

**Overview**

The CCTV Pass-Thru/GLI Balun (500132) allows video, remote power and 2-wire PTZ control to be transmitted via one 4-pair Cat5E/6 cable and is designed for installations where ground loop issues may be present. The product features ground loop isolation (GLI) and is installed either at the camera or DVR side in conjunction with other standard MuxLab CCTV baluns such as the 500009, 500022, 500024/29 and 500130.



**Features/Benefits**

Video, power and PTZ over one Cat5E/6 cable  
Video up to 2,200 ft (670m) via Cat5E/6 UTP\*  
Ground Loop Isolation (GLI)  
May be installed at camera or DVR side.  
*\* Shorter distances may result with certain models of DVR.*

**Applications**

Campus, high rise, manufacturing, retail and distribution where ground loops may be present.

Specifications			
<b>Environment</b>	Baseband video; NTSC, PAL, SECAM		
<b>Devices</b>	CCTV cameras, monitors, DVR, IP Encoders and other CCTV equipment.		
<b>Transmission</b>	Transparent to the user.		
<b>Video</b>			
<b>Bandwidth</b>	20 Hz to 8 MHz.		
<b>Impedance</b>	Input: 75 ohms (BNC); Output: 100 ohms (RJ45)		
<b>Maximum Input</b>	1.1Vp-p		
<b>Insertion Loss</b>	Less than 4 dB per pair from 20Hz to 8 MHz		
<b>Return Loss</b>	Less than -15 dB		
<b>Common Mode Rejection</b>	Greater than 20 dB		
<b>Ground Loop Isolation</b>	Up to 50VDC		
<b>Max. Distance - Colour</b>	Cat 3 –1,200 ft (365m); Cat5E/6 – 2,200 ft. (670m)* <i>*Certain models of DVR may yield shorter distances of 1,000 to 1,500 ft</i>		
<b>Remote Power (i.e.; 24 VAC, 28 VAC)</b>			
<b>Wiring</b>	Remote low voltage power supported via two (2) twisted pairs. A Class II power supply is recommended.		
<b>Max. Distance @ 24VAC via two twisted pairs*</b> . <i>*Longer distances may be achieved @ 28 VAC.</i>	5 VA: 350 ft (107m)* 20 VA: 90 ft (30m)*	10 VA: 175 ft (53m)* 30 VA: 60 ft (20m)*	<i>*Based on 10% voltage drop at camera. Please consult your CCTV equipment vendor for more info.</i>
<b>2-Wire PTZ Control (i.e. RS-422, Manchester/Bi-Phase, half duplex RS485)</b>			
<b>Wiring</b>	Remote 2-wire PTZ control supported via one (1) twisted pair.		
<b>Maximum Distance</b>	Up to 4,000 ft (1.2 km) depending on the PTZ camera vendor		
<b>Maximum Input Voltage</b>	50 Volts (AC RMS/DC)		
<b>Maximum Current Rating</b>	3A (AC RMS/DC)		
<b>Mechanical &amp; Environmental</b>			
<b>Cable – UTP</b>	24 gauge or lower solid copper twisted pair wire. Impedance: 100 ohms at 1 MHz Maximum capacitance: 20 pf/foot. Attenuation: 6.6 dB/1000 ft at 1 MHz		
<b>Cable – Coax</b>	Impedance: 75 Ω at 1 MHz. (RG59/U). Max. 25 ft. of coax allowed end to end.		
<b>Connectors</b>	Combined signals: RJ45 Video: BNC-F Power: 2-pole terminal block Control: 2-pole terminal block		
<b>Switch</b>	Select between Power-Thru (500024/500029) and Pass-Thru (500022) Mode		
<b>RJ45 Pin Configuration*</b> <i>*Reverse polarity sensitive</i>	<b>Signal</b>	<b>500022 Mode</b>	<b>500024/500029 Mode</b>
	Power A (+)	1, 3	1, 3, 5
	Power B (-)	2, 6	2, 4, 6
	Control (+)	4	NA
	Control (-)	5	NA
	Video BNC Center (Tip)	7 [T] same as 500000R	7 [T] same as 500000R
	Video BNC Ground (Ring)	8 [R] same as 500000R	8 [R] same as 500000R
<b>Temperature</b>	Operating: 0° to 55°C. Storage:-20° to 85°C. Humidity: up to 95%		
<b>Enclosure</b>	ABS fire retardant plastic		
<b>Dimensions</b>	2.40" x 2.25" x 1.0" (6.1 x 5.7 x 2.54 cm)		
<b>Weight</b>	1.95 oz (55 gms)		
<b>Warranty</b>	Lifetime		
<b>Order Information</b>	500132 CCTV Pass-Thru/GLI Balun		

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## Typical Applications

