

# Long Range Twisted Pair Transmission System – Active Series

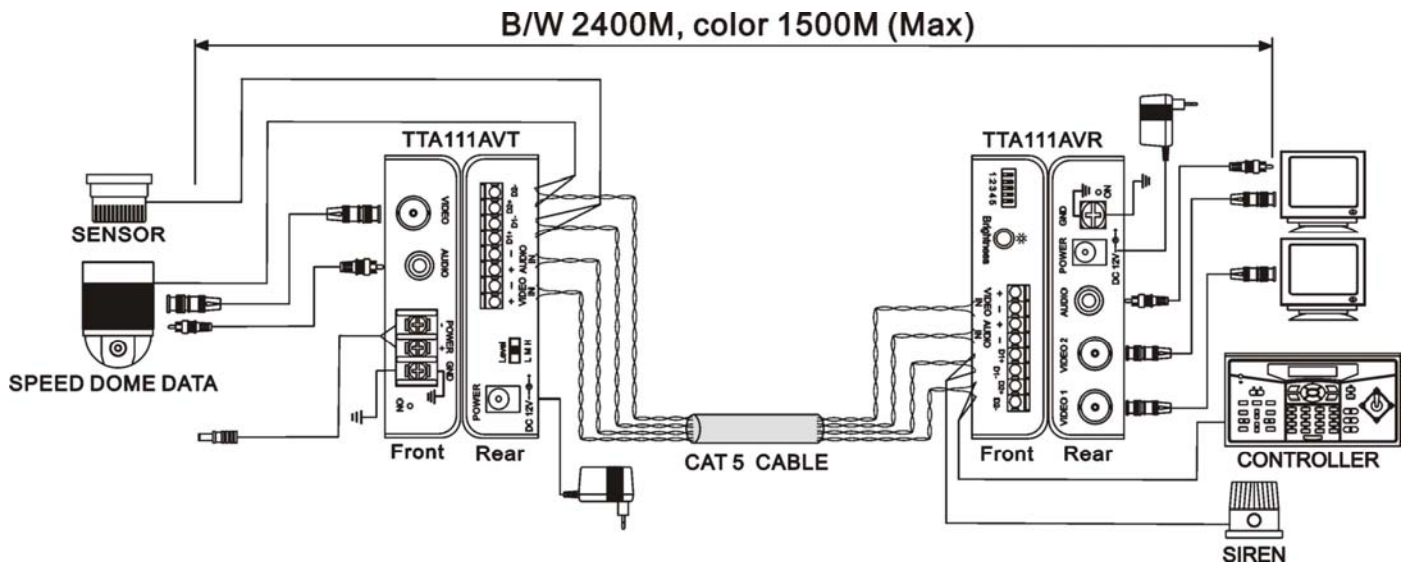
**ITEM NO.:** TTA111AV (TTA111AVT + TTA111AVR), TTA111V (TTA111VT + TTA111VR),  
TTA414VR 4 channel Active Receiver Hub

**Features:**

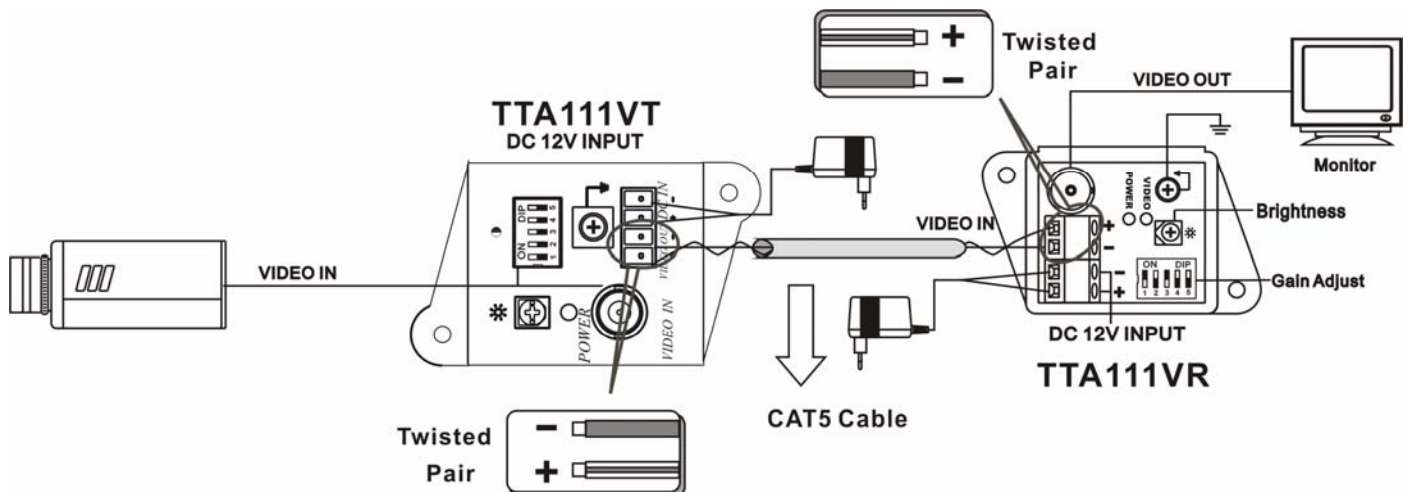
- Transmit a full motion color or monochrome video signal and data signal (RS422, RS485), audio (TTA111AV). Color range 1500 meters, B/W video signal up to 2400 meters.
- Video color burst and luminance adjustments at TTA111VT transmitter.
- Easy setting with 2 adjustments for color gain and brightness at TTA111VR receiver.
- Three position range switch for gain select on TTA111AVT transmitter.
- Five position distance range switch on Receiver TTA111AVR.
- System is integrated with alarm sensor (PIR, Magnetic, etc.) or data. (Pan, Tilt, Zoom).
- Built in transient protection and ground lifting, damaging voltage spike problems are eliminated.
- Red LED: Power on / off.
- **TTA414VR: 4 channel active receiver hub, built in 4 pieces TTA111VR.**
- Up to multi pieces TTA111AVT, TTP111VT transmitter can work with 4 channel Hub TTA414VR or 1U rack mounting TPA008/TPA008H, TPA016/TPA016H receiver panel.

**Installation View:**

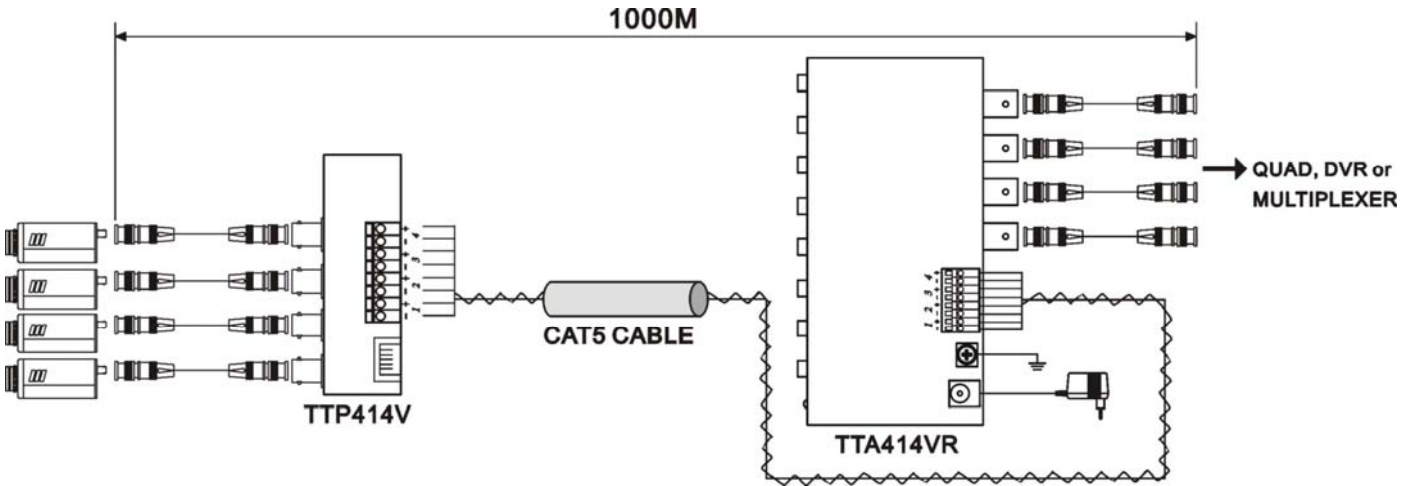
**TTA111AV: TTA111AVT, TTA111AVR**



**TTA111V: TTA111VT, TTA111VR**



# TTA414VR



Use TTP414V 4 channel passive video transceiver as transmitter to work with Active TTA414VR receiver, transmission range 1Km. Use TTA111VT, TTA111AVT transmitter to work with TTA414VR, transmission range 1500 meters at color, 2400 meters at B/W.

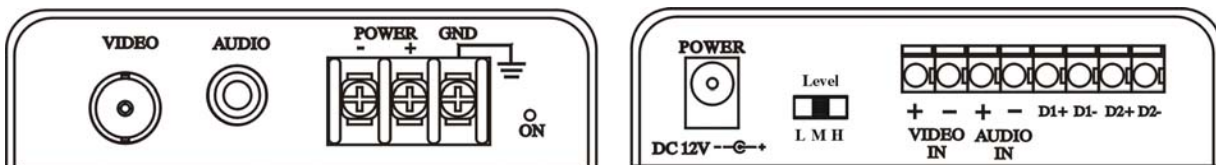
## Troubleshooting:

All transmission distances mentioned above are without connecting image processor (e.g. Quad, Multiplexer, DVR), the transmission range would be reduce 100-200meters upon different camera, cable,DVR...ect.

1. These products are designed for long range transmission, the unit built in video amplifier function, If your transmission range under 100 meters, the video gain function is too big to have snow or wavy, bright image occurred. Recommend to use them with range at least over 100 meters or alternate passive video transceivers TTP111 series for short range transmission as well as cost saving.
2. Both of he active receiver has "5 position distance range switch" for different range transmission. Please switch to appropriate range upon your application to avoid any weak or bad image.
3. For color camera transmission, color signal would be degradation upon longer range, please alternate the receiver to TTA111VH model for color gain function.

## Panel View:

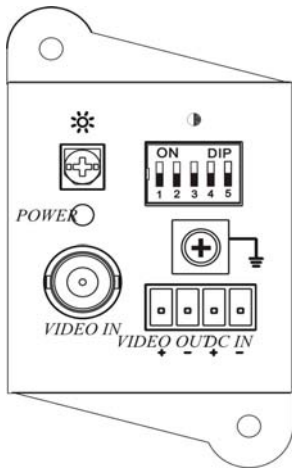
### TTA111AVT



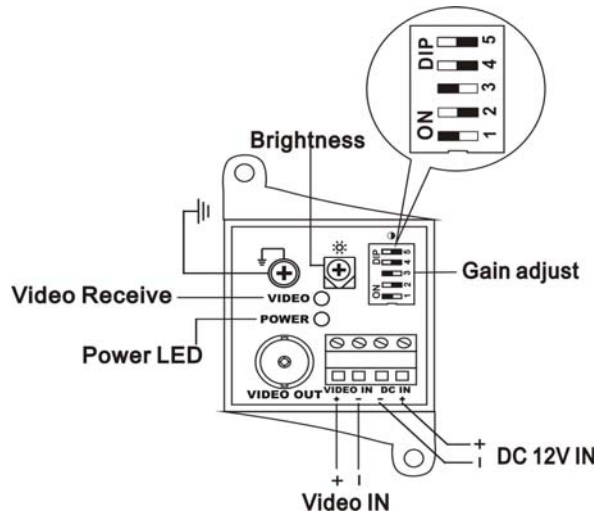
### TTA111AVR



**TTA111VT**

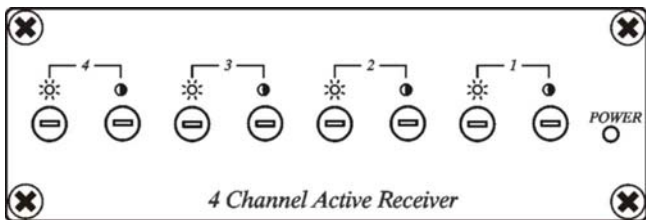


**TTA111VR**

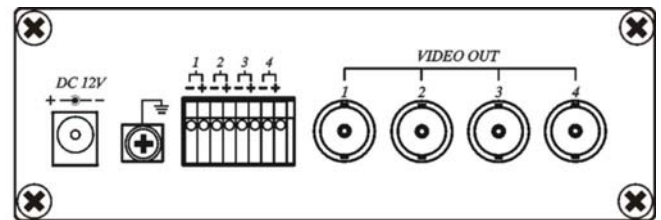


**TTA414VR**

Front View



Rear View



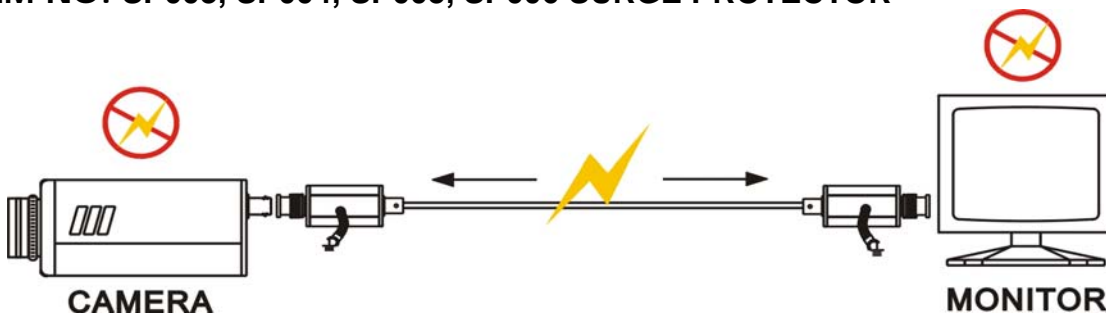
VIDEO GAIN ADJUSTING (Receiver)	
Press 1 0~300M	Press 4 900~1200M
Press 2 300~600M	Press 5 1200~1500M
Press 3 600~900M	

RJ - 45 Jack		
PIN	Color	Function
1	W-O	D1-
2	O	D1+
3	W-G	Audio +
4	BL	D2+
5	W-BL	D2-
6	G	Audio -
7	W-BR	Video +
8	BR	Video -

**Option:**

To protect high value camera and CCTV image processor/monitoring equipment destroyed from high voltage surges from nearby lightning strikes, the long-range twisted pair cable go through outdoors. To add surge protection SP003-SP006 device on the back of camera and front of CCTV image processor/monitoring equipments. Small money to save high value CCTV equipments.

**ITEM NO: SP003, SP004, SP005, SP006 SURGE PROTECTOR**



Recommend WT104PE Outdoor CAT5 UTP Twisted Pairs cable with PE jacket and steel wire, and use surge protector SP003-SP006 to avoid the damage of twisted pair system under lightning, thunderstorm weather environment.

## Specification:

ITEM NO.	TTA111AVT	TTA111VT
VIDEO INPUT	1 Vp-p , 75 Ohms (BNC Connector)	
DC INPUT	DC 12V	
POWER CONSUMPTION	40mA(max)	
COLOR BURST ADJUSTING	X	Press 1: 0~300M, Press 2 300~600M , Press 3 600~900M, Press 4 900~1200M , Press 5 1200~1500M
VIDEO GAIN ADJUSTING	3 Level dip switch (L/M/H)	100 I.R.E. (MAX)
RECOMMENDED CABLE	CAT5 UTP Cable 4 pair (24AWG)	
DIMENSIONS W x H x D mm	109x77x24	49x42x45

ITEM NO.	TTA111AVR	TTA111VR
VIDEO OUTPUT	1Vp-p , 75 Ohms (BNC Connector)	
DC INPUT	DC 12V	
POWER CONSUMPTION	40mA(max)	
VIDEO GAIN ADJUSTING	VR adjustment	Press 1 0~300M, Press 2 300~600M , Press 3 600~900M, Press 4 900~1200M , Press 5 1200~1500M
RECOMMENDED CABLE	CAT5 UTP Cable 4 pair (24AWG)	
DIMENISONS W x H x D mm	109x77x24	49x42x45

Remark: TTA111AV = TTA111AVT+ TTA111AVR                      TTA111V = TTA111VT+ TTA111VR

ITEM NO.	TTA414VR
VIDEO OUTPUT	1 Vp-p , 75 Ohms (BNC Connector)
DC INPUT	DC 12V
POWER CONSUMPTION	150mA(max)
VIDEO GAIN ADJUSTING	VR adjustment
DIMENSIONS W x H x D mm	120x133x44

RoHS   

## Option For TTA111V:

### TPN009 2U RACK MOUNTING PANEL

#### Features:

- Ideal for security monitoring stations or video distribution hubs.
- Standard 19-inch (482mm) wide, 3.5-inch (88mm) 2U high.
- Supports up to 9 pieces of TTA111VT OR TTA111VR.
- This heavy-gauge panel is designed to withstand the mechanical load of multiple cables.

