

HD-MD4X2-4K-E

4x2 4K HDMI® Switcher



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

The Crestron® HD-MD4X2-4K-E is a simple to use, ultra high-definition signal switcher with four 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 onboard 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

4K video support provided by the HD-MD4X2-4K-E is essential for use with the latest generation of UHD and 4K DCI displays and sources, as well as computers and monitors with native resolutions beyond 1080p and WUXGA.

QuickSwitch HD™ Technology

Digital media signals are typically encrypted to protect against unauthorized viewing. After authenticating displays or signal processors, a source device must issue a key before delivering an output signal. Crestron QuickSwitch HD technology manages these keys to ensure fast, reliable switching and immunity to display blackouts caused by key authentication.

NOTE: QuickSwitch HD technology requires the use of a scaling HDMI output which is available on DigitalMedia devices such as the DM-RMC-4KZ-SCALER-C and DMC-4KZ-HDO.

EDID Format Management

To ensure that every source gets displayed at its optimal resolution and format, the HD-MD4X2-4K-E provides comprehensive management of EDID (Extended Display Identification Data) information. For applications requiring custom configuration, the HD-MD4X2-4K-E allows for easy assessment of each device's format and resolution capabilities with the ability to configure signals appropriately.

Low-Profile Installation

The HD-MD4X2-4K-E mounts conveniently to a wall or other flat surface. At just over one inch deep, it can fit easily behind a flat panel display or under a table. It can also be placed on a rack shelf, or attached to a single rack rail.

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Specifications

Features

4x2 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 compatible¹)

Output Signal Types HDMI w/Deep Color, 3D, & 4K (DVI compatible¹)

Maximum Resolutions

Scan Type	Resolution	Frame Rate	Color Sampling	Color Depth
Progressive	4096x2160 4K DCI	24 Hz	4:4:4	30 bit
	3840x2160 Ultra HD	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.

Audio

Input Signal Types HDMI (DisplayPort Multimode compatible¹)

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

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 1-4 (4) 19-pin Type A HDMI female; HDMI digital video/audio inputs; Also supports DVI and DisplayPort Multimode¹

OUTPUT 1-2 19-pin Type A HDMI female; HDMI digital video/audio output; Also supports DVI¹

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

**24 VDC
0.75 A** (1) 2.1 x 5.5 mm DC power connector; 24 VDC power input; PW-2407WU power pack included

SERVICE (1) USB Type A female; For factory use only

Display

Display Type 2x20 character alphanumeric OLED

Functions Displays setup and configuration menus, signal information, customizable input names

Controls & Indicators

MENU (1) push button, opens the setup menu

▲ ▼ ◀ ▶ (4) push buttons, for menu navigation and parameter adjustment

ENTER (1) push button, applies a change

BACK (1) push button, steps menu back one level

EXIT (1) push button, exits the menu

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

INPUT 1-4 (4) push buttons for manual input selection, and (4) bicolor green/amber LEDs to indicate the current active input and signal presence at each corresponding input

OUTPUT 1-2 (2) push buttons for output selection, and (2) bicolor green/amber LEDs to indicate sink detection and signal presence at each corresponding HDMI output

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

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Power Requirements

Power Pack	0.75 A @ 24 VDC; 100-240 VAC, 50/60 Hz power pack, model PW-2407WU included
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Environmental

Temperature	32° to 104° F (0° to 40° C)
Humidity	10% to 90% RH (noncondensing)

Enclosure

Chassis	Metal, black finish, with (2) integral mounting flanges
Mounting	Freestanding, surface mount, or attach to a single rack rail

Dimensions

Height	4.08 in. (104 mm)
Width	8.68 in. (221 mm)
Depth	1.08 in. (28 mm)

Weight

1.35 lb (0.62 kg)

Models

HD-MD4X2-4K-E

Included Accessories

PW-2407WU
Wall Mount Power Pack, 24VDC, 0.75A, 2.1mm, Universal

Available Accessories

CBL-HD-1.5
Crestron® Certified HDMI® Interface Cable, 18 Gbps, 1.5 ft
(0.45 m)

CBL-HD-12
Crestron® Certified HDMI® Interface Cable, 18 Gbps, 12 ft
(3.6 m)

CBL-HD-20
Crestron® Certified HDMI® Interface Cable, 18 Gbps, 20 ft
(6.1 m)

CBL-HD-3
Crestron® Certified HDMI® Interface Cable, 18 Gbps, 3 ft
(0.91 m)

CBL-HD-30
Crestron® Certified HDMI® Interface Cable, 10.2 Gbps, 30 ft
(9.1 m)

CBL-HD-6
Crestron® Certified HDMI® Interface Cable, 18 Gbps, 6 ft
(1.8 m)

CBL-HD-DVI-1.5
Crestron® Certified HDMI® to DVI Interface Cable, 1.5 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-3
Crestron® Certified HDMI® to DVI Interface Cable, 3 ft

CBL-HD-DVI-30
Crestron® Certified HDMI® to DVI Interface Cable, 30 ft

CBL-HD-DVI-6
Crestron® Certified HDMI® to DVI Interface Cable, 6 ft

CBL-HD-LOCK-16
Locking High-Speed HDMI® Cable, 10.2 Gbps, 16 ft (4.8 m)

CBL-HD-LOCK-2
Locking High-Speed HDMI® Cable, 10.2 Gbps, 2 ft (0.6 m)

CBL-HD-LOCK-4
Locking High-Speed HDMI® Cable, 10.2 Gbps, 4 ft (1.2 m)

CBL-HD-LOCK-8
Locking High-Speed HDMI® Cable, 10.2 Gbps, 8 ft (2.4 m)

MPI-WP150-120
Media Presentation Wall Plate – International Version – HDMI®
w/Mini-TRS Stereo Audio, White

MPI-WP150-122
Media Presentation Wall Plate – International Version – HDMI®
w/Mini-TRS Stereo Audio, Anthracite

MP-WP152-A
Media Presentation Wall Plate - HDMI®, Almond

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

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

Notes:

1. HDMI requires an appropriate adapter or interface cable to accommodate a DVI or DisplayPort Multimode signal. [CBL-HD-DVI](#) interface cables are available separately.

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This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/How-To-Buy/Find-a-Representative or by calling 855-263-8754.

This product is covered under the Crestron standard limited warranty. Refer to www.crestron.com/warranty for full details.

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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