

## 70M 4K60Hz USB-C / HDMI Wall Plate Switcher over Cat.6 Extender

No.WST-PEX015

### Introduction



The WST-PEX015 HDMI / USB-C Switcher Extender Kit features a US Decora-style wall plate transmitter designed for meeting rooms, classrooms, and professional AV integration. It provides a clean, reliable, and easy-to-deploy AV extension solution that combines elegant installation with practical functionality.

Supporting HDMI2.0b, USB-C (DisplayPort Alt Mode), and HDCP2.3, the WST-PEX015 delivers high-resolution video up to 4K@60Hz. Using a single CAT6 cable, it extends 4K video signals up to 70 meters, providing a cost-effective solution for long-distance AV transmission.

The transmitter features dual video inputs, including HDMI and USB-C (DisplayPort Alt Mode). A dedicated USB-C Power Delivery (PD) input allows an external power adapter to charge the connected USB-C source device while simultaneously transmitting audio and video. Built-in automatic input switching detects the active source and switches seamlessly between inputs, while the integrated wall plate button enables manual source selection whenever required.

The WST-PEX015 also incorporates Bi-Directional Power over Cable (PoC) technology, allowing a single power adapter connected to either the transmitter or receiver to power both units through the CAT6 cable. Combined with its US 1-Gang Decora wall plate design, the system simplifies installation, minimizes cable clutter, and delivers a clean, professional appearance. The WST-PEX015 is an ideal solution for modern BYOD meeting rooms, corporate collaboration spaces, educational facilities, and professional AV installations requiring reliable 4K signal extension.

### Key Features

- Supports video resolutions up to 3840x2160@60Hz 4 : 4 : 4 8-bit, with HDR10 support
- Compatible with HDCP1.4 / 2.2 / 2.3
- Supports 4K@60Hz transmission distances up to 70 m
- Supports dual input sources: USB-C and HDMI
- Supports automatic and manual input switching
- Supports USB-C PD power back-charging, allowing power delivery to USB-C source devices with up to 100W output
- Supports bi-directional PoC, allowing power to be supplied from either the transmitter or receiver side
- Transmitter features a wall plate design for installation in a standard 1-gang electrical box
- Supports analog audio de-embedding at the receiver side. The 3.5mm analog audio output supports 2.0-channel audio with sampling rates up to 96kHz
- Supports IR signal extension from the transmitter to the receiver
- Supports 8 EDID presets for display compatibility management

## Package Contents

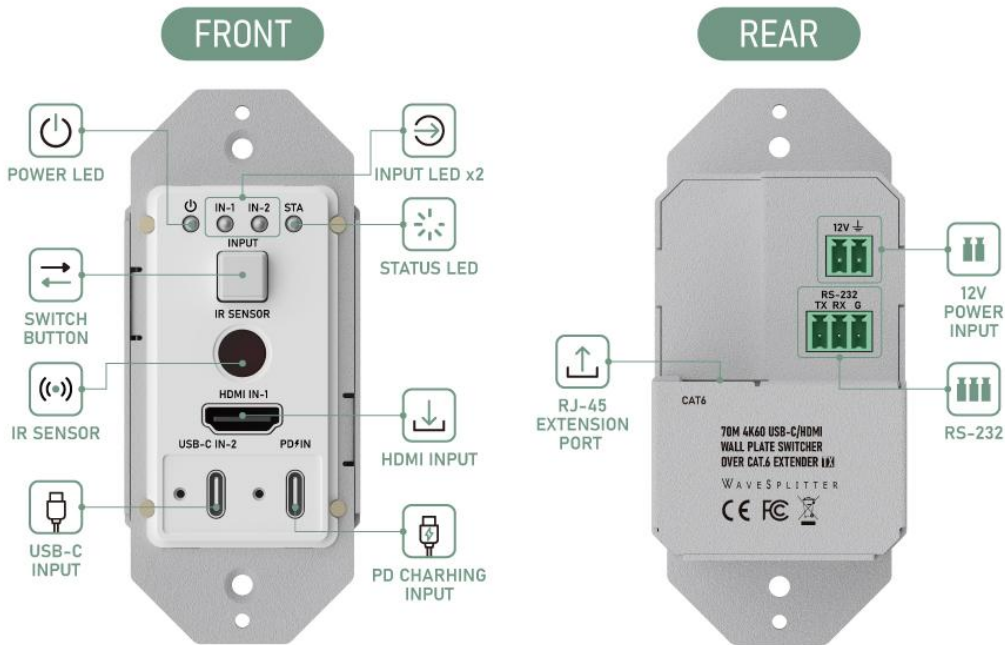
US Wall Plate 1-Gang Transmitter x 1 | Receiver x 1 | 12V/1A Multi-Country Power Adapter x 1 | IR Emitter x 1 | Phoenix Male Connector (3-pin) x 2 | Phoenix Male Connector (2-pin) x 1 | Ear Mounts x 2 | Screws Pack x 1

## Specifications

| Interface              | Transmitter                                                | Receiver                                                                              |
|------------------------|------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Video Input            | HDMI Type-A (Female) x 1  <br>USB-C (Female) x 1           | Extension Port (RJ-45) x 1                                                            |
| Video Output           | Extension Port (RJ-45) x 1                                 | HDMI Type-A (Female) x 1                                                              |
| Control I/O            | RS-232 (3-Pin Phoenix Terminal Block) x 1<br>IR Sensor x 1 | RS-232 (3-Pin Phoenix Terminal Block) x 1<br>IR Out (3.5mm Jack) x 1                  |
| Audio                  |                                                            | Analog Audio Line Out (3.5mm Jack) x 1                                                |
| USB                    |                                                            | Micro USB Port for FW updating                                                        |
| Power                  | 2-pin Phoenix Terminal Block x 1<br>USB-C PD Port x 1      | 12V/1A (DC Plug : 5.5 / 2.1mm with Locking) x 1                                       |
| Transmission           |                                                            |                                                                                       |
| HDMI Compliant         |                                                            | HDMI2.0b                                                                              |
| HDCP Compliant         |                                                            | 1.4 / 2.2/ 2.3                                                                        |
| Bandwidth              |                                                            | 18Gbps                                                                                |
| Output Resolution      |                                                            | 4096x2160@60Hz / 3840x2160@60Hz / 2560x1440@60Hz<br>/ 1920x1200@60Hz / 1920x1080@60Hz |
| Audio Format           |                                                            | HDMI Audio Pass-Through<br>Stereo Audio : PCM2.0                                      |
| IR Frequency           |                                                            | 30 ~ 50KHz                                                                            |
| Power                  |                                                            |                                                                                       |
| Power Supply           | 12V/1A 2-pin Phoenix Terminal Block. PoC                   | 12V/1A DC (Select one side for power-on) PoC                                          |
| Max. Power Consumption |                                                            | 6.3W                                                                                  |
| Environment            |                                                            |                                                                                       |
| Operating Temperature  |                                                            | 0°C ~ 45°C                                                                            |
| Storage Temperature    |                                                            | -20°C ~ 70°C                                                                          |
| Product Structure      |                                                            |                                                                                       |
| Main Material          | TX : SGCC                                                  | RX : SGCC                                                                             |
| Size W x D x H         | TX : 45 x 105.6 x 45.3mm                                   | RX : 63 x 15.2 x 80mm                                                                 |
| Weight                 | TX : 230kg                                                 | RX : 120kg                                                                            |
| Country of Origin      |                                                            | China                                                                                 |
| Certification          |                                                            |                                                                                       |
| Safety & Emission      |                                                            | CE / FCC / RoHS / REACH                                                               |

**Panel Overview**

TRANSMITTER



RECEIVER



**Connection Diagram**

