohms
Dynamic range I/O: >114dB
THD+N I/O: <-97dB (input) / <-100dB (output)
EIN: -126 dBu @ -26dBu level setting
Phantom power: +48V @ 10mA per ch max (software switchable)
Output level: -10 to +24dBu line out
Output load imp.: 2K ohm or greater
AD/DA converter: 32 bit over sampling
Frequency: @ 48kHz sample rate - 20Hz to 20kHz +0.1/-0.5dB
@ 96kHz[†] sample rate - 20Hz to 40kHz +0.1/-2.0dB

NETWORK AUDIO

Type: 100/1000Mbit Fast/Gigabit Ethernet
Protocol/Standard: Dante™ / AES67 supported
Connector: Dual RJ-45 redundant streams or switch
Audio formats: 16, 24 and 32 bits per sample
Sample rate: 44.1kHz, 48kHz or 96kHz[†] optional
Latency: 150, 250, 500µs, 1.0 and 5.0ms optional

GPIO

Digital inputs:
8 x digital inputs - 3.3v LVTTTL logic supporting;
Low: 0VDC – 0.8VDC, High: 2.0VDC – 3.3VDC (+24VDC tolerance)

Relays:
4 x Form C relays – NO, NC & COM dry contacts

MECHANICAL

Dimensions: W 19" (482mm) - D 6" (152mm) - H 1.75" (44mm)
Weight: 5 lb (2.2kg) max
Operating Temp: 32 - 104°F (0 - 40°C) - non condensing

Internal PS: 90-260VAC, 47-63Hz @ 60W
Redundant PS: External 12VDC, 60W power supply via locking 2.1mm jack optional (not included)

Architect's & Engineer's Specifications

The networkable digital audio interface(s); shall be a 1RU industrial package designed for fixed installations used in professional public address and distributed audio systems. The interface shall allow analog audio to be converted to/from a digital format being packaged and transmitted as a real-time, high quality lossless data stream using the Dante™ protocol or AES67 standard audio-over-IP/GBit-Ethernet - Dante Domain Manager (DDM) ready. The interfaces shall be available in optional audio input / output configurations supporting; 8 inputs x 8 outputs, 16 inputs, 16 outputs, 16 inputs x 16 outputs plus 32 outputs. Monitoring and remote gain control of audio signals shall be possible at the analog domain via the streaming audio network. All analog audio inputs shall provide software assignable 48V phantom power for microphones including mute on physical disconnection of audio signal drivers from the external connectors. General-purpose I/O connections (8) shall be available supporting digital logic inputs including (4) Form C relays NO, NC & COM dry contact. The interface shall be powered by an internal power supply supporting universal power or redundantly from an optional external 12-volt DC power supply. The interface shall feature front-panel RGB LEDs indicating audio signal levels for each channel including separate LEDs for power, network audio and system fault. Remote control and monitoring shall be over Ethernet for all available functionality via an integrated controller/digital signal processor and configuration software or optionally using a web browser UI. The networkable digital audio interface shall be the MediaMatrix® sDAB™ or approved equal.

* Denotes minimum order required.

† Denotes not supported when using AES67.