# VS-108R/VS-104R/VS-102R/VS-101R Extender Splitter User Manual

#### **♦**Introduction:

It does not increase systematic fabrication cost on short and middle distance transmission, but simplifies project wiring, etc. instead. So, in high clear VGA monitoring system, high clear video network advertising system, multimedia network teaching. system .etc, it has obvious advantages in transmitting with twisted pair line:

- 1. It transmits long distance with high quality. Because advanced technology is adopted in the twisted pair line transceiver, it compensates the decay and decay difference among different frequency to the signal range of the video of paired line extremely well, keeps the luminance, color and real-time character of primitive VGA signal, and the picture signal almost has no distortion in transmitting 150m or farther.
- 2. It is convenient in wiring and it improves cable utilization ratio. One twisted pair line can not only transmit high clear VGA picture signal, but also transmit the stereoscopic sound signal of high-fidelity. In addition, there are CAT5 UTP extensively in the buildings, just use one line and needn't wire in addition. Even it needs more wire, CAT5 lines are easier than the optic fiber, coaxial cable, it simplifies the project wiring difficulty greatly, improves the utilization ratio of the cable, prevents trouble brought by wiring various lines with various signals, and reduces the fabrication cost of the project.
- **3.** It has strong anti-interference ability. The twisted pair line can inhibit the common interference effectively. Even in strong interference environment, the twisted pair line can transmit the fairly good picture signal, moreover, the twisted pair line will not interfere with each other.
- **4.** It is easy to use with high reliability. Use the twisted pair line to transmit the high clear video signal, insert the special-purpose transmitter in the signal source, insert the special-purpose receiver into the display device far away. The transmission equipment price of this kind of twisted pair line is cheap, it is very easy to use. The user does not need professional knowledge and much operation, just install one time, it can work in a long time steadily.
- **5.** The price is cheap and it is easy to get materials. Since user can use ordinary CAT5 twisted pair line, all parts are all easy to buy, and the price is very cheap, bringing great convenience for the project.

#### **Application:**

Liquid crystal and plasma multimedia advertising project
The large screen LCD curtain wall project
Display system of the large-scale projection apparatus
Control system of the industrial automation
Video conference system of the large-and-middle-scale
Display system of medical treatment guards
Bank, securities, financial system
VGA district monitoring system
Multimedia network tutoring system
Long distance KVM extender and switch
Remote network monitoring of servers
Large-and-middle-scale central control system

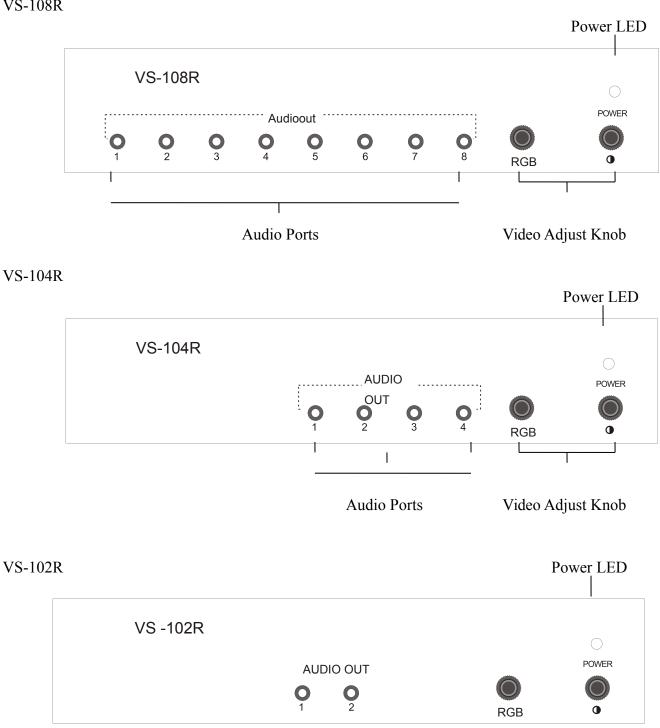
#### **♦** Input & Output Port:

Input: RJ45 Plug

Output: VGA Female + Audio Terminal

## **♦** Panel Sketch Map:

1. Front Panel VS-108R

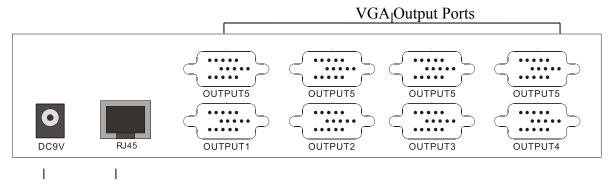


**Audio Ports** 

Video Adjust Knob

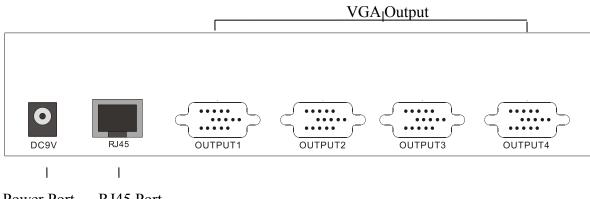
# 2. Rear Panel

## **VS-108R**



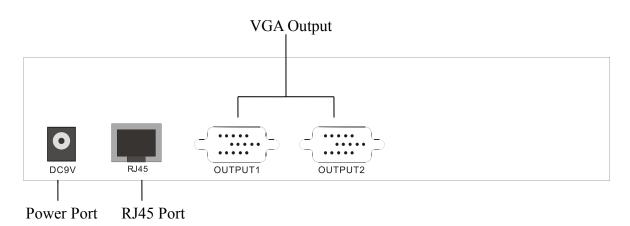
Power Port RJ45 Port

## VS-104R



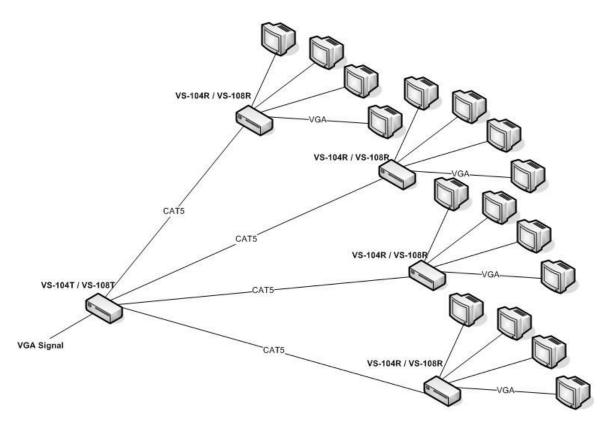
Power Port RJ45 Port

## VS-102R



- 1. Power Port: In put DC 9V 1000mA
- 2. Video Port

# **System Connection:**



# **♦** Specification:

Trait	Bandwidth	250MHz (-3dB) full load
		0-100 MHz + 0.1 dB to $-0.1 dB$
		0-130 MHz + 6 dB to -0.8 dB
	Brightness	−50dB@5MHz,−45dB@10MHz
	Color Interfere	30db@3lvIIIZ, 43db@10lvIIIZ
	Differential	0.1%,3.8-4.43MHz
	phase Error	0.170,3.0-4.43IVIIIZ
	Differential	0.1,3.8-4.43MHz
	Gain Error	0.1,5.0 <sup>-</sup> 4.451VIIIZ
	Largest transmit	5ns (+1ns)
	time delay	5115 (+1115)
Video Signal	Signal type	VGA signal
	Connection type	RJ45 interface input
	Minimum input	0.5Vp-p
	level positive	0.5 үр р
	Maximum input	2.0Vp-p
	level positive	
Input	I/O impedance	75Ω
	Echo Wasting	-30dB@5MHz
	Largest DC	1.5V
	compensate	1.5 v
	Synchronous	0.3V-0.4Vp-p
	Phase-lock	0.5 v-0.4 v p-p
Video	Signal Type	VGA Signal
Signal	Connection	VGA 15HDF Interface Output
Output	Туре	

	Minimum input level positive	0.5Vp-p
	Maximum input	2.0Vp-p
	level positive  I/O impedance	75Ω
	Echo wasting	-30dB@5MHz
	Largest DC compensate	+5Mv $-0$
	Maximum Level (600Ω)	+15dBm
Spec	Power Supply	Input 100-240V, Output DC9V
	MTTF	30000hours

#### **♦** Notice:

In order to make sure the equipment work normally, please follow the directions in installation, use and maintenance:

- 1). When installing and operating the device, please make sure proper power supply first, and then do other operations after it is initialized.
- 2). As signal and power transfer need custom cable, please use matched cable, unmatched cable may cause system work improperly or even damage the device.
- 3). Keep airy during operation to prevent high temperature.)
- 4). The equipment should be placed in a dry environment;
- 5). Please do not open the device without permission of professionals.