

# VGA EXTENDER & SPLITTER

Ethernet VGA Remote Signal Receiver  
for Distances up to 360 ft. (100m)

ST128UTPR  
(Requires ST128UTP)

Instruction Guide

**StarTech.com** 

The Professionals' Source For Hard-to-Find Computer Parts

#### 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 Ethernet VGA Remote Receiver. Combined with a StarTech.com ST128UTP VGA Splitter and Extender and additional Remote Receiver units, you can display the image from a computer or other VGA image source on up to 8 different remote displays at a distance of up to 360 feet (110 meters). With no drivers or software to install, this VGA Remote Receiver offers simple setup and crystal-clear images at resolutions of up to 1600 x 1200 pixels.

## Features

- Hardware-only solution: no drivers or software to install or configure
- Uses industry-standard Category 5 Ethernet cable
- Supports resolutions of up to 1600 x 1200 at 75Hz refresh (depends on distance of the remote display)

## Before You Begin

### System Requirements

- 1 ST128UTP VGA Splitter and Extender (not provided)
- 1 high-quality HD15 male-to-female VGA cable to connect a computer to the Remote Receiver (optional, not provided)
- Display (projector, monitor) that uses a standard VGA data connection
- Shielded Category 5 twisted pair (FTP) straight-through Ethernet cable terminated at each end with RJ-45 connectors between Remote Receiver and VGA Extender (if using surface cabling)

OR

- Shielded Category 5 twisted pair (FTP) straight-through Ethernet cable terminated at each end in a wall-mounted outlet, with two standard Category 5 patch cables, one for the Remote Receiver and one for the VGA Extender (if using premises cabling)

Do you need additional cables? Visit [www.startech.com](http://www.startech.com) to find what you need and the name of your local StarTech.com dealer.

**NOTE:** The total length of cable supporting the remote display cannot exceed 360 feet (110 meters) from the VGA Extender, including patch cables (if used).

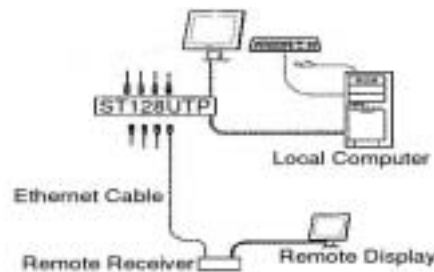
**NOTE:** Long cable lengths between the VGA Extender and the remote display may adversely affect image quality at high resolutions and refresh rates. If you need to run your remote display at high resolutions and frequencies, use as little Ethernet cabling between locations as possible and avoid practices such as “coiling” unused cable in a ceiling or behind the display.

## Contents

- 1 x ST128UTPR VGA Remote Receiver
- 1 x User Manual

## Connecting Your VGA Remote Receiver

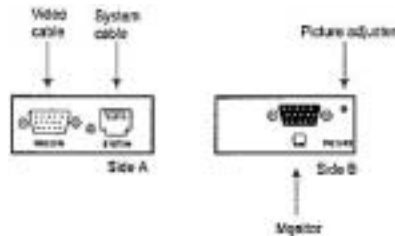
The VGA Extender and Splitter solution is composed of two different units: a ST128UTP Extender and Splitter (available separately), along with the ST128UTPR Remote Receiver. The VGA Extender takes the output from a VGA source (usually a computer) and transmits it to one or more Remote Receivers over Category 5 Ethernet cable. Each remote display (monitor, projector) connects to a Remote Receiver using a standard VGA connection and displays the image from the local computer connected to the VGA Extender on the remote displays.



## Preparing Your Site

Before you can install the Remote Receiver, you need to prepare your site.

- 1: Determine where the display will be located and place/mount it appropriately.
  - 2a: If you are using surface cabling, ensure you have enough Category 5 Shielded twisted pair (FTP) Ethernet cabling to connect the Remote Receiver to the VGA Extender, and that each end is terminated with a RJ-45 connector.
- OR
- 2b: If you are using premises cabling, ensure that the Category 5 Shielded twisted pair (FTP) Ethernet Cabling between the Remote Receiver and VGA Extender has been properly terminated in a wall outlet in each location and there is a patch cable long enough to connect the Remote Receiver and the VGA Extender to their respective outlets.



### Installing the Remote Receiver Module

- 1: Connect the Remote Receiver to the Ethernet cable connection from the VGA Extender, marked **SYSTEM**.
- 2: Connect the data cable from the display to the opposite side of the receiver, marked with a monitor icon (see above).
- 3: Connect the Ethernet cable connection for the Remote Receiver to a **SYSTEM** RJ-45 connector on the VGA Extender.
- 4: If you need to use a computer with this display, connect a HD15 male-to-female VGA cable (not provided) to the **VIDEO IN** port on the Remote Receiver, and the opposite end to the VGA Out connector on the computer.

**NOTE:** The Remote Receiver is self-powered and does not require an AC Adapter.

**CAUTION:** The Category 5 Ethernet cables that connect the VGA Extender and Remote Receiver carry electrical current and should not be plugged in to other devices, as they may cause damage. We strongly recommend marking the Ethernet cables you are using with the VGA Extender and Remote Receiver at each location for easy identification.

### Completing the Installation

- 1: Switch on the local computer and display connected to the VGA Extender.
- 2: Switch on the display connected to the Remote Receiver.
- 3: Verify that the remote display is properly displaying the image from the local computer connected to the VGA Extender.

## Troubleshooting

The following section provides troubleshooting help. The solutions are arranged in the order they should be attempted in most situations. If you continue to have difficulties after attempting the solutions in this section, please contact StarTech.com technical support using any of the methods on page 7.

**Symptom:** The display is black or displays a “no signal” message.

**Cause:** The Remote Receiver is not receiving a signal from the VGA Extender.

**Remedy:** (1) Check that the display is receiving power and that all cables are connected.  
 (2) Check that the display is connected to the Remote Receiver.  
 (3) Try an alternate **SYSTEM** RJ-45 connector on the VGA Extender.  
 (4) If you have a computer connected to the **VIDEO IN** port on the Remote

Receiver, switch it off and/or disconnect it.

**Symptom:** The remote display does not display an image when the local computer connected to the VGA Extender wakes up from Standby Mode.

**Remedy:** Power the remote display OFF and ON again.

**Symptom:** The image on the remote display is distorted, noisy, or displays a “signal error” or similar error message.

**Cause:** The screen resolution and/or refresh rate on the local computer connected to the VGA Extender may be set too high for the capabilities of the remote display.

**Remedy:** (1) Adjust the local computer connected to the VGA Extender to a lower resolution and refresh rate until the remote display shows an image.  
 (2) Gradually increase the resolution and refresh rate until the remote display ceases to display an image.  
 (3) Return the resolution and refresh rate on the local computer connected to the VGA Extender to the highest resolution and refresh rate setting that displayed an image on all remote displays.

**NOTE:** If you are still unable to see an image on the remote display after trying the above solutions, it is recommended that you verify the Category 5 Ethernet cable installation to the remote display before calling technical support. This can be used using a standard cable tester. If you do not have a cable tester, contact a local computer service or wiring professional.

## Specifications

Resolution	Up to 1600 x 1200 @ 75Hz (can be affected by overall cable length)
I/O Video Signals	Analog signal: red, green, blue 0.7v p-p 75 Ohm
Sync	TTL Compatible
Horizontal/Vertical Sync Polarity	Positive/Negative
System Cable	Category 5 Shielded FTP Cable
Maximum Distance	360 feet (110 meters)
Operating Temperature	41°F - 104°F (5°C - 40°C)
Connectors	VGA Out: HDD15F (for display) VGA In: HDD15M (for computer, optional) RJ-45
Power	Self-Powered (via Ethernet cable)
Dimensions	1.32" x 3.12" x 0.84" 34mm x 85mm x 73mm

## Technical Support

The following technical resources are available for this StarTech.com product:

### On-line help:

We are constantly adding new information to the *Tech Support* section of our web site. To access this page, click the *Tech Support* link on our homepage, [www.startech.com](http://www.startech.com). In the tech support section there are a number of options that can provide assistance with this product.

Knowledge Base - This tool allows you to search for answers to common issues using key words that describe the product and your issue.

FAQ - This tool provides quick answers to the top questions asked by our customers.

Downloads - This selection takes you to our driver download page where you can find the latest drivers for this product.

Call StarTech.com tech support for help:

**USA/Canada:** 1-800-265-1844

**UK/Ireland/Europe:** 00-800-7827-8324

*Support hours: Monday to Friday 8:30AM to 6:00PM EST (except holidays)*

## 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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