



# Single Channel Active Video Balun Transmitter

## Model: VBAU100T



The VBAU100T 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 VBAU100T is compatible with active receivers (e.g. VBAU100R or VBAU400R) with transmission distance of up to 4000ft / 1200m. 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 VBAU100T 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 4000ft / 1200m and a B/W video signal up to 8000ft / 2400m.
- Supports all bandbase signals including PAL, NTSC, SECAM.
- Signal Transmission via UTP cable.
- Transmission Signal 1Vpp 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

### Components are Made In USA for this product:

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

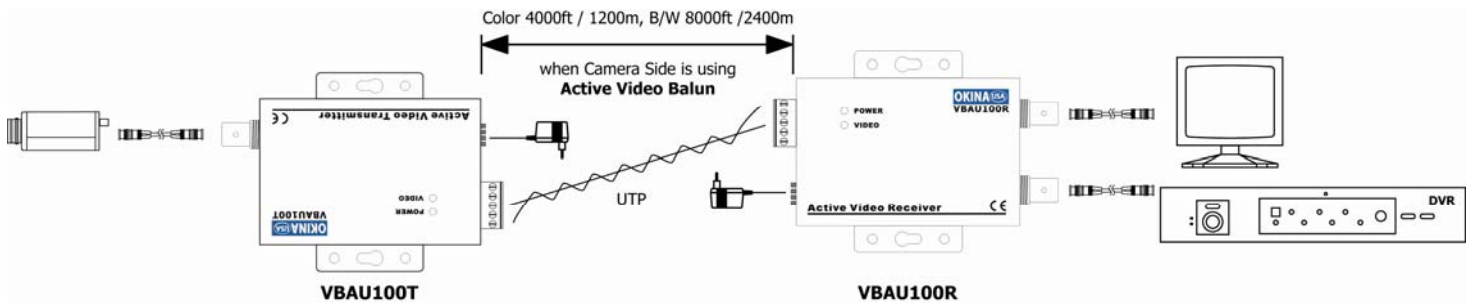
R&D Designed in Taiwan  
Assembled in China



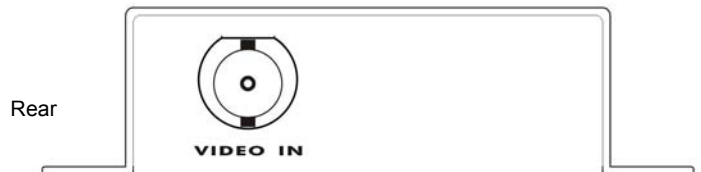
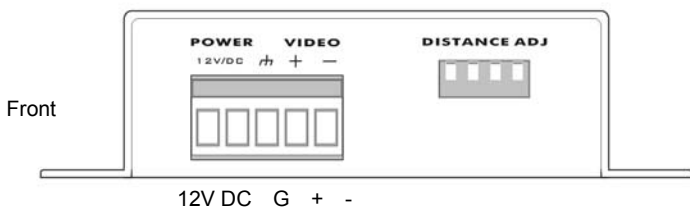
**Switch Chart:** Each switch can be independently adjusted for the different transmission distances and image quality based upon the type and quality of the cable being used.

ADJ	0-50M	50-250M	250-450M	450-600M	>600M
SWITCH	■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■

### 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 300~600ft / 100~200m 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 300ft / 100m, 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 300ft / 100m. 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 Number		VBAU100T
Power Properties	Adaptive Voltage Arrange	12V DC
	Power Consumption	<100mw
Video Transmitting Properties	Supporting Video Mode	All Baseband Signals including PAL, NTSC, SECAM
	Signal Band	250MHz (-3dB)
	Balance Band	0~6MHz
	Maximum Transmission Distance	Color 4000ft / 1200m, B/W 8000ft / 2400m (working with VBAU100R, VBAU400R, VBAU800R) 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 IEC6100-4 2/1955 (GB/T 1726, 5-1999)
	Video Input Protection	2KV (different mode), 4KV (common mode) IEC6100-4 2/1955 (GB/T 1726, 5-1999)
	Video Input Protection for Over Current	100mA
Indicators	Power LED	Red
	Signal LED	Yellow
Stability	MTBF	>30,000 hours
Physical Properties	Dimensions (L x W x H)	4.53" x 3.27" x 0.87" / 115 x 83 x 22 mm
	Housing Material	Metal
	Color	Black
	Weight	0.42lbs / 190g
Environment	Operating Temperature	32°F ~ 122°F / 0°C ~ 50°C
	Relative Humidity	0~95%
	Storage Temperature	-40F ~ 302°F / -40°C~150°C

\*Specifications are subject to change without notice.

**FCC CE ROHS**

R&D Designed in Taiwan

Components are Made in USA: DCDC Power (National Semiconductor), Video Signal Disposal (Intersil)

Assembled in China



### Caution:

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

**Cabling Systems & Solutions**

**UTP = Unshielded Twisted Pair**