

Model TS510

Active receiver for UTP Transmission

Installation and Operation Manual

NITEK[®]

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Reduce risk of fire or electrical shock do not expose this product to rain or moisture.

System Components

- 1 TR510M Active Receiver Unit
- 1 VB43ATF Transceiver Unit

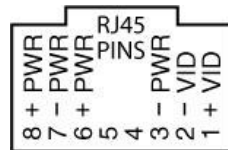
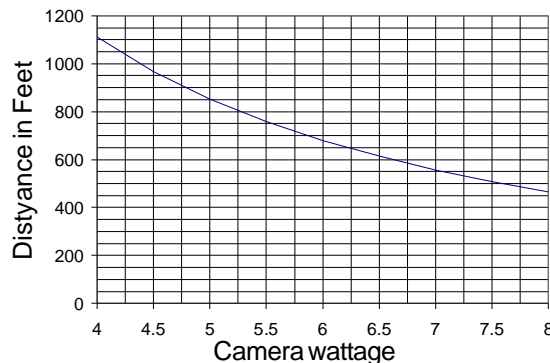
Installation

1) Check the twisted pair connections for continuity. This is best done by shorting the pair of wires at one end and use an ohm meter to check the resistance at the other end. The chart below will give you the length of your wires for a measured resistance. Use a multimeter to make sure there is no voltage on the line.

WIRE GAGE	DISTANCE IN FEET (METERS)	
	500 (152)	1,000 (304)
22	16	32
24	26	51
26	41	82

The TS510M is designed to power a low wattage stationary camera. The unit is designed to work with standard 4 pair network cable. It will provide power from the receiver unit to the camera end. The chart below shows the maximum recommended operation distance for cameras on 24AWG wire. For distances greater than the chart a camera may be powered from a separate supply of its own. The TS510 M is not recommended for distances greater than 1,500 feet.

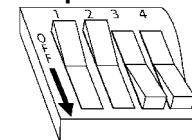
Operating Distance Chart



- 2) At the camera, connect video to the VB43ATF via attached BNC connector.
- 3) Connect power from the VB34ATF screwless terminals to the camera using the enclosed twisted pair wired.
- 4) Plug in Category 3 or better cabling connecting VB43ATF to the TR510M
- 5) Using a power supply connect power to the screw terminals of the TR510M active receive. The unit can be powered using 12 to 24 volts of AC or DC current. There is no polarity to the power connection.
- 6) Connect video from the TR510M to the monitor or DVR using a coax jump cable.
- 7) DIP switches are provided so that the unit can be adjusted for best picture. The following settings are factory recommended for normal conditions. For added sharpness adjust switches 7 and 8. For more gain adjust 5 and 6. Switches 1, 2 and 3, 4 must be operated in pairs.

Distance	Unmarked Positions are Off				Video Level Gain	Video Peaking		
	1	2	3	4	5	6	7	8
<100-400 ft. (30-121 m)								
400-700 ft. (121-213 m)					ON			
700-900 ft. (213-274 m)			ON	ON	ON			
900-1,100 ft. (274-335 m)			ON	ON		ON		
1,100-1,300 ft. (335-396 m)			ON	ON		ON	ON	
>1,300 ft. (396 m)	ON	ON	ON	ON		ON		

Sample



Switches 1 and 2 are in "OFF" position
Switches 3 and 4 are in "ON" position

Troubleshooting

Video inverted or rolling and unstable.

- Reverse the wires of the twisted pair at either the transmitter or receiver.

No video out at the receiver.

- Check to make sure that there is video in at the transmitter.
- Make sure that the pair of wires you are using is not open or shorted between the transmit and receive points.
- Check power to the receiver. The receiver must be powered with the supplied wall pack.

Ghost image at the receiver

- Bridge tap or "T" tap on the twisted pair video line. Remove tap.

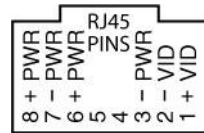
Power Requirements

Power In - Screw Terminals

24-28 VAC 300mA 50/60 Hz
Class 2 SELV

Power Out - RJ45

24-28 VAC 250mA 50/60 Hz



TR510M

VB43ATF

