

**Model BFS-4504SR- II**

## Features

### 4-Channel Passive Video Transceiver (small and compact)

- 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
- RJ45 and detachable terminal blocks for UTP cat5e/6
- Female 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
- Rack, wall mountable and desk installation with 4 rubber feet
- Black galvanized housing



## Overview

The BFS-4504SR- II video balun hub 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 construction of BFS-4504SR- II is much smaller and compact compared with BFS-4504SR. BFS-4504SR- II supports pluggable screw terminal or RJ45 connections. Used in pairs, it is capable to transmit 4 channel live CCTV color video signal from camera end and receive 4 channel video signal at DVR end via one UTP cable at distance up to 1300ft(400m). BFS-4504SR-III is 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 BFS-4504SR-III 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. It has built-in surge suppression to protect video equipment against damaging voltage spikes and provide noise immunity to ensure quality signals without disturbing "hum-bars".

## 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

BFS-4504SR- II 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.

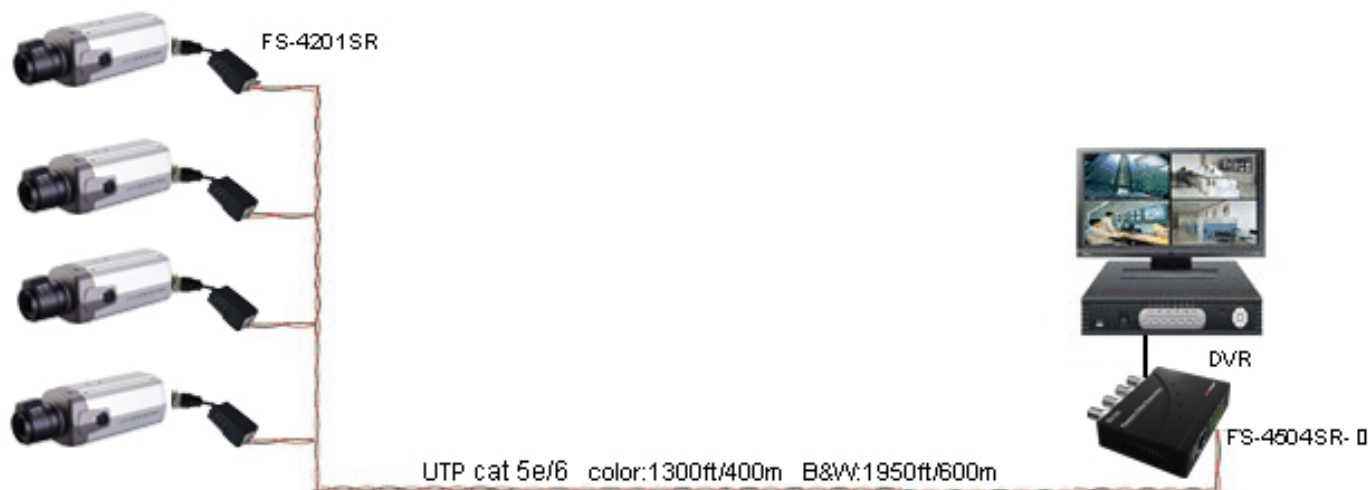
For more specific information regarding wire types, gauges and proper installation techniques, please contact us for technical assistance.

## Technical Specifications

Model		BFS-4504SR- II	
Product Name		4 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, female BNC	75Ω unbalanced
		UTP, screw terminal block or RJ45	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	Female BNC connector	
	Video output/input	pluggable screw terminal block and RJ45 for UTP ( select one connection)	
Protection	Surge Protection	renewable solid state surge protection	
	Antistatic	YES	
	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	Dimensions(L*W*H)	BNC connector & mounting bracket excluded	
		100*72.5*23mm	
	Housing	Galvanized	
	Body Color	Black	
	Net Weight	200g	
Environmental	Operating Temperature	-20° ~ 70° C	
	Relative Humidity	0~95% (non-condensing)	
	Storage Temperature	-40° ~ 150° C	

## Application Diagram

**Diagram 1** FS-4201SR + FS-4504SR-II



**Diagram 2** FS-4504SR-II + FS-4504SR-II



Diagram 3 FS-4504SR-II + FS-4504R

