HD-MD6X2-4K-E

6x2 4K HDMI® Switcher

- > 6x2 ultra high-definition 4K/60 digital AV switcher
- > For standalone use, or as part of a fully integrated Crestron® system
- > Fully operable using front panel controls, a Web browser, or a Crestron control system
- > Simplified setup through the front panel OLED display or Web browser
- > Six HDMI® inputs and two independent HDMI outputs
- > DVI and DisplayPort Multimode compatible [1]
- > QuickSwitch HD® technology manages HDCP keys for fast, reliable switching
- > Comprehensive built-in EDID configuration tools
- > Handles Dolby® TrueHD, DTS-HD®, and uncompressed 7.1 linear PCM audio
- > High-speed Ethernet LAN connection
- > Single-space 19" rack-mountable design
- > Universal 100-240V external power pack included

The Crestron® HD-MD6X2-4K-E is a simple to use, ultra high-definition signal switcher with six HDMI® inputs and two HDMI outputs. It handles Full HD 1080p, Ultra HD, 2K, and 4K video signals with support for HDCP, 3D, Deep Color, and high-bitrate 7.1 audio. Operation is enabled using the front panel controls, a Web browser, or a Crestron control system. Simplified setup is facilitated through the front panel OLED display or a Web browser.

4K Ultra HD

Support for 4K video is essential to ensuring support for the latest generation of UHD and 4K DCl displays and sources, as well as computers and monitors with native resolutions beyond 1080p and WUXGA.

QuickSwitch HD® Technology

Handling digital media signals means handling HDCP (High-bandwidth Digital Content Protection), the encryption scheme used by content providers to protect their DVDs, Blu-ray™ discs, and broadcast signals against unauthorized copying. Viewing HDCP encrypted content requires a source device to "authenticate" each display and signal processor in the system and issue it a "key" before delivering an output signal. Crestron QuickSwitch HD manages these keys to ensure fast, reliable switching and immunity to "blackouts."

EDID Format Management

To ensure that every source gets displayed at its optimal resolution and format, the HD-MD6X2-4K-E provides comprehensive management of the EDID (Extended Display Identification Data) information that passes between the display and source devices. Most applications require no changes to the default settings. For applications requiring custom configuration, the HD-MD6X2-4K-E allows for easy assessment of each device's format and resolution capabilities, with the ability to configure signals appropriately for the most desirable and predictable behavior.



1RU Rack-Mountable

The HD-MD6X2-4K-E can be placed on a shelf, or mounted in a 19" EIA equipment rack using the rack ears provided. When rack-mounted, it occupies a single rack space. The front panel label strips can be customized using Crestron Engraver software or standard 3/8" tape labels, allowing for the clear designation of each input and output. Inputs and outputs may also be designated by name to appear on the OLED display.

SPECIFICATIONS

Features

6x2 digital AV switcher, QuickSwitch HD® technology, local or Web browser setup and control, Crestron® controllable

Video

Input Signal Types: HDMI® w/Deep Color, 3D, & 4K (DVI & DisplayPort Multimode compatible $^{[1]}$)

Output Signal Types: HDMI w/Deep Color, 3D, & 4K (DVI compatible [1])

Maximum Resolutions:

Scan Type	Resolution	Frame Rate	Color Sampling	Color Depth
Progressive	4096x2160 4K DCI & 3840x2160 Ultra HD	24 Hz	4:4:4	30 bit
		30 Hz	4:4:4	24 bit
		30 Hz	4:2:2	36 bit
		60 Hz	4:2:0	24 bit
	2560x1600 WQXGA	60 Hz	4:4:4	36 bit
	1920x1080 HD1080p	60 Hz	4:4:4	36 bit
Interlaced	1920x1080 HD1080i	30 Hz	4:4:4	36 bit

NOTE: Common resolutions are shown; other custom resolutions are supported at pixel clock rates up to 300 MHz



HD-MD6X2-4K-E 6x2 4K HDMI[®] Switcher



HD-MD6X2-4K-E — Rear View

Audio

Input Signal Types: HDMI (DisplayPort Multimode compatible [1])

Output Signal Types: HDMI

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[™], LPCM up to 8 channels [6]

Communications

Ethernet: 10/100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, DHCP, Web browser setup and control, Crestron control

system integration

USB: For factory use only HDMI: HDCP, EDID

NOTE: Supports management of EDID

Connectors

INPUT 1 – 6: (6) 19-pin Type A HDMI female;

HDMI digital video/audio inputs;

Also supports DVI and DisplayPort Multimode [1]

OUTPUT 1 - 2: (2) 19-pin Type A HDMI female;

HDMI digital video/audio outputs;

Also supports DVI [1]

SERVICE: (1) USB Type A female;

For factory use only

LAN: (1) 8-wire RJ45 female; 10Base-T/100Base-TX Ethernet port

24VDC 0.75A: (1) 2.1 x 5.5 mm DC power connector;

24 Volt DC power input;

PW-2407WU power pack included

Display

Display Type: 2x20 character alphanumeric OLED

Functions: Displays setup and configuration menus, signal information,

customizable input names

Controls & Indicators

PWR: (1) bicolor green/amber LED, indicates operating power supplied from power pack, turns amber while booting and green when operating

MENU: (1) pushbutton, opens the setup menu

 $\blacktriangle, \blacktriangledown, \blacktriangleleft, \blacktriangleright$: (4) pushbuttons, for menu navigation and parameter adjustment

Enter: (1) pushbutton, applies a change

BACK: (1) pushbutton, steps menu back one level

EXIT: (1) pushbutton, exits the menu

INPUT 1 – 6: (6) pushbuttons for input selection, and (6) bicolor green/amber LEDs to indicate which input is currently routed or pending output selection, and signal presence at each corresponding input OUTPUT 1 – 2: (2) pushbuttons for output selection, and (2) bicolor green/amber LEDs to indicate sink detection and signal presence at each corresponding HDMI output

LAN (rear): (2) LEDs, amber LED indicates Ethernet activity, green LED indicates Ethernet link status

Power Requirements

Power Pack: 0.75 Amps @ 24 Volts DC;

100-240 Volts AC, 50/60 Hz power pack, model PW-2407WU included

Environmental

Temperature: 32° to 104°F (0° to 40°C) Humidity: 10% to 90% RH (non-condensing)

Enclosure

Chassis: Metal, black finish, vented sides

Front Panel: Metal, black finish with polycarbonate label overlay

Mounting: Freestanding or 1U 19-inch rack-mountable (adhesive feet and

rack ears included)

Dimensions

Height: 1.71 in (44 mm) Width: 18.96 in (481 mm);

17.29 in (439 mm) without rack ears

Depth: 10.83 in (275 mm)

Weight

4.10 lb (1.82 kg)



HD-MD6X2-4K-E 6x2 4K HDMI® Switcher

MODELS & ACCESSORIES

Available Models

HD-MD6X2-4K-E: 6x2 4K HDMI® Switcher

Included Accessories

PW-2407WU: Wall Mount Power Pack, 24VDC, 0.75A, 2.1mm, Universal (Qty. 1 included)

Available Accessories

CBL Series: Crestron® Certified Interface Cable MP-WP Series: Media Presentation Wall Plates

MPI-WP Series: Media Presentation Wall Plates - International Version

Notes:

 HDMI requires an appropriate adapter or interface cable to accommodate a DVI or DisplayPort Multimode 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.

Crestron, the Crestron logo, and QuickSwitch HD are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. Blu-ray is either a trademark or registered trademark of the Blu-ray Disc Association in the United States and/or other countries. Dolby and Dolby Digital are either trademarks or registered trademarks of Dolby Laboratories in the United States and/or other countries. DTS, DTS-HD, and DTS-HD Master Audio are either trademarks or registered trademarks of DTS, Inc. in the United States and/or other countries. HDMI and the HDMI Logo are either trademarks or registered trademarks of HDMI Licensing LLC in the United States and/or other countries. Other trademarks, registered trademarks, and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. Crestron is not responsible for errors in typography or photography. Specifications are subject to change without notice. ©2015 Crestron Electronics, Inc.

