

## User Manual

### Passive VGA Extender with Wall Plate or Box options up to 330ft over 1 x CAT5/6/7 Cable AT-VGA100-SR and AT-WPVGA-SR

AT-WPVGA-SR



AT-VGA100-SR



TRANSMITTER

RECEIVER

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## INTRODUCTION

The Atlona passive VGA Extenders over 1 x CAT5/6/7 cable up to the distance of 330ft with resolutions up to 1280x1024. The Atlona VGA Extenders are a perfect way of extending video signal away from the computer. The advanced design allows no limitations or delays when using extender versus a direct connection to the computer.

There extenders can be mixed and matched with each other. The wall plate transmitter can be matched with "box" receiver and the other way around. Of course, the wall plate transmitter will perfectly work with wall plate receiver and "box" transmitter with "box" receiver.

### Combinations are below:

- a. AT-WPVGA-S + AT-WPVGA-R
- b. AT-VGA100-S + AT-VGA100-R
- c. AT-WPVGA-S + AT-VGA100-R
- d. AT-VGA100-S + AT-WPVGA-R

Plug and Play, no drivers or software needed, user will not even notice the difference when using an extender versus a direct connection. The extenders required no external power.

The VGA Extenders are a great solution for many different applications, e.g., classroom, office environment, data-center, training room and many others where the computer must be placed further away from the users display.

## PACKAGE CONTENTS

Depends on the package selected as this manual is for 6 models

- Module or 2 Modules – depending on the model purchased
- Instructions manual
- Wall plate Modules include white decora plate

## FEATURES

- Perfect for extending VGA signal further away than standard cables may allows.
- Extend signals up to 330ft away from the computer on a single low-cost Cat5, 6 or 7 cables.
- Wall plate transmitter is compatible with "box" receiver and other way around.
- Resolution support up to 1280x1024
- No power supplies are needed
- Plug and Play, no drivers or software needed
- Any computer is compatible, no limitations

## SPECIFICATIONS

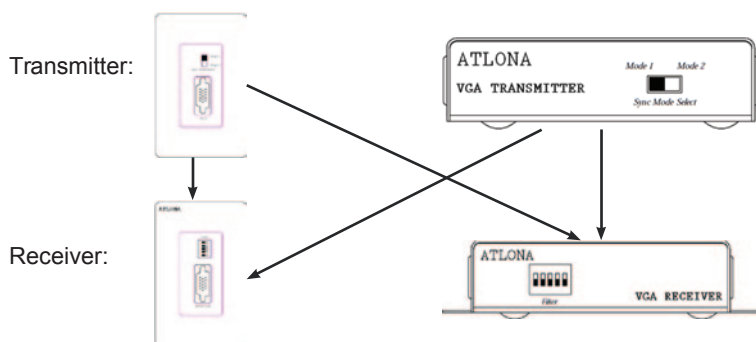
	AT-WPVGA-SA	T-WPVGA-RA	T-VGA100-SA	T-VGA100-R
<b>Inputs</b>	1 x VGA	1 x RJ45	1 x VGA	1 x RJ45
<b>Outputs</b>	1 x RJ45	1 x VGA	1 x RJ45	1 x VGA
<b>VGA Type</b>	(HD15) female			
<b>VGA Resolution</b>	800x600, 1024x768, 1280x768 and 1280x1024			
<b>Signal Bandwidth</b>	300 kHz max.			
<b>Signal Loss</b>	Less than 3dB per pair			
<b>Transmitting Distance</b>	up to 330ft (100m)			
<b>Dimensions (inch)</b>	2.75x2.40x4.52 – Single Gang	2.75x2.40x4.52 – Single Gang	4.3x3.03x1.02	4.3x3.03x1.02
<b>Weight (lb)</b>	0.15			
<b>Operation Temperature</b>	0 to 55°C			
<b>Storage Temperature</b>	-20 to 85°C			
<b>Humidity</b>	up to 95%			

Max. Distance via CAT5 Cable:

- 640x480 pixels (15MHz) – 430ft
- 800x600 pixels (30MHz) – 320ft
- 1024x768 pixels (60MHz) – 250ft
- 1280x1024 pixels (100MHz) – 200ft

## CONNECTION AND OPERATION

- Connect transmitter module to the VGA connection of a computer
- Connect display to the receiver module
- Install or use pre-existing CAT5, 6 or 7 cables
- Make sure to use a cable tester to check all wires are correctly terminated. (Incorrect Termination may cause damage to the receiving module)
- Once connected, please refer to the Mode and Dip switch configuration



**ANY TRANSMITTER IS COMPATIBLE  
WITH ANY RECEIVER**

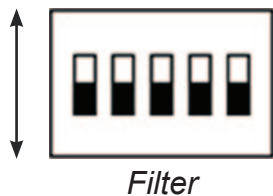
## MODE SELECTION



Mode # 1: If your display is a projector or a new display 17-inch and up, please use Mode # 1

Mode # 2: If you are using a CRT monitor or a display under 17-inch, please switch to Mode # 2

## DIP SWITCH



There are 5 dip-switchers on the receiving module. Each dip switch represents signal stability from 0 to 5, where #5 is the highest stability. The default mode is all dip-switchers are at the up position.

If the signal is going in and out or USB is freezing, please start by switching down the dip switch # 1, if signal doesn't become better, switch dip switch # 2 down and so on.

**It is highly recommended using STP cable (Shielded Twisted Pair).**

## MODE SELECTION

### No Signal or it is going in and out:

- Please test your RJ45 cables with a Fluke or similar tester to make sure that all the wires are connected and the distance is within the limits.
- If you are using patch panel or and RJ45 wall plates, the distance will be reduced, please do a direct connection bypassing all additional equipment.
- Please try to re-terminate your CAT5/6/7 wire to 568B
- Check the dip switch and mode configurations as they are very important when UTP wire is used.
- Change the resolution on the computer to 800x600 or 1024x768
- Change frequency to 60Hz
- Try using STP Cable

### Image is tilted:

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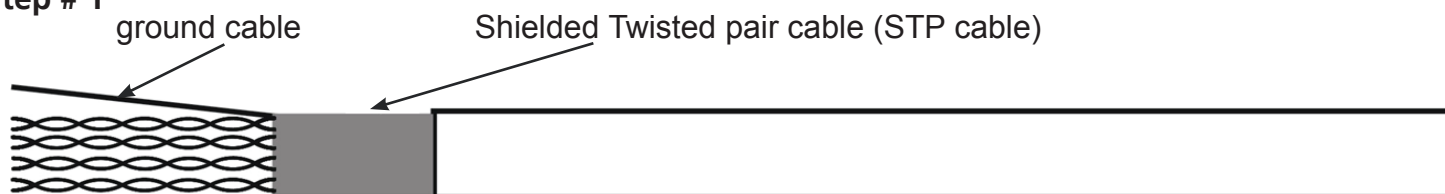
If you are terminating STP cable with a plastic CAT5 or CAT6 connector, please separate ground wire and connect it to the Ground connection on the receiver module.

**STP (Shielded Twisted Pair) Cable is recommended**

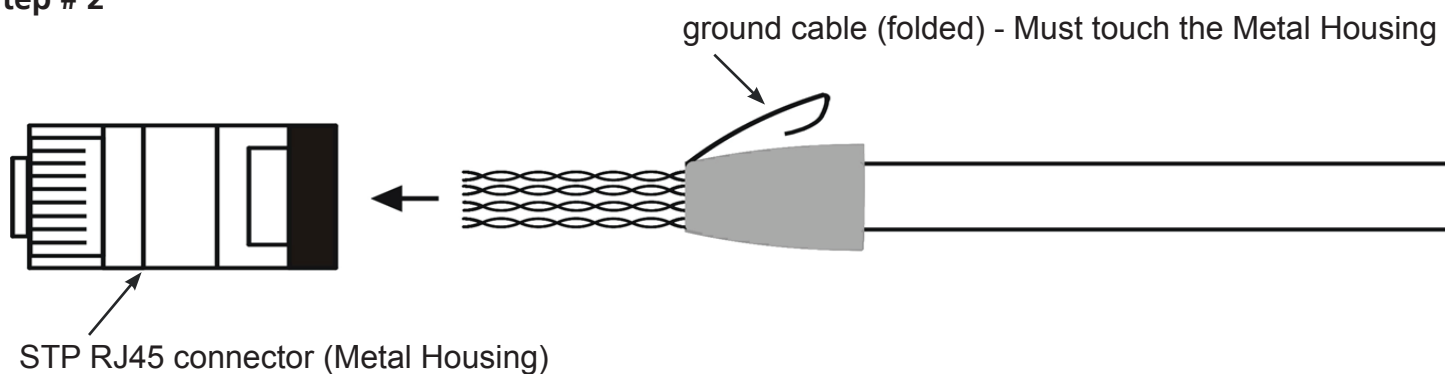
## STP CONNECTOR

**STP Connector is used:**

**Step # 1**

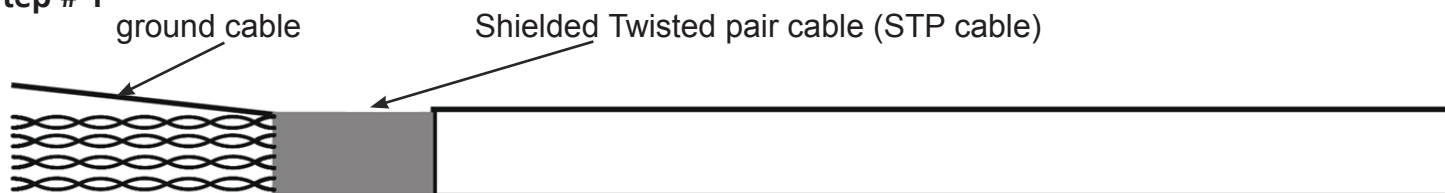


**Step # 2**

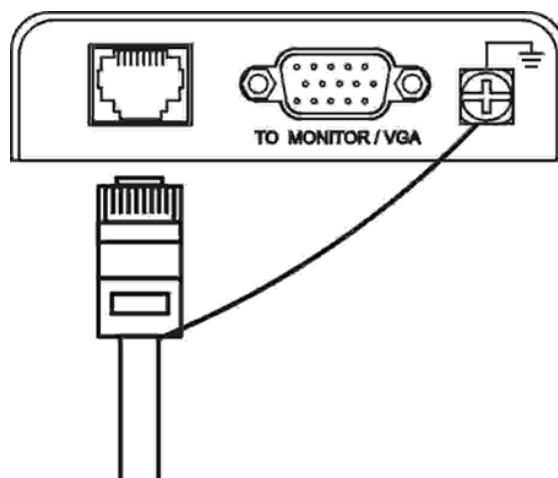


**STP Connector is not used:**

**Step # 1**



**Step # 2**



## WIRING CONFIGURATION

RJ45 Pin Configuration: TIA/EIA 568B Wiring standard

Video Cable

1. Orange-white	Video Red +
2. Orange	Video Red -
3. Green-white	H-Sync
4. BlueV	Video Green +
5. Blue-white	Video Green -
6. Green	V-Sync
7. Brown-white	Video Blue +
8. Brown	Video Blue -

Data Cable

1. Orange-white	Keyboard Clock
2. Orange	Keyboard Data
3. Green-white	Power 1
4. BlueG	round 1
5. Blue-white	Power 2
6. Green	Ground 2
7. Brown-white	Mouse Clock
8. Brown	Mouse Data

## SAFETY INFORMATION

### Safeguards



To reduce the risk of electric shock, do not expose this product to rain or moisture



Do not modify the wall plug. Doing so will void the warranty and safety features.



If the wall plug does not fit into your local power socket, hire an electrician to replace your obsolete socket.



This equipment should be installed near the socket outlet and the device should be easily accessible in the case it requires disconnection.

### Precautions

FCC regulations state that any unauthorized changes or modifications to this equipment, not expressly approved by the manufacturer, could void the user's authority to operate this equipment.

Operate this product using only the included external power supply. Use of other power supplies could impair performance, damage the product, or cause fires.

In the event of an electrostatic discharge this device may automatically turn off. If this occurs, unplug the device and plug it back in.

Protect and route power cords so they will not be stepped on or pinched by anything placed on or against them. Be especially careful of plug-ins or cord exit points from this product.

Avoid excessive humidity, sudden temperature changes or temperature extremes.

Keep this product away from wet locations such as bathtubs, sinks, laundries, wet basements, fish tanks, and swimming pools.

Use only accessories recommended by Atlona to avoid fire, shock, or other hazards.

Unplug the product before cleaning. Use a damp cloth for cleaning and not cleaning fluid or aerosols. Such products could enter the unit and cause damage, fire, or electric shock. Some substances may also mar the finish of the product.

Never open, remove unit panels, or make any adjustments not described in this manual. Attempting to do so could expose you to dangerous electrical shock or other hazards. It may also cause damage to your AT-VGA100. Opening the product will void the warranty.

Do not attempt to service the unit. Disconnect the product and contact your authorized Atlona reseller or contact Atlona directly.

## **WARRANTY**

### **Limited Warranty**

Atlona Technologies warrants that (a) its products (the AT-VGA100) will perform substantially in accordance with the accompanying written materials for a period of 3 years from the date of receipt and (b) that the product will be free from defects in materials and workmanship under normal use and service for a period of 3 years. In the event applicable law imposes any implied warranties, the implied warranty period is limited to 3 years from the date of receipt. Some jurisdictions do not allow such limitations on duration of an implied warranty, so the above limitation may not apply to customers that fall within those areas.

### **Customer Remedies**

Atlona Technologies' and its suppliers' entire liability and Customer's exclusive remedy shall be, at Atlona Technologies' decision, either return of the price paid for the product, repair, or replacement of the product that does not meet this Limited Warranty and which is returned to Atlona Technologies with a copy of the Customer's receipt. This Limited Warranty is void if failure of the product has resulted from accident, abuse, misapplication, or natural occurrence. In example but not limited to: power surges (electrical storms, local power outage), dropping the product (or items on the product), contact with fluids, and physical misconduct (i.e. kicking or punching). Any replacement product will be warranted for the remainder of the original warranty period.

### **No other warranties**

To the maximum extent permitted by applicable law, Atlona Technologies and its suppliers disclaim all other warranties, either expressed or implied, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose, with regard to the product and any related written materials. This Limited Warranty gives customer specific legal rights. Customers may have other rights depending on the jurisdiction.

### **No liability for damages**

To the maximum extent permitted by applicable law, in no event shall Atlona Technologies or its suppliers be liable for any damages arising out of the use of or inability to use this product, even if Atlona Technologies has been advised of the possibility of such damages. Such damages include but are not limited to: special, incidental, consequential, or indirect damages for personal injury, loss of business profits, business interruption, loss of business information, or any other pecuniary loss. Atlona Technologies' and its suppliers' entire liability under any provision of this agreement shall be limited to the amount actually paid by you for the product. Some Jurisdictions do not allow the exclusion or limitation of liability for consequential or incidental damage. The above limitations may not apply to you in such jurisdictional cases.

## ATLONA PRODUCT REGISTRATION

Thank you for purchasing this Atlona product. - We hope you enjoy it and will take an extra few moments to register your new purchase.

Registration creates an ownership record if your product is lost or stolen and helps ensure you'll receive notification of performance issues and firmware updates.

At Atlona, we respect and protect your privacy, assuring you that your registration information is completely secure. Atlona product registration is completely voluntary and failure to register will not diminish your limited warranty rights.

**To register go to:** <http://www.atlona.com/registration>