

Active UTP Video Balun Receiver

Active Vision's active video balun receiver conditions balanced signal and converts it into an amplified unbalanced signal with no video distortion, which can be applied in applications such as video monitoring and video meeting. It can transmit four channels of video simultaneously on a single CAT-5 twisted pair wire. It can simplify wiring and lower expenses.

Features

- Save project wiring expenses, each pair of wire can transmit one channel of video signal and one common CAT-5 unshielded twisted pair wire can simultaneously transmit four channels of video
- If used with a passive transceiver the farthest transmission distance will be 3,000ft, and the farthest transmission distance can reach 8,000ft if used with an active transmitter
- Up to 16 Receivers may be rack mounted using the 16P Rack Panel Kit
- Built-in transient suppression protection

Technical specifications:

- Frequency response: DC-8MHZ
- CMRR (Common Mode Rejection Ratio): 60DB
- Impedance: BNC terminal: 75Ω, Connection terminal: 100Ω
- Working temperature: -10°C ~ 70°C
- Storage temperature: -30°C ~ 70°C
- Applicable to NTSC, PAL, SECAM and CCIR systems
- External dimension: 75mm*34mm*25mm (excluding BNC)
- Power supply: DC12V (Max:50mA)

Type of required wire:

Only use standard unshielded CAT-5 or better twisted pair wire. The wire quality will directly affect the transmitted image and transmission distance.

Characteristic impedance: 100Ω±20Ω

DC loop resistance: 18Ω/100m

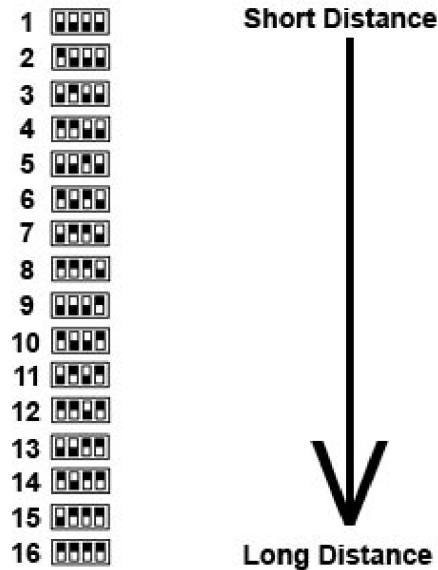
Differential capacitance: 62pf/m (Maximum)

Installation Instructions:

Connect the white striped wire of a pair from the CAT-5 unshielded twisted pair cable to the "+" terminal of the green socket and connect the solid color wire to the "-" terminal. Connect the BNC interface of the video balun receiver to your monitor or recording equipment. If there is a splice in the circuit, please use a splice block or termination strip to ensure perfect contact at the splice.

Adjusting method:

Adjust the "BRIGHTNESS" knob to adjust the image brightness, then adjust the "SHARPNESS" switches to adjust the image sharpness and color. Adjust the switches according to the transmission distance. Use the diagram below for your reference.



Frequently Asked Questions

Why does my video look like a scrambled TV signal?

This typically indicates reversed polarity.

Can shielded twisted pair be used?

Shielded wire can be used up to a few hundred feet. However we do not recommend it. It's high-frequency roll-off will severely degrade the transmission distance and performance.

Can Category 6 wire be used?

Yes. Unshielded Twisted Pair wire, Category 5 or better, can be used with UTP video transceivers.

Can I transmit more than one video signal in a multi-pair wire bundle?

Yes. One of the benefits of using Active Vision video transceivers is the interference rejection. UTP video signals can reside in the same wire bundle as multiple video signals, ringing telephones, Ethernet, low voltage power, RS-422, RS-485, etc.

Application Diagram

1) Passive - Active UTP Video Transmission



2) Active - Active UTP Video Transmission

