# **VB1001F / VB1001M**

### Twisted Pair Video Balun

# **Features**

- Quality color and B&W video or PTZ signals over 1000 ft. (305 m) of unshielded twisted pair wires
- 3000 ft. (915 m) with Vigitron active receivers
- · NTSC, PAL, and SECAM video formats
- Support for "up-the-coax" type signals
- No power required
- 60 dB crosstalk and noise immunity
- Compact size and easy installation
- · Compatible with all qualified UTP cameras
- · Limited lifetime warranty

# **Applications**

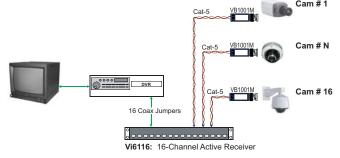
- · Security and surveillance
- Elevator surveillance
- · Casino security
- · Hospitals and airports
- School campuses



The Vigitron VB1001F and VB1001M are passive transmission devices that transport video signals over unshielded twisted pair wires, point-to-point, for distances up to 1,000 ft. (305m)\*. Distances up to 3,000 ft. (915 m) can be achieved when it is used with Vigitron active UTP receivers. They use Category 2-7 twisted pair wires, are easy to install, cost effective, and do not require power. Their unique and compact design allows mounting directly to the video source or receiver without additional cabling. The VB1001F and VB1001M are compatible with all qualified cameras with a built-in twisted pair transmitter.

Their crosstalk and noise immunity ensure quality video signals. The VB1001F and VB1001M offer quality video in a compact size at an affordable price. They are ideal for a wide variety of security and surveillance applications.

# **Application Diagram**











# **Technical Specification\*\***

#### **Electrical**

Video Format NTSC, PAL, SECAM Frequency DC to 10 MHz 75 Ohm Coax

Twisted Pair 100 Ohms +/- 20%, 24 AWG minimum

up to 1,000 ft. (305 m)\* unshielded Category 2-7

Insertion Loss **CMRR** 60 dB

Power No power required Connectors Video: Male BNC UTP: Terminal block

#### **Environmental**

Humidity 0 to 95%, non-condensing Temperature Operating: -10°C to +50°C Storage: -30°C to +70°C

Mechanical

Dimensions 1.85x0.54 inches (47x13.6 mm)

Weight 0.2 oz (7 g)

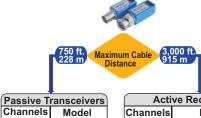
Material ABS plastic, UL rating of 94V-0

\*It is recommended not to exceed 750 ft. (228 m) when using with digital equipment. \*\*Specifications are subject to change without notice.

### **Ordering Information**

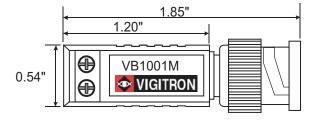
PART No.	Description
VB1001F	Video Balun w/ Female BNC
VB1001M	Video Balun w/ Male BNC

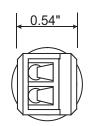
## **System Configuration**



Passive Transceivers		
Channels	Model	
1	VB1001F/M VB1007M Vi1001F/M/P Vi1003M Vi1006M	
4	Vi1004	
8	Vi1008	
16	Vi1016	
32	Vi1032	

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Active Receivers		
Channels	Model	
1	Vi6100VR/Vi6200VR	
4	Vi6104/Vi6204	
8	Vi6108/Vi6208/Vi6308	
16	Vi6116/Vi6216/Vi6316	
32	Vi6132/Vi6232/Vi6332	
2,000 feet (610 m) for Vi6200 series		





## Wire and Cable Recommendations

The Vigitron products are designed to be used with unshielded twisted pair (UTP) wiring. The UTP wire must be 24AWG - 12AWG or Category 2-7 cable. Multi pair cable with an overall shield is acceptable, however individually shielded pairs should be avoided. Multiple UTP video feeds can be operated in the same communication cable along with telephone, computer, control signals and low power voltages. While UTP video may be routed through punch-down block terminals, any resistive, capacitive or inductive devices (such as T-taps or MOV's) must not be used. Please contact Vigitron for more specific information regarding wire types and proper installation techniques.

