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4 CH CCTV Video Balun

with Data & Power thru

Description:

The Lemar 4 CH CCTV Video Balun allows 4 base-band composite video signals and Power supply as well Data to be transmitted via unshielded twisted pair (UTP) cable for more versatile cabling. The 4 CH CCTV Balun can be used with CCTV Balun with power & data thru or CCTV Balun with Power converter for wide applications, and allow you to eliminate more expensive coaxial cables, including coupling signals from remote video cameras to display systems, video capture, security and surveillance monitoring applications.

Features:

1. 4 balun are installed within one package.
2. One DC jack provided one power input and be shared by four cameras.
3. One terminal block with two pins provided one Data signal input to control four PTZ cameras.
4. Located at DVR or monitor side.

Specification:

Environment	CCTV equipment for security and surveillance.
Devices	CCTV cameras, monitors, multiplexers, digital video recorders (DVR) and other CCTV equipment.
Bandwidth	Video DC to 8MHz
Maximum input	1.0Vp-p
Insertion loss	Max. 2dB per pair over the frequency range from DC to 8MHz
Return loss	Greater than 15dB over the frequency range from DC to 8MHz
Cross Talk	Greater than 40dB over the frequency range from DC to 8MHz
Common mode rejection	Greater than 40dB at 8MHz
Video transmission Max. distance	Color: Cat.5 2230ft (680 Meter) Monochrome: Cat.5 2550ft (780 Meter) No qualified cable might decrease the transmission distance.
Cable-UTP	Cat 5 or better, 24 gauge typical Max. capacitance :20pf/ft Attenuation: 6.6dB/1000ft at 1MHz
Cable-Coax	Impedance: 75 ohm at 1MHz Max. 25ft. of coax allowed per end to end link
Connectors	RJ45 Jack, BNC Male, DC jack and a two pins of terminal block
Polarities of each CH	Video 8+/- Power thru 1,3+/-2,6- Data thru 4+/- Four CHs share the same Power and Data
Impedance	75 ohm to 100 ohm (or 75ohm to 120ohm on request)
Temperature	Operating temp. 0 to 55° C Storage temp. -22 to 85° C Humidity up to 95%
Data	PTZ by RS485. It can be transmitted up to to 1000m. over cat.5 UTP.
Dimension	110*60*27 in mm, connectors are not included.
Weight	110g

Remote Power: (ie: 24VAC, 28VAC)

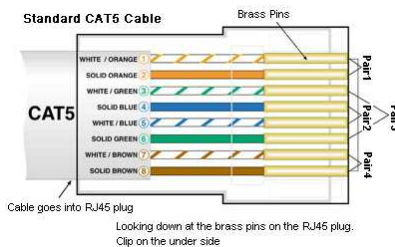
Max. Distance @ 24Vac via an UTP Cat 5 cable (24 AWG): Based on 10% voltage drop at camera. <i>Longer distance may be achieved @ 28Vac or use Power converter with Balun items.</i>	VA	Distance
	5VA	558ft(170m)
	10VA	279ft (85m)
	20VA	141ft (43m)
	30VA	92ft (28m)
Maximum input voltage:	50Vdc/ac	
imum current Rating:	4.5A	

Installation:

1. Run coaxial cables between cameras and the CCTV Baluns at cameras' side.
2. Connect power and data to camera.
3. Run UTP cables between CCTV Baluns and CCTV 4 CH Video Balun.

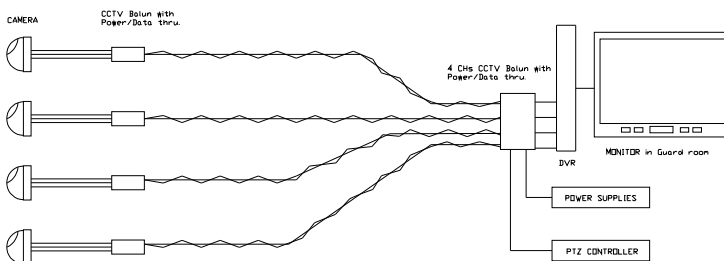
Please pay attention to the wirings of RJ45 plugs by following figures, it is easy to make the mistake at this step. Please make sure you get all the cores into RJ45 plug in correct order and all cores go to the end of RJ45 plug before crimping. The brass pins will be pressed in to the individual cores and locked the plug on to the cable by crimping tool.

Pin	Color of Core
1	White / Orange
2	Solid Orange
3	White / Green
4	Solid Blue
5	White / Blue
6	Solid Green
7	White / Brown
8	Solid Brown



4. Plug the outputs of power supply to DC jack on CCTV 4 CH Video Balun.
5. Connect Data control signal to terminal block on CCTV 4 CH Video Balun.
6. Run coaxial cables between CCTV 4 CH Video Balun and DVR.

Application:



Troubleshooting:

No Picture

1. Camera is not working or not feeding power to camera. Please make sure the camera is working normally.
2. Wrong wire colors have been used in wrong order please recheck the connection order.
3. RJ45 plug has not been put on correctly, either the cores are in wrong order or the cores are not far enough into the plug and not been crimped properly. Cut off the end again and re-crimp.
4. The cable is damaged or there is a short or open circuit on the wire, please replace the wire.

Poor Picture

1. Camera is not working properly. Please make sure the camera is working normally and sending good quality picture.
2. Insufficient power supply to be submitted for four cameras. Check camera specification to replace suitable power supply.
3. RJ45 plug has not been put on correctly, either the cores are in wrong order or the cores are not far enough into the plug and not been crimped properly. Cut off the end again and re-crimp.
4. Cable runs too long. The picture will deteriorate if the Cat 5 cable runs too long. 2,230 feet (Coaxial cables be included.) is the maximum distance for a passive balun to be functioned with adjustments to DVR and monitor. However, a maximum distance 650 feet (Coaxial cables be included.) is recommended for using with equipment such as DVRs, multiplexers and quads.

Warranty:

Our products have a limited lifetime warranty. Lemar warrants that this product is to be free from defect in materials and workmanship, for the life of the product. The warranty given by Lemar 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. Lemar assumes no responsibility for damages or penalties incurred resulting from the use of this product. Lemar's liability under any warranties shall be discharged by replacing or repairing, at our option, the defective product. Lemars' 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 Lemar.

Caution:

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

All contents above are subjected to change without notice.