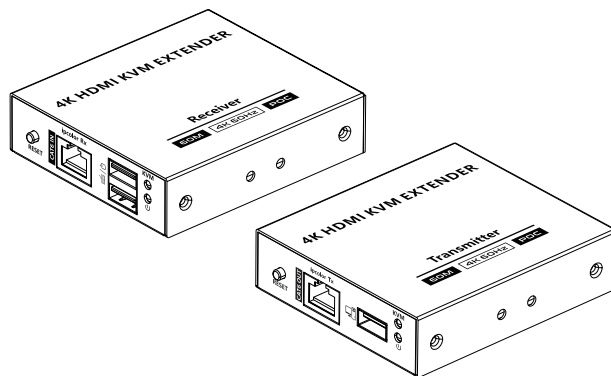# 4K60Hz HDMI KVM EXTENDER

Disclaimer

The product name and brand name may be registered trademark of related manufactures. ™ and ® may be omitted on the user manual. The pictures in this user manual are just for reference. We reserve the rights to make changes without further notice to a product or system described herein to improve reliability, function or design.

- **Important Safety Instructions:**

  1. To prevent electric shock, please ensure that all devices are properly grounded.
  2. Do not place this device near or over a radiator or heat register, or where it is exposed to direct sunlight.
  3. Place the device in a well-ventilated area, do not block any ventilation openings.
  4. Do not expose this device to rain or place it near water. Any liquid that goes into the device may cause a failure, fire, or electric shock.
  5. Do not place the device on an uneven or unstable surface. The device may fall resulting in a malfunction.
  6. Never insert anything metallic into the open parts of this device. This may cause a danger of electric shock.
  7. The device should be repaired only by a qualified technician.
  8. If a third-party power supply is used, please ensure that the power supply specifications meet the product requirements.
  9. Do not plug or unplug the Ethernet cable or HDMI cable while the power is on.

- **Introduction**

  This is an HDMI point-to-point extender kit, it can realize zero-latency transmission. The 4K@60Hz HDMI signal can be extended by 60m through CAT6/6A/7 network cable. It supports HDMI loop out, KVM function, 3.5mm stereo audio output, etc. This kit is a reliable, ultra-high-definition video transmission solution, which is widely used in security monitoring, home theater, broadcasting, training and other fields.

• Features

1. Zero-latency transmission
2. Extend 4K@60Hz HDMI signal up to 60m over Cat6/6A/7 cable
3. Compatible with a wider range of screen resolutions such as 3440x1440, 2560x1440, 2560x1080, 2048x1080, 1920x1440
4. Support KVM function
5. Support HDR10
6. The transmitter supports HDMI loop out
7. The receiver supports 3.5mm stereo audio output
8. Support auto downscaling
9. Lightning protection, surge protection, ESD protection
10. Support PoC Network Cable Power Supply, Only TX Power Supply is Needed.

• Package Contents

Transmitter x1   Receiver x1   DC 5V/2A x1

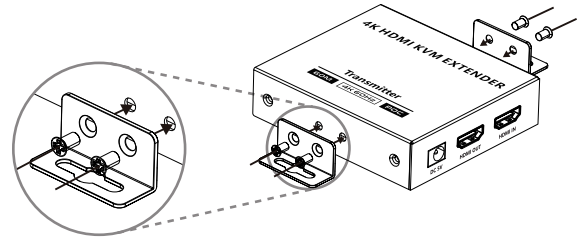USB cable x1   User manual x1   Mounting ear x4

Screw x10

• Installation Requirements

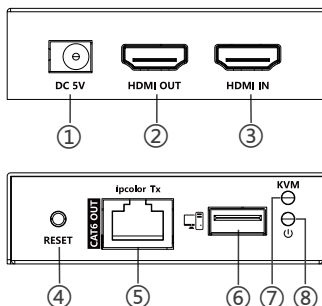| Item	Description	Requirement
Signal source	PC, DVD, NVR, etc. with HDMI port	HDMI cable ≤ 5m
Cable	CAT6/6A/7, following standard IEEE-568B	CAT6/6A/7 ≤ 60m
Display device	TV, projector, LED screen, etc. with HDMI port	HDMI cable ≤ 5m

• Wall Mounting

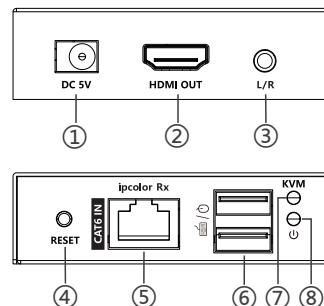Choose the wall mounting position and attach the mounting ears to the unit according to the diagram.

• Panel Description

1. Transmitter

DC 5V   HDMI OUT   HDMI IN
① ② ③

ipcolor Tx   KVM
RESET   CAT6 OUT
④ ⑤   ⑥ ⑦ ⑧

①	Power Input	Connect with DC 5V/2A power adapter
②	HDMI Out	Connect with HDMI display device
③	HDMI In	Connect with HDMI source device
④	Reset Button	Press to restart the device
⑤	RJ45 Output	Connect with CAT6/6A/7 network cable
⑥	USB-A Port	Connect to the computer with USB cable
⑦	KVM Indicator	**Light off**: the computer and the USB port have not established a connection **Steady on**: the computer and the USB port are connected **Light flashing**: the KVM data is transmitting
⑧	Power Indicator	**Light flashing**: the power is on, but no HDMI signal is transmitted **Steady on**: the HDMI signal is transmitting

2. Receiver

DC 5V   HDMI OUT   L/R
① ② ③

ipcolor Rx   KVM
RESET   CAT6 IN
④ ⑤   ⑥ ⑦ ⑧

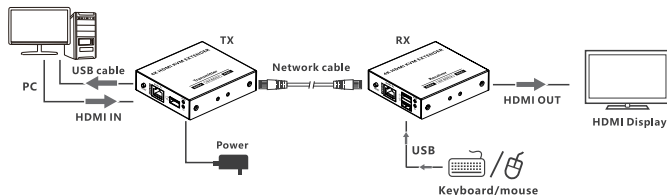| ①	Power Input	PoC, only TX power supply is needed
②	HDMI Out	Connect with HDMI display device
③	L/R stereo audio output	Connect with speaker/earphone
④	Reset Button	Press to restart the device
⑤	RJ45 Input	Connect with CAT6/6A/7 network cable
⑥	USB-A Port	Connect with the mouse and keyboard
⑦	KVM Indicator	**Light off**: the keyboard/mouse and the USB port have not established a connection **Steady on**: the keyboard/mouse and the USB port are connected **Light flashing**: the KVM data is transmitting
⑧	Power Indicator	**Light flashing**: the power is on, but no HDMI signal is transmitted **Steady on**: the HDMI signal is transmitting

• Installation Procedures

1. Connection Diagrams

2. Connection Instructions

1) Connect the source device to the HDMI IN port of the transmitter with an HDMI cable, and connect the HDMI OUT port of the receiver to the display device with another HDMI cable.
2) Use a Cat6/6A/7 cable to connect the RJ45 port of the transmitter and receiver.
3) If using the KVM function, connect the keyboard/mouse to the USB port of the receiver and connect the computer to the USB port of the transmitter via the USB cable.
4) If using HDMI loop out, connect the display device to the HDMI OUT port of the transmitter.
5) If you need to output audio additionally, connect the speaker to the L/R port with a 3.5mm stereo audio cable.
6) Plug the power supply into the devices to get started.

• FAQ

Q: The devices are connected correctly, but why is there no image displayed?
A:
1) Please make sure the HDMI cable meets the transmission requirements. (e.g. 4K HDMI cable)
2) Please check and make sure the network cable is connected firmly.
3) Restart the transmitter or receiver by pressing the reset button.

Q: Why does the display occasionally have a black screen?
A:
1) Check if the length of the cable is within the specified range.
2) Restart the transmitter or receiver by pressing the reset button.

Q: Why is the display color abnormal or no sound?
A:
1) Check if the HDMI cables and the network cable are connected well.
2) Restart the transmitter or receiver by pressing the reset button.

Technical Parameters

Item	Transmitter	Receiver
Video		
Input interface	1x HDMI	1x RJ45
Output interface	1x HDMI 1x RJ45	1x HDMI
HDMI length	≤ 5m	≤ 5m
Maximum transfer rate	18Gbps	
Compatibility	HDMI 2.0	
	HDCP 2.2	
Resolutions	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz, 3840x2160@24/25/30/50/60Hz, 4096x2160@24/25Hz, 3440x1440, 2560x1440, 2560x1080, 2048x1080, 1920x1440, 1920x1200, 1280x960, 1280x800, 1280x768, 1680x1050, 1360x768, 1366x768, 1600x900, 1024x768, 800x600	
Transmission distance	CAT6/6A/7 ≤ 60m	
Audio		
Input interface	1x HDMI	N/A
Output interface	1x HDMI	1x HDMI 1x 3.5mm L/R
Audio formats	LPCM/DTS-Audio/Dolby Digital 5.1CH/Dolby Atmos	
Command Signal		
USB version	USB 1.1, compatible with USB 1.0	
Power		
Power Supply	DC 5V/2A	PoC (Powered by TX)
Power Consumption	TX+RX<8W	
Operating Environment		

Working	-10℃~60℃	
Storage temperature	-30℃~70℃	
Humidity	0~90% RH (no condensation)	
Physical Properties		
Housing	Iron	
Weight	TX: 146g	RX: 146g
Color	Black	
Dimensions	85.0(L)x75.5(W)x21.5(H)mm	
Protection	ESD protection 1a Contact discharge level 2 (±4KV) 1b Air discharge level 3 (±8KV) Implementation of the standard: IEC61000-4-2	
	Lightning protection, Surge protection	