DMC-DVI

DVI/RGB Input Card for DigitalMedia™ Switchers

The DMC-DVI is an input card for a Crestron® DigitalMedia™ Switcher, providing one DVI digital video input or analog RGB/Component input^[1], plus stereo analog audio. The DMC-DVI handles computer resolutions up to WUXGA 1920 x 1200, as well as HDTV up to 1080p60. Professional balanced/unbalanced audio inputs are included to accept a stereo line level audio signal, which is converted to digital and embed along with the digital video to create a new HDMI™ stream for distribution via DigitalMedia.

Additional connections on the card include an HDMI output and a USB HID device port. The HDMI output simply passes the audio and video input signals through to feed a local device, or to feed a second DM switcher for output expansion purposes. The USB HID port connects to the source device (i.e. computer or media server) at the central equipment rack, allowing it to be controlled by a mouse or keyboard located in another room, or at a presentation lectern, conference table, or some other remote location.

The DMC-DVI may also be used with the DMCI DigitalMedia Card Interface to create a very handy problem-solving tool with many useful functions. For instance, it can be used to merge DVI digital video and analog stereo audio into a single HDMI output. As part of a complete Crestron control system, it can be used to detect and manage EDID and input source format information, to assess a device's HDCP capabilities, and to extend a USB HID mouse/keyboard signal over Ethernet.

Whether installed in a DM switcher or DMCI, the DMC-DVI card affords a perfect digital upgrade for analog-based systems like Crestron MPS, QuickMedia®, and the CEN-RGBHV Series. 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 DigitalMedia^[3].

SPECIFICATIONS

Video

Input Signal Types: DVI, RGB, component (YPbPr)^[1], S-Video (Y/C)^[1], composite^[1] **Output Signal Types:** HDMITM or DVI^[2] to switcher backplane and HDMI OUT connector

Formats: DVI, HDCP v.1.2 content protection support, RGBHV up to UXGA/WUXGA, HDTV up to 1080p60, NTSC or PAL

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, 100x1200@60Hz, 2048x1080@24Hz, 2048x1152@60Hz, plus any other resolution allowed by Single-link DVI up to 165MHz pixel clock

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, 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, 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 and S-Video[1]: 480i, 576i

Output Resolutions: Matched to inputs

Analog-To-Digital Conversion: 10-bit 170 MHz

Audio

Input Signal Types: Analog stereo

Output Signal Types: HDMI to switcher backplane and HDMI OUT connector

Formats: Stereo 2-channel

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

Performance (analog): Frequency Response: 20Hz to 20kHz ±0.75dB;

S/N Ratio: >95dB, 20Hz to 20kHz A-weighted;

THD+N: <0.005% @ 1kHz; Stereo Separation: >90dB

I ISB

Protocols: Supports USB HID class devices

Connectors

HDMI OUT: (1) 19-pin Type A HDMI female;

HDMI digital video/audio output;

Also supports DVI[2]

DVI-I IN: DVI-I female (or DB15HD female via adapter included)

DVI, RGB (VGA), or component (YPbPr) video input[1];

Analog Formats: RGBHV, RGBS, RGsB, YPbPr;

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 1.1 device port for connection to the USB host interface of a computer or other USB HID-compliant host device



DMC-DVI

AUDIO IN: (1) 5-pin 3.5mm detachable terminal block;

Balanced/unbalanced stereo line-level 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)

Available Models

DMC-DVI: DVI/RGB Input Card for DM Switchers

Available Accessories

CBL-DVI-1.5: Crestron® Certified DVI-D Interface Cable, 1.5 ft

CBL-DVI-3: Crestron® Certified DVI-D Interface Cable, 3 ft

CBL-DVI-6: Crestron® Certified DVI-D Interface Cable, 6 ft

CBL-DVI-12: Crestron® Certified DVI-D Interface Cable, 12 ft

CBL-DVI-20: Crestron® Certified DVI-D Interface Cable, 20 ft

CBL-DVI-30: Crestron® Certified DVI-D Interface Cable, 30 ft

CBL-VGA-1.5: Crestron® Certified Computer VGA Interface Cable, 1.5 ft

CBL-VGA-3: Crestron® Certified Computer VGA Interface Cable, 3 ft

CBL-VGA-6: Crestron® Certified Computer VGA Interface Cable, 6 ft

CBL-VGA-12: Crestron® Certified Computer VGA Interface Cable, 12 ft

CBL-VGA-25: Crestron® Certified Computer VGA Interface Cable, 25 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 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

MP-WP130-B: Media Presentation Wall Plate - DB15HD Computer VGA w/ Mini-TRS Stereo Audio, Bulkhead, Black

MP-WP130-W: Media Presentation Wall Plate - DB15HD Computer VGA w/ Mini-TRS Stereo Audio, Bulkhead, White

MP-WP131-B: Media Presentation Wall Plate - DB15HD Computer VGA w/ Mini-TRS Stereo Audio, Breakout, Black

MP-WP131-W: Media Presentation Wall Plate - DB15HD Computer VGA w/ Mini-TRS Stereo Audio, Breakout, White

MP-WP152-B: Media Presentation Wall Plate - HDMI®, Black

MP-WP152-W: Media Presentation Wall Plate - HDMI®, White

MP-WP150-B: Media Presentation Wall Plate - HDMI® w/Mini-TRS Stereo Audio, Black

MP-WP150-W: Media Presentation Wall Plate - HDMI® w/Mini-TRS Stereo Audio, White

DMCI: DigitalMedia™ Card Interface

1. RGB to DVI-I adapter included. In addition to RGB, the DVI-I input can accept component, composite, and S-Video signals via direct interface to Crestron MPS Series products, or through an appropriate adapter (not



