SC&T

VGA Extender

User Manual

Model : VE02AL

1 x 3 VGA & Stereo Audio Distribution Amplifier CAT5e
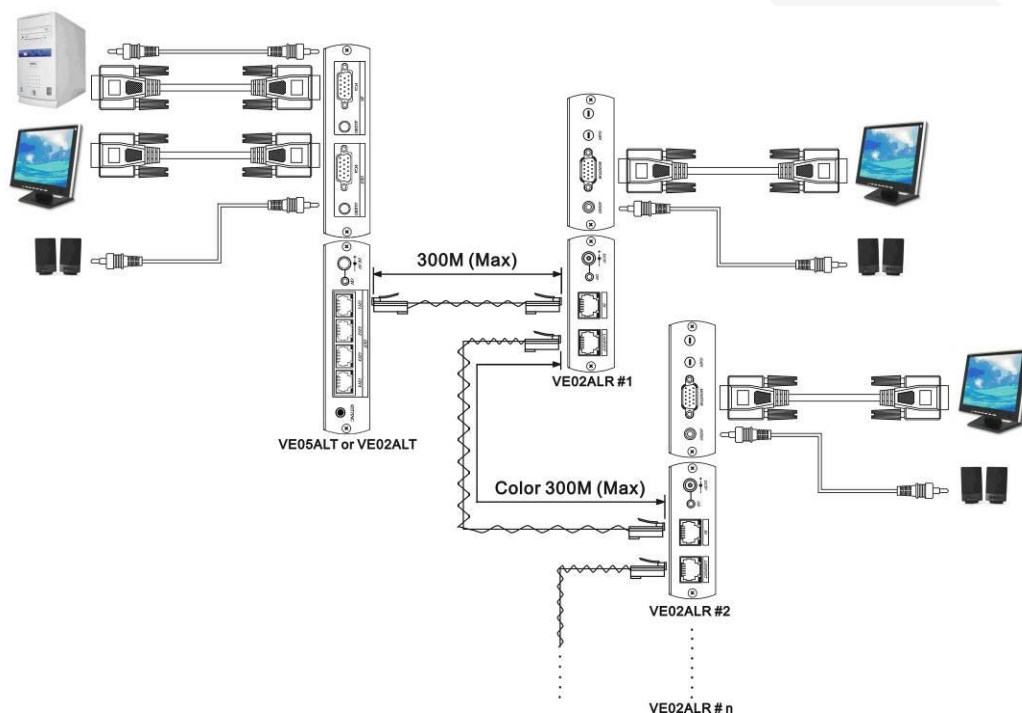Extender 200M (VE02ALT+VE02ALR)

Introduction

VE02AL is a VGA extender designed to use a cost-effective CAT5e UTP cable to carry the signal with stereo Audio signal. Its RX unit has a built-in chainable RJ45 output to connect another chainable RX for more working distance and VGA outputs. It's an optimal solution used in Shopping malls, airports, train & bus stations, boardrooms, and tradeshows…etc.
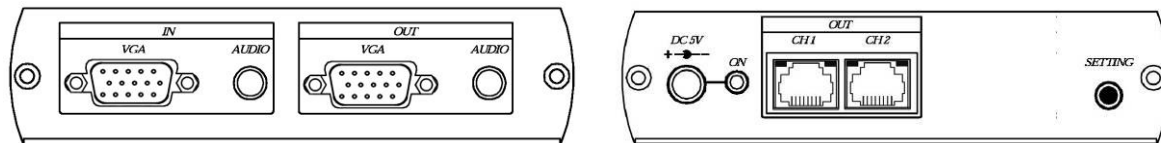
Features

- Extends and split a VGA into 2 ones.
- Resolution up to 1920x1200 @60Hz.
- Signal extension up to 300M.
- Built-in a VGA loop-out for local display.
- Built-in equalization, gain adjustment, chainable CAT5e output at remote unit.
- Supports analog/ digital audio.
- Supports daisy chain for RX unit. more transmission distance and multiple displays.
- Supports DDC. DDC2, DDC2B at TX unit
- Provides virtual DDC, DDC backup function, to avoid improper setting for resolution and frequency.
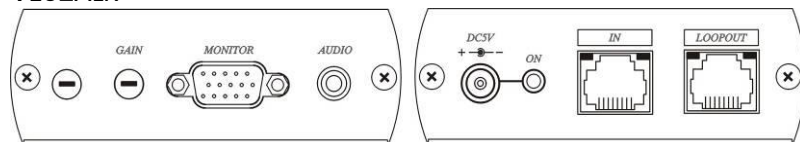
Installation View

Panel View

VE02ALT

VE02ALR

RJ45 Define

Link Cable (TIA/EIA-568-B)	
1. Orange-white	Red +
2. Orange	Red -
3. Green-white	Green +
4. Blue	Audio -
5. Blue-white	Audio +
6. Green	Green -
7. Brown-white	Blue +
8. Brown	Blue -

VE02ALT/VE05ALT LED

Blue (front panel): power on/off

RJ45 LED (Link Cable Connector)

Green: status (Refer the below)
Yellow: status (Refer the below)

LED Status Indication

CH1 ~ CH4	
Green on/off:	VGA Signal
Green flash:	EDID checksum error
Yellow on:	Use monitor DDC
Yellow off:	Use built in DDC
Yellow flash:	Monitor EDID checksum Error
Yellow, Green, Blue all flash:	Memory error

VE02ALT Local Unit EDID Set Up

Setup Monitor EDID:	When Yellow LED off, press "SETTING" button until Blue LED flash, then release the "SETTTING" button, yellow LED will be on.
Setup Built-in EDID:	When Yellow LED on, press "SETTING" button until Blue LED flash, then release the "SETTTING" button, yellow LED will be off.
Reset factory default:	First to unplug the power, then press "SETTTING" button until reconnect power and Blue LED flash.
Auto Backup EDID:	Change new monitor, it will start the monitor EDID backup.

VE02ALR Remote unit adjustment

EQ	Equalization (sharpness)
Gain	Signal boost (brightness)

VE02ALR LED

Blue (front panel): power on/off

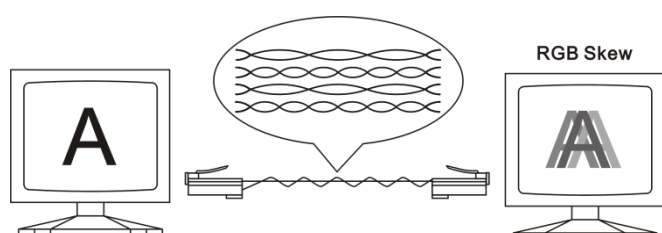## RJ45 LED (Link cable connector)
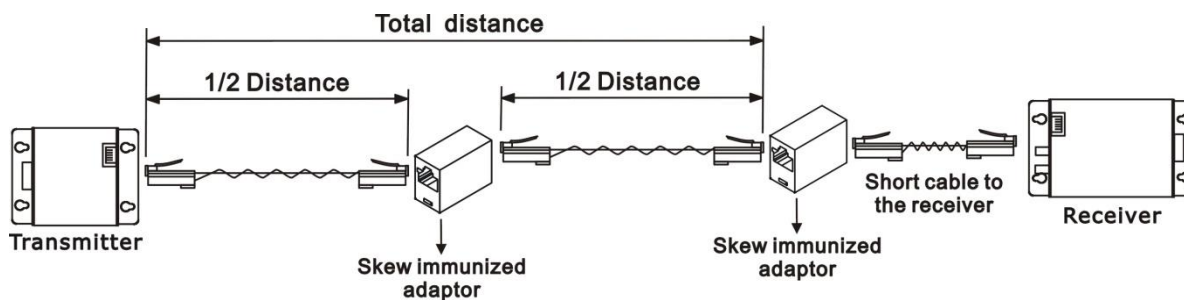
Green: signal lock (LED on)

Caution

The cabling must away from any equipment with electromagnetic wave, i.e.: microwave, radio equipment, high voltage lines.

Installation Tips

Due to the inside of CAT5 cable that the pairs of wires are twisted at different rates, and the different quality on cable itself and installation that will cause different signal arrival time at each pair. If there are big different at arrival time, that will cause RGB skew status. This is seen on the monitor as separation, or lack of convergence in colors. Normally it happens on long CAT 5 cable runs.

Recommend to use following cabling way to reduce skew status, to add special made "skew immunized adaptor", 2 pieces included at the package.

Caution

To avoid display equipment damaged, be sure to make correct cable connection and power for VE02ALT, VE05ALT, and VE02ALR before connecting VE02ALT, VE05ALT, and VE02ALR.

Installation Cable

Video Link cable using high quality CAT5E UTP/STP or CAT6 UTP cable.
Please noted STP cable could enhance noise rejection, but also less transmission range and picture sharpness quality.

Specification

ITEM NO.	VE02ALT	VE02ALR
Support		
Compliance	TTL	
Max. Video Resolution	1920 x 1200@60Hz	
Max. Transmission Distance	300M over CAT5e or Greater	
Video Bandwidth	700 MHz, -3dB (Remote 350MHz, -3dB)	150MHz
Audio Bandwidth	20 to 20KHz, -3dB	
Frequency	Horizontal at 30 to 95KHz, Vertical at 50 to 180Hz	
Ports & Interfaces		
Video Input	1 x DB15 (75Ω, 0.7Vp-p)	1 x RJ45
Video Output	2 x RJ45	1 x DB15 (75Ω, 0.7Vp-p)
Video Loop-out	1 x DB15 (75Ω, 0.7Vp-p)	1 x RJ45
Audio Interface	2 x 3.5mm Stereo Phone Jack (10KΩ, 3Vp-p)	1 x 3.5mm Stereo Phone Jack (10KΩ, 3V
Power		
Power Supply	DC 12V 2A	DC 12V 2A
Power Consumption	700mA (Max)	700mA (Max)
Ambient Temperature		
Operation	0 to 55℃	
Storage	-20 to 85℃	
Humidity	up to 95%	
Physical Characteristics		
Dimensions	125 x 95 x 30mm	88 x 95 x 30mm
Weight	270g	205g

RoHS CE