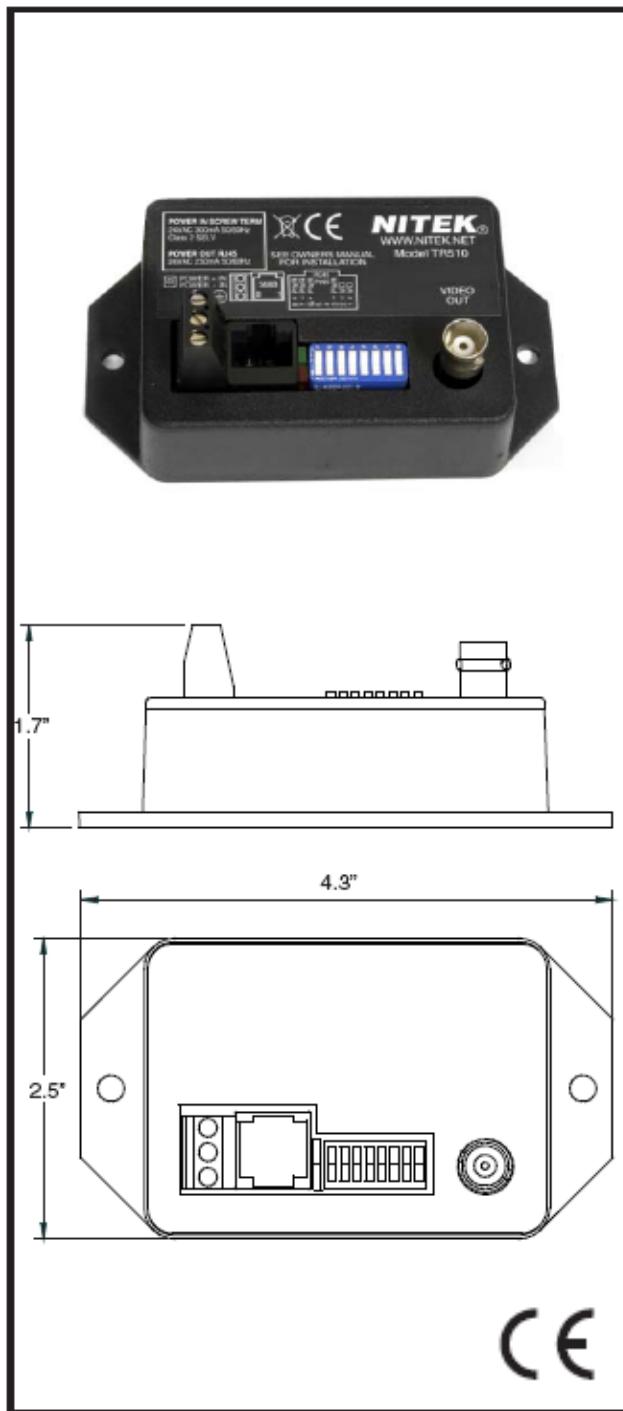




TR510M

Active Video Receiver for the transmission
of video and power up to 1,000 feet (305 meters)



Description

Live video and transmission of power over twisted pair Category 3 or better cables.

The TR510M is a video receiver designed to transmit video and remotely power one stationary camera over one Category 3 or better twisted pair cable. The unit works 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 unit 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 surge, 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
- Weather resistant design
- Easy to install

TECHNICAL SPECIFICATION

Receiver Unit

Size	1.7" H x 4.3" W x 2.5" D
Power Requirements	24-30 VAC 300mA 50/60 Hz Class 2 SELV
Power Out	24-30 VAC 250mA 50/60 Hz
Input	Low voltage differential
Output	1 Vpp composite video Monochrome or Color
Common Mode Rejection	>70dB
Video Format	RS170, NTSC, PAL, SECAM, CCIR (Color or B/W)
Operating Frequency	2Hz to 10 MHz
Wire Spec	24 to 18 AWG unshielded twisted pair (UTP)
DC Loop Resistance	51 Ohms/1,000 feet (304 meters) (max)
Nominal Capacitance Impedance	17pF/ft. 100 Ohms +/- 20%
UTP Category	3 or better
Temperature Range	-20 degrees C to +65 degrees C
Humidity Range	0 to 95%, non-condensing
Enclosure Material	Black ABS flame retardant plastic
Twisted Pair Connection	RJ45 Jack

SYSTEM COMPONENTS

For more information on individual components listed above refer to respective specification sheets.

Wire and Cable Recommendations

Twisted Sender is recommended for use with **unshielded twisted pair (UTP)** wiring. The systems will operate over wire gauges from 26 AWG through 12 AWG but are optimized for 24 AWG. Category 3 or better cable 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 carried 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. For more specific information regarding wire types, gauges and proper installation techniques, please call 800-528-4343 for technical assistance.

