

HDBaseT-USB3 Extender Kit

Model:
BHDBT3-USB



Purchased product
may differ from image.

Este manual está disponible en español en la página de
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Introduction

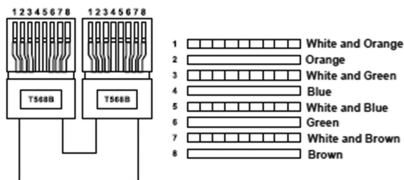
The BHDBT3-USB USB 3.2 Extender extends a USB signal up to 328 ft. (100 m) with a single Cat6a cable. The transmitter includes one USB 3.2 Type-B input, one FSYSNC GPIO input and one RS-232 pass-through. The receiver includes four USB 3.2 Type-A outputs, one FSYSNC GPIO output and one RS-232 pass-through. Bi-directional 24V PoC is also supported.

Important Safety Instructions

SAVE THESE INSTRUCTIONS

This manual contains instructions and warnings that should be followed during the installation, operation and storage of this product. Failure to heed these warnings may affect your warranty.

- 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.
- **Caution:** The product requires the use of UTP connectors. Please connect in direct interconnection method and do not cross connect.



Direct Interconnection Method

Package Contents

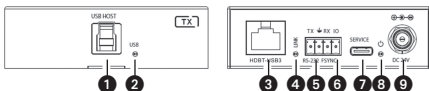
- USB 3.2 Extender (Transmitter)
- USB 3.2 Extender (Receiver)
- 24V/2A Locking Power Plug (AS/NZS 3112 Australia; BS 1363 UK; CEE 7/16 Schuko; NEMA 1-15P North America)
- (x2) 3-Pin, 3.5mm Phoenix Connector (Male)
- (x4) Mounting Ear
- (x8) M3x4 Machine Screw
- User Documentation

Product Features

- Extends USB 3.2 connections up to 328 ft. (100 m) over Cat6a cable.
- USB 3.2 connectivity with data transfer rates up to 5 Gbps.
- Backward compatible with USB 2.0 and 1.1.
- Hardware acceleration for isochronous and bulk transfers.
- USB-A ports 1 and 2 support 5V/1.5A and ports 3 and 4 support 5V/1A on the receiver.
- Supports RS-232 pass-through and FSYNC GPIO pass-through (for industry camera use).
- Supports bi-directional 24V PoC.
- Plug and play, no driver and setting installation required.

Product Overview

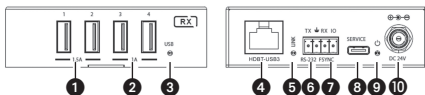
Transmitter



- 1 USB HOST:** Host port, supports USB 3.2. Connects to a PC or host.
- 2 USB LED:** USB signal indicator.
 - On: USB signal is detected.
 - Off: USB signal is not detected.
- 3 HDBT OUT:** Connects to the HDBT IN port on receiver with Cat6a cable.
- 4 LINK LED:** Connection signal indicator.
 - On: Transmitter and receiver are connected and linked.
 - Flashing: Transmitter and receiver link is off due to USB low-power mode.
 - Off: Transmitter and receiver are not connected.
- 5 RS-232:** 3-pin Phoenix connector, connects to a PC or control system for RS-232 command pass-through.
- 6 FSYNC:** FSYNC port, used for level pass-through to the receiver and synchronizes the external devices. The default level is 3.3V.
- 7 SERVICE:** Firmware update port.
- 8 POWER LED:** The LED will be on when the transmitter is powered on.
- 9 DC 24V:** DC 24V/2A power input port.

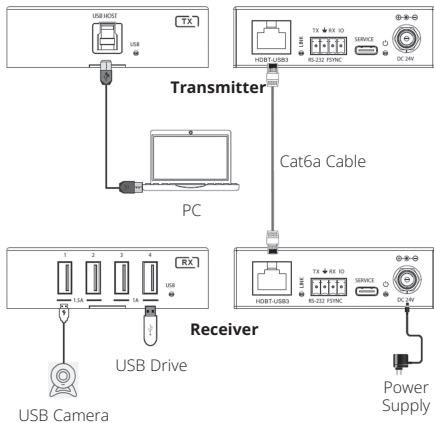
Product Overview

Receiver



- ❶ **USB 1/2:** Connects to USB devices. Max output power is up to 5V/1.5A.
- ❷ **USB 3/4:** Connects to USB devices. Max output power is up to 5V/1A.
- ❸ **USB LED:** USB signal indicator.
 - On: USB signal is detected.
 - Off: USB signal is not detected.
- ❹ **HDBT IN:** Connects to the HDBT OUT port on transmitter with Cat6a cable.
- ❺ **LINK LED:** Connection signal indicator.
 - On: Transmitter and receiver are connected and linked.
 - Flashing: Transmitter and receiver link is off due to USB low-power mode.
 - Off: Transmitter and receiver are not connected.
- ❻ **RS-232:** 3-pin Phoenix connector, connects to a PC or control system for RS-232 command pass-through.
- ❼ **FSYNC:** FSYNC port, used for receiving level pass-through from the transmitter and synchronizes the external devices. Default level is 3.3V.
- ❽ **SERVICE:** Firmware update port.
- ❾ **POWER LED:** The LED will be on when the receiver is powered on.
- ❿ **DC 24V:** DC 24V/2A power input port.

Installation



Specifications

Technical	
USB Protocol	USB 3.2
Transmission Rate	Up to 5 Gbps
Network Bandwidth	10G
Transmission Distance	328 ft. (100 m) over Cat6a (F/FTP) cable
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge), ±4kV (Contact discharge)
Connections	
Transmitter	Input: 1 × USB HOST [USB-B, 9-pin Female] Output: 1 × HDBT OUT [RJ45, Female] Control: 1 × RS-232 [3-pin, 3.5 mm Phoenix Connector] 1 × FSYNC [1-pin, 3.5 mm Phoenix Connector] 1 × SERVICE [USB-C, Update Port]
Receiver	Input: 1 × HDBT IN [RJ45, Female] Output: 4 × USB Devices [USB-A, 9-pin Female] Control: 1 × RS-232 [3-pin, 3.5 mm Phoenix Connector] 1 × FSYNC [1-pin, 3.5 mm Phoenix Connector] 1 × SERVICE [USB-C, Update Port]

Specifications

Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions H x W x D	Transmitter / Receiver: 1 x 3.3 x 4 in. (25.5 x 85 x 100 mm)
Weight	Transmitter: 0.56 lb. (253 g), Receiver: 0.57 lb. (260 g)
Power Supply	Input: AC 100~240V 50/60 Hz Output: DC 24V 2A
Power Consumption	PoC Power Supply: 40W (Max)
Operating Temperature	32°F ~ 104°F (0°C ~ 40°C)
Storage Temperature	-4°F ~ 140°F (-20°C ~ 60°C)
Relative Humidity	20~90% RH (Non-condensing)

Warranty

1-Year Limited Warranty

We warrant our products to be free from defects in materials and workmanship for a period of one (1) year from the date of initial purchase. Our obligation under this warranty is limited to repairing or replacing (at its sole option) any such defective products. Visit **[Tripplite.Eaton.com/support/product-returns](https://www.TrippliteEaton.com/support/product-returns)** before sending any equipment back for repair. This warranty does not apply to equipment which has been damaged by accident, negligence or misapplication or has been altered or modified in any way.

EXCEPT AS PROVIDED HEREIN, WE MAKE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Some states do not permit limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser.

FCC Notice, Class A

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Warranty

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. The user must use shielded cables and connectors with this equipment.

Any changes or modifications to this equipment not expressly approved by Eaton could void the user's authority to operate this equipment.

WEEE Compliance Information for Customers and Recyclers (European Union)

Under the Waste Electrical and Electronic Equipment (WEEE) Directive and implementing regulations, when customers buy new electrical and electronic equipment from Eaton they are entitled to:



- Send old equipment for recycling on a one-for-one, like-for-like basis (this varies depending on the country)
- Send the new equipment back for recycling when this ultimately becomes waste

Eaton has a policy of continuous improvement. Specifications are subject to change without notice. Photos and illustrations may differ slightly from actual products.



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