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 simplex fiber optic cable is required, supporting distances up to 1000 feet (300 m) using CresFiber® 8G 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.

Additional AV connections on the card include HDMI™ and stereo analog audio 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 DM input and passes it through to feed a Sonnex™, Adagio®, or other 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 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.

SPECIFICATIONS

Video

Input Signal Types: DM 8G™ Fiber (DigitalMedia™ over simplex multimode fiber optic cable)
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 or 2-channel down-mix) at

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 DM 8G Fiber output of a DM transmitter or other DM device via CresFiber 8G 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

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)

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

Available Accessories

CRESTRON

CRESFIBER8G-NP-SP500: CresFiber® 8G Multimode Fiber Optic Cable, 50/125 x4 breakout, non-plenum, 500 ft spool
CRESFIBER8G-NP-SP1000: CresFiber® 8G Multimode Fiber Optic Cable, 50/125 x4 breakout, non-plenum, 1000 ft spool
CRESFIBER8G-P-SP500: CresFiber® 8G Multimode Fiber Optic Cable, 50/125 x4 breakout, plenum, 500 ft spool
CRESFIBER8G-P-SP1000: CresFiber® 8G Multimode Fiber Optic Cable, 50/125 x4 breakout, plenum, 1000 ft spool
CRESFIBER-CONN-SC50UM-12: CresFiber® Fiber Optic Cable Connector (AFL Telecommunications™), SC 50µm, 12-Pack
CRESFIBER-SINGLE-SC-P-1.5: CresFiber® Simplex Fiber Optic Cable Assembly, 50/125, SC, Plenum, 1.5 ft
CRESFIBER-SINGLE-SC-P-3: CresFiber® Simplex Fiber Optic Cable Assembly, 50/125, SC, Plenum, 3 ft
CRESFIBER-SINGLE-SC-P-6: CresFiber® Simplex Fiber Optic Cable Assembly, 50/125, SC, Plenum, 6 ft
CRESFIBER-SINGLE-SC-P-12: CresFiber® Simplex Fiber Optic Cable Assembly, 50/125, SC, Plenum, 12 ft
CRESFIBER-SINGLE-SC-P-20: CresFiber® Simplex Fiber Optic Cable Assembly, 50/125, SC, Plenum, 20 ft
CRESFIBER-SINGLE-SC-P-30: CresFiber® Simplex Fiber Optic Cable Assembly, 50/125, SC, Plenum, 30 ft
CRESFIBER-SINGLE-SC-ARMORED-P-60: CresFiber® ARMORED Simplex Fiber Optic Cable Assembly, 50/125, SC, Armored, Plenum, 60 ft
CRESFIBER-SINGLE-SC-ARMORED-P-100: CresFiber® ARMORED Simplex Fiber Optic Cable Assembly, 50/125, SC, Armored, Plenum, 100 ft
CRESFIBER-SINGLE-SC-ARMORED-P-200: CresFiber® ARMORED Simplex Fiber Optic Cable Assembly, 50/125, SC, Armored, Plenum, 200 ft
CRESFIBER-SINGLE-SC-ARMORED-P-300: CresFiber® ARMORED Simplex Fiber Optic Cable Assembly, 50/125, SC, Armored, Plenum, 300 ft
CRESFIBER-SINGLE-SC-CLEAR-NP-30: CresFiber® CLEAR Simplex Fiber Optic Cable Assembly, 50/125, SC, Non-Plenum, 30 ft
CRESFIBER-SINGLE-SC-CLEAR-NP-60: CresFiber® CLEAR Simplex Fiber Optic Cable Assembly, 50/125, SC, Non-Plenum, 60 ft
CRESFIBER-SINGLE-SC-CLEAR-NP-100: CresFiber® CLEAR Simplex Fiber Optic Cable Assembly, 50/125, SC, Non-Plenum, 100 ft
CBL-HD-1.5: Crestron® Certified HDMI® Interface Cable, 1.5 ft
CBL-HD-3: Crestron® Certified HDMI® Interface Cable, 3 ft
CBL-HD-6: Crestron® Certified HDMI® Interface Cable, 6 ft
CBL-HD-12: Crestron® Certified HDMI® Interface Cable, 12 ft
CBL-HD-20: Crestron® Certified HDMI® Interface Cable, 20 ft
CBL-HD-30: Crestron® Certified HDMI® Interface Cable, 30 ft
CBL-HD-DVI-1.5: Crestron® Certified HDMI® to DVI Interface Cable, 1.5 ft
CBL-HD-DVI-3: Crestron® Certified HDMI® to DVI Interface Cable, 3 ft
CBL-HD-DVI-6: Crestron® Certified HDMI® to DVI Interface Cable, 6 ft
CBL-HD-DVI-12: Crestron® Certified HDMI® to DVI Interface Cable, 12 ft
CBL-HD-DVI-20: Crestron® Certified HDMI® to DVI Interface Cable, 20 ft
CBL-HD-DVI-30: Crestron® Certified HDMI® to DVI Interface Cable, 30 ft
CBL-RCA2-1.5: Crestron® Certified RCA Stereo Audio Interface Cable, 1.5 ft
CBL-RCA2-3: Crestron® Certified RCA Stereo Audio Interface Cable, 3 ft
CBL-RCA2-6: Crestron® Certified RCA Stereo Audio Interface Cable, 6 ft
CBL-RCA2-12: Crestron® Certified RCA Stereo Audio Interface Cable, 12 ft
MP-WP152-B: Media Presentation Wall Plate - HDMI®, Black
MP-WP152-W: Media Presentation Wall Plate - HDMI®, White
MP-WP140-B: Media Presentation Wall Plate - DVI-I w/Mini-TRS Stereo Audio, Black
MP-WP140-W: Media Presentation Wall Plate - DVI-I w/Mini-TRS Stereo Audio, White
DMCI: DigitalMedia™ Card Interface

Notes:
1. All cable sold separately. 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

Crestron Electronics, Inc. 15 Volvo Drive | Rockleigh, NJ 07647
Tel: 800.237.2041 / 201.767.3400 | Fax: 201.767.1905
www.crestron.com

CRESTRON®

9.07 in
(23.03 cm)

9.34 in
(23.72 cm)

4.94 in
(12.55 cm)

1.2 in
(3.05 cm)

HDMI OUT

DM IN
HDMI/DC

AUDIO OUT
L   R

CRESTRON

DMC-S-DSP