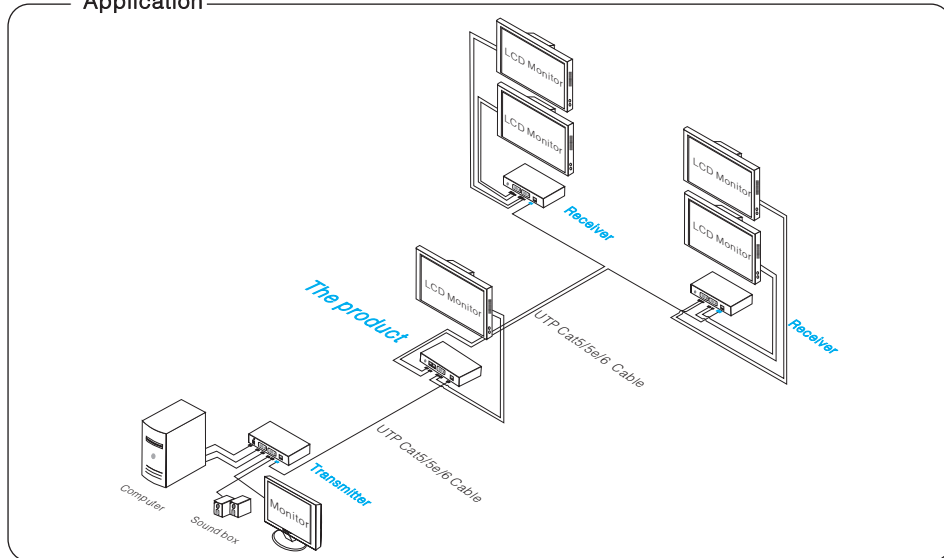


# 1ch VGA Video Audio UTP Repeater

It is a single channel active VGA video and audio repeater that can extend VGA video and audio signal transmission distance, improve the quality of long distance transmission, output multi-channel signal, including 1 ch VGA video and audio port for debugging, 2 channel RJ45 signal port. Can cascade, work together with other transceivers, and realize more flexible transmission method like tree. It features high bandwidth, high resolution, transmit distance up to 300m, combination of transmission can up to 600m or longer, compact volume, with ears, easy to install. Widely used in data control center, demo show and teaching environment and training center, etc.

## Application

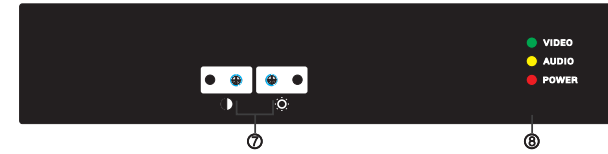


## Features

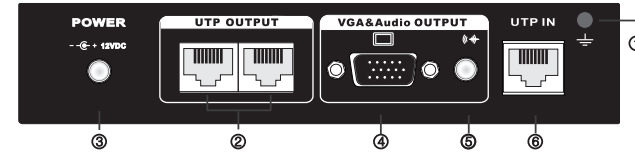
- Properties: Use single Cat UTP cable ( Cat5/5e/6 ) relay transmission VGA video and audio, low price; 2 kinds comprehensive output interface, including 1 group video and audio signal and 2 channel UTP RJ45 interface;
- Distance: Increase the transmission distance, relay transmit VGA video and audio signal to 300m, Combination transmission max up to 600m;
- Compatibility: Support VGA, SVGA, XGA, SXGA, WXGA;
- Transmission properties: Real-time synchronous transmit VGA video and audio, no delay and asynchronous;
- Protection: Super lighting protection and anti-interference, product is more stable;
- Operation: Use no driver and internet setting, use and install is easier.

## Board Diagram

### Front



### Back



Item	Component	Description
①	Ground Port	Connect with the ground
②	RJ45 Output Port	For RJ45 Crystal Plug
③	Power Port	12V DC Power Input
④	3.5mm Audio Port	For 3.5mm Audio Plug
⑤	15 Pin VGA Male Port	VGA Video Input Port
⑥	RJ45 Input Port	For RJ45 Crystal Plug
⑦	Adjusting Button	Left: Contrast, Right: Brightness
⑧	LED	From top to button : Video LED, Audio LED, Power LED

## Installation

Please check the following item before installation. If it's missing, please contact the dealer

- UTP Repeater 1set
- 12V DC Power Adapter 1set
- Accessory(2 hanger, 4 screw driver, 4 pad, 1 driver) 1set
- User Manual 1set

### Installation steps

1. Please close the power related to the device before installation.
2. Please check if the cable is used by other devices.
3. Please connect the audio video signal port and the VGA AV Transmitter related port with the cable.
4. Please connect the monitoring device, stereo and VGA AV Transmitter's Signal output Port.
5. Please plug the RJ 45 Crystal on the transmitter's UTP OUT and Repeater's UTP In port. and connect the monitor device, amplifier to the VGA AV Repeater's signal output port;
6. Please connect the RJ45 Crystal on the Repeater's UTP out and receiver's UTP IN port, and connect the monitor device, amplifier to the VGA AV Receiver's Signal INPUT port
7. Please turn on the computer and adjust the repeater's knob until you get the best image;
8. Adjust the receiver's knob until the receiver side's monitor get the best image.

## Specification

Item	Description	
Function	Receiver's Signal	1ch
	Splitting Transmitter Signal	2ch
	Transmission Distance	300m ( Max )
	Max Cascade	5 ( Max )
Power	Power Range	Power Adapter
	Power Adapter	12V DC
	Consumption	<4W
VGA Transmission and Port	VGA Video Output Port	Female VGA
	Video Signal Process Bandwidth	>350MHz(-3dB)
	Syn. Signal Bandwidth	>200kHz
Audio Transmission and Port	Output Port	3.5mm Stereo Audio Port
	Bandwidth	10Hz~20KHz
Transmission Port	Output Port	2 × RJ45
	Input Port	1 × RJ45
Knob Adjust	Brightness	Adjustment Available
	Contrast	Adjustment Available
Status	SignalLED	Green
	DataLED	Yellow
	Power	RED
Protection	ESD	1a Contact Discharge Level 3 1b Air Discharge level 3 Per: IEC61000-4-2
	Surge Protector	2KV Per: IEC61000-4-5
Environment	Working Temperature	0~55°C
	Storage Temperature	-20~70°C
	Humidity	0~95%
Structure	Size	160mm × 90mm × 32mm
	Shell	Iron
	Color	Black
	N.W.	430g
Stability	MTBF	>30000hrs

*Specification change will not be noticed*

## Problem Examination

Please find the following solution when the device doesn't work

- Please check the installation is correct;
- Please check if the cable connection is correct
- Please do not overrun the Max transmission distance;
- Please check if the connection is stable or system is powered when find no image;
- Please use a normal machine to replace a failure one;
- If the problem still exist, please contact our factory;

## Plug Producing Method

Instruments to be used: wire crimper, network tester. Wire sequence of RJ45 plug should conform with EIA/TIA568A or 568B.

1. Please remove 2cm long the insulating layer, and bar the 4 pairs UTP cable;
2. Separate the 4 pairs UTP cable and straighten them;
3. Line up the 8 pieces of cables per EIA/TIA 568A or 568B.
4. Cut off the cables to leave 1.5cm bare wire;
5. Plug 8 cables into RJ45 plug, make sure each cable is in each pin.
6. Use the wire crimper to crimp it;
7. Repeat above 5 steps to make the another end;
8. Using network tester to test the cable whether is working.

pin	color
1	white/green
2	green
3	white/orange
4	blue
5	white/blue
6	orange
7	white/brown
8	brown



EIA/TIA 568A

pin	color
1	white/orange
2	orange
3	white/green
4	blue
5	white/blue
6	green
7	white/brown
8	brown



EIA/TIA 568B



### Notice

- When choose RJ45 make sure if one end is EIA/TIA568A, the other end should also be EIA/TIA568A.
- When choose RJ45 make sure if one end is EIA/TIA568B, the other end should also be EIA/TIA568B.