Technical Specifications

Transmitter and receiver	
Video	
Bandwidth	400MHz
Analog signal Level	1 volt
Impedance	75 ohms
Connector	High density HD15
Format	VGA/SVGA/XGA/UXGA/RGBH/RGsB
Sync	TTL horizontal SyncRange: 15 to 130 KHz Vertical Sync Range 30 to 120 Hz
Audio	
Bandwidth	20 KHz
Signal level	0dB
Impedance	10K ohms
Connector	3.5mm jack socket
System Cable	
Type	Cat5 UTP EIA 568A
Connector	RJ45
Power	
Requirements	5V DC @500mA
Connector	5x2.1 DC Jack

For more information, visit www.smartavi.com.

Rack Mountable Option

Our SmartRack is the perfect solution to allow virtually all SmartAVI devices to be custom mounted in a standard 19" server rack. The SmartRack is fully adjustable and can secure/organize several devices.

Smart-AVI

SMART AUDIO VIDEO INNOVATION

SmartAVI, Inc. / Twitter: smartavi
11651 Vanowen St. North Hollywood, CA 91605
Tel: (818) 503-6200 Fax: (818) 503-6208
http://www.SmartAVI.com

Smart-AVI
Smart Audio Video Integration

User Manual

VCA100

Use a single CAT5 to broadcast high resolution UXGA and stereo audio 1000ft away at the most affordable price in the market.
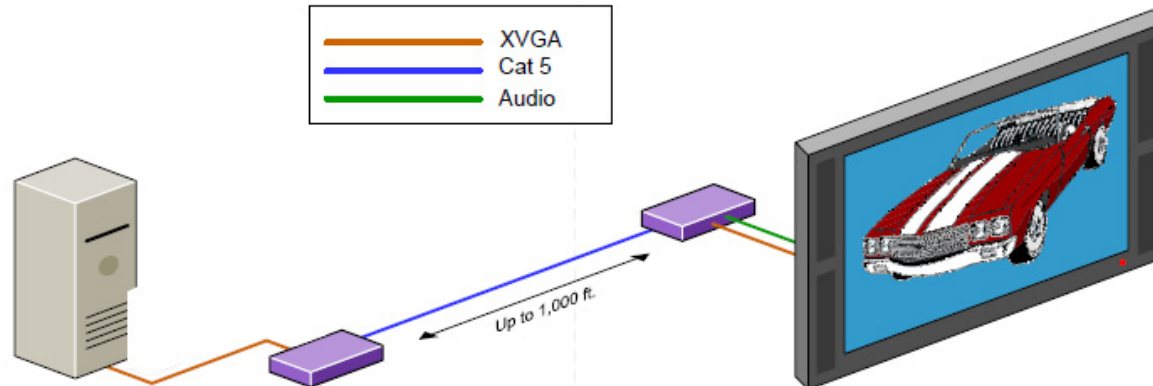
www.smartavi.com

Introduction

The VCA100 allows transmission of high definition video and stereo audio signals over a standard CAT-5 UTP cable over distances of up to 1000 ft.

Features

- Uses easy to install, inexpensive CAT5.
- Output reaches up to 1,000 feet.
- Resolutions up to 1900x1200.
- 300 MHz Bandwidth.
- Compatible with VGA, XGA, Sun, MAC and SGI signals.
- Sync Format / Polarity Preservation.
- High ground loop immunity.
- Built-in lightning, power surge and transient protection.
- Designated trimmer in the remote unit to compensate for cable length.
- Compact Metal Case Enclosure.
- Remote Units come with Buffered Outputs.
- External power supply.

What's in the box?

Description	Part Number
VCA UXGA/Audio Transmitter	VCA-TX100
5VDC 2A Power Supply	PS-5VDC2A
VGA cable Male to Female	CC-VGAMM-06
Optional Equipment	
VCAT-RX Receiver Unit	VCA-RX100

Installation Diagram

XVGA	
Cat 5	
Audio	

Up to 1,000 ft.

VCA100 Transmitter Installation Diagram   VCA100 Receiver Installation Diagram
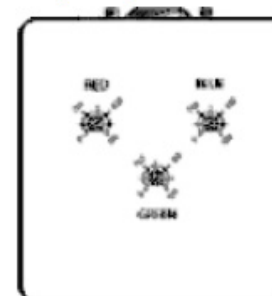
Connecting The Transmitter

1. Connect the output of the computer video card to the video input of the transmitter using the included male to male video cable.
2. Connect the audio output cable from the computer to the transmitter
3. In the back of the unit connect the CAT5 cable that will connect to the receiver unit.
4. Connect the power supply.

*NOTE: You can not use RS232 and IR at the same time.

Connecting The Receiver

1. Connect CAT5 cable (coming from the transmitter) to the back of the receiver.
2. Connect monitors to the VGA out connectors on the front of the receiver.
3. Connect the speakers to the audio out connectors on the front of the receiver unit.
4. Connect the power supply.

Adjusting and Fine Tuning the Signal

In order to fine tune the signal, adjust the individual dials one at a time starting with GREEN, then BLUE, and lastly RED. As you turn the dials you will notice the colors slightly change as you increase or decrease the strength.

Preparing & Connecting System CAT5 Cable

Following is the wiring standard for terminating CAT 5 cable using RJ-45 connector:

Pair 1	Pins 1 & 2
Pair 2	Pins 3 & 6
Pair 3	Pins 4 & 5
Pair 4	Pins 7 & 8

Connectors: RJ-45
Capacitance: 14 pf/ft (46.2 pf/m)
Conductor Gauge: 24 AWG
Impedance: 100 +/- 15 ohms
4 - Pair