



## 4K 120HZ TYPE-C HDMI 4K 60HZ HDMI OVER IP KVM EXTENDER 120M PSG3558

The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

## Please read these instructions carefully before use and retain for future reference.

## IMPORTANT SAFETY INFORMATION

When using electrical appliances basic safety precautions should always be followed.

- To prevent fire or shock hazard, do not expose this product to rain or moisture.
- Check that the power supply matches the mains voltage.
- Only use the power supply provided or one of identical specification.
- Ensure the IR remote extender cables are connected to the correct devices.
- Beware of static electricity which may damage the device. Use ESD precautions when installing.
- Do not place this device near or over a radiator or heat source, or where it is exposed to direct sunlight.
- Do not plug or unplug cables while the devices are powered on.
- For indoor use only.

## WHAT'S INCLUDED

- HDMI Extender and Receiver
- 2 x Power adapter 230VAC to 5VDC 2A
- · Operation manual
- Mounting kit
- 2 x RS232 terminal block
- Micro USB cable
- Grounding screw

## **FEATURES**

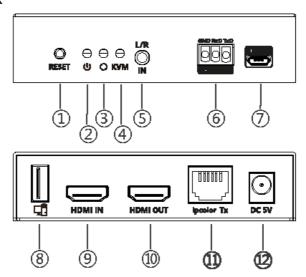
- Adopting ipcolor STREAM technology to realize high-definition and low-latency transmission.
- Supports up to 3840 x 2160@60Hz resolution, backwards compatible.
- Compatible with Cat5/5e/6 or above network cables, transmission distance of Cat6 cable is 120 meters.
- Supports one-to-one or one-to-many connections through the gigabit switch.
- Supports RS-232 passthrough.
- The transmitter supports HDMI loop out.
- Supports KVM control signal passback.
- The transmitter has a 3.5mm audio input for sound embedding, the receiver has an independent 3.5mm audio output.
- Firmware can be upgraded through Micro USB.
- Incorporates lightning protection, surge protection and ESD protection.
- Supports steady 24-hour operation.

## **OVERVIEW**

- This product is a 4K@60Hz HDMI KVM extender kit consisting of a transmitter and a receiver, using ipcolor STREAM technology for high-definition, low-latency transmission
- The 4K@60Hz HDMI signal can be extended up to 120m via category 6 and above network cables, supporting one-to-one connection, one-to-many connection via gigabit switch, or switch cascading.
- Also supports HDMI loop out, KVM, and RS-232 passthrough.

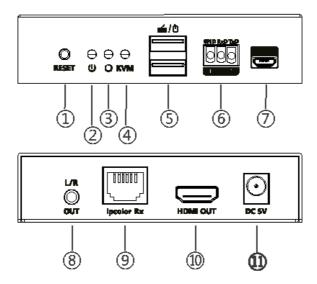
## INSTALLATION

## **TRANSMITTER**

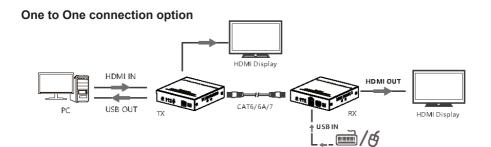


- 1. Reset button press to restart the device
- 2. Power indicator
- 3. Status indicator
  - off no connection established
  - slow flash Gigabit ethernet connection established but no ethernet transmission active
  - quick flash 100M ethernet connection established but no ethernet transmission active
  - steady on Video data is transmitting
- 4. KVM indicator
  - flashing KVM data is transmitting
  - steady on Computer and USB port are connected
- L/R in connect to the audio output of the source device using 3.5mm stereo jack lead
- 6. RS232 (gnd/rxd/txd) used for RS-232 passthrough
- 7. Micro USB port used for firmware update
- 8. USB-A port connect to PC using a suitable USB cable
- 9. HDMI input connect to source device using high quality HDMI cable
- 10. HDMI output connect to a local display device using a suitable HDMI cable
- 11. RJ45 connector connect to network using CAT6/6a/7 cable
- 12. 5V DC input connect to the 5V 2A mains power supply output

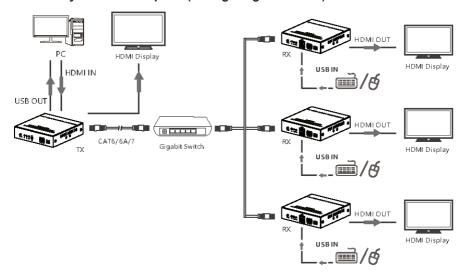
#### **RECEIVER**



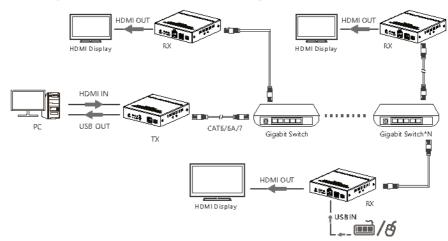
- 1. Reset button press to restart the device
- 2. Power indicator
- 3. Status indicator
  - off no connection established
  - slow flash Gigabit ethernet connection established but no ethernet transmission active
  - quick flash 100M ethernet connection established but no ethernet transmission active
  - steady on Video data is transmitting
- 4. KVM indicator
  - flashing KVM data is transmitting
  - steady on Mouse and keyboard are connected
- 5. USB-A port connect a mouse and keyboard
- 6. RS232 (gnd/rxd/txd) used for RS-232 passthrough
- Micro USB port used for firmware update
- L/R out connect to the audio input of the destination device using 3.5mm stereo jack lead
- 9. RJ45 connector connect to network using CAT6/6a/7 cable
- 10. HDMl output connect to a display device using a suitable HDMl cable
- 11. 12V DC input connect to the 12V 2A mains power supply output



## One to Many connection option (through Gigabit switch)



## One to Many connection option (cascade of Gigabit switches)



## **OPERATION**

**Note:-** It is suggested to use gigabit (1000 Mbps) switches in LAN transmission, and 100Mbps switches should not be mixed with gigabit switches when cascading.

- Connect the source device to the HDMI IN port of the transmitter with a high quality HDMI cable, and connect the HDMI OUT port of the receiver to the display device with another high quality HDMI cable.
- If it's a one-to-one connection, use a network cable to connect the RJ45 port of the
  transmitter and receiver. If it is a one-to-many connection, use the gigabit switch
  as a bridge to connect the transmitter and the receivers with the network cable
  respectively.
- If using HDMI loop out, connect the display device to the HDMI OUT port of the transmitter.
- 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
- If you need to output additional audio sources from the receiver or extend only L/R stereo audio, connect the receiver's L/R OUT port to the audio device using a 3.5mm stereo audio cable.
- When the HDMI IN port of the transmitter is connected and the L/R IN port is not connected, the HDMI audio source can output from the HDMI OUT and L/R OUT ports of the receiver simultaneously.
- When the HDMI IN port and the L/R IN port of the transmitter is both connected, the L/R stereo audio source can output from the HDMI OUT and L/R OUT ports of the receiver simultaneously.
- When the L/R IN port of the transmitter is connected and the HDMI IN is not connected, it can be used as an audio extender, the L/R stereo audio source can only output from the L/R OUT port of the receiver.
- Plug the power supplies into the devices and connect to the mains to get started.

## **CAT CABLE REQUIREMENT**

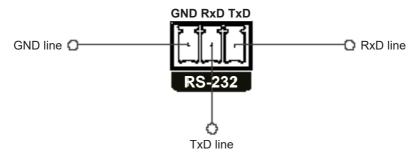
Follow the standard of IEEE-568B, It is recommended to select a high quality network cable with less loss and crosstalk.

1 orange/white 5 Blue/white 2 orange 6 Green 7 Brown/white 4 Blue 8 Brown

#### **RS-232 FUNCTION**

#### Baud rate

- Different encoding mechanisms cannot be mixed.
- The baud rate of the RS-232 port of this transmitter and receiver is 2400, 4800, 9600, 19200, 38400, 57600, 115200.
- Make sure the RS-232 serial line is firmly connected and that the serial data line is connected correctly as follows:



- If the RS-232 serial does not work by following the above connection, try to change over the TXD line and RXD lines.
- If you need to check the baud rate, use a serial port test tool and set the baud rate
  value to the default value of 115200, connect the serial port test tool to the product,
  and then power on the product. The baud rate displayed at this time is the current
  baud rate.

**For example:** "Baudrate:9600", that is, the baud rate value is 9600.

- The baud rate of the serial port test tool must be set to 9600, which is consistent
  with the product, and then input the command you want to set "Bset:19200",
- If "Succeed" is displayed after sending data, the baud rate 19200 is set successfully.

## **CLEANING & MAINTENANCE**

 Clean the outside casing with a soft cloth lightly moistened with mild soap and water. Never use any abrasive or solvents.

## **SPECIFICATIONS**

Technical	Transmitter-TX	Receiver-RX
Video		
Input interface	1x HDMI	1x RJ45
Output interface	1x HDMI 1x RJ45	1x HDMI
Compatibility	HDMI 2.0	
	HDCP 1.4 / HDCP 2.2	
HDMI length	≤5m	
Maximum transfer rate	18Gbps	
Resolutions	3840x2160@24/30/50/60Hz, 1080p@50/60Hz, 720p@50/60Hz, 1920x1200@60Hz, 2560x1440@60Hz, 2560x1600@60Hz	
Connection types	One-to-one / one-to-many connection and switch cascading	
Transmission distance	Cat6/6a/7≤120m	
Transmission latency	80~140ms	
Audio Signal		
Input interface	1x HDMI 1x 3.5mm L/R	1x RJ45
Output interface	1x RJ45	1x HDMI 1x 3.5mm L/R
HDMI output	LPCM 2.0	
3. 5mm L/R output	PCM	
Command Signal		
RS-232 (GND/RXD/TXD)	2 (GND/RXD/TXD) 2400, 4800, 9600, 19200, 38400, 57600, 115200 (default)	
Power		
Power Supply	DC 5V/2A ≤5.5W	DC 5V/2A ≤4W
Operating Environment		
Working temperature	-20°C~60°C	
Storage temperature	-30°C~70°C	
Humidity	0~90%RH (no condensation)	
Physical Properties		
Weight	TX: 315g	RX: 307g
Dimensions (mm)	106.0(L) x 103.0(W) x 20.6(H)	



# INFORMATION ON WASTE DISPOSAL FOR CONSUMERS OF ELECTRICAL & ELECTRONIC EQUIPMENT.

When this product has reached the end of its life it must be treated as Waste Electrical & Electronic Equipment (WEEE). Any WEEE marked products must not be mixed with general household waste, but kept separate for the treatment, recovery and recycling of the materials used. Contact your local authority for details of recycling schemes in your area.

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