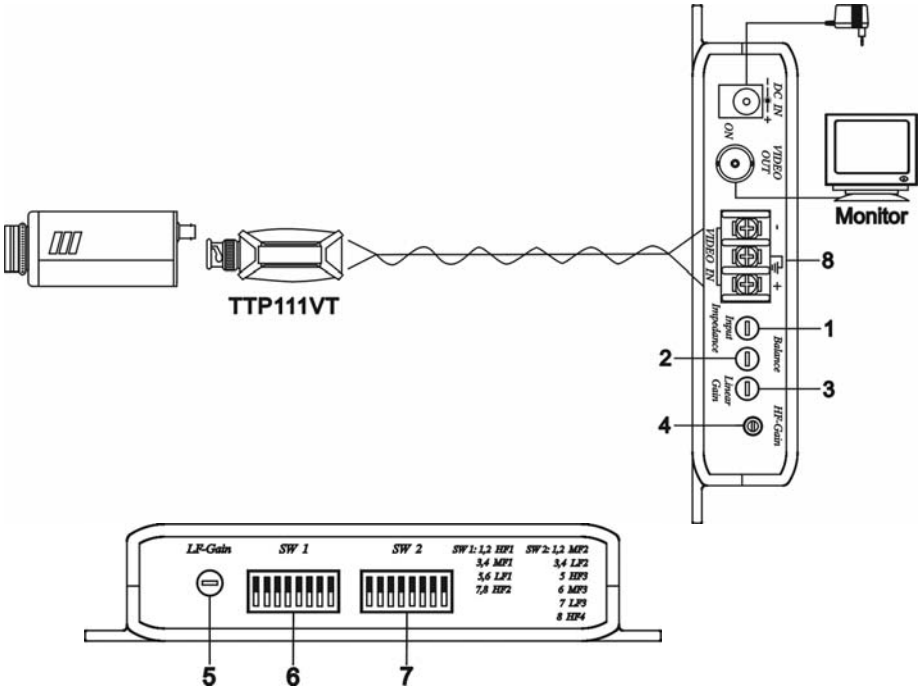
Long Range Twisted Pair Transmission System – Active Receiver

ITEM NO.: TTA111VH Active Receiver

Features:

- TTA111VH Twisted Pair Active Receiver as an amplifier.
- Using passive video transceiver TTP111XX, TTP414XX, TTP444V, TRP414VH…etc as transmitter, transmit a full motion color video signal up to 1.5Km, B/W up to 2.4Km.
- Built in Input Impedance adjustment.
- Built in Balance adjustment.
- Built in Liner Gain adjustment.
- Built in HF/MF/LF Compensation for color gain.
- Built in a highly balanced mode of video transmission for extra interference immunity.
- Built in Surge Protection.
- Red LED: As power on indicator.
- Perfect to maintain good quality picture for long-range transmission with DVR.
- Using three sets TTP111XX+TTA111VH for series connection, range up to 3Km(Color).
- Power supply included.

Installation View:



Trimmer Function:

TTA111VH have numerous trimmers as follows, you could adjust them upon different range transmission for best picture quality.

1. Input Impedance: To adjust the impedance matching between TTA111VH and cable, to transmit long-range video signal without any video loss.
2. Balance: Adjust the balance of video signal upon long-range transmission to immunity noise for

cleaner picture.

3. Linear Gain: Adjust the Linear Gain for appropriate output video signal upon different range transmission.
4. HF GAIN: Adjust the HF Gain for color brightness.
5. LF GAIN: Adjust the LF Gain for color contrast.
6. SW1: Adjust the Dip Switch 1 – 8 upon different range, for the best picture quality on color brightness & contrast.
7. SW2: Adjust the Dip Switch 1– 8 upon different range, for the best picture quality on color brightness & contrast.
8. Ground

Installation:

1. Make sure the all Dip Switch SW1, SW2 (6. 7) at down position.
2. Adjust Liner Gain trimmer – 3 for stable video signal.
3. Then switch SW1, SW2 (6.7) to up position until good picture quality on color brightness & contrast. Please refer to the following recommended chart on DIP-switch for different range.
4. At last, to adjust other trimmers slightly (1,2,4,5) for best quality picture.
5. Make sure ground to the earth (8), to protect TTA111VH and other monitoring equipment.

Distance (M)	SW1 (1-8), SW2 (1-8)
0 – 300	x
300 – 600	SW1(1,2) to SW1(1,2,3) up
600 – 900	SW1(1,2,3) to SW1(1,2,3,4,5,) up
900 – 1200	SW1(1,2,3,4,5,6) to SW(1,2,3,4,5,6,7,8)+SW2(1) up
1200- 1500	SW1(1,2,3,4,5,6,7,8)+SW2(1) to SW1(1,2,3,4,5,6,7,8)+SW2(1,2,3,4,5) up

Troubleshooting:

All transmission distances mentioned above are without connecting image processor (e.g. Quad, Multiplexer, DVR), the transmission range would be reducing 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. When finish the installation, but no video signal, please checks Power LED and power source.
3. No video signal, please check cable installation.
4. Video signal is not normal; please check "＋" and "－" of cable.

Specification

ITEM	TTA111VH
Video input	0.12-2 Vpp
Input impedance	45 - 175 Ohms
Video output	1 Vpp, 75 Ohms
Freq. response	50 Hz - 5 MHz(-3 dB)
Disturbance reduction	> 70 dB, 50Hz
Gain adjustment	+6 dB…+60 dB at 5 MHz
Noise	-50 dB at+40 dB gain adj. -47 dB at+60 dB gain adj.
Power Supply	DC12V, 500mA
Power Consumption	150mA (max)
Input protection	Surge arrester
Temperature	Operation: 0 to 55℃, Storage: -20 to 85℃, Humidity: up to 95%
Dimensions W x H x D mm	138 x 77.3 x 28
Weight g	130

RoHS CE FC

Rev. B