# **Single Channel Active Video Balun Transmitter** Model: VAB100T

The VAB100T video transmitter is an active device that allows the transmission of real-time monochrome (B/W) or color video via Unshielded Twisted Pair (UTP) cable. Baseband (composite) signals of any type are supported. The unit receives one channel of video from camera using coaxial cable and sends out one channel of UTP signal with screw terminals as the connection. The VAB100T is compatible with active or passive receivers (e.g. VAB100R or VAB400R) with transmission distance of up to 1200 m / 4000 ft. Each switch can be independently adjusted for the different transmission distances and image quality based upon the type and quality of the cable being used. With interference rejection, the VAB100T 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 infrastructure.

#### Features:

- Transmit a full motion color video signal up to 1200 m / 4000 ft and a B/W video signal up to 2400 m / 8000 ft.
- Supports all bandbase signals including PAL, NTSC, SECAM.
- Signal Transmission via UTP cable.
- Transmission Signal 1Vp-p Composite Video.
- Built-in transient protection and ground lifting, which eliminates damaging voltage spike problems.
- Built-in Filter: 0~6MHz
- Can work with 4-channel Hub or 1U rack mounting receiver panel.
- **BNC Video Input**
- Red LED: Power on/off
- Yellow LED: Signal
- Power supplied 12V DC

#### Name of Component Manufacturer DCDC Power National Semiconductor Video Signal Disposal

Intersil

Components are Made In USA for this product:

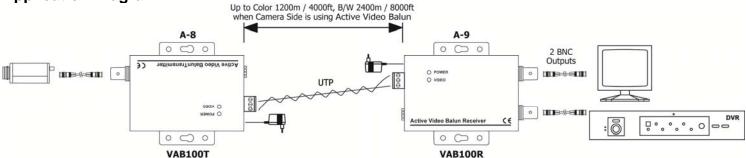
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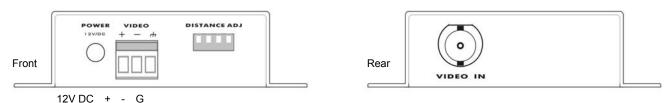
**Switch Chart:** Each switch can be independently adjusted for the different transmission distances and image quality based upon the type and quality of the cable being used.

ADJ	0-50M	50-250M	250-450M	450-600M	>e00M
SWITCH		I	-1	1-	

# **Application Diagram:**



#### **Panel View:**



#### **Troubleshooting:**

All transmission distances mentioned above are without connecting image processors (e.g. Quad, Multiplexer, or DVR). The transmission range would be reduced 100~200m / 300~600 ft upon different camera, cable, DVR ... etc.

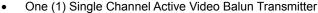
These products are designed for long range transmission, utilizing the built-in video amplifier function. If your transmission range is under 100 m / 300 ft, setting the video gain function too high will result in snowy, wavy, or overly bright images. It is recommended that this product be used for long transmission distances over 100 m / 300 ft. For shorter distances use an alternate passive video transceiver such as the VB100 series. Both of the active transmitter and receiver have "4 position distance range switch" for different range transmission. Please adjust to appropriate range upon your application to avoid any weak or bad image.

### **Specification:**

Model		VAB100T		
Power Properties	Adaptive Voltage Arrange	12V DC		
	Power Consumption	<100mw		
	Supporting Video Mode	All Baseband Signals including PAL, NTSC, SECAM		
	Signal Band	250MHz (-3dB)		
	Balance Band	0~6MHz		
Video Transmitting Properties	Maximum Transmission Distance	Color 1200 m / 4000 ft ; B/W 2400 m / 8000 ft (working with VAB100R, VAB400R, VAB800R)  Transmitting UTP Cable		
	Interference Rejection	>75dB		
Connection Properties	Video Input Connectors	Female BNC, Resistance 75 Ohms		
	Connector for UTP Transmission	Screw Terminal Set, Resistance 50 Ohms		
Surge Protections	Video Output Protection	2kV (common mode), 10/700μs Standard: IEC61000-4-2		
	Video Input Protection	2kV (different mode), 4kV (common mode) Standard: IEC61000-4-2		
	Video Input Protection for Over Current	100mA		
Indicators	Power LED	Red		
mulcators	Signal LED	Yellow		
Stability	MTBF	>30,000 hours		
Physical Properties	Dimensions L x W x H	115 x 83 x 22 mm / 4.53 x 3.27 x 0.87 inches		
	Housing Material	Metal		
	Color	Black		
	Weight	190g / 6.7 oz		
	Operating Temperature	0°C ~ 50°C / 32°F ~ 122°F		
Environment	Relative Humidity	0~95%		
	Storage Temperature	-40°C~150°C / -40°F ~ 302°F		

\*Specifications are subject to change without notice.

# Package Contents:



• One (1) User Manual



#### Caution:

- Do not connect this device to any power source.
- Do not handle the unit with wet hands.
- The unit is not waterproof and should not be used outdoors.

R&D Designed in Taiwan
Components are Made in USA: DCDC Power (National Semiconductor), Video Signal Disposal (Intersil)
Assembled in China

## **Limited Warranty:**

#### **LIMITED ONE (1) YEAR WARRANTY AND EXCLUSIONS**

Manufacturer warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Manufacturer is free of defects in materials and workmanship under normal and proper use for one (1) year from the purchase date. Manufacturer's only obligation is to correct such defects by repair or replacement, at its option, if within such one (1) year period the product is returned prepaid, with proof of purchase date, and a description of the problem. This warrant excludes and there is disclaimed liability for labor for removal of this product or reinstallation. This warranty is voided if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. There are no other implied warranties of any kind, including merchantability and fitness or a particular purpose, but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warrant, including merchantability and fitness of or a particular purpose, is limited to one (1) year. Manufacturer is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, loss sales or profits or delay or failure to perform this warranty obligation. The remedies, provided therein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.

