

# VB101 & VB201

## Instruction of Twisted Pair Video Transmitting Equipment

### SJ-01 Series passive transceiver\receiver

Along with the development of the CCTV, it's more and more necessary to utilize a kind of high-quality and low-priced video transferring method. The traditional coaxial cable and fibre-optical transferring methods can only solve the short and long-distance video transferring problems, however, the picture signal transferring for a distance around 1000 meters becomes the bottle-neck of the monitoring field. A series of twisted-pair video transferring equipment researched and developed by Shanghai Qunan Electrics Co. Ltd. use one of the four unshielded Cable 5 or above twisted-pairs to transfer the basic band video signal with high-quality, and can realize the transferring of one or more high-quality video signal or control signal in the same cable. What's more, the signals will not interfere with each other with the nominal transferring distance between 0~1500 meters. This kind of twisted-pair video transferring equipment has super strong anti-interference ability, which makes it the best choice in such strong-interfering environments as the lift, concrete plant, steel plant and electric plant etc.

This kind of transferring method has lots of advantages such as convenient wiring, simple installation, high reliability, strong anti-interference ability, good transferring effects and low system cost etc. Its utilization has brought great changes to the traditional wiring methods in all kinds of monitoring places as the intelligent building and residential districts. It provides a high performance/price ratio solution to the monitoring engineering system design.

sj-01 passive transceiver\ receiver , no power required, transmit the color video signals 300m(from camera to monitor)away, it Can cooperate with Series active transmit the color video signals 800 away

#### Characteristics:

•no power required

Transmit the color video signals 300M(From camera to Monitor) Away.

-it Can cooperate with Series active transmit the color video signals 800 away

#### Installation:

##### Transmitter:

1. Connecting the video signals to the VIDEO IN terminal of sj-01.
2. Respectively join the twisted-pair (the intertwist pair) with the terminals of the transmitter V+ and V-. (Terminal V+ of the transmitter to terminal V+ of the receiver, and terminal V- of the transmitter to terminal V- of the receiver)
3. Earthing lead (lightning proof lead) join with the terminal of GND.

##### Receiver

1. According to twisted-pair colors of the transmitter (the intertwist pair), respectively join with the terminals of the receiver V+ and V-.
2. Connecting the video signals from the terminal VIDEO OUT to monitor.
3. Earthing lead (lightning proof lead) join with the terminal of GND.



# VB101 & VB201

## Content.

- Normal Output Level: Unbalanced termination 75Ω    Balanced Termination 100Ω
- Bandwidth: DC~6MHz
- Differential Gain: <2%
- Differential Phase: <2°
- Weighted Signal-noise-ratio: 60dB
- Operating Temperature Range: -25°C~+70°C
- Humidity (non-condensing): 0~95%(Non-condensing)
- Dimensions: 5mm\*3mm\*1.5mm



## Cautions:

- Non-shield twisted-pair, gauge is 24—16AWG(0.5—1.31mm), using shield twisted-pair will be shorten the transmission distance.
- Guarantee the twisted-pair is intertwist together, separated pair or parallel pair is forbidden.
- Equipments is impressible with static, disassembly and repair without permission is forbidden.
- Keep water out of the equipment.
- DC circuit resistance less than 18Ω/100m; Difference capacitance less than 20pf/ft.
- Keep earthing perfect, especially outdoor

## VB101 Setup - Both Receiver and Transmitter are the Passive SJ-01



## VB201 Setup - Receiver is Passive and Transmitter is Active (SJ-02T)



# VB201 & VB202

## Instruction of Twisted Pair Video Transmitting Equipment

### SJ-02T® Series Active Transceiver\Receiver

Along with the development of the CCTV, it's more and more necessary to utilize a kind of high-quality and low-priced video transferring method. The traditional coaxial cable and fibre-optical transferring methods can only solve the short and long-distance video transferring problems, however, the picture signal transferring for a distance around 1000 meters becomes the bottle-neck of the monitoring field. A series of twisted-pair video transferring equipment researched and developed .use one of the four non-shelting Cable 5 or above twisted-pairs to transfer the basic band video signal with high-quality, and can realize the transferring of one or more high-quality video signal or control signal in the same cable. What's more, the signals will not interfere with each other with the nominal transferring distance between 0~1500 meters. This kind of twisted-pair video transferring equipment has super strong anti-interference ability, which makes it the best choice in such strong-interfering environments as the lift, concrete plant, steel plant and electric plant etc.

This kind of transferring method has lots of advantages such as convenient wiring, simple installation, high reliability, strong anti-interference ability, good transferring effects and low system cost etc. Its utilization has brought great changes to the traditional wiring methods in all kinds of monitoring places as the intelligent building and residential districts. It provides a high performance/price ratio solution to the monitoring engineering system design.

#### Installation:

##### Transmitter

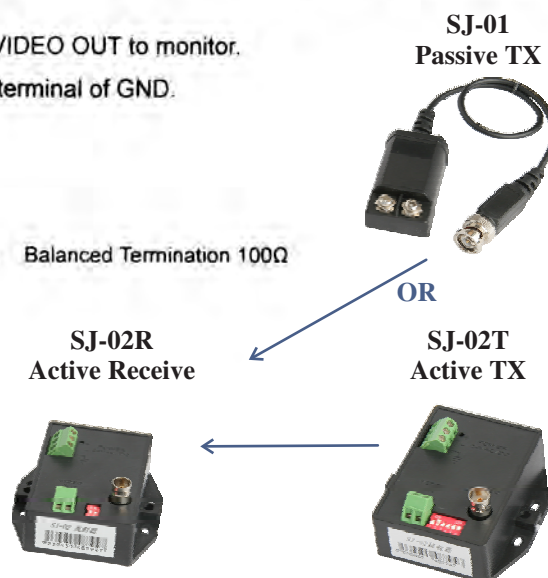
1. Connecting the video signals to the VIDEO IN terminal of SJ-01 (VB201 Kit) or SJ-02T (VB202 Kit)
2. Respectively join the twisted-pair (the intertwist pair) with the terminals of the transmitter V+ and V-. (Terminal V+ of the transmitter to terminal V+ of the receiver, and terminal V- of the transmitter to terminal V- of the receiver)
3. Earthing lead (lightning proof lead) join with the terminal of GND.

##### Receiver

1. According to twisted-pair colors of the transmitter (the intertwist pair), respectively join with the terminals of the receiver V+ and V-.
2. Connecting the video signals from the terminal VIDEO OUT to monitor.
3. Earthing lead (lightning proof lead) join with the terminal of GND.

#### Content.

- Normal Output Level: Unbalanced termination 75Ω    Balanced Termination 100Ω
- Bandwidth: DC~6MHz
- Differential Gain: <2%
- Differential Pgage: <2°
- Weighted Signal-noise-ratio: 60dB
- Power consumption: 0.5w
- Dimensions: 76\*76\*27mm



# VB201 & VB202

- Operating Temperature Range: -25°C~+70°C
- Operating Humidity Range: 0~95%(Non-condensing)

## Cautions:

- Non-shield twisted-pair, gauge is 24—16AWG(0.5—1.31mm), using shield twisted-pair will be shorten the transmission distance.
- Guarantee the twisted-pair is intertwist together, separated pair or parallel pair is forbidden.
- Equipments is impressible with static, disassembly and repair without permission is forbidden.
- Keep water out of the equipment.
- DC circuit resistance less than 18 Ω/100m; Difference capacitance less than 20pf/ft.
- Keep earthing perfect, especially outdoor

## Switch for Distance Set

### Transmitter

Switch	Distance						
	0-200m	200-400m	400-600m	600-800m	800-1000m	1000-1200m	1200-1500m
1	OFF	OFF	OFF	OFF		OFF	
2	OFF	OFF	OFF	OFF	OFF		

### Receiver

Switch	Distance						
	0-200m	200-400m	400-600m	600-800m	800-1000m	1000-1200m	1200-1500m
1		OFF	OFF	OFF	OFF	OFF	OFF
2	OFF		OFF	OFF	OFF	OFF	OFF
3	OFF	OFF		OFF	OFF	OFF	OFF
4	OFF	OFF	OFF		OFF	OFF	OFF
5	OFF	OFF	OFF	OFF		OFF	
6	OFF	OFF	OFF	OFF	OFF		

## Sketch map for connecting equipment

