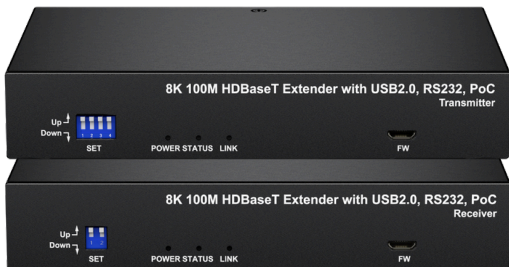


Zenty

8K 30Hz HDMI KVM Extender over
Single Cat6/6A/7 Cable (328ft.)



User Manual

Introduction

Thank you for purchasing this product. For proper installation and optimal performance, please read the instructions in this manual carefully.

This product is an 8K transmitter and receiver kit with HDCP 2.3 compatibility. It supports resolutions up to 8K@60Hz 4:2:0, 8K@30Hz 4:4:4, and 4K@120Hz, allowing 8K video and USB 2.0 signals to be extended up to 100m/328ft over a Cat 6/6A/7 cable.

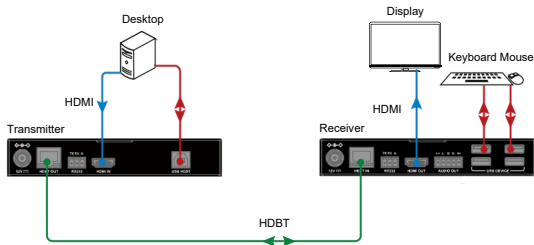
Features

Supports HDMI 2.1 with resolutions up to 8K@60Hz 4:2:0, 8K@30Hz 4:4:4 and 4K@120Hz. HDCP 2.3 compliant. Supports HDR10. Supports USB 2.0 extension. Supports one-way PoC, allowing a single power adapter at the receiver to power both units. Transmits signals up to 100m/328ft over a single Cat 6/6A/7 cable. Includes a DIP switch on each for RS-232 mode, as well as HDCP and EDID configurations (HDCP & EDID apply to the transmitter only). Bi-directional RS-232 passthrough.

Package Contents

- 1 x Extender Set
- 1 x Power Adapter (DC 12V 3A) with US Pins
- 2 x 3.5mm 3-pin Phoenix Male Connectors
- 1 x 3.5mm 5-pin Phoenix Male Connector
- 8 x Mounting Brackets (with Screws)

Application Diagram



Specifications

Technical	
Input/Output Signal Type	HDMI 2.1, HDCP 2.3
Input/Output Resolutions Supported	<p>VESA: 800 x 600⁶, 1024 x 768⁶, 1280 x 768⁶, 1280 x 800⁶, 1280 x 960⁶, 1280 x 1024⁶, 1360 x 768⁶, 1366 x 768⁶, 1440 x 900⁶, 1600 x 900⁶, 1600 x 1200⁶, 1680 x 1050⁶, 1920 x 1200⁶, 2048 x 1152⁶, 2560 x 1440⁶, 5120 x 1440⁶, 5120 x 2160⁶</p> <p>HDTV: 1280 x 720P^{5,6,7,8}, 1920 x 1080P^{5,6,7,8,9,10,11}, 3840 x 2160P^{1,2,3,4,5,6,7,8}, 4096 x 2160P^{1,2,3,4,5,6,7,8}, 7680 x 4320P^{1,2,3,4,5,6}</p> <p>1 = at 24 (23.98) Hz, 2 = at 25 Hz, 3 = at 30 (29.97) Hz, 4 = at 48 Hz, 5 = at 50 Hz, 6 = 60 (59.94) Hz, 7 = at 100Hz, 8 = at 120Hz, 9 = at 144Hz, 10 = at 165Hz, 11 = at 240Hz</p> <p>Note: 7680 x 4320P @48Hz/50Hz/60Hz supports only YCbCr 4:2:0.</p>

Technical	
Maximum Data Rate	HDMI: 40Gbps USB 2.0: 255Mbps
Audio Formats Supported	HDMI IN/OUT: Supports multichannel audio up to PCM 7.1, including PCM 2.0/5.1/7.1ch, Dolby Digital, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos, DTS 5.1, DTS-HD Master Audio and DTS:X AUDIO OUT: PCM 2.0

General	
Operating Temperature	0°C to 45°C (32°F to 113°F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Humidity	10% to 90%, non-condensing
ESD Protection	Human-body Model: ±8kV (Air-gap discharge)/ ±4kV (Contact discharge)
Power Supply	DC 12V 3A
Power Consumption (Max)	25W (Pair, via PoC)
Device Dimension (W x H x D)	145mm × 25mm × 90.2mm/ 5.71" x 0.98" x 3.55" each for TX/RX
Product Weight	0.39kg/0.86lb each for TX/RX

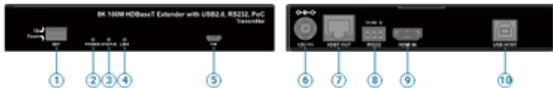
Transmission Distance:

Note: A T568B straight-through Category cable is recommended.

Cable Type	Range	Supported Video
Cat 6/6A/7	100m/328ft	8K@60Hz 4:2:0 8K@30Hz 4:4:4
Cat 5e	90m/295ft	8K@60Hz 4:2:0 8K@30Hz 4:4:4
HDMI	Input/Output: 10m/33ft	4K@30Hz, 1080P@60Hz
	Input: 5m/16ft Output: 10m/33ft	4K@60Hz
	Input/Output: 3m/10ft	8K@60Hz 4:2:0

Panel Description

Transmitter



#	Name	Description
1	SET	A 4-pin switch for RS-232, HDCP and EDID configurations. For more information, refer to the DIP Switch Configurations section.
2	POWER LED	On/Off: Indicates whether the device is powered on.
3	STATUS LED	<ul style="list-style-type: none">• Blinking: The device is working properly.• Off: The device is not working properly.
4	LINK LED	<ul style="list-style-type: none">• On: The link between the transmitter and receiver is normal.• Blinking/Off: Link error or no link.
5	FW	A Micro USB port. Connect to a PC for firmware update.
6	12V	Connect to the included DC 12V 3A power adapter. Note: Connecting the power adapter to the receiver is recommended as it could power both the transmitter and the receiver through one-way PoC.
7	HDBT OUT	Connect to the HDBT IN port of the receiver.
8	RS-232	Connect to an RS-232 device for RS-232 data passthrough or to a PC for HDBT firmware update (available only when the first pin of the SET switch is set to the "down" position).
9	HDMI IN	Connect to an HDMI source device.
10	USB HOST	1 x USB 2.0 Type-B port. Connect to a USB host (e.g. a PC).

Receiver



#	Name	Description
1	SET	A 2-pin switch for RS-232 configurations. For more information, refer to the DIP Switch Configurations section.
2	POWER LED	On/Off: Indicates whether the device is powered on.
3	STATUS LED	<ul style="list-style-type: none">• Blinking: The device is working properly.• Off: The device is not working properly.
4	LINK LED	<ul style="list-style-type: none">• On: The link between the transmitter and receiver is normal.• Blinking/Off: Link error or no link.
5	FW	A Micro USB port. Connect to a PC for firmware update.
6	12V	Connect to the included DC 12V 3A power adapter. Note: Connecting the power adapter to the receiver is recommended as it could power both the transmitter and the receiver through one-way PoC.
7	HDBT IN	Connect to the HDBT OUT port of the transmitter.
8	RS232	Connect to an RS-232 device for RS-232 data passthrough or to a PC for HDBT firmware update (available only when the first pin of the SET switch is set to the "down" position).
9	HDMI OUT	Connect to an HDMI display device.
10	AUDIO OUT	Connect to an audio receiver for de-embedded balanced analog audio output.
11	USB DEVICE	4 x USB 2.0 Type-A ports, each outputting a maximum current of 1.25A. Connect to USB peripherals.

DIP Switch Configurations

Transmitter

The 4-pin SET switch on the transmitter configures RS-232 mode, input HDCP, and input EDID. By default, pins 1 to 4 are set to the “Up” position.

Function	DIP Switch Position			
	1	2	3	4
RS232 Passthrough (Default)	Up	—	—	—
RS232 for HDBT Firmware Update	Down	—	—	—
Input HDCP on (Default) Input	—	Up	—	—
HDCP off Copy EDID (Default) Fix	—	Down	—	—
4K@60 PCM 2CH Fix 4K@30 PCM	—	—	Up	Up
2CH Fix 1080P@60 PCM 2CH	—	—	Up	Down
	—	—	Down	Up
	—	—	Down	Down

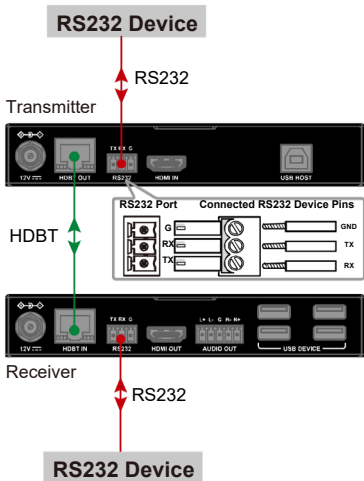
Receiver

The 2-pin SET switch on the receiver configures the RS-232 mode. By default, pin 1 is set to the “Up” position. pin 2 is reserved.

Function	DIP Switch Position	
	1	2
RS232 Passthrough (Default)	Up	—
RS232 for HDBT Firmware Update	Down	—

RS232 Operation

The RS232 port supports bidirectional passthrough, allowing RS232 data to pass between the transmitter and receiver. Before operation, ensure that pin 1 of the SET switches on both units is set to the “Up” position.



Troubleshooting

1. Why is there no power to the device?

Ensure the device is powered on.

Use the power adapter included in the package.

2. Why is there no picture, or is the video flashing?

Make sure all devices are powered on and all cables are properly connected and of good quality.

Check that cable lengths are within the recommended range (see Specifications table).

Verify that all LED indicators are functioning normally.

If connecting a source directly to a display, ensure they can work properly.

Confirm that the input resolution is supported by the device.