



HDMI KVM Extender Set, 4K/30Hz



Installation Guide **DS-55357**

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Important Safety Instructions:

- Do not disassemble the device to repair during the working process to avoid electric shock
- Please cut off the power before installation. Live installation may damage the equipment
- Do not expose the devices to rain, moisture and liquid
- Use only the power supply units, which are part of the package content

1. Introduction

The HDMI KVM Extender Set (4K/30Hz) enables lossless and virtually latency-free (10-20 ms) transmission of AV signals in Ultra HD resolution (4K/30Hz) over up to 40 meters using a CAT6 or higher-quality network cable. Thanks to the integrated KVM function, the mouse and keyboard can be connected directly to the receiver side, enabling convenient remote control.

The system supports both uncompressed HDMI signal transmission in 4K/30Hz over 40 meters and Full HD (1080p/60Hz) transmissions over up to 70 meters. The ultra-low latency technology ensures virtually lag-free image playback (10-20 ms latency) and a seamless user experience.

For easy and flexible installation, the set offers PoC (Power over Cable) support so that only the transmitter unit needs to be supplied with a power supply unit. Thanks to Plug & Play installation, quick and uncomplicated commissioning is guaranteed.

The HDMI KVM Extender Set is the ideal solution for professional applications, conference rooms, industrial control systems or home theater setups that require high-resolution signal transmission with additional control options.

2. Main Features

- Loss-free HDMI signal transmission in UHD 4K/30Hz (3840x2160p) up to 40 m via CAT6 (or higher) network cable
- Loss-free HDMI signal transmission in Full HD (1080p/60Hz) up to 70 m via CAT6 (or higher) network cable
- Ultra Low Latency – Virtually latency-free image reproduction (10-20 ms) and uncompressed AV signal transmission
- Additional connectivity & control: KVM function for connecting mouse & keyboard on the receiver side
- Flexible installation thanks to PoC support: only the transmitter unit needs to be supplied with power via an external power supply unit
- Supports point-to-point connections
- Supports CAT6 (or higher) network cables
- Plug & Play installation

3. Package Content

- 1x Transmitter unit
- 1x Receiver unit
- 1x Mains adapter, EU plug (DC 5V/2A, 1.2 m)
- 1x USB cable (1.2 m)
- 1x Operating instructions

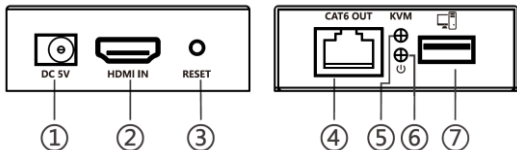
4. Specification

Power Supply	DC 5V/2A (Only TX power supply is needed)
Power Consumption	TX+RX $\leq$ 10W
HDMI Performance and Interface	
HDMI Compliance	HDMI 1.4
HDCP Compliance	HDCP 1.4
HDMI Resolutions	800x600, 1024x768, 1280x720, 1280x960, 1366x768, 1440x900, 1680x1050, 1920x1080, 480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@24/25/30/50/60Hz, 3840x2160@24/25/30Hz
Audio formats	DTS, DTS-HD, PCM, LPCM
HDR	Supported
Input and output TMDS signal	0.7~1.2Vp-p (TMDS)
Input and output DDC signal	5Vp-p (TTL)
Transmission Distance	CAT6 (or higher): 1080p/60Hz transmission 70 meters

	4K/30Hz transmission 40 meters
ESD Protection	Implementation of the standard: IEC61000-4-2 1a Contact discharge level 2(±4KV) 1b Air discharge level 3 (±8KV)
Operating environment	
Working Temperature	-20 - 60°C
Storage Temperature	-30 - 70°C
Humidity	0 - 90% RH (no condensation)
Body properties	
Dimension	75.0 (L) x 60.0 (W) x 20 (H) mm
Weight	TX: 123g RX: 123g
Color	Black

5. Interfaces

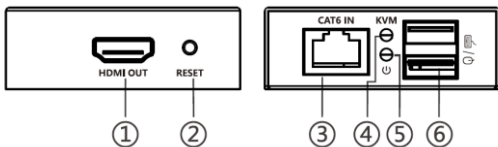
5.1 Transmitter (TX)



1	DC 5V	Connect with 5V/2A power adapter
2	HDMI input	Connect with HDMI source device
3	Reset button	Press the button to restart the device
4	RJ45 Output	Connect with CAT6/6A/7 network cable
5	KVM indicator	▪ Light off: the USB port and the computer have not established a connection ▪ Steady on: the USB port is connected to the computer, but no KVM data is transmitted ▪ Light flash: the KVM data is transmitting

6	Power Indicator	Light flash: it is powered on, but no video data is transmitted Steady on: the video data is transmitting
7	USB-A Port	Connect to the computer with USB cable

5.2 Receiver (RX)



1	HDMI Output	Connect with HDMI display device
2	Reset Button	Press the button to restart the device
3	RJ45 Input	Connect with CAT6/6A/7 network cable
4	KVM Indicator	Light off: the USB port and the computer have not established a connection Steady on: the USB port is connected to the computer,

		but no KVM data is transmitted • Light flash: the KVM data is transmitting
5	Power Indicator	• Light flash: it is powered on, but no video data is transmitted • Steady on: the video data is transmitting
6	USB-A Port	Connect to the mouse and keyboard

6. Installation Requirements

- HDMI source device (PC, NVR, Streaming Device, etc.)
- HDMI display, projector, etc.
- Network cables: UTP/STP CAT6 or higher network cables, which following the standard of IEEE-5688

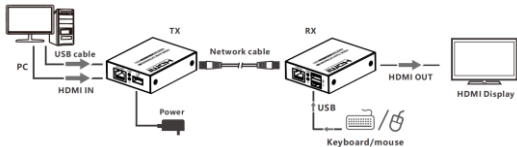
7. Installation Procedures



It is recommended to select a network cable with less loss and crosstalk.

Follow the standard of IEEE-568B:	
1-Orange/white	5-Blue/white
2- Orange	6-Green
3-Green/white	7-Brown/white
4-Blue	8-Brown

7.1 Connection Diagrams



7.2 Connection Instructions

1. Connect the HDMI port of the source device to the HDMI In port of the transmitter via an HDMI cable
2. Connect the CAT Out port of the transmitter and the CAT In port of the receiver via a network cable.
3. Connect the HDMI port of the display device to the HDMI Out port of the receiver via an HDMI cable

4. Use the USB cable to connect the computer to the transmitter and connect the mouse and keyboard to the USB port of the receiver.
5. Plug the power into the devices to get started.

8. FAQ

Q: Why there is no image/image or sound is not played smoothly?

A:

- 1) Press the “RESET” button of the receiver to restart the device.
- 2) Reconnect the devices with a shorter network cable.

Q: Why does the power indicator always flashes?

A:

- 1) Check whether the network cable is uses IEEE-568B wiring standards.
- 2) Check whether the source device and the transmitter are connected well.
- 3) Reset the transmitter or receiver and connect it again

Q: Why does the receiver 's power indicator stays on but there is no image output?

A:

- 1) Press the “RESET” button of the receiver to restart the device.
- 2) Check whether the display device and the receiver are connected well.
- 3) Reconnect the network cable or re-power the receive

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