DMC-S-DSP

DigitalMedia 8G™ Fiber Input Card w/Down-mixing for DM® Switchers

The DMC-S-DSP is an input card for a Crestron® DigitalMedia™ Switcher, providing one DM 8G® Fiber input. The DM 8G Fiber input enables the connection of a DM 8G Fiber Transmitter, or the output of another DM® switcher. Just one multimode fiber optic strand is required, supporting distances up to 1000 feet (300 m) using CresFiber® 8G Multimode Fiber Optic Cable.[1]

The DMC-S-DSP provides all of the features of the DMC-S with the addition of internal surround sound down-mixing to enable the simultaneous distribution of uncompressed 7.1 surround sound and 2-channel down-mix signals. The DMC-S-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.

In addition to the DM 8G Fiber input, the DMC-S-DSP also includes HDMI® and stereo analog audio outputs. 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 DM 8G Fiber input and passes it through to feed a multi-room audio distribution system.

The DMC-S-DSP may also be used with the DMCI DigitalMedia Card Interface to provide a DM 8G Fiber receiver solution that's perfect for installation in an equipment rack or AV cart, or as a portable display interface. As a DM 8G Fiber receiver, and as a DM switcher input card, the DMC-S-DSP enables EDID signal detection and format management, CEC device control, and audio breakaway.

Please refer to the DigitalMedia Resources Webpage at http://www.crestron.com/dmresources/ for additional design tools and reference documents.

SPECIFICATIONS

Video

Input Signal Types: DM 8G® Fiber (DigitalMedia™ over one multimode fiber optic strand)[1]
Output Signal Types: HDMI® or DVI[2] 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: DM 8G Fiber
Output Signal Types: HDMI (simultaneous multi-channel and 2-channel down-mix) to switcher backplane, HDMI (multi-channel pass-thru from input) at HDMI OUT, analog stereo 2-channel, 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™, Up to 8ch 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
Volume Gain Range (analog): -80dB to 0dB

Connectors

HDMI OUT: (1) 19-pin Type A HDMI female;
HDMI digital video/audio output;
Also supports DVI[2]

DM IN MMF/SC: (1) SC female optical fiber connector;
DM 8G Fiber input;
Connects to the DM 8G Fiber output of a DM transmitter or other DM device via CRESFIBER8G multimode fiber optic cable[1]

AUDIO OUT: (2) RCA female;
Unbalanced stereo line-level audio output with level control;
Maximum Output Level: 2 Vrms;
Output Impedance: 100 Ohms nominal

DMC-S-DSP DigitalMedia 8G™ Fiber Input Card w/Down-mixing for DM® Switchers

Indicators

DM IN MMF/SC: (1) green LED, indicates DM link status

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-S-DSP: DigitalMedia 8G™ Fiber Input Card w/Down-mixing for DM® Switchers

Available Accessories

CRESFIBER8G-NP: CresFiber® 8G Multimode Fiber Optic Cable, 50/125 x4 breakout, non-plenum
CRESFIBER8G-P: CresFiber® 8G Multimode Fiber Optic Cable, 50/125 x4 breakout, plenum
CRESFIBER-CONN-SC50UM-12: CresFiber® Fiber Optic Cable Connector (AFL Telecommunications™), SC 50µm, 12-Pack
CRESFIBER-TK: CresFiber® Termination Kit (AFL Telecommunications™)
CRESFIBER-SINGLE-SC-P: CresFiber® Simplex Fiber Optic Cable Assembly, 50/125, SC, Plenum
CRESFIBER-SINGLE-SC-ARMORED-P: CresFiber® ARMORED Simplex Fiber Optic Cable Assembly, 50/125, SC, Armored, Plenum
CRESFIBER-SINGLE-SC-CLEAR-NP: CresFiber® CLEAR Simplex Fiber Optic Cable Assembly, 50/125, SC, Non-Plenum
CBL Series: Crestron® Certified Interface Cables
MP-WP Series: Media Presentation Wall Plates
MPI-WP Series: Media Presentation Wall Plates - International Version
DMCI: DigitalMedia™ Card Interface

Notes:

1. The maximum DigitalMedia 8G Fiber cable length is 1000 ft (300 m) using CRESFIBER8G fiber optic cable, or 500 ft (150 m) using standard CRESFIBER, CRESFIBER-SINGLE-SC, or generic OM3 simplex multimode fiber optic cable. Refer to the Crestron DigitalMedia Design Guide, Doc. #4546 for complete system design guidelines. All wire and cables sold separately.
2. HDMI requires an appropriate adapter or interface cable to accommodate a DVI signal. CBL-HD-DVI interface cables 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.

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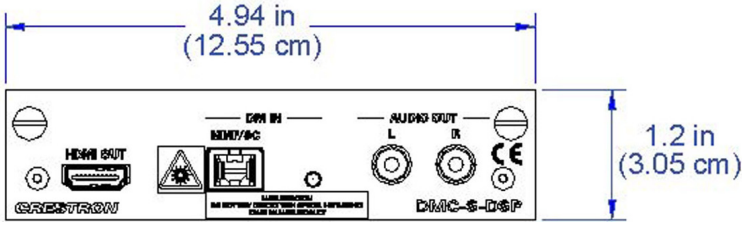
The specific patents that cover Crestron products are listed online at: patents.crestron.com.



Crestron Electronics, Inc. 15 Volvo Drive | Rockleigh, NJ 07647
Tel: 800.237.2041 / 201.767.3400 | Fax: 201.767.1903
www.crestron.com

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