# **Crestron DMC-HD-DSP**

# <sup>≫crestron</sup> DigitalMedia<sup>™</sup>

# HDMI Input Card w/DSP for DM Switchers

The DMC-HD-DSP is an input card for a Crestron DigitalMedia<sup>™</sup> Switcher, providing one HDMI input. The DMC-HD-DSP supports HDMI 1.3a w/Deep Color and HDCP, handling 1080p60 HDTV and WUXGA computer resolutions, and multi-channel HD lossless audio - all through a single HDMI cable.

The DMC-HD-DSP provides all of the features of the DMC-HD with the addition of internal DSP processing to enable the simultaneous distribution of uncompressed 7.1 channel HD surround sound and 2-channel audio. The DMC-HD-DSP is recommended for use with Blu-ray Disc<sup>™</sup> players and other HD sources that output multi-channel surround sound audio via HDMI, allowing the multi-channel signal to reach the surround sound system without requiring any decoding, while also providing a 2-channel down-mix to feed a stereo zone or audio distribution system.

Additional connections on the card include an HDMI pass-thru output, a stereo analog audio pass-thru output, and a USB HID port. The HDMI output simply passes the input signal through to feed a local device, or to feed a second DM switcher for output expansion purposes. The analog audio output breaks out the stereo audio signal from the HDMI input and passes it through to feed a CNX-PAD8A, AAE, or other multi-room audio distribution system.

The USB HID port allows a remote mouse/keyboard or game controller, connected at the display location, to control a centralized source device (i.e. computer, game console, media server, etc.) at the equipment rack.

## SPECIFICATIONS

#### Video

### Signal Types: HDMI

Formats: HDMI v.1.3a w/Deep Color, DVI v.1.0, HDCP v.1.1 content protection support Resolutions: 640x480@60Hz, 720x480@60Hz (480p), 800x600@60Hz, 848x480@60Hz, 852x480@60Hz, 854x480@60Hz, 1024x768@60Hz, 1024x852@60Hz, 1024x1024@60Hz, 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@60Hz (1080p60), 1920x1200@60Hz, 2048x1080@24Hz, 2048x1152@60Hz, plus any other resolution allowed by HDMI v.1.3a

#### Audio

Signal Types: HDMI v.1.3a supporting HD lossless multi-channel up to 7.1, analog converted stereo pass-thru, 2-channel down-mix enabling simultaneous uncompressed multi-channel and stereo output signals

Formats: Dolby® TrueHD 7.1, Dolby Digital Plus 7.1, Dolby Digital AC3 5.1, Dolby Digital EX 5.1, DTS-HD Master Audio™ 7.1, DTS-HD High Res 7.1, DTS 5.1, DTS-ES Matrix 5.1, DTS-ES Discrete 6.1, DTS 96/24 5.1, 8ch PCM, 6ch PCM, 2ch PCM

Decoder: Cirrus Logic® CS49700 HD Audio Decoder DSP with dual 32-bit cores Digital-To-Analog Conversion: 24-bit 48 kHz

Performance (analog): Frequency Response: 20Hz to 20kHz ±0.5dB; S/N Ratio: >95dB, 20Hz to 20kHz A-weighted;

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



#### USB

Protocols: Supports USB HID class devices

#### Connectors

HDMI OUT: (1) 19-pin Type A HDMI female; HDMI digital video/audio output; Provides pass-thru signal from HDMI IN for system expansion

HDMI IN: (1) 19-pin Type A HDMI female; HDMI digital video/audio input

USB HID: (1) USB Type B female; USB 1.1 port for connection to source device's mouse, keyboard, or game controller input

AUDIO OUT L – R: (2) RCA female; Unbalanced stereo line-level audio output; Provides analog audio pass-thru signal converted from HDMI INPUT to feed multi-room audio distribution system; Maximum Output Level: 2 V<sub>MMS</sub>; Output Impedance: 100 ohms nominal

### Construction

Plug-in card, occupies (1) DM Switcher input card slot, includes steel faceplate w/black matte powder coat finish

#### Weight

8.0 oz (227 g)

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