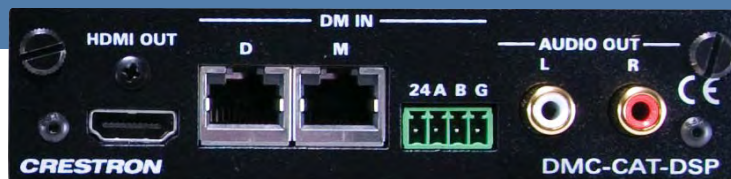


DM CAT Input Card with Down-mixing for DM switchers



The DMC-CAT-DSP is an input card for a Crestron DigitalMedia™ Switcher, providing one CAT-type DigitalMedia (DM) input. The DM CAT input enables the connection of a DM transmitter or the output of another DM switcher, with a potential cable length up to 450 feet (137 m) using DigitalMedia cable*.

The DMC-CAT-DSP provides all of the features of the DMC-CAT 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-CAT-DSP is recommended for use with Blu-ray Disc™ 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 both HDMI and stereo analog audio pass-thru outputs. 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, which features programmable volume control, 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 DMC-CAT-DSP may also be used with the DMCI DigitalMedia Card Interface to provide a DM CAT receiver solution that's perfect for installation in an equipment rack or AV cart, or as a portable display interface. As a DM receiver, and as a DM switcher input card, the DMC-CAT-DSP enables EDID signal detection and format management, CEC device control, and audio breakaway.

SPECIFICATIONS

Video

Input Signal Types: DM CAT (DigitalMedia over twisted-pair copper wire)
Output Signal Types: HDMI and DVI† to switcher backplane and HDMI OUT connector
Formats: HDMI v.1.3a w/Deep Color, DVI v.1.0, HDCP v.1.2 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 v.1.3a
Input Resolutions, Interlaced: 720x480@30Hz (480i), 720x576@25Hz (576i), 1920x1080@25Hz (1080i25), 1920x1080@30Hz (1080i30), plus any other resolution allowed by HDMI v.1.3a
Output Resolutions: Matched to inputs

Audio

Input Signal Types: DM CAT
Output Signal Types: HDMI (simultaneous multi-channel and 2-channel down-mix) to switcher backplane, HDMI (multi-channel or 2-channel down-mix) at HDMI OUT, analog stereo 2-channel, allows audio breakaway
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

Connectors

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

DIGITAL MEDIA: (1) DM CAT input composed of (2) 8-pin RJ45 female;
 Connect to DM CAT output of a DM transmitter or other DM device via DM-CBL or CresCAT-D cable*

NET: (1) 4-pin 3.5mm detachable terminal block, DMNet port;
 Connects to DMNet port of a DM transmitter or other DM device via DM-CBL or CresCAT-D cable*

AUDIO OUT: (2) RCA female;
 Unbalanced stereo line-level audio output with level control;
 Maximum Output Level: 2 V_{rms};
 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

AVAILABLE ACCESSORIES

DM-CBL

DigitalMedia™ Cable

DM-CONN

DigitalMedia™ Cable Connector

CBL-HD

HDMI™ Interface Cable

CBL-HD-DVI

HDMI™ to DVI Interface Cable

CBL-RCA2

RCA Stereo Audio Interface Cable

MP-WP152

Media Presentation Wall Plates – HDMI™

MP-WP140

Media Presentation Wall Plates – DVI w/Mini-TRS Stereo Audio

MP-WP185

Media Presentation Wall Plate - Crestron DigitalMedia™ CAT w/DMNet

DMCI

DigitalMedia Card Interface

* For DigitalMedia CAT wiring, use DM-CBL DigitalMedia Cable, CresCAT-D, or quality CAT5e/CAT6 cable. Do NOT use low-skew cable. The maximum allowable cable length depends on multiple factors. One or more DM Repeaters (Model DM-DR) may be required. Refer to the Crestron DigitalMedia Design Guide, Doc. #4789 for complete wiring guidelines.

† HDMI requires an appropriate adapter or interface cable to accommodate a DVI signal. CBL-HD-DVI interface cables available separately.