Model EX560

Active receiver for UTP Transmission

Installation and Operation Manual

EX560 includes TR560 Receiver and TT560 Transmitter



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



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Installation

1) Check the twisted pair for continuity. Do this 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 loop resistance. (For distances greater than 6,000 feet, there are several other systems available, contact your local Distributor or NITEK Technical Support for assistance.)

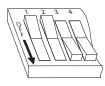
Also use a multimeter to make sure there is no voltage on the line, very high resistance to ground and an open circuit when the short at the far end of the wires is removed.

Wire Gage	DISTANCE IN FEET (METERS)								
	500 (150)	1000 (300)	2000 (600)	3000 (900)	4000 (1200)	5000 (1500)	6000 (1800)		
22	16	32	64	96	128	160	192		
24	25	51	102	153	204	255	306		
26	41	82	164	246	328	410	492		

- 2) Connect a video source to the BNC of the TT560 transmitter unit. Connect the twisted pair to the terminals marked "WIRE PAIR +" and "-". Note the polarity of the connection. This will be needed when connecting the receiver.
- 3) Set the DIP switches on the transmitter as follows. The settings listed are for normal conditions.

DISTANCE	SWITCH POSITION						
DISTANCE	1	2	3	4			
< 2000 ft.			Х	Х			
> 2000 ft.	ON		Х	Х			
> 4500 ft.	ON	ON	Х	Х			

Example



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

X = not used

- **5)** At the receiver end, connect the receiver BNC jack to a monitor or DVR.
- **6)** Connect the twisted pair to the terminals marked "WIRE PAIR +" and "-". Note the polarity of the connection should match the

polarity of the transmitter. If the wires are reversed the video will not be viewable, this will not hurt the unit. Just reverse the wires and the video will be correct.

7) Set the DIP switches on the receiver as follows:

Unmarked Positions are Off					Video Level Gain		Video Peaking	
DISTANCE	SWITCH POSITION							
IN FEET (meters)	1	2	3	4	5	6	7	8
500 - 1000 (300)								
1001 - 1500 (450)					ON			
1501 - 2000 (600)			ON	ON		ON		
2001 - 2500 (750)					ON		ON	
2501 - 3000 (900)			ON	ON	ON		ON	
3001 - 3500 (1100)			ON	ON		ON	ON	
3501 - 4000 (1200)	ON	ON	ON	ON		ON	ON	
4001 - 4500 (1350)	ON	ON	ON	ON	ON	ON	ON	
4501 - 5000 (1500)			ON	ON	ON		ON	
5001 - 5500 (1700)			ON	ON		ON	ON	
5501 - 6000 (1800)	ON	ON	ON	ON		ON	ON	
>6000 (1800)	ON	ON	ON	ON	ON	ON	ON	

The settings listed are for normal conditions. Other settings are possible. For sharpness adjust switches 7 and 8. For gain adjust 5 and 6. Switches 1 and 2 or 3 and 4 must be operated in pairs according to distance.

- **8)** The transmitter and receiver units can be powered using 12 to 24 volts of AC or DC current. There is no polarity to the power connection. The transmitter unit can also be powered from the same power source as the camera.
- 9) There is also an "Earth Ground" terminal on both the transmitter and receiver, this connection is required for proper surge protection. If the "Earth Ground" is not connected the unit will be grounded through the coax shield.

Troubleshooting

Problem Fix/Cause

Video inverted or rolling and unstable.

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

Problem Fix/Cause

No video out at the receiver.

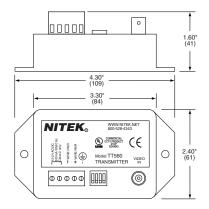
- Check to make sure that there is video in at the transmitter end.
- Make sure that the pair of wires you are using is not open or shorted between the transmit and receiver points.
- Check the power to the receiver and transmitter, they should be powered with the supplied wall pack transformer.

Problem Fix/Cause

Ghost image at the receiver.

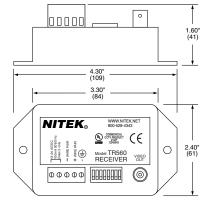
• Bridge tap or "T" tap on the twisted pair video line. Remove tap.

For additional help with problems please call NITEK Technical Assistance



Power Requirements 12 to 24 AC\DC Transmitter

300mA max 100mA tvp. 50\60 Hz, Class 2



Power Requirements 12 to 24 AC\DC Receiver

100mA 50\60 Hz 50\60 Hz, Class 2