

# VGA & Stereo Audio CAT5 Extender With Chainable Output

ITEM NO.: VE10DAL, VE02ALR, VE02DALS

VE010DAL is designed for VGA +Stereo Audio/Digital Audio signal over cost effective CAT5 cable to instead of VGA and Audio cable. VE02AL/VE02DALS receiver built in chainable output/skew corrector to cascade the other receiver for working range over 300 meters. It is optimum video performance under long cable run and perfect for multiple monitor display.

This AV Extender is the smart, fast and cost-effective, eliminates costly and bulky VGA and Audio cable and the most efficient way to move multimedia content from player to display. Used in pairs, the VGA & Audio Extender is used in Shopping malls, public address systems, airports, train & bus station, boardrooms, trade shows, computer based training application.

## VE10DAL 1 in 11 Out VGA & Stereo/Digital Audio CAT5 Extender Distribution Amplifier In 1U Rack Mounting Panel

- Extends and distributes VGA and stereo/digital audio over one UTP CAT5 cable.
- Supports up to 1600x1200 @85Hz.
- Long range transmission up to 300 meters (Max.)
- Dual output: 1 VGA loop output for local, plus 10 x CAT5 RJ45 output for remote side.
- Built in one loop out allows cascading connection multi units for larger display system.
- Built in EDID and auto back up Monitor EDID.
- Audio by digital encoding process for sound undistorted.
- Digital audio support coax and optical input, auto selection.
- CAT5 receiver option model: VE02ALR, VE02DALS.



### Option Model:

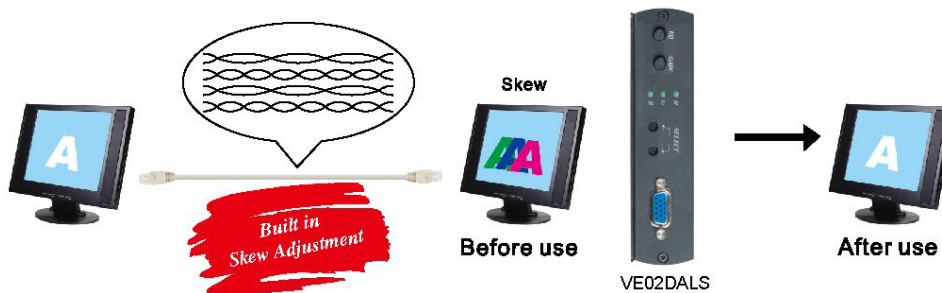
#### VE02ALR VGA with Stereo Audio CAT5 Receiver– Chainable function

- Work with VE02ALT, VE05ALT as receiver for extra remote VGA display equipment.
- It could be daisy chained for another VE02ALR to extended working range over 300 meters and multiple displays.
- Built in equalization, gain adjustment.
- Supports up to 1600x1200 @85Hz.

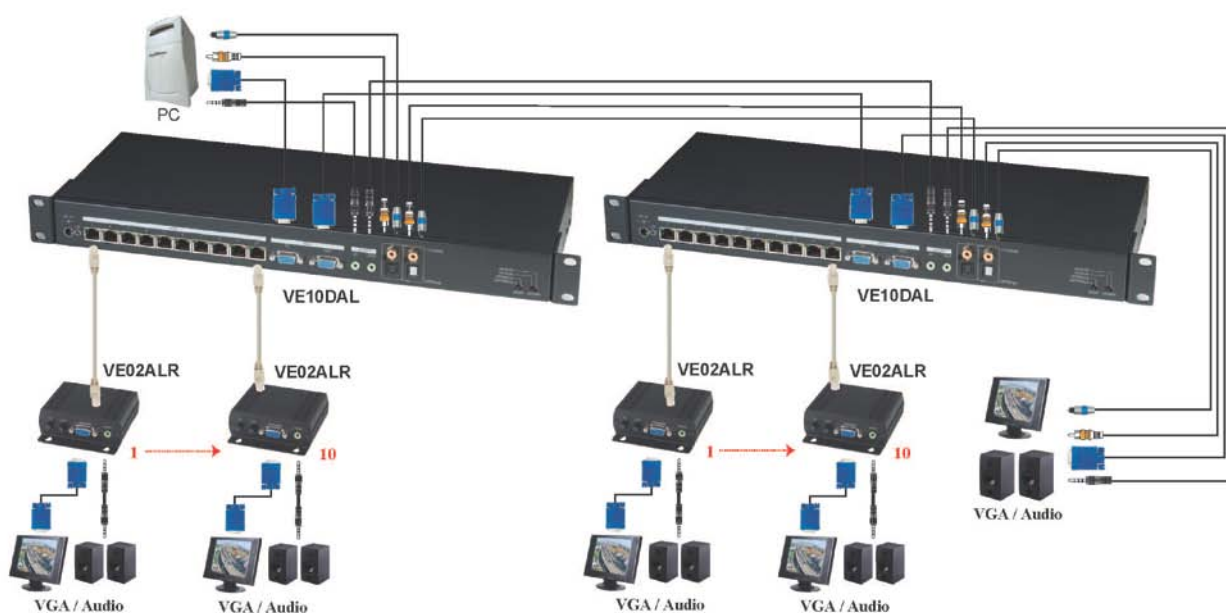


## VE02DALS VGA & Stereo/Digital Audio CAT5 Receiver– Built in Skew Corrector

- Work with VE01T, VE02T, VE05T, VE02DAT, VE02ALT, VE05ALT CAT5 VGA transmitter as a high quality receiver.
- Built in RGB skew adjustment for the optimum video performance under long cable run.
- It could be daisy chained for another VE02DALS to extended working range over 300 meters and multiple displays.
- Built in analog audio, digital audio output ( coaxial, optical)
- Built in equalization, gain adjustment.
- Supports up to 1600x1200 @85Hz.
- Digital transmission on analog stereo audio for sound undistorted.
- support LPCM 44.1K 、48K 、96K / 16bit stereo decode function, digital and analog could simultaneously output. Dolby Digital (AC3) and DTS digital output supported.



### View of installation:



**Cable:**

Video Link cable use 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.

**Transmission Distance:**

300 meters at 1600x1200 60Hz

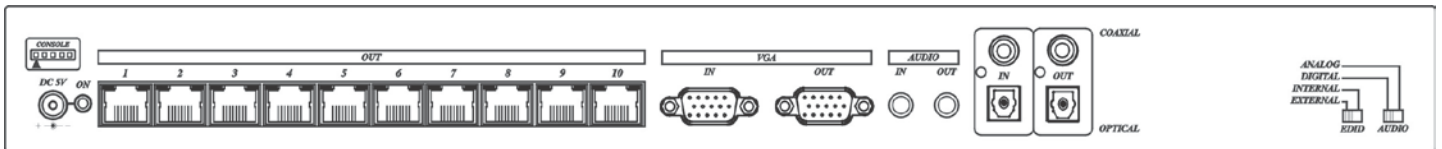
**RJ45 Define:**

**Link Cable (TIA/EIA-568-B )**

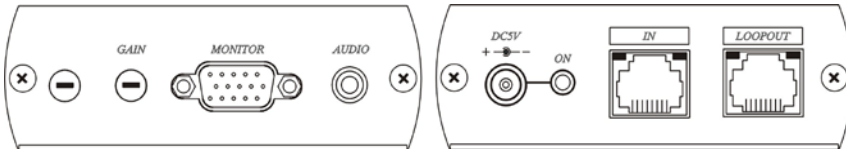
- |                 |               |
|-----------------|---------------|
| 1. Orange-white | Video Blue -  |
| 2. Orange       | Video Blue +  |
| 3. Green-white  | Video Green - |
| 4. Blue         | Audio +       |
| 5. Blue-white   | Audio -       |
| 6. Green        | Video Green+  |
| 7. Brown-white  | Video Red-    |
| 8. Brown        | Video Red+    |

**Panel View:**

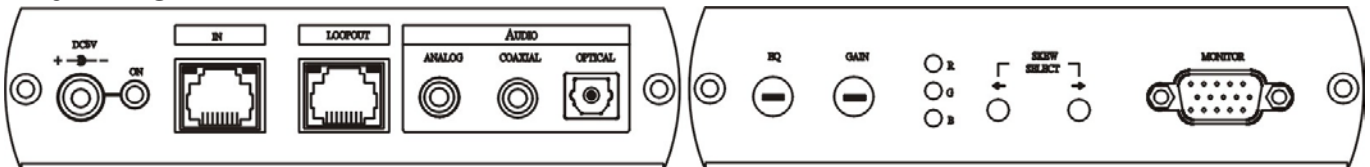
**VE10DAL**



**VE02ALR**



**VE02DALS**



**Connection Port:**

- |             |   |
|-------------|---|
| VGA IN      | VGA signal input                          |
| VGA OUT     | VGA signal LOOP OUT output                |
| AUDIO IN    | Analog stereo audio input.                |
| AUDIO OUT   | Analog stereo audio input LOOP OUT output |
| COAXIAL IN  | Coax digital audio input.                 |
| COAXIAL OUT | Coax digital audio LOOP OUT output        |
| OPTICAL IN  | Optical digital audio input               |
| OPTICAL IN  | Optical digital audio LOOP OUT output     |
| OUT 1 - 10  | Remote Cat.5e output                      |
| DC 5V       | Power input                               |
| CONSOLE     | Reserve                                   |

### **LED Indication:**

Bule	Power ON/OFF.
RJ45 Green	ON/OFF Video Signal
	Flash Non-Detected Sync Signal
RJ45 Yellow	ON/OFF Digital Audio Signal
	Flash Analog Audio input distortion

### **ON/OFF Instruction:**

EDID ← Use external (Loop Out) EDID.  
→ Use Internal default EDID.

AUDIO ← select digital audio input  
→ select analog audio input

### **Auto Backup EDID:**

If VGA Loop Out connect with local monitor, the VE10DAL will auto backup its EDID. When EDID mode switch with external EDID and also not connect with monitor, it will jump to previous EDID for computer recognition use.

### **Auto Selection Digital Audio Input:**

When audio input select "digital audio", it will auto select the audio signal with input one, either from coax or optical fiber.

When optical fiber and coax both with digital audio input, it will select optical fiber as priority.

When digital audio input disconnect over 0.5 seconds, it will auto re-detect the new digital audio input source.

### **Caution:**

1. The wiring must away from any equipment with electromagnetic wave, i.e.: microwave, cell phone, wireless AP, radio equipment, power lines in order to avoid interference or affect picture quality , reliability.
2. Long CAT5 run will cause Skew picture, to use VE02DALS receiver with skew corrector function to eliminate Skew.

## Specification:

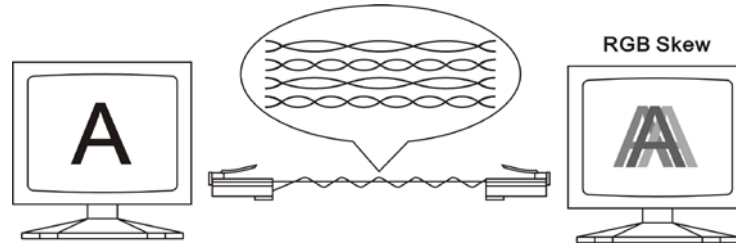
ITEM	VE10DAL	
Resolution	1600 x 1200 (Max)	
Video Bandwidth	Loop Out 500MHz (-3dB) / Cat.5e Out 350MHz (-3dB)	
Video Input / Output	R & G & B Video 75Ω 1Vp-p / H & V Sync TTL	
Video Connector	Female DE-15	
	Analog Audio	Digital Audio
Audio Bandwidth	20-20Khz (-3dB)	
Audio Input / Output	10KΩ 3Vp-p (Max)	75Ω SPDIF
Audio Connector	3.5mm Stereo Phone Jack	COAXIAL: RCA / OPTICAL: JIS F05
Power Supply	5V DC 2000mA Regulated (External)	
Power Consumption	1500mA (Max)	
Dimensions	482 x 177 x 44	
Shipping Weight (g)	2000	

ITEM NO.	VE02ALR	
Resolution	Up to 1600 x 1200 non-interlaced to 85 Hz	
Video Bandwidth	150MHz	
Video Output	RGB Analog, 75Ω, 0.7Vp-p	
Sync Output	H/V Separated, 5V TTL	
Horizontal Frequency	30-95 KHz	
Vertical Frequency	50-180 Hz	
VGA Connector	15-pin Mini D-Sub (High Density)	
Analog Audio Output	10KΩ, 3Vp-p (Max)	
Analog Audio Bandwidth	20-20KHz	
Analog Audio Connector	3.5mm Stereo Phone jack	
Link Connector	RJ-45	
Max Distance	Up to 1000 ft. (300M)	
Power Supply	5V DC 2000mA Regulated (External)	
Power Consumption	700mA (Max)	
Dimensions (mm)	88 x 96 x 30	
Weight (g)	200	

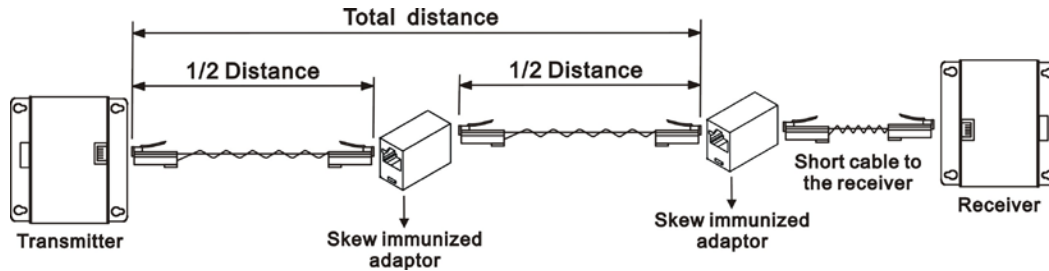
ITEM NO.	VE02DALS	
Resolution	Up to 1600 x 1200 non-interlaced to 85 Hz	
Video Bandwidth	122MHz(-3dB)	
Video Output	15 Pin D-SUB x 1 (R.G.B 1V p-p 75Ω · H.V Sync TTL)	
Sync Output	H/V Separated, 5V TTL	
Horizontal Frequency	30-95 KHz	
Vertical Frequency	50-180 Hz	
VGA Connector	15-pin Mini D-Sub (High Density)	
Audio Output	Analog audio: 3.5mm Stereo Phone jack 10KΩ, 3Vp-p (Max) Digital audio: Optical x 1, coax RCA x 1	
Audio Bandwidth	20-20KHz (-3dB)	
Skew adjustment	0 – 62ns ( 2ns Step )	
Link Connector	RJ-45	
Max Distance	Up to 1000 ft. (300M)	
Power Supply	5V DC 2000mA Regulated (External)	
Power Consumption	1000mA (Max)	
Dimensions (mm)	125 x 95 x 30	
Weight (g)	280	

**Installation Tips:**

1. 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.



2. 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 VE10DAL and VE02ALR before connecting VE10DAL,VE02ALR