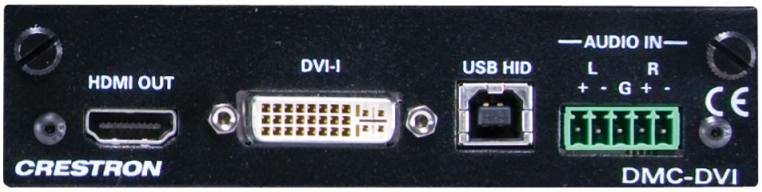
DMC-DVI

DVI/VGA Input Card for DM® Switchers

- *Modular input card for a DM-MD8X8, DM-MD16X16, or DM-MD32X32 switcher*
- *Provides a single DVI-I input with balanced stereo analog audio*
- *Accommodates DVI, VGA, RGB, and component video sources [1]*
- *Handles computer resolutions up to WUXGA*
- *Handles video resolutions up to Full HD 1080p*
- *HDCP 1.2 compliant*
- *Enables embedding of analog audio with digital video*
- *Includes an HDMI® output for pass-through of the input signal*
- *Enables USB HID signal extension for a local computer*
- *Compatible with Crestron USB over Ethernet Extenders [2]*
- *Occupies a single DM® switcher input card slot*
- *Provides a DVI or VGA to HDMI convertor using the optional DMCI card interface [3]*



The DMC-DVI is an input card designed for use with any card-based Crestron® DigitalMedia™ Switcher. It provides one DVI-I type input, with a complementary analog stereo audio input and HDMI® pass-through output. A USB HID port is also provided. The DVI-I input allows for the connection of a single-link DVI digital video source or an analog VGA, RGB, or component video source.[1] It handles computer resolutions up to WUXGA 1920x1200, as well as HD video up to 1080p60. Analog video signals are converted to digital using high-quality 30 bit sampling.

Audio Embedding

Via its balanced analog audio input, the DMC-DVI allows a stereo line-level signal to be converted to 24-bit digital and combined with the digital video signal for distribution over the DigitalMedia network.

HDMI® Pass-Through

Every DM® switcher input card includes an HDMI output port, which can be used to pass the audio and video input signals through to a local audio processor or video monitor, or to feed a second DM switcher for output expansion purposes.

USB Signal Extension

Built-in USB HID signal routing allows a connected computer (or other USB HID-compliant host) to be controlled by a mouse and/or keyboard located at a presentation lectern, conference table, or some other remote location. Additional USB devices of virtually any type can be supported using Crestron USB over Ethernet Extenders (USB-EXT-DM) [2].

Standalone DVI/VGA to HDMI Converter

In addition to its use as an input card for DM switchers, the DMC-DVI may also be used with the DMCI DigitalMedia Card Interface [3] to provide a handy problem-solving tool with many useful functions. It can be used to merge DVI digital video and analog stereo audio into a single HDMI output, and to extend a USB HID mouse/keyboard signal over Ethernet. It can also be used to detect a deviceís video information, manage its EDID, and assess its HDCP capabilities.

Digital Upgrade for Legacy Systems

Whether installed in a DM switcher or DMCI, the DMC-DVI card affords a digital upgrade for analog-based systems like Crestron MPS and QuickMedia®. A simple HD15 VGA cable and balanced stereo audio cable connected between the output of an MPS system and the input of the DMC-DVI allows every RGB, component, S-Video, composite video, and audio input on the MPS to be converted to HDMI and DigitalMedia.[1]

To configure a DM switcher complete with input and output cards, cables, and other peripherals, please use the online DigitalMedia Switcher Configuration Tool.

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: DVI, VGA, RGB (RGBHV, RGBS, RGsB), component (YPbPr), S-Video (Y/C), composite (NTSC, PAL) [1]

Output Signal Types: HDMI® (DVI compatible [4])

Input Resolutions, DVI, 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 Single-link DVI up to 165MHz pixel clock

DMC-DVI DVI/VGA Input Card for DM® Switchers

Input Resolutions, DVI, Interlaced: 720x480@30Hz (480i), 720x576@25Hz (576i), 1920x1080@25Hz (1080i25), 1920x1080@30Hz (1080i30), plus any other resolution allowed by Single-link DVI up to 165MHz pixel clock

Input Resolutions, VGA/RGB [1]**:** 640x480@60Hz, 720x480@60Hz (480p), 720x576@50Hz (576p), 800x600@60Hz, 848x480@60Hz, 1024x768@60Hz, 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1280x768@60Hz, 1280x800@60Hz, 1280x960@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1366x768@60Hz, 1400x1050@60Hz, 1440x900@60Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1080@24Hz (1080p24), 1920x1080@50Hz (1080p50), 1920x1080@60Hz (1080p60), 1920x1200@60Hz, 2048x1080@24Hz, 2048x1152@60Hz

Input Resolutions, Component [1]**:** 480i, 576i, 480p, 576p, 720p50, 720p60, 1080i25 (1125 lines), 1080i30, 1080p30, 1080p50 (1125 lines), 1080p60

Input Resolutions, Composite & S-Video [1]**:** 480i, 576i

Output Resolutions: Matched to input

Analog-To-Digital Conversion: 10-bit 170 MHz per each of 3 channels

Audio

Input Signal Types: Analog stereo

Output Signal Types: HDMI (pass-through from input)

Formats: Stereo 2-channel

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

Input Level Compensation: ±10 dB

Analog Performance: Frequency Response: 20Hz to 20kHz ±0.75dB;
S/N Ratio: >95dB, 20Hz to 20kHz A-weighted;
THD+N: <0.005% @ 1kHz;
Stereo Separation: >90dB

Communications

USB: Supports signal extension of USB HID class devices, expandable to support virtually any USB 1.1 or 2.0 device using Crestron USB-EXT-DM USB over Ethernet Extenders [2]

DVI: HDCP 1.2, EDID

VGA: EDID

HDMI: HDCP 1.2, EDID, CEC

NOTE: Supports management of HDCP and EDID; supports management of CEC between the connected HDMI device and a control system

Connectors

HDMI OUT: (1) 19-pin Type A HDMI female;
HDMI digital video/audio output;
Also supports DVI [4]

DVI-I IN: DVI-I female (or HD15 female via adapter included);
DVI (single-link), VGA/RGB, component, S-Video, or composite video input [1];
Analog Formats: RGBHV, RGBS, RGsB, YPbPr, Y/C, NTSC, PAL;
Analog Input Levels: 0.5 to 1.5 Vp-p with built-in DC restoration;
Analog Input Impedance: 75 Ohms;
Analog Sync Input Type: Autodetect RGBHV, RGBS, RGsB, YPbPr;
Analog Sync Input Level: 3 to 5 Vp-p;
Analog Sync Input Impedance: 1k Ohms

USB HID: (1) USB Type B female; USB device port for connection to a computer or other USB HID-compliant host

AUDIO IN: (1) 5-pin 3.5mm detachable terminal block;
Balanced/unbalanced stereo line-level audio input;
Input Impedance: 24k Ohms balanced/unbalanced;
Balanced Input Level: 4 Vrms maximum;
Unbalanced Input Level: 2 Vrms maximum

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-DVI: DVI/VGA Input Card for DM® Switchers

Available Accessories

CBL Series: Crestron® Certified Interface Cables
MP-WP Series: Media Presentation Wall Plates
MPI-WP Series: Media Presentation Wall Plates - International Version
USB-EXT-DM: USB over Ethernet Extender with Routing
DMCI: DigitalMedia™ Card Interface

Notes:

1. A VGA to DVI-A adapter is included. In addition to VGA and RGB, the VGA input can also accept component, composite, and S-Video signals using an appropriate adapter (not included). However, input sync detection is not provided for composite or S-Video signal types.
2. USB-EXT-DM USB over Ethernet Extender Modules are sold separately. Refer to the USB-EXT-DM spec sheet for more information.
3. Item(s) sold separately.
4. HDMI requires an appropriate adapter or interface cable to accommodate a DVI signal. CBL-HD-DVI interface cables are 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.

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

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

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