

## 8-Channel 4K HDMI® & Dante™ Input Blade for DM® Switchers

- > Modular input blade for a DM-MD64X64 or DM-MD128X128 switcher
- > Provides eight independent 4K HDMI® inputs
- > Handles video resolutions up to 4K and Ultra HD
- > Handles 3D video and Deep Color
- > Handles Dolby® TrueHD, Dolby Atmos®, DTS-HD®, and uncompressed 7.1 linear PCM audio
- > Dante™ audio networking supports up to eight stereo sends and eight stereo inputs/returns
- > Integrates seamlessly with Crestron® Avia™ DSP products
- > Analog audio inputs enable stereo audio embedding via the optional AUD-BOB-1602 breakout box<sup>[1]</sup>
- > Enables device control via CEC
- > HDCP 2.2 compliant
- > Occupies a single DM switcher input blade slot

The DMB-4K-I-HD-DNT is an input blade designed for use with any blade-based Crestron® DigitalMedia™ Switcher. It provides eight independent HDMI® inputs with complementary analog audio inputs<sup>[1]</sup> and Dante™ audio networking. The HDMI inputs are each capable of handling Full HD 1080p, Ultra HD, 2K, and 4K video signals with support for HDCP 2.2, Deep Color, 3D, and high-bitrate 7.1 audio. Support for Dante audio networking allows for interfacing with other Dante enabled equipment over the local area network to send and receive streaming stereo audio on any or all input channels. The analog audio inputs are enabled using the optional Analog Audio Breakout Box, which provides support for balanced or unbalanced stereo line-level signals.

### 4K Ultra HD

All inputs on the DMB-4K-I-HD-DNT are capable of handling video resolutions up to 4K and Ultra HD. Support for 4K video also ensures support for the latest generation of computers and monitors with native resolutions beyond 1080p and WUXGA.

### Analog Audio Embedding

Each HDMI input on the DMB-4K-I-HD-DNT is accompanied by a balanced analog audio input, allowing stereo analog audio signals to be embedded with the digital video signal. The analog audio inputs are enabled using the optional Analog Audio Breakout Box (model [AUD-BOB-1602](#)).<sup>[1]</sup>

### Dante™ Audio Networking

Dante networking enables streamlined integration with Crestron Avia™ DSP products and other Dante enabled audio sources, processors, mixers, and switchers. Dante allows stereo audio input signals to be received over an Ethernet network and embedded with the video input signal from any of the blade's HDMI inputs. Send/return loop capability is also supported, allowing audio from any HDMI or analog input to be externally processed, mixed, or switched via Dante, and then re-embedded with the video signal within the DM switcher. The Dante network interface is provided via the DM switcher's LAN port, supporting up to 120 simultaneous stereo input and output signals.

### CEC Embedded Device Control

DigitalMedia offers an alternative to conventional RS-232 and IR display control by harnessing the CEC (Consumer Electronics Control) signal embedded in HDMI. Through its connection to a control system (via the DM switcher), the DMB-4K-I-HD-DNT provides a gateway for controlling display devices right through their HDMI connections, potentially eliminating the need for any dedicated control wires or IR emitters.

Please refer to the DigitalMedia Resources Webpage at <http://www.crestron.com/dmresources/> for additional design tools and reference documents.



# DMB-4K-I-HD-DNT 8-Channel 4K HDMI® & Dante™ Input Blade for DM® Switchers

## SPECIFICATIONS

### Video

**Input Signal Types:** HDMI w/Deep Color, 3D, & 4K (DVI & Dual-Mode DisplayPort compatible<sup>[2]</sup>)

**Maximum Resolutions:**

Scan Type	Resolution	Frame Rate	Color Sampling	Color Depth
Progressive	4096x2160 DCI 4K & 3840x2160 4K UHD	24 Hz	4:4:4	30 bit
		30 Hz	4:4:4	24 bit
		30 Hz	4:2:2	36 bit
		60 Hz	4:2:0	24 bit
	2560x1600 WQXGA	60 Hz	4:4:4	36 bit
	1920x1080 HD1080p	60 Hz	4:4:4	36 bit
Interlaced	1920x1080 HD1080i	30 Hz	4:4:4	36 bit

*NOTE: Common resolutions are shown; other custom resolutions are supported at pixel clock rates up to 300 MHz*

### Audio

**Input Signal Types:** HDMI (Dual-Mode DisplayPort compatible<sup>[2]</sup>), Dante™, analog stereo<sup>[1]</sup>

**Send Output Signal Types:** Dante

**Digital Formats, HDMI:** Dolby Digital®, Dolby Digital EX, Dolby Digital Plus, Dolby® TrueHD, Dolby Atmos®, DTS®, DTS-ES, DTS 96/24, DTS-HD High Res, DTS-HD Master Audio™, LPCM up to 8 channels

**Digital Formats, Dante:** Stereo 2-channel send/output and return/input per channel at up to 24-bit 48 kHz

**Analog Formats:** Stereo 2-channel<sup>[1]</sup>

**Analog-To-Digital Conversion:** 24-bit 48 kHz

**Analog Performance:** Frequency Response: 20 Hz to 20 kHz  $\pm 0.5$  dB;  
S/N Ratio: >95 dB, 20 Hz to 20 kHz A-weighted;  
THD+N: <0.005% @ 1 kHz;  
Stereo Separation: >80 dB

**Analog Input Compensation:**  $\pm 10$  dB

### Communications

**HDMI:** HDCP 2.2, EDID, CEC

**Dante:** Dante network interface provided via the host switcher's LAN port, limited to a maximum of up to 120 stereo audio channels per switcher

*NOTE: Supports management of HDCP and EDID; supports management of CEC between the connected HDMI devices and a control system*

### Connectors

**INPUT HD 1 – 8:** (8) 19-pin Type A HDMI female;

HDMI digital video/audio inputs;

Also support DVI and Dual-Mode DisplayPort<sup>[2]</sup>

**ANALOG AUDIO INSERT:** (1) 68-pin VHDCI female;

Connects to external analog audio breakout box, model AUD-BOB-1602<sup>[1]</sup>;

Input Impedance: 10k Ohms balanced/unbalanced;  
Maximum Input Level: 4 Vrms balanced, 2 Vrms unbalanced

### Indicators

**ACT:** (1) Green LED, indicates blade activity

**MSG:** (1) Red LED, indicates an error message has been generated

**INPUT HD 1 – 8:** (8) Bi-color red/green LEDs, indicate video lock and HDCP status for each corresponding input

### Construction

Plug-in blade, occupies (1) DM switcher input blade slot, includes metal faceplate w/black finish

### Weight

1.6 lb (726 g)

## MODELS & ACCESSORIES

### Available Models

**DMB-4K-I-HD-DNT:** 8-Channel 4K HDMI® & Dante™ Input Blade for DM® Switchers

### Available Accessories

**AUD-BOB-1602:** 16-Channel Analog Audio Breakout Box

**CBL Series:** Crestron® Certified Interface Cables

**MP-WP Series:** Media Presentation Wall Plates

**MPI-WP Series:** Media Presentation Wall Plates – International Version

Notes:

1. Analog audio input capability requires the optional Analog Audio Breakout Box, model [AUD-BOB-1602](#), sold separately.
2. HDMI requires an appropriate adapter or interface cable to accommodate a DVI or Dual-Mode DisplayPort signal. [CBL-HD-DVI](#) interface cables are available separately.

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at [www.crestron.com/salesreps](http://www.crestron.com/salesreps) or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: [patents.crestron.com](http://patents.crestron.com).

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