

VGA over Cat5 UTP Extender - 8 Port

ST1218T



CONVERGEAV

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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 the StarTech.com ST1218T VGA over Cat5 UTP Extender - 8 Port. The Converge A/V VGA over Cat5 video extender allows you to connect up to eight remote displays directly from one video source. The video signal is sent to remote monitors over standard Cat5 UTP cable using RJ45 connectors and supports distances of up to 150m (492ft). The ST1218T requires the ST121R remote receivers or the ST121EXT repeater/extender to connect additional displays in between the Transmitter (ST1218T) and Receiver (ST121R).

Allow Converge A/V to provide you with digital signage solutions. Applications include airports, bus depots, retail, or any large buildings where video needs to be delivered at long distances.

Features

- Consists of 1 Base unit (Transmitter) for distributing 8 remote displays through Cat5 and two local VGA displays
- Extends video cables by up to 492 ft. (150m)
- Provides crystal clear picture quality
- Pure hardware design, no software or drivers required and easy to install
- Supports VGA, SVGA, and Multisync monitors
- Use repeaters along your path to connect additional displays or to connect directly to a remote display

Package Contents

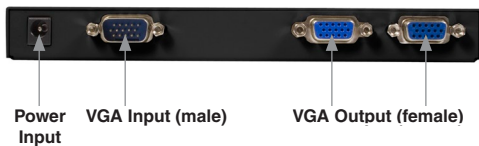
- 1 x ST1218T Transmitter Unit
- 1 x Universal Power Adapter
- 1 x Instruction Manual

Product Description

Front Panel



Rear Panel



Hardware Installation

Installing the ST1218T Transmitter Unit

1. Place the Transmitter Unit near the local (source) computer.
2. Switch off the computer and disconnect any existing VGA cables.
3. If desired, connect the VGA cable from the local computer display(s) to the female DE-15 VGA ports on the Transmitter Unit. This will enable you to see video locally while an image is transmitted to the remote display. You may choose to connect up to two local displays, one for each "Monitor" port. Both outputs display the same image.
4. Connect a male-to-female DE-15 VGA cable (not provided) to the VGA output on the local computer. Connect the opposite end to the VGA IN port on the Transmitter Unit.
5. Connect each Cat5 cable connection to the "CAT5 OUT" ports on the Transmitter Unit.
6. Connect the Power Adapter (provided) into an appropriate power source and plug the opposite end into the power connector on the Transmitter Unit. The POWER LED will light up.

NOTE: To prevent potential electrical damage to the unit in some environments, ensure that the chassis is properly grounded.

Installing the ST121R Receiver Units (not included)

1. Connect the opposite end of the Cat5 cable from the Transmitter Unit to the "CAT5 IN" port on the ST121R Receiver Units.
2. Adjust the Signal Equalizer switch setting to the appropriate length of Cat5 cable used (see documentation included with St121R).
3. Connect the Power Adapter provided with the ST121R into an appropriate power source and plug the opposite end into the power connector on the ST121R Receiver Unit. The POWER LED will light up.

Driver Installation

No driver installation is required for this video extender as they are pure hardware solutions and not visible to the computer system.

Cat5 Cable

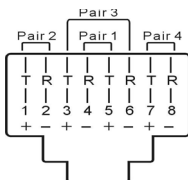
The Video Extenders requires an unshielded twisted pair Cat5 cable no longer than 150m (500ft.).



The cable must be wired according to the EIA/TIA 568B industry standard as shown below.

Pin	Wire Color	Pair
1	White/Orange	2
2	Orange	2
3	White/Green	3
4	Blue	1
5	White/Blue	1
6	Green	3
7	White/Brown	4
8	Brown	4

NOTE: Cat5, Cat5e, or Cat6 cables can also be used with the extender pair.



The above diagram shows the RJ45 connector of a Cat5 cable with its metal contacts facing up.

Operation

LED

There are two LEDs on the Transmitter unit. The POWER LED will illuminate indicating that the unit is properly powered. The ACTIVE LED illuminates when there are VGA input signals present.

The POWER LED of the Receiver and Repeater Units also illuminates indicating that the unit is properly powered. The ACTIVE LED illuminates when VGA signals are properly decoded from the Cat5 for the two local DE-15 VGA outputs.

Signal Equalizer Selector (ST121R, ST121EXT)

The Signal Equalizer Selector on the Receiver and Repeater Units can be adjusted to obtain the optimal video signal for various cable lengths. There are four settings on the selector switch, indicating cables of different lengths. The following table can be used as a reference for selecting the appropriate setting:

Cat5 Cable Length		Equalizer Position
meters	feet	
0 ~ 40	0 ~ 131	—
40 ~ 80	131 ~ 262	—
80 ~ 120	262 ~ 394	—
120 ~ 150	394 ~ 500	—

Specifications

Connectors	1 x DE-15 VGA male (input) 2 x DE-15 VGA female (output) 8 x RJ45 female 1 x Power connector
LEDs	1 x Power 1 x Active
Maximum Distance	150 m (492 ft) @ 1024x768
Maximum Video Resolution	1600x1200 @ 50 m (150 ft)
Power Adapter	9~12VDC, 1.5A
Dimensions	180.0mm x 85.0mm 20.0mm
Weight	1300 g

Troubleshooting

Symptom	Solution
No VGA signals at the Receiver unit	Both units must be powered. The ACTIVE LED on the Transmitter unit and the Receiver unit must illuminate to indicate the proper transmission of the signal.
VGA signal is garbled	Ensure that the cables being used are wired according to the EIA568B standard.
ACTIVE LED at the Receiver unit is always off.	The ACTIVE LED on the Transmitter unit must be on. Check the wiring of the Cat5 cable. Ensure that the POWER LED of the Remote unit is on.
VGA quality changes with the use of different Cat5 Cables.	Use the equalizer selector to adjust the VGA signal for various cable lengths and characteristics.

Technical Support

StarTech.com's lifetime technical support is an integral part of our commitment to provide industry-leading solutions. If you ever need help with your product, visit www.startech.com/support and access our comprehensive selection of online tools, documentation, and downloads.

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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