

UTP VGA Splitter

User Guide



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Welcome

The UTP VGA Splitter system is produced by Minicom Advanced Systems Limited.

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 Minicom Advanced Systems Limited, will be responsible.

Changes or modifications made to this equipment not expressly approved by Minicom Advanced Systems Limited could void the user's authority to operate the equipment.

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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 losing 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:

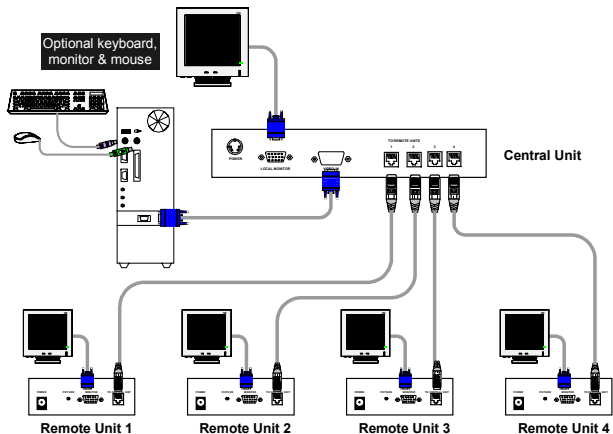
- Central Unit - (2/4 port model)
- 2/4 Remote Units
- 2/4 UTP CAT5 System cables
- Cables (illustrated below)
- Power adapters

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.

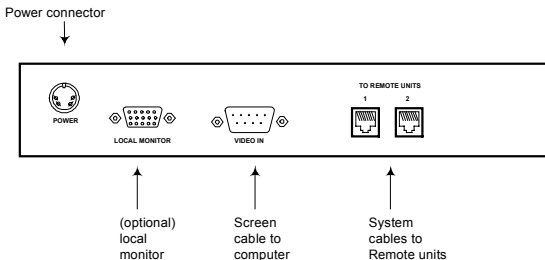


3. The Central Unit

The figure below illustrates the Central Unit front panel.



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



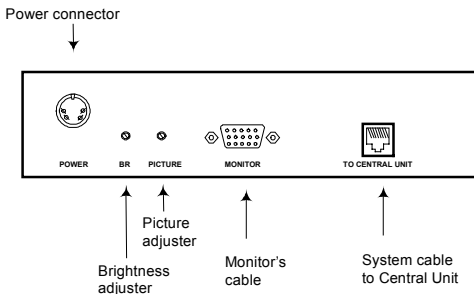
The Central Unit 4-Port rear panel is the same with the addition of 2 more RJ45 ports.

4. The Remote Long Range Unit

The figure below illustrates Remote Long Range Unit front panel.

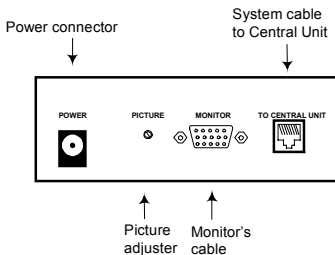


The figure below illustrates the ports on the Remote Long Range Unit rear panel.



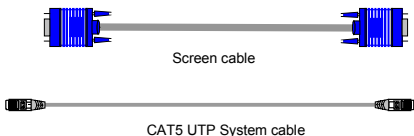
5. The Remote Short Range Unit ports

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:

1. 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:

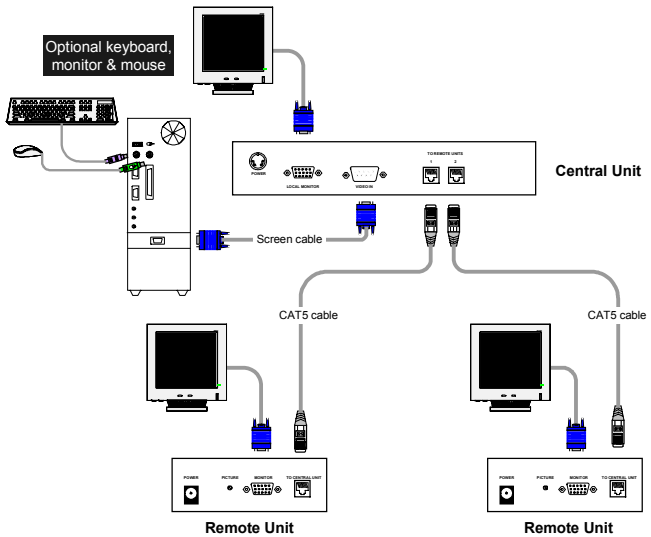
Central Unit 2/4 port – 2 x 9 VAC, 1A from AC/AC adapter

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

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

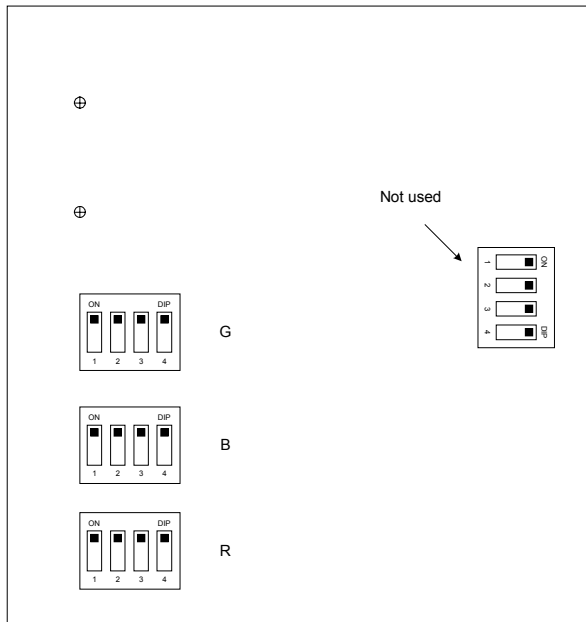
Connect each unit to the Power supply with the Power adapter and cord provided.

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			
M	ft	640x480 75 Hz	800x600 75 Hz	1024x768 75 Hz	1280x1024 75 Hz
50	165	ON OFF <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 1 2 3	ON OFF <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 1 2 3	ON OFF <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 1 2 3	ON OFF <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 1 2 3
100	330	ON <input checked="" type="checkbox"/> OFF <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 1 2 3	ON <input checked="" type="checkbox"/> OFF <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 1 2 3	ON <input checked="" type="checkbox"/> OFF <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 1 2 3	ON <input checked="" type="checkbox"/> OFF <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 1 2 3
150	490	ON <input checked="" type="checkbox"/> OFF <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 1 2 3	ON <input checked="" type="checkbox"/> OFF <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 1 2 3	ON <input checked="" type="checkbox"/> OFF <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 1 2 3	ON <input checked="" type="checkbox"/> OFF <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 1 2 3
200	650	ON <input checked="" type="checkbox"/> OFF <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 1 2 3	ON <input checked="" type="checkbox"/> OFF <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 1 2 3	ON <input checked="" type="checkbox"/> OFF <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 1 2 3	ON <input checked="" type="checkbox"/> OFF <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 1 2 3
250	820	ON <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> OFF <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 1 2 3	ON <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> OFF <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 1 2 3	ON <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> OFF <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 1 2 3	ON <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> OFF <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 1 2 3

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

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