



## CCTV BALUN Series

### Passive Series

Description:

**Fast, easy, simple !**

CCTV passive balun : no AC power or batteries needed, bi-directional signal conversion and ultra-miniature enclosure.

The CCTV Video Balun allows base-band composite video signals to be transmitted via a single unshielded twisted pair (UTP) cable for more versatile cabling.

The CCTV Balun is used in pairs to allow you to eliminate more expensive coaxial cable, including coupling signals from remote video cameras to display systems, video capture, security and surveillance monitoring applications.

General Specifications:

Cable-UTP :	Cat. 5e or better, #24 AWG typical Impedance: 100 ohms at 1MHz. Max. capacitance: 20pf/ft Attenuation: 6.6dB/1000ft at 1MHz
Cable-BNC:	75ohm at 1MHz (RG59/U) Max. 25ft. of coax allowed per end to end link
Max. distance:	Color: Cat.5 2230ft (680 Meter) Monochrome: Cat.5 2550ft (780 Meter)
Environment required :	Operating temp. 0 to 55° C Storage temp. -22 to 85° C Humidity up to 95%

Electrical Characteristic and Performance::

Bandwidth:	Video DC to 8MHz
Maximum input:	1.1Vp-p
Impedance:	75 ohm to 100 ohm (or 75ohm to 120ohm on request)
Insertion loss:	Max. 2dB per pair over the frequency range
Return loss:	Greater than 15dB over the frequency range
Common mode rejection:	Greater than 40dB at 8MHz



**ATP-1111670** BNC Male-RJ45 Jack



**ATP-1121670** BNC Male-RJ45 Jack



**ATP-1151670** BNC Male-RJ45 Jack



**ATP-1131661** BNC-IDC (Tooless)



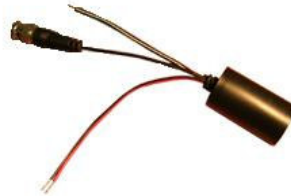
**ATP-11819610** BNC Male + Fly lead  
Video + Power



**ATP-11819630** BNC Male + Fly lead  
Video + Power



**ATP-11811610** BNC Male + Plug +Fly lead  
Video + Power + Data



**ATP-11811630** BNC Male + Fly lead  
Video + Power + Data

## ATP-1172414 Passive 4 Ports Transceiver Box



### Description:

This Transceiver box allows transmission of 4 real time color or monochrome Video signal up to 670 meters over Cat.5 UTP networking cable. This transceiver box is designed for small CCTV installations where size and space are restricted.

I/O: 4xBNC to 1xRJ45

### Specifications:

<b>Bandwidth:</b>	Video DC to 8MHz
<b>Insertion Loss:</b>	$\leq 2\text{dB}$ over the frequency range from DC to 8MHz
<b>Return loss :</b>	$\geq 15\text{dB}$ over the frequency range from DC to 8MHz
<b>Common Mode Rejection:</b>	$\geq 40\text{dB}$ at 8MHz
<b>Impedance:</b>	BNC 75ohm to RJ45 100ohm<
<b>Cable:</b>	Cat5. UTP cable Wires impedance: 100 ohm at 1MHz Max. Capacitance : 20 pf/ft Attenuation: 6.6dB/1000ft at 1MHz
<b>Maximum Distance:</b>	2200 feet / 670 meters via UTP Cat.5 cable
<b>Size:</b>	81x60x24mm

# Active Series

## ATP-121111 Active Balun-One port transmitter



### Description:

The Active Video Transmitter provides for the long-distance transmission of real-time color and monochrome video signals as well as all base-band (composite) signals. This amplified (active) product enables video transmissions of up to 2.5 kilometers across Category 5 cabling, or 1.7 kilometers via Category 2 or 3 unshielded twisted pair cabling.

The Active Video Transmitter also makes it possible for long-distance video signals to share the same wire bundling with data, telephony and low-voltage power circuits, thanks to the product special shielding design and low emissions capability. The Active Video Transmitter also offers protection against voltage spikes and helps prevent interference from ground potential differences.

### Specifications:

Frequency Response :	DC to 8 MHz
Distance Switch :	3-Position, "L" for distance less or equal to 500m "M" for or distance between 500~1000m "H" for or distance longer than 1000m
Common-mode / Differential-mode Rejection. :	60 dB typ. at 15KHz to 8 MHz
Impedance :	Coax, female BNC 75 ohms UTP, Terminal Block 100 ohms
Power Required :	12VDC/24VAC, 250mA max. (not included) May share power with camera
Power On :	Red Indicator Light
Video Signal Present :	Green Indicator Light
Network Wiring :	Unshielded Twisted Pair, AWG #16~24(1.3-0.5 mm) Category Type : Cat 2 or better Impedance : 100 ± 20 ohms
DC Loop Resistance :	52 ohms per 1,000 ft (18 ohms per 100 m) for Cat.5 AWG#24
Transmission Distance :	1.7Km When used with 121121 active receiver and Cat.2 or 3 2.5Km When used with 121121 active receiver and Cat.5 or better
Differential Capacitance :	19 pF/ft max (62 pF/m max)
Temperature :	0° to +50° C
Humidity (non-condensing) :	0 to 95%
Dimensions excluding BNC :	3.0 x 1.6 x 1.1 in (75.6 x 40.9 x 27.1 mm)
Weight :	100 g
Material :	Black ABS

## ATP-121121 Active Balun-One port receiver



### Description:

The Active Video Receiver provides for the long-distance reception of real-time color and monochrome video signals as well as all base-band (composite) signals. This amplified (active) product enables video signal reception across distances of 2.5 kilometers using Category 5 cabling, or 1.7 kilometers with Category 2 or 3 unshielded twisted pair cabling.

The Active Video Receiver makes it possible for long-distance video signals to share the same wire bundling with data, telephony and low-voltage power circuits, thanks to the product special shielding design and low emissions capability. The Active Video Receiver also offers protection against voltage spikes and helps prevent interference from ground potential differences.

### Specifications:

Frequency Response :	DC to 5 MHz
Brightness and Sharpness Control :	Adjustable
Common-mode / Differential-mode Rejection. :	60 dB typ. at 15 KHz to 5 MHz
Impedance :	Coax, female BNC 75 ohms UTP, Terminal Block 100 ohms
Power Required :	12-24VAC/DC, 250mA max. (not included) One floating power supply may power multiple 121121 Receivers
Power On :	Red Indicator Light
Video Signal Present :	Green Indicator Light
Network Wiring :	Unshielded Twisted Pair, AWG #16~24(1.3-0.5 mm) Category Type : Cat 2 or better Impedance : 100 ± 20 ohms
DC Loop Resistance :	52 ohms per 1,000 ft (18 ohms per 100 m) for Cat.5 AWG#24
Transmission Distance :	1.7Km When used with 121111 active transmitter and Cat.2 or 3 2.5Km When used with 121111 active transmitter and Cat.5 or better
Differential Capacitance :	19 pF/ft max (62 pF/m max)
Temperature :	0° to +50 °C
Humidity (non-condensing) :	0 to 95%
Dimensions excluding BNC :	3.0 x 1.6 x 1.1 in (75.6 x 40.9 x 27.1 mm)
Weight :	100 g
Material :	Black ABS

## ATP-121112 Active Balun-Two ports transmitter (Video+Audio)



### Description:

The ATP-121112 transmitter provides for the transmission of one audio and video signal. This capability is useful for connection with both a monitor and a DVR at the same time. This amplified (active) product enables video transmissions of up to 2 kilometers across Category 5 cabling, or 1.7 kilometers via Category 2 or 3 unshielded twisted pair cabling. The ATP-121112 Video-Audio Transmitter also makes it possible for long-distance video signals to share the same wire bundling with data, telephony and low-voltage power circuits, thanks to the product special shielding design and low emissions capability. The ATP-121112 also offers protection against voltage spikes and helps prevent interference from ground potential differences. The transmitter is fully compatible with the ATP-121132 receiver, making them the perfect team for your video monitoring needs.

### Specifications:

Frequency Response :	DC to 5 MHz
Distance Switch :	3-Position, "L" for distance less or equal to 500m "M" for distance between 500~1000m "H" for distance longer than 1000m
Common-mode / Differential-mode Rejection. :	60 dB typ. at 15 KHz to 5 MHz
Impedance :	Coax, female BNC 75 ohms UTP, Terminal Block 100 ohms
Power Required :	24VAC/DC, 250mA max. (not included) May share 24 VAC power with camera, providing supply is floating
Power On :	Red Indicator Light
Video Signal Present :	Without Indicator Light
Network Wiring – Terminal Block :	Unshielded Twisted Pair, AWG #16 - #24 (1.3-0.5 mm)
– RJ45 Jack	Unshielded Twisted Pair, AWG #24 (0.5 mm) Category Type : Cat 2 or better Impedance : 100 ± 20 ohms
DC Loop Resistance :	52 ohms per 1,000 ft (18 ohms per 100 m) for Cat.5 AWG#24
Transmission Distance :	1.7Km When used with 121132 active receiver and Cat.2 or 3 2.5Km When used with 121132 active receiver and Cat.5 or better
Differential Capacitance :	19 pF/ft max (62 pF/m max)
Temperature :	0° to +50 °C
Humidity (non-condensing) :	0 to 95%
Dimensions excluding BNC :	3.2 x 2.4x 0.9 in (81X60X24mm)
Weight :	100 g
Material :	Black ABS

## ATP-121132 Active Balun-Two ports receiver (Video+Audio)



### Description:

The ATP-121132 Receiver allows for the reception of one audio and video signal. This capability is especially useful for connection with both a monitor and a DVR at the same time. This amplified (active) product enables video signal reception across distances of 2 kilometers using Category 5 cabling, or 1.7 kilometers with Category 2 or 3 unshielded twisted pair cabling. The ATP-121132 makes it possible for long-distance video signals to share the same wire bundling with data, telephony and low-voltage power circuits, thanks to the product special shielding design and low emissions capability. The ATP-121132 also offers protection against voltage spikes and helps prevent interference from ground potential differences. The receiver is designed to complement the ATP-121112 transmitter.

### Specifications:

Frequency Response :	DC to 5 MHz
Brightness and Sharpness Control :	Adjustable
Common-mode / Differential-mode Rejection. :	60 dB typ. at 15 KHz to 5 MHz
Impedance :	Coax, female BNC 75 ohms UTP, Terminal Block 100 ohms
Power Required :	12-24VAC/DC, 250mA max. (not included) One floating power supply may power multiple 121112 Receivers
Power On :	Red Indicator Light
Video Signal Present :	Without Indicator Light
Network Wiring – Terminal Block :	Unshielded Twisted Pair, AWG #16 - #24 (1.3-0.5 mm)
– RJ45 Jack :	Unshielded Twisted Pair, AWG #24 (0.5 mm) Category Type : Cat 2 or better Impedance : 100 ± 20 ohms
Differential Capacitance :	19 pF/ft max (62 pF/m max)
Temperature :	0° to +50 °C
Humidity (non-condensing) :	0 to 95%
Dimensions excluding BNC :	3.2 x 2.4x 0.9 in (81X60X24mm)
Weight :	100 g
Material :	Black ABS

# Active CCTV Receiver Panel: 8/16/32 Ports

## Description:

Our **Active CCTV Receiver Panel** is provided for long distance transmission of real-time color and monochrome video signals as well as all base-band (composite) video signals by economical UTP (Unshielded Twisted Pair) cable. The inputs can be RJ45 Jack video inputs or Terminal Block video inputs. The Active CCTV Receiver Panel would have three types:

**ATP-135808411**- 8 ports which is for four output (1 in / 4 Out)

**ATP-135816411**- 16 ports which is for 2 outputs (1 in / 2 Out)

**ATP-135832411**- 32 ports which is for one output. (1 in / 1 Out)

## Features:

- 8/16/32 ports active CCTV panel
- Use with both passive and active transmitters for various distance:
  - 1000m: use with any ATP CCTV passive transceiver Balun
  - 1800m: use with ATP CCTV active transmitter balun.
- Spark voltage protector built-in
- CE, FCC certificated



## Specifications:

<b>Environment:</b>	Close-Circuit TV (CCTV) equipment for security and surveillance.	
<b>Devices:</b>	CCTV cameras, monitors, sequencers, multiplexers, digital video recorders (DVR) and other CCTV equipment.	
<b>Bandwidth:</b>	DC to 8MHz	
<b>Common Mode Rejection:</b>	60 dB typical over the frequency range	
<b>Distance Switch 3-positions:</b>	500m: 500m or less 1.0km: 500~1000m 1.5km: over 1000m and up to 1500m	
<b>Power Required:</b>	115/230VAC 320mA, DC power supply built-in	
<b>Power On:</b>	Blue LED light	
<b>Video On:</b>	Yellow-green LED light	
<b>Cable-UTP:</b>	UTP Cat. 5 or better, AWG #24 typically Impedance: 100 ohms Max. Cap.:20pf/ft Attenuation: 6.6dB/1000 ft. at 1MHz	
<b>DC Loop Resistance:</b>	CAT.5	Loop Resistances/100 M
	20 AWG (0.7mm)	7 ohms
	22 AWG (0.6mm)	11 ohms
	24 AWG (0.5mm)	18 ohms
<b>Cable-Coax:</b>	Impedance: 75 ohms at 1MHz (RG59/U) Max. 25ft. of coax allowed per end to end link	
<b>Connectors:</b>	BNC female: 75 ohms Terminal Block: 100 ohms RJ45 jack:100 ohms	
<b>Maximum Distance:</b>	1.8Km across Cat. 5 cable or better	
<b>Temperature:</b>	Operating temp. 0 to 55° C Storage temp. -22 to 85° C Humidity up to 95%	

# ATP-1101600 CCTV Ground Loop Isolator



Description:

The Video Ground Loop Isolator is a necessary part of every CCTV setup, providing improved security from troublesome ground loop distortion. Installation of the ATP-1101600 Video Ground Loop Isolator rescues you from the irritation of tearing apart your setup as you search for the source of irritating signal disturbances such as those caused by loops or wiring laid too near power lines. The product also provides for better surge protection, while convenience of installation means the ATP-1101600 Video Ground Loop Isolator is easily added to previously existing operations.

## What is the use of a ground loop isolator?

A ground loop isolator removes earth loop interference problems from CCTV systems.

## Why has my system such problems?

An earth loops interference may occur when there is more than one ground or earth between two pieces of equipment.

Because there is multiple ground paths, loops are formed in which current can flow.

The current flows through the shield of coaxial cable and it picks the interference up and carries it to the inputs of CCTV equipment. This equipment interprets this interference as part of the video signal and displays it on the monitor as a rolling "hum bar".

## How works the ground loop isolator?

The ground loop isolator terminates ground loop currents in a cable and blocks the hum and interference carried in the ground loop.

## Specifications:

Connector:	BNC male to BNC female
Insertion Loss:	0.5dB
Frequency response:	0-3dB at 10MHz
Input Resistance:	75 ohm
Output Resistance:	75 ohm
Typical distance:	300 m
Isolation Voltage:	600VDC (min)
Insulation Resistance:	100m Ohm
Transient Voltage Suppressors:	12 Vrms
Material:	ABS black
Dimensions:	3.09"x1.15"x0.96" (78.6mm x29.4mm x24.4mm)



CCTV image with a ground loop problem



CCTV image where a ground loop isolator has been used

## ATP-11016xx Series CCTV Surge Protector



### Description:

The ATP-1101621 video surge protectors help prevent damage to sensitive electronic equipment due to differences in ground potential, power surges and area lightning strikes. Easily installed between the coax video cable and equipment connection jack, our surge protectors intercept repeated surges and ground along a conductive wire without any loss of signal quality.

These products offer a combined surge handling capacity of 3,000 watts.

Auviss offers a variety of products for your customers' special demands, such as the Model **ATP-1101621** and **ATP-1101622** that rely upon BNC connectors to allow for direct connection with coax CCTV video surveillance setups, the Model **ATP-1101623** and **ATP-1101624** "F Series" connectors for direct connection with SATV, VSAT, CATV and direct TV equipment. The Model **ATP-1101625** incorporates RJ45 Female Connectors for use with CCTV and CATV equipment..

### Specifications:

Connector :	Male BNC to Female BNC (ATP-1101621)
DC Spark-Over Voltage :	90V typ. at 100V/sec.
Impulse Spark-Over Voltage :	700V at 1KV/ $\mu$ sec.
Surge Resistance :	10 ohms typical.
Impulse Discharge Current :	10KA at 8*20 $\mu$ sec. (Short Wave) 100A at 10*1000 $\mu$ sec. (Long Wave)
Insertion Loss :	Less than 0.2 dB
Return Loss (75 ohms) :	18dB
Dimensions W x D x H :	78.6x29.4x24.4mm for F & BNC connector 51.2x29.4x24.4mm for RJ45 connector

### Ordering Information for different connector type:

Part No.	Description
<b>ATP-1101621</b>	BNC female to BNC male (Standard Shipment)
<b>ATP-1101622</b>	BNC female to BNC female
<b>ATP-1101623</b>	F female to F male
<b>ATP-1101624</b>	F female to F female
<b>ATP-1101625</b>	RJ45 female to RJ45 female