

One Channel Active Balun



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Description:

Active CCTV Video baluns is provided for long-distance transmission of real-time color and monochrome video signals as well as all baseband (composite) video signals by economical UTP (Unshielded Twisted Pair) cable. These amplified (active) products enable video transmissions up to 1.8 kilometers across Category 5 cabling or better.

Features:

- Easy & economical assembly by UTP cable
- Spark voltage protector built-in
- Impedance matched network built-in
- Distance switch provided
- Luma & Chroma adjustable
- Use with both passive and active transmitters for various distance 1000m: use with our any CCTV passive transceiver Balun 1800m: use with our CCTV active transmitter balun.
- Wide power range 12-24Vac/dc
- Long distance transmission

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Specification:

Environment	Close-Circuit TV (CCTV) equipment for security and surveillance.	
Devices	CCTV cameras, monitors, sequencers, multiplexers, digital video recorders (DVR) and other CCTV equipment.	
Bandwidth	DC to 8MHz	
Common mode rejection	60 dB typ. at 15KHz to 5MHz	
Differential Capacitance	19 Pf/ft max. (62 Pf/m max.)	
Distance Switch 3-positions	500m: 500m or less 1.0km: 500~1000m 1.8km 1000m or longer, up to 1800m	
Power Required	Transmitter: 24Vac/dc, 250mA max. Receiver: 12Vac/dc, 24Vdc, 100mA max.	
Power On	Blue LED light	
Video On	Yellow-green LED light	
Networking Wiring	UTP Cat. 5 or better, AWG #24 typically Impedance: 100 ohms	
DC Loop Resistance	Refer to table 1	
Transmissive Distance	1.8Km across Cat. 5 cable or better	
Impedance	Coax: female BNC 75 ohms UTP: Terminal Block 100 ohms	



Installation:

- 1. Measure the transmissive distances
 - a.Short the two conductors at the far end (refer to Fig.1)
- b.Measure the Loop resistance by an ohms meter (refer to Fig.1 and table 1)

	CAT.5	Loop Resistances/100 M
\square	20 AWG (0.7mm)	7 ohms
	22 AWG (0.6mm)	11 ohms
UTP CABLE SHORT	24 AWG (0.5mm)	18 ohms

Fig. 1: Loop Resistances measurements

Table 1: Cable resistances

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- Set the distance switch to the right position by the slide switch on top of the transmitter. The distance should include the length of coaxial cables: 500m / 1.0km / 1.8km
- 3. Wiring the UTP cable into the terminal blocks on the both transmitter & receiver

individually by following instructions shown on the terminal blocks. **24Vac/dc of Transmitter, 12~24VAC/DC of receiver:** connect to power supply, no polarity; **Ground:** connect to earth ground; **Video** +/-: connect to one pair of UTP cable; be sure to use the same pair and polarities for both transmitter and receiver.

- 4. Plug BNC connectors on both sides.
- 5. Power units on
- a.Check all hook-ups before power units on.
- ${\sf b}. {\sf Always}$ use the specified power source shown in specification table.
- c.Pay attention to LED indicators:
- POWER ON----Blue Light / VIDEO ON -----Yellow-Green Light
- 6. Adjust the VRs on top of Receiver to get the best image display.

Application:

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Troubleshooting:

No Image: Check the power sources and wirings.

<u>Poor image display:</u>

- a. Check the cable quality
- b. Check the wirings firmly
- c. Check the polarity of Video Signal
- d. Check distance set switch at right position. Be sure to include the length of coaxial cables while setting this switch.
- e. Check camera settings: focus intensity...may check with another portable monitor.
- f. Check adjustments of equalizations both Luma & chroma variable resistors, wrong adjustment may cause asynchronous signal and dizzy or distorted pictures

Warranty:

Our products have a limited lifetime warranty. We warrant that this product is free from defect in materials and workmanship, for the life of the product. The warranty is in lieu of any other warranties, express or implied. This warranty does not apply to units abused through misuse or subjected to improper and/or excessive voltage, beyond our control. We assume no responsibility for damages or penalties incurred resulting from the use of this product. Our liability under any warranties shall be discharged by replacing or repairing, at our option, the defective product. Our liability for any product shall not exceed a refund of the purchase price. The warranty listed here is intended only as a summary of your full and complete warranty. For a full and complete warranty of this product, please contact us.

Caution:

Do not attempt to open the body, as there are no user-serviceable parts inside Balun. Opening the unit will void your warranty.

