

**Model FS-4616R**

## Features

### 16-Channel Active Video Receiver Hub

- Full-motion color video signal up to 3936ft(1200m) via UTP cat5e/6
- NTSC, PAL & SECAM video format compatible
- Real-time transmission
- 100-240V power supply, 50~60Hz
- Adjustable for various video distance
- Female BNC connector
- RJ45 and detachable terminal blocks for UTP cat5e/6
- Video Present LED indicators for each channel
- Compatible with qualified UTP camera
- 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
- High-Density 19", 1U rack mount, wall mountable and desk installation via 4 rubber feet
- Black galvanized housing



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## Overview

The FS-4616R 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-4616R is a compact unit. RJ45 and pluggable screw terminal blocks of FS-4616R allows easy connection of UTP cable input. It receives 16 channel video signal from camera end via 4 UTP cable at distance up to 3936ft(1200m)when used with active video transmitter. The transmission distance reaches up to 2296ft(700m)when used with passive transmitter.

The FS-4616R has a single video distance adjustment as well as built-in surge suppressor 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-4616R 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.

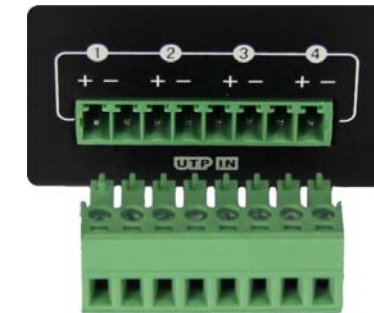
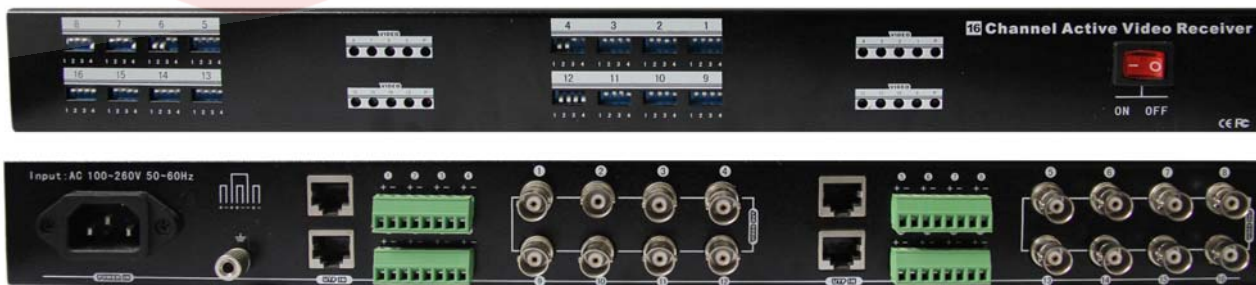
## Applications

- 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-4616R 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-voltages 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

Model		FS-4616R
Product Name		16 Channel Active Video Receiver Hub
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: 3936ft(1200m)) with active transmitter;2296ft(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	AC100-250V, 50~60Hz
	Power Consumption	<1500mW
Connector	Video Input	pluggable screw terminal block and RJ45 for UTP ( select one connection)
	Video Output	Female BNC Connector
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)	430*82.5*44.5mm (BNC connector & mounting bracket excluded)
	Net Weight	1420g
Environmental	Operating Temperature	-20° ~ 70° C
	Relative Humidity	0~95% (non-condensing)

## Application Diagram

