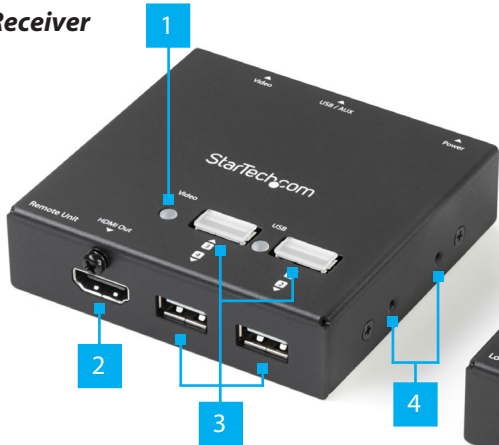# HDMI over CAT6 Extender with 4-port USB Hub

Product ID
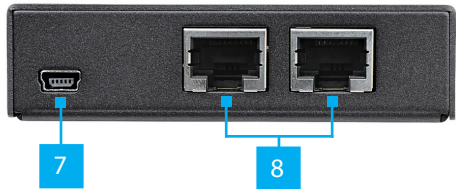ST121USBHD

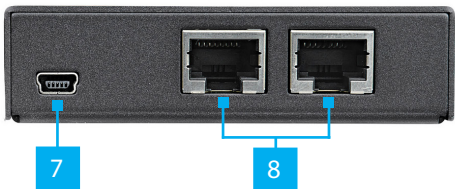*Receiver*

Transmitter

Receiver

Transmitter

Cable Distance

Cable Type	Distance	Max Resolution
Shielded CAT6	50m	1080i
Shielded CAT6	40m	1080p
Unshielded CAT6	30m	1080p
Shielded/Unshielded CAT5e	15m	1080p

	Component	Function
1	LED Indicators	• **Status Lights** for **Video** and **USB Connections** • See below for more information
2	HDMI Output	• Connect to an **HDMI Display**
3	USB 2.0 Hub Ports	• Connect a **Mouse, Keyboard**, or other **USB Peripherals**
4	Mounting Holes	• Install the included **Mounting Kit** • Two Holes on each side of the **Transmitter** and **Receiver**
5	HDMI Input	• Connect to an **HDMI Source Device**
6	USB Host Connection	• Connect to a **USB Port** on the **Host Device**
7	Mini-USB Power Input	• Connect to a **USB Port** on the **Host Device**, or to an available **USB Wall Charger**
8	RJ45 Ports	• Connect the **Transmitter** and **Receiver** together, using a **CAT6/5e Ethernet Cable** (sold separately)

Product Information
For the latest drivers/software, technical specifications, and declarations of conformance, please visit: www.StarTech.com/ST121USBHD

Requirements
- HDMI Source Device x 1
- HDMI Display x 1
- HDMI Cables x 2
- (Optional) USB Peripherals x 4
- (Optional) USB Wall Charger x 2
- (Optional) Phillips Head Screwdriver for Mounting x 1

Package Contents
- HDMI Over CAT6 Transmitter x 1
- HDMI Over CAT6 Receiver x 1
- Ethernet Cables x 2
- USB to Mini-USB Cables x 2
- Universal Power Adapter (NA/EU/EJ/AU) x 1
- Mounting Kit x 1
- Quick-Start Guide x 1

Installation

(Optional) Mounting Kit

Note: Before mounting the HDMI Extender make sure that the surface you are mounting to is strong enough to support the HDMI Extender. It is recommended that the HDMI Extender is mounted on a wall stud to provide the correct support.

1. Determine the **Mounting Surface** for the **Transmitter and Receiver**.
2. Place the **Mounting Brackets** beside the **Transmitter** and **Receiver**. Align the **Holes** in the **Mounting Brackets** with the **Holes** on the sides of the **Transmitter** and **Receiver**.
3. Insert two **Screws** through each **Mounting Bracket** and into the **HDMI Extender**.
4. Tighten each **Screw** using a **Phillips Head Screwdriver**.
5. Mount the **HDMI Extender** to the desired **Mounting Surface** using the appropriate **Mounting Hardware** (e.g. Wood Screws).

Install the Transmitter and Receiver

Note: For full functionality both Ethernet Cables must be connected between the Transmitter and Receiver. Both Ethernet Cables should be the same type and length.

1. Position the **Transmitter** and **Receiver** near the **HDMI Source and Display.**
2. Connect an **HDMI Cable** (not included) from the **HDMI Source** to the **HDMI Input Port** on the **Transmitter.**
3. Connect an **HDMI Cable** (not included) from the **HDMI Output Port** on the **Receiver** to an available **HDMI Input** on the **HDMI Display**.
4. Connect a **Mouse, Keyboard**, or other **USB Peripheral Devices** to the **USB Hub Ports**, located on the **Receiver**.
5. Connect **CAT5e/6 Cables** from the **RJ45 Ports** on the **Transmitter** to the **RJ45 Ports** on the **Receiver**.

   Note: The cabling cannot go through any networking equipment (e.g. router, switch, etc.). Video and Data RJ45 Ports must connect to their respective counterpart on the Transmitter and Receiver.

6. Connect the **USB to Mini-USB Cable** from the **Power Input** on the **Receiver** to an available **USB Port/Wall Charger.**
7. Connect a **USB to Mini-USB Cable** from the **Host Device** to the **USB Host Connection** on the **Transmitter**.
8. (Optional) If connecting **High Powered USB Devices**, connect a **USB to Mini-USB Cable** (not included) from the **Mini-USB Power Input** on the **Transmitter** to an available **USB Port/Wall Charger.**

LED Indicators

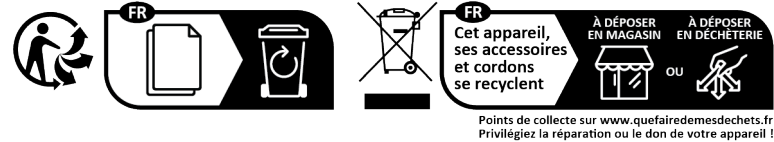| USB LED Behaviour	Description
Off	Disconnected or No Power
Solid Yellow	Connection established between Transmitter and Receiver

Video LED Behaviour	Description
Off	• Disconnected or No Power
Solid Green (Transmitter Only)	• Transmitter is powered on but no video is detected
Solid Red (Receiver Only)	• Receiver is powered on but no connection to local unit is detected
Blue with Single Flash	• Transmitter and Receiver are connected • Video functionality established but no video signal is detected
Blue with Double Flash	• Transmitter and Receiver are connected • Video functionality established • USB functionality not established
Blue Pattern Flashing	• Transmitter and Receiver are connected and working

Regulatory Compliance

FCC - Part 15

This equipment 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 residential installation. 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. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio/TV technician for help

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by StarTech.com could void the user's authority to operate the equipment.

Industry Canada Statement

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe [A] est conforme à la norme NMB-003 du Canada.

CAN ICES-3 (A)/NMB-3(A)

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

(1) This device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Warranty Information

This product is backed by a two year warranty.

For further information on product warranty terms and conditions, please refer to www.startech.com/warranty.

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