# 18Gbps HDBaseT 70M with USB-C/HDMI Wall Plate Transmitter



## User Manual

**VER 1.1**

# Thank you for purchasing this product

For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

# Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lighting strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

# Table of Contents

## 1. Introduction

The wall plate is a 2x1 switcher and HDBaseT transmitter with HDMI and USB-C inputs. It features a US one-gang enclosure for Decora-style wall plate openings with interchangeable black and white wall plates and faceplates. Support video resolution up to 4K2K@50/60Hz 4:4:4. It supports bidirectional RS-232 pass-through, and the RS-232 control signal can be transmitted up to 131ft / 40m. The product is remotely powered by the receiver or other HDBaseT-equipped devices via POE.

## 2. Features

☆ Compliant with HDMI 2.0b, HDCP 2.2 and Display Port 1.2a
☆ HDMI input supports 18Gbps video bandwidth;
  USB-C input supports 5.4Gbps video bandwidth
☆ Video resolution up to 4K2K@50/60Hz 4:4:4
☆ HDBaseT output can extend video transmission distance up to 230ft / 70m for 1080P@60 or 131ft / 40m for 4K@60 via a single CAT6/6a/7 cable
☆ Support 3D, HDR10 and Dolby Vision
☆ HDMI audio formats support LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX,DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
☆ Support HDMI and USB-C input
☆ With USB-C charging port
☆ US one-gang enclosure for Decora-style wall plate openings
☆ Input signal selection supports automatic mode and manual mode
☆ Support POE function (only from Receiver to Transmitter)
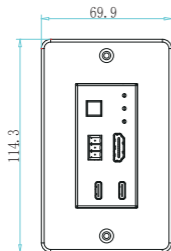☆ Available in white or black coating

## 3. Package Contents

① 1 × 18Gbps HDBaseT 70M with USB-C/HDMI Wall Plate Transmitter
② 1 × 3pin-3.81mm Phoenix Connector (male)
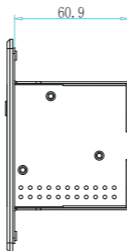③ 1 × User Manual

## 4. Specifications

| Technical | |
|---|---|
| HDMI Compliance | HDMI 2.0b |
| HDCP Compliance | HDCP 2.2 |
| DP Compliance | Display Port 1.2a |
| Video Bandwidth | USB-C: 5.4 Gbps |
| | HDMI: 18 Gbps |
| Video Resolution | 480i~1080p50/60Hz, 4Kx2K@24/30Hz, 4k2k@60Hz |
| Color Space | RGB, YCbCr 4:4:4 / 4:2:2, YUV 4:2:0 |
| Color Depth | 8/10/12-bit (1080P@60Hz)<br>8-bit (4K@60Hz) |
| HDR | Support |
| HDMI Audio Formats | LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD |
| Transmission Distance | Max distance (1080P) : 230ft / 70m over CAT6/6a/7<br>Max distance (4K): 131ft / 40m over CAT6/6a/7 |
| ESD Protection | Human body model — ±8kV (Air-gap discharge) & ±4kV (Contact discharge) |
| Connection | |
| Transmitter | Inputs: 1 x HDMI Type A [19-pin female]<br>        1 x USB-C<br>Outputs: 1 x HDBaseT Out [RJ45, 8-pin female]<br>        1x USB-C (only for charging)<br>Controls: 1x RS-232 [3-pin phoenix connector]<br>        1x FW [Micro USB, Update port] |
| Receiver | Inputs: 1x HDMI IN [Type A, 19-pin female]<br>        1x HDBaseT IN [RJ45, 8-pin female]<br>Outputs: 1x HDMI OUT [Type A, 19-pin female]<br>        1x AUDIO OUT [Phoenix jack]<br>Controls: 1x RS-232 [3-pin phoenix connector]<br>        1x FW [Micro USB, Update port] |

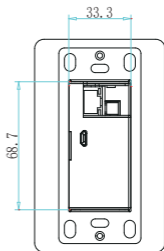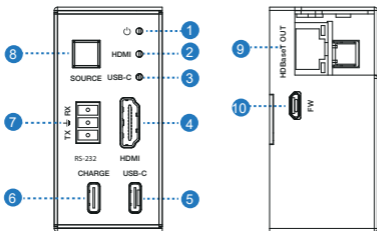| Mechanical | |
|---|---|
| Housing | Metal Enclosure |
| Color | White / Black |
| Dimensions | Wall plate:<br>33.3mm [W] x 65.7mm [D] x 68.7mm [H]<br>Faceplate:<br>69.9mm [W] x 3mm [D] x 114.3mm [H]<br>Receiver:<br>200mm [W] x 102.8mm [D] x 22mm [H] |
| Weight | Wall plate: 197g, Receiver: 517g |
| Power Supply | POE (only from Receiver to Transmitter) |
| Power Consumption | Wall plate: 7.92W (Max), Receiver: 6W (Max) |
| Operating Temperature | 32 - 104°F / 0 - 40°C |
| Storage Temperature | -4 - 140°F / -20 - 60°C |
| Relative Humidity | 20 - 90% RH (no condensation) |

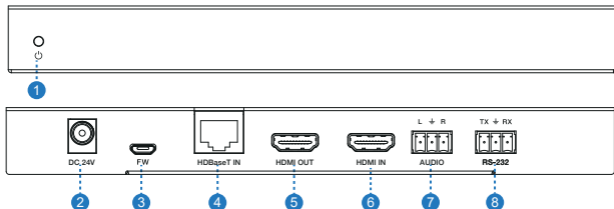## 5. Product Dimensions



**Front**   **Side**   **Back**

Unit: mm

# 6. Operation Controls and Functions

## 6.1 Transmitter Panel



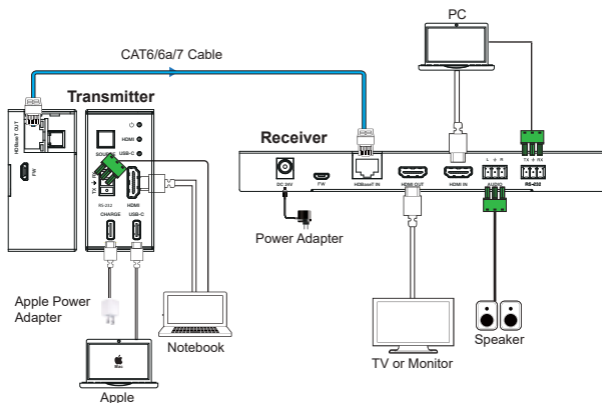| No. | Name | Function Description |
|-----|------|---------------------|
| 1 | Power LED | The power LED indicator will illuminate in green when the product is powered on, and red when the product is on standby. |
| 2 | HDMI LED | When the HDMI input port is active and the HDMI signal is detected, the green LED will be on. |
| 3 | USB-C LED | When the USB-C input port is active and USB-C signal is detected, the green LED will be on. |
| 4 | HDMI port | HDMI input port, connect to HDMI source device. |
| 5 | USB-C port | (1) USB-C signal input port.<br>(2) Charging port for devices with USB-C port. |
| 6 | CHARGE port | Connect this port to power supply, then the USB-C port will power the connected device. |
| 7 | RS-232 port | Connect to PC or control system for bidirectional RS-232 control signal passthrough. |
| 8 | SOURCE button | Used to switch HDMI / USB-C input signal. |
| 9 | HDBaseT OUT | Connect to the HDBaseT IN port of Receiver with a CAT6/6a/7 cable. |
| 10 | FW port | Firmware update port. |

| No. | Name | Function Description |
|-----|------|---------------------|
| 1 | Power LED | When the product is powered on, the red LED indicator will be on. |
| 2 | DC 24V | DC 24V power supply port. |
| 3 | FW | Firmware update port. |
| 4 | HDBaseT IN | Connect to the HDBaseT OUT port of Transmitter with a CAT6/6a/7 cable. |
| 5 | HDMI OUT | HDMI output port, connect to HDMI display device. |
| 6 | HDMI IN | HDMI input port, connect to HDMI source device. |
| 7 | AUDIO OUT | Analog audio output port. |
| 8 | RS-232 port | Connect to PC or control system for bidirectional RS-232 control signal pass-through. |

**Note:**
This transmitter supports automatic/manual mode for source signal input. In manual switching mode, press the SOURCE button to select HDMI/ USB-C input source.
In automatic switching mode, the last connected or the currentlly connected source signal will be selected automatically; When both HDMI and USB-C ports are connected to active signal, HDMI signal input is preferred; When both HDMI and USB-C ports are not connected to active signal, it will switch to the source signal of the Receiver.

# 7. Application Example



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