

HBT100UB
HDMI USB KVM Extender over
Cat5e/Cat6(HDBaseT)

SEADA
Showing the World

User Manual

VER 1.0

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

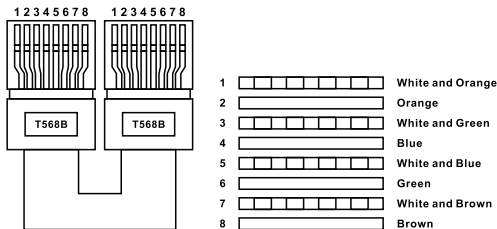
This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

Table of Contents

1. Introduction.....	2
2. Features.....	2
3. Package Contents.....	2
4. Specifications.....	3
5. Operation Controls and Functions.....	4
6. IR Cable Pin Assignments.....	7
7. Connection Diagram.....	8
8. Application Example.....	11

Caution:

The extender using UTP cable termination follows the standard of IEEE-568B.



Direct interconnection method

1. Introduction

The HDMI USB KVM (Keyboard, Video, Mouse) Extender is a tool which can extend your HDMI signal over 328fts/100meters to a compatible display. It is designed to convert HDMI signal to standard HDBaseT signal which can be transmitted by CAT5e/ CAT6/CAT7 cable. It also supports Transfer Bidirectional Infrared control signal and RS232 control signal. With LAN serving connection and external digital and analog audio capability that gives users the convenience of additional audio connection. It also supports the connection of USB host and 2 USB device ports. So you can control the Source in the Sink side which is 328fts outside, also you can control the Sink in the Source side which is 328fts outside using the HDMI Extender.

2. Features

- ☆ Fully compliant with HDMI 1.4, and compatible with HDMI 2.0 (4K2K@60Hz with YCbCr 4:2:0).
- ☆ HDCP2.2 and DVI compatible.
- ☆ Supports HDBaseT 2.0 specification over a single CAT5e/6/7 cable up to 100m/328ft.
- ☆ Supports pass-through of HD audio formats: LPCM2/5.1/7.1 CH, Dolby Digital, DTS, Dolby TrueHD, DTS-HD Master Audio and more.
- ☆ POE(Power Over Ethernet)function support, either TX or RX powered 24V@1A, another don't need power form the DC jack.
- ☆ Full HD support: 1080p@60Hz@24/36/48bit/pixels.
- ☆ Supports USB 2.0 control.
- ☆ Supports external Bi-Directional SPDIF IN/OUT and available for multichannel audio.
- ☆ Supports stereo audio with PCM 2CH.
- ☆ Transfer Bidirectional Infrared control signal together with the HDMI signal.
- ☆ Transfer Bidirectional RS232 control signal together with the HDMI signal.
- ☆ Transfer Bidirectional Ethernet signal together with the HDM signal.

3. Package Contents

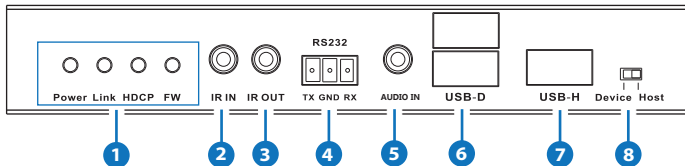
1.HDMI USB KVM Extender Transmitter -----	1PCS
2.HDMI USB KVM Extender Receiver -----	1PCS
3.Wideband IR Tx -----	2PCS
4.Wideband IR Rx -----	2PCS
5.24V/1A DC power adaptor -----	1PCS
6.Operation Manual -----	1PCS
7.Phoenix male jack-----	2PCS
8.Mounting ears-----	4PCS

4. Specifications

Technical	
Video Bandwidth	340MHz[10.2Gbps]
Transmitter input ports	1x HDMI , 1xLAN , 1xUSB-H , 1x IR in , 1xOptical(Spdif in) , 1xAudio in , 1xRS-232
Transmitter output ports	1xIR out, 1xOptical (Spdif out), 1xHDBaseT OUT, 2xUSB-D
Receiver input ports	1xIR in, 1xOptical (Spdif in), 1xHDBaseT IN, 1xUSB-H
Receiver output ports	1x HDMI, 1xLAN, 2xUSB, 1xIR out, 1x Audio out, 1xRS232,1xOptical (Spdif out),
Power Supply	DC 24V 1A
ESD Protection	Human-body Model : $\pm 8\text{kV}$ (Air-gapdischarge) , $\pm 4\text{kV}$ (Contact discharge)
Dimensions	160(W) X 97 (D) X 28 (H)
Weight	450g x 2
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative Humidity	20~90% RH (non-condensing)
Power Consumption	12W

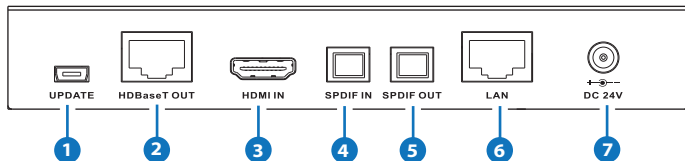
5. Operation Controls and Functions

☆ Transmitter Front Panel



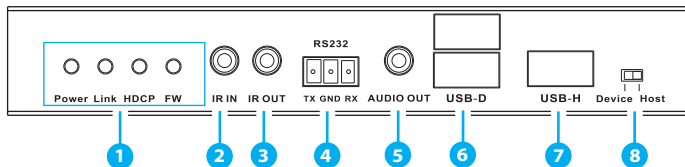
Number	Name	Function description
1	Power LED	illuminates when power has been supplied to the unit
	Link LED	The connection status indicating lamp. Illuminate: The Transmitter and Receiver is good connections. Flashing: The Transmitter and Receiver is poor connections. Dark: The Transmitter and Receiver is no connections
	HDCP LED	The HDCP status indicating lamp. Illuminate: The HDMI signal with HDCP. Flashing: The HDMI signal without HDCP. Dark: No HDMI signal.
	FW LED	Light is flashing on behalf of the unit work normally
2	IR IN	Chanel 1 IR Receiver. Connect with Wideband IR Rx
3	IR OUT	Chanel 2 IR Transmitter. Connect with Wideband IR Tx
4	RS232 TX/RX	Connect to a PC or Laptop with 3-pin Relay cable for the transmission of RS-232 commands.
5	AUDIO IN	Connect to a PC or Laptop stereo output port via 3.5mm audio cable.
6	USB-D	Connect to USB peripheral devices such as printer, keyboard, mouse, flash driver or ...etc.
7	USB-H	Connect from PC or Laptop for data transmit to or control from the Receiver's USB-D slots.
8	USB-H/USB-D SELECT	Select USB host or USB device. Note: If the unit work to change the state, required again to power

☆ Transmitter Rear Panel



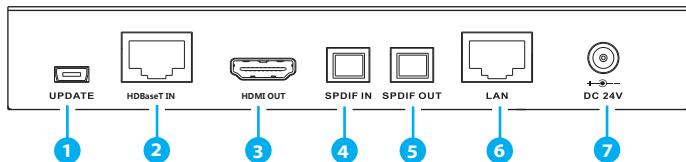
Number	Name	Function description
1	UPDATE	Reserved for manufacturer use only
2	HDBaseT OUT	Standard HDBaseT signal output port. Connect HDBaseT receiver with a Cat5e/6/7 cable.
3	HDMI IN	This slot is where you connect the HDMI source
4	SPDIF IN (Optical in)	Connect to audio source equipment such as DVD or Blu-ray player for audio signal sending to Receiver's SPDIF OUT(Optical out).
5	SPDIF OUT (Optical out)	Connect to speaker with coaxial input for audio signal output from Receiver's SPDIF IN(Optical in)
6	LAN	This slot provide Internet signal from receiver or to receiver
7	DC IN	Plug the 24V DC power supply into the unit

☆ Receiver Front Panel



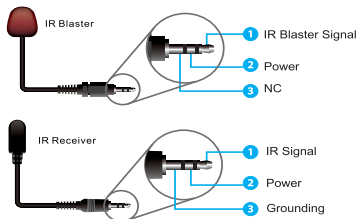
Number	Name	Function description
1	Power LED	illuminates when power has been supplied to the unit
	Link LED	The connection status indicating lamp. Illuminate: The Transmitter and Receiver is good connections. Flashing: The Transmitter and Receiver is poor connections. Dark: The Transmitter and Receiver is no connections
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	FW LED	Light is flashing on behalf of the unit work normally
2	IR IN	Chanel 1 IR Receiver. Connect with Wideband IR Rx
3	IR OUT	Chanel 2 IR Transmitter. Connect with Wideband IR Tx
4	RS232 TX/RX	Connect to a PC or Laptop with 3-pin Relay cable for the transmission of RS-232 commands.
5	AUDIO OUT	Connect to speaker via 3.5mm audio cable
6	USB-D	Connect to USB peripheral devices such as printer, keyboard, mouse, flash driver or ...etc.
7	USB-H	Connect from PC or Laptop for data transmit to or control from the Receiver's USB-D slots.
8	USB-H/USB-D SELECT	Select USB host or USB device. Note: If the unit work to change the state, required again to power supply.

☆ Receiver Rear Panel



Number	Name	Function description
1	UPDATE	Reserved for manufacturer use only
2	HDBaseT IN	Standard HDBaseT signal output port. Connect HDBaseT Transmitter with a Cat5e/6/7 cable
3	HDMI OUT	This slot is where you connect the a HDMI equipped TV/monitor.
4	SPDIF IN (Optical in)	Connect to audio source equipment such as DVD or Blu-ray player for audio signal sending to Receiver's SPDIF OUT(Optical out).
5	SPDIF OUT (Optical out)	Connect to speaker with coaxial input for audio signal output from Receiver's SPDIF IN(Optical in)
6	LAN	This slot provide Internet signal from receiver or to receiver
7	DC IN	Plug the 24V DC power supply into the unit

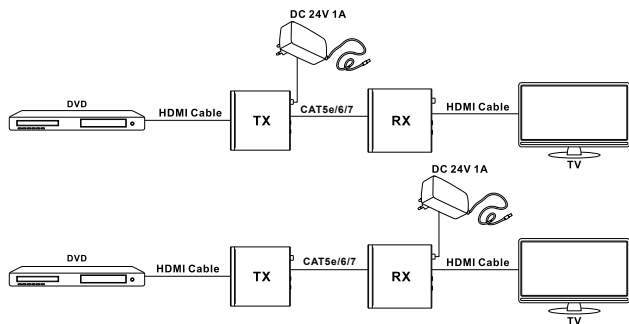
6. IR Cable Pin Assignments



7. Connection Diagram

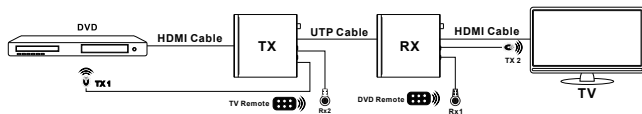
※ Picture 1

POE(Power Over Ethernet) Application Example

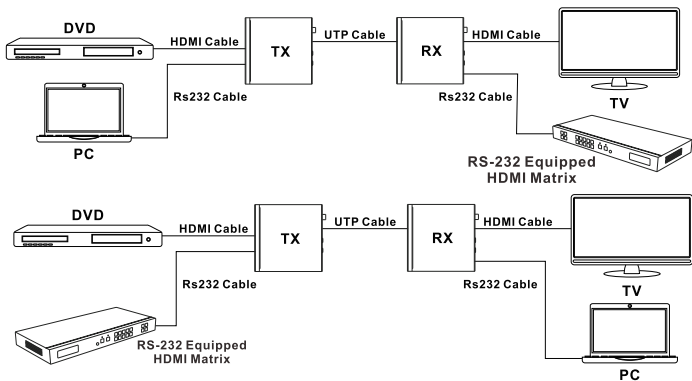


※ Picture 2

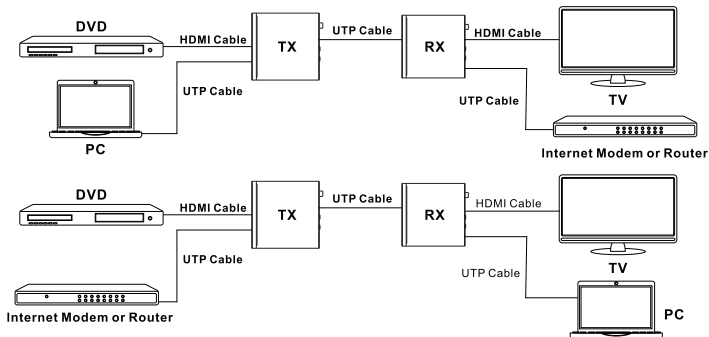
Bidirectional Infrared control Application Example



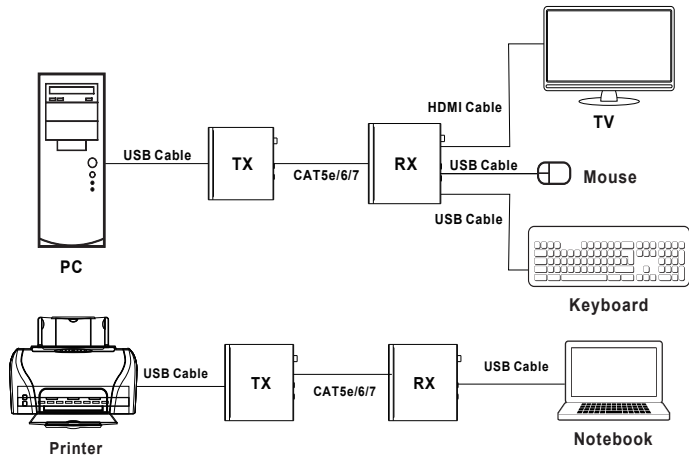
※ Picture 3 Bidirectional RS232 control Application Example



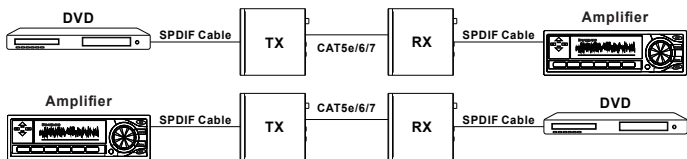
※ Picture 4 Bidirectional Ethernet signal Application Example



※ Picture 5 USB control Application Example



※ Picture 6 Digital Audio bidirectional transmission Application Example



8. Application Example

