

**08CH ACTIVE CAT5 VIDEO RECEIVER/HUB**

**OPERATION MANUAL**



UST108R Front



UST108R Rear

[08 Channel Active CAT5 Video Receiver/Hub](#)

['Hub-Bar' Rejective Active UTP Video BALUN](#)

**Video Transceiver Introduction**

08 Channel CAT5 Video Receiver/Hub is an active (amplified) pair equipment that allows the extension of real-time monochrome or color video on up to 4000ft (with Image figure enhanced function), using Category-5 Unshielded Twisted-Pair (UTP) CAT5 networking wire. Composite Video Broadcasting Base band (composite-CVBS/AV, PAL/NTSC/SECAM) signals of any video type are supported.

The unparalleled interference rejection and low emissions of the transceiver allows long run video signals to co-exist in the same wire bundle as telephone, data-com, or low-voltage power circuits. This allows the use of shared or existing cable plant. Ground-lifting circuit design ensures no annoying "hum-bars" when ground potential differences exist.

Built-in lightning protection, transient protections, ESD protection, power line contact protection, damaging voltage spike problems are eliminated.

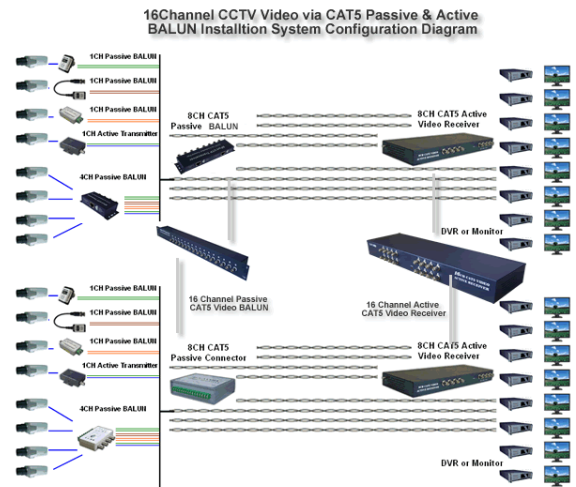
**Equipment Specifications**

Cable Distance: Up to 5000ft Transmitter-Receive UTP Cat 5 or better.  
Point to Point transmission of real-time PAL,NTSC or SECAM 08 channel CVBS video

signals.

Image figure enhanced function in output of CAT5 video receiver. Lightning protection, Transient protection, ESD protection, Power Line Contact protection, damaging voltage spike problems are eliminated. Dimensions: 326X120X33mm, GND screw connector.

**08/16 Channel CAT5 Video Transceiver System Configuration Diagram**



**Distance ADJ Switches Table**

Video Transmitter Distance ADJ Switches  
0-600m 600-900m 900-1400m >1400m

Video Receiver Distance ADJ Switches  
0-300m 300-600m 600-1400m >1400m

**Technical Specifications**

- Video Frequency Response: DC to 6 MHz
- DC Coupled Amplifier Mode 100V/us transient responding
- Differential Gain: 0.5%
- Differential Phase: 0.3°
- Distance Switch 4-Position Adjustable for each channel.
- Common-mode/Differential-mode Rejection: 15KHz to 5 MHz, 65 dB typical.
- Channels Cross Talk: -68dB.
- Loop Return Loss: over 15dB
- Figure Enhanced Output: 4.43MHz extra emphasis
- Line Impedance: Coax, female BNC 75 ohms, CAT5 line, Terminal Block 100 ohms.
- Wire Type: Network Wiring One Unshielded Twisted Pair 24-16 AWG (0.5-1.31mm). Category Type Cat 5 or better. Impedance 100±20 ohms.
- DC Loop Resistance 52ohms per 1,000 ft (18 ohms per 100m).
- Differential Capacitance 19pF/ft max (62pF/m max).
- LED Indicator: Power On Red Indicator LED Light.
- Power Supply: +12VDC/1A

**Environmental**

Temperature -20°C to +65°C.  
Humidity (non-condensing) 0 to 95%.

**Transient Immunity**

6,000 V 1.2µS x 50 µS per ANSI/IEEE 587 C62.41 B3.  
3,000 V 8µS x 20 µS when ground screw terminal is bonded to earth-ground.

**Equipment Installment**

- 1: Put the video signals you need in the VIDEO IN/OUT of CAT5 Video Transceiver.
- 2: Put a twisted-pair in the VIDEO A, B screw terminals of CAT5 Video Transmitter and Receiver respectively.
- 3: Connect with the mains following instructions shown in the system configuration diagram or sketch map, make sure DC power supply is +12VDC/1A.
- 4: Set the position of ADJ correctly according to the distance table in Transceiver.
- 5: 3 'GND' screw terminals are bonded to earth-ground.
- 6: After the five steps, the 08 VIDEO Outputs of 08 Channel CAT5 Video Receiver/Hub is ready to work.

**Check after Connection**

1. Power On Red Indicator LED Light.
2. Make sure that UTP wire and coaxial cable is correctly and firmly connected.
3. Make sure the 'GND' screw terminal is firmly connected to earth-ground.

**Mechanical**

Dimensions: 326X120X33mm  
Material: Metal Housing Case

**Maintenance & Quality Guarantee**

3 Year Warranty