USB-EXT11-KIT

USB 5Gbps EXTENDER KIT 100M

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Preface

Read this user manual carefully before using the product. Pictures shown in this manual are for reference only. Different models and specifications are subject to real product.

This manual is only for operation instruction, please contact the local distributor for maintenance assistance. The functions described in this version were updated till October 12, 2024. In the constant effort to improve the product, we reserve the right to make functions or parameters changes without notice or obligation. Please refer to the dealers for the latest details.

FCC Statement

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. It 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 in a commercial installation.

Operation of this equipment in a residential area is likely to cause interference, in which case the user at their own expense will be required to take whatever measures may be necessary to correct the interference.

Any changes or modifications not expressly approved by the manufacture would void the user's authority to operate the equipment.

SAFETY PRECAUTIONS

To ensure the best performance from the product, please read all instructions carefully before using the device. Save this manual for further reference.

- Unpack the equipment carefully and save the original box and packing material for possible future shipment.

- Follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.

- Do not dismantle the housing or modify the module. It may result in electrical shock or burn.

- Using supplies or parts not meeting the products' specifications may cause damage, deterioration, or malfunction.

- Refer all servicing to qualified service personnel.

- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.

- Do not put any heavy items on the extension cable in case of extrusion.

- Do not remove the housing of the device as opening or removing housing may expose you to dangerous voltage or other hazards.

- Install the device in a place with good ventilation to avoid damage caused by overheating.

- Keep the module away from liquids.

- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.

- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

- Unplug the power cord when left unused for a long period of time.

- Information on disposal for scrapped devices: do not burn or mix with general household waste, please treat them as normal electrical wastes.

Table of Contents

1. Product Introduction

The USB-EXT11-KIT is designed to transmit USB signals at speeds of up to 5Gbps over distances reaching 100 meters when utilizing a Cat6a cable. It maintains backward compatibility with earlier USB standards such as 1.1 and 2.0. The USB-EXT11-HOST acts as the host port within the extender kit, featuring a Type-C connection for the host device. Meanwhile, the USB-EXT11-CLIENT serves as the device port, offering four USB ports that can deliver a shared power output of 5V3A.

The devices feature a DIP switch that allows for the selection of two device power modes: Auto mode and Always On mode. In Auto mode, the power to the CLIENT side will automatically shut off when the host on the USB-EXT11-HOST side is disconnected. Conversely, when switched to Always On mode, the unit will continuously supply power, irrespective of the host's connection status.

This device is particularly ideal for extending USB connections for conferencing cameras, video capture devices, and audio equipment in boardrooms and conference environments. It also supports a diverse array of USB peripherals, including flash drives, hard drives, keyboards, mice, interactive whiteboards, touchscreens, audio devices, and other USB devices.

1.1 Key Features

- USB data transfer rate up to 5Gbps
- Supports extending USB signals up to 100m via Cat6a cable
- Backwards compatible with USB 1.1 and USB 2.0
- Support USB device ports power management
- Bi-directional 24V PoC power supply

1.2 Package List

- 1x USB-EXT11-HOST
- 1x USB-EXT11-CLIENT
- 1x User Manual
- 8x Rubber feet
- 2x Mounting Kit (Attached by default)
- 1x Power adapter (DC 24V1.5A) with EU&UK&US converter

Note: Please contact your distributor immediately if any damage or defect in the components is found.

1.3 Customer Service

TiGHT AV provide a limited warranty for the product within **five years** counting from

date of purchase (The purchase invoice shall prevail).

For more information see TiGHT AV general Warranty Statement at
https://tightav.com/warranty-statement or just scan the QR-code below.

2. Technical Specification

USB-EXT11-HOST	
Host Connector	(1) Type-C USB
USB Version	USB 3.2 Gen1 (USB 5GBPS)
USB Compatibility	USB 1.1/2.0/3.2 Gen1
FW Upgrade Port	(1) Type-C USB
Dimension (W*H*D)	130.0mm x 21.5mm x 75.0mm
Net Weight	257g
USB-EXT11-CLIENT	
Device Connector	(3) Type-A USB (1) Type-C USB
Device Power	Devices share 15W (5V/3A)
USB Version	USB 3.2 Gen1 (USB 5GBPS)
Dimension (W*H*D)	130.0mm x 21.5mm x 75.0mm
Net Weight	292g
Control Part	
Control Connector	(1) 2-pin DIP switch
General	
Transmit distance	Up to 100m with CAT6a cable
PoC standard	Two-way 24V PoC
Data Rate	5Gbps
Operation Temperature	-10°C ~ +55°C
Storage Temperature	-25°C ~ +70°C
Relative Humility	10% ~ 90%
External Power Supply	DC 24V 1.5A
Max Power Consumption	23.5W (fully populated)
Shipping Weight	950g
Compliance	FCC, CE
Environmental Compliance	RoHS, REACH, WEEE

3. Panel Description

3.1 USB-EXT11-HOST

1. **HOST:** USB 3.2 Gen 1 Type-C connector for connecting to host device (PC or laptop). A blue LED lights up to indicate a successful connection to the host.

2. **HDBT-USB:** RJ45 port for interfacing with the extender's client unit, providing two-way 24V Power over Cable (PoC) support. The yellow LED signifies the HDBT connection status, while the green LED indicates data activity.

   - Yellow LED off: No CAT cable or active connection detected.
   - Yellow LED blinking: Establishing or unstable connection between the host and client.
   - Yellow LED on: A stable CAT cable connection exists between the host and client.
   - Green LED off: No USB data signal is being transmitted.
   - Green LED flashing regularly (every 500ms): USB 2.0 data is being transmitted
   - Green LED flashing irregularly: A fault in USB data transmission is present.
   - Green LED on: USB 3.0 data is currently being transmitted.

3. **FW:** 1 x USB-C, for connecting to a PC to facilitate the upgrade of Valens chipsets.

4. **LED and DC 24V:**

   - Power LED: The LED illuminates green when the power adapter is connected or when receiving PoC power from the CLIENT unit.
   - DC24V: 1x locking port, connecting with the DC24V1.5A power adapter.

3.2 USB-EXT11-CLIENT

1. **DEVICES 3A:** 3x Type-A USB 3.2 Gen1 ports and 1x Type-C USB 3.2 Gen1 port, designed for connecting KVM devices, cameras, or other USB peripherals. All devices share a current limit of 3A.

2. **HDBT-USB:** RJ45 port for interfacing with the extender's host unit, providing two-way 24V Power over Cable (PoC) support. The yellow LED signifies the HDBT connection status, while the green LED indicates data activity.

   - Yellow LED off: No CAT cable or active connection detected.
   - Yellow LED blinking: Establishing or unstable connection between the host and client.
   - Yellow LED on: A stable CAT cable connection exists between the host and client.
   - Green LED off: No USB data signal is being transmitted.
   - Green LED flashing regularly (every 500ms): USB 2.0 data is being transmitted
   - Green LED flashing irregularly: A fault in USB data transmission is present.
   - Green LED on: USB 3.0 data is currently being transmitted.

3. **USB POWER:** 1x DIP switch for USB device ports power mode:

   - AUTO(Default): Follow Host, USB device ports will only output power when an active host is connected.
   - ON: USB device ports output power all the time.

4. **LED and DC 24V:**

   - Power LED: The LED illuminates green when the power adapter is connected or when receiving PoC power from the HOST unit.
   - DC24V: 1x locking port, connecting with the DC24V1.5A power adapter.
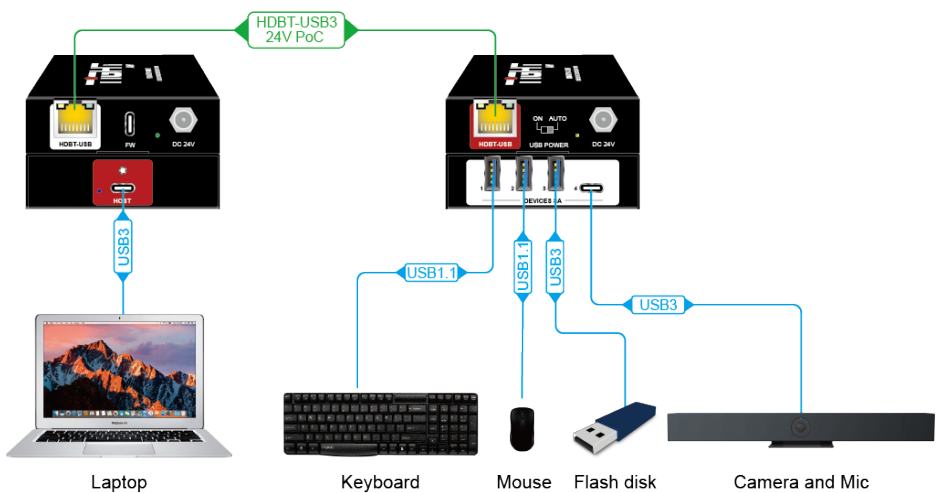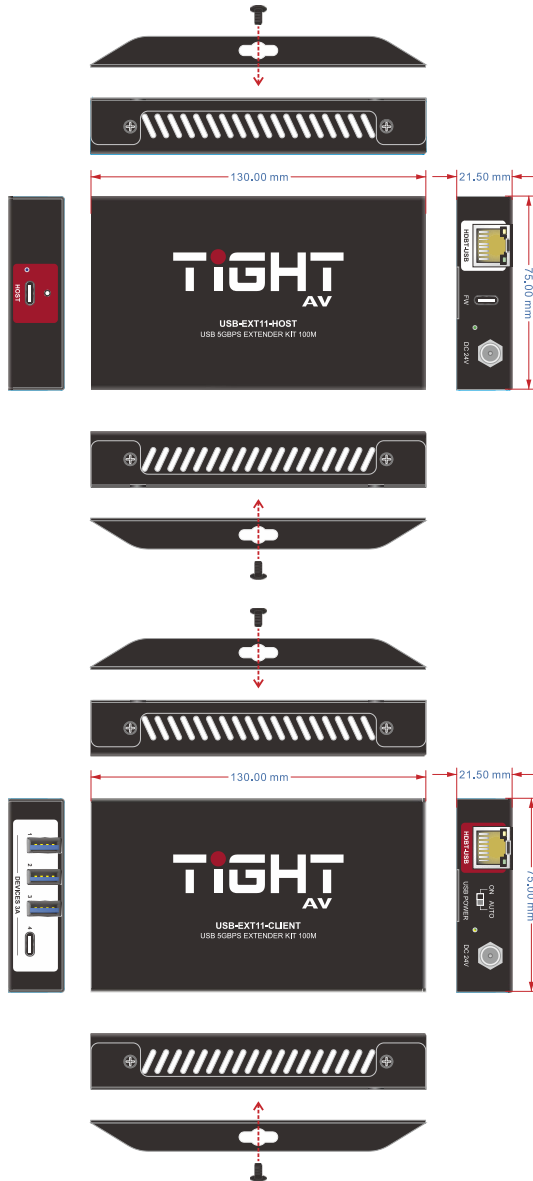
4. System Connection

4.1 Usage Precaution

- Make sure all components and accessories are included before installation.
- The system should be installed in a clean environment with proper temperature and humidity.
- All the power switches, plugs, sockets, and power cords should be insulated and safe.
- All devices should be connected before system powers on.

4.2 System Diagram

The following diagram illustrates an example of connections that can be utilized using the USB-EXT11-KIT.

Laptop   Keyboard   Mouse   Flash disk   Camera and Mic

5. Drawings and Dimensions

6. Environment and recycling information

6.1 Disposal of electric and electronic devices EC Directive 2012/19/EU

This product is not to be treated as regular household waste but must be returned to a collection point for recycling electric and electronic devices. Further information is available from your municipality, your municipality's waste disposal services, or the retailer where you purchased your product.

6.2 Packaging recycling information

	SCATOLA CORRUGATED PAPER BOX	RACCOLTA CARTA MIXED PAPER AND CARD
20 PAP		
22 PAP	BUSTA PER ACCESSORI ACCESSORIES BAG	RACCOLTA CARTA MIXED PAPER AND CARD
22 PAP	PIATTINA ANIMATA CABLE TIE	RACCOLTA CARTA MIXED PAPER AND CARD

Verifica le disposizioni del tuo comune
Check the regulations of your municipality

Note: This manual is recycled as paper (mixed paper and card).

22 PAP