

## Features

### Single Channel HD Passive Video Balun

- Real-time transmission over UTP cat5e/6
- No power required
- NTSC, PAL & SECAM video format compatible
- Compatible with all HD-TVI, HD-CVI & AHD analogue camera
- Colour video Max up to 440m(1443ft) for HD-CVI 720P analogue camera
- Colour video Max up to 240m(787ft) for HD-CVI 1080P analogue camera
- Colour video Max up to 230m(754ft) for HD-TVI 720P analogue camera
- Colour video Max up to 250m(820ft) for HD-TVI 1080P analogue camera
- Colour video Max up to 320m(1050ft) for AHD 720P analogue camera
- Colour video Max up to 330m(1082ft) for AHD 960P analogue camera
- Male BNC connector
- Reliable push-pin terminal connection for UTP cable
- Built-in 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

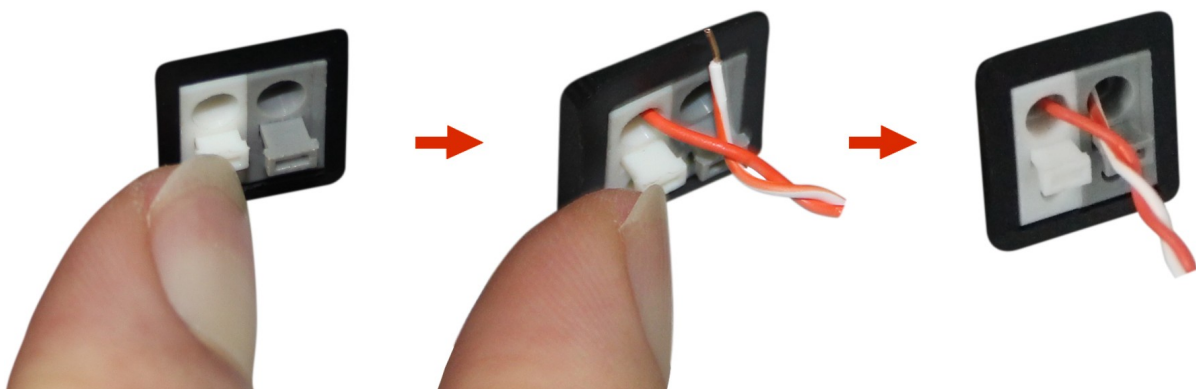


## Overview

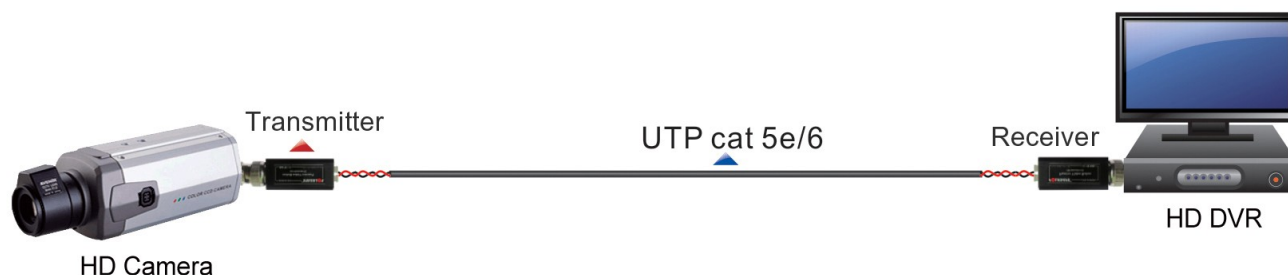
The HAY-HDVB01 video balun is a passive (non-amplified) device that allows the transmission of real-time CCTV HD video signal via cost-effective Unshielded Twisted Paired (UTP) cable. Baseband (composite) signals of any type are supported. The HAY-HDVB01 is compatible with all HD-TVI, HD-CVI and AHD analogue camera. Male BNC of the HAY-HDVB01 allows connection directly to the camera and DVR. Screwless terminal block allows tool-less connection of UTP cable output. Used in pairs, the HAY-HDVB01 eliminates costly and bulky coaxial cable. The superior interference rejection and low emissions of the HAY-HDVB01 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 HAY-HDVB01 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 HAY-HDVB01 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-voltage 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.



## Application Diagram



Model		HAY-HDVB01		
Product Name		Single Channel HD Passive Video Balun		
Applied Devices		CCTV cameras, monitors, DVR, switchers, IP encoders, and other CCTV equipment		
Video	Video Format	PAL, NTSC, SECAM		
	Operating Frequency	DC to 42MHz		
	Max Distance	HD-TVI 720P: 230m	HD-CVI 720P: 440m	AHD 720P : 320 m
		HD-TVI 1080P: 250m	HD-CVI 1080P: 240m	AHD 960P : 330 m
	Common-mode/Differential-mode rejection	15KHz to 42MHz 60 dB typ		
	Impedance	☐Coax, Male BNC 75Ω unbalanced		
		UTP, push-pin terminal block 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	Tool-less push-pin terminal block		
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)	35.1*16.7*18.7mm (BNC connector excluded)		
	Net Weight	40g		
Environmental	Operating Temperature	-20° ~ 70° C		
	Relative Humidity	0~95% (non-condensing)		
	Storage Temperature	-40° ~ 150° C		