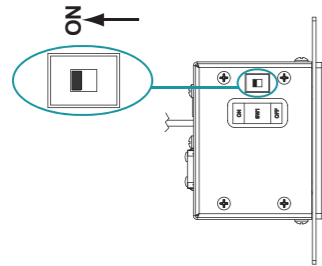


### 1 Introduction

The HD-EXT1-C provides an HDMI® extender that consists of the HD-TX1-C transmitter and HD-RX1-C receiver. Operating as a pair, the HD-TX1-C and HD-RX1-C transmit uncompressed digital high definition video, audio, and control signals up to 330 feet (100 meters) over a single DM-CBL-8G shielded twisted pair (STP) cable.

### 2 SW1 DIP Switch Setting (HD-TX1-C Only)

The SW1 DIP switch on the HD-TX1-C controls the hot plug detect (HPD) signal. Before installing the HD-TX1-C, locate the SW1 DIP switch on the left side of the unit and observe that the switch is set in the ON position (default setting). When set to ON, the HPD signal is sent from the display device on the HD-RX1-C to the source device on the HD-TX1-C.



**NOTE:** The OFF position of the SW1 DIP switch is reserved for factory use only.

### 3 Mounting

Mount the HD-TX1-C and HD-RX1-C in any of the following ways as appropriate for your installation:

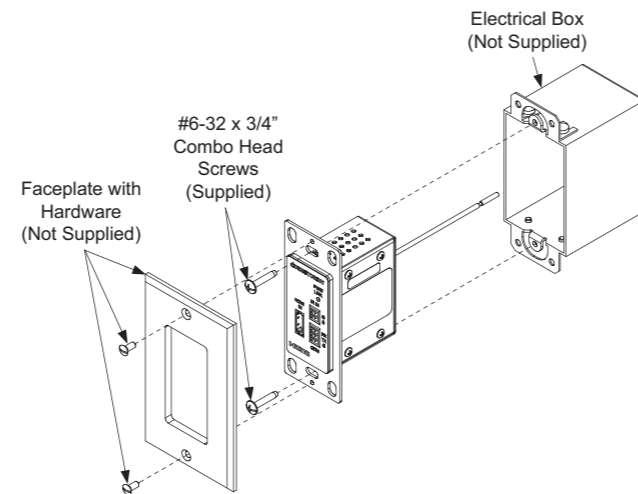
- (HD-TX1-C only) In a one-gang electrical box
- On a flat surface
- On a rack rail

#### Mounting the HD-TX1-C in a One-Gang Electrical Box

**NOTE:** The recommended depth of the electrical box (not supplied) is a minimum of 2.5 inches.

Do the following:

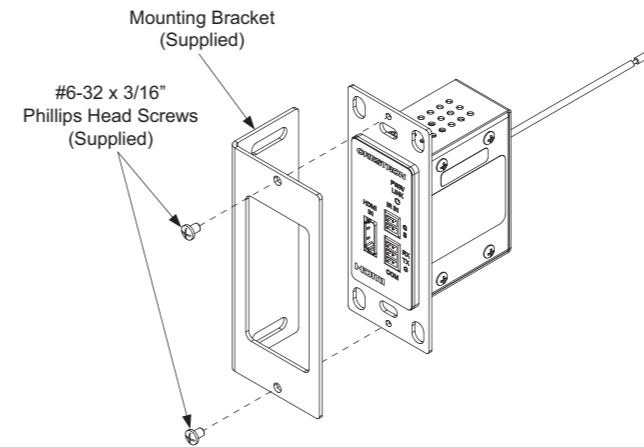
1. Using two #6-32 x 3/4 inch combo head screws (supplied), mount the HD-TX1-C in a one-gang electrical box.
2. Attach the desired decorator style faceplate (not supplied).



#### Mounting the HD-TX1-C on a Flat Surface

Do the following in the order desired:

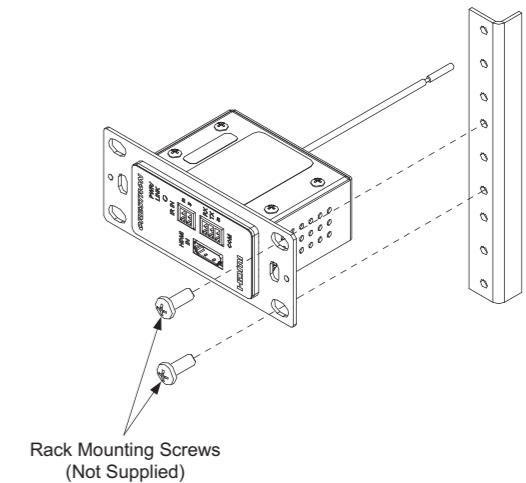
- Using two #6-32 x 3/16 inch Phillips head screws (supplied), attach the transmitter to the mounting bracket (supplied).
- Using the appropriate hardware (not supplied), attach the bracket to a flat surface.



#### Mounting the HD-TX1-C on a Rack Rail

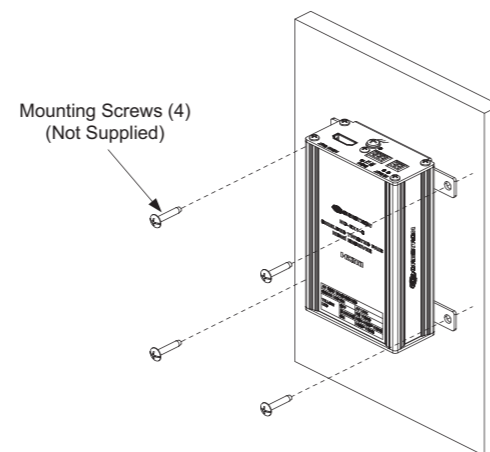
Mount the HD-TX1-C on the front or rear rail of a rack as follows:

1. Position the HD-TX1-C horizontally so that the holes of the left or right mounting flange align with the holes in the rack (mounting of right mounting flange is shown below).
2. Secure the device to the rack using two rack mounting screws (not supplied).



#### Mounting the HD-RX1-C on a Flat Surface

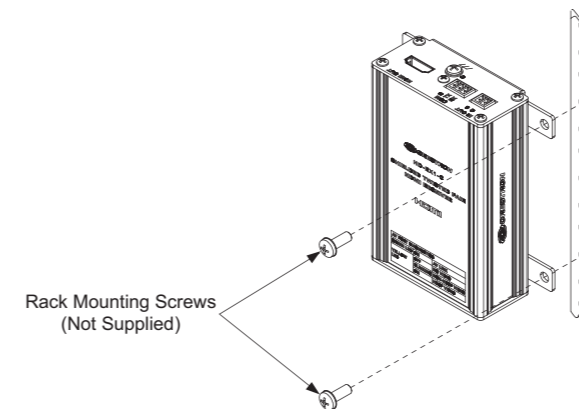
Using four mounting screws (not supplied), attach the HD-RX1-C to a flat surface. Mounting of the HD-RX1-C on a wall is shown below.



#### Mounting the HD-RX1-C on a Rack Rail

Mount the HD-RX1-C on the front or rear rail of a rack as follows:

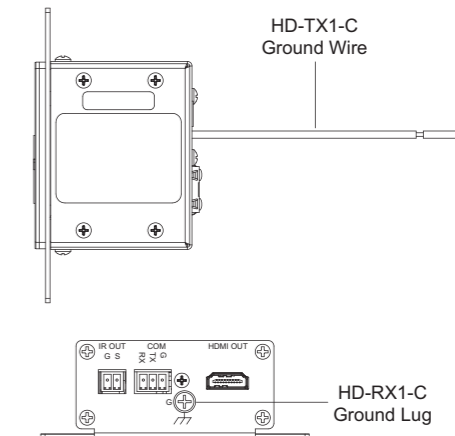
1. Position either the left or right mounting flanges of the device so that the holes align with the holes in the rack (mounting of right mounting flanges is shown below).
2. Secure the device to the rack using two rack mounting screws (not supplied).



### 4 Connections

#### Connecting the HD-TX1-C and HD-RX1-C to Ground

Connect the ground wire on the HD-TX1-C and the chassis ground lug on the HD-RX1-C to earth ground (building steel).



(Continued on following page)

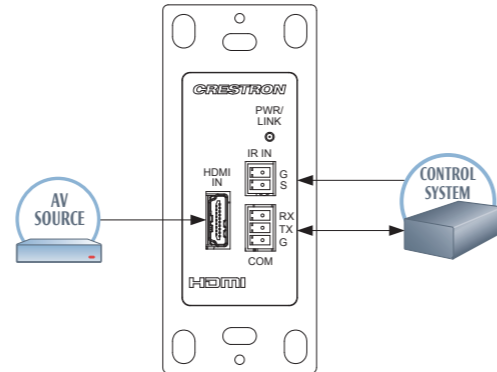
### 4 Connections (Continued)

#### Connecting HDMI and Control Ports on the HD-TX1-C

**Connecting the HDMI IN Port.** Using an HDMI cable (not supplied), connect the **HDMI IN** port to the HDMI output port of the audio/video source.

**Connecting the Control Ports.** Connect the **IR IN** or **COM** control port or both as follows:

- **IR IN:** Using an IR cable (not supplied), connect the 2-pin terminal block of the **IR IN** port to the IR output port of the control system.
- **COM (RS-232):** Using a data communications cable (not supplied), connect the 3-pin terminal block of the **COM** port to the COM port of the control system.

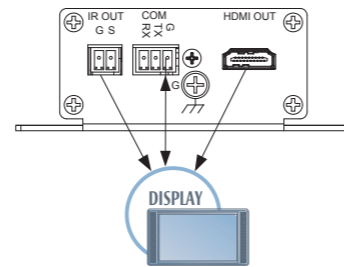


#### Connecting HDMI and Control Ports on the HD-RX1-C

**Connecting the HDMI OUT Port.** Using an HDMI cable (not supplied), connect the **HDMI OUT** port to the HDMI input port of the receiving device.

**Connecting the Control Ports.** Connect the **IR OUT** or **COM** control port or both as follows:

- **IR OUT:** Using the Crestron® IRP2 emitter (not supplied), connect the 2-pin terminal block of the **IR OUT** port to the IR input port of the device to be controlled.
- **COM (RS-232):** Using a data communications cable (not supplied), connect the 3-pin terminal block of the **COM** port to the COM port of the device to be controlled.



#### Connecting the AV Port on the HD-TX1-C and HD-RX1-C

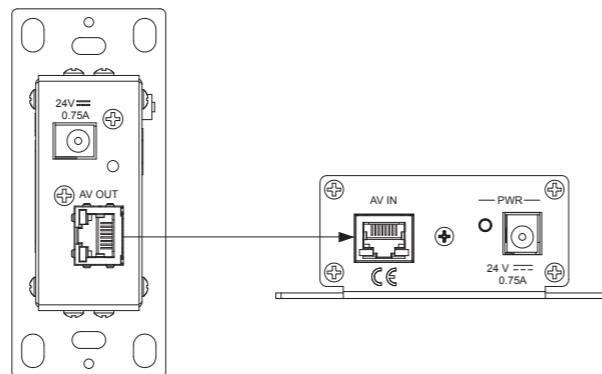
Connect the **AV OUT** port on the HD-TX1-C to the **AV IN** port on the HD-RX1-C using either of the following STP cables:

- DM-CBL-8G cable, which supports distances up to 330 feet (100 meters)

**NOTE:** For optimum performance and ESD (electrostatic discharge) protection, it is recommended that DM-CBL-8G cable be used.

- DM-CBL-D cable, which supports distances up to 200 feet (61 meters)

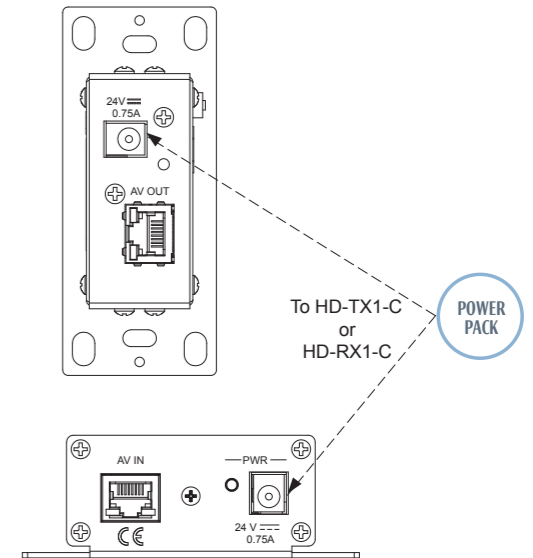
**NOTE:** The **AV OUT** port and the **AV IN** port accept power over the STP cable. For additional information, refer to "Connecting the 24 VDC Power Jack on the HD-TX1-C or HD-RX1-C" at the top of the next column.



#### Connecting the 24 VDC Power Jack on the HD-TX1-C or HD-RX1-C

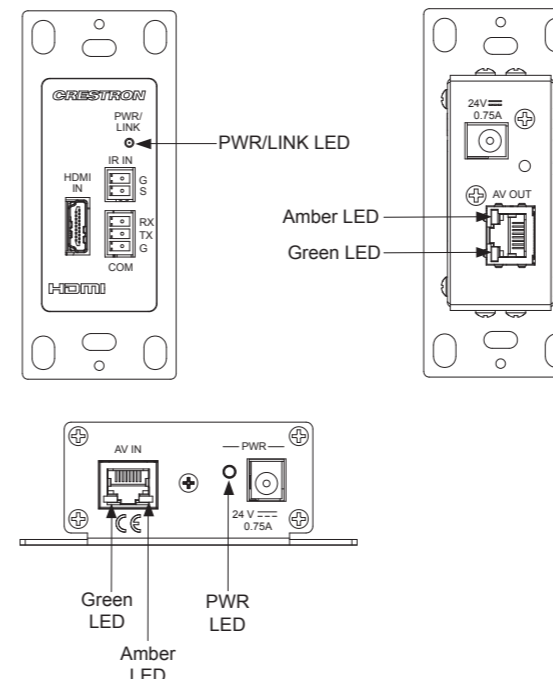
Only one 24 VDC power pack (supplied) powers both the HD-TX1-C and HD-RX1-C. Connect the power pack to either the 24 VDC power jack of the HD-TX1-C or HD-RX1-C as desired:

- If the power pack is connected to the HD-TX1-C, power is sent to the HD-RX1-C over the STP cable that connects the **AV OUT** port of the HD-TX1-C to the **AV IN** port of the HD-RX1-C.
- If the power pack is connected to the HD-RX1-C, power is sent to the HD-TX1-C over the STP cable that connects the **AV IN** port of the HD-RX1-C to the **AV OUT** port of the HD-TX1-C.



### 5 LED Indicators

LEDs are provided on the HD-TX1-C and HD-RX1-C.



HD-TX1-C/ HD-RX1-C INDICATOR	COLOR	DESCRIPTION
PWR/LINK (HD-TX1-C Only)	Blinking green	The HD-TX1-C is powered on but a link is not established with the HD-RX1-C.
	Solid green	The HD-TX1-C is powered on and a link is established with the HD-RX1-C; however, HDMI video is not detected on the HDMI input of the HD-RX1-C.
	Solid amber	The HD-TX1-C is powered on, a link is established with the HD-RX1-C, and HDMI video is detected on the HDMI input of the HD-RX1-C.
	Off	The HD-TX1-C is not powered on.
AV OUT/AV IN	Green	A link is established with the remote HD-TX1-C/HD-RX1-C device.
	Blinking amber	Non-HDCP video is detected.
	Solid amber	HDCP video is detected.
	Off	HDMI video is not detected.
PWR (HD-RX1-C Only)	Green	The HD-RX1-C is powered on.
	Off	The HD-RX1-C is not powered on.