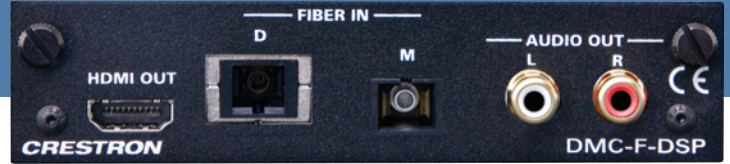


## DM Fiber Input Card with Down-mixing for DM Switchers



The DMC-F-DSP is an input card for a Crestron DigitalMedia™ Switcher, providing one optical fiber type DigitalMedia (DM) input. The DM Fiber input enables the connection of a DM transmitter, or the output of another DM switcher, with a potential cable length up to 1000 feet (300 m) using multimode fiber optic cable\*.

The DMC-F-DSP provides all of the features of the DMC-F 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-F-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-F-DSP may also be used with the DMCI DigitalMedia Card Interface to provide a DM Fiber 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-F-DSP enables EDID signal detection and format management, CEC device control, and audio breakaway.

### SPECIFICATIONS

#### Video

**Input Signal Types:** DM Fiber (DigitalMedia over multimode fiber optic cable)  
**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 Fiber  
**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\*

**FIBER IN:** (1) DM Fiber input composed of (2) SC female optical fiber connectors;  
 Connects to DM fiber output of a DM switcher, transmitter, or other DM device via CresFiber fiber optic cable\*

**AUDIO OUT:** (2) RCA female;  
 Unbalanced stereo line-level audio output with level control;  
 Maximum Output Level: 2 V<sub>RMS</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

### AVAILABLE ACCESSORIES

#### CRESFIBER

CresFiber™ Fiber Optic Cable

#### CRESFIBER-CONN-SC50UM

CresFiber™ Fiber Optic Cable Connector

#### CRESFIBER-DUAL-SC

CresFiber™ Duplex Fiber Optic Cable Assembly, 50/125, SC

#### 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-WP186

Media Presentation Wall Plate - Crestron DigitalMedia™ Fiber

#### DMCI

DigitalMedia Card Interface

\* For DigitalMedia fiber wiring, use CresFiber or other quality duplex multimode fiber optic cable. 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.



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