

8-Channel 4K HDMI® 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
- > Analog audio inputs enable stereo audio embedding via the optional AUD-BOB-1602 breakout box^[1]
- > Enables device control via CEC
- > HDCP 2.2 compliant^[2]
- > Occupies a single DM switcher input blade slot

The DMB-4K-I-HD 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.^[1] The HDMI inputs are each capable of handling Full HD 1080p, Ultra HD, 2K, and 4K video signals with support for HDCP 2.2^[2], Deep Color, 3D, and high-bitrate 7.1 audio. The analog audio inputs are enabled using the optional Analog Audio Breakout Box, which provides support for balanced or unbalanced stereo line-level signals.

Note: Older units with Crestron Material # 6506006 support HDCP 1.2 only. A hardware replacement using Material # 6507801 is required to enable support for HDCP 2.2.

4K Ultra HD

All inputs on the DMB-4K-I-HD 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 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).^[1]

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 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 8-Channel 4K HDMI® Input Blade for DM® Switchers

SPECIFICATIONS

Video

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

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^[3]), analog stereo^[1]

Digital Formats: 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

Analog Formats: Stereo 2-channel^[1]

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

Analog Performance:

Frequency Response: 20 Hz to 20 kHz ±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: ±10 dB

Communications

HDMI: HDCP 2.2^[2], EDID, CEC

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;
(DVI and Dual-Mode DisplayPort compatible^[3])

ANALOG AUDIO INSERT: (1) 68-pin VHDCI female;
Connects to external analog audio breakout box, model AUD-BOB-1602^[1];
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: 8-Channel 4K HDMI® 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. Older units with Crestron Material # 6506006 support HDCP 1.2 only. A hardware replacement using Material # 6507801 is required to enable support for HDCP 2.2.
3. 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 or by calling 800-237-2041.

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

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