材质:157g铜版纸 正反印刷

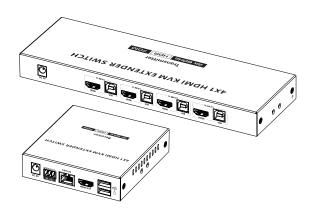
尺寸: 100x138mm

H22079英文说明书AH1: 0106010022042

## **User Manual**

# **4X1 HDMI KVM ESTENSION SWITCH**







## Important Safety Instructions

- 1. To prevent electric shock, please ensure that all devices are properly g rounded.
- 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
- 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.

## Introduction

This is a 4-in 1-out ultra-high-definition KVM extension switcher, comprises a transmitting end and a receiving end. It supports 4 HDMI signal inputs and 1 HDMI signal output, the 4K@60HZ HDMI signal can be extended to 70 meters through CAT6 or above network cable, the highest resolution is 4K@60HZ and is backward compatible, supports KVM control. A variety of control methods (IR remote control, button and RS-232) can easily switch the content of the 4 HDMI signal sources to the display. The product is widely used in security monitoring, education and training, exhibitions and broadcasting, command centers, etc.

#### Features

- 1. 4K@60Hz resolution and backwards compatibility
- 2. Support 4 HDMI signal input, and extend the HDMI signal to 70 meters through CAT6 and above network cables
- 3. RJ45 output to transmit HDMI signals to receiver
- 4. Multiple switching modes: IR remote control, button, RS-232
- 5. KVM function for USB2.0 devices
- 6. EDID passthrough and auto downscaling
- 7. HDR10 supported
- 8. Lightning protection, surge protection, ESD protection

## Package Contents



Power 5V1A x2

Grounding Screw x4

USB 2.0 Type A to

Type B Cable x4













Screw x10

**BBB** 

Remote Control x1







# Mounting Ear x4

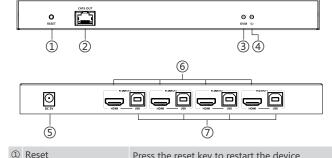
# Terminal Block x1

# • Installation Requirements

- 1. HDMI source device (DVD, game console, set top box, PC, etc.)
- 2. HDMI display device like TV, projector with HDMI port
- 3. HDMI cable: Standard HDMI 2.0 cable (Support 4Kx2K@60Hz)
- 4. CAT6 and above network cable

## Panel Description

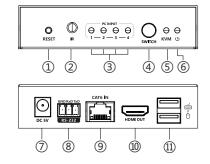
## 1. Transmitter (TX)



G	Reset	riess the reset key to restart the device	
(2	RJ45 output	Connect with CAT6/6A/7 network cable	
(3	KVM indicator (blue)	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	
4	Power/Signal indicator (orange)	Light off: no power Slow flash (every 1 second): there is power, but no HDMI signal Quick flash (every 200ms): the HDMI signal is connecting Steady on: the HDMI signal is transmitting	

(5)	DC 5V	Connect with DC5V/1A power adapter
6	HDMI input	Connect with HDMI source device
7	USB 2.0 (Type-B)	Connect to the computer's USB ports with USB cables

### 2. Receiver (RX)



1	Reset	Press the reset key to restart the device	
2	IR receiving window	Receive IR signal	
3	HDMI input indicator	Corresponding to HDMI input 1, 2, 3, 4 respectively	
		Press the button to switch the input of the signal source	
⑤ KVM indicator (blue		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	

6 Power/Si (orange)		Power/Signal indicator (orange)	Light off: no power Slow flash (every 1 second): there is power, bu no HDMI signal Quick flash (every 200ms): the HDMI signal is connecting Steady on: the HDMI signal is transmitting
	7	DC 5V	Connect with DC5V/1A power adapter
	8	RS-232	For RS-232 command control
9	9	RJ45 input	Connect with CAT6/6A/7 network cable
	10	HDMI output	Connect with HDMI display device
	(11)	USB 2.0 (Type-A)	Connect with keyboard and mouse

#### Remote Control

"<" and ">" button, to choose channel forward or backward.

"1-4" number buttons, to choose any source device as you need



## Installation

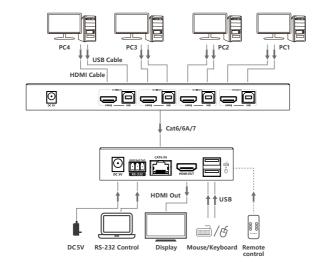
# 1. Network production

Follow the standard of IEEE-568B:

1-white and orange 2-orange 3-white and green 4-blue

5-white and blue 6-green 7-white and brown 8-brown

#### 2. Connection Diagrams



#### 3. Connection Instructions

- 1) Connect the source devices to the HDMI input ports with HDMI cables.
- 2) Connect the display device to the HDMI output port with HDMI cable.
- 3) Connect the transmitter and receiver with CAT6 or higher network cable.
- 4) To use the KVM function, connect the mouse and keyboard to the USB type-A port of the switch, while connecting the computer and the switch with a USB Type A to Type B cable.
- 5) Power on the devices to get started.

Note: You can switch the signal source by pressing the switch button or use the remote control.

#### 4. RS-232 control

Baud rate: 9600

Data bits: 8

Stop character: 1

Parity: none

/	HDMI1 input	HDMI2 input	HDMI3 input	HDMI4 input
PS1XR\n	PS11R	PS12R	PS13R	PS14R
Reset\n Restart the device Recover\n Restore factory setting				
Status\n	Query for status information Displays the current status of HDMI input signal source, such as Status:			
	Baud 9600 PS12R OK			
Baud XX\n Set baud rate value: 9600 (default), 19200				

## FAQ

- Q: No image output?
- A: 1) Check the power supply and make sure the power indicator is on.
- 2) Check if the HDMI cables connected well.
- 3) Check and make sure the TV has been set up to the right channel.
- 4) Make sure the network cable meets the standard and is properly connected.
- 5) While connect with PC or laptop via HDMI, please make sure the output mode is mirror or extend.

Q: Picture quality is not fluent and stable?

- A: 1) Please check and make sure all HDMI cables are connected well.
- 2) Try to connect the source device to display device directly, or change to another source device for a try to see the picture quality.
- 3) Please use high quality HDMI standard cable when HDMI 4K signal input.

# Specification

	Item	Specification
Power supply	Voltage/Current	DC 5V/1A
Power supply	Power consumption	TX<4W RX<4W
	HDMI compliance	HDMI 2.0 (HDR, YUV4:4:4)
	HDCP compliance	HDCP 2.2, and HDCP1.4
HDMI Performance And Interface	HDMI resolution	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, 1280x960, 1280x800, 1280x768, 1680x1050, 1360x768, 1366x768, 1600x900, 1024x768, 800x600, 3340x1440, 2560x1600, 2560x1440, 1920x1200
	Supports audio formats	LPCM7.1/DTS-HD/DTS-Audio/Dolby Digital plus/Dolby TrueHD 5.1/Dolby Digital/Dolby Atmos
	Transmission speed	18Gbps
	Video bandwidth	600MHz
HDMI port	HDMI input x4	
RJ45 port	RJ45 port x1	
RS-232	3 pin (GND/RxD/TxD) , baud rate 9600	
Transmission Distance CAT6/6A/7		≤70m ≤40m: 4096x2160@24/25/30Hz, 3440x1440, 2560x1600, 2560x1440

Electrostatic protection of the whole machine	Electrostatic protection 1a Contact discharge level 2 1b Air discharge level 3 Implementation of the standard: IEC61000-4-2 lightning protection, surge protection
Working temperature	-20~60℃
Storage temperature	-30~70℃
Humidity (no condensation)	0 ~ 90%RH
Dimension	TX: 250(L) x 80(W) x 25(H)mm RX: 106(L) x103(W) x25(H)mm
Material	Aluminum alloy material + crystal panel
Treatment process	Iron
Color	Black
Weight	TX: 524g RX:234g
	protection of the whole machine  Working temperature  Storage temperature  Humidity (no condensation)  Dimension  Material  Treatment process  Color

#### Disclaimer

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