

# 1. Introduction

Thanks for purchasing the VGA Chainable Extender over CAT5e/6. We encourage you to read this manual thoroughly and retain the manual for future reference.

## Features

VGA Chainable Extender over CAT5e/6 provides a long distance solution for extending video signals over CAT5e/6. It supports up to 1080p resolution and offers excellent video quality and audio performance while lowering and simplifying network cabling. Besides, the extender has low latency and low power consumption. With taking its excellent features of up to 100m and 100Mbps, this product, the VGA Chainable Extender over CAT5e/6, delivers superb performance, efficiency and value added.

# VGA Chainable Extender over CAT5e/6

## User's Manual

- Quick Start
- Features
- Specifications
- Installation
- Troubleshooting
- Appendix
- Contact Us
- Warranty
- End User License Agreement
- End Notes

Version 1.0

## Package Contents

1. VGA Extender Transmitter x1
1. VGA Extender Receiver x1
1. Power Adapter (DC 5V x 2) (optional) x1 (depends on the model)
1. User Manual x1

## 1. Introduction

Thanks for purchasing the **VGA Chainable Extender over CAT.5e/6**. We recommend that you read this manual thoroughly and retain for future reference.

### Features

**VGA Chainable Extender over CAT.5e/6** is the latest high performance, cost-effective **VGA Daisy-Chainable Extender**, which allows you to extend video and audio up to 100 meters distance between source or computer and monitor or projector. With the built-in video and audio signals enhancement, you can gain the best video resolution quality and audio stereo sound while listening, and no any additional software needed. Besides, the installation and operation are easily more than expected. With using in extension facilities of video and audio, this product, the **VGA Chainable Extender over CAT.5e/6**, delivers worthy of performing efficiency and value-added.

- With **Expandable Receiver**, each Receiver Unit with cascade function enables to link the other two (2) Receiver Units consecutively extending another 100m distance, and continue expanding corresponding to custom demand as likely Cascade/Tree Chain web architecture spread.
- Uses easy to install, inexpensive CAT. 5e/6 cables.
- Each pair (TX & RX) extends the signals up to 100m (330 feet).
- Supports video high resolution up to 1920x1080@60Hz, Full HD 1080p.
- HDTV compatible (720p, 1080i, 1080p).
- Supports Stereo 2.0
- Cascaded-chainable receiver up to 10 layers.
- Supports RS-232 (Serial).
- IR (Infrared remote) enabled.
- Support Local HDMI monitoring port.
- Each receiver (remote) links cascade-chainable 2 receivers.
- Rack mountable.

### Package Contents

1. VGA Extender Transmitter x 1
2. VGA Extender Receiver x 1
3. Power Adaptor DC 5V x 2 ( set units ) or 1 ( single unit )
4. User's Manual x 1

## Specification

		Transmitter	Receiver
Console	VGA Output	VGA (Female)	VGA (Female)
Connectors	RS-232 Control Port	Phone Jack	Phone Jack
PC Connectors	VGA Input	VGA (Male)	N/A
Extension Port	RJ-45	Full HD Video / Audio Extension	
RJ-45		1 (Line Out)	3 (Line In or Line Out)
Cascaded-Chainable		N/A	up to 10 layers
Audio		Supports High Definition Audio (HD) , Surround Sound	
IR		Uni-directional (from RX to TX)	
RS-232		Bi-directional	
LED Indicators	Local	Power	Red LED
		Link	Red Green
	Remote	Power	Red LED
		Link	Red Green
DDC Supported		DDC, DDC2, DDC2B	
Extension Cable Type & Length		CAT.5e / CAT.6 Max. Length: 100m	
Max. Video Resolution		1920x1080@60Hz, Full HD 1080p, 48-bit	
Wide Screen Supported		Yes	
OS Compatibility		Windows, Mac, Linux, Sunmicro systems	
Power Supply		External DC 5V / 2A Power Adapter	
Dimension ( L x W x H )		115 x 91 x 28 mm	
Weight		340g	380g
Housing material		Metal	
Operating Temperature		32 - 122 <sup>o</sup> F ( 0 - 50 <sup>o</sup> C )	
Humidity		0% - 80% RH	

## 2. Detail and Diagram

### Detail Picture

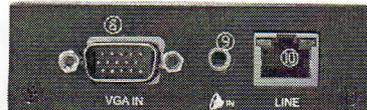


**Transmitter (TX)-Front**



- ①: Connected to Power Adapter DC 5V/2A
- ②: Power LED (Solid Red when power present)
- ③: Link LED (Solid Green when link present)
- ④: IR Blaster /Emitter
- ⑤: RS-232 control port

**Transmitter (TX)-Rear**



- ⑥: Audio Out, connect to speaker
- ⑦: VGA Out, connected to local Monitor
- ⑧: VGA In, connected to VGA source
- ⑨: Audio In, connect to Audio source
- ⑩: Cat.5e/6 cable connected for data out

**Receiver (RX)-Front**



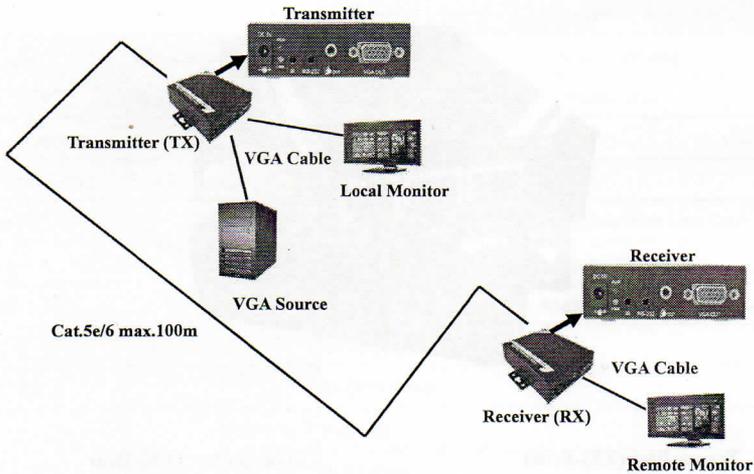
- ①: Connected to Power Adapter DC 5V/2A
- ②: Power LED (Solid Red when power present)
- ③: Link LED (Solid Green when link present)
- ④: IR Receiver
- ⑤: RS-232 control port

**Receiver (RX)-Rear**



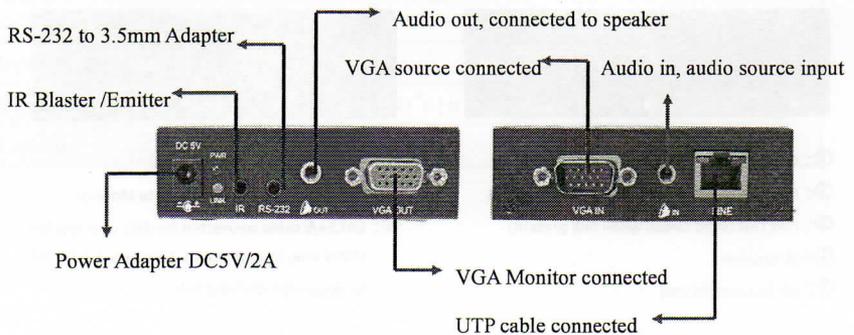
- ⑥: Audio Out, connect to speaker
- ⑦: VGA Out, connected to Remote Monitor
- ⑧: CAT.5e/6 cable connected for data in or out for either one, or another 2 x Receivers connected for expanded chaining link.

## Application Diagram



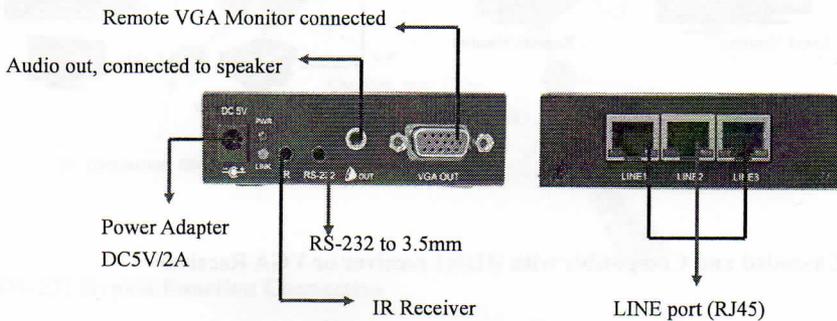
## Transmitter Installation Sequence

1. Plug DC 5V/2A power adapter.
2. UTP Cable connected with Transmitter to get the best display quality, please use CAT.5e/6 Cable, and the cable connector node is to connect to Transmitter **LINE port (RJ45)**
3. Connect the IR Blaster Emitter cable or RS-232 to 3.5mm adapter to the Transmitter Unit IR Port or RS-232 control port if necessary.
4. Connects Transmitter with VGA cable to VGA connector of VGA source.
5. Connects audio input connector with audio cable to the audio source, connects audio output with audio cable to speaker.
6. Connects Transmitter with VGA cable to VGA connector of VGA Monitor if necessary.



## Receiver Installation Sequence

1. Plug DC 5V/2A power adapter.
2. UTP Cable connected with Receiver to get the best display quality, please use CAT.5e Cable, and the cable connector node is to connect to Receiver **LINE1 or LINE2 or LINE3 port (RJ45)**
3. Connect the IR Receiver cable or RS-232 to 3.5mm adapter to the Receiver Unit IR Port or RS-232 port if necessary.
4. Connects audio output with audio cable to speaker.
5. Connect Receiver with VGA cable to VGA connector of Remote VGA Monitor.



## Cascade Chain Connection

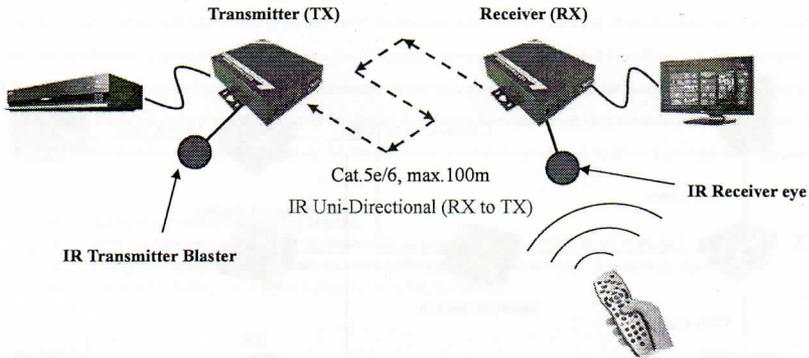
1. Plug DC 5V/2A power adapter.
2. Use UTP Cable connected with Receiver to link the other two (2) Receiver Units consecutively to extend another 100m distance, the cable connector node is to connect to Receiver **LINE1 or LINE2 or LINE3 port (RJ45)**, as long as the **LINE port is not occupied**, and user can continue expanding corresponding to custom demand as likely Cascade/Tree Chain web architecture spread.
3. Connect the IR Receiver cable or RS-232 to 3.5mm adapter to the Receiver Unit IR Port or RS-232 port if necessary.
4. Connect Receiver with VGA cable to VGA connector of VGA Monitor.

Each Receiver with three (3) Line port, one is used for source input, and the other two are used for expanding source to other receivers. User can choose any LINE port as source input at random, and use the other two LINE port for expanding source to next tier receiver as long as the LINE port is not occupied.



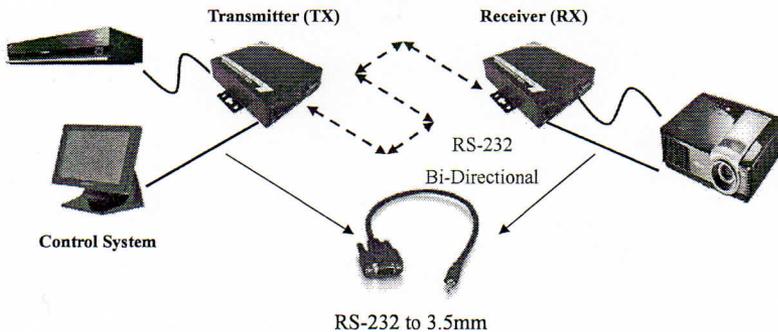
## IR Bypass Function Connection

1. Connect the IR Transmitter (or Emitter) cable to the IR Connector on the VGA Transmitter Unit (TX)
2. Connect the IR Receiver cable to the IR Connector on the VGA Receiver Unit (RX)
3. Place the IR Eye of the IR Receiver cable near the Remote Controller
4. Place the IR Blaster of the IR Transmitter cable near the device that intend to be controlled by the Remoter controller



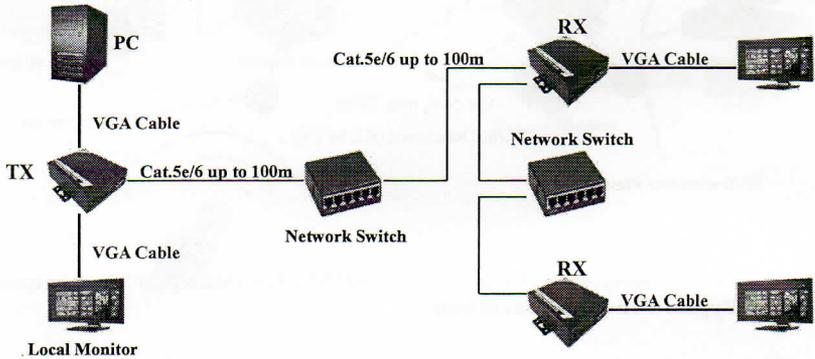
## RS-232 Bypass Function Connection

1. Connect the device, such as a PC, projector... etc, to the RS-232 port of the VGA Transmitter Unit or VGA Receiver Unit via a RS-232 to 3.5mm adapter
2. Connect the controlling device to the RS-232 port of the VGA Receiver Unit via a RS-232 to 3.5mm adapter
3. Operating the control system



## Hub Extend Function Connection

- The maximum distance between each tier could be up to 100 meters long, while this could be extended through Network Switch. User can add one Network Switch to extend another 100 meters.
- The more Network Switches, the longer distance extended. The number of Network Switches is as many as user want.



## Disclaimer

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## FCC Statement

This device generates and uses radio frequency and may cause interference to radio and television reception if not installed and used properly. This has been tested and found to comply with the limits of a Class B computing device in accordance with the specifications in Part 15 of the FCC Rules. These specifications are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by plugging the device in and out, the user can try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the device and receiver.
- Connect the computer 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.

CE / FCC



User's Manual