HDMI Extender over IP
True 4K60 UltraHD

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 shook, 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 machine is a HDMI Extension tool, distance up to 330ft/100 meters, connect a 10 GBE network switch transmits over Cat6a cable, it designed over based IP switching, and processing of Digital video resolutions up to 4K/60/4:4:4 (594 MHz) & HDR, HDMI multi-channel digital audio & analog audio, Bidirectional RS-232, IR.

2. Features

☆ Compliant with HDMI 2.0 and HDCP 2.2, pixel clock up to 594MHz
☆ Up to 100 meters on Cat6a or better for 4K/60 Hz/ 4:4:4 video
☆ Up to 90 meters on Cat6 or better for 4K/30Hz/4:4:4 video
☆ Support digital audio formats: LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS HD Master Audio
☆ RS-232 (up to 115.2 kbaud) matrix, Infrared matrix
☆ IP based switching with zero-frame latency
☆ Transmission Interface:10 Gigabit XFI, IEEE 802.3 (RJ45)
☆ AV Processing Technology:
   Colors pace and frame-rate conversion
   Ultra-light compression, lossless for most content
   Audio embedding and de-embedding
   Audio down-mixing and re-sampling
   Video-splitting and bezel correction

3. Package Contents

① 1× HDMI Extender Transmitter
② 1× HDMI Extender Receiver
③ 2× 12V/2.5A DC Power Adapters
④ 2× Wideband IR Receiver cables
⑤ 2× Wideband IR Blaster cables
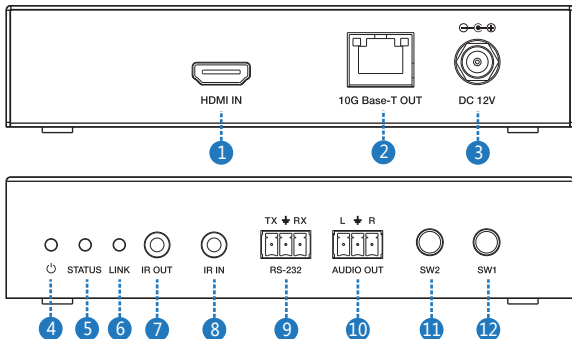⑥ 4× Phoenix terminals (3 pins)
⑦ 4× Mounting Ears
⑧ 1× User Manual

4. Specifications

Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2
Video Bandwidth	18Gbps
Video Resolutions	Up to 4K2K@50/60Hz (YUV4:4:4),4K2K@30Hz, 1080P@120Hz, and 1080P 3D@60Hz
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2
Color Depth	4K60 10-bit, 1080p 12-bit
HDMI Audio Formats	LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS HD Master Audio
ESD Protection	Human body model — ±8kV (air-gap discharge) & ±4kV (contact discharge)
Connections	
Transmitter	Inputs: 1x HDMI Type A [19-pin female] 1x RS-232 [Phoenix jack] 1x IR In [3.5mm Stereo Mini-jack] Outputs: 1x 10G BaseT OUT [RJ45 connector] 1x AUDIO OUT [Phoenix jack] 1x IR Out [3.5mm Stereo Mini-jack]
Receiver	Inputs: 1×10G BaseT [RJ45 connector] 1×IR In [3.5mm Stereo Mini-jack] Outputs: 1×HDMI TypeA [19-pin female] 1×RS-232 [Phoenix jack] 1×AUDIO OUT [Phoenix jack] 1×IR Out [3.5mm Stereo Mini-jack]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	TX/RX: 150mm [L] x 98mm [W] x 32mm [H]
Weight	TX: 489g, RX: 471g
Power Supply	Input: AC100 - 240V 50/60Hz, Output: DC 12V/2.5A (US/EU standards, CE/FCC/UL certified)
Power Consumption	TX: 20W, RX: 18.7W

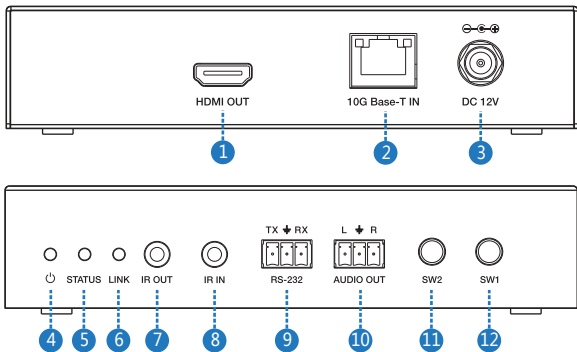| Operation Temperature	32 - 104°F / 0 - 40°C
Storage temperature	-4 - 140°F / -20 - 60°C
Relative Humidity	20 - 90% RH (no condensation)

5. Operation Controls and Functions

5.1 Transmitter Panel

Number	Name	Function descriptions
1	HDMI IN	Connect to the HDMI source device, such as DVD player or Set top box.
2	10G Base-T OUT	10G Enternet port signal output.
3	DC 12V	Connect 12V/2.5A adaptor to AC wall outlet for power supply.
4	Power LED	Blue LED power indicator light.
5	STATUS LED	Blue LED status indicator light.
6	LINK LED	Blue LED video indicator light.
7	IR OUT	IR signal output. Connect to an IR blaster cable.
8	IR IN	IR receiver input. Connect to IR receiver cable.
9	RS-232	Use the phoenix jack for connect PC or control system to transmit RS-232 commands.

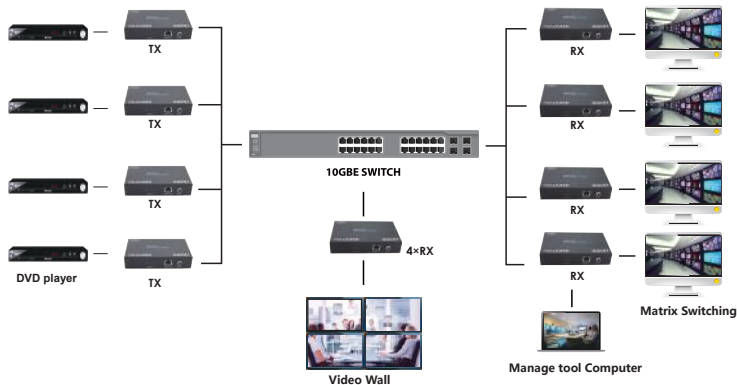| 10 | AUDIO OUT | Use the phoenix jack for connect audio output. This port output from HDMI input port audio. |
| 11 | SW2 button | Reserved button. |
| 12 | SW1 button | Reserved button. |

5.2 Receiver Panel

Number	Name	Function descriptions
1	HDMI OUT	Connect to the HDMI output source device, such as HDTV or monitor.
2	10G Base-T IN	10G Enternet port signal input.
3	DC 12V	Connect 12V/2.5A adaptor to AC wall outlet for power supply.
4	Power LED	Blue LED power indicator light.
5	STATUS LED	Blue LED status indicator light.
6	LINK LED	Blue LED video indicator light.
7	IR OUT	IR signal output. Connect to an IR blaster cable.
8	IR IN	IR receiver input. Connect to an IR receiver cable.
9	RS-232	Use the phoenix jack for connect PC or control system to transmit RS-232 commands.

10	AUDIO OUT	Use the phoenix jack for connect audio output. This port output from HDMI input port audio.
11	SW2 button	Reserved button.
12	SW1 button	Copy EDID from the Receiver HDMI display send to the Transmitter HDMI source.

6. Connection Diagram

TX

TX

TX

DVD player

TX

10GBE SWITCH

4×RX

Video Wall

RX

RX

RX

RX

Matrix Switching

Manage tool Computer

7. Notes

Recommend switch model:

Manufacturer	Model number
BlackBox	LGB5028A
Netgear	ProSAFE PLUS XS708E
Netgear	ProSAFE Smart XS712T
Netgear	M7300-24XF XSM7224S
Extreme Network	Summit X670 Series
Arista Networks	7050X Series

Maybe the switch need some configurations for match the product to use all functions.
The windows that manage tool needs operation information , please contact us.