

Model FS-4100SR

Features

1-CH Passive Video Transceiver (tool-less mini balun)

- Full-motion color video signal up to 1300ft(400m) and monochrome (B&W) up to 1950ft(600m) via UTP cat5e/6
- NTSC, PAL & SECAM video format compatible
- Real-time transmission
- No power required
- Reliable screwless UTP terminal block
- Tool-less installation within less than 1 minute
- 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-4100SR 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-4100SR allows connection directly to the camera or DVR. Screwless terminal block allows tool-less connection of UTP cable output. Used in pairs, FS-4100SR eliminates costly and bulky coaxial cable, allowing live CCTV color video signal up to 1300ft/400m. FS-4100SR is also compatible with all the other FOLKSAFE passive transceiver for application at distance up to 1300ft/400m and active receiver up to 2200ft/700m.

The superior interference rejection and low emissions of the FS-4100SR 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. The FS-4100SR has built-in surge suppression to protect video equipment against damaging voltage spikes. Its crosstalk and noise immunity ensure quality video signals.

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-4100SR 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-4100SR	
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: 1300ft(400m) B&W: 1950ft(600m)	
	Common-mode/Differential-mode rejection	15 KHz to 5 MHz 60 dB typ	
	Impedance	Coax, Male BNC	75 ohms
		UTP, screwless terminal block	100 ohms
Attenuation	0.5 dB typ		
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	Screwless terminal block	
Protection	Surge Protection	Built-in Transient Voltage Suppressor(TVS)	
	Antistatic	YES	
Mechanical	Dimensions(L*W*H)	34*16*19mm (BNC connector excluded)	
	Housing	ABS engineering plastic	
	Body Color	Black	
	Net Weight	20g	
Environmental	Operating Temperature	-25° ~ 75° C	
	Relative Humidity	0~95% (non-condensing)	
	Storage Temperature	-40° ~ 150° C	

Application Diagram

Diagram 1 FS-4100SR + FS-4100SR



Diagram 2 FS-4100SR + FS-4504SR



Diagram 3 FS-4100SR + FS-4401R

