What's in the Box?

PART NO.	QTY	DESCRIPTION
VSA-100S	1	Skew for all VGA receivers Includes: [VSA-100, (CCVGAMM06), and (PS5VD2A)]
Power Supply	1	PS5VDC2A
User Manual	1	

Technical Specifications

VIDEO	
Format	VGA RGB Analog (75Ω, 0.7Vp-p)
Resolution	Up to 1600x1200 @ 85Hz2048x1536 @ 60Hz
Input Interface	(1) HD-15 Female
Output Interface	(1) HD-15 Female
Total, Step Delay	62ns, 2ns
H Frequency Range	30-95KHz
V Frequency Range	50-180Hz
OTHER	
Power	External 5VDC2A
Dimensions	5"W x 1.25"H x 2.5"D
Weight	0.3 lbs.
Approvals	Device: CE, ROHS; Power Supply: C-UL US, CE

NOTICE

For more information, visit www.smartavi.com.

Smart-**AVI**
SMART AUDIO VIDEO INNOVATION

Smart-**AVI**
SMART AUDIO VIDEO INNOVATION

Installation Manual

VSA-100
Smart Video Skew Adjuster

Compensates for Skew Caused by Long Runs of Twisted Pair Cable

www.smartavi.com

Introduction

The VSA-100 is Smart Adjustor that compensates for skew delay between any Red, Green Blue signals transmitted over a twisted pair cable. Any CAT5 or CAT6 cable can introduce delay between the pairs, due to the varying lengths of each pair. The delay causes color distortion and improper alignment. Skew delay increases as the length of the cable increases. The VSA-100 corrects the skew of each color independently, making it the perfect skew correction tool.

Features

- Aligns the RGB of any analog video signal
- Each color can be adjusted individually
- Supports UXVGA and Y-Pb-Pr
- 62 ns total delay
- 2 ns delay step increments
- Memorize and Button Lock functions
- Digitally saves settings and remembers last state
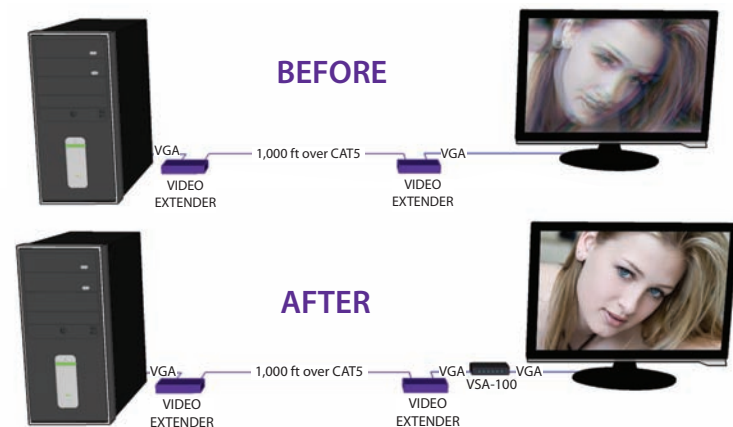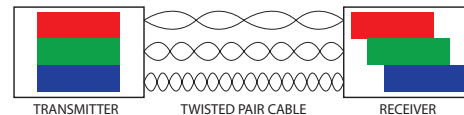- Compatible with most of the SmartAVI extenders

Applications

- Corporate or Educational Presentations
- Financial (Remote Servers/User Control)
- Call Centers
- Industrial (Long-Range Workstation Isolation)
- Information Terminals/Kiosks
- Airport Installations (Air Traffic Control/Passenger Information)
- Educational Environments with remote displays

Product - Installation Diagram

What is Skew Delay?

CAT5 and CAT6 cables have pairs of wires that are twisted at different rates, and some pairs are longer than others. Because RGB signals are sent along different pairs, there is a delay in the arrival of the signals at the receiver. This results in color separation and degradation of the image quality. The longer the cable, the worse the skew delay.

BEFORE

VGA — 1,000 ft over CAT5 — VGA

VIDEO EXTENDER   VIDEO EXTENDER

AFTER

VGA — 1,000 ft over CAT5 — VGA — VGA VSA-100

VIDEO EXTENDER   VIDEO EXTENDER

TRANSMITTER   TWISTED PAIR CABLE   RECEIVER

Installation

1. Turn off the receiving video extender, the display and the VSA-100.
2. Connect the included male to male VGA cable to the receiving video extender.
3. Connect the other end of that male to male VGA cable to the input of the VSA-100.
4. Connect the VGA display to the output of the VSA-100.
5. Power on the receiving video extender and the display.
6. Connect the power cord to the VSA-100.

Using the VSA-100

The skew of the signal is adjusted using the three color channels of VGA which are Red, Green and Blue. There are six buttons on the front of the VSA-100, two for each color. When looking at the image on the display, choose the color that looks most out of line compared to the others. For example, if the image looks like it has green fringe, choose the green adjustment. While changing the skew of a particular color channel, watch the image for changes in alignment. It is best to choose one color that the other two will be aligned to. For example if green was the best aligned color, you would adjust only the blue and red to compensate. Align the colors in the image until there is no visible fringe and the image looks clear. The VSA-100 will retain this setting even after it is powered off.

VSA-100 Front

VSA-100 Rear