

# MODELS

**Vi6208, Vi6216, Vi6232**  
**Vi6308, Vi6316, Vi6332**

Automatic Video Compensation  
UTP Receiver Hubs

User's Manual



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## 1. Introduction

The Vigitron Vi62xx and Vi63xx series are active video receivers that receive quality video from a passive or active UTP transmitter over point-to-point unshielded twisted pair (UTP) wires

The Vi62xx series can reach distances up to 2,000 ft. (960 m) with a passive transmitter and 4,000 ft. (1220 m) using a Vigitron active receiver. The Vi62xx series can cover extended distances of 3,500 ft. (915 m) and 6,000 ft. (1830 m) respectively. The Vi6316 has 8 built-in 1-in to 4-out distribution amplifiers to be used with multiple video equipment.

This hub uses Category 2-7 twisted pair wires, and is easy to install and cost effective. This receiver HUB has built-in surge suppression to protect video equipment against damaging voltage spikes. Its cross talk and noise immunity ensures quality video signals with no disturbing "hum-bars".

The distance for each channel is automatically adjusted by an internal microcontroller to provide the best video quality. In addition, a green LED indicates video presence for each channel. The Vi6xxxJ provides RJ45 connectors to be used with Vigitron VPD products.

The Vigitron active hubs offer quality video in a highly integrated and cost-effective package. They are ideal for a wide variety of security and surveillance applications that require high-density CCTV equipment.

## 2. Model Numbers and Features:

Model #	Description	Mating Model	Distance	Distribution Amp.
Vi6208	8-Port Active HUB	Any passive Baluns VI6300VT	2000 feet (915m) 4000 feet (1220m)	1 to 4
Vi6216	16-Port Active HUB	All passive Baluns VI6300VT	2000 feet (915m) 4000 feet (1220m)	1 to 2
Vi6232	32-Port Active HUB	All passive Baluns VI6300VT	2000 feet (915m) 4000 feet (1220m)	None
Vi6308	8-Port Active HUB	Any passive Baluns VI6300VT	3500 feet (1060m) 6000 feet (2000m)	1 to 4
Vi6316	16-Port Active HUB	All passive Baluns VI6300VT	3500 feet (1060m) 6000 feet (2000m)	1 to 2
Vi6332	32-Port Active HUB	All passive Baluns VI6300VT	3500 feet (1060m) 6000 feet (2000m)	None

## 3. Specifications\*

Video Format	NTSC, PAL, and SECAM
Frequency	20 to 6 MHz
Coax	75 Ohm
Twisted Pair	100 Ohms +/- 20%, 24 AWG min, Unshielded Category 2-5
Video Loss	Green LED
CMRR	70 dB
Power	110-240 VAC 50-60Hz
Connectors	UTP: Detachable Screw Terminal, Video: Female BNC
Temperature	Operating: -10C to +70C, Storage: -30C to +70C
Humidity	0 to 95%, non-condensing
Transient Immunity	6000V, 1.2 usec x 50 usec
Housing	Aluminum
Dimensions	1.70 x 17.0 x 8.0 Inches, 4.3 x 43 x 20.3 cm (H x W x L),
Weight	3.3 lb, 1500 g
Mounting	19 inch, Rack Mount or Wall Mount (Mounting Kit Included)

\*Specifications subject to change without notice.

## 4. Installation

### 4.1 Preparation:

Before getting started verify that you have the following:

- Mounting Hardware and 32 pieces of 2 feet coax Cables (included with the kit).
- Vigitron VI6300VT active transmitter or passive transceivers (See Table in section 2 above for various options and configurations). These transceivers are not included with the kit and are sold separately.
- Use Unshielded Twisted Pair (UTP) wires (24 AWG or better). **Do not** use untwisted wires since it may result in interference and noisy picture. **Do not** use shielded twisted pair wires since it may cause impedance mismatch.
- Verify that each video signal uses conductors from the same twisted pair.
- The UTP transmitter/receiver devices must be used with point-to-point connection of unshielded twisted pair wires. Any extra branch of twisted pair will cause ghost effect and poor quality video.
- **Do not** use long coax cables between the UTP devices and video equipment.

### 4.2 Transmitter side installation:

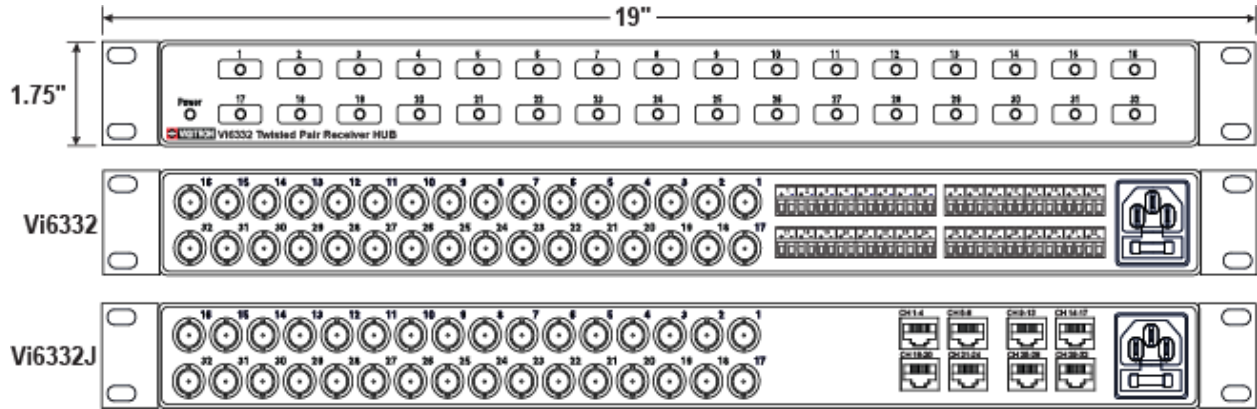
1. Choose the right mating transmitters or transceivers.
2. When a Vigitron single transceiver is used, connect the video source (camera, etc.) through a coax cable or directly to the BNC video input of each transceiver. Connect one end of the UTP wire to the terminal block of each transceiver.
3. When a Vi6300VT active transmitter is used, connect the video source (camera, etc.) through a coax cable or directly to the BNC video output of the UTP transmitter. Connect the UTP wire to the terminal block of the UTP transmitter. Connect the ground wire to a solid ground thru an 18 AWG or thicker wire. Connect the power supply to the UTP transmitter power connector. Set the distance switch to HI for distances longer than 3000 feet or set it to LO for distances below 3000 feet when using Vi63xx series. This distance will be 2000 feet for Vi62xx series.

### 4.3 Receiver side installation:

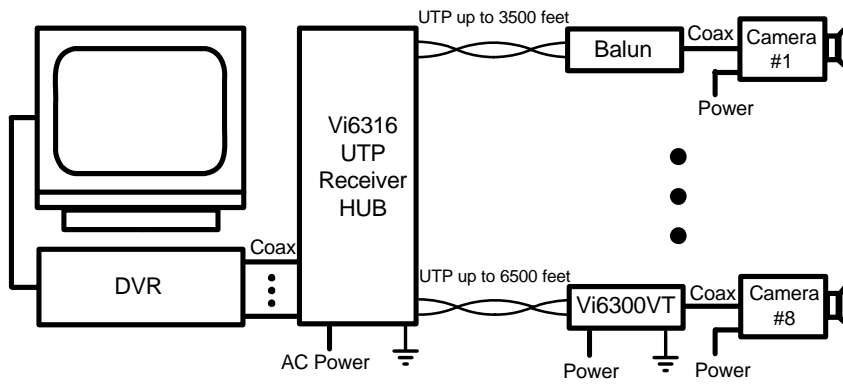
1. Mount the hub near the monitors or DVRs using the rack mount or wall mount hardware provided with the kit.
2. Connect the BNC outputs to the video equipment (monitors, DVRs, etc.) using the 2 feet coax cables provided with the kit. Make sure the connections are secured properly.
3. Connect the other end of the UTP wire, to the hub's detachable terminal block. Make sure to match the corresponding numbers on the detachable terminal block and BNC connectors.
4. Connect power cord to an AC outlet.
5. If the picture is scrambled change the polarity of the twisted pair wires to the corresponding terminal block.

**5. Drawings:**

**5.1 The Vi6332 front and rear Drawings:**



**5.1 The Vi6316 application Drawing:**



## 6. Warranty

Subject to the provisions described below, **Vigitron, Inc.** UTP Active AVC Hub Vi6XXX ("Product") is protected by a limited three-year warranty from the date of purchase from defects in material and workmanship.

Should this product fail to perform as described above within three years following the original date of purchase, Vigitron, Inc. will ship a replacement for the failed product upon return of the defective product.

This warranty does not apply if, in the judgment of **Vigitron, Inc.**, Product fails due to damage from shipment, handling, storage, accident, abuse or misuse, or if it has been used or maintained in a manner not conforming to Product manual instructions, has been modified in any way, or has had any serial number removed or defaced. Repair by anyone other than **Vigitron, Inc.** or an approved agent will void this warranty. The maximum liability of **Vigitron, Inc.** under this warranty is limited to the purchase price of the Product covered by the warranty.

Prior to returning any defective Product, the end customer or the reseller from whom the end customer originally purchased the Product must obtain a Return Materials Authorization (RMA) number from **Vigitron, Inc.** All defective Products should be returned to **Vigitron, Inc.** with shipping charges prepaid. **Vigitron, Inc.** will not accept collect shipments.

**Except as specifically provided in this agreement or as required by law, the warranties and remedies stated above are exclusive and in lieu of all others, oral or written, expressed or implied. Any and all other warranties, including implied warranties of merchantability, fitness for a particular purpose and non-infringement of third party rights are expressly excluded. Vigitron Inc. shall not under any circumstances be liable to any person for any special incidental, indirect or consequential damages, including, without limitation, damages resulting from use or malfunction of the products, loss of profits or revenues or costs of replacement goods, even if Vigitron, Inc. is informed in advance of the possibility of such damages.**

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