

Model: FS-HDA4501T

Features

Single Channel Active Video Transmitter

- Real-time transmission over UTP cat5e/6
- Compatible with HD-TVI,CVI, AHD & CVBS analog cameras
- Male BNC connector
- Push-pin terminal connection
 - 2-pins for UTP cat 5e/6 (Video: white:- gray:+)
 - 2-pins for power cable (Power: black:- red:+)
- Power Supply: 12VDC input < 10mA
- Built-in solid state TVS (Transient Voltage Suppressor) for surge protection
- Wave Filter Design, Anti-Static Design
- Lightning protection design Grade: III
- 60 dB crosstalk and noise immunity
- Exceptional interference rejection
- ABS engineering plastic housing



Overview

The FS-HDA4501T video balun is an active (amplified) device that allows the transmission of real-time CCTV HD video signal via cost-effective Unshielded Twisted Paired (UTP) cable. The FS-HDA4501T can be used with HD active receiver of FS-HDA4501R which is compatible with all HD-TVI, HD-CVI, AHD and CVBS analog cameras. Transmission distance within a certain range can be flexibly adjusted by the dial switch of FS-HDA4501R. The FS-HDA4501T can be used with HD passive receiver within certain distance.

The superior interference rejection and low emissions of the FS-HDA4501T 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-HDA4501T is built-in surge suppressor to protect video equipment against damaging voltage spikes. Its crosstalk and noise immunity ensure quality video signals.

Wire and Cable Recommendations

The FS-HDA4501T 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.

Distance Chart

Active Transmitter + Passive Receiver

Solution \ Resolution Ratio	Active Transmitter + Passive Receiver				
	720P	1080P	3MPX	4MPX	5MPX
HD-TVI	320M	320M	300M	300M	300M
HD-CVI	450M	360M	NONE	280M	NONE
AHD	500M	360M	300M	250M	250M

Active Transmitter + Active Receiver

Solution \ Resolution Ratio	Active Transmitter + Active Receiver	
	720P	1080P
HD-TVI	320M	320M
HD-CVI	450M	360M
AHD	500M	360M

Technical Specifications

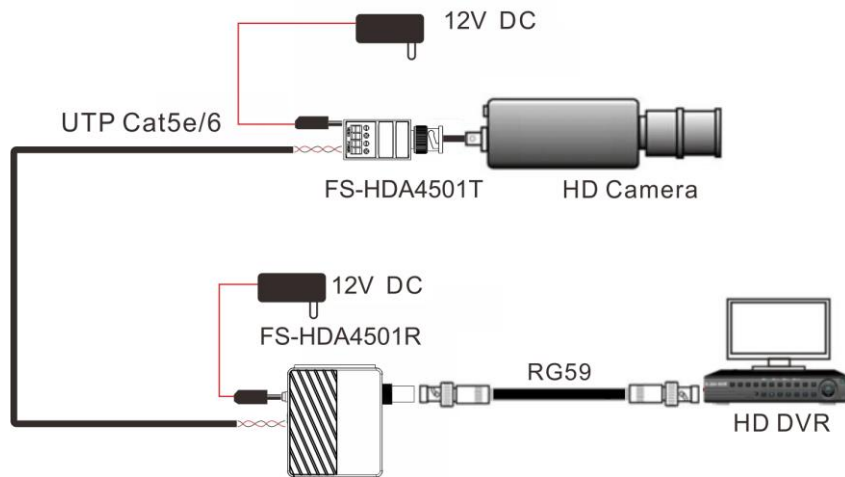
Model		FS-HDA4501T
Product Name		Single Channel HD Active Video Transmitter
Applied Devices		CCTV cameras, monitors, DVR
Video	Video Format	HD-TVI,CVI, AHD and CVBS
	Operating Frequency	Signal bandwidth:205MHz(-3db)
	Max Distance	Please refer to distance chart
	Impedance	BNC side 75Ω unbalanced, UTP side 100Ω balanced
Wire Type	Network Wiring	One Unshielded Twisted Pair (for each video signal) 24-16 AWG (0.5-1.31mm)
	Category Type	UTP cat 5e/6
	Impedance	100 ± 20 ohms
	DC Loop Resistance	30.5 ohms per 1,000ft (10 ohms per 100m)
	Mutual capacitance	18 pF/ft max (59 pF/m max)
Power	Adaptive Voltage Arrange	12VDC power adapter
	Power Consumption	<120mW
Connector	Video Input	Male BNC Connector
	Video Output	Push-pin terminal connection for UTP cat 5e/6
Protection	Antistatic	YES
	Video Input	1KV(different mode),2KV(common mode), 10/700us IEC6100-4-5/1955(GB/T 1726, 5-1999)
	Video Output	2KV(common mode), 10/700us IEC6100-4-5/1955(GB/T 1726, 5-1999)
MTBF	Mean Time Between Failure	20000h
Mechanical	Housing	ABS plastic
	Body Color	Black
	Dimensions (L*W*H)	60*30*24.5mm (L*W*H (BNC connector & mounting bracket excluded))
	Net Weight	48g
Environmental	Operating Temperature	-5° ~ 45° C
	Relative Humidity	0~95% (non-condensing)
	Storage Temperature	-45° ~ 85° C

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

Application Diagram

1. HD Active Transmitter + HD Active Receiver



2. HD Active Transmitter + HD Passive Receiver

