Secureye

DATASHEET

# 16 Channel
# HD Passive Video Balun


## Overview

The S-PVB-16P video balun hub 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. The S-PVB-16P is compatible with all HD-TVI, HD-CVI, AHD and CVBS analog cameras.

The S-PVB-16P supports pluggable screw terminal or RJ45 connections. Used with single channel HD passive video transmitter, the S-PVB-16P is capable to receive 16 channel live CCTV HD video signal from camera end via 4 UTP cables.

The superior interference rejection and low emissions of the S-PVB-16P 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 is built-in surge suppressor to protect video equipment against damaging voltage spikes and provide noise immunity to ensure quality signals without disturbing "hum-bars".

## Key Features

- Real-time transmission over UTP cat5e / cat-6
- No power required
- Compatible with all HD-TVI/CVI/AHD/CVBS analog cameras
- Color video max up to 190m (623ft) for HD-TVI 720P camera
  Color video max up to 190m (623ft) for HD-TVI 1080P camera
  Color video max up to 200m (656ft) for HD-TVI 3MPX camera
- Color video max up to 440m (1443ft) for HD-CVI 720P camera
  If you adjust saturation of DVR, max up to 470m (1541ft)
  Color video max up to 230m (754ft ) for HD-CVI 1080P camera
  Color video max up to 230m (754ft ) for HD-CVI 4MPX camera
- Color video max up to 320m (1049ft) for HD-AHD 720P camera
  Color video max up to 320m (1049ft) for HD-AHD 960P camera
  Color video max up to 250m (820ft) for HD-AHD 1080P camera
  Color video max up to 180m (590ft) for HD-AHD 3MPX camera
  Color video max up to 200m (656ft ) for HD-AHD 4MPX camera
  Color video max up to 200m (656ft ) for HD-AHD 5MPX camera
- Color video max up to 400m (1312ft) for CVBS camera
- Female BNC connector
- RJ45 and detachable terminal blocks for UTP cat5e / cat-6
- Built-in solid state TVS (Transient Voltage Suppressors) for surge protection
- Wave Filter Design, Anti-Static Design
- Lightning protection design Grade: III
- 60 dB crosstalk and noise immunity
- Exceptional interference rejection
- Compact size and easy installation
- Rack, wall mountable and desk installation with 4 rubber feet
- Black galvanized housing

# Specification

| Specification | | S-PVB-16P | | | | | |
|---|---|---|---|---|---|---|---|
| | Applied Devices | CCTV cameras, monitors, DVR, switchers, IP encoders, and other CCTV equipment | | | | | |
| Video | Video Format | HD-TVI/CVI/AHD/CVBS | | | | | |
| | Operating Frequency | DC to 42MHz | | | | | |
| | Max Distance | HD-CVI 720P<br>440m(1443ft) | HD-CVI 1080P<br>230m(754ft) | HD-CVI 4MPX<br>230m(754ft) | | | |
| | | HD-TVI 720P<br>190m(623ft) | HD-TVI 1080P<br>190m(623ft) | HD-TVI 3MPX<br>200m( 656ft) | | | |
| | | HD-AHD 720P<br>320m(1049ft) | HD-AHD 960P<br>320m(1049ft) | HD-AHD 1080P<br>250m(820ft) | HD-AHD 3MPX<br>180m(590ft) | HD-AHD 4MPX<br>200m(656ft ) | HD-AHD 5MPX<br>200m(656ft ) |
| | Common-mode/Differential-mode rejection | 15KHz to 42MHz 60 dB typ | | | | | |
| | Impedance | Coax: female BNC 75Ω unbalanced | | | | | |
| | | UTP: screw terminal block or RJ45 100Ω balanced | | | | | |
| | Attenuation | 1.5 dB typ Max | | | | | |
| WireType | Network Wiring | One Unshielded Twisted Pair (for each video signal) 24-16 AWG (0.5-1.31mm) | | | | | |
| | Category Type | UTP cat5e / cat-6 | | | | | |
| | 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 | 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 IEC61000-4-5/1955(GB/T 1726, 5-1999) | | | | | |
| | Video Output | 2KV(different mode), 10/700us IEC61000-4-5/1955(GB/T 1726, 5-1999) | | | | | |
| Mechanical | Dimensions(L*W*H) | BNC connector & mounting bracket excluded | | | | | |
| | | 430*85*44.5mm | | | | | |
| | Housing | Galvanized | | | | | |
| | Body Color | Black | | | | | |
| Environmental | Operating Temperature | -10° ~ 60° C | | | | | |
| | Relative Humidity | 0~95% (non-condensing) | | | | | |
| | Storage Temperature | -40° ~ 70° C | | | | | |

## Application Diagram