

**Model FS-4401SL**

## Features

### Single Channel Active Video Transmitter

- Full-motion color video signal up to 4900ft(1500m) via UTP cat5e/6
- NTSC, PAL & SECAM video format compatible
- Real-time transmission
- 12V/24V DC/AC power supply
- Adjustable for various video distance
- Female BNC connector
- Pluggable screw terminal block or UTP
- 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
- Silver metal housing



## Overview

The FS-4401SL video balun 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-4401SL is a compact unit. The power requirement is 12/24V DC/AC. The screw terminal blocks of FS-4401SL allows easy connection of UTP cable output. It transmit one single channel video signal from camera end to DVR end via one UTP cable at distance up to 4900ft(1500m) when used with active video receiver.

The FS-4401SL has a single distance adjustment as well as built-in surge suppression 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 superial interference rejection and low emissions of the FS-4401SL 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-4401SL 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

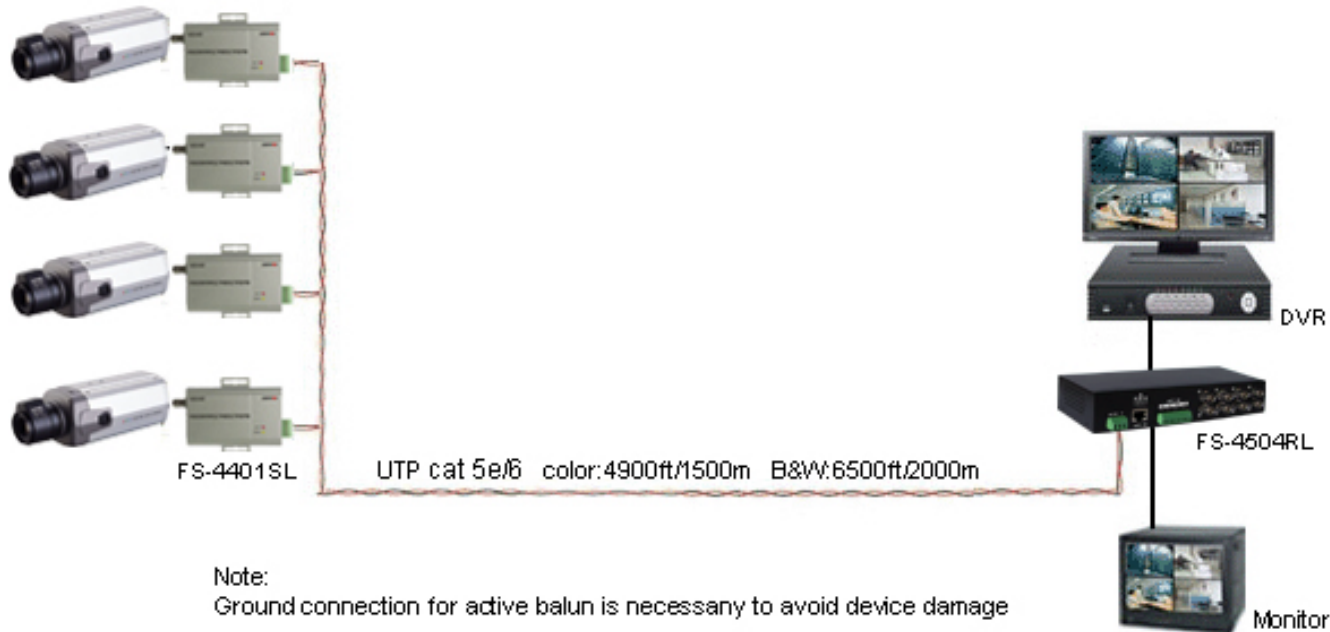
Model		FS-4401SL	
Product Name		Single Channel Active Video Transmitter	
Applied Devices		CCTV cameras, monitors, DVR, switchers, IP encoders, and other CCTV equipment	
Video	Video Format	PAL, NTSC, SECAM	
	Operating Frequency	DC to 6MHz	
	Max Distance	UTP Category 5e (24AWG) Color: 4900ft(1500m) B&W: 6500ft(2000m)	
	Common-mode/Differential-mode rejection	70 dB typ	
	Impedance	Coax, female BNC	75 ohms
		UTP, Screw terminal block	100 ohms
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	12V-40V DC or 9V-24V AC (50Hz)	
	Power consumption	<100mw	
Connector	Video Input	Female BNC Connector	
	Video Output	pluggable screw terminal block for UTP	
Protection	Surge Protection	Built-in Transient Voltage Suppressor(TVS)	
	Ground Isolation	YES	
	Antistatic	YES	
Mechanical	Dimensions(L*W*H)	94.5*64*22 mm (BNC connector & mounting bracket excluded)	
	Housing	Galvanized	
	Body Color	Silver	
	Net Weight	210g	
Environmental	Operating Temperature	-20° ~ 70° C	
	Relative Humidity	0~95% (non-condensing)	
	Storage Temperature	-20° ~ 85° C	

## Application Diagram

**Diagram 1 FS-4401SL + FS-4401RL**



**Diagram 3 FS-4401SL + FS-4504RL**



Note:  
Ground connection for active balun is necessary to avoid device damage