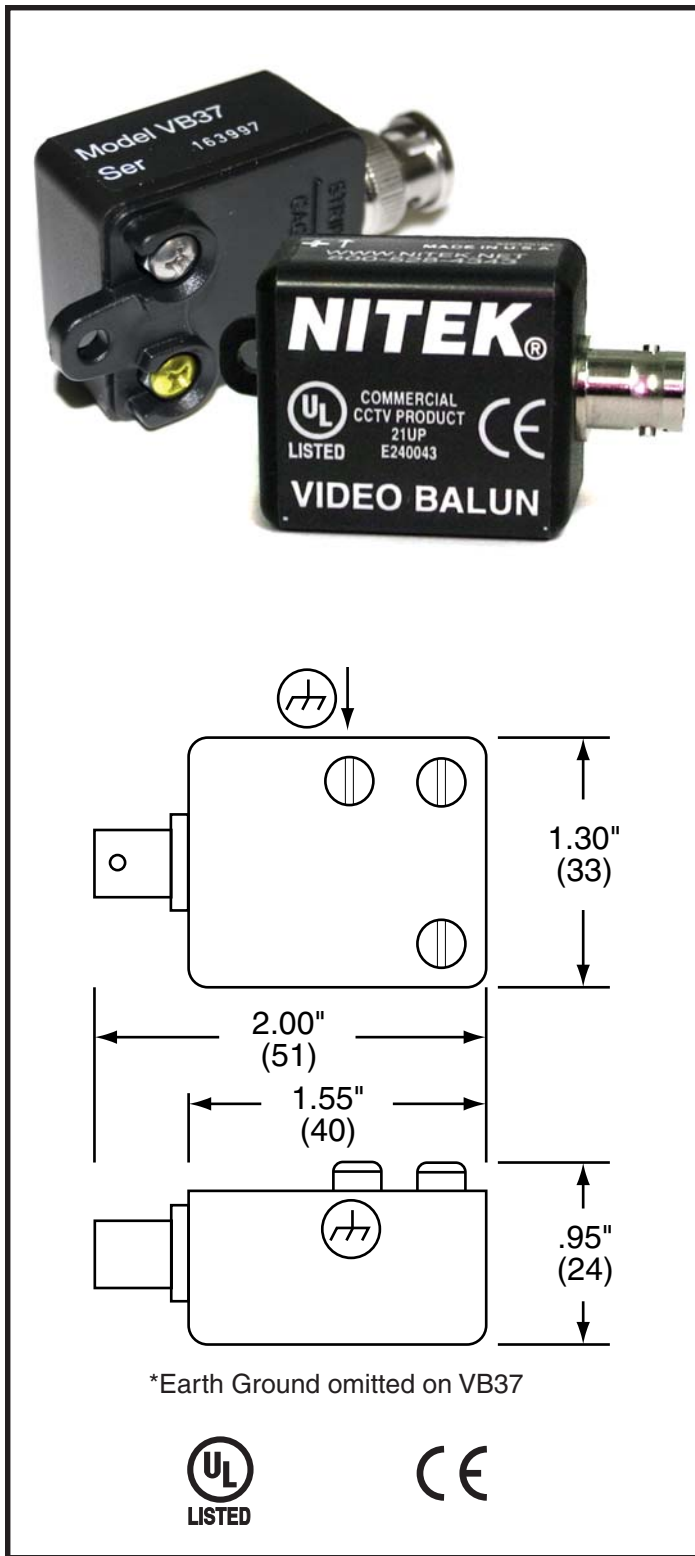


PRODUCT SPECIFICATION

DOCUMENT NUMBER VB3739	MODEL VB37F with Female BNC; VB37M with Male BNC Video Balun Transceivers for Twisted Pair up to 750 feet (228 meters)
REVISION NUMBER 041806	VB39F with Female BNC; VB39M with Male BNC Video Balun Transceivers w/Surge Suppression for Twisted Pair up to 750 feet (228 meters)



Description

Video balun transceivers for twisted pair up to 750 feet (228 meters). Two types are available. The basic VB37 model and the VB39 with built-in surge suppression for added equipment protection.

The video balun transceiver is a video transmission device that provides a low cost means of sending live video over unshielded twisted pair, point-to-point wiring for distances of up to 750 feet (228 meters). The VB37 and VB39 are compatible with all of the "up-the-coax" control systems. A basic system uses (2) VB37 or (2) VB39 units, one at each end of a twisted pair of wires. These units are intended for use over existing in-house telephone wiring, Category 5 wiring or other twisted pair cable runs to provide a convenient, cost-effective alternative to coax. The VB37 and VB39 are designed to provide superior immunity from noise and interference even when running next to line power!

Features

- Quality video over ordinary twisted pair cable
- Immunity to noise and interference
- Built-in surge suppression on VB39 models
- Passive devices - do not require power
- Video & P/T/Z over a single pair (with "up-the-coax" systems)
- M - version mounts directly to camera or video source
- UL Listed and CE Approved
- Weather resistant design
- Easier to install than coax

Applications

- Intra-building CCTV installations (instead of coaxial cable)
- Structured cabling (Category 5) environments
- To eliminate requirement for Plenum Coax
- Multi-camera applications through conduit (more cameras through a smaller diameter)

VB37F
VB37M
VB39F
VB39M

NITEK[®]

5410 Newport Drive, Suite 24 • Rolling Meadows, IL • 60008
Phone: (800) 528-4343 • (847) 259-8900 • Fax: (847) 259-1300
E-mail: info@nitek.net • Internet: www.nitek.net

TECHNICAL SPECIFICATION

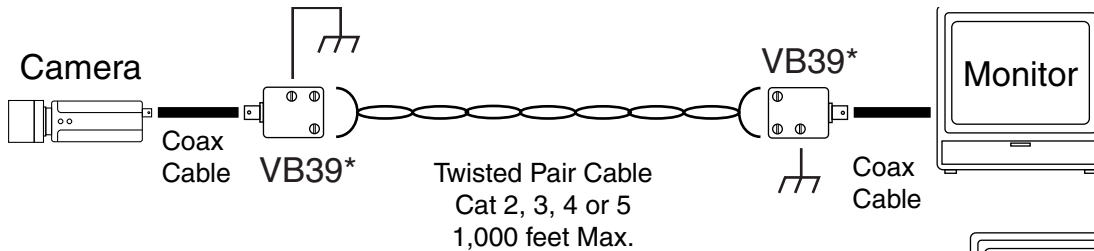
Transceiver Unit

Size	1.3"H x 2.0"W x .95"D
Power Requirements	NONE REQUIRED
Input	1 vpp composite video Monochrome or Color
Output	Balanced low voltage current loop

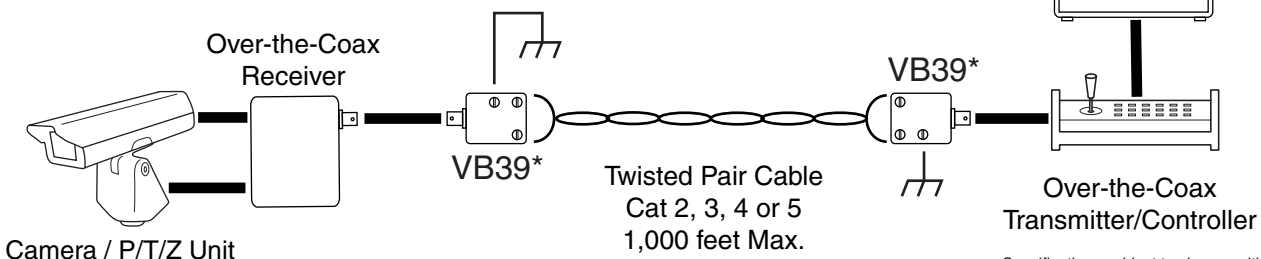
System (2 transceivers required)

Video Format	RS170, NTSC, PAL, SECAM, CCIR (Color or B/W)
Video Input	1 Vpp composite video Monochrome or Color
Operating Frequency	DC to 10 MHz
Common Mode Rejection	>60 dB typ.
Wire Spec	26 to 12 AWG Unshielded Twisted Pair (UTP)
DC Loop Resistance	51 Ohms/1,000 feet (304 meters) (max)
Nominal Capacitance Impedance	17pF/ft. 100 Ohms +/- 20%
UTP Category	2 or better
Temperature Range	-40 degrees C to +85 degrees C
Humidity Range	0 to 98%, non-condensing
Transient Immunity	6,000 V 1.2uS x 50 uS per ANSI / IEE 587 C62.41 B3 3,000 A 8uS x 20 uS when ground screw terminal is connected to earth-ground
Enclosure Material	Black ABS flame retardant plastic

Twisted Pair Connection Screw terminals



*omit ground if using VB37



Ordering Information

PART	DESCRIPTION
VB37F	Female BNC Connector for up to 750 feet (228 meters)
VB37M	Male BNC Connector for up to 750 feet (228 meters)
VB39F	Female BNC Connector w/Surge Suppression for up to 750 feet (228 meters)
VB39M	Male BNC Connector w/Surge Suppression for up to 750 feet (228 meters)

SYSTEM COMPONENTS

Two VB37 or VB39 devices M or F in any combination are required for transmission over a single UTP.

Wire and Cable Recommendations

The VB37 and VB39 are recommended for use with **unshielded twisted pair** (UTP) wiring. The systems will operate over wire gauges from 26 AWG through 12 AWG. Category 2, 3, 4 or 5 cable may be used. Individually shielded pairs should be avoided, as they drastically reduce the operating range of the systems. Multi-pair 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 punchdown block terminals, any bridge-taps, also called T-taps and any resistive, capacitive or inductive devices **MUST BE** removed from the pair. For more specific information regarding wire types, gauges and proper installation techniques, please call 800-528-4343 for technical assistance. More information is also available on the CCTV System Design Guide Sheet.