

# HD-CTL-101

## 8K Smart Display Controller with HDMI® connectivity



- *Device control options include CEC, RS-232, IR, Relay, and digital input ports*
- *Automatic or scheduled display power on/off*
- *8K60 4:4:4 signal supported*
- *HDMI 2.1 and HDCP 2.3 compliance*
- *HDR10, HDR10+, and Dolby Vision® video formats*
- *Provides RS-232 COM port with software handshaking*
- *EDID management*
- *XiO Cloud® service support*
- *Crestron Home OS® support*
- *Crestron Driver support*
- *Enterprise-grade security*
- *Built-in web interface*
- *PoE (Power over Ethernet) network powered*
- *No programming or control processor required*

The HD-CTL-101 is an 8K Smart Display Controller with HDMI® connectivity that provides a variety of options for controlling displays without a control processor. Ideal for unified communications, digital signage, and presentation spaces, the HD-CTL-101 can be configured to automatically power displays on and off based on schedule, room occupancy, or video sync detect. The HD-CTL-101 can also be utilized in residential systems to control a variety of devices such as garage doors and TV lifts.

### CEC Control

CEC (Consumer Electronics Control) can control the source and display devices via the HDMI connection, potentially eliminating the need for dedicated serial cables or IR emitters, as well as eliminating the need for a control system. CEC over the HDMI output can also enable the display devices to be turned on or off automatically.

### Device Control via RS-232, IR, Relay, and Digital Input Ports

The HD-CTL-101 includes built-in COM (RS-232), IR, relay, and digital input ports for control of source devices and accessories.

### Built-In Web Interface

Full configuration of the HD-CTL-101 can be accomplished using the built-in web interface. To simplify system installation, the configuration of a single unit can be downloaded to a computer or mobile device and then uploaded to multiple HD-CTL-101 units.

### EDID Management

The HD-CTL-101 provides comprehensive management of EDID (Extended Display Identification Data) to ensure that every source is displayed at the optimal resolution and format. For applications requiring a custom configuration, the HD-CTL-101 enables assessment of the format and resolution capabilities of any device that is connected to the HDMI output. The HD-CTL-101 provides the ability to configure signals appropriately for the most desirable and predictable behavior.

### 8K60 4:4:4 and HDR Support

The HD-CTL-101 supports video resolutions up to 8K60 with 4:4:4 color sampling. HDR10, HDR10+, and Dolby Vision® are also supported.

### Enterprise-Grade Security

The HD-CTL-101 includes advanced security features and protocols. Using 802.1X authentication, Active Directory® credential management, PKI authentication, TLS, SSH, and HTTPS, the HD-CTL-101 provides a true enterprise-grade AV switcher.

### XiO Cloud® Service Support

The HD-CTL-101 is compatible with the XiO Cloud service, which is an IoT (Internet of Things) platform for remotely provisioning, monitoring, and managing Crestron devices across an enterprise or an entire client base. Built on the Microsoft® Azure® software platform and using industry-leading Azure IoT Hub technology, the XiO Cloud service enables installers and IT managers to easily deploy and manage thousands of devices. Unlike other virtual machine-based cloud solutions, Azure services provide unlimited scalability to suit the ever-growing needs of an enterprise. For more information, visit [www.crestron.com/xiocloud](http://www.crestron.com/xiocloud).

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### Specifications

#### Video

<b>Input Signal Types</b>	HDMI with HDR10, HDR10+. Dolby Vision™, Deep Color, 8K60 4:4:4 support (DVI and Dual-Mode DisplayPort™ interface compatible)
<b>Output Signal Types</b>	HDMI with HDR10, HDR10+, Dolby Vision, Deep Color, and 8K60 4:4:4 support (DVI compatible)

#### Audio

<b>Input Signal Types</b>	HDMI (Dual-Mode DisplayPort interface compatible)
<b>Formats</b>	Dolby Digital®, Dolby Digital EX, Dolby Digital Plus, Dolby® TrueHD, Dolby Atmos®, DTS®, DTS-ES, DTS 96/24, DTS HD® High Res, DTS-HD Master Audio, DTS: X®, LPCM up to 8 channels

#### Connectors

<b>HDMI IN</b>	(1) 19-pin Type A connector, female; HDMI 2.1 compliant digital video/audio input (DVI and Dual-Mode DisplayPort interface compatible)
<b>HDMI OUT</b>	(1) 19-pin Type A connector, female; HDMI digital video/audio output (DVI compatible)
<b>IN</b>	(1) 2-pin 3.5 mm detachable terminal block; Digital input; Input Voltage Range: 0–24VDC; Logic Threshold: ≥2.0VDC 0/low, ≤1.1VDC 1/high; Input Impedance: 2.2k Ohms pulled up to 5V
<b>COM</b>	(1) 3-pin 3.5 mm detachable terminal block; Bidirectional RS-232 port; Supports RS-232 up to 115.2k baud with software handshaking
<b>IR</b>	(1) 2-pin 3.5 mm detachable terminal block; IR output control port; Supports IR up to 60 kHz; <a href="#">IRP2</a> IR emitter probe sold separately
<b>RELAY 1-2</b>	(2) 2-pin detachable terminal blocks; Comprised of 2 normally open, isolated relays; Rated 1A, 30VAC/VDC; MOV arc suppression across contacts
<b>Ethernet 1</b>	(1) 8-pin RJ-45 connector, female; 100BASE-TX/1000BASE-T Ethernet port; Provides network connectivity to secondary device

<b>Ethernet 2 PoE</b>	(1) 8-pin RJ-45 connector, female; 100BASE-TX/1000BASE-T Ethernet port; PoE Class 3 powered device (PD) port, 8.2 W Maximum
<b>Ground</b>	(1) 6-32 screw, chassis ground lug

#### Controls and Indicators

<b>PWR</b>	(1) LED; Amber indicates that the device is booting; Green indicates that the device is operational.
<b>HDMI IN</b>	(1) LED; Green indicates an HDMI signal; Amber indicates the device is ready for an HDMI signal.
<b>HDMI OUT</b>	(1) LED; Green indicates an HDMI signal; Amber indicates the device is ready for an HDMI signal.
<b>RESET</b>	(1) LED indicates the device is being reset.
<b>ETHERNET 1</b>	(2) LEDs on RJ-45 connector; Green indicates that a 100BASE-TX link is established; Flashing amber indicates Ethernet activity.
<b>ETHERNET 2 PoE</b>	(2) LEDs on RJ-45 connector; Green indicates that a 100BASE-TX link is established; Flashing amber indicates Ethernet activity.

#### Environmental

<b>Temperature</b>	32° to 104°F (0° to 40°C)
<b>Humidity</b>	10% to 95% RH (noncondensing)

#### Construction

<b>Chassis</b>	Metal, black finish, vented sides
<b>Mounting</b>	Surface mountable or attachment to a single rack rail

#### Dimensions

<b>Height</b>	1.20 in. (31 mm)
<b>Width</b>	5.93 in. (151 mm)
<b>Depth</b>	4.09 in. (104 mm)

#### Weight

0.90 lb (.40 kg)

#### Compliance

Regulatory Model: M202116001

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### Model

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### Available Accessories

For a list of available accessories, visit the [HD-CTL-101](#) product page.

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative in your area. A list of sales representatives is available online at [www.crestron.com/How-To-Buy/Find-a-Representative](http://www.crestron.com/How-To-Buy/Find-a-Representative) or contact us for additional information by visiting [www.crestron.com/contact/our-locations](http://www.crestron.com/contact/our-locations) for your local contact.

The original language version of this document is U.S. English. All other languages are a translation of the original document.

The product warranty can be found at [www.crestron.com/warranty](http://www.crestron.com/warranty).

The specific patents that cover Crestron products are listed online at [www.crestron.com/legal/patents](http://www.crestron.com/legal/patents).

Certain Crestron products contain open source software. For specific information, please visit [www.crestron.com/opensource](http://www.crestron.com/opensource).

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### HDMI

Specifications are subject to change without notice.

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Rev 04/17/24

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