### **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	OdB	
Impedance	10K ohms	
Connector	3.5mm jack socket	
System Cable		
Туре	Cat5 UTP EIA 568A	
Connector	RJ45	
Power		
Requirements	5V DC @500mA	
Connector	5x2.1 DC Jack	

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# Smart-AVI Smart Audio Video Integration

# **User Manual**

## **VCA400**



Use a single CAT5 to broadcast high resolution UXGA and stereo audio to 4 locations1000ft away

#### Smart-AVI

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#### Introduction

The VCA400 allows transmission of high definition video and stereo audio signals over a standard CAT-5 UTP cable over distances of up to 1000 ft.

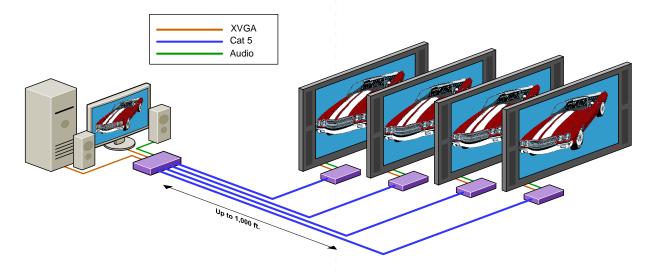
#### **Features**

- Uses easy to install, inexpensive CAT5.
- Output reaches up to 1,000 feet.
- Resolutions up to 1900x1200.
- 300 MHz Bandwidth.
- Sends high-resolution VGA and stereo audio signals from one source to up to 4 devices.
- Compatible with VGA, XGA, Sun, MAC and SGI
- 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	
4 port VCA UXGA/Audio Transmitter	VCA-TX400	
. ,		
5VDC 1A Power Supply	PS-5D1A-US	
VGA cable Male to Female	CC-VGAMM-06	
Optional Equipment		
VCAT-RX Receiver Unit	VCA-RX100	

## **Installation Diagram**



**VCAT Transmitter Installation Diagram** 

VCAT Receiver Installation Diagram

#### Connecting The Transmitter

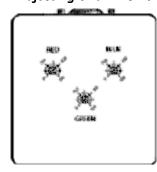
- 1. Connect the output of the computer video card to the video input of the transmitter using the included male to male video cable.
- 2. Connect local monitor to the VGA out of the transmitter.
- 3. Connect the audio output cable from the computer to the transmitter
- 4. In the back of the unit connect the CAT5 cable that will connect to the receiver unit.
- 5. 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:

Pins 1 & 2 Pair 1 Pair 2 Pins 3 & 6

Pair 3 Pins 4 & 5 Pair 4 Pins 7 & 8



Connectors:

Capacitance: Conductor Gauge:

**24 AWG** 

14 pf/ft (46.2 pf/m)

100 +/- 15 ohms Impedance:

4 - Pair

**RJ-45**