

## HDMI over Cat 5/6 Extender w/ Serial & IR – 330ft (100m)

ST121HDBT5



\*actual product may vary from photos

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## 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.

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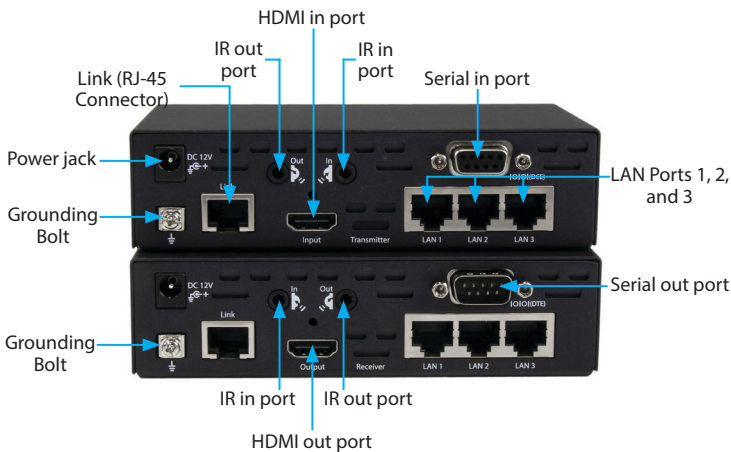
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# Product Diagram

## Front View - Transmitter / Receiver Unit



## Rear View - Transmitter/Receiver Unit



# Introduction

## Packaging Contents

- 1 x HDMI extender
- 1 x HDMI receiver
- 2 x Mounting brackets
- 1 x IR sensor kit (Transmitter cable \ Receiver cable)
- 1 x CAT5 Cable
- 2 x Foot pad set
- 1 x Power Adapter
- 2 x Grounding Wire
- 1 x Instruction Manual

## System Requirements

- HDMI® enabled video source device (i.e. computer, Blu-ray Player)
- HDMI® enabled display device (i.e. television, projector)
- Available AC electrical outlet for either the transmitter or receiver
- 2x HDMI® Cables (for video source to transmitter, and receiver to display)

# Preparing Your Site

1. Determine where the local video source (i.e. computer, Blu-ray Player) will be located and set up the device.
2. Determine where the remote display will be located and place/ mount the display appropriately.

**Note:** This HDMI extender kit features Power over cable, allowing both the transmitter and Receiver to be powered from a single power source that connects to either the transmitter or receiver unit. Please ensure that unit you've chosen to power is situated near an available AC electrical outlet. Make sure all devices are turned off before beginning installation.

Before you begin Hardware Installation ensure both Transmitter and Receiver are properly grounded.

## Installation

### Hardware Installation

#### 1. Install Transmitter Unit

- a) Position the Transmitter Unit near the video source (i.e. Computer, Blu-ray Player).
- b) Connect an HDMI® cable from the video source device (i.e. computer, Blu-ray Player) to the HDMI® in port on the Transmitter Unit.
- c) **(Optional)** If you've chosen to connect the power adapter to the transmitter unit, connect the power adapter from the power adapter port to an available wall outlet.
- d) **(Optional)** If using the Extender to extend up to three 10/100 Network signal(s), connect up to three Ethernet cable(s) from the Network gateway to the LAN Port(s) on the Transmitter Unit.
- e) **(Optional)** If using the Extender kit to transmit an infrared (IR) device signal, and the device receiving the IR signal is on the Receiver side. Connect the IR Transmitter Cable to the IR-RX port on the Transmitter Unit, and position the extended IR sensor directly in front of the video source's IR sensor. Check the manual of your video source device for the IR sensor location. If the device receiving the IR signal is on the Transmitter side, and connect the IR Transmitter Cable to the IR-TX port, and position the IR sensor where the remote control will point.
- f) **(Optional)** If using the Extender kit to transmit a serial signal. Connect a serial cable (not included) from the serial in port on the Transmitter unit to the serial port on the local device.

## 2. Install RJ45 terminated Cat5e/6 Ethernet Cable

- a) Connect an RJ45 terminated Cat5e/6 Ethernet cable (not included) to the RJ45 connector on the Transmitter unit.

**Note:** If you are using surface cabling, ensure you have enough Category 5e unshielded twisted pair (UTP) network cabling to connect the Host Unit to the Remote Unit's location, and that each end is terminated with a RJ45 connector. The cabling should not go through any networking equipment (i.e. router, switch).

### **OR**

If you are using premises cabling, ensure that the Category 5 unshielded twisted pair (UTP) network cabling between the Host Unit and the Remote Unit has been properly terminated in a wall outlet in each location and there is a patch cable long enough to connect the Remote Unit and the Host Unit to their respective outlets. The cabling should not go through any networking equipment (i.e. router, switch).

- b) Connect the other end of the Cat5e/6 cable run to the RJ45 connector on the Receiver Unit.

## 3. Install Receiver Unit

- a) Position the Receiver Unit near the video display (i.e. television, projector).
- b) Connect the Display to the HDMI out port on the Receiver unit using an HDMI cable.
- c) **(Optional)** If you've chosen to connect the power adapter to the Receiver unit, connect the power adapter from the power adapter port to an available wall outlet.
- d) **(Optional)** If using the Extender to extend up to three 10/100 Network signal(s), connect up to three Ethernet cable(s) from the LAN Port(s) on the Receiver Unit to RJ-45 port on your network device(s).
- e) **(Optional)** If using the Extender kit to transmit an infrared (IR) device signal, and the device receiving the IR signal is on the Transmitter side. Connect the IR Transmitter Cable to the IR-TX port on the Receiver Unit, and position the IR sensor where the remote control will point. If the device receiving the IR signal is on the Transmitter side, and connect the IR Transmitter Cable to the IR-TX port, and position the extended IR sensor directly in front of the video source's IR sensor. Check the manual of your video source device for the IR sensor location.
- f) **(Optional)** If using the Extender kit to transmit a serial signal. Connect a serial cable (not included) from the serial out port on the Receiver unit to the serial port on the remote device.

#### 4. (Optional) Install the grounding wires.

**Note:** Installation of the grounding wires is optional but recommended in environments with high levels of electromagnetic interference (EMI), or frequent electrical surges.

##### **Transmitter**

- a) Using a Phillips type screw driver (sold separately) remove the grounding bolt from the Transmitter Unit.
- b) Attach the loop of one of the grounding wires to the shaft of the grounding bolt that was removed.
- c) Using the Phillips type screw driver (sold separately) drive the grounding bolt back into the hole it was removed from, on the Transmitter Unit.
- d) Attach the other end of the grounding wire (that's not connected to the Transmitter Unit) to an earth ground connection.

##### **Receiver**

- a) Using a Phillips type screw driver (sold separately) remove the grounding bolt from the Receiver Unit.
- b) Attach the loop of one of the grounding wires to the shaft of the grounding bolt that was removed.
- c) Using the Phillips type screw driver (sold separately) drive the grounding bolt back into the hole it was removed from, on the Receiver Unit.
- d) Attach the other end of the grounding wire (that's not connected to the Receiver Unit) to a proper earth-ground connection.

#### 5. Your source video image will now appear on the remote video display.



# Specifications

<b>Local Unit Connectors</b>	2x IrDA (Infrared; SIR/FIR) 1x HDMI (19 pin) Female 4x RJ-45 Female 1x RS232 (9 pin) Female
<b>Remote Unit Connectors</b>	2x IrDA (Infrared; SIR/FIR) 1x HDMI (19 pin) Female 4x RJ-45 Female 1x RS232 (9 pin) Male
<b>Maximum Data Transfer Rate</b>	HDMI - 3.4Gbps
<b>Max Distance</b>	100 m / 330 ft
<b>Maximum Digital Resolutions</b>	1080p @ 60Hz, 48-bit
<b>Wide Screen Supported</b>	Yes
<b>Audio Specifications</b>	Supports Dolby® TrueHD, DTS-HD MA

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## Warranty Information

This product is backed by a two year warranty.

In addition, StarTech.com warrants its products against defects in materials and workmanship for the periods noted, following the initial date of purchase. During this period, the products may be returned for repair, or replacement with equivalent products at our discretion. The warranty covers parts and labor costs only. StarTech.com does not warrant its products from defects or damages arising from misuse, abuse, alteration, or normal wear and tear.

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