

## ***System Specifications***

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**VH3200** System includes the following:

- (1) VH3200 Hub
- (1) Wall power transformer

|                           |   |
|---------------------------|---|
| <b>Size</b>               | 1.75"H x 19"W x 10"D                                    |
| <b>Power Requirements</b> | 24VAC @1.2A   |
| <b>Input</b>              | Low voltage current loop from balanced UTP transmitters |
| <b>Output-Video</b>       | 1.0 vpp composite video<br>Monochrome or Color          |

## **General Installation**

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The VH3200 UTP Modular Hub is designed to operate with a mix of NITEK UTP Video Cards either active or passive. If you are using pre-existing wire or are not sure of the distance you are going the following wire tests are highly recommended.

### **Checking the wire**

- 1. Loop Resistance** - Short one end and check the resistance between the wires at the other end. This will give you the loop resistance and wire distance. (See Chart)
- 2. Open Loop** - Open the shorted end and check for infinity at the other end.
- 3. Short or Leakage to Ground** - With both ends open check each wire to earth ground. The reading should be infinity or megohms.
- 4. No Voltage on Wires** - With both wires open check for DC or AC, other than stray AC, on the wires.

For distances greater than 3,000 feet an amplified transmit source may be needed.

| WIRE GAGE | DISTANCE IN FEET (METERS) |                |                |                |                 |                 |                 |
|-----------|---------------------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|
|           | 500<br>(152)              | 1,000<br>(304) | 2,000<br>(610) | 3,000<br>(914) | 4,000<br>(1219) | 5,000<br>(1524) | 6,000<br>(1829) |
| 22        | 16                        | 32             | 64             | 97             | 129             | 161             | 194             |
| 24        | 26                        | 51             | 103            | 154            | 205             | 257             | 308             |
| 26        | 41                        | 82             | 163            | 245            | 326             | 408             | 490             |

## Connecting the Hub

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If using the unit as a receiver, connect the twisted pair from the camera end to the screw terminals on the back, make sure of the polarity of the connection. If the wires are reversed the video will be unviewable on the monitor. Connect the matching BNC to your video system as needed.

If using the unit as a transmitter, connect your video source to the BNC and connect the twisted pairs leading to your monitor end to the matching screw terminals. Note the polarity of your connections.

## Installing cards

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Remove the front panel of the VH3200 by pulling on both front knobs. Insert a card between the card guides. Push the card to the rear until it slides into the edge connector and the front of the card is flush with the front of the VH3200. Replace the front panel and press the knobs in to lock it in place. Refer to the instruction sheet with each card for setup of each card.



Remove front



Install cards

## Powering the Hub

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The VH3200 is powered from a 24VAC wall pack. It uses a maximum of 18VA so several units can be run from a larger supply. Contact NITEK® Tech Support for recommendations.

## ***Troubleshooting***

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**Problem**            **Video inverted or rolling and unstable.**  
**Fix/Cause**            • Reverse the wires of the twisted pair at either the transmitter or receiver.

**Problem**            **No video out at the receiver.**  
**Fix/Cause**            • Check to make sure that there is video in at the transmit end.  
                             • Make sure that the pair of wires you are using is not open or shorted between the transmit and receiver points.  
                             • Check power to the receiver.

**Problem**            **Ghost image at the receiver.**  
**Fix/Cause**            • Bridge tap or "T" tap on the twisted pair video line. Remove tap.

For additional help with problems please call NITEK® Technical Assistance at (847) 259-8900. Hours are from 8am to 5pm Central Standard Time Monday through Friday. We are always ready to help.

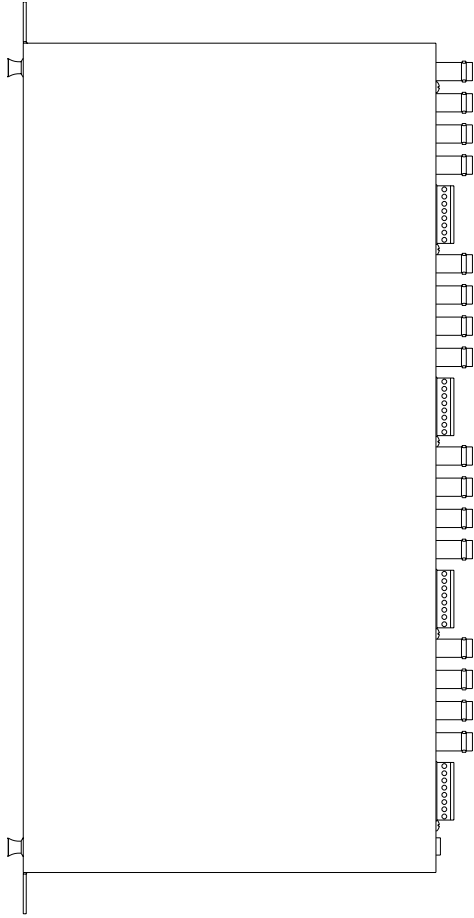
## ***Limited Warranty***

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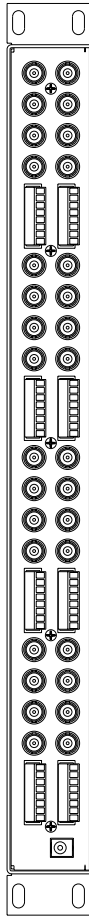
NITEK® warranties that this unit will be free from defects in materials and/or workmanship. Defective units will be repaired or replaced at our option within 2 years from the date of shipment. This warranty does not apply to units abused through misuse or subjected to improper and/or excessive voltage, beyond our control.

**For complete warranty details contact NITEK®**

# VH3200 Top



# VH3200 Back





**Installation and  
Operation Manual**

**VH3200**

**UTP Modular Hub**



Reduce risk of fire or electrical shock. Do not expose this product to rain or moisture.

***NITEK***<sup>®</sup>

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