

Model FS-4504R

Features

4-Channel Active Video Receiver Hub

- Full-motion color video signal up to 3900ft(1200m) via UTP cat5e/6
- NTSC, PAL & SECAM video format compatible
- Real-time transmission
- 12V/24V DC/AC power supply
- Adjustable for various distance
- Integrated 2 channel video distribution amplifier allows dual output
- Female BNC connector
- RJ45 and detachable terminal blocks for UTP cat5e/6
- Compatible with all cameras with built-in UTP transmitter
- Exceptional interference rejection
- 70 dB crosstalk and noise immunity
- Full ground-loop immunity
- Built in TVS(Transient Voltage Suppressors) for surge protection
- Lightning protection design Grade: V
- Compact size and easy installation
- Rack, wall mountable and desk application with 4 rubber feet
- Black galvanized housing



Overview

The FS-4504R video balun hub is a active (amplified) device that allows the transmission of real-time CCTV video signal via cost-effective Unshielded Twisted Paired(UTP) cable. Baseband (composite) signals of any type are supported.

The FS-4504R is a compact unit. The power requirement is 12V/24V DC/AC. The pluggable screw terminal block of FS-4504R allows easy connection of UTP cable input. It receives 4 channel video signal from camera end via one UTP cable at distance up to 3900ft(1200m)when used with active video transmitter. The transmission distance reaches up to 2200ft(700m) when used with passive video transceiver. Its integrated 2 channel video distribution amplifier allows dual output to display video at both monitor and DVR.

The FS-4504R has a single distance adjustment as well as built-in surge suppression to protect video equipment against damaging voltage spikes. Its Integrated

Ground Loop isolation prevents annoying "hum-bars" common with long distance installations and its excellent crosstalk and noise immunity provides quality video up to the maximum distance. The superior interference rejection and low emissions of the FS-4504R allow video signals to co-exist in the same wire bundle as telephone, datacom, or low-voltage power circuits. This allows the use of a shared or existing cable plant.

Applications

- Security Monitoring System
- Multimedia Network Teaching System
- Medical Monitoring Display System
- Industrial Automation Control System
- Banking, securities, financial information display system
- Remote Network Server Monitoring
- Department Store Security
- Casino Security
- Hospitals, Airports and banks
- School Campuses

Wire and Cable Recommendations

FS-4504R is recommended to use with Unshielded Twisted Paired (UTP) wiring from 24AWG through 22AWG. Individually shielded pairs should be avoided, as they reduce the operating range of the systems drastically. Multi-pair cable (25-pair or more) with an overall shield are acceptable. Video signals can coexist in the same wire bundle as telephone, datacom, or low-voltage power circuits. While video may be routed through telephone punch-down block terminals, any bridge-taps, also called T-taps and any resistive, capacitive or inductive devices MUST BE removed from the pair.

For more specific information regarding wire types, gauges and proper installation techniques, please contact us for technical assistance.

Technical Specifications

Product Name		4 Channel Active Video Receiver Hub (FS-4504R)
Applied Devices		CCTV cameras, monitors, DVR, switchers, IP encoders, and other CCTV equipment
Video	Video Format	PAL, NTSC, SECAM
	Operating Frequency	Signal Band: 250MHz(-3db) Balance Band: DC to 6MHz
	Max Distance	UTP Category 5e (24AWG) color: 3900ft(1200m)) with active transmitter;2200ft(700m)) with passive transmitter
	Common-mode/Differential-mode rejection	75 dB typ
	Attenuation	1.5 dB Max
	Impedance	Coax, female BNC 75Ω unbalanced UTP, screw terminal block or RJ45 100Ω balanced
	Video Distance Adjustment	4-position dip switches
LED Indicators		Red: Power-On Yellow : "Active" signal present
Wire Type	Network Wiring	One Unshielded Twisted Pair (for each video signal) 24-16 AWG (0.5-1.31mm)
	Category Type	2 or better
	Impedance	100 ± 20 ohms
	DC Loop Resistance	52 ohms per 1,000ft (18 ohms per 100m)
	Differential Capacitance	19 pF/ft max (62 pF/m max)
Power	Adaptive Voltage Arrange	AC/DC 9V-24V 12V Power Supply is recommended
	Power Consumption	<500mW
Connector	Video Input	pluggable screw terminal block and RJ45 for UTP (select one connection)
	Video Output	Female BNC Connector; dual video output for 4 port and 8 port
Protection	Surge Protection	renewable solid state surge protection
	Ground Isolation	Ground connection available for STP or Ground loop removal
	Video Output	2KV(common mode), 10/700us IEC6100-4-5/1955(GB/T 1726, 5-1999)
	Video Input	2KV(different mode), 4KV(common mode), 10/700us IEC6100-4-5/1955(GB/T 1726, 5-1999)
	Video Input Protection for Over Current	Protection for over 100mA current Max
Mechanical	Housing	Galvanized
	Body Color	Black
	Dimensions(L*W*H)	190*82.5*44.5mm (BNC connector & mounting bracket excluded)
	Net Weight	660g
Environmental	Operating Temperature	-20° ~ 70° C
	Relative Humidity	0~95% (non-condensing)
	Storage Temperature	-40° ~ 150° C

Application Diagram

Diagram 1 FS-4201SR + FS-4504R

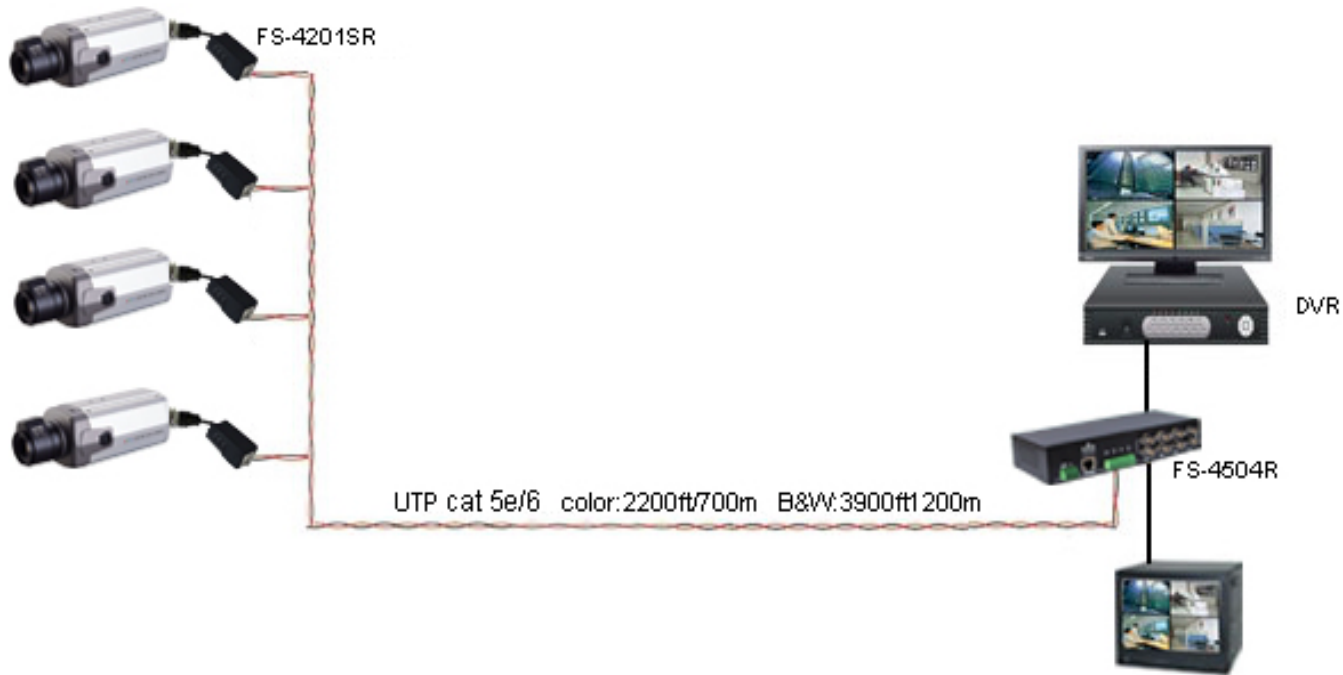


Diagram 2 FS-4401S + FS-4504R

