# UTP VGA VIDEO SPLITTER

4-port UTP VGA Video Splitter/Extender

ST124UTP ST124UTPLRR ST124UTPR

# Instruction Guide



\* Actual product may vary from photo



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

# **Table of Contents**

	Welcome	2
1.	Introduction	3
2.	The system components	3
3.	The Central Unit	5
4.	The Remote Long Range Unit	5
5.	The Remote Short Range Unit ports	6
6.	The cables	7
7.	Connecting the System cables	7
8.	Connecting the Screen cable	8
9.	Connecting monitors to the Remote Units	8
10.	Connecting a local KVM console	8
11.	Connecting to the Power supply	8
12.	The UTP Video Splitter Remote Long Range unit	10
	The dipswitches	11
13.	Operating the UTP VGA Splitter system	12
	Adjusting the screen picture	12
	For the Long Range Remote Unit – Adjusting the brightness	12
14.	Technical Specifications	13

#### 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.

### Technical precautions

This equipment generates radio frequency energy and if not installed in accordance with the manufacturer's instructions, may cause radio frequency interference.

This equipment complies with Part 15, Subpart J of the FCC rules for a Class A computing device. This equipment also complies with the Class A limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of the Canadian Department of Communications.

These above rules are designed to provide reasonable protection against such interference when operating the equipment in a commercial environment. If operation of this equipment in a residential area causes radio frequency interference, the user, and not StarTech.com, will be responsible.

Changes or modifications made to this equipment not expressly approved by StarTech.com could void the user's authority to operate the equipment.StarTech.com assumes no responsibility for any errors that appear in this document. Information in this document is subject to change without notice.

### 1. Introduction

With the UTP VGA Splitter system, broadcast your computer's VGA screen to four remote monitors simultaneously. Broadcast up to 250m/820ft using CAT5 UTP cables without loosing any picture quality.

The UTP VGA Splitter system is compatible with VGA, SVGA, or XGA video standards

### 2. The system components

The UTP VGA Splitter system components include:

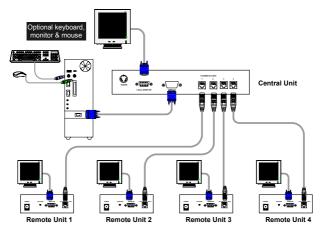
- Central Unit (2/4 port model)
- 2/4 Remote Units
- 2/4 UTP CAT5 System cables
- Cables (illustrated below)
- Power adapters

The UTP VGA Splitter Central Unit comes with either 2 or 4 ports.

The 2 Port Model can have 2 Remote Units connected to it, while the 4 Port Model can have 4 Remote Units connected.

There are 2 Remote Unit models. The Short Range model can be located up to 110m/360ft away from the computer, and the Long Range model can be 250m/820ft away from the computer.

The figure below illustrates the Central Unit 4-port model configuration. The configuration is the same for the 2-port model, except that there are only 2 Remote Units connected.

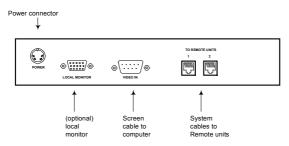


### 3. The Central Unit

The figure below illustrates the Central Unit front panel.



The figure below illustrates the ports on the Central Unit 2 Port rear panel.



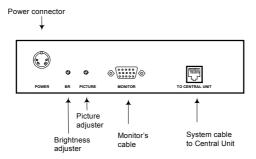
The Central Unit 4-Port rear panel is the same with the addition of 2 more RJ45 ports.

# 4. The Remote Long Range Unit

The figure below illustrates Remote Long Range Unit front panel.

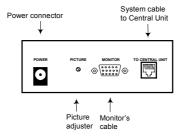


The figure below illustrates the ports on the Remote Long Range Unit rear panel.



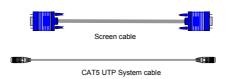
### 5. The Remote Short Range Unit ports

The figure below illustrates the ports on the Remote Short Range Unit rear panel.



### 6. The cables

The cables used in the UTP VGA Splitter system are illustrated below.



## 7. Connecting the System cables

The System cable consists of a single 4-pair CAT5 UTP cable, 2 x 4 x 24 AWG. The System cables connect the Remote Units to the Central Unit

To connect the System cable:

- 1. Connect one connector to the Central Unit's RJ45 #1 port.
- 2. Connect the other connector to one Remote Unit's RJ45 port.
- 3. Connect another System cable to the other Remote Unit's System port and the Central Unit's RJ45 #2 port.
- 4. For the 4 Port Central Unit model connect another 2 Remote Units with System cables to the Central Unit's RJ45 ports #3 and #4.

## 8. Connecting the Screen cable

The Screen cable connects the Central Unit to the computer.

To connect the Screen cable:

- 1. Connect the HDD15M connector to computer's video card.
- 2. Connect the HDD15F connector to the Central Unit 's Video In port.

# 9. Connecting monitors to the Remote Units

To connect monitors to each Remote Unit:

 Connect the monitor's connector to Remote Unit's Monitor port.

# 10. Connecting a local KVM console

You can connect a monitor to the Central unit's Screen Out port and a keyboard and mouse to the computer. This gives you the ability to update and see the data displayed on the remote screens.

# 11. Connecting to the Power supply

The units come with the following power adapters:

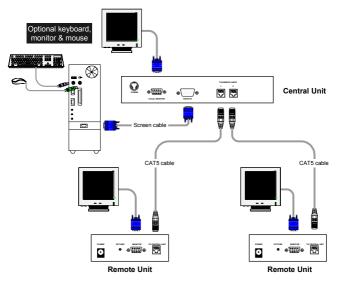
Central Unit 2/4 port – 2 x 9 VAC, 1A from AC/AC adapter

Remote Long Range – 2 x 9 VAC, 1A from AC/AC adapter

Remote Short Range – 9 VAC, 1.5A from AC/AC adapter

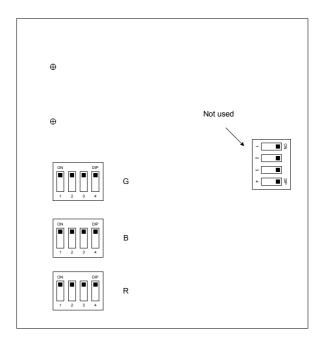
Connect each unit to the Power supply with the Power adapter and cord provided.

The figure below illustrates the detailed connections of the UTP VGA Splitter system



# 12. The UTP Video Splitter Remote Long Range unit

The figure below illustrates the underside panel of the Remote Long Range unit, with 4 sets of dipswitches. One set is not used.



### The dipswitches

The dipswitches are used for RGB compensation. All 3 sets of dipswitches must have the same settings.

Set dipswitches 1-3 of each set according to the cable length, screen resolution and refresh rates. See the table below.

**Note!** Dipswitch number 4 is not used.

Cable	Length	Screen Resolution and Refresh Rates			
М	ft	640x480 75 Hz	800x600 75 Hz	1024x768 75 Hz	1280x1024 75 Hz
50	165	ON OFF 1 2 3	ON OFF 1 2 3	ON OFF	ON OFF 1 2 3
100	330	ON	ON	ON	ON
150	490	ON	ON	ON	ON
200	650	ON	ON	ON	ON
250	820	ON	ON	ON	ON

### 13. Operating the UTP VGA Splitter system

To prepare the system for operation:

- 1. Connect the system.
- 2. Switch on the computer, Central Unit, Remote Units and remote display monitors. The computer screen image broadcasts to all the Remote unit locations.

### Adjusting the screen picture

When the picture sharpness on the remote screen needs adjusting, use a screwdriver to turn the Picture Adjuster knob on the Remote Unit

# For the Long Range Remote Unit – Adjusting the brightness

When the picture brightness on the remote screen needs adjusting, use a screwdriver to turn the Brightness (BR) Adjuster knob on the Remote Unit.

## 14. Technical Specifications

Video output	SVGA, VGA, XGA, or Monochrome
System cable length	

With Remote Short Range 110m/360ft With Remote Long Range 250m/820ft

### **Power adapters**

Central Unit 2/4 port – 2 x 9 VAC, 1A from AC/AC adapter Remote Long Range – 2 x 9 VAC, 1A from AC/AC adapter Remote Short Range – 9 VAC, 1.5A from AC/AC adapter

### Video signal

Analog signal: Red, Green, Blue 0.7Vp-p/ 75 ohms positive

Resolution	1024 x 768
Sync	TTL Compatible
Horizontal sync range	Sync positive/ negative
Vertical sync range	Sync positive/ negative

### Cables

System 4-pair CAT5 UTP: RJ45 / RJ45 connectors. 2 x 4 x 24 AWG

Screen: HDD15M / HDD15F connectors

### **Dimensions**

Central Unit with 2 / 4 Ports: 195 x 100 x 40mm

Remote Short Range Unit: 113 x 90.5 x 40mm

Remote Long Range Unit: 160 x 95 x 40mm

Operating temperature	Up to 50°C/122°F
Storage temperature	-40°C to 70°C/-40°F to 158°F
Humidity	80% non condensing relative humidity

### **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**. In the tech support section there are a number of options that can provide assistance with this card.

**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: 1-519-455-4931

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

Support hours: Monday to Friday 9:00AM to 5:00PM 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 below, 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 to StarTech.com Ltd. (or its 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 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.