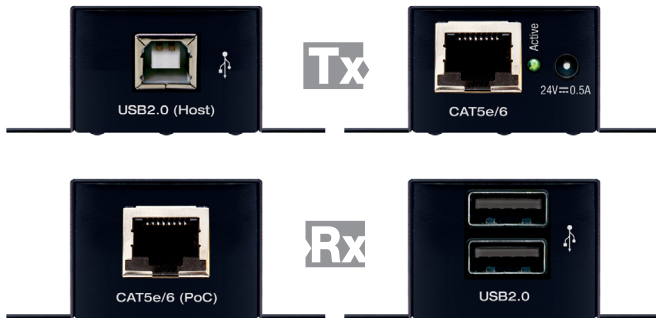


# KD-XUSB2

USB2.0 over CAT5e/6 50m Extender Kit (Tx and Rx).  
Rx features built-in 2 Port USB Hub, Power over CAT.

## Operating Instructions



**Key digital**<sup>®</sup>

The Experts in Digital Video Technology and Solutions™

## Table of Contents

---

Introduction . . . . .	1
Quick Setup Guide . . . . .	1
Application Examples . . . . .	2
Connections, Buttons, and LEDs. . . . .	3
Specifications . . . . .	4
Important Product Warnings & Safety Instructions: . . . . .	5
Contacting Key Digital . . . . .	5
Warranty Information. . . . .	5

**Always follow the instructions provided in this Operating Manual.**

Please visit [www.keydigital.com](http://www.keydigital.com) for the latest product documentation and software downloads. Product features and specifications are subject to change without notice.

## Introduction

---

KD-XUSB2 is a USB 2.0 transmitter + receiver extender kit that has been optimized for use with high bandwidth USB1.1 -2.0 devices, making it ideal in conference rooms and classrooms as well as in business offices and connected homes. KD-XUSB2 enables host laptops, computers, smart TVs or appliances to connect with devices such as web cams, keyboard and mouse, hard drives, printers and scanners, USB microphones, touchscreen displays, conferencing DSPs, and more. KD-XUSB2 extends USB signals up to 50m / 164ft via single CAT5e/6 cable, and only the transmitter needs a power connection. The transmitter features one USB-B connection and the receiver has two USB-A ports which may also connect to a USB hub for up to 15 supported devices.

### Key Features

- **Signal Extension:** Extends USB signals up to 50m / 164ft using CAT5e/6 cable
- **Data transfer rate:** Supports Low, Full, and High data transfer speeds up to 480Mbps
- **Power Over CAT (PoC):** Rx unit powered by Tx
- **USB Power to device:** Rx unit may provide 5V 500mA powering to connected device
- **Backward Compatible:** Supports USB versions 1.1 thru 2.0
- **Installation:** Compact size with L bracket chassis, ideal for mounting at tables, desks, or walls.
- **Hub Compatible:** Supports up to 15 connect USB devices with USB hub connected to Rx unit
- **No software required:** Effortless use on Windows, Mac, and Linux machines

### Included Accessories

- 1x 24V, 0.5A Power Supply with barrel connector. Model PA1015-240IB050
- 1x each US, EU, UK, AU power outlet adapter
- 1x 6 ft USB A to B cable

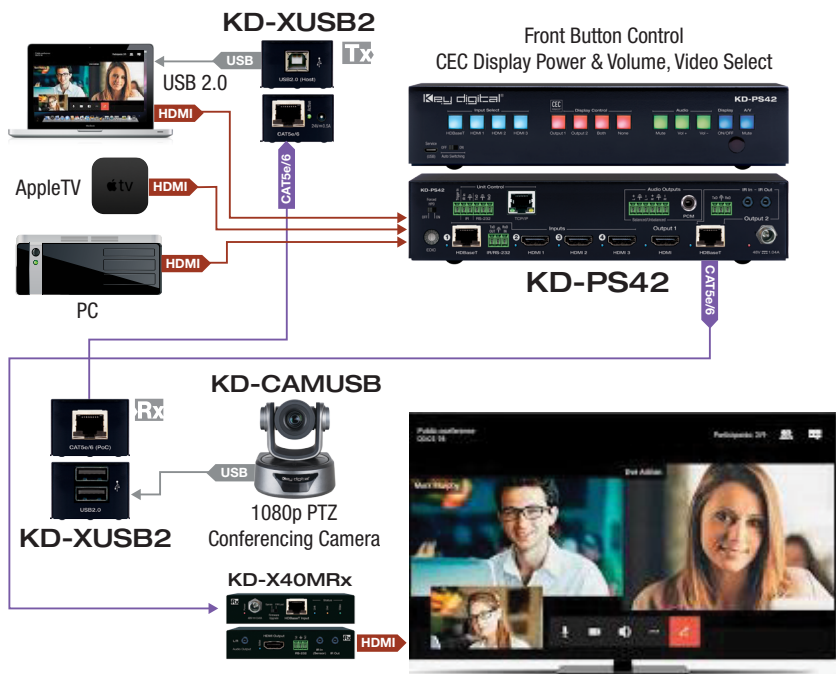
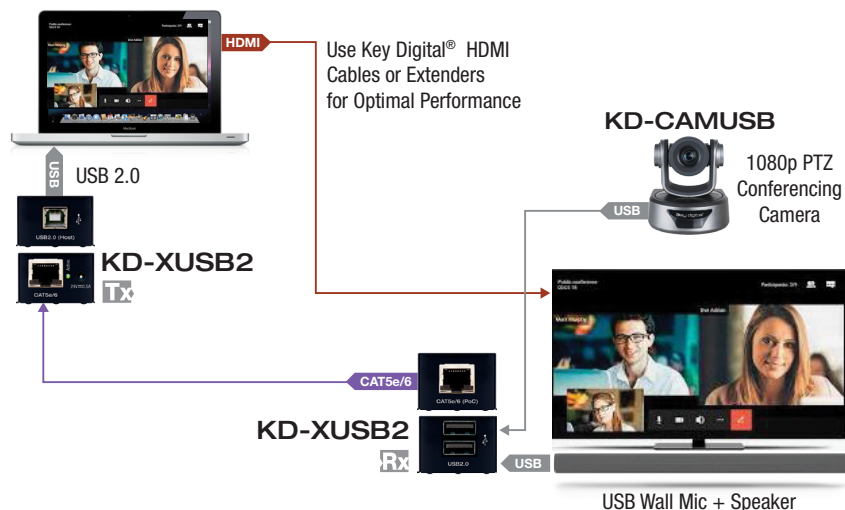
## Quick Setup Guide

---

**Begin with the Tx and Rx units and all input/output devices turned off with power cables removed.**

1. Connect USB devices into Rx unit's USB-A ports and USB host to Tx unit's USB-B port
  - » a. Examples of USB device: Keyboard, mouse, web cam, USB microphone, printer, hard drive, flash drive, etc
  - » b. Examples of USB host: Computer, laptop, smart TV, conferencing system
2. Connect CAT5e/6 cabling to Tx and Rx. Use 568-B standard termination on both ends, avoiding couplers and excess CAT cable length
3. Connect power supply to the Tx unit
4. Power on USB host and devices
5. Your USB extender is now ready to use. There is no configuration required.

## Application Examples



## Connections, Buttons, and LEDs

### USB Device Ports



- Supports USB2.0 and previous
- 2 USB Device ports are included, and can be used simultaneously
- Used for connecting USB endpoints (ie web cam, keyboard, mouse)
- Not used for connecting USB hosts (ie computer)
- Supports connectivity to USB hubs but may not exceed 15 endpoint devices
- Provides 5V 500mA power to connected devices. Do not over draw or damage may occur.
- Supports Low, Full, and High data transfer speeds up to 480Mbps

### USB Host Port



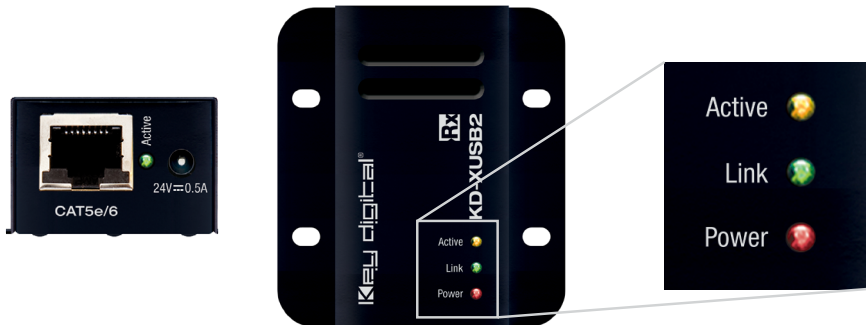
- Supports USB2.0 and previous
- Used for connecting USB host (ie computer)
- Not used for connecting USB endpoints (ie web cam, keyboard, mouse)
- Supports Low, Full, and High data transfer speeds up to 480Mbps

### CAT5e/6 Ports



- Connect a CAT5e/6 cable to Tx and Rx units to extend USB signals up to 50m / 164ft
- For optimal performance, terminate CAT5e/6 cable using 568-B standard, avoid keystones/ couplers, and remove excess cable length
- Tx unit provides power to Rx unit
  - » **⚠ KD-XUSB2 Tx unit is only compatible with KD-XUSB2 RX unit and vice versa.**  
Damage may occur if connected to any other devices.

## Power, Link, Active LEDs



- **Tx Active (green)** illuminates solid when USB Host port is connected to Host PC/Computer. Steady blink with active USB data transmission
- **Rx Power (red)** illuminates solid with power from Tx unit
- **Rx Link (green)** illuminates solid with CAT5e/6 connection from Rx to Tx unit and Tx unit is connected to Host PC/Computer.
- **Active (amber)** steady blinks with active USB data transmission

## Specifications

### Technical:

- » Inputs Tx (Each): 1 USB-B
- » Outputs Tx (Each) 1 CAT5e/6
- » Inputs Rx (Each) 1 CAT5e/6
- » Outputs Rx (Each) 2 USB-A

### General:

- » Regulation: CE, RoHS, WEEE, EAC
- » Enclosure: Black Metal
- » Product (Tx): 2.6 x 2.37 x 0.93" (67 x 60.2 x 23.7mm), Weight: 0.3 lbs
- » Product (Rx): 2.6 x 2.37 x 1.1" (67 x 60.2 x 26.1mm), Weight: 0.3 lbs
- » Packaging: 9 x 7.8 x 2.5" (230 x 198 x 63mm), Weight: 1 lbs

### Accessories:

- » Power supply (24V / 0.5A) (qty 1) USB-A – USB-B cable (qty1)

## Important Product Warnings:

---

1. Connect all cables before providing power to the unit.
2. Test for proper operation before securing unit behind walls or in hard to access spaces.
3. If installing the unit into wall or mounting bracket into sheet-rock, provide proper screw support with bolts or sheet-rock anchors.

## Safety Instructions:

---

**Please be sure to follow these instructions for safe operation of your unit.**

1. Read and follow all instructions. Heed all warnings.
2. Do not use this device near water. Clean only with dry cloth.
3. Install in accordance with the manufacturer's instructions.
4. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
5. Only use attachments/accessories specified by the manufacturer.
6. Refer all servicing to qualified service personnel. Servicing is required when the device has been damaged in any way including:
  - » Damage to the power supply or power plug
  - » Exposure to rain or moisture

## Power Supply Use:

---

**You MUST use the Power Supply PROVIDED with your unit or you VOID the Key Digital® Warranty and risk damage to your unit and associated equipment.**

## Contacting Key Digital®

---

### Technical Support

For technical questions about using Key Digital® products, please contact us at:

➤ Phone: 914-667-9700 or E-mail: [tech@keydigital.com](mailto:tech@keydigital.com)

### Repairs and Warranty Service

Should your product require warranty service or repair, please obtain a Key Digital® Return Material Authorization (RMA) number by contacting us at:

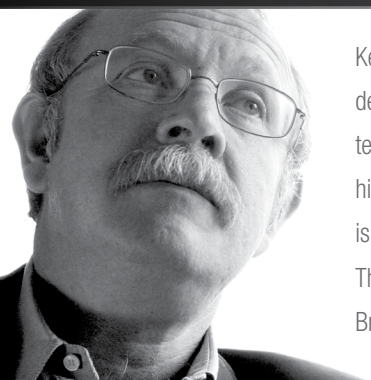
➤ Phone: 914-667-9700 or E-mail: [rma@keydigital.com](mailto:rma@keydigital.com)

## Warranty Information

---

All Key Digital® products are built to high manufacturing standards and should provide years of trouble-free operation. They are backed by a Key Digital Limited 3 Year Product Warranty Policy.

<http://www.keydigital.com/warranty.htm>



Key Digital®, led by digital video pioneer Mike Tsinberg, develops and manufactures high quality, cutting-edge technology solutions for virtually all applications where high-end video and control are important. Key Digital® is at the forefront of the video industry for Home Theater Retailers, Custom Installers, System Integrators, Broadcasters, Manufacturers, and Consumers.

Key Digital® :: 521 East 3rd Street :: Mount Vernon, NY 10553

Phone : 914.667.9700 Fax : 914.668.8666 Web : [www.keydigital.com](http://www.keydigital.com)