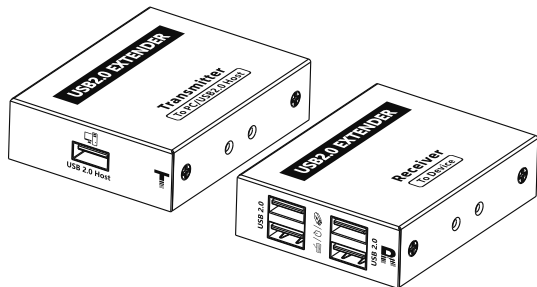


### User Manual

## 120m 4-Ports USB2.0 over IP Extender



#### • Important Safety Instructions:

1. To prevent electric shock, please ensure that all apparatus is properly grounded.
2. Place the device in a well-ventilated area, do not block any ventilation openings.
3. Do not expose this apparatus to rain or place it near water. Any liquid that goes into the apparatus may cause a failure, fire, or electric shock.
4. Do not place the device on an uneven or unstable surface. The device may fall resulting in a malfunction.
5. Never insert anything metallic into the open parts of this apparatus. This may cause a danger of electric shock.
6. If a three-party power supply is used, please ensure that the power supply specifications meet the product requirements.

#### • Introduction

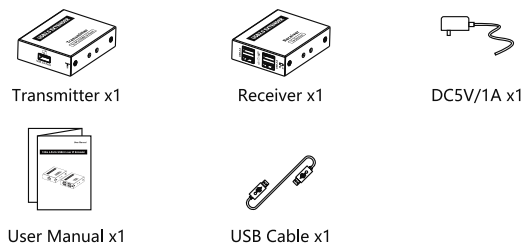
This is a USB 2.0 extender, which can realize one-to-one connection through CAT5e/6/7 network cables, with a transmission distance of up to 100m for CAT5e and 120m for CAT6 and above; It supports 4 channels of USB 2.0 device input, such as Keyboard, Mouse, Touchscreen, Storage (USB Flash Drive/ Portable Hard Drive), Camera, Audio Device (Speaker/Microphone), and supports one-to-one connection, one-to-many connection via 100Mbps switch, or switch cascading.

It can be used for security monitoring, gaming, industrial control, professional audio-visual, smart medical and other fields.

#### • Features

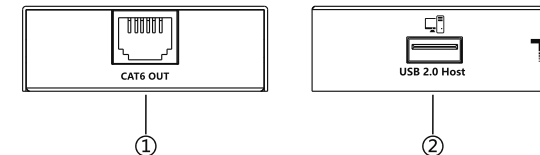
1. Support 4 USB 2.0 inputs and 1 USB 2.0 output.
2. Compatible with CAT5e/6/7 network cables, CAT5e transmission distance can reach 100m, and CAT6/7 transmission distance can reach 120m.
3. USB 2.0 devices are supported by the receiver: Keyboard, Mouse, Touchscreen, Storage (USB Flash Drive/Portable Hard Drive), Camera, Audio Device (Speaker/Microphone)
4. Supports USB hub connection.
5. The transmitter is powered by the source device, no additional power supply is required.
6. Supports one-to-one or one-to-many connections through the 100Mbps switch, or switch cascading.
7. Supports hot-plugging of USB devices and automatically identify USB High-Speed, Full-Speed and Low-Speed
8. Lightning protection, surge protection, ESD protection.
9. Plug and play.
10. Supports stable 24/7 operation.

#### • Package Contents



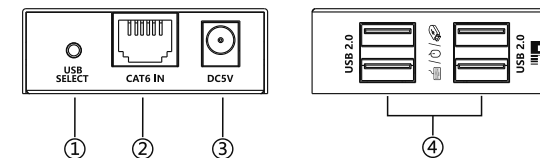
#### • Panel Description

##### Transmitter(Tx)



- ① RJ45 Ports      Connect with CAT5e/6 network cable
- ② USB-A Ports    Connect with computer

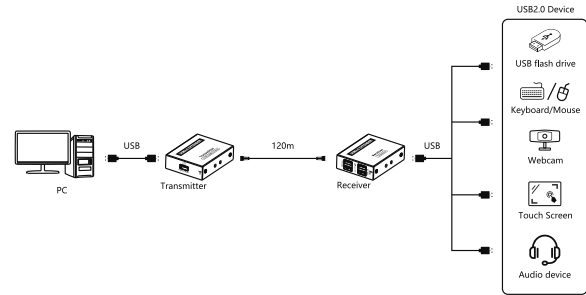
##### Receiver(Rx)



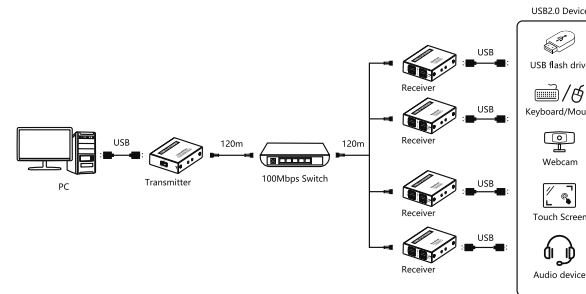
- ① USB SELECT Button    One to many connection, press to switch to the current device
- ② RJ45 Ports            Connect with CAT5e/6/7 network cable
- ③ Power Input            Connect with DC5V/1A power adapter
- ④ USB-A Ports            Supports connection to USB 2.0 devices: Keyboard, Mouse, Touchscreen, Storage (USB Flash Drive/Portable Hard Drive), Camera, Audio Device (Speaker/Microphone)

## • Installation Procedures

### 1. One-to-one connection:

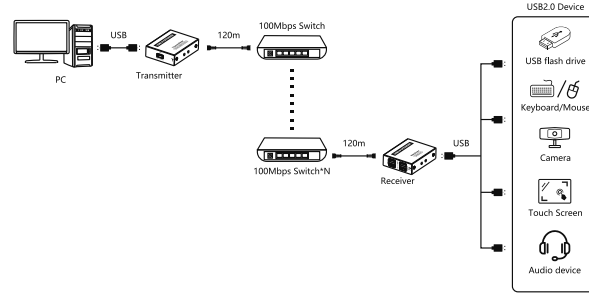


### 2. One-to-many connection (through 100Mbps switch):



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### 3. One-to-many connection (cascade of 100Mbps switches):



### 4. Connection Instructions

1. Connect the transmitter to the signal source device via USB cable, and then connect the USB device to the receiver.
2. If it's a one-to-one connection, use a network cable to connect the RJ45 port of the transmitter and receiver. If it is a one-to-many connection, use the 100Mbps switch as a bridge to connect the transmitter and the receivers with the network cable respectively
3. Plug the power supply into the receiver to get started.

### • Q&A

Q: There is no response after USB device is connected?

- A: 1) Please check whether the driver is installed properly;  
 2) Please check whether the network cable conforms to IEEE-568B standard and whether the cables are firmly connected;

Q: The receiver is unstable when connected to an external web camera?

- A: When connecting high-power USB devices, it is necessary to supply additional power to external devices.

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Q: Why does the USB device not work during one-to-many connections?

A: 1) Check if the USB device cables are properly connected.

- 2) Press the USB selection button on the receiver end to switch to the currently connected USB device.

### • Specification

| Item                  | Parameters  |
|-----------------------|---|
| Compatibility         | USB 2.0, compatible with USB1.1, USB1.0   |
| Transmission Distance | CAT5 80m / CAT5E 100m / CAT6 120m   |
| USB Device            | <p>Supported USB 2.0 Devices:<br/>                     Keyboard, mouse, touchscreen, storage devices (USB Flash Drive/ Portable Hard Drive), camera, and audio devices (speaker/ microphone).</p> <p>Device Limitations:<br/>                     1. Only one device per category (storage, camera, audio) can be recognized simultaneously.<br/>                     2. For devices of the same type, only the first connected device will be recognized; subsequently connected devices will not be detected.<br/>                     3. Keyboard, mouse, and touchscreen are exempt from these limitations.</p> <p>Camera Specifications:<br/>                     1. Supported formats: MJPEG, YUY2, H.264<br/>                     2. MJPEG/H.264: Resolutions up to 2560x1440@30fps<br/>                     3. YUY2: Resolutions up to 640x480@30fps</p> <p>Audio Specifications:<br/>                     1. Supported format: PCM<br/>                     2. Sampling rates: 48KHz, 44.1KHz, 16KHz</p> |
| Connection types      | One-to-one connection; One-to-many connection<br>Switch cascading   |
| Switch                | Supports switches with 100Mbps and above  |
| USB Hot-Plug          | Support   |
| Operating System      | Windows, MacOS, Linux, Android  |
| USB-A                 | 4 ports USB-A input<br>1 ports USB-A output   |
| Standard              | CAT5e/CAT6/CAT6A/CAT7, Follow IEEE-568B Standard  |

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| Physical Properties   |  |
|---|--|
| Housing   | Iron   |
| Dimensions  | 76.8(L) x 60.0(W) x 20.8(H) mm   |
| Weight  | TX: 124g RX: 127g  |
| Color   | Black  |
| Power   |  |
| Power Supply  | TX: powered by the source device<br>RX: DC5V/1A  |
| Power Consumption   | TX≤2W<br>RX≤1W(Not connected to external devices)  |
| Operating Environment   |  |
| Working temperature   | -20 ~ 60°C   |
| Storage temperature   | -30 ~ 70°C   |
| Humidity  | 0 ~ 90% (No condensation)  |
| Protection  | ESD protection<br>1a Contact discharge level 2 (±4KV)<br>1b Air discharge level 3 (±8KV)<br>Implementation of the standard: IEC61000-4-2<br>Lightning protection, Surge protection |
| Application   |  |
| Industrial Control, KVM Extension, Professional AV, Security and Monitoring, Gaming, etc. |  |

### Disclaimer

The product name and brand name may be registered trademark of related manufactures. ™ and ® may be omitted on the user manual. The pictures in this user manual are just for reference. We reserve the rights to make changes without further notice to a product system described herein to improve reliability, function or design.

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