

## HDMI over CAT5 HDBaseT Extender - 4K

ST121HDBTL



\*actual product may vary from photos

DE: Bedienungsanleitung - [de.startech.com](http://de.startech.com)

FR: Guide de l'utilisateur - [fr.startech.com](http://fr.startech.com)

ES: Guía del usuario - [es.startech.com](http://es.startech.com)

IT: Guida per l'uso - [it.startech.com](http://it.startech.com)

NL: Gebruiksaanwijzing - [nl.startech.com](http://nl.startech.com)

PT: Guia do usuário - [pt.startech.com](http://pt.startech.com)

For the most up-to-date information, please visit: [www.startech.com](http://www.startech.com)

## FCC Compliance Statement

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:

- 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.

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

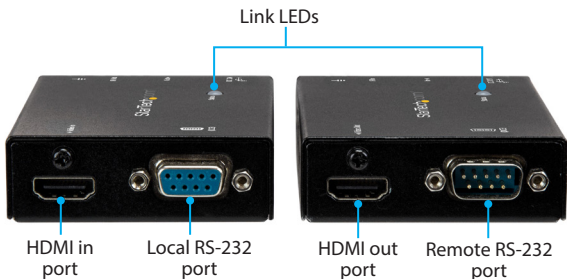
This manual may make reference to trademarks, registered trademarks, and other protected names and/or symbols of third-party companies not related in any way to StarTech.com. Where they occur these references are for illustrative purposes only and do not represent an endorsement of a product or service by StarTech.com, or an endorsement of the product(s) to which this manual applies by the third-party company in question. Regardless of any direct acknowledgement elsewhere in the body of this document, StarTech.com hereby acknowledges that all trademarks, registered trademarks, service marks, and other protected names and/or symbols contained in this manual and related documents are the property of their respective holders.

# Table of contents

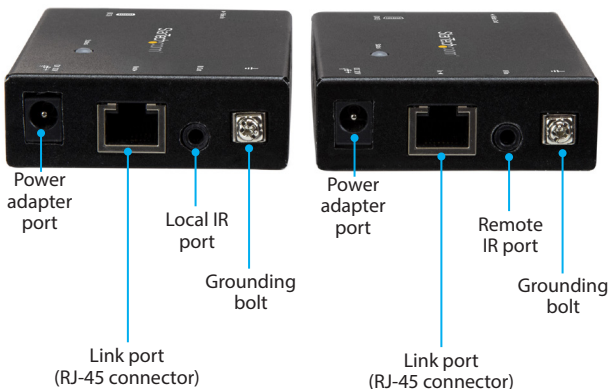
<b>Product Diagram .....</b>	<b>1</b>
Front View - Transmitter / Receiver Unit.....	1
Rear View - Transmitter/Receiver Unit .....	1
<b>Introduction .....</b>	<b>2</b>
Packaging Contents .....	2
System Requirements.....	2
<b>Preparing Your Site .....</b>	<b>3</b>
<b>Installation .....</b>	<b>3</b>
Hardware Installation .....	3
<b>Specifications.....</b>	<b>5</b>
<b>Technical Support .....</b>	<b>6</b>
<b>Warranty Information.....</b>	<b>6</b>

# Product diagram

## Front view - transmitter and receiver units



## Rear view - transmitter and receiver units



# Package contents

- 1 x HDBaseT transmitter
- 1 x HDBaseT receiver
- 2 x Mounting brackets
- 1 x universal power adapter (NA, EU, UK, ANZ)
- 1 x IR receiver
- 1 x IR blaster
- 2 x mounting brackets
- 8 x foot pads

## Requirements

- An HDMI® video source device
- An HDMI display with cabling
- An available AC electrical outlet for either the transmitter or receiver

# Preparing your site

1. Determine where your local video source will be located and set up the device.
2. Determine where your remote display will be located and place/ mount the display appropriately.

**Note:** This HDBaseT 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 the installation steps, ensure both the transmitter and receiver are properly grounded. The grounding nuts on the transmitter and receiver may be used to do this, depending on your environment.

## Installation

### 1. Install the transmitter

- a) Position and ground the HDBaseT transmitter near your video source.
- b) Connect your video source device to the HDMI in port on the transmitter.
- c) **(Optional)** If you've chosen to power the HDBaseT kit using the transmitter, connect the included power adapter to the power adapter port on the transmitter and to an AC outlet.
- d) **(Optional)** If you're using the HDBaseT kit to extend an infrared (IR) signal.

If the device receiving the IR signal is at the remote side, connect the IR receiver to the Local IR port on the transmitter, and position the IR sensor where you'll point your IR remote control.

or

If the device receiving the IR signal is at the local side, connect the IR blaster to the Local IR port on the transmitter side, and position the IR sensor directly in front of the video source's IR sensor (if you're unsure, check the manual of your video source to determine the IR sensor location).

- e) **(Optional)** If you're using HDBaseT kit to transmit a serial signal, connect a serial cable (not included) from the Local RS-232 port on the transmitter unit to the serial port on the local device.

## 2. Install the receiver

- a) Position and ground the HDBaseT receiver near your video source.
- b) Connect your remote display to the HDMI out port on the receiver.
- c) **(Optional)** If you've chosen to power the HDBaseT kit using the receiver, connect the included power adapter to the power adapter port on the transmitter and to an AC outlet.
- d) **((Optional))** If you're using the HDBaseT kit to extend an infrared (IR) signal.  
If the device receiving the IR signal is at the remote side, connect the IR blaster to the remote IR port on the receiver, and position the IR sensor directly in front of the device's IR sensor (if you're unsure, check the manual of your video source to determine the IR sensor location).

or

If the device receiving the IR signal is at the local side, connect the IR receiver to the remote IR port on the receiver, and position the IR sensor where you'll point your IR remote control.

- e) **(Optional)** If you're using the HDBaseT kit to transmit a serial signal, connect a serial cable (not included) from the Remote RS232 port on the receiver to the serial port on the remote device.

## 3. Install RJ-45 terminated CAT5e/6/7 Cable

- a) Connect an RJ-45 terminated CAT5e/6/7 cable (sold separately) to the Link port on the transmitter.
- b) Connect the other end of the RJ-45 terminated CAT5e/6/7 cable (not included) to the Link port on the receiver.

### Notes:

- The cabling should not go through any networking equipment (i.e. router, switch)
- If you are using surface cabling, ensure you leave enough cabling to connect the transmitter to the receiver, and that each end is terminated with an RJ-45 connector. The cabling should not go through any networking equipment (i.e. router, switch).
- If you are using premises cabling, ensure that the cabling between the transmitter and receiver has been properly terminated in a wall-outlet at each location and there is a patch cable long enough to connect the transmitter and receiver to their respective wall-outlet.

## 4. Power on your video source and your display and the source image will now appear on the remote video display.

**Note:** The resolution performance of this HDBaseT extender will vary depending on the length of your cabling. Please review the chart below to determine the best solution for your setup. For best results, StarTech.com recommends shielded CAT6 cable.

Distance	Maximum resolution
35 m (115 ft.) or less	4K x 2K at 30 Hz
Up to 70 m (230 ft.)	1080p at 60 Hz

## LED indicators

The transmitter and receiver feature an LED indicator that communicates the Link status. Review the chart below to determine the significance of the LED status.

LED	Behavior	Significance
Link LED (local and remote)	The LED is illuminated.	The HDBaseT transmitter and receiver are connected and powered.
	The LED is off.	The HDBaseT transmitter and receiver are not connected or not powered.

## Specifications

<b>Supported resolutions</b>	3840x2160 (4K at 30Hz), 2560x1600, 1920x1200 (60Hz), 1920x1080 (1080p), 1280x720 (720p)
<b>Max Distance</b>	70 m (230 ft.) - 1080p @ 60Hz 35 m (115 ft.) - 4K @ 30Hz
<b>Audio Specifications</b>	Supports Dolby® TrueHD, DTS-HD MA



# Technical Support

StarTech.com's lifetime technical support is an integral part of our commitment to provide industry-leading solutions. If you ever need help with your product, visit [www.startech.com/support](http://www.startech.com/support) and access our comprehensive selection of online tools, documentation, and downloads.

For the latest drivers/software, please visit [www.startech.com/downloads](http://www.startech.com/downloads)

## 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.

### Limitation of Liability

In no event shall the liability of StarTech.com Ltd. and StarTech.com USA LLP (or their officers, directors, employees or agents) for any damages (whether direct or indirect, special, punitive, incidental, consequential, or otherwise), loss of profits, loss of business, or any pecuniary loss, arising out of or related to the use of the product exceed the actual price paid for the product. Some states do not allow the exclusion or limitation of incidental or consequential damages. If such laws apply, the limitations or exclusions contained in this statement may not apply to you.

Hard-to-find made easy. At StarTech.com, that isn't a slogan. It's a promise.

StarTech.com is your one-stop source for every connectivity part you need. From the latest technology to legacy products — and all the parts that bridge the old and new — we can help you find the parts that connect your solutions.

We make it easy to locate the parts, and we quickly deliver them wherever they need to go. Just talk to one of our tech advisors or visit our website. You'll be connected to the products you need in no time.

Visit [www.startech.com](http://www.startech.com) for complete information on all StarTech.com products and to access exclusive resources and time-saving tools.

*StarTech.com is an ISO 9001 Registered manufacturer of connectivity and technology parts. StarTech.com was founded in 1985 and has operations in the United States, Canada, the United Kingdom and Taiwan servicing a worldwide market.*