

# Streaming Input Card for DM<sup>®</sup> Switchers

- > Modular input card for a DM-MD8X8, DM-MD16X16, or DM-MD32X32 switcher
- > Provides a single streaming input
- > Converts the incoming stream to HDMI<sup>®</sup> for distribution via DigitalMedia<sup>™</sup>
- > Allows high-definition AV signal distribution over IP with no distance limitations
- > Supports streaming at resolutions up to 1080p30 and bitrates up to 25 Mbps
- > Employs high-quality H.264 video and AAC audio decoding
- > Includes a stereo analog line-level audio output with volume control
- > Allows extraction of stereo 2-channel audio signals
- > Includes an HDMI<sup>®</sup> output for pass-through of the decoded signal
- > Supports streaming via the Control LAN or a dedicated Content LAN
- > Occupies a single DM switcher input card slot
- > Provides a streaming receiver solution using the optional DMCI card interface <sup>[1]</sup>

The DMC-STR is an input card designed for use with any card-based Crestron<sup>®</sup> DigitalMedia<sup>™</sup> Switcher. It provides one streaming input, with associated HDMI<sup>®</sup> and analog audio outputs. The streaming input receives a single H.264 video stream over an IP network from another DM<sup>®</sup> switcher, an IP camera, or a streaming server (Crestron [CEN-NVS200](#) or similar<sup>[1]</sup>).

## H.264 Streaming

High-performance H.264 streaming capability enables enterprise-wide distribution of HD content over an IP network. Streaming expands the capabilities of a DM system to allow high-definition AV signal routing from sources anywhere in the world. Streaming removes all distance limitations and utilizes existing infrastructure to enable signal distribution for applications where dedicated wiring cannot be installed.

The DMC-STR supports streaming at resolutions up to HD 1080p, with bitrates up to 25 Mbps. The stream is decoded and converted to HDMI<sup>®</sup> to allow for switching and distribution via DigitalMedia. The streaming input can be configured to receive streaming signals via its dedicated “CONTENT LAN” port, or via the DM switcher’s LAN port, allowing the option to isolate control and content onto separate networks or combine them on a single network.

## AAC Audio

High-quality AAC audio decoding provides support for streaming sources with 2-channel stereo audio. The audio stream is converted to linear PCM for distribution via the DM system.



## Audio Extracting

The DMC-STR includes an unbalanced analog audio output, allowing stereo audio signals to be extracted from the streaming input and fed to a multiroom audio distribution system. The output volume is adjustable via a control system using a keypad, touch screen, handheld remote, or mobile device.

## HDMI<sup>®</sup> Pass-Through

Every DM switcher input card includes an HDMI output port, which 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.

## Standalone Streaming Receiver

In addition to its use as an input card for DM switchers, the DMC-STR may also be used with the [DMCI DigitalMedia Card Interface<sup>\[1\]</sup>](#), allowing it to function as a streaming receiver for a single display device, AV receiver, or other equipment.

To configure a DM switcher complete with input and output cards, cables, and other peripherals, please use the [DigitalMedia<sup>™</sup> Switcher Configuration Tool](#).

Please refer to the [DigitalMedia Resources Webpage at <http://www.crestron.com/dmresources/>](#) for additional design tools and reference documents.

# DMC-STR Streaming Input Card for DM<sup>®</sup> Switchers

## SPECIFICATIONS

### Streaming

**Video Format:** H.264 (MPEG-4 part 10 AVC)

**Audio Format:** AAC stereo

**Bitrates:** Up to 25 Mbps

**H.264 Profiles:** Constrained Baseline Profile (CBP), Baseline Profile (BP), Main Profile (MP), High Profile (HiP)

**Streaming Protocols:** RTP, RTSP, SDP

**Container:** MPEG-2 transport stream (.ts) or none

### Video

**Streaming Input Resolutions:** up to 1080p30

**Output Signal Types:** HDMI<sup>®</sup> or DVI<sup>[2]</sup> to switcher backplane and HDMI OUT connector

**Output Resolutions:** 640x480@60Hz, 800x600@60Hz, 1024x768@60Hz<sup>[3]</sup>, 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1280x800@60Hz<sup>[3]</sup>, 1366x768@60Hz<sup>[3]</sup>, 1440x900@60Hz<sup>[3]</sup>, 1600x900@60Hz<sup>[4]</sup>, 1600x1200@60Hz, 1680x1050@60Hz<sup>[3]</sup>, 1920x1080@50Hz (1080p50), 1920x1080@60Hz (1080p60), 1920x1200@60Hz<sup>[4]</sup>

### Audio

**Output Signal Types:** HDMI (stereo) to switcher backplane and HDMI OUT connector, analog stereo 2-channel, allows audio breakaway

**Digital Format:** 2-channel PCM

**Analog Format:** Stereo 2-channel

**Digital-To-Analog Conversion:** 24-bit 48 kHz

**Performance (analog):** Frequency Response: 20Hz to 20kHz  $\pm 0.5$ dB;  
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<sup>[2]</sup>

**CONTENT LAN:** (1) 8-wire RJ45 female;

10Base-T/100Base-TX Ethernet port;

Provides a dedicated LAN connection for streaming only, used in lieu of streaming via the main LAN port of the host switcher or DMCI

**AUDIO OUT:** (2) RCA female;

Unbalanced stereo line-level audio output;

Output Impedance: 100 Ohms nominal;

Maximum Output Level: 2 Vrms

### Indicators

**CONTENT LAN:** (2) LEDs, left green LED indicates Ethernet link status, right amber LED indicates Ethernet activity

### 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-STR:** Streaming Input Card for DM<sup>®</sup> Switchers

### Available Accessories

**DMCI:** DigitalMedia™ Card Interface

**CBL Series:** Crestron® Certified Interface Cables

Notes:

1. Item(s) sold separately.
2. DVI is supported via the HDMI output using a suitable adapter or interface cable. [CBL-HD-DVI](#) interface cables are available separately.
3. With or without reduced blanking.
4. With reduced blanking only.

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](http://www.crestron.com/salesreps) or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: [patents.crestron.com](http://patents.crestron.com).

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