

# VGA Video & Audio over Cat5 UTP Extender / VGA and Audio Cat5 UTP Receiver / VGA Video & Audio over Cat5 UTP Line Splitter

ST124UTPEA/ST128UTPEA  
STUTPEALR  
STUTPEA4X



**CONVERGEM**

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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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# Introduction

Thank you for purchasing a StarTech.com video extension solution. ST124UTPEA/ST128UTPEA and STUTPEALR combine to create a cost effective method of providing high quality video (with audio) to remote locations over Cat5 UTP cabling.

## Features

- Supports resolutions of up to 1024x768 @ 60 Hz refresh rate at maximum extension distance; higher resolutions available with shorter cable runs
- Delivers VGA video and audio to monitors located up to 300m / 950ft away
- Can be used with a four port line splitter

## Package Contents

### ST124UTPEA/ST128UTPEA/STUTPEA4X

- 1 x Local VGA Video and Audio Extender
- 1 x Power Adapter
- 2 x Rack Rails
- 1 x Screw kit for rack rails
- 1 x Instruction Manual

### STUTPEALR

- 1 X Instruction Manual
- 1 X Long Range UTP Receiver
- 1 X Power Adapter - Class 2 Transformer

# Hardware Guide

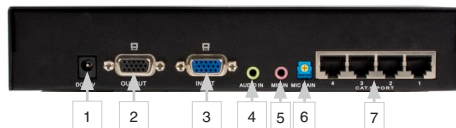
## Local Unit - Front View

ST124UTPEA  
ST128UTPEA



## Local Unit - Rear View

ST124UTPEA  
ST128UTPEA

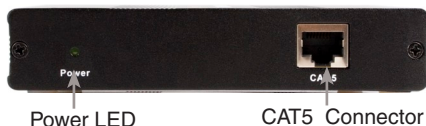


1. Input Power Jack
2. VGA Output (HD-15 Female Connector)
3. VGA Input (HD-15 Female Connector)
4. AUDIO Input
5. MIC Input
6. MIC GAIN – adjust volume of microphone
7. CAT5 OUT (RJ-45 Connectors): ST124UTPEA x4  
ST128UTPEA x 8

## Hardware Guide - Cont'd

### Remote Unit - Front View

STUTPEALR

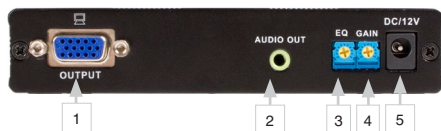


Power LED

CAT5 Connector

### Remote Unit - Rear View

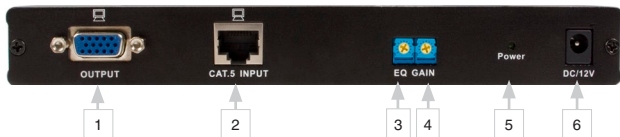
STUTPEALR



1. VGA Output (HD-15 Female Connector)
2. AUDIO Output
3. EQ – Equalization length adjust (Adjust to sharpen images)
4. GAIN – Adjust brightness
5. Input Power Jack

## Hardware Guide - Cont'd

### Line Splitter - Rear View



### Line Splitter - Front View



1. VGA Output (HD-15 Female Connector)
2. CAT5 Input
3. EQ – Equalization length adjust (Adjust to sharpen images)
4. GAIN – Adjust brightness
5. Power LED
6. Input Power Jack
7. CAT5 Output ports

# Installation

1. Turn off the VGA signal source device (computer).
2. Connect the local unit (ST124UTPEA/ST128UTPEA) HD-15 female **INPUT** connector to the signal source (computer) using an HD-15 male to male cable.
3. Connect the **AUDIO IN** connector of the local unit (ST124UTPEA/ST128UTPEA) to the **Audio Out** port of the audio source (computer sound card), using a 3.5mm audio cable.
4. **Optional:** Connect a compatible microphone cable to the **MIC IN** connector on the local unit (ST124UTPEA/ST128UTPEA).
5. Connect a VGA monitor to the local unit (ST124UTPEA/ST128UTPEA) HD-15 female **OUTPUT** using an HD-15 male to male cable
6. Connect the Local Unit (ST124UTPEA/ST128UTPEA) **CAT5 OUT** port to the Remote Unit (STUTPEALR) using CAT5 cable.

**Optional:** If you will be using the STUTPEA4X Line Splitter, connect the Local Unit (ST124UTPEA/ST128UTPEA) **CAT5 OUT** port to the Line Splitter using CAT5 cable. Once the Line Splitter has been connected, you have the option of connecting to up to four remote units (STUTPEALR) using CAT5 cable.

7. Once each of the Remote Units have been connected to either a Local Unit (ST124UTPEA/ST128UTPEA) or Line Splitter (STUTPEA4X), connect a VGA monitor to the HD-15 **OUTPUT** connector provided by the remote units as necessary.
8. Connect the Remote Unit **AUDIO OUT** port to the device you will be using to distribute audio (i.e. stereo receiver, amplifier etc.)
9. Connect the power cord on all units (Local, Line Splitter, Remote).
10. Turn on the monitor and PC and audio amplifier.

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When situating the Local and Remote Units, please review the maximum distance capability offered by each component (found in the **Specifications** section)

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# Specifications

## Local Unit

Function	ST124UTPEA	ST128UTPEA
VGA In Connector	HD-15 Female x 1	
VGA Out Connector	HD-15 Female x 1	
Audio In Connector	3.5mm Stereo Jack x 1	
MIC In Connector	3.5mm Stereo Jack x 1	
RJ-45 Connector	4	8
Max. Resolution	1280x1024 60Hz	
Cable Distance	300 m (Max.)	
Power Adapter (Min.)	DC 12V 600mA	
Weight	600 g	660 g
Dimensions (LxWxH)	220x119.5x41 mm	

## Remote Unit

Function	STUTPEALR
VGA In/Out Connector	HD-15 Female x 1
Audio In/Out Connector	3.5mm Stereo Jack x 1
RJ-45 Connector	1
Max. Resolution	1280x1024 60Hz
Cable Distance	300 m (Max.)
Power Adapter (Min.)	DC 12V 600mA
Weight	296 g
Dimensions (LxWxH)	130x110.5x25 mm

## Specifications - Cont'd

### Line Splitter Unit (STUTPEA4X)

Function	STUTPEA4X
RJ-45 In Connector	1
RJ-45 Out Connector	4
Max. Resolution	1280x1024 60Hz
Cable Distance	300 m (Max.)
Power Adapter (Min.)	DC 12V 600mA
Weight	322 g
Dimensions (LxWxH) mm	200x111x25

## Specifications - Cont'd

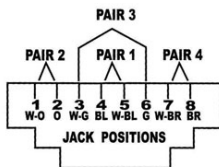
### Distances/Resolutions

Please note: It is recommended that CAT5 cable be used, as it offers superior performance to other standards. For example, CAT6:

Cable Type	Supported Distance	Supported Resolutions
CAT.5/5E	50M	2048x1536
	100M	1280x1024
	180M	1024x768
	200M	800x600
	300M	640x480
CAT.6	30M	1920x1440
	50M	1280x1024
	100M	800x600

### Wiring Information and Coding

Conductor Identification	RJ45 Pin Assignment	Color Code for Conductor
Pair 1	5	White-Blue
	4	Blue
Pair 2	1	White-Orange
	2	Orange
Pair 3	3	White-Green
	6	Green
Pair 4	7	White-Brown
	8	Brown



## Technical Support

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## Warranty Information

This product is backed by a one-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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