

HDMI® over IP Extender | 1080p



Actual product may vary from photos

User Manual

SKU#: ST12MHDLNV

For the latest information and specifications visit
www.startech.com/ST12MHDLNV

Compliance Statements

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

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)

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Safety Statements

Safety Measures

- Wiring terminations should not be made with the product and/or electric lines under power.
- Cables (including power and charging cables) should be placed and routed to avoid creating electric, tripping or safety hazards.

Mesures de sécurité

- Les terminaisons de câblage ne doivent pas être effectuées lorsque le produit et/ou les câbles électriques sont sous tension.
- Les câbles (y compris les câbles d'alimentation et de chargement) doivent être placés et acheminés de façon à éviter tout risque électrique, de chute ou de sécurité

安全対策

- 電源が入っている状態の製品または電線の終端処理を行わないでください。
- ケーブル(電源ケーブルと充電ケーブルを含む)は、適切な配置と引き回しを行い、電気障害やつまづきの危険性など、安全上のリスクを回避するようにしてください。

Misure di sicurezza

- I terminali dei fili elettrici non devono essere realizzate con il prodotto e/o le linee elettriche sotto tensione.
- I cavi (inclusi i cavi di alimentazione e di ricarica) devono essere posizionati e stesi in modo da evitare pericoli di inciampo, rischi di scosse elettriche o pericoli per la sicurezza.

Säkerhetsåtgärder

- Montering av kabelavslutningar får inte göras när produkten och/eller elledningarna är strömförda.
- Kablar (inklusive elkablar och laddningskablar) ska dras och placeras på så sätt att risk för snubblingsolyckor och andra olyckor kan undvikas.

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Product Diagram

Transmitter



1	12V DC Port
2	HDMI In
3	HDMI Out
4	RJ45 Port
5	IR Out Port

Receiver



1	12V DC Port
2	HDMI Out
3	IR In Port
4	RJ45 Port (x2)

Product Information

Package Contents

- HDMI over IP Transmitter x 1
- HDMI over IP Receiver x 1
- Power Adapter (NA, UK, EU and AU clips) x 2
- IR Blaster x 1
- IR Receiver x 1
- Mounting Screws x 4
- Rubber Feet x 8
- User Manual x 1

Requirements

Display

- HDMI Display Device x 1
- (Optional) HDMI Display Device x 1

Video Source Device

- Video Source (e.g. Host Computer, Media Player) x 1

Cables

- CAT5e/6 Cable x 1
- HDMI Cables x 3

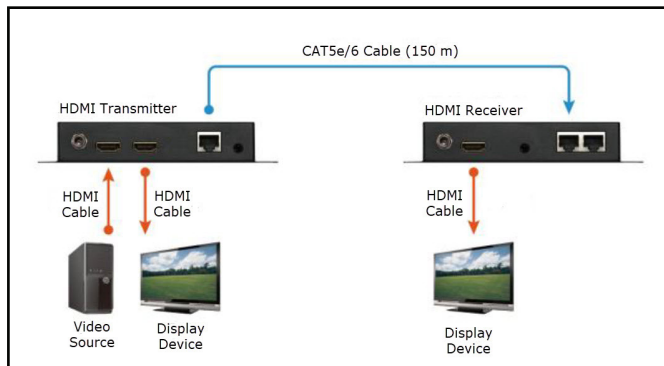
Optional

- Network Device (e.g. Switch) x 1
- IR Remote Control x 1

Tools

- Phillips Head Screwdriver x 1

Connecting the Extender



Point to Point Configuration

Point to Point

Connecting the HDMI Transmitter

1. Place the **HDMI Transmitter** near the **Video Source Device**.
2. Connect an **HDMI Cable** (sold separately) to the **HDMI In Port** on the **HDMI Transmitter** and the other end to an HDMI port on the **Video Source Device** (e.g. host computer).
3. Connect an **HDMI Cable** to the **HDMI Out Port** on the **HDMI Transmitter** and the other end to an **HDMI Port** on the **Display Device** (e.g. Monitor).

Connecting the HDMI Receiver

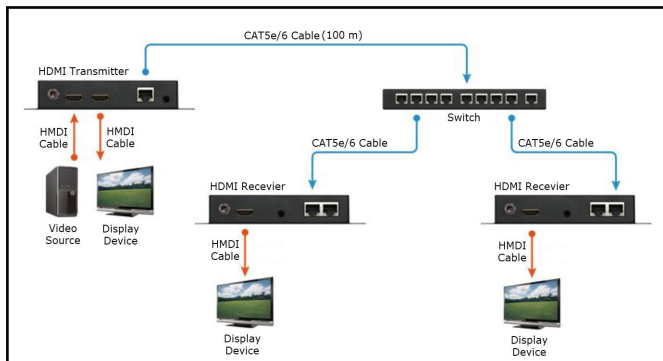
1. Place the **HDMI Receiver** near the **Display Device**.

2. Connect an **HDMI Cable** to the **HDMI Out Port** on the **HDMI Receiver** and the other end to an HDMI port on the **Display Device** (e.g. monitor).
3. Connect an **Cat5e/Cat6 Cable** to the **RJ45 Port** on the **HDMI Receiver** and the other end to an **RJ45 Port** on a **HDMI Transmitter**.

Powering the Extender

- Connect the **Power Adapters** to the **12V DC Port** on both the **HDMI Transmitter** and the **HDMI Receiver** and the other ends to **AC Electrical Outlets**.

One Transmitter to Multiple Connections (Network Method)



One to Multiple Connection

In order to use this configuration, an existing IP network, Network Switch (sold separately), and multiple HDMI Receivers (sold separately) are required.

Notes: A minimum of 100Mbps of bandwidth is required per **Receiver** (e.g. 100Mbps is needed for one transmitter and one receiver).

Each Ethernet connection in the setup needs to be at least 100Mbps.

Only one transmitter can be connected to a network at a time.

A DHCP Server is required to be connected to the network in order to automatically assign an IP Address to the **Extender**.

Connecting the HDMI Transmitter

1. Place the **HDMI Transmitter** near the **Video Source Device**.
2. Connect an **HDMI Cable** (sold separately) to the **HDMI In Port** on the **HDMI Transmitter** and the other end to an HDMI port on the **Video Source Device** (e.g. host computer).
3. (Optional) Connect an **HDMI Cable** to the **HDMI Out Port** on the **HDMI Transmitter** and the other end to an HDMI port on a **Display Device** (e.g. monitor).
4. Connect an **Cat5e/Cat6 Cable** to the **RJ45 Port** on the **HDMI Transmitter** and the other end to an **RJ45 Port** on a **Network Device** (e.g. Switch).

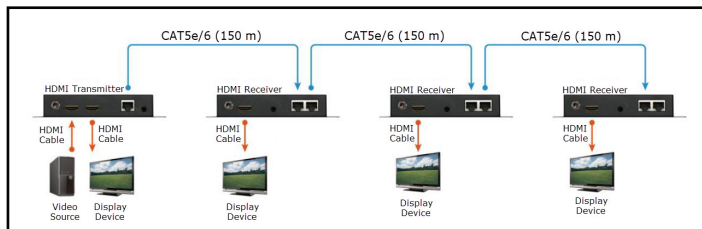
Connecting the HDMI Receiver

1. Place the **HDMI Receiver** near the **Display Device**.
2. Connect an **HDMI Cable** to the **HDMI Out Port** on the **HDMI Receiver** and the other end to an HDMI port on the **Display Device** (e.g. monitor).
3. Connect a **CAT5e/6 Cable** to the **RJ45 Port** on the **HDMI Receiver** and the other end to an **RJ45 Port** on a **Network Device** (e.g. Switch).
4. Connect additional **HDMI Receivers** as desired.

Powering the Extender

- Connect the **Power Adapters** to the **12V DC Port** on both of the **HDMI Transmitter** and the **HDMI Receiver** and the other ends to **AC Electrical Outlets**.

One Transmitter to Multiple Connections (Cascading Method - Maximum of 3 HDMI Receivers)



Cascade Connection

In order to use this configuration multiple **HDMI Receivers** (sold separately) are required.

Connecting the HDMI Transmitter

1. Place the **HDMI Transmitter** near the **Video Source Device**. Connect an **HDMI Cable** (sold separately) to the **HDMI In Port** on the **HDMI Transmitter** and the other end to an HDMI port on the **Video Source Device** (e.g. host computer).
2. (Optional) Connect an **HDMI Cable** to the **HDMI Out Port** on the **HDMI Transmitter** and the other end to an HDMI port on the **Display Device** (e.g. monitor).
3. Connect a **CAT5e/6 Cable** to the **RJ45 Port** on the **HDMI Transmitter** and the other end to an **RJ45 Port** on a **HDMI Receiver**.

Connecting the HDMI Receiver

1. Place the **HDMI Receiver** near the **Display Device**.

2. Connect an **HDMI Cable** to the **HDMI Out Port** on the **HDMI Receiver** and the other end to an **HDMI Port** on the **Display Device** (e.g. monitor).
3. Connect a **CAT5e/6 Cable** to the **RJ45 Port** on the **HDMI Receiver** and the other end to an **RJ45 Port** on the **HDMI Transmitter**.
4. Connect a **CAT5e/6 Cable** to the **RJ45 Port** on the connected **HDMI Receiver** and the other an to the **RJ45 Port** on a second **HDMI Receiver**.
5. Repeat step 4 to connect additional **HDMI Receivers**.

Powering the Extender

- Connect the **Power Adapters** to the **12V DC Port** on the **HDMI Transmitter** and the **HDMI Receivers** and the other ends of the Power Adapters to **AC Electrical Outlets**.

(Optional) Installing the IR Receiver and Blaster

The **IR Receiver** and **IR Blaster** can be connected to allow you to use an **IR Remote**.

HDMI Transmitter:

1. Connect the **IR Blaster** to the **IR Out Port** on the **HDMI Transmitter**.
2. Position the **IR Blaster** directly in front of the **Video Source Device's IR Sensor** (if you are unsure, check the manual of the video source device to determine the IR sensor location).

HDMI Receiver:

1. Connect the **IR Receiver** to the **IR In Port** on the **HDMI Receiver**.
2. Position the **IR Receiver's Sensor** in the location where you will point the **IR Remote Control**.

(Optional) Mounting the Extender

Notes: StarTech.com is not responsible for any damages related to the installation of this product.

Prior to mounting, please test the product's port compatibility with all devices intended for use with this product.

*Before mounting the **HDMI Transmitter and/or HDMI Receiver** make sure that the surface you are mounting to is strong enough to support the weight of the **HDMI Transmitter and HDMI Receiver**. It is recommended that you mount the **HDMI Transmitter and/or HDMI Receiver** into a wall stud to provide the correct support.*

1. Measure the distance between the **Mounting Screw Holes** on the **Mounting Brackets**.
2. Using a **Level** and a **Writing Utensil**, mark the distance measured between the two **Mounting Screw Holes** on the mounting surface.
3. Using a **Phillips Head Screwdriver**, screw the two **Mounting Screws** into the surface, using the **Mounting Screw Hole** locations marked in step 2 as a guide. Make sure that you leave space between the head of the screw and the wall.

4. Align the large holes on the **Mounting Brackets** with the **Mounting Screws**.
5. Slide the **HDMI Transmitter** and/or **HDMI Receiver** down, to lock the **Mounting Brackets** in place.

Changing the Power Adapter Clips

1. On the front side of the **Power Adapter** slide the release button downward, releasing the **Power Adapter Clip**.
2. Pull the **Power Adapter Clip** away from the **Power Adapter**. Align another **Power Adapter Clip** with the **Prongs** on the **Power Adapter**.
3. Gently push the **Power Adapter Clip** over-top of the **Prongs**. The **Power Adapter Clip** will click into place.

Video Resolution Performance

The video resolution performance of this extender will vary depending on the quality of your network cabling. For best results, StarTech.com recommends using a shielded CAT6 cable.

Distance	Maximum Resolution
150 m (492 ft.) or less	1080p at 60Hz

LED Indicators

LED	Function
Power	Solid Red: Indicates that the HDMI Transmitter and HDMI Receiver are receiving power.

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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