SECTION 27 41 16

INTEGRATED AUDIO-VIDEO SYSTEMS AND EQUIPMENT

GUIDE SPECIFICATION

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Specifier: Please see PART 4 for a listing of products specified in this Guide Specification.

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# GENERAL

NOT USED in this Guide Specification. Specifier shall Specify PART 1 administrative and procedural requirements as needed.

# PRODUCTS

## Smart Display Controller with HDMI® Connectivity

Specifier Note:

*The Crestron 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.*

### Basis of Design

#### Crestron HD-CTL-101

### Device Definition

#### Smart display controller with the following capabilities:

##### Automatic scheduled display power on/off

##### CEC, RS-232, IR, and relay control

##### Configuration via web interface

###### Device programming with control processor by same manufacturer not required

##### PoE (Power over Ethernet) network powered

##### EDID management with support for custom formats and resolutions

##### 8K60 4:4:4, HDR, HDR10+, and Dolby Vision® support

##### Support for 802.1X authentication, Active Directory® credential management, PKI authentication, TLS, SSH, and HTTPS

##### Support for proprietary remote configuration and monitoring software by same manufacturer

### Device Architecture

#### Construction

##### Chassis: Metal, black finish, vented sides

##### Mounting: Surface mountable or attachment to a single rack rail

##### Dimensions

###### Height: 1.20 in. (31 mm)

###### Width: 5.93 in. (151 mm)

###### Depth: 4.09 in. (104 mm)

##### Weight: 0.90 lb. (0.40 kg)

##### Environmental Operating Conditions

###### Temperature: 32° to 104° F (0° to 40° C)

###### Humidity: 10% to 95% RH (noncondensing)

### Functions

#### Video

##### Input signal Types

###### HDMI with HDR10, HDR10+

###### Dolby vision™, Deep Color, 8K60 4:4:4 support

###### DVI and Dual-Mode DisplayPort™ interface compatible

##### Output Signal Types

###### HDMI with HDR10, HDR10+

###### Dolby Vision™, Deep Color, and 8K60 4:4:4 support

###### DVI compatible

#### Audio

##### Input Signal Types

###### HDMI (Dual-Mode DisplayPort interface compatible)

##### Formats: 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

#### HDMI IN

##### (1) 19-pin Type A connector, female

##### HDMI 2.1 compliant digital video / audio input (DVI and Dual-Mode DisplayPort interface compatible)

#### HDMI OUT

##### (1) 19-pin Type A connector, female

##### HDMI digital video / audio output (DVI compatible)

#### IN

##### (1) 2-pin 3.5 mm detachable terminal block, Digital input

##### Input Voltage Range: 0-24 VDC

##### Logic Threshold: ≥ 2.0 VDC 0 / low; ≤ 1.1 VDC 1 / high

##### Input Impedance: 2.2 kΩ pulled up to 5 V

#### COM

##### (1) 3-pin 3.5 mm detachable terminal block

##### Bidirectional RS-232 port

##### Supports RS-232 up to 115.2k baud with software handshaking

#### IR

##### (1) 2-pin 3.5 mm detachable terminal block

##### IR output control port

##### Supports IR up to 60 kHz

##### IR emitter probe by same manufacturer sold separately

#### RELAY 1-2

##### (2) 2-pin detachable terminal blocks

##### Comprised of 2 normally open, isolated relays

##### Rated 1 A, 30 VAC / VDC

##### MOV arc suppression across contacts

#### Ethernet 1

##### (1) 8-pin RJ45 connector, female

##### 100BASE-TX/1000BASE-T Ethernet port

##### Provides network connectivity to secondary device

#### Ethernet 2 PoE

##### (1) 8-pin RJ45 connector, female

##### 100BASE-TX/1000BASE-T Ethernet port

##### PoE Class 3 powered device (PD) port, 8.2 W maximum

#### Ground: (1) 6-32 screw, chassis ground lug

### Controls and Indicators

#### PWR

##### (1) LED

##### Amber indicates that the device is booting

##### Green indicates that the device is operational

#### HDMI IN

##### (1) LED

##### Green indicates an HDMI signal

##### Amber indicates the device is ready for an HDMI signal

#### HDMI OUT

##### (1) LED

##### Green indicates an HDMI signal

##### Amber indicates the device is ready for an HDMI signal

#### RESET: (1) LED indicates the device is being reset.

#### ETHERNET 1

##### (2) LEDs on RJ45 connector

##### Green indicates that a 100BASE-TX link is established

##### Flashing amber indicates Ethernet activity

#### ETHERNET 2 PoE

##### (2) LEDs on RJ45 connector

##### Green indicates that a 100BASETX link is established

##### Flashing amber indicates Ethernet activity

### Compliance

#### Regulatory Model: M202116001

# EXECUTION

NOT USED in this Guide Specification. Specifier shall Specify PART 3 On-Site work as needed.

# APPENDICES

## SPECIFIED PRODUCTS

Specifier Note: This Article includes Crestron products specified in this Guide Specification document. This Article is for reference only and should not be required in actual project manual unless included in an overall system equipment list.

### Crestron HD-CTL-101

## Input / Output Connection Diagrams

### HD-CTL-101

Diagram

Description automatically generated