

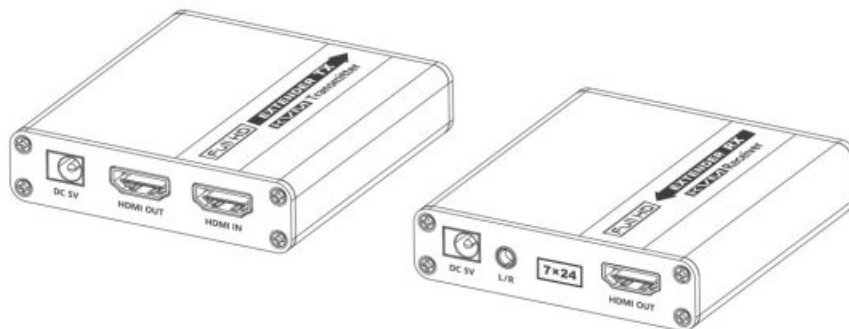


ERGO LKV223KVM KVM Point to Point Extender User Manual

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LKV223KVM KVM Point to Point Extender User Manual



HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

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Important Safety Notice

1. Please distinguish the transmitter and receiver before installation.

2. Do not disassemble the machine to repair the product during the working process to avoid electric shock.
3. Please cut off the power before installation. Live installation may damage the equipment.
4. Do not expose the devices to rain, moisture and liquid.
5. Use a 5V/1A DC adapter only. Make sure the specification matched if using 3rd party DC adapters.

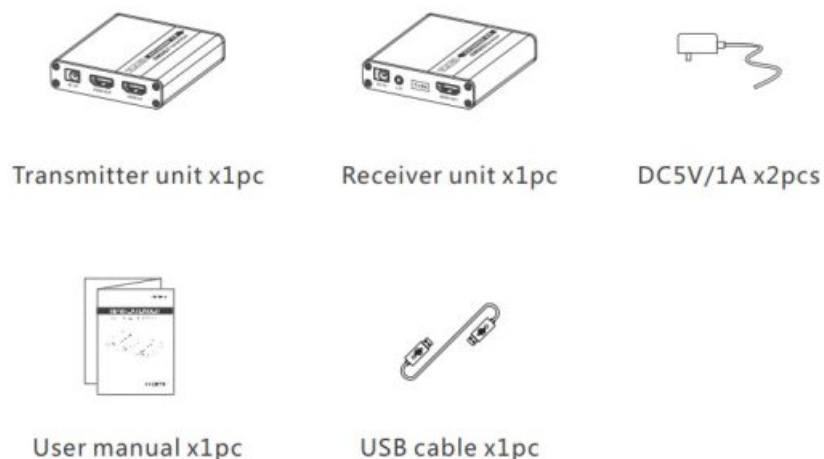
Introduction

This HDMI Extender includes a transmitter unit and a receiver unit, allowing the HDMI signal to be transmitted up to 70 meters at 1080p resolution using a Cat6/6A/7 network cable. It adopts a point-to-point connection configuration, supports KVM remote control and management and 3.5 mm stereo audio output. It is perfect for outdoor advertising, monitor system, home entertainment, conference, etc.

Features

1. Zero-latency.
2. Support up to 1080p@60Hz resolution.
3. Supports Cat6/6A/7 network cables, the transmission distance is up to 70 meters.
4. Support KVM remote control and management.
5. Support 1080p HDR10, YUV4:4:4.
6. Support EDID passthrough.
7. Transmitter supports HDMI loop-out.
8. The receiver supports 3.5mm stereo audio output.
9. Audio formats supported: PCM, LPCM, DTS HD, DTS Audio
10. Automatically adjusts parameters to match different network cable and achieve the best display performance.
11. Lightning Protection, Surge Protection, ESD Protection.

Package Contents



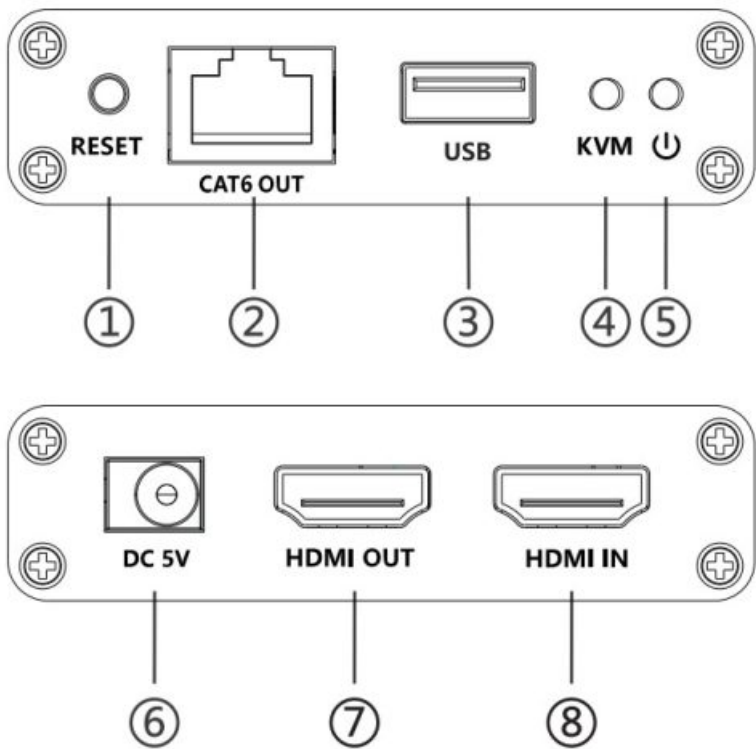
Installation Requirements

1. HDMI source device (compute graphics card, DVD, PS4, HD monitoring equipment etc.)
2. HDMI display devices like SDTV, HDTV, projector with HDMI port.
3. UTP/STP CAT6/6A/7 cable. Following standard IEEE-568B, It is recommended to select a network cable with

less loss and

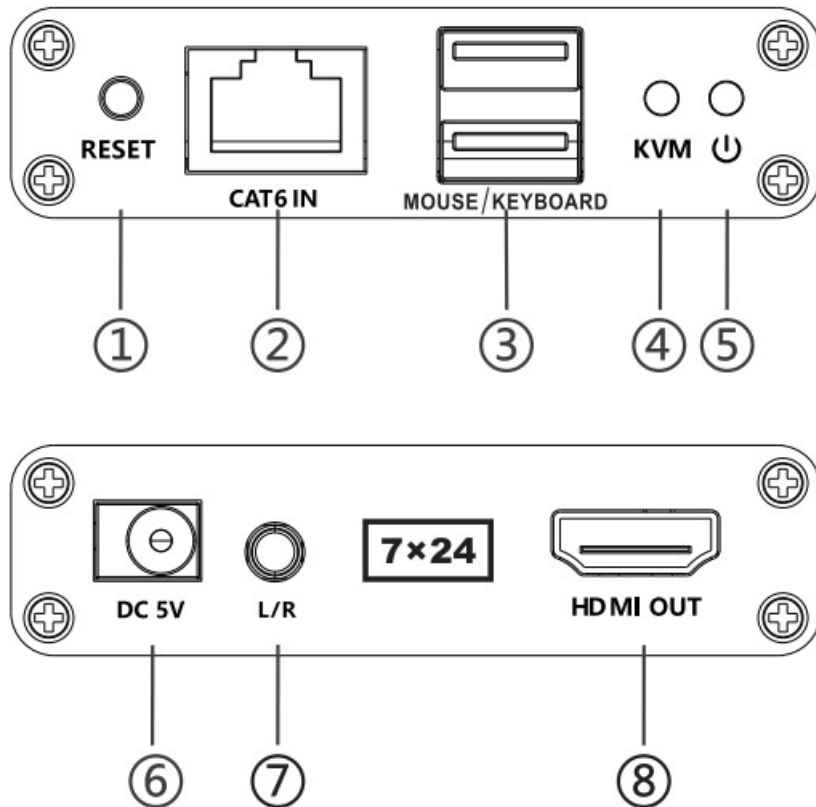
Interfaces

Transmitter (TX)



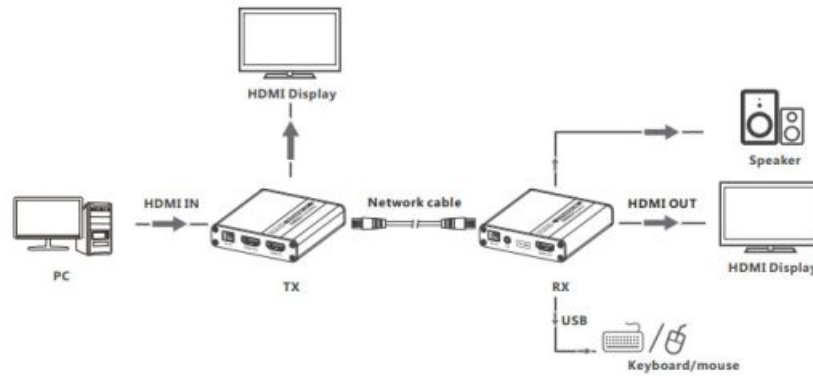
Reset button	Press the button to restart the device.
Rj45 signal output	Output modulated HDMI signal.
USB-A port	Connect to the computer.
KVM indicator	a) The host computer is not connected and the indicator light is off. b) Connect to the host computer, the indicator light is always on. c) The mouse and keyboard work normally, and the signal transmission i ndicator flashes.
Power/Signal indicator	a. When power is on and no HDMI signal is transmitted the indicator flas hes. b. When power is on and the HDMI signal is transmitted, the indicator is always on.
DC 5V input	Connect to the 5V1A DC power adapter.
HDMI output	Connect to a local HDMI display device.
HDMI input	Connect to an HDMI source device.

Receiver(Rx)



1 Reset button	Press the button to restart the device.
2 Rj45 signal input	Input modulated HDMI signal.
3 USB-A port	Connect mouse and keyboard.
4 KVM indicator	a) The host computer is not connected and the indicator light is off. b) Connect to the host computer, the indicator light is always on. c) The mouse and keyboard work normally, and the signal transmission indicator flashes.
5 Power/Signal indicator	a. When power is on and no HDMI signal is transmitted the indicator flashes. b. When power is on and the HDMI signal is transmitted, the indicator is always on.
6 DC 5V input	Connect to the 5V1A DC power adapter.
7 3.5mm L/R out	Connect headphones or power amplifiers to output stereo audio.
8 HDMI output	Connect to an HDMI source device.

Installation Procedures



Note: When using the 3.5mm stereo audio jack, please switch the audio output format of the signal source to PCM format.

The network cable should follow the standard of IEEE-568B. It is recommended to select a network cable with less loss and crosstalk.

1-Orange/white	5-Blue/white
2-Orange	6-Green
3-Green/white	7-Brown/white
4-Blue	8-Brown



Connection instruction

1. Connect the source device to the HDMI In the 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. Connect the CAT out port of the transmitter and the CAT in the port of the receiver via a network cable (CAT6/6A/7).
3. If using HDMI loop out, connect the display device to the HDMI OUT port of the transmitter.
4. Plug the power supply into the device to get started.

[NOTE]: It is recommended to use a length range within 2-70m network cable. If the cable is too short, there may be no display output because the signal is too strong. If the cable is too long, the output may be of poor quality.

FAQ

Q: There is no output on screen when all connections are correct?

A:

1. Please make sure the HDMI cables support the resolution of the output signal from the source device.
2. Please check and make sure the network cable inserted into the RJ45 port is well.
3. Restart the transmitter or receiver by pressing the reset button.

Q: Black screen happened on the display/monitor?

A:

1. Check if the length of the cable is within the specified range. 2) Reset the transmitter to re-built the connection.

Q: The display shows unusual color or no sound?

A:

1. Reset the transmitter or receiver to re-built the connection.
2. Check if the HDMI cables are connected well.
3. Reconnect the network cable.

Specification

Items		Specification
Power Supply	Voltage/Current	DC5V/1A
	Power consumption	TX < 2.5W RX < 2.5W
HDMI Performance And Interface	HDMI compliance	HDMI 1.3
	HDCP compliance	HDCP 1.4
	HDMI resolution	800×600, 1024×768, 1280×720, 1280×960, 1366×768, 1440×900, 1680×1050, 1920×1080, 480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@24/25/30/50/60Hz
	Supports audio formats	PCM, LPCM, DTS HD, DTS Audio
	Input and output TMDS signal	0.7-1.2Vp-p(TMDS)
	Input and output DDC signal	5Vp-p(TTL)
	Input cable length	≤8m(AWG24)
	Output cable length	≤8m(AWG24)
Transmission Distance	Cat6/6A/7	≤70m
Protection Level	Electrostatic protection of the whole machine	Implementation of the standard: IEC61000-4-2 Ia Contact discharge level 4 (8KV) Ib Air discharge level 4 (15KV)
Operating Environment	Working temperature	-20-60°C
	Storage temperature	-30-70°C
	Humidity (no condensation)	0 – 90%RH
Body Properties	Dimension	75.0(L) x 85.0(W) x 20.0(H)mm
	Material	Aluminum alloy material + crystal panel
	Treatment process	Grit blast
	Color	Black
	Weight	TX: 180g RX:180g

Disclaimer

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We reserve the right to make changes without further notice to a product or system described herein to improve reliability, function or design.

Documents / Resources

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