



PU-USB-KIT

USB extender USB 2.0 over Single CAT5e/CAT6 (100m) Kit





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SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply.

Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

REVISION HISTORY

| VERSION NO. | DATE | SUMMARY OF CHANGE |
|-------------|------------|---------------------|
| VS1 | 04/02/12 | First release |
| VR2 | 10/10/2012 | New Format/Diagrams |



CONTENTS

| 1. Introduction | 6 |
|-------------------------------------|----|
| 2. Applications | 6 |
| 3. Package Contents | 6 |
| 4. System Requirements | 6 |
| 5. Features | 6 |
| 6. Operation Controls and Functions | 7 |
| 6.1 Transmitter Front & Rear Panels | 7 |
| 6.2 Receiver Front & Rear Panels | 8 |
| 7. Connection and Installation | 9 |
| 9 Specifications | 11 |



1. INTRODUCTION

The PU-USB-KIT is a USB over CAT5/6 transmitter and receiver that has been developed to extend USB devices over long distances via CAT5e/6 cable infrastructure. This kit allows any USB host to send data within a 100m range while offering up to 4 USB outputs, giving this product the ability to act like a USB hub.

2. APPLICATIONS

- **III** USB Extension over CAT5/6 up to 100M or 200M through Hub
- Control devices from far away
- Host device information sharing and control

3. PACKAGE CONTENTS

- **III** USB over CAT5e/6 Transmitter x 1
- **III** USB over CAT5e/6 Receiver x 1
- JJJ 5V / 3A DC Power Supply x 2
- **III** Operation Manual x 1

4. SYSTEM REQUIREMENTS

PC or laptop with USB and CAT5e/6 cables and USB devices.

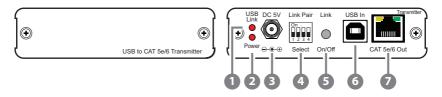
5. FEATURES

- Supports all major operating systems including Windows®, MAC OS®, and Linux
- Supports USB 2.0 high-speed and USB 1.1 (full-speed, low-speed) devices
- True plug and play without the need to install drivers
- Display or control the host device
- Proven up to 100m CAT5 cable distance without lag
- Each USB port carries 500mA of power
- Total transmission frequency 1 GHz



6. OPERATION CONTROLS AND FUNCTIONS

6.1 Transmitter Front & Rear Panels



- **1 USB Link:** This LED will illuminate when the transmitter has linked with receiver's USB signal.
- Power LED: This LED will illuminate when the device is plugged with power supply.
- 3 **DC 5V:** Plug the 5V DC power supply into the unit and connect the adaptor to an AC outlet.
- Link Pair Select: This dip switch allows user with multi-pairs setting for link up to 16 pairs of the devices with single IP router. Each pair must have the same dip switch setting in order to pair to the right device setting. The factory default setting is at 0000.

Note: To activate the setting a re-power on is required after each new setting.

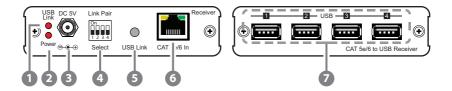
5 Link On/Off button: Press this button to allow the receiver to be link up or unlink with the transmitter's USB input.

Note: To activate the link a re-power on is required after each button pressed.

- **OUSB In:** This slot is to connect with PC/Laptop for input source signal with USB B type cable.
- **CAT5e/6 Out:** This slot is to connect with CAT5e/6 cable with receiver side's CAT5e/6 input. When both transmitter and receiver is connected the green LED will illuminate. When the data is sending the yellow LED will be blinking.



6.2 Receiver Front & Rear Panels

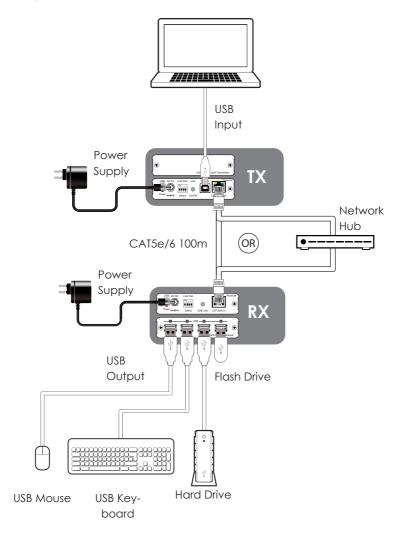


- (1) **USB Link:** This LED will illuminate when the transmitter has linked with receiver's USB signal. User are only able to control the USB in (the source device) when this LED is not illuminated.
- 2 Power LED: This LED will illuminate when the device is plugged with power supply.
- 3 **DC 5V:** Plug the 5V DC power supply into the unit and connect the adaptor to an AC outlet.
- Link Pair Select: This dip switch allows user with multi-pair setting for link up to 16 pairs of the devices with single IP router. Each pair must have the same dip switch setting in order to pair to the right device setting. The factory default setting is at 0000. (This function is not available yet with the first generation of the product)
 - Note: To activate the setting a re-power on is required after each new setting.
- **5 USB Link button:** Press this button to allow the receiver to be link up or unlink with the transmitter's USB input.
 - Note: To activate the link a re-power on is required after each button pressed.
- CAT5e/6 Out: This slot is to connect with CAT5e/6 cable with receiver side's CAT5e/6 input. When both transmitter and receiver is connected the green LED will illuminate. When the data is sending the yellow LED will be blinking.
- **USB 1~4:** These slots are where you connect your devices, such as keyboard, mouse, USB storage device or etc with USB cables.



7. CONNECTION AND INSTALLATION

Example 1

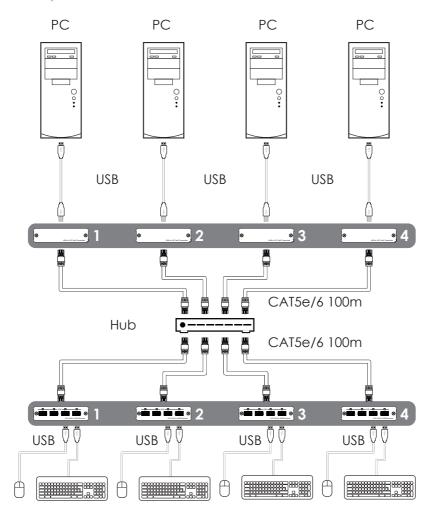


In this example, a single Transmitter and Receiver set can be used over a network or connected directly via a single CAT5e/6 cable





Example 2



In this example, up to 16 Transmitters and Receivers can be paired using the DIP switch setting on the units and used over the network



8. SPECIFICATIONS

TRANSMITTER

Input Port 1×USB (B type)

Output Port 1×RJ45

RECEIVER

Input Port 1×RJ45

Output Ports 4×USB (A type)

ESD Protection Human Body ±10 kV (air-gap dis-

Model: charge)

±6kV (contact dis-

charge)

Power Supply 5 V/3 A DC (US/EU standards, CE/FCC/

UL certified)

Dimensions(mm) 206 mm (W)×99 mm (D)×25 mm(H)
Weight(g) 206 g (Transmitter), 214 g (Receiver)

Chassis Material Aluminum

Silkscreen Color Black

Operating Temperature $0 \,^{\circ}\text{C} \sim 40 \,^{\circ}\text{C}/32 \,^{\circ}\text{F} \sim 104 \,^{\circ}\text{F}$

Storage Temperature $-20 \,^{\circ}\text{C} \sim 60 \,^{\circ}\text{C} / -4 \,^{\circ}\text{F} \sim 140 \,^{\circ}\text{F}$

Power Consumption 5.5 W (Transmitter), 12 W (Receiver)

Relative Humidity 20~90% RH (non condensing)



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