

# User Manual

## 4K 3-in 1-out HDBaseT Wall Plug



Manual No: V1.1



**Dear user:**

Thank you for using the product of our company. In order to better experience the visual effect brought by this product, we have prepared a detailed user manual. Please read the user manual carefully before you start to use this product, from which you can get the knowledge about product introduction, usage and other aspects, so that you can use this machine correctly. If you don't understand anything, please feel free to contact us!

**Tips:** This manual is for reference only. If it is updated, no further notice will be given!

This manual mainly introduces the usage, main performance parameters, device connection, important safety instructions and other information of the audio inserter. This manual is only used as the user's operation instruction, not for maintenance service. If there are any changes in the functions or related parameters from the date of issuance, they will be supplemented by additional information, which can be obtained from us or our distributors.

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## 1. Product Preview



## 2. Package Contents

- 1×4K 3-in 1-out HDBaseT Wall Plug
- 1×3pin-3.81mm phoenix terminal
- 1×24V/1A multi-country power supply (with 2pin-3.81mm phoenix terminal)
- 2×machine screw (M3.5 \* 12)1×4K 3-in 1-out HDBaseT Wall Plug
- 1×User Manual

### 3. Introduction

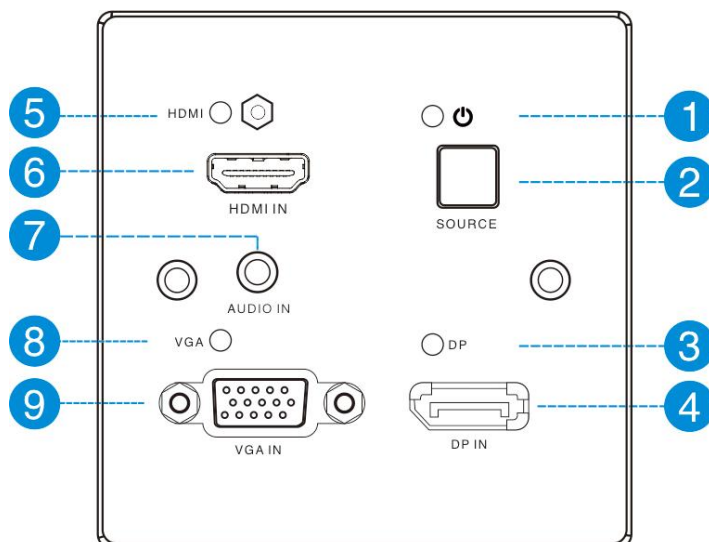
This 4K HDBaseT wall plug supports 3 inputs (HDMI/DP/VGA) and 1 output HDBaseT. Standard medium size 86 × 86mm wall boxes shall be used. 1080P @ 60Hz signals can be transmitted up to 70 meters and 4K@30Hz YCbCr 4:4:4 signals can be transmitted up to 40 meters through a single Cat6/6a network cable. The HDMI/DP input supports video resolutions up to 4K2K @ 30Hz, and the VGA input supports video resolutions up to 1920 × 1200 @ 60Hz. It supports both manual and automatic switching modes, as well as 24V POC function. Built-in bi-directional RS-232.

### 4. Features

- ✧ HDMI 1.4, HDCP1.4, DP1.2 compliant
- ✧ HDMI/DP input supports video resolution up to 4K2K@30Hz
- ✧ VGA input supports video resolution up to 1920 × 1200@60Hz
- ✧ VGA format input supporting multiple VESA standards
- ✧ Transmission of 7.1 channel high-definition audio (LPCM, Dolby True HD and DTS-HD Master Audio)
- ✧ Extended transmission distance via single Cat6/6a cable: 1080P@60Hz up to 70m, 4K@30Hz up to 40m
- ✧ Support manual and automatic switching modes
- ✧ Support bidirectional RS-232 transparent transmission
- ✧ Support 24V POC function

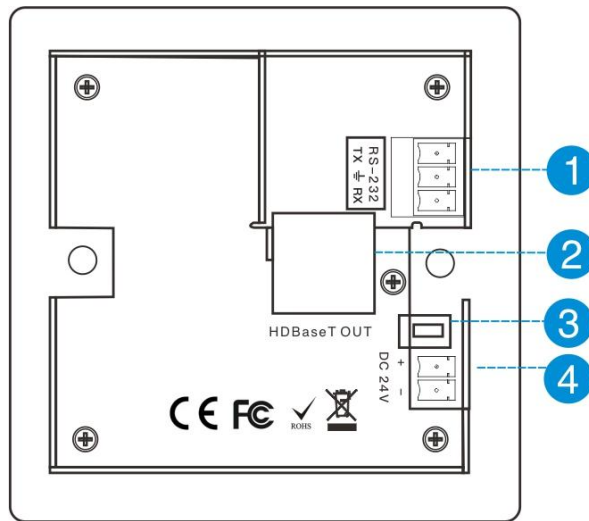
## 5. Functional Description

### 5.1 Front Panel



No.	Port Name	Function Description
1	Power LED	The red power LED is on when the device is powered on.
2	SOURCE Key	For manual selection of input signal sources
3	DP Indicator	When the DP port is selected and there is a signal input, the green indicator is on.
4	DP IN	DP input port. Connect the DP input signal source through the DP cable.
5	HDMI Indicator	When the HDMI port is selected and there is a signal input, the green indicator is on.
6	HDMI IN	HDMI input port. Connect the HDMI input signal source through the HDMI cable.
7	AUDIO IN	VGA audio input port
8	VGA Indicator	When the VGA port is selected and there is a signal input, the green indicator is on.
9	VGA IN	VGA input port. Connect the VGA input signal source through the VGA cable.

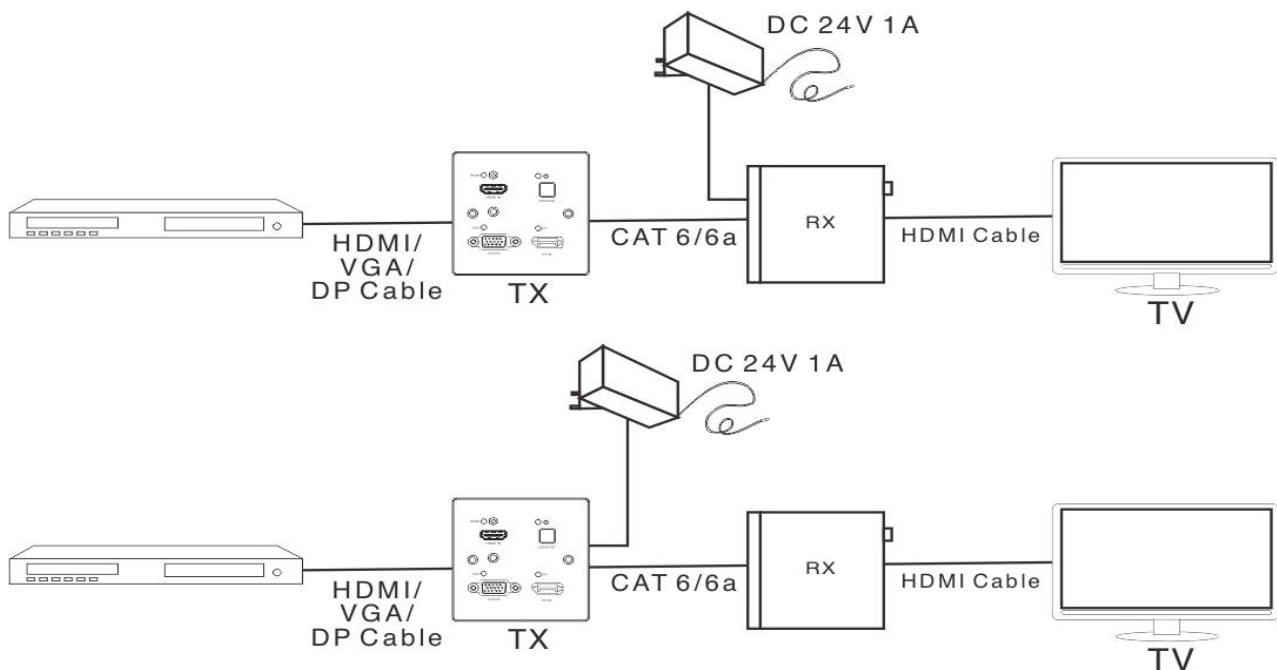
### 5.2 Rear Panel



No.	Name	Function Description
1	RS-232	Use the Phoenix terminal to connect to a computer or control system to transmit RS232 commands.
2	HDBaseT OUT	HDBaseT output port. Connect the HDBaseT receiver via the UTP cable.
3	POC Switch	Use this switch to turn POC power on/off
4	DC 24V	DC 24V power supply interface

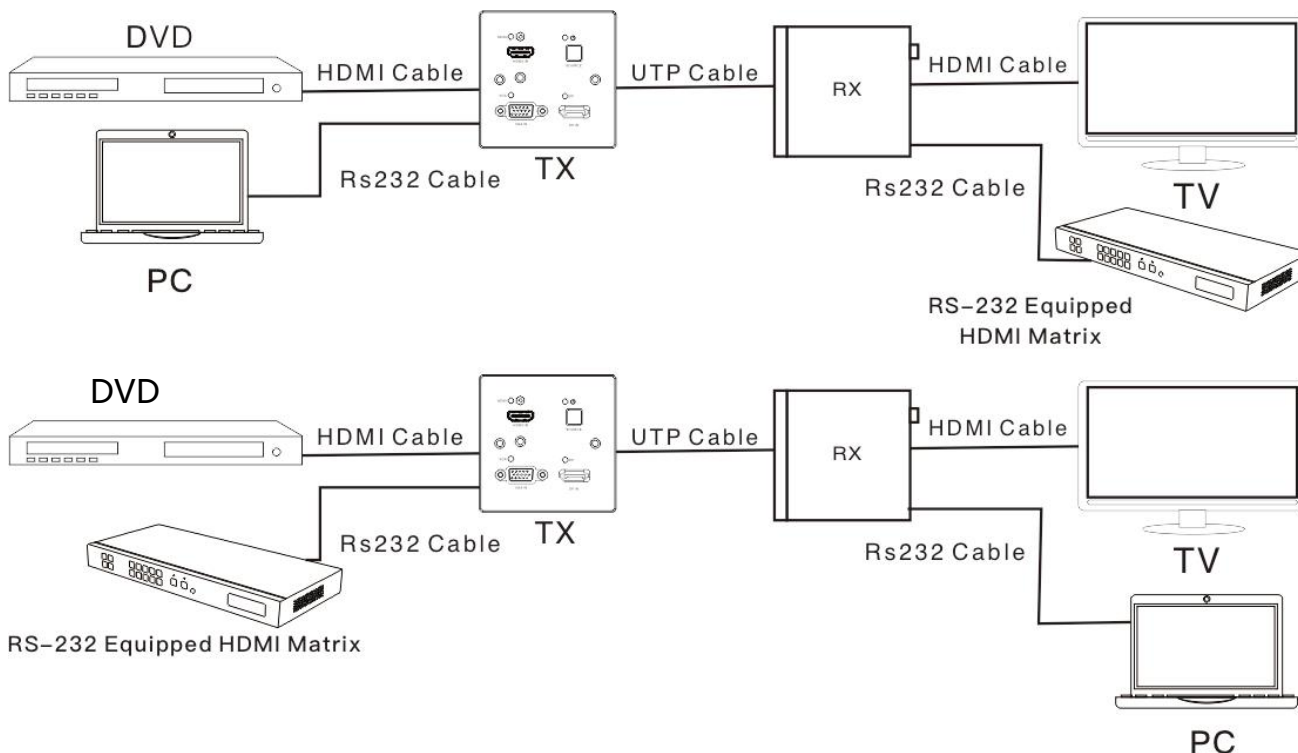
※ Describe 1 POC

**POC (Power over Cable) Application Example**



※ Describe 2 POC

**Bidirectional RS232 Control Application Example**



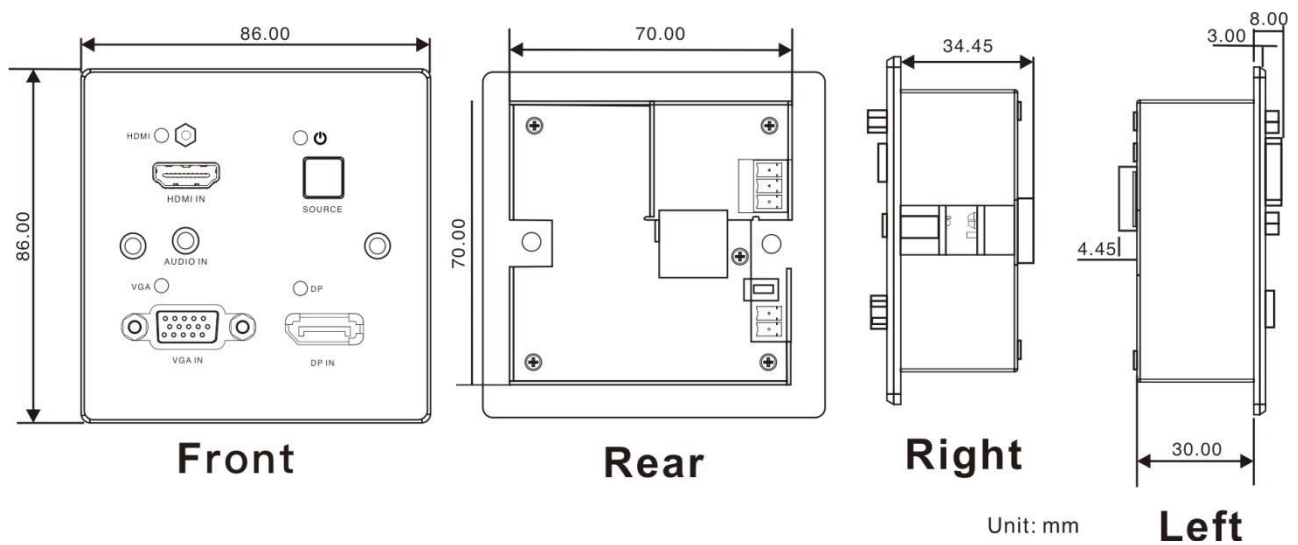
## 6. Technical Parameters

Parameter Specifications	
HDMI Compliance	HDMI 1.4
HDCP Compatible	HDCP 1.4
HDMI/DP Video Bandwidth	10.2 Gbps
HDMI/DP Video Resolution	Up to 4K/2K@30Hz YCbCr 4:4:4
VGA Video Resolution	Up to 1920×1200@60Hz
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2
Color Depth	8-bit (4K/2K@30Hz)
HDMI/DP Audio Format	LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS HIGH Res, DTS-HD Master Audio, DSD
VGA Audio Format	LPCM2.0/48KHz
ESD Protection	Human body model: ±8KV (Air-gap discharge), ±4KV (Contact Discharge)
Connection	

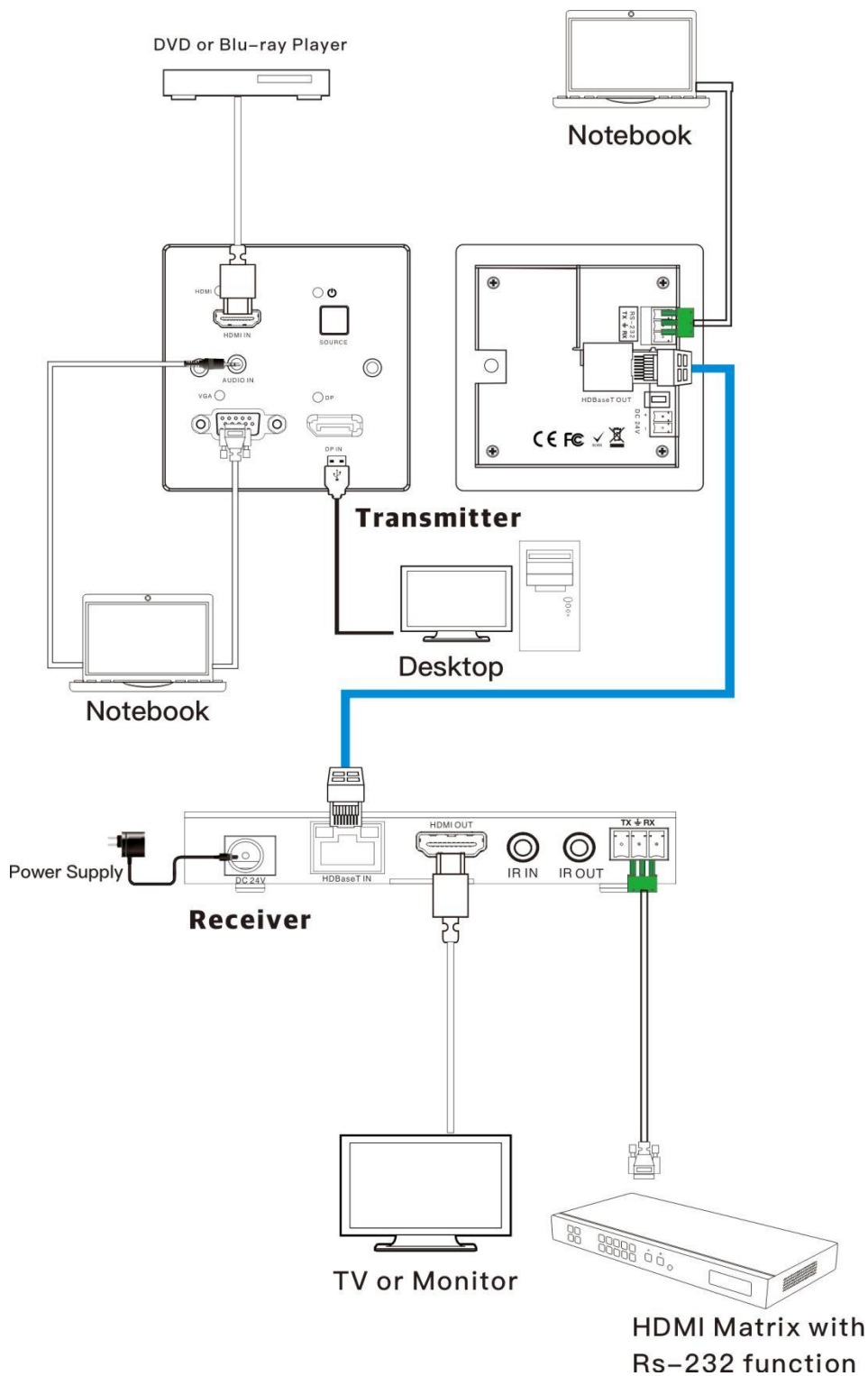


Input Port	1×HDMI Type A [19-pin female] 1×VGA [15-pin female] 1×DP [Standard size female] 1×AUDIO IN [3.5mm Stereo Mini-jack]
Output Port	1×HDBaseT Out [RJ45]
Control Port	1×RS-232 [phoenix terminal]
<b>Mechanical</b>	
Housing	Aluminum shell--front panel Iron case--rear panel
Color	White--front panel Black--rear panel
Dimensions	86mm (L)×86mm (W)×41mm (H)
Weight	205g
Power Supply	DC 24V/1A or support POC power supply
Power Consumption	5W (Maximum)
Operating Temperature	32-104°F / 0-40°C
Storage Temperature	-4-140°F / -20-60°C
Relative Humidity	20-90% RH (non-condensing)

## 7. Product Dimensions










# 8. Application Examples




✧ Safety Instructions

Symbols used in the user manual and on the device to indicate the risk of injury to the user or others and damage to property. For your safe and correct use of the device, the symbols and their meanings are as follows. Please make sure to understand these symbols correctly before reading the user manual.

	EMC Certification Mark for Electronic Products by the Federal Communications Commission.
	The product contains some metal components, please pay attention to environmental protection.
	Through Directive 2011/65/EU of the European Parliament and of the Council.
	CE certification means that this product has met the safety requirements stipulated in the EU directive, and users can rest assured to use it.
	This is a Class A product and may cause radio interference in the living environment. In this case, the user may be required to take practical measures against the interference.
	Warn the user that uninsulated hazardous voltage present in the equipment may cause a person to receive an electric shock.
	Warning: To avoid electric shock, do not open the cover and do not put useless parts inside the case. Please contact qualified service personnel.

✧ General Information Instructions

	Lists what may cause an unsuccessful operation or setup, and some related information to be aware of.
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## WARNING

To ensure reliable use of the equipment and personal safety, please observe the following items during installation, use and maintenance:

### **Precautions for installation:**

- ◆ Do not use this product in the following places: places with dust, oil smoke, conductive dust, corrosive gas and flammable gas. Places exposed to high temperature, condensation, wind and rain; places with vibration and impact. Electric shock, fire, misoperation can also cause product damage and deterioration.
- ◆ When processing and wiring screw hole , do not make metal chips and wire ends fall into the ventilation hole of the controller, which may cause fire, failure and misoperation.
- ◆ After the installation of the product, it is necessary to ensure that there is no foreign matter on the ventilation surface, including dust-proof paper and other packaging items, otherwise it may lead to poor heat dissipation during operation, causing fire, failure and misoperation.
- ◆ Avoid wiring, plugging and unplugging cable plugs in live state, otherwise it is easy to cause electric shock or circuit damage.
- ◆ Installation and wiring must be firm and reliable, and poor contact may lead to misoperation.
- ◆ For applications with serious interference, shielded cables should be selected for

the input or output cables of high frequency signals to improve the anti-interference performance of the system.

### **Precautions for Wiring:**

- ◆ The installation and wiring can only be carried out after the external power supply is completely cut off, otherwise it may cause electric shock or equipment damage.
- ◆ This product is grounded through the grounding conductor of the power cord. To avoid electric shock, the grounding conductor must be connected to the ground. Before connecting the input or output of this product, please be sure to ground the product correctly.
- ◆ After installation and wiring, remove foreign matters immediately, and cover the terminal cover plate of the product before power on to avoid electric shock.

### **Precautions for operation and maintenance:**

- ◆ Do not touch the terminal when it is powered on, otherwise it may cause electric shock and misoperation.
- ◆ Please clean and tighten the terminal after turning off the power supply. These operations may cause electric shock when the power is on.
- ◆ Please connect or remove the communication signal cable and the cable of the expansion module or control unit after the power is turned off. Otherwise, it may cause equipment damage and misoperation.
- ◆ Do not disassemble the device to avoid damaging the internal electrical components.
- ◆ Please be sure to read this manual carefully and fully confirm the safety before

changing, commissioning, starting and stopping the program.

**Precautions for product scrapping:**

- ◆ Electrolytic capacitors on circuit boards may explode when burned.
- ◆ Please collect and dispose of it, and do not put it into domestic garbage.
- ◆ Please dispose of as industrial waste or in accordance with local environmental protection regulation.