VGA/Video Input Card for DM® Switchers

The DMC-VGA is an input card for a Crestron[®] DigitalMedia[™] Switcher, providing one analog RGB video input^[1] with stereo analog audio. The DMC-VGA handles computer resolutions up to WUXGA 1920 x 1200, as well as standard and HD video up to 1080p60. The professional balanced/ unbalanced audio input accepts a stereo line level audio signal. Both the video and audio signals are converted to high-quality digital for distribution via DigitalMedia.

The DMC-VGA employs advanced analog video processing with anti-alias filtering and 3D comb filtering, offering improved performance over the DMC-DVI and other analog video input cards. Built-in time base correction is also included to ensure optimal results for use with video tape players.

In addition to the video and audio inputs, the DMC-VGA also includes an HDMI[®] output and a USB HID device port. The HDMI output can be used to pass the input signals through to a local audio processor or video monitor, or to feed a second DM[®] switcher for output expansion purposes. The USB HID port connects to the local source device (i.e., computer or media server), 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-VGA 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 convert analog video and audio to digital and merge them into a single HDMI output. As part of a complete Crestron control system, it can be used to detect input source format information, manage EDID, and extend a USB HID mouse/keyboard signal over Ethernet.

Whether installed in a DM switcher or DMCI, the DMC-VGA card affords a 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-VGA allows every RGB, component, S-Video, composite video, and audio input on the MPS to be converted to DigitalMedia^[1].

SPECIFICATIONS

Video

Input Signal Types: RGB, component (YPbPr)^[1], S-Video (Y/C)^[1], composite^[1]

Output Signal Types: $\mathsf{HDMI}^{\circledast}$ or $\mathsf{DVI}^{[2]}$ to switcher backplane and HDMI OUT connector

Formats: Computer up to UXGA/WUXGA, HDTV up to 1080p60, NTSC or PAL

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, 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 and S-Video^[1]: 480i, 576i Output Resolutions: Matched to inputs Analog-To-Digital Conversion: 12-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: Frequency Response: 20Hz to 20kHz ±0.75dB;

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

USB

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]

RGB IN: (1) DB15HD female (3-BNC breakout cable included); RGB (VGA), component, S-Video, or composite video input^[1]; Formats: RGBHV, RGBS, RGsB, YPbPr, Y/C, NTSC, PAL; Input Levels: 0.5 to 1.5 Vp-p with built-in DC restoration; Input Impedance: 75 Ohms; Sync Input Type: Autodetect RGBHV, RGBS, RGsB, YPbPr; Sync Input Level: 3 to 5 Vp-p; Sync Input Impedance: 510 Ohms



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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 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-VGA: VGA/RGB 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 DMCI: DigitalMedia[™] Card Interface Notes:

- The RGB input can actually accept component, composite, and S-Video signals through the 3-BNC breakout cable provided, or via direct interface to a Crestron MPS Series product. However, input sync detection is not provided for composite or S-Video signal types through the RGB connection.
- HDMI connector requires an appropriate adapter or interface cable to accommodate a DVI device. CBL-HD-DVI interface cable 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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