



Description

The **TS510M** is a complete video transmission system designed to transmit video and remotely power stationary camera over one Category 3 or better twisted pair cable. The system consists of a TR510M active receiver and a VB43ATF transceiver. The units work equally well over existing communication and computer network spare pairs, or new cable installations. Advanced receiver electronics provide superior immunity from ground loop, hum and noise to produce maximum video quality with virtually no loss.

Dip switches on the TR510M unit provide precise adjustment of gain and frequency compensation, allowing the system to be "fine-tuned" for any cable. This unique feature provides easy adjustment for optimum performance over the entire operating range and also allows cable length to be estimated with a wide safety margin, when bidding CCTV twisted pair transmission jobs.

The system includes RJ45 jack connectors for quick and confident connections. The TR510M also features Intelligent Light Link indicators to detect the presence of video and power.

Features

- Intelligent light link indicator
- RJ45 jack connectors
- Power cameras from head-end
- Active electronics compensate for frequency and level loss
- Built-in protection from power surges, transients, static or other electrical interference
- High resolution color or monochrome video
- Superior common mode rejection ratio; video and AC can be run in a common raceway, where allowed
- Video can be run in the same cable with telephone and computer signals
- Connects directly to camera
- Weather resistant design
- Easy to install



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TECHNICAL SPECIFICATION

Receiver Unit

Size	1.7" H x 4.3" W x 2.5" D
Power Requirements	Class 2 SELV
Power Out	24-30 VAC 300mA 50/60 Hz
Input	Low voltage differential
Output	1 Vpp composite video Monochrome or Color
Common Mode Rejection	>70dB
Video Format	PAL, SECAM, NTSC, RS170, CCIR (Color or B/W)
Operating Frequency	2 Hz to 10 MHz
Wire Size	24 to 18 AWG twisted pair
DC Loop Resistance	51 Ohms/1,000 ft (max)
Nominal Capacitance	17pF/ft
Impedance	100 Ohms +/- 20%
Category Wire	3 or better
Temperature Range	-20°C to +65°C
Humidity Range	0 to 98%, non-condensing
Enclosure Material	Black, ABS flame retardant plastic
Twisted Pair Connection	RJ45 jack
Shipping Weight	2 lbs

Wire and Cable Recommendations

We recommend using unshielded twisted pair wiring. The systems will operate over wire 26 to 18 AWG but are optimized for 24 AWG. Category cables may be used. Individually shielded pairs should be avoided, as they drastically reduce the operating range of the systems. Multi-pair cable with an overall shield is acceptable. Video can be operated in the same communication cable coexistent with telephone, computer, control signals, power voltages and other video signals. While video may be routed through telephone punch down block terminals, any bridge-taps, also called T-taps and any resistive, capacitive or inductive devices MUST BE removed from the pair.

