

Lenkeng LKV676KVM-P Point to Point Extender User Manual

Home » LENKENG » Lenkeng LKV676KVM-P Point to Point Extender User Manual

Contents

- 1 Lenkeng LKV676KVM-P Point-to-Point
- **Extender**
- 2 Connection
- **3 Important Safety Notice**
- 4 Introduction
- **5 Features**
- **6 Package Contents**
- 7 Installation Requirements
- 8 Interfaces
- 9 Installation Procedures
- 10 FAQ
- 11 Specification
- 12 Documents / Resources



Lenkeng LKV676KVM-P Point-to-Point Extender



Product Information

The HDMI Extender is a KVM Point to point-to-point extender that allows HDMI signals to be transmitted up to 70 meters at 4K resolution using a CAT6/6A/7 network cable. It is perfect for outdoor advertising, video clips, monitor systems, home entertainment, and conferences.

- Zero latency
- Transmits 4K@60Hz HDMI signal up to 70 meters using CAT6/6A/7 network cable
- Receiver can extract digital audio from the transmitter through the S/PDIF port
- Supports HDR10
- Supports EDID passthrough and Auto downscaling
- Transmitter supports one HDMI loop-out
- Supports KVM function
- Lightning protection, surge protection, and ESD protection
- Supports bi-directional PoC, only one power supply required

Product Usage Instructions

Transmitter (TX)

- Transmitter unit x1pc
- Receiver unit x1pc
- DC12V/1A x1pc (power supply)
- USB Cable x1pc
- Mounting brackets x8pcs
- Screw x18pcs
- User manual x1pc

The transmitter should be connected to the HDMI source device (compute graphics card, DVD, PS3, HD monitoring equipment, etc.) using an HDMI cable. Connect the transmitter to the HDMI display device (SDTV, HDTV, projector with HDMI port) using an HDMI cable. Use a UTP/STP CAT6/CAT6A/CAT7 cable to connect the transmitter and receiver. Follow the standard of IEEE-568B for network cable connection, and it is recommended to select a network cable with less loss and crosstalk.

Transmitter (TX) Features

- **KVM Light:** Connected to the computer, the indicator light is on; No signal transmission, the indicator light off; Signal transmission, the indicator light flashes.
- Reset button: Press to restart the device.
- RJ45 signal output: Connect with network cable.
- **Power/Signal indicator**: When there is power and no HDMI signal, the indicator will flash; when there is HDMI signal, the indicator will light solid blue.
- DC12V input: Connect with DC12V power adapter.
- HDMI output: Connect with HDMI display device.
- **HDMI input:** Connect with the source device.
- USB-A port: Connect with computer.

Receiver (RX)

- KVM Light: The mouse/keyboard is connected to the USB port, the indicator light is on.
- Reset button: Press to restart the device.
- RJ45 signal input: Connect with network cable.
- Power/Signal indicator: When there is power and no HDMI signal, the indicator will flash; when there is HDMI signal, the indicator will light solid blue.
- DC12V input: Connect with DC12V power adapter.
- S/PDIF out: Output digital audio signal.
- HDMI output: Connect with HDMI display device.
- USB-A port: Connect with keyboard and mouse.

Connection

Connect the HDMI source device to the HDMI in port of the transmitter using an HDMI cable. Connect the HDMI out port of the receiver to the display device using another HDMI cable. Use a network cable to connect the PoC TX and RX. Connect the PoC TX to a DC12V power supply. Connect the keyboard/mouse to the USB port of the RX.

Follow the standard of IEEE-568B for network cable connection, and it is recommended to select a network cable with less loss and crosstalk.

Important Safety Notice

- 1. Do not mix up HDMI to RJ45 transmitter and RJ45 to HDMI receiver before installation.
- 2. Do not hot plug when it is working.
- 3. Use DC12V power supply only. Make sure specification matched if using 3rd party adapters.
- 4. Static electricity will cause damage of the device, please do ESD protection when using the device.

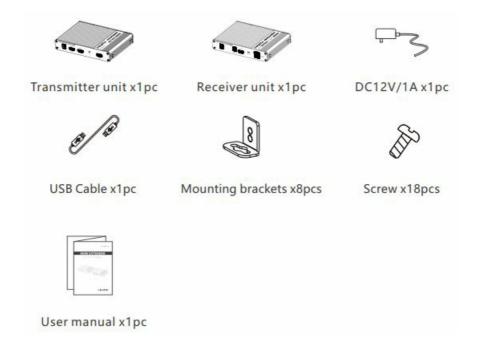
Introduction

This HDMI Extender includes a transmitter unit and a receiver unit, allows HDMI signal to be transmitted up to 70 meters at 4K resolution using a CAT6/6A/7 network cable. It is perfect for outdoor advertising, video clips, monitor system, home entertainment, and conference, etc.

Features

- 1. Zero latency.
- 4K@60Hz HDMI signal can be transmitted 70 meters through a CAT6/6A/7 network cable.
- 3. The receiver can extract the digital audio from the transmitter through the S/PDIF port.
- 4. Supports HDR10.
- 5. Supports EDID passthrough, Auto downscaling.
- 6. Transmitter support one HDMI loop-out.
- 7. Support KVM function.
- 8. Lighting protection, surge protection, ESD protection.
- 9. Support bi-drectional PoC, only the transmitter or receiver is required to supply power.

Package Contents

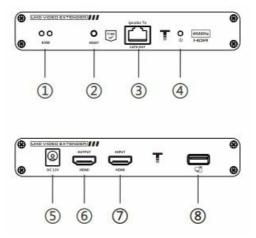


Installation Requirements

- 1. HDMI source device (compute graphics card, DVD, PS3,)HD monitoring equipment etc.
- 2. HDMI display device like SDTV, HDTV, projector with HDMI port.
- 3. UTP/STP CAT6/CAT6A/CAT7 cable. Follow standard IEEE-568B, It is recommended to select a network cable with less loss and crosstalk.

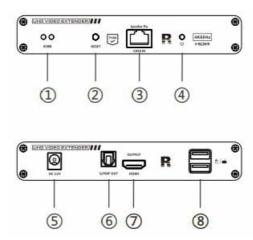
Interfaces

Transmitter (TX)



1	KVM Light	The mouse/keyboard is connected to the USB port, the indicator light is on
2	Reset button	Press to restart the device
3	RJ45 signal input	Connect with network cable
4	Power/Signal indicator	When there is power and no HDMI signal, the indicator will flash, when there is HDMI signal, the indicator will light solid blue
(3)	DC12V input	Connect with DC12V power adapter
6	S/PDIF out	Output digital audio signal
7	HDMI output	Connect with HDMI display device
8	USB-A port	Connect with keyboard and mouse

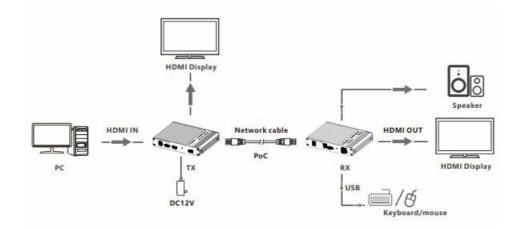
Receiver (RX)



1	KVM Light	Connected to the computer, the indicator light is on; No signal transmission, the indicator light off; This is signal transmission, the indicator light flashes.	
2	Reset button	Press to restart the device	
3	RJ45 signal output	Connect with network cable	
4	Power/Signal indicator	When there is power and no HDMI signal, the indicator will flash, when there is HDMI signal, the indicator will light solid blue	
(5)	DC12V input	Connect with DC12V power adapter	
6	HDMI output Connect with HDMI display device		
7	HDMI input	Connect with the source device	
8	USB-A port	Connect with computer	

Installation Procedures

Connection



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

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



Connection instruction

- 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. Connect the CAT out port of the transmitter and the CAT in port of the receiver via a network cable (CAT6/CAT6A/CAT7).
- 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 with poor quality

FAQ

- Q: There is no output on screen when all connections are correct?
- A: Please make sure the HDMI cables supports 4K×2K if the output signal from the source device is 4K×2K resolution.
 - Please check and make sure the network cable insert to the RJ45 port well.

- Restart the transmitter or receiver by pressing the reset button
- Q: Black screen happened on the display/monitor?
 - A: Check if the length of the cable is within the specified range.
 - Reset the transmitter to re-built the connection
- Q: The display shows unusual color or no sound?
 - A: Reset the transmitter or receiver to re-built the connection.
 - · Check if the HDMI cables are connected well.
 - Reconnect the network cable.

Specification

	Items	Specification
	Voltage/Current	DC12V/1A
Power Supply	Power consumption	TX < 4W RX < 4W
	HDMI compliance	HDMI 2.0
	HDCP compliance	HDCP 2.2
HDMI Performance And Interface	HDMI resolution	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080i@50/60Hz, 3840x2160@24/25/30/50/60Hz, 4096x2160@24/25Hz, 1280x960, 1280x800, 1280x768, 1680x1050, 1360x768, 1366x768, 1600x900, 1024x768, 800x600
And Interface	Supports audio formats	LPCM/DTS-HD/DTS-Audio/ Dolby Digital 5.1CH/Dolby Atmos
	Input and output TMDS signal	0.7~1.2Vp-p(TMDS)
	Input and output DDC signal	5Vp-p(TTL)
	Input cable length	≤8m(AWG24)
1 6	Output cable length	≤8m(AWG24)
Transmission Distance	CAT6/6A/7	≤70m
Protection Level	Electrostatic protection of the whole machine	1a Contact discharge level 3 1b Air discharge level 3 Implementation of the standard: IEC61000-4-2
	Working temperature	-20~60°C
Operating Environment	Storage temperature	-30~70℃
Environment	Humidity (no condensation)	0~90%RH
	Dimension	150.0(L) x 107.0(W) x 28.4(H)mm
	Material	Aluminium alloy material + crystal panel
Body Properties	Treatment process	Grit blast
rioperties	Color	Black
	Weight	TX: 260g RX:260g

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. The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. We reserve the rights to make changes without further notice to a product or system described herein to improve reliability, function or design.

Documents / Resources



<u>Lenkeng LKV676KVM-P Point to Point Extender</u> [pdf] User Manual LKV676KVM-P Point to Point Extender, LKV676KVM-P, Point to Point Extender, Point Extender, Extender

