## VideoEase CCTV Power-Thru Balun 500024, 500029

## MuxLab

Overview

The VideoEase CCTV Power-Thru Balun allows video and remote power to be transmitted via one 4-pair Cat 5 cable, thus eliminating the need to install multiple cables for more efficient cabling in the CCTV security and surveillance environment. There are two models: 500024; with modular RJ45 connector and 500029; with screw terminals.

The Power-Thru Balun may be used in pairs or in conjunction with standard twisted pair cross-connect devices and other MuxLab CCTV baluns such as the 500000, 500009, 500023 and 500015.



## Features/Benefits

Video and remote power via one 4-pair Cat 5 cable Video up to 2,200 ft (670m) via Cat 5 UTP\* Remote power up to 500 ft (170m) @ 24VAC/5VA via three (3) twisted pairs

\* Shorter distances may result with certain models of DVR.

0	Sno	orter distances may result with certa	all models of DVN.	
Specifications	D 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
Environment	Baseband video; NTSC, PAL, SECAM			
Devices	Close-circuit TV (CCTV) cameras , monitors, switchers, sequencers, multiplexers,			
	digital video recorders (DVR) and other CCTV equipment.			
Transmission	Transparent to the user.			
Video				
Bandwidth	DC to 8 MHz.			
Impedance	Input: 75 ohms (BNC); Output: 100 ohms (RJ45)			
Maximum Input	1.1Vp-p			
Insertion Loss	Less than 2 dB per pair over the frequency range from DC to 8 MHz			
Return Loss	Greater than 15 dB over the frequency range from DC to 8 MHz			
Common Mode Rejection	Greater than 40 dB @ 8 MHz			
Max. Distance - Colour				
	*Certain models of DVR may yield shorter distances of 1,000 to 1,500 ft			
Max. Distance - Black & White	Cat 3 –1,500 ft (457m); Cat 5 – 2,500 ft (762m)			
Remote Power (ie; 24 VAC, 28	VAC)			
Wiring	Remote power via three (3) twisted pairs. Class II power supply recommended.			
Max. Distance @ 24VAC via	5 VA: 518 ft (170m)* 10 VA: 259 ft (85 m)*			
three (3) twisted pairs*	20 VA: 130 ft (43 m)* 30 VA: 86 ft (28 m)*			
*Longer distances may be achieved	*Based on 10% voltage drop at camera. Please consult your CCTV equipment vendor for more			
@ 28 VAC.	detailed performance specifications.			
Maximum Input Voltage	50 Volts (AC RMS/DC)			
Maximum Current Rating	4.5A (AC RMS/DC)			
Mechanical & Environmental				
Cable – UTP	24 AWG 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			
Cable - Coax	Impedance: 75 Ω at 1 MHz. (RG59/U). Max. 25 ft. of coax allowed end to end.			
Connectors		C-male 8" mini-coax lead Power: 2-wire 18AWG lead		
	Combined signals: RJ45 (500024); Screw terminals (500029)			
Pin Configuration*	Signal	RJ45 Pin	Cable Lead Color	
	Power A Power B	1 (common with 3&5) 2 (common with 4&6)	Red Black	
	Power A	3 (common with 1&5)	Red	
	Power B	4 (common with 2&6)	Black	
	Power A	5 (common with 1&3)	Red	
	Power B	6 (common with 2&4)	Black	
	Video BNC Center (Tip)	7 [T] opposite to 500000	Mini-coax	
Temperature	Video BNC Ground (Ring) 8 [R] opposite to 500000 Mini-coax  Operating: 0° to 55°C. Storage:-20° to 85°C. Humidity: up to 95%			
•	ABS fire retardant plastic			
Enclosure				
Dimensions	1.875" (4.7cm)x 1.0" (2.54cm) diameter plus cable leads; 8" (20cm) for video; 10" (25.4cm) for power lead			
Wainht	1.95 oz (55 gms)			
Weight	`			
Warranty	Lifetime			
Order Information 500024 CCTV Power-Thru Balun, RJ45 CCTV Power-Thru Balun, Screw Terminal			al.	
	500029 CCTV Powe	181		
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## **Typical Applications**



