

## HDMI over CAT6 Extender | 4K 60Hz

### Product Diagram (ST121HD20L)

#### Transmitter and Receiver Front View



Component	Function
<b>Transmitter and Receiver</b>	
<b>1</b> Power LED Indicator	• Solid green when the <b>Universal Power Adapter</b> is connected
<b>Transmitter</b>	
<b>2</b> Link LED Indicator	• Solid green when the <b>HDMI Source Device</b> is connected
<b>Receiver</b>	
<b>2</b> Link LED Indicator	• Solid green when the <b>CAT6 Cable</b> is connected and the <b>HDMI Source Device Video Signal</b> is active

#### Transmitter and Receiver Rear View



Port	Function
<b>Transmitter and Receiver</b>	
<b>3</b> DC IN Ports	<ul style="list-style-type: none"> <li>Power the <b>Transmitter</b> and <b>Receiver</b></li> <li>Secure the <b>Universal Power Adapters</b> into the <b>DC IN Ports</b> by inserting the <b>Barrel Connectors</b> on the <b>Universal Power Adapters</b> and turning the <b>Screw Locks</b> clockwise</li> </ul>
<b>4</b> HDMI IN and OUT Ports	<ul style="list-style-type: none"> <li>Connect an <b>HDMI Source</b> and <b>HDMI Display Device</b></li> </ul>
<b>5</b> IR TX and RX Ports	<ul style="list-style-type: none"> <li>Connect the <b>IR (Infrared) Blasters</b> and <b>Receivers</b> to control the <b>HDMI Source</b> and <b>HDMI Display Device</b> from the <b>Transmitter</b> or <b>Receiver</b></li> <li>Bi-directional to support different IR configurations</li> </ul>
<b>6</b> RS-232 Extension Ports	<ul style="list-style-type: none"> <li>Connect any <b>Serial Device</b> to extend the signal over <b>CAT6 Cable</b></li> </ul>
<b>7</b> RJ45 Ports	<ul style="list-style-type: none"> <li>Connect the <b>CAT6 Cable</b> to extend the signal from the <b>Source Device</b> to the <b>HDMI Display Device</b></li> </ul>

### Requirements

For the latest requirements and to view the full User Manual, please visit [www.startech.com/ST121HD20L](http://www.startech.com/ST121HD20L).

- HDMI Source Device x 1
- HDMI Display Device x 1
- CAT6 Cable x 1
- (Optional) Surface for Mounting x 1

### Installation

#### Installing the HDMI Transmitter and Receiver

1. Position the **Transmitter** near the **HDMI Source Device**.
2. Connect an **HDMI Cable** to the **HDMI Source Device** and to the **HDMI IN Port** on the back of the **HDMI Transmitter**.

To view manuals, FAQs, videos, drivers, downloads, technical drawings, and more, visit [www.startech.com/support](http://www.startech.com/support).

3. Connect a **CAT6 Cable** (included) to the **RJ45 Port** on the back of the **HDMI Transmitter** and to the **RJ45 Port** on the back of the **HDMI Receiver**.  
*Note: The cabling should not go through any networking equipment (e.g. router, switch, etc.).*
4. Position the **HDMI Receiver** near the **HDMI Display Device**.
5. Connect an **HDMI Cable** to the **HDMI OUT Port** on the back of the **HDMI Receiver** and to the **HDMI Display Device**.
6. Connect the **Universal Power Adapters** to the **DC IN Ports** on the **Transmitter** and **Receiver** and to two **AC Electrical Outlets**.

## Installing the IR Blaster and IR Receiver

### Control the HDMI Display Device from the Transmitter

1. Connect the **Infrared Receiver** (oval shaped) to the **IR - TX Port** on the **Transmitter**.
2. Peel the **Film** off of the **Adhesive Pad** that is located on the **Infrared Receiver**. Stick the **Infrared Receiver** in a location where there is a clear path to the **Remote Control**.  
*Note: Ensure there is an unobstructed path to the Infrared Receiver. Infrared signals require a direct line of sight to function.*

3. Connect the **Infrared Blaster** (L shaped) to the **IR - RX Port** on the **Receiver**.
4. Peel the **Film** off of the **Adhesive Pad** that is located on the **Infrared Blaster**. Stick the **Infrared Blaster** on the **HDMI Display Device** so that it is pointing directly at the **IR Sensor** on the **Display**.

*Note: Consult the HDMI Display Device's manual to determine the location of the IR Sensor.*

### FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B 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:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- 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 B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe [B] est conforme à la norme NMB-003 du Canada. CAN ICES-3 (B)/NMB-3(B)

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.

### Use of Trademarks, Registered Trademarks, and other Protected Names and Symbols

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5. Use the **Remote Control** for the **HDMI Source Device** to control the **HDMI Display Device** from the **Transmitter's** location.

### Control the HDMI Source Device from the Receiver

1. Connect the **Infrared Blaster** (L shaped) to the **IR - RX Port** on the **Transmitter**.
2. Peel the **Film** off of the **Adhesive Pad** that is located on the **Infrared Blaster**. Stick the **Infrared Blaster** so that it is pointing directly at the **IR Sensor** on the **HDMI Source Device**.

*Note: Consult the HDMI Source Device's manual to determine the location of the IR Sensor.*

3. Connect the **Infrared Receiver** (oval shaped) to the **IR - TX Port** on the **Receiver**.
4. Peel the **Film** off of the **Adhesive Pad** that is located on the **Infrared Receiver**. Stick the **Infrared Receiver** in a location where there is a clear path to the **Remote Control**.

*Notes: Infrared signals require a direct line of sight to function.*

*Consult the manual for the HDMI Display Device to determine the location of the IR Sensor.*

5. Use the **Remote Control** for the **HDMI Source Device** to control the **HDMI Source Device** from the **Receiver's** location.

### 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](http://www.startech.com/warranty).

### Limitation of Liability

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### Safety Measures

- If product has an exposed circuit board, do not touch the product under power.

### Mesures de sécurité

- Si l'un des circuits imprimés du produit est visible, ne pas touchez le produit lorsqu'il est sous tension.

### 安全対策

- 製品に露出した状態の回路基盤が含まれる場合、電源が入っている状態で製品に触らないでください。

### Misure di sicurezza

- Se il prodotto ha un circuito stampato visibile, non toccare il prodotto quando è acceso.

### Säkerhetsåtgärder

- Rör aldrig vid enheter med oskyddade kretskort när strömmen är påslagen.

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