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## WP-20CT Quick Start Guide

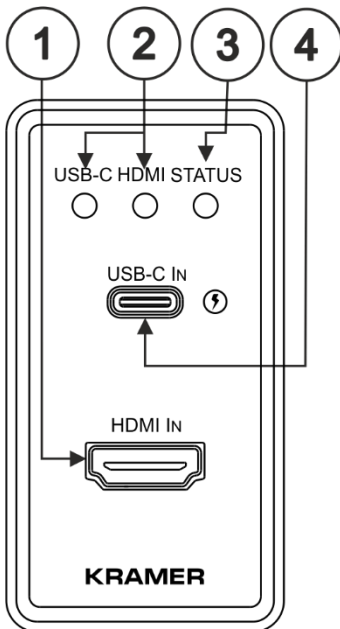
This guide helps you install and use your WP-20CT for the first time.

Go to [www.kramerav.com/downloads/WP-20CT](http://www.kramerav.com/downloads/WP-20CT) to download the latest user manual and check if firmware upgrades are available.

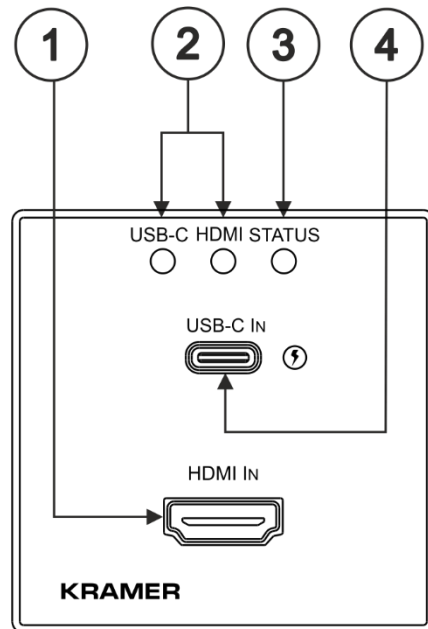
### Step 1: Check what's in the box

- ✓ WP-20CT HDMI 4K Wall-Plate Line Transmitter
- ✓ +12V Power adapter (with open DC head) and cord
- ✓ 1 Quick start guide
- ✓ Frame (or frame set) and faceplate
- ✓ Installation accessories

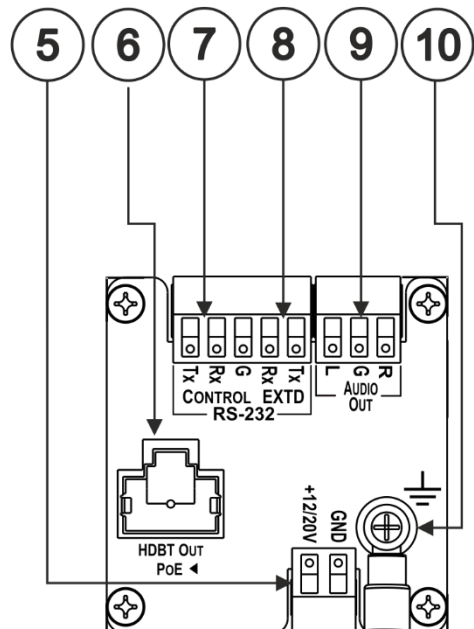
US-D Version  
Front



EU/UK Version  
Front



US-D/EU/UK Version  
Rear



#	Feature	Function
1	HDMI™ IN Connector	Connects to an HDMI source.
2	USB-C LED	Off – when an input source is not connected.
	HDMI LED	Blue – when an active signal is detected on the input. Blue, flashing – when the source is connected but an active signal is not detected.
3	STATUS LED	Off – the device does not receive power. Red – the powered device is inactive or booting. Green – the device is active and powered via power supply. Orange – the device is active and powered via PoE. Green or orange (depending on power source), flashing slowly – the device is in the power-save standby mode. Green or orange (depending on power source), fast-flashing – firmware is downloaded in the background.
4	USB-C IN Port	Connect to a USB-C source (that supports DisplayPort Alternate Mode). When powered by a Kramer 20V power supply (optional), charges sources (that support USB Power Delivery 2.0) up to 60W. Use to access WP-20CT internal web pages via connected browser.

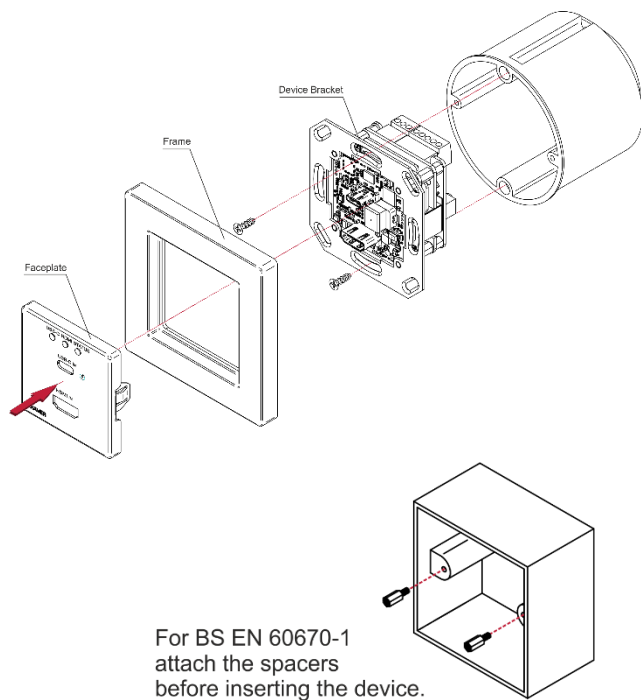
#	Feature	Function
5	12V/20V Power Supply 2-pin Terminal Block Connector	Connect to the power supply (required for USB charging). Connect GND to GND, +12V/20V to +12/20V. If you need to charge a device via the USB-C port, use Kramer 20V power supply (optional).
6	HDBT OUT PoE ◀ RJ-45 Connector	Connect to the HDBT IN port on a PoE-provider receiver (for example, <b>TP-789R</b> ) or a receiver (for example, <b>TP-580R</b> ). When <b>WP-20CT</b> is connected to a PoE providing receiver, it is not necessary to connect a power supply, unless the USB-C charging feature is used which requires the Kramer 20V power supply.
7	CONTROL RS-232 3-pin Terminal Block Connector (Tx, Rx and common G)	Connect to a controller to control the device.
8	EXTD RS-232 3-pin Terminal Block Connector (Tx, Rx and common G)	Connect to a controller to extend an RS-232 bi-directional signal (even if no A/V signal is extended).
9	AUDIO OUT 3-pin Terminal Block Connector	Connect to an unbalanced analog audio acceptor.
10	Ring Tongue Terminal Grounding Screw	Connect to grounding wire (optional).

The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

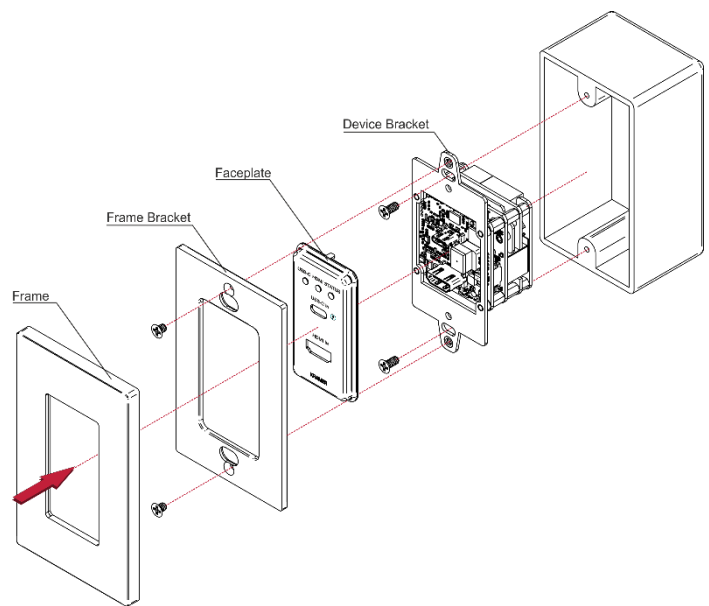
## Step 2: Install the WP-20CT

Insert the device into the in-wall box (note that first you need to connect the HDBT cable and power) and connect the parts as shown in the illustrations below:

### EU/UK Version



### US-D Version



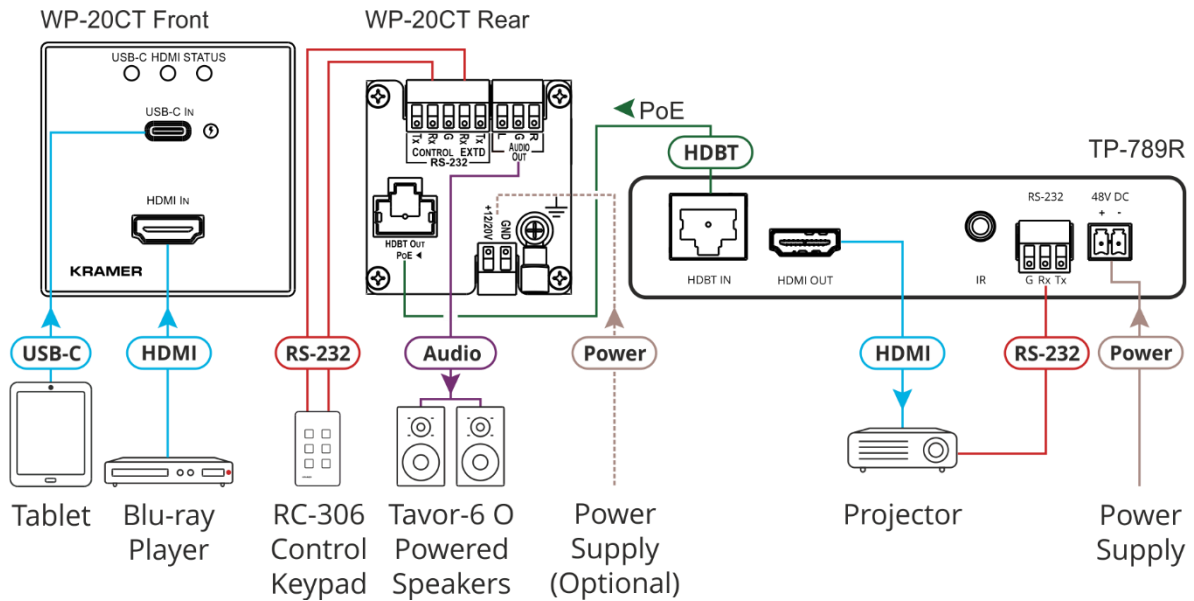
DECORA® design frames are included in US-D models. DECORA® is a registered trademark of Leviton Manufacturing Co., Inc.

We recommend that you use any of the following standard 1 Gang in-wall junction boxes (or their equivalent):

- **US-D:** 1 Gang US electrical junction boxes.
- **EU:** 1 Gang in-wall junction box, with a cut-hole diameter of 68mm and depth that can fit in both the device and the connected cables (DIN 49073).
- **UK:** 1 Gang in-wall junction box, 75x75mm (W, H) and depth that can fit in both the device and the connected cables (BS 4662 or BS EN 60670-1 used with supplied spacers and screws).

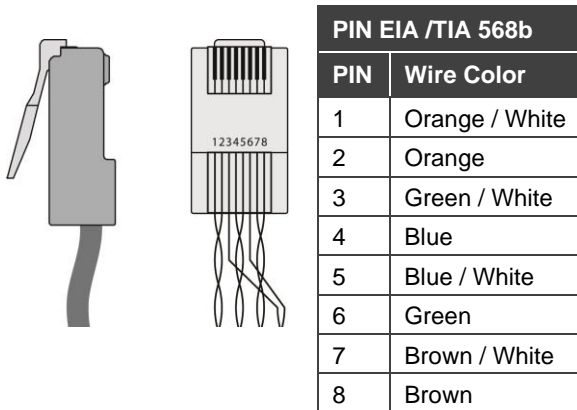
## Step 3: Connect the inputs and outputs

Always switch OFF the power on each device before connecting it to your **WP-20CT**. For best results, we recommend that you always use Kramer high-performance cables to connect AV equipment to the **WP-20CT**.



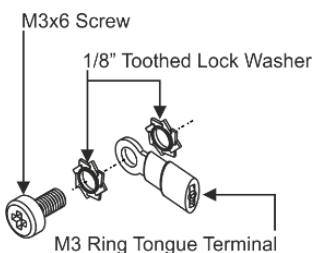
### RJ-45 Pinout

For the HDBT connector, see the wiring diagram below:



For optimum range and performance use the recommended Kramer cables available at [www.kramerav.com/product/WP-20CT](http://www.kramerav.com/product/WP-20CT).

### Grounding the WP-20CT (Optional)



1. Connect the ring tongue terminal to the building grounding point wire (a green-yellow, AWG#18 (0.82mm<sup>2</sup>) wire, crimped with a proper hand-tool is recommended).
2. Insert the M3x6 screw through the toothed lock washers and the tongue terminal in the order shown above.
3. Insert the M3x6 screw (with the two toothed lock washers and ring tongue terminal) into the grounding screw hole and tighten the screw.

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## Step 4: Connect the power

When accepting power over HDBaseT from a PoE provider (for example, the **TP-789R**), there is no need to connect the 12V DC power supply to power the device. If you need to power the device, connect the 12V power adapter to the device and plug the power supply into the mains electricity.

If you need to charge the connected USB-C device, use a 20V DC power supply (purchased separately).

### Safety Instructions



**Caution:**

- For products with relay terminals and GPIO ports, please refer to the permitted rating for an external connection, located next to the terminal or in the User Manual.
- There are no operator serviceable parts inside the unit.

**Warning:**

- Use only the power cord that is supplied with the unit.
  - Disconnect the power and unplug the unit from the wall before installing.
  - Do not open the unit. High voltages can cause electrical shock! Servicing by qualified personnel only.
  - To ensure continuous risk protection, replace fuses only according to the rating specified on the product label which located on the bottom of the unit.
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## Step 5: Operating WP-20CT

Control and operate **WP-20CT** by:

- Sending device protocol commands via the CONTROL RS-232 port:

RS-232 Control	
Baud Rate:	115,200
Data Bits:	8
Stop Bits:	1
Parity:	None
Command Format:	ASCII
Example (select USB-C input):	#ROUTE_1,1,1<CR>

- Using the internal web pages via the USB-C IN port.
- Using Maestro auto-playing.