# **Passive Video Balun**



## Model FS-4201SR

## **Features**

#### Single Channel Passive Video Transceiver (Tool-less Balun)

- •Full-motion color video signal up to 1312ft(400m) and monochrome (B&W) up to1968ft(600m) via UTP cat5e/6
- •NTSC, PAL & SECAM video format compatible
- •Real-time transmission
- No power required
- •Reliable UTP push-pin terminal block
- •Tool-less installation within less than 1 minute
- •Male BNC with extended 5.9inch(150mm)mini-coax pigtail
- Exceptional interference rejection
- •Built-in TVS(Transient Voltage Suppressors) for surge protection
- Lightning protection design Grade: III
- •50 dB crosstalk and noise immunity
- •Compact size and easy installation
- ABS engineering plastic housing



## **Overview**

The FS-4201SR video balun is a passive (non-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-4201SR has a mini-coax pigtail lead which allows quick mounting onto fixed cameras and allows in-camera mounting in most dome cameras.

Push-pin terminal block allows tool-less connection of UTP cable output. Used in pairs, FS-4201SR eliminates costly and bulky coaxial cable, allowing live

CCTV color video signal up to 1312ft (400m). FS-4201SR is also compatible with all the other FOLKSAFE passive transceiver for application at distance up to 1312ft(400m) and active receiver up to 2296ft(700m).

The superior interference rejection and low emissions of the FS-4201SR allow video signals to coexist in the same wire bundle as telephone, datacom, or low-voltage power circuits. This allows the use of a shared or existing cable plant. FS-4201SR has built-in surge suppressor to protect video equipment against damaging voltage spikes. Its crosstalk and noise immunity ensure quality video signals.



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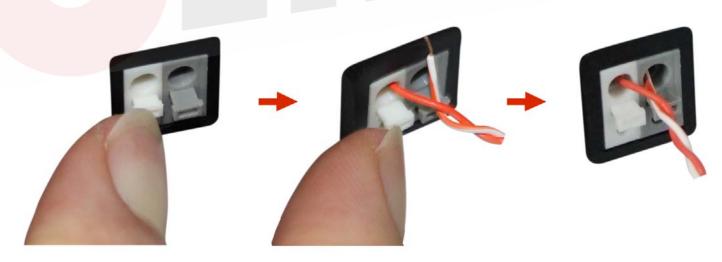
## **Applications**

- 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-4201SR 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.





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# **Technical Specifications**

		FS-4201SR
Product Name		Single Channel Passive Video Transceiver
Applied Devices		CCTV cameras, monitors, DVR, switchers, IP encoders, and other CCTV equipment
Video	Video Format	PAL, NTSC, SECAM
	Operating Frequency	DC to 5MHz
	Max Distance	UTP Category 5e (24AWG) Color: 1312ft(400m) B&W: 1968ft(600m)
	Common-mode/Differential-mode rejection	15 KHz to 5 MHz 60 dB typ
	Impedance	Coax, Male BNC 75Ω unbalanced
		UTP, two push-pins terminal block 100Ω balanced
	Attenuation	1.5 dB typ Max
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	No external power required
Connector	Video input/output	Male BNC connector
	Video input/output	Tool-less push-pin terminal block
Protection	Surge Protection	renewable solid state surge protection
	Video Input	2KV(common mode), 10/700us IEC6100-4-5/1955(GB/T 1726, 5-1999)
	Video Output	2KV(different mode), 10/700us IEC6100-4-5/1955(GB/T 1726, 5-1999)
Mechanical	Housing	ABS engineering plastic
	Body Color	Black
	Dimensions(L*W*H)	38.4*18.6*19.5mm (BNC connector & cable excluded)
	Net Weight	40g
Environmental	Operating Temperature	-20° ~ 70° C
	Relative Humidity	0~95% (non-condensing)
	Storage Temperature	-40° ~ 150° C





# **Application Diagram**

