



HDMI 1.4 USB KVM CAT Extender - 100m User's Guide



P/N: KVMHDExt100

Thank you for purchasing from gofanco. Our products aim to meet all your connectivity needs wherever you go. For optimum performance and safety, please read the instructions carefully and keep this User's Guide for future reference. If you need more information about our products, please visit www.gofanco.com. For technical support, please email us at support@gofanco.com. For drivers/manuals download, please go to www.gofanco.com/downloads.

Important Safety Notices

Please read safety instructions carefully before installation and operation.

- Please pay close attention to all warnings and hints for this device
- Do not expose this unit to rain, heavy moisture, or liquid
- Do not repair the device or open the enclosure without professional guidance to avoid electric shocks. Doing so may void your warranty
- Keep the product in a well-ventilated location to avoid damage from overheating

- Shut off power and make sure environment is safe before installation
- Do not plug the HDMI cables in/out when the device is in use to avoid cable damage. Make sure they are plugged into the correct ports
- Use the included DC12V power adapter only. Make sure the specification matches if using a 3rd-party DC power adapter

Introduction

The HDMI 1.4 USB KVM CAT Extender - 100m extends HDMI and USB signals up to 328ft (100m) at 4K or 1080p over CAT6/7.

Features

- Supports up to 4K @30Hz YUV 4:4:4, 1080p @60Hz YUV 4:4:4
- HDMI 1.4 and HDCP 1.4/2.2 compliant
- KVM extension with 2 USB 1.1 ports for keyboard and mouse
- HDMI loop-out equipped on the TX
- Supports Power over Cable (PoC) to power both TX and RX units with one power supply
- Near zero latency
- Lightning/Surge/ESD protection

Package Contents

- Transmitter (TX) unit (1pc)
- Receiver (RX) unit (1pc)
- USB Type-A to USB Type-A cable (1pc)
- Power adapter (1pc)
- User's guide (1pc)

Product Layout



Figure 1: Transmitter (TX)

1. **HDMI Out:** Connects to an HDMI display for local monitoring of the remote display
2. **HDMI In:** Connects to your HDMI source
3. **USB Port:** Connects to your PC using the included USB cable. **Note:** The LED lights up when plugged into the PC's USB port, flashes when typing, and solid on when using the mouse.
4. **Power Jack:** Connects to the included power adapter. **Note:** Only one power adapter, connected to either TX or RX unit, is required to power both units
5. **Reset:** Press to reset the Transmitter
6. **RJ45 Out:** Connects to the Receiver's RJ45 In using a CAT cable
7. **Link:** Lights up when an HDMI signal is detected



Figure 2: Receiver (RX)

1. **HDMI Out:** Connects to an HDMI display
2. **USB Port (x2):** Connects to your keyboard and mouse to control the source device. **Note:** The LED lights up when a keyboard or mouse is plugged in, and flashes when typing or using the mouse
3. **Power Jack:** Connects to the included power adapter. **Note:** Only one power adapter, connected to either TX or RX unit, is required to power both units
4. **Reset:** Press to reset the Receiver
5. **RJ45 Out:** Connects to the Transmitter's RJ45 In using a CAT cable
6. **Link:** Lights up when an HDMI signal is detected

Hardware Installation

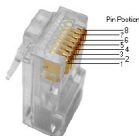
1. Power off all devices including your PC and HDMI display(s).
2. Connect your PC's HDMI output to the Transmitter's HDMI In connector with an HDMI cable (HDMI cable not included).
3. Connect the Transmitter's USB port to the PC's USB port using the included USB Type-A to Type-A cable.
4. Connect an HDMI display to the Transmitter's HDMI Out connector with an HDMI cable (HDMI cable not included) for local monitoring of the HDMI signal.
5. Plug your CAT cable between the Transmitter's RJ45 Output and Receiver's RJ45 Input.
6. Connect your HDMI display to the Receiver's HDMI Out connector with an HDMI cable (HDMI cable not included).
7. Plug your keyboard and mouse into the USB ports of the Receiver (RX) unit.

8. Plug the included power adapter into either the Transmitter's or Receiver's power jack, then plug the power adapter into a reliable power source. Supports Power over Cable (PoC) to power both the TX and RX units with one power adapter.
9. Power on all connected devices.
10. The extender is ready for use.

CAT Cable Wiring

We suggest both RJ-45 connectors be wired identically following T568B wiring standard for the best performance and compatibility.

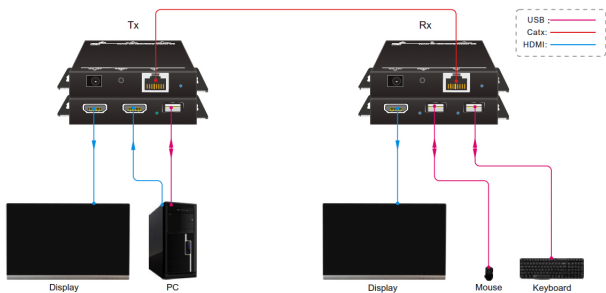
Both connectors must be wired identically, to T568B standard.



RJ45 Plug Colour Code (T568B)	
Contact Side - Tab is on Back	
8	BROWN
7	WHITE / BROWN
6	GREEN
5	WHITE / BLUE
4	BLUE
3	WHITE / GREEN
2	ORANGE
1	WHITE / ORANGE

Note: You may use cat5e, cat6 UTP (cat6 preferred) in conjunction with the RJ45 output; however for best performance use cat6a or cat7 (particularly in electrically noisy environments). The maximum distances & transmission performance for HDMI and USB may be compromised by cable quality, patch panels, poor termination, wall plates, cable kinks and electrical interferences. Generally ensure the cat cable is solid copper core of 23AWG (avoid CCA type), in one straight run (avoid/minimise patches) and avoid close proximity to any noisy electrical sources.

Connection Diagram



EDID Management

If the HDMI loop-out of the Transmitter is connected to a display device, the HDMI source device will learn the EDID of the local display device, otherwise, the source device will use the built-in EDID (4K @30Hz YUV 4:4:4)

FAQ & Solutions

Q: There is no video output or video is not normal:

A: 1) Check all cable connections.
2) Press reset button on the TX and RX units

Q: The extender is not working properly:

A: 1) Please check the cable lengths below:
- HDMI cables: Up to 3 meters
- Network cables: Up to 328ft (100 meters)
2) Press the reset button on both TX & RX

Q: Link LED is on but there is no image:

A: 1) Press reset button on both TX & RX
2) Make sure the HDMI cable is firmly connected to the display
3) Use a 100% solid copper CAT cable

Specifications

Transmitter	
Input	(1) HDMI IN
Input Connector	(1) 19-pin type-A female HDMI
Output	(1) HDMI OUT, (1) CAT
Output Connector	(1) 19-pin type-A female HDMI, (1) RJ45
Control	(1) Type-A USB
Receiver	
Input	(1) CAT
Input Connector	(1) RJ45
Output	(1) HDMI OUT
Output Connector	(1) 19-pin type-A female HDMI
Control	(2) Type-A USB
General	
Video Resolution	Up to 4K@30Hz 4:4:4
HDMI Audio Format	Supports LPCM 2/5.1/7.1CH, Dolby Digital 2/5.1CH, DTS 2/5.1CH, DTS 96/245.1CH
HDMI Transmission Distance	Up to 328ft (100m)
USB Extension	Up to 328ft (100m)
HDMI Version	1.4
HDCP Version	2.2
USB Version	1.1
Power Supply	Input: 100 to 240V AC, 50/60Hz, Output: 12V DC 1A
Power Consumption	4.5w (Max)
Operation Temperature	-5 to +55°C (+23° to +131°F)
Storage Temperature	-25 to +70°C (-13° to +158°F)
Relative Humidity	10% to 90%, Non-condensing
Dimensions (W*H*D)	102mm x 16mm x 95mm (with mounting ears) 80mm x 16mm x 95mm (without mounting ears)
Net Weight	Tx/Rx: 200g



Thank you for choosing gofanco

www.gofanco.com

Disclaimer

The product name and brand name may be registered trademarks of related manufacturers. TM and ® may be omitted on the user's guide. The pictures on the user's guide are just for reference, and there may be some slight differences with the actual products.

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