Model FS-4102SR

Features

Single Channel Passive Video Transceiver

- 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
- Two screw terminals for UTP cable
- Male BNC connector
- 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-4102SR 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.

Male BNC of FS-4102SR allows connection directly to the camera or DVR. Screw terminals of FS-4102SR allows easy connection of UTP cable output. Used in pairs, FS-4102SR eliminates costly and bulky coaxial cable, allowing live CCTV color video signal up to 1312ft(400m). FS-4102SR 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-4102SR 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. With Built-in TVS(Transient Voltage Suppressors) for surge protection, damaging voltage spike problems are eliminated.

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-4102SR 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.

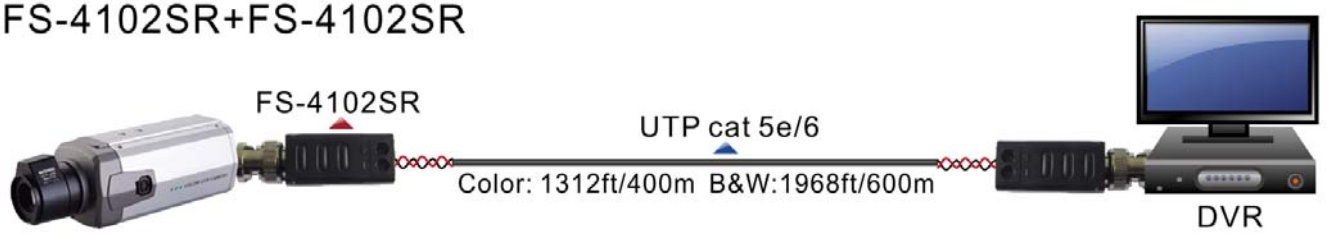
For more specific information regarding wire types, gauges and proper installation techniques, please contact us for technical assistance.

Technical Specifications

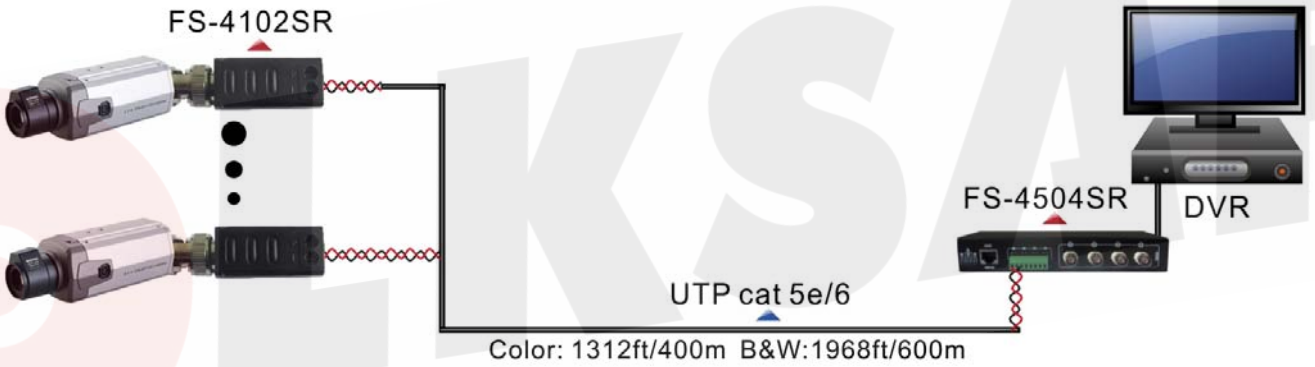
Model		FS-4102SR
Product Name		Single Channel Passive Video Transceiver
Applied devices		CCTV cameras, monitors, DVR, switchers, IP encoders, and other CCTV equipment
Video	Video Format	PAL, NTSC, SECAM
	Operating Frequency	DC to 5MHz
	Max Distance	UTP Category 5e (24AWG) Color: 1312ft(400m) B&W: 1968ft(600m)
	Common-mode/Differential-mode rejection	15 KHz to 5 MHz 60 dB typ
	Impedance	Coax, Male BNC 75Ω unbalanced UTP, Screw terminal 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	Screw terminal
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)	42.4*17.8*17.4mm (BNC connector excluded)
	Net Weight	20g
Environmental	Operating Temperature	-20º ~ 70º C
	Relative Humidity	0~95% (non-condensing)
	Storage Temperature	-40º ~ 150º C

Application Diagram

FS-4102SR+FS-4102SR



FS-4102SR+FS-4504SR



FS-4102SR+FS-4401R