

DM-NAX-BTIO-1G

DM NAX® Audio-over-IP Wall Plate with Bluetooth® Audio Support, Analog Audio Input and Output, 1-Gang



- *Built-in Bluetooth® wireless audio input support*
- *Front panel OLED display provides metadata readout and device setup menus*
- *Single-gang U.S. wall box installation*
- *Power over Ethernet (PoE) network powered*
- *Stereo unbalanced analog line-level audio input and output via 3.5 mm TRS connectors*
- *Mountable in a standard US electrical box or on a rack rail via included hardware*
- *Connects directly to a managed network to route to or from other DM NAX® and DM NVX® devices*
- *Interoperable with Dante® audio networking devices via AES67 compatibility*
- *Streamlined configuration through front panel push buttons and a web interface*
- *Seamless Crestron system integration with SIMPL Windows programming*

The [DM-NAX-BTIO-1G](#) is a DM NAX encoder and decoder with support for Bluetooth wireless and analog line-level wired audio input and output, housed in a single-gang wall plate form factor. The front panel features an OLED display and four buttons for device pairing and menu navigation. Two 1/8 in. (3.5 mm) TRS connectors for stereo unbalanced analog line-level audio input and output are concealed under a front panel door. The rear panel of the wall plate features an Ethernet connection for PoE, Audio over IP (AoIP), and control.

DM NAX is built on the AES67 standards with additional ease of configuration via a web interface, SIMPL Windows, C#, and/or a RESTful API. It is compatible with DM NVX through the AES67 secondary audio stream and also with third-party AES67 solutions and Dante via the compatibility mode enabled through Dante Controller.

Bluetooth® Wireless Connectivity

Bluetooth wireless audio support is built-in to the DM-NAX-BTIO-1G, allowing a stereo audio signal (such as an album or podcast) to be transmitted from a smart phone or other source device to the wall plate. This signal can be output as a DM NAX AoIP stream onto the network to distribute the content throughout several rooms or as an unbalanced line-level analog signal from the local 3.5 mm audio output connector. Metadata for the Bluetooth audio stream can be displayed on the front panel, and up to seven previous source device connections can be recalled.

Audio-over-IP

DM NAX takes audio distribution to a whole new level by putting it on the network. The DM-NAX-BTIO-1G sends and receives DM NAX and AES67 encoded audio over a standard IP network. A single DM NAX system can handle audio distribution between 32 DM NAX devices and supports up to 256 audio output zones. DM NAX devices can seamlessly pull and distribute the audio from DM NVX sources.

Encoder and Decoder Functionality

The DM-NAX-BTIO-1G can operate as a network AV encoder and decoder. The local input sources on the wall plate can be sent as AoIP streams to DM NAX, Dante, or AES67 capable devices. Simultaneously, the DM-NAX-BTIO-1G can receive AoIP streams from these same devices and decode them for local output.

Front Panel Controls and Display

The DM-NAX-BTIO-1G features four front panel push buttons and a 128 x 64 dot matrix OLED display. The push buttons allow local volume control and Bluetooth pairing, with volume feedback and pairing status reflected in real time on the display. Metadata for Bluetooth media and basic configuration menus are also shown on the display.

Both the display and push buttons can be disabled via the configuration web interface or programming for applications where a more discreet or secure installation is required.

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Specifications

Audio

Input Signal Types	Unbalanced stereo analog line-level; Stereo Bluetooth wireless; DM NAX/AES67 audio-over-IP
Output Signal Types	Unbalanced stereo analog line-level; DM NAX/AES67 audio-over-IP
Source Compensation	±10.0 dB per input
Input Monitoring	Source Signal Detect
Frequency Response (at line-level output)	20 Hz to 20 kHz ±0.5 dB
THD+N (at line-level output)	0.005% @ 1 kHz, max output
S/N Ratio (at line-level output)	From line-level input: 108 dB, 20 Hz to 20 kHz, A-weighted; From digital input: 111 dB, 20 Hz to 20 kHz, A-weighted
Balance Control	Left/right adjustable

Communications

Ethernet	For control and PoE, AoIP, and/or console, 100/1000 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, DHCP
Bluetooth	For audio input, Bluetooth 5.2 sink device, recalls up to seven previously paired devices, persistent or nonpersistent pairing, exclusive, interrupting, or temporary connection modes; Maximum Simultaneous Connections: 1 active device; Exclusive Connection Mode: Remembers up to 7 paired devices; Interrupt Connection Mode: Remembers up to 6 paired devices; Temporary Connection Mode: Remembers 1 paired device; Connection Range: 30 to 60 ft (9 to 18 m) typical, line-of-sight

Connectors

IN	(1) 3.5 mm connector, female TRS; Unbalanced line-level audio input; Maximum input level: 2Vrms; Input Impedance: 10 kΩ
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OUT	(1) 3.5 mm connector, female TRS; Unbalanced line-level audio output; Maximum output level: 2Vrms; Channel separation: 80 dB @ 1 kHz; Output Impedance: 100 Ω
G	(1) 6-32 screw; Chassis ground lug
ETHERNET PoE	(1) 8-pin RJ-45 connector, female; 100BASE-TX/1000BASE-T Ethernet port

Controls and Indicators

Front Panel Display	(1) OLED screen, 128 x 64 dot matrix; Height (active area): 0.43 in. (11 mm); Width (active area): 0.86 in. (22 mm); Displays metadata, menus, and volume feedback
Menu	(1) Push button Used to enter the front panel menu and select menu items
Bluetooth	(1) Push button Used to initiate Bluetooth pairing
UP and DOWN Arrows	(2) Push buttons Used to navigate menus and control volume
ETHERNET PoE	Left amber LED indicates 1000 Mb link status; Left green LED indicates 100 Mb link status; Flashing right amber LED indicates Ethernet activity
SETUP	(1) Push button: Used for factory reset procedures; (1) LED, illuminates red when the button is pressed, flashes red when reset has been initiated

Power

PoE	IEEE 802.3af Class 0 (12.95 W) compliant; Compatible with IEEE 802.3af compliant Ethernet switch or third-party PoE compliant PSE
Power Consumption	3.5 W

Environmental

Temperature	32° to 95° F (0° to 35° C)
Humidity	10% to 95% RH (noncondensing)
Heat Dissipation	11.95 BTU/hr

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Construction

Chassis	Metal, black and silver finish, vented sides
Mounting	Mountable on the following: 1-gang U.S. electrical box or plaster ring (not included), 3.5 in. (26 mm) electrical box depth recommended; Rack rail

Dimensions

Height	4.12 in. (105 mm)
Width	1.76 in. (45 mm)
Depth	2.25 in. (57 mm)

Weight

4.8 oz. (136 g)

Compliance

Regulatory Model: M202050005
IC, FCC Part 15 Class B digital device

Model

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Available Accessories

For a list of available accessories, visit the [DM-NAX-BTIO-1G](#) product page.

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/How-To-Buy/Find-a-Representative or by calling 855-263-8754.

This product is covered under the Crestron standard limited warranty. Refer to www.crestron.com/warranty for full details.

The specific patents that cover Crestron products are listed online at patents.crestron.com.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

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