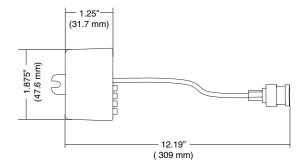


# 1.875" (47.6 mm)



## **Description**

The **VB43ATF** is a unique transmission device which provides an economical means of sending video, camera power and 2-wire control signals over a standard Category cable. Video is sent over one pair, 2-wire control signals over a second pair and camera power is sent over the two remaining pairs. A minicoax pigtail with male BNC is used on the VB43ATF. Two pair of screwless terminals are provided to connect 2-wire control signals and power (wires are provided for these connections). Connections to the Category cable are made via an RJ45 connector. The VB43ATF video balun provides the same immunity to noise and interference as all of the Nitek baluns.

This simplified wiring scheme provides a convenient method of powering the camera, allowing for quicker and easier installations. The RJ45 modular jack uses standard 568B wiring so spare network cables can be used. The VB43ATF also offers indication lights for the presence of power and data.

## **Features**

- Intelligent light link indication
- Superior video over ordinary twisted pair cable
- Quick connect screwless terminals
- Immunity to noise and interference
- Rugged ABC flame retardant casing
- Lifetime warranty
- Built-in surge suppression
- Passive devices—do not require power
- Convenient connection to Category cable for video power and 2-wire control signals
- Easier to install than coax









# TECHNICAL SPECIFICATION

### **Combiner Unit**

Size .875" H x 1.875" W x 1.25" D

Power Pass Through 250mA @ 1.000 feet on

> 24 AWG wire 1 Amp @ 100 feet on 24 AWG wire

Input 1 Vpp composite video

Monochrome or Color

Output Balanced low voltage current loop

Modular Jack Standard RJ45

## System (2 combiners required)

Video Format PAL, SECAM, NTSC, RS170,

CCIR (Color or B/W)

1 Vpp composite video Video Input

Monochrome or Color

DC to 10 MHz Operating Frequency

Common Mode Rejection

>60 dB

Wire Size

26 to 18 AWG twisted pair DC Loop Resistance 51 Ohms/1,000 ft (max)

17 pF/ft

Nominal Capacitance

Impedance 100 Ohms +- 20%

Category Wire 2 or better

-10°C to +85°C Temperature Range

**Humidity Range** 0 to 98%, non-condensing

Twisted Pair Connection

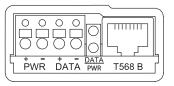
RJ45 modular connector

Transient Immunity Built-in

Shipping Weight 1 lb

#### Wire and Cable Recommendations

We recommend using unshielded twisted pair wiring. The systems will operate over wire 26 to 18 AWG but are optimized for 24 AWG. Category cables may be used. Individually shielded pairs should be avoided, as they drastically reduce the operating range of the systems. Multipair cable with an overall shield is acceptable. Video can be operated in the same communication cable coexistent with telephone, computer, control signals, power voltages and other video signals. While video may be routed through telephone punch down block terminals, any bridge-taps, also called T-taps and any resistive, capacitive or inductive devices MUST BE removed from the pair.





PIN	Color Code	Signal
1	WHT/ORG	VIDEO +
2	ORG/WHT	VIDEO -
3	WHT/GRN	24V COM (1)
4	BLU/WHT	RS422 -
5	WHT/BLU	RS422 +
6	GRN/WHT	24V LINE (1)
7	WHT/BRN	24V COM (2)
8	BRN/WHT	24V LINE (2)

