



# USER MANUAL <sup>V1.0</sup>



USB 3.2 Extender Over CAT 328 feet  
with USB-C Input

JTD-3263 | JTECH-UCEXT

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Scan the QR code below or visit  
<https://www.jtechdigital.com/product/3263>  
to view and access detailed digital  
resources regarding this unit.



## Safety Instructions:

- Before using this product, please carefully read the following safety instructions to ensure its proper use and keep this manual for future reference:
- To prevent electric shock, do not attempt to open the product.
- Only qualified personnel should perform any repairs or maintenance.
- Always place the product on a stable, flat surface to prevent it from falling.
- Do not expose the product to water, moisture, or high-humidity environments to avoid the risk of damage.
- To prevent damage from direct sunlight or high temperatures, do not expose the product to such environments.
- Do not place the product near heat sources like radiators, heat registers, stove, or other heat-producing apparatus.
- Do not place any objects on top of the product to avoid damage.
- Use only the attachments and accessories specified by the manufacturer.
- During lightning storms or prolonged periods of disuse, unplug the power supply to prevent damage.

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# 1. Introduction

This USB extender can extend USB 3.2 Gen 1 signal up to 100m/328ft distance via a single CAT6a cable. The transmitter features 1x USB-C host port and 1x USB-C and 2x USB-A device ports. The receiver features 2x USB-C and 2x USB-A device ports.

Bi-directional 24V PoC (Power over Cable) allows user to only provide power supply to the transmitter side or the receiver side.

The product can be widely used for long distance USB signal transmission between multiple USB sources and devices like webcams, PTZ cameras, keyboards, mice, USB microphones, flash sticks, printers, scanners, touch panel displays and other USB devices.

## 2. Features

- ☆ Extension of USB 3.2 Gen 1 up to 100m/328ft via CAT6a cable
- ☆ USB 3.2 Gen 1 connectivity with data transfer rate up to 5Gbps
- ☆ Backwards compatible with USB 2.0 and 1.1
- ☆ Hardware acceleration for isochronous and bulk transfer
- ☆ TX features 1x USB-C host port, 1x USB-C and 2x USB-A device ports
- ☆ RX features 2x USB-C (1x 5V@1A and 1x 5V@1.5A) and 2x USB-A device ports (1x 5V@1A and 1x 5V@1.5A)
- ☆ Support firmware upgrade via USB-C service port
- ☆ Support FSYNC GPIO pass-through for industry camera use
- ☆ Support bi-directional 24V PoC (Power over Cable), when TX or RX gets power, the other end does not need an external power supply
- ☆ Plug-and-play with no drivers download or software setting required

## 3. Package Contents

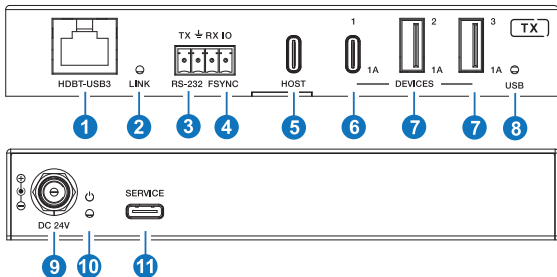
- ① 1× USB 3.2 Gen 1 Extender (Transmitter)
- ② 1× USB 3.2 Gen 1 Extender (Receiver)
- ③ 1× 24V/3.75A Multinational Locking Power Supply
- ④ 2× 4pin-3.5mm Phoenix Connector (Male)
- ⑤ 4× Mounting Ear
- ⑥ 8× Machine Screw (KM3\*4)
- ⑦ 1× User Manual

## 4. Specifications

Technical	
USB Protocol	USB 3.2 Gen 1
Transmission Rate	Up to 5Gbps
Transmission Distance	100m/328ft via CAT6a (U/FTP) 23AWG cable 1.5m/4.9ft via USB passive cable
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge), ±4kV (Contact discharge)
Connections	
Transmitter	Input: 1× HOST [USB Type C, 24-pin female] Output: 1× USB-C DEVICE [USB Type C, 24-pin female] 2× USB-A DEVICE [USB Type A, 9-pin female] 1× HDBT-USB3 [RJ45 connector, 24V PoC] Control: 1× RS-232 [3pin-3.5mm phoenix connector] 1× FSYNC [1pin-3.5mm phoenix connector] 1× SERVICE [USB Type C, firmware update port]
Receiver	Input: 1× HDBT-USB3 [RJ45 connector, 24V PoC] Output: 2× USB-A DEVICE [USB Type A, 9-pin female] 2× USB-C DEVICE [USB Type C, 24-pin female] Control: 1× RS-232 [3pin-3.5mm phoenix connector] 1× FSYNC [1pin-3.5mm phoenix connector] 1× SERVICE [USB Type C, firmware update port]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	TX / RX: 140mm [W] × 75mm [D] × 23mm [H]
Weight	TX: 312g; RX: 312g
Power Supply	Input: AC 100~240V 50/60Hz Output: DC 24V/3.75A
Power Consumption	TX: 20.16W (Max); RX: 32.4W (Max); TX+RX: 57.84W (Max, including line loss)
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Operating Humidity	20%~80% relative humidity, non-condensing
Storage Humidity	10%~90% relative humidity, non-condensing

## 5. Operation Controls and Functions

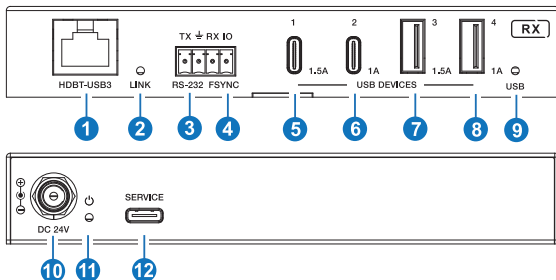
### Transmitter Panel



No.	Name	Function Description
1	HDBT-USB3	Connects to the HDBT-USB3 port on Receiver with CAT6a cable. It can also be used for 24V PoC power supply.
2	LINK LED	Connection signal indicator. <ul style="list-style-type: none"> <li>▪ <b>On:</b> Transmitter and Receiver are connected and linked.</li> <li>▪ <b>Off:</b> Transmitter and Receiver are not connected.</li> </ul>
3	RS-232	3pin phoenix connector, connected to a PC or control system for RS-232 command pass-through.
4	FSYNC	FSYNC port, used for the level pass-through from TX to RX, to synchronize the external devices. Default level is 5V.
5	HOST	Upstream USB-C port, connected to PC or host.
6	USB DEVICES 1	Downstream USB-C port, with output power up to 5V/1A. Connects to USB device such as U disk or hard disk.
7	USB DEVICES 2~3	Downstream USB-A ports, with output power up to 5V/1A. Connect to USB devices such as U disk or hard disk.
8	USB LED	USB signal indicator. <ul style="list-style-type: none"> <li>▪ <b>On:</b> USB 3.0 signal is detected.</li> <li>▪ <b>Flashing:</b> USB 2.0 signal is detected.</li> <li>▪ <b>Off:</b> USB signal is not detected.</li> </ul>

No.	Name	Function Description
9	DC 24V	DC 24V/3.75A power input port.
10	Power LED	The LED will be on when the transmitter is powered on.
11	SERVICE	USB-C port for firmware update, supporting USB 2.0.

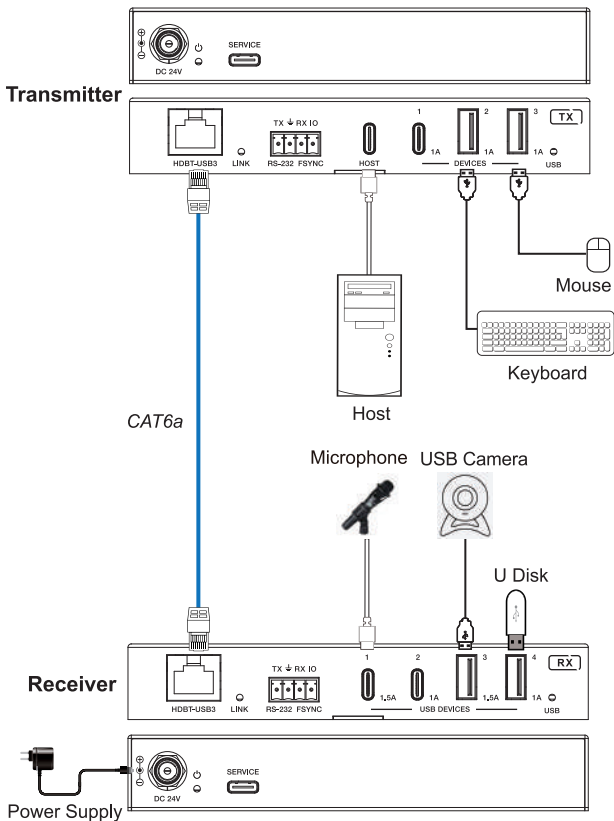
## Receiver Panel



No.	Name	Function Description
1	HDBT-USB3	Connects to the HDBT-USB3 port on Transmitter with CAT6a cable. It can also be used for 24V PoC power supply.
2	LINK LED	Connection signal indicator. <ul style="list-style-type: none"> <li>▪ <b>On:</b> Transmitter and Receiver are connected and linked.</li> <li>▪ <b>Off:</b> Transmitter and Receiver are not connected.</li> </ul>
3	RS-232	3pin phoenix connector, connected to a PC or control system for RS-232 command pass-through.
4	FSYNC	FSYNC port, used for the level pass-through from TX to RX, to synchronize the external devices. Default level is 5V.
5	USB DEVICES 1	Downstream USB-C port, with output power up to 5V/1.5A. Connects to USB device such as U disk or hard disk.
6	USB DEVICES 2	Downstream USB-C port, with output power up to 5V/1A. Connects to USB device such as U disk or hard disk.

No.	Name	Function Description
7	USB DEVICES 3	Downstream USB-A port, with output power up to 5V/1.5A. Connects to USB device such as U disk or hard disk.
8	USB DEVICES 4	Downstream USB-A port, with output power up to 5V/1A. Connects to USB device such as U disk or hard disk.
9	USB LED	USB signal indicator. <ul style="list-style-type: none"> <li>▪ <b>On:</b> USB 3.0 signal is detected.</li> <li>▪ <b>Flashing:</b> USB 2.0 signal is detected.</li> <li>▪ <b>Off:</b> USB signal is not detected.</li> </ul>
10	DC 24V	DC 24V/3.75A power input port.
11	Power LED	The LED will be on when the receiver is powered on.
12	SERVICE	USB-C port for firmware update, supporting USB 2.0.

## 6. Application Example



## 7. Maintenance

Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner, or benzene to clean.

## 8. Warranty

If your product does not work properly because of a defect in materials or workmanship, our company (referred to as “the warrantor”) will, for the length of the period indicated as below, “Parts and Labor (1) Year”, which starts with the date of original purchase (“Limited Warranty period”), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

During the “Labor” limited warranty period, there will be no charge for labor. During the “Parts” warranty period, there will be no charge for parts. You must mail-in your product during the warranty period. This Limited Warranty is extended only to the original purchaser and only covers products purchased as new. A purchase receipt or other proof of original purchase date is required for Limited Warranty service.

## 9. Mail-In Service

When shipping the unit, carefully pack and send it prepaid, adequately insured, and preferably in the original carton. Include a letter detailing the complaint and provide a day time phone and/or email address where you can be reached.

## 10. Limited Warranty Limits and Exclusions

This Limited Warranty ONLY COVERS failures due to defects in material or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The Limited Warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, mis- adjustment of consumer controls, improper maintenance, power line

surge, lightning damage, modification, or service by anyone other than a Factory Service center or other Authorized Servicer, or damage that is attributed to acts of God.

There are no express warranties except as listed under “Limited Warranty Coverage”. The warrantor is not liable for incidental or consequential damages resulting from the use of this product or arising out of any breach of this warranty. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, travel to and from the service, loss of or damage to media or images, data or other recorded content. The items listed are not exclusive but are for illustration only).

Parts and service, which are not covered by this limited warranty, are your responsibility



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