

## HDMI® Input Card for DM® Switchers

The DMC-HD is an input card for a Crestron® DigitalMedia™ Switcher, providing one HDMI® input. The HDMI input supports HD 1080p60 video and WUXGA computer signals with HDCP, Deep Color, 3D, and multichannel HD lossless audio - all through a single HDMI cable. The HDMI input can also handle DVI and DisplayPort Multimode signals using an appropriate adapter or interface cable [1].

In addition to the HDMI input, the DMC-HD also includes HDMI and stereo analog audio outputs, and a USB HID device port. The HDMI output can be used to pass the input signal through to a local audio processor or video monitor, or to feed a second DM switcher for output expansion purposes. The analog audio output, which features programmable volume control, breaks out the stereo audio signal from the HDMI input and passes it through to feed a multi-room audio distribution system. [2]

NOTE: For applications requiring the simultaneous distribution of surround sound and 2-channel audio signals, use model DMC-HD-DSP.

The USB HID port connects to the source device (i.e. computer or media server) at the central equipment rack, allowing it to be controlled by a mouse or keyboard located in another room, or at a presentation lectern, conference table, or some other remote location.

The DMC-HD may also be used with the DMCI DigitalMedia Card Interface to create a very handy problem-solving tool with many useful functions. For instance, it can be used to extract an analog audio signal from an HDMI or DisplayPort Multimode stream. As part of a complete Crestron control system, it can be used to detect and manage EDID and input source format information, to enable CEC device control, to assess a device's HDCP capabilities, and to extend a USB HID mouse/keyboard signal over Ethernet.

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

#### **SPECIFICATIONS**

#### Video

Input Signal Types: HDMI®, DVI<sup>[1]</sup>, DisplayPort Multimode<sup>[1]</sup>
Output Signal Types: HDMI or DVI<sup>[1]</sup> to switcher backplane and HDMI OUT connector

Formats: HDMI w/Deep Color & 3D, DVI, HDCP content protection support Input Resolutions, Progressive: 640x480@60Hz, 720x480@60Hz (480p), 720x576@50Hz (576p), 800x600@60Hz, 848x480@60Hz, 852x480@60Hz, 854x480@60Hz, 1024x768@60Hz, 1024x852@60Hz, 1024x1024@60Hz, 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1280x768@60Hz, 1280x800@60Hz, 1280x960@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1365x1024@60Hz, 1366x768@60Hz, 1400x1050@60Hz, 1440x900@60Hz, 1600x900@60Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1080@24Hz (1080p24), 1920x1080@25Hz (1080p25), 1920x1080@50Hz (1080p50), 1920x1080@60Hz, 1080p60), 1920x1200@60Hz, 2048x1080@24Hz,



2048x1152@60Hz, plus any other resolution allowed by HDMI up to 165MHz pixel clock

Input Resolutions, Interlaced: 720x480@30Hz (480i), 720x576@25Hz (576i), 1920x1080@25Hz (1080i25), 1920x1080@30Hz (1080i30), plus any other resolution allowed by HDMI up to 165MHz pixel clock Output Resolutions: Matched to inputs

#### **Audio**

**Input Signal Types:** HDMI or DisplayPort Multimode<sup>[1]</sup> supporting HD lossless multi-channel up to 7.1

Output Signal Types: HDMI (multi-channel) to switcher backplane and HDMI OUT connector, analog stereo 2-channel $^{[2]}$ , allows audio breakaway

Formats: Dolby Digital®, Dolby Digital EX, Dolby Digital Plus, Dolby® TrueHD, DTS®, DTS-ES, DTS 96/24, DTS-HD High Res,

DTS-HD Master Audio<sup>™</sup>, Up to 8ch PCM Digital-To-Analog Conversion: 24-bit 48 kHz

Performance (analog): Frequency Response: 20Hz to 20kHz  $\pm 0.5$ dB;

S/N Ratio: >95dB, 20Hz to 20kHz A-weighted;

THD+N: <0.005% @ 1kHz; Stereo Separation: >90dB

Volume Gain Range (analog): -80dB to 0dB, adjustable from 0% to 100%

### **USB**

Protocols: Supports USB HID class devices

#### **Connectors**

**HDMI OUT:** (1) 19-pin Type A HDMI female; HDMI digital video/audio output;

Also supports DVI<sup>[1]</sup>

HDMI IN: (1) 19-pin Type A HDMI female;

HDMI digital video/audio input;

Also supports DVI and DisplayPort Multimode[1]

**USB HID:** (1) USB Type B female, USB device port for connection to the USB host interface of a computer or other USB HID-compliant host



# DMC-HD HDMI® Input Card for DM® Switchers

AUDIO OUT: (2) RCA female;

Unbalanced stereo line-level audio output with level control[2];

Maximum Output Level: 2 Vrms; Output Impedance: 100 Ohms nominal

#### Construction

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

## Weight

8.0 oz (227 g)

## **MODELS & ACCESSORIES**

#### **Available Models**

DMC-HD: HDMI® Input Card for DM® Switchers

#### Available Accessories

CBL Series: Crestron® Certified Interface Cables MP-WP Series: Media Presentation Wall Plates

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

**DMCI:** DigitalMedia<sup>™</sup> Card Interface

#### Notes:

- HDMI requires an appropriate adapter or interface cable to accommodate a DVI or DisplayPort Multimode signal. CBL-HD-DVI interface cables available separately.
- The analog stereo audio output is only active when the input source is outputting a 2-channel stereo signal. For applications using a multi-channel surround sound source, use model DMC-HD-DSP which provides simultaneous surround sound and stereo down-mix output signals.

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 <a href="https://www.crestron.com/salesreps">www.crestron.com/salesreps</a> or by calling 800-237-2041.

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