19" Rack Card Series - Twisted Pair Transmission System

ITEM NO.: TRP414VH, TRA111VH, TRN012

TRP414VH, TRA111VH both are 19” rack card transceivers that receiving of real-time color or monochrome video signal, over industry CAT-5 unshielded twisted pair (UTP) networking cable. These two models could install in TRN012 19” standard rack mounting cabinet, up to thirteen pieces. It can install together with other racks for other equipments, such as switchers, multiplexers, DVR, video conferencing equipment, etc. It is perfect for larger CCTV installations and ideal for security monitoring stations.

TRP414VH 19” Rack Card 4 Channel Passive Receiver

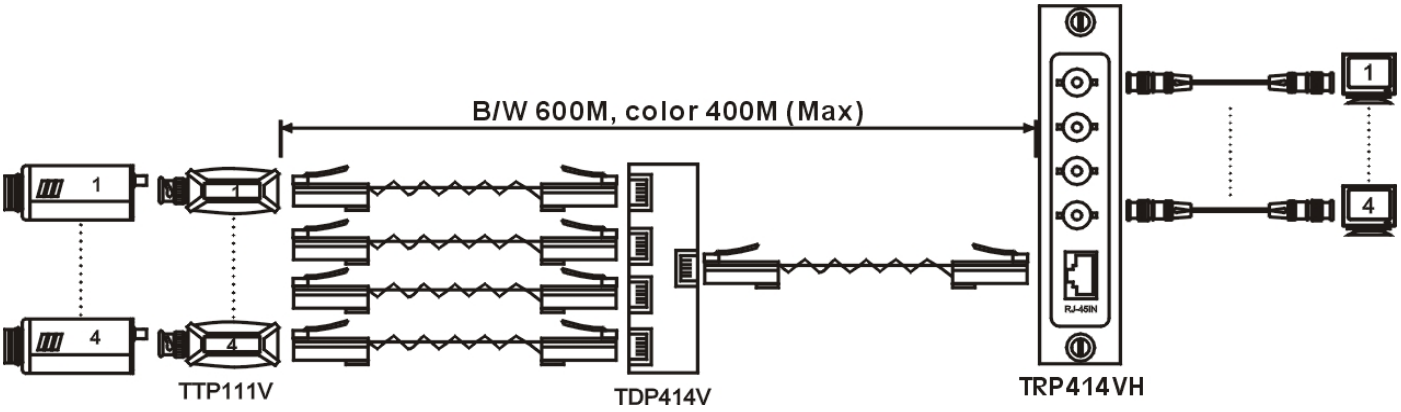
- 19” rack card with one RJ45 (CAT5) input and 4 video BNC outputs.
- Used to receive 4 video signals from a single CAT5 cable and provides 4 video outputs(BNC) to monitor/VCR, for use with TTP111V, TTP414V, TTP444V, TDP414V.
- Transmit a full motion color up 300 meters (COLOR), up to 60 pieces passive video transceiver TTP111V, TTP111VT, TTP111VC, when used with 15 pieces rack card TRP414VH in 19” 3U rack mounting cabinet.
- Built in a highly balanced mode of video transmission for extra interference immunity.

TRA111VH 19” Rack Card One Channel Active Receiver

- 19” rack card with one terminal bock input and one video BNC output.
- Used to received one video signals from a single CAT5 cable and provides one video outputs (BNC) to monitor/VCR, for use with TTA111AVT, TTA111VT.
- Using passive video transceiver TTP111XX, TTP414XX, TTP444V, TRP414VH…etc as transmitter, to send a full motion color video signal up to 1.5Km.
- Built in brightness adjustment.
- Built in HF for color gain adjustment.
- Built in dip switch for HF/MF/LF compensation.
- 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.
- Up to 15 pieces active transmitter TTA111AVT, TTA111VT, when used with 15 pieces rack card TRA111VH in 19” 3U rack mounting cabinet.

Installation view:

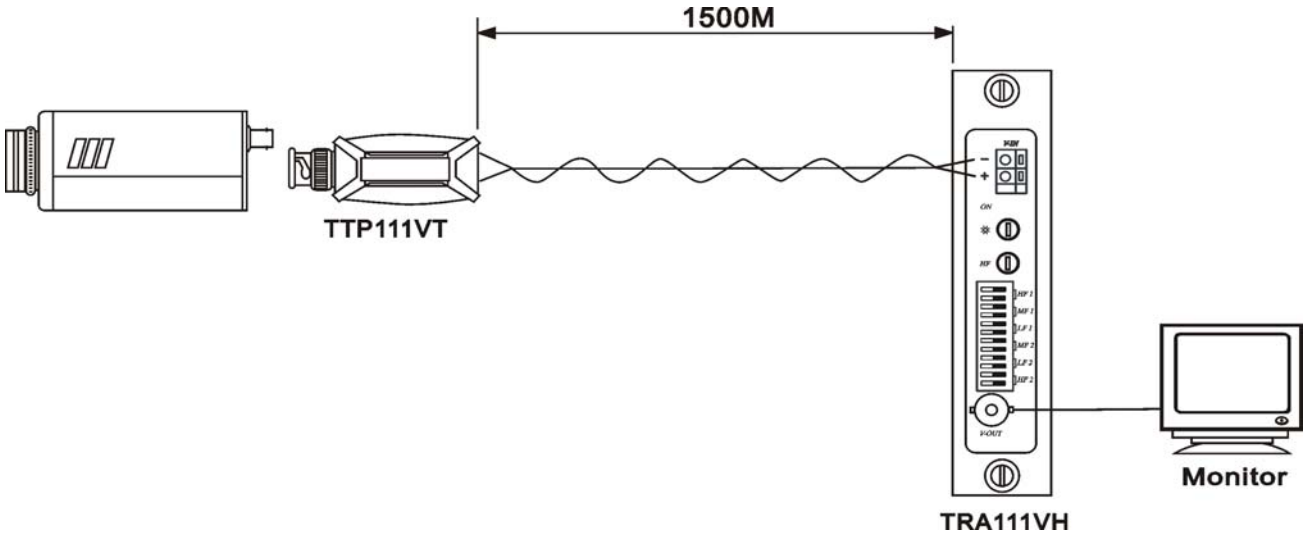
TRP414VH



	RJ - 45 Jack		
	PIN	Color	Function
	1	W-O	Video1 +
	2	O	Video1 -
	3	W-G	Video2 +
	4	BL	Video3 -
	5	W-BL	Video3 +
	6	G	Video2 -
	7	W-BR	Video4 +
	8	BR	Video 4-

1 W-O 2 O 3 W-G 4 BL 5 W-BL 6 G 7 W-BR 8 BR
JACK POSITION

TRA111VH



All transmission distances mentioned above are without connecting image processor (e.g. Quad, Multiplexer, DVR) in case where the picture displayed lacks quality connecting said processors, please alternate the passive receiver to active type TTA111VH ,TTA111AVR(VR), TRA111VH, TPA008, TPA016 or use video amplifier (CA404/CA101AV/CA101VH) before connecting image processor.

TRA111VH Trimmer Function:

TRA111VH have numerous trimmers as follows, you could adjust them upon different range transmission for best picture quality.

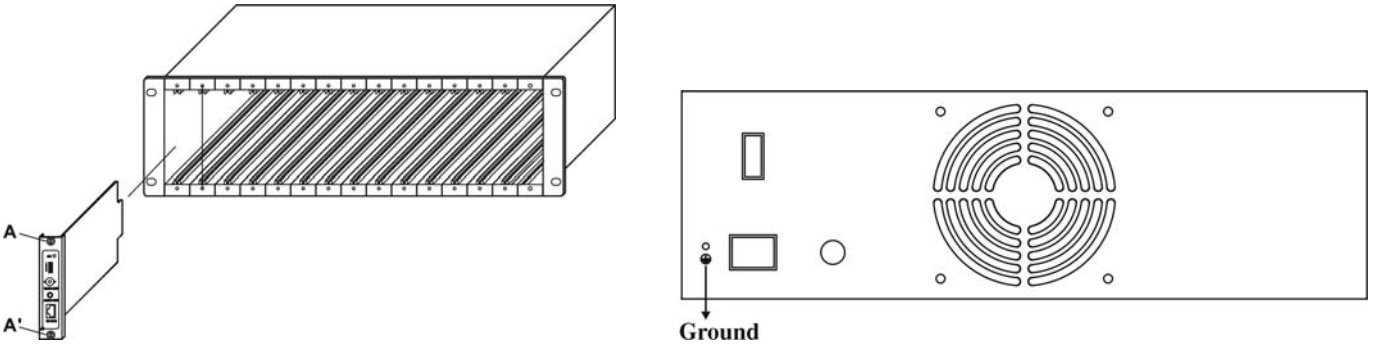
1. Brightness: adjust the brightness trimmer for appropriate output video signal upon different range transmission.
2. HF : adjust the HF trimmer for color gain.
3. Dip Switch: adjust the dip switch at “on: position” from 1. 2.3…..12 for high/middle/low frequency compensation for best picture quality based on variety working range.

TRA111VH Installation:

1. At first, adjust brightness trimmer for stable video signal.
2. Then adjust Dip Switch from 1, 2, 3…….12 for best picture quality on color brightness & contrast based on different working range. If the video signal too strong, then make dip switch at “off” position from 1.2, 3….
3. At last, to adjust HF trimmers slightly for best quality picture.

Rack Card Install to Rack Card Cabinet:

1. Put the Rack card into cabinet, then screw A and A’.
2. The unit must cooperate with cabinet TRN012.
3. When video signal input, signal detector LED will light, if no function, please check camera and cable.



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. When finish the installation, but no video signal, please checks Power LED and power source.
2. No video signal, please check cable installation.
3. Video signal is not normal; please check “＋” and “－” of cable.

TRN012　3U 19" Rack Mounting Cabinet

- Standard 19” 3U rack mounting cabinet built in 3Amp switching power supply.
- Supports up to 15 pieces 19”rack card receiver, TRP414VH, TRA111VH.
- No cooling fans required.
- Ground connecting for protection monitoring equipment.
- Ideal for security monitoring stations or video (audio) distributions hubs.

SPECIFICATION:

ITEM NO.	TRP414VH
Video Input	RJ45 x1
Video Output	BNC x 4　(1 Vp-p，75 Ohm)
Recommend Cable	CAT 5 UTP (24 AWG)
Temperature	Operation: 0 to 55℃, Storage: -20 TO 85℃, Humidity: up to 95%
Dimension　mm	125 x 138.3 x 27.5
Weight　g	180

ITEM NO.	TRA111VH
Video input	2 PIN Terminal x 1 (0.12-2 Vpp)
Input impedance	45 - 175 Ohm
Video output	BNC x 1　(1 Vp-p，75 Ohm)
Freq. response	50 Hz - 5 MHz(-3 dB)
Disturbance reduction	+6 dB…+60 dB at 5 MHz
Gain adjustment	-50 dB at+40 dB gain adj.　-47 dB at+60 dB gain adj.
Power Supply	DC 12V
Power Consumption	150mA (Max)
Input protection	TVS
Temperature	Operation: 0 to 55℃, Storage: -20 TO 85℃, Humidity: up to 95%
Dimensions　W x H x D mm	125 x 139.2 x 27.5
Weight　g	120

ITEM NO.	TRN012
Rack Card Input	15 Pieces
Power supply	DC 12V 3A
Dimensions　W x H x D mm	483 x 205 x 133 (3U)
Weight　g	5460

RoHS CE FC

Rev. B