VGA Video Extender over Cat 5 with RS232

ST121UTP232
ST121UTP23GB

*actual product may vary from photos

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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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Table of Contents

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Introduction

Packaging Contents

- 1 x ST121UTP232 Transmitter unit
- 1 x ST121UTP232 Receiver unit
- 2 x Power Adapter
- 2 x Rubber Stopper set
- 1 x Instruction Manual

System Requirements

- VGA enabled video source and display
- Serial Device: RS232 only
- Available power outlet for both Transmitter/Receiver units
- Point-to-Point Cat5 UTP Ethernet connection
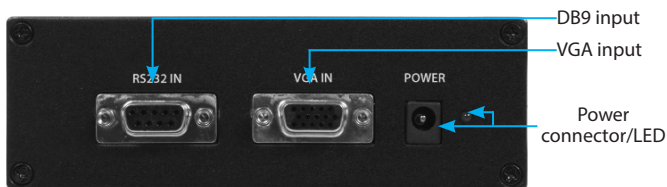
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Installation

This product is composed of two separate units: the Transmitter Unit and the Receiver Unit. The Transmitter Unit takes the output from a VGA and/or RS-232 Serial data source and transmits it to the Receiver unit over Category 5 Ethernet cable. The signal source (VGA and/or Serial) is connected to a Transmitter unit, which transmits the signal to the Receiver unit, up to 300m away. The remote display connects to the Receiver unit using a standard VGA connection and displays the image from the local computer on the remote display.

NOTE: The total length of cable between the Transmitter and Receiver units cannot exceed 1000 feet (300 meters), including patch cables (if used).
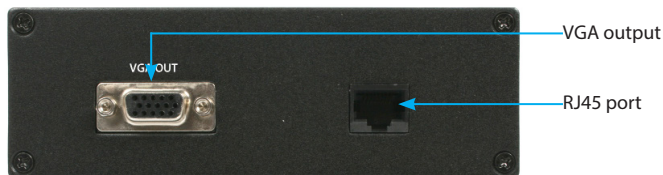
NOTE: Long cable lengths between the Transmitter and Receiver units may adversely affect image quality at high resolutions and refresh rates. If you need to run your remote displays at high resolutions and frequencies, use as little Ethernet cabling between locations as possible and avoid practices such as "coiling" unused cable in a ceiling or behind the display.
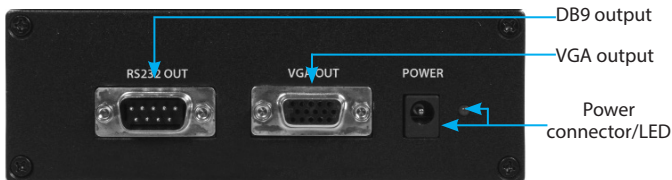
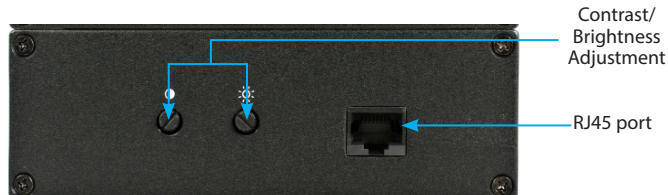## Hardware Installation

Front View - Transmitter Unit

DB9 input

VGA input

Power connector/LED

Rear View - Transmitter Unit

VGA output

RJ45 port

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Front View - Receiver Unit

DB9 output

VGA output

Power connector/LED

Rear View - Receiver Unit

Contrast/ Brightness Adjustment

RJ45 port

Preparing Your Site

Prior to installation, please ensure that the site is prepared to accommodate the location of the Transmitter and Receiver units.

1. Determine where the local computer will be located and set up the computer.

2. Determine where the remote display(s) will be located and place/mount them appropriately.

3. If you are using surface cabling, ensure you have enough Category 5 unshielded twisted pair (UTP) Ethernet cabling to connect the Transmitter Unit to the Receiver unit's location, and that each end is terminated with a RJ-45 connector.
OR
If you are using premises cabling, ensure that the Category 5 unshielded twisted pair (UTP) Ethernet Cabling between the Transmitter Unit and the Receiver unit has been properly terminated in a wall outlet in each location and there is a patch cable long enough to connect the Receiver unit and the Transmitter Unit to their respective outlets.

4. Ensure that both the remote and Transmitter units are close enough to an available power outlet, to safely connect.

Please note that the following instructions assume that both Serial and VGA

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connections will be used. If you are using the extender with only serial or only VGA, please disregard any steps pertaining to the unused connection.

Installing the Transmitter Unit

1. Place the Transmitter Unit near the computer/video source.

2. Switch off the computer and disconnect any existing VGA connections.

3. Connect one end of a standard male/male VGA cable to the port marked VGA IN, located on the rear panel of the local unit.

4. Connect the remaining end of the VGA cable used in step 3, to the VGA out port on the computer video card (or other signal source).

5. Connect one end of an RS-232 Serial cable to the port marked RS232 IN on the Transmitter Unit.

6. Connect the remaining end of the RS-232 cable used in step #5, to the Serial output port on the host computer.

7. Insert the round, metal connector from the included power adapter to the port marked POWER on the rear panel of the Transmitter unit.

8. Connect the remaining end of the power adapter to an available power receptacle.

9. Optional: If you wish to locate a display near the video source, please insert the VGA cable provided by the monitor/display to the VGA OUT port located on the front panel of the Transmitter unit.

Installing the Receiver Unit

1. Place the Receiver Unit near the display and/or serial peripheral you wish to use.

2. Connect the VGA display to the port marked VGA OUT, located on the rear panel of the Receiver unit.

3. Connect the RS232 OUT port located on the rear panel of the Receiver Unit to the desired Serial peripheral.

4. Connect the rounded metal connector from the included power adapter to the port marked POWER on the rear panel of the Receiver unit.

5. Connect the remaining end of the power adapter to an available power receptacle.

Linking the Transmitter and Receiver Units

Once the Transmitter and Receiver Units have been situated and installed, connect the two devices together using standard Cat5 Ethernet cable terminated at both ends with an RJ45 connector. For longer transmissions, it is advisable to use as little Cat5 cable as possible (i.e. avoid using excess cable), to ensure optimum picture quality at the remote display

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Specifications

Connectors (Transmitter)	2 x DE-15 VGA female
	1 x 9-pin DB9 male
	1 x RJ45
Connectors (Receiver)	2 x DE-15 VGA female
	1 x 9-pin DB9 male
	1 x RJ45
Input Signal	RGB Analog (75Ω, 0.7Vp-p) + DATA
	H/V Sync Separated (TTL)
	RS232 Data
Maximum Video Resolution	1600x1200
Maximum Distance	984 ft. (300m)
Video Bandwidth	150MHz
Horizontal Frequency Range	30-95KHz
Vertical Frequency Range	50-180Hz
Power Supply	12VDC, 500mA
Dimensions	44.0mm x 133.0mm x 70.0mm
Weight	1400g (combined)

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