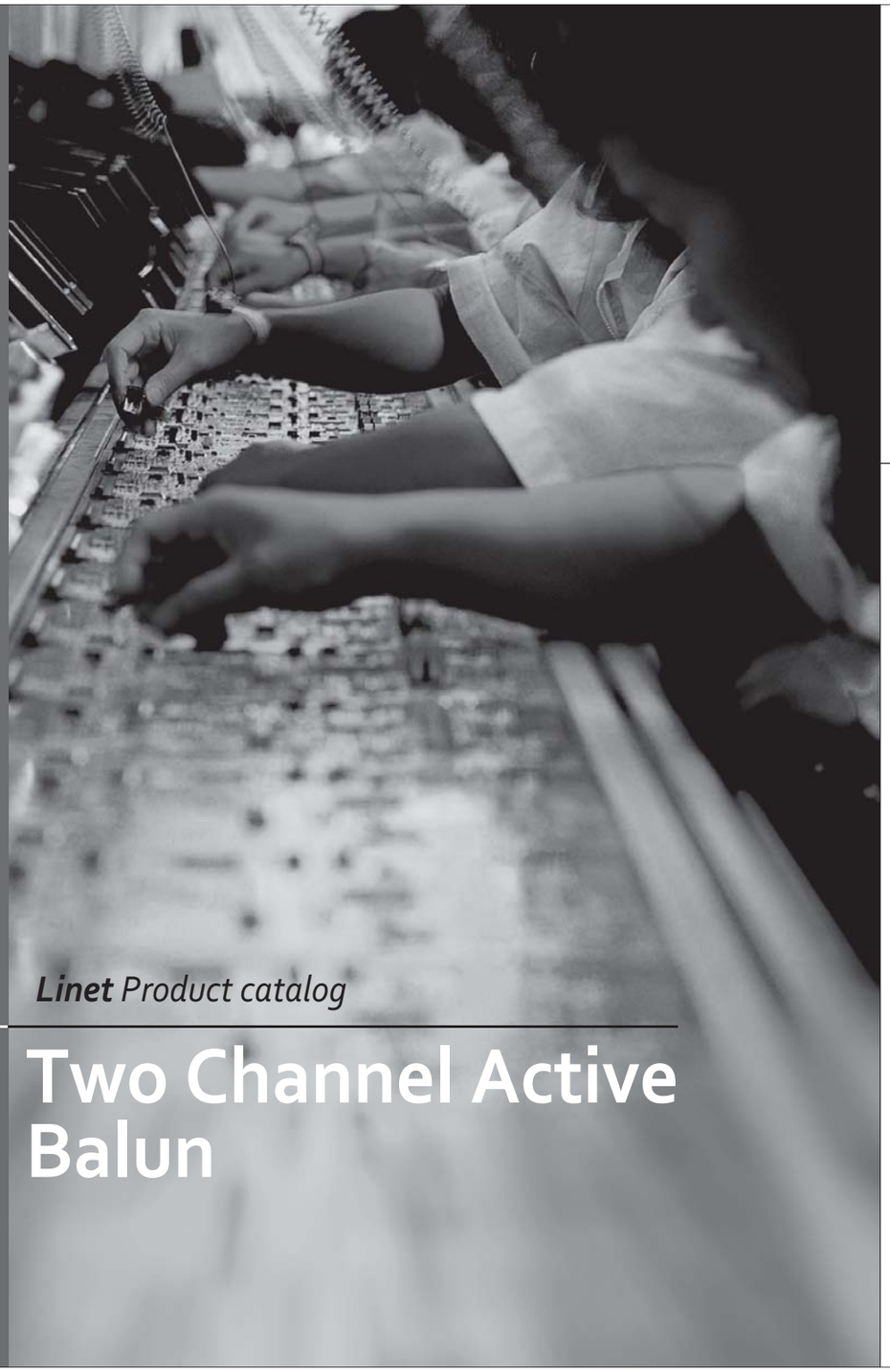


Linet *Product catalog*

Two Channel Active Balun

Two Channel Active Balun

Description:

Active CCTV Video Balun are provided for long-distance video signals to share the same wire bundling with data, telephony and low-voltage power circuits, thanks to the product special shielding design and low emissions capability. It also offers protection against voltage spikes and helps prevent interference from ground potential differences. The transmitter provides for the transmission of one audio and video signal. This capability is useful for connection with both a monitor and a VCR (videocassette recorder) at the same time. Active CCTV Video Balun enables video transmissions of up to 1.8 kilometers across Category 5 cabling or better.

The transmitter offers multiple connection options, each unit equipped with both an RJ45 jack and a terminal block. The terminal block can be used with 16 to 24 AWG wire. The RJ45 jack is selected for 24 AWG UTP cable.

Features:

- 2 Video outputs for DVR and Monitor
- 1 Audio output
- Easy & economical assembly by UTP cable
- Spark voltage protector built-in
- Impedance matched network built-in
- Distance switch provided
- Luma & Chroma adjustable
- Wide power range 12-24VAC/DC
- Long distance transmission

Transmitter

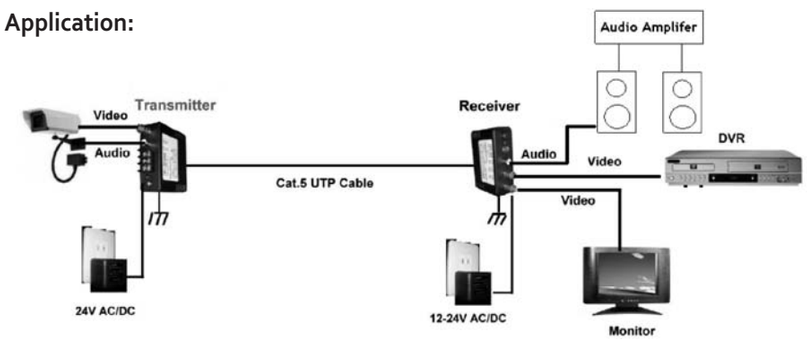
Receiver

The content subject to change without notice

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	Video: DC to 8MHz Audio: 20Hz to 20KHz
Common Mode Rejection	60 dB typical over the frequency range
Distance Switch 3-positions	500m: 500m or less 1.0km: 500~1000m 1.8km: over 1000m and up to 1800m
Power Required (Not included)	12~24VAC/DC, 250mA or bigger. May share 24Vac power with camera.
Power On	Blue LED light
Cable-UTP	UTP Cat. 5 or better, AWG #24 typically Impedance: 100 ohms Max. Cap.:20pf/ft Attenuation: 6.6dB/1000 ft. at 1MHz
DC Loop Resistance	Refer to table 1
Cable-Coax	Impedance: 75 ohms at 1MHz (RG59/U) Max. 25ft. of coax allowed per end to end link
Connectors	Transmitter: BNC female*1,RCA female*1,RJ45 jack*1,8-pin Terminal Block*1 DC jack (2.1*5.5 in mm), 3-pin DC terminal block. Receiver: BNC female*2,RCA female*1,RJ45 jack*1,8-pin Terminal Block*1 DC jack (2.1*5.5 in mm).
Maximum Distance	Video/Audio: 1.5Km across Cat. 5 cable or better
Dimensions	3.2 x 2.4x 0.9 in (81X60X24mm)
Temperature	Operating temp. 0 to 55° C Storage temp. -22 to 85°C Humidity up to 95%
Weight	183g
Material	ABS

Application:



Installation:

1. Run an UTP cable and 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 Table1)

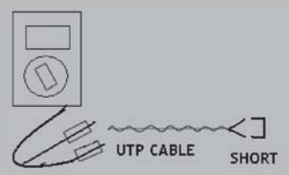


Fig. 1: Loop Resistances measurements

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

Table 1: Cable resistances

2. 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.

3. Connect the UTP cable between transmitter and receiver in either way.
   ---Use the RJ45 connectors for the connection:
   Assemble the RJ45 plugs on both end of UTP cable, and then insert them to RJ45 Jacks on both transmitter and receiver individually.

   ---Use the 8-pin terminal block for the connection: Solid wire is easier to use.
   Strip the UTP Cable Jacket with proper length (approximate 20mm) at both ends. And then strip the following 2 pairs of UTP cable, Brown/White Brown and Green/ White Green, with proper length (approximate 5mm).

   Run above two pairs into the video+/- and Audio+/- terminals on both transmitter and receiver individually by following instruction: White Brown wire: video+ / Brown wire: video- / White Green: Audio+ / Green wire: Audio-

   Easily to release the wire by pushing down the upper button via a small minus screw driver.

4. Run a coaxial cable which has BNC male connectors at both ends and connect this cable between camera and transmitter.

5. Run a coaxial cable which has RCA male connectors at both ends and connect this cable between audio source and transmitter.

6. Run a coaxial cable which has BNC male connectors at both ends and connect this cable between DVR and receiver.

7. Run a coaxial cable which has BNC male connectors at both ends and connect this cable between monitor and receiver.

8. Run a coaxial cable which has RCA male connectors at both ends and connect this cable between receiver and audio equipment.

9. Connect the power supplies to both transmitter and receiver, following the specification of power supply listed above. The transmitter offers an optional hook up via open wires for power supply connection.

10. Power units on
    a、Double check all hook-ups before powering units on.
    b、Always use the specified power source shown in specification table.
    c、Pay attention to LED indicators.
    d、Adjust the VRs on top of Receiver to get the best image display.

Troubleshooting:

No Image/audio: Check the power sources and all connections.

Poor image display and audio:

a. Check the cable quality, cables with poor quality might affect the transmissive distance.

b. Check all the connections.

c. Check the polarity of Video/Audio signals.

d. Check distance set switch at right position. Be sure to include the length of coaxial cables while setting this switch. Check if the distance is too long.

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.