

# Installation Instructions

## TR560x8 Card

**Note:** This installation should be made by a qualified service person and conform with local codes.



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

# NITEK®

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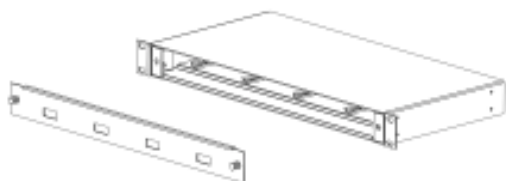
## Specifications

**Power Requirements:** Power is supplied by VH3200

**UTP Wire Length:** up to 3000 feet with passive transmitter  
up to 6000 feet when used with active transmitter

**This sheet is designed to cover TR560x8 receiver card UTP video system.** This sheet is divided into two sections. First is the TR560x8 card used with a passive (balun) transmitter. Second is the TR560x8 card used with an active (TT560) transmitter.

To install the TR560x8, remove the front panel of the VH3200 Modular Hub by pulling on the two front panel knobs. Insert the card into any open slot. Replace the front cover and press the knob in to lock it in place.



Remove front panel



Install cards

## Determining Cable Length

Check the twisted pair for continuity. Do this by shorting the pair of wires at one end and use an ohm meter to check the resistance at the other end. Use the chart below to determine the length of your wires for a measured resistance. Also, use the multimeter to test the line and make sure there is no voltage on it. Testing each line and recording the length for each camera run can greatly reduce installation time. For distances greater than 3,000 feet an amplified transmit source may be needed.

| WIRE<br>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             |

## TR560x8 Card w/Passive (Balun) Transmitter

**1. Connect Balun to camera** - Using the installation manual provided with the balun connect it to the video source, usually a video camera. If you have a UTP ready camera connect the twisted pair directly to the camera video out.

**2. Connect twisted pair to VH3200** - The twisted pair connects to the terminal blocks on the rear of the VH3200.

**3. Connect video out to your system** - Using standard coax cable connect from the video out BNC to your system as needed for viewing.

**4. Set DIP switch for distance** - Using the chart below set the 8 position DIP switch on the TR560x8 for the distance of your twisted pair line plus any coax on each end. The modules are numbers to match the connections. Do not just try settings to see what works. Knowing the distance and setting the switch will save you time and provide you with the best possible picture. Note that the settings listed are for standard communication cable. Should you be using wire gages less than 22 awg or **shielded wire** with less than 10 pair your setting may vary, call Nitek Tech Support for help.

| Distance in Feet (Meters) | SWITCH POSITIONS                 |    |    |    |             |    |               |   |
|---------------------------|----------------------------------|----|----|----|-------------|----|---------------|---|
|                           | 1-2 and 3-4 must be set in pairs |    |    |    | Video Level |    | Video Peaking |   |
|                           | 1                                | 2  | 3  | 4  | 5           | 6  | 7             | 8 |
| <500 (152)                |                                  |    |    |    |             |    |               |   |
| >500 (152)                |                                  |    |    |    | ON          |    |               |   |
| >1000 (304)               |                                  |    |    |    | ON          |    | ON            |   |
| >1500 (456)               |                                  |    | ON | ON | ON          |    |               |   |
| >2000 (608)               |                                  |    | ON | ON |             | ON | ON            |   |
| >2500 (760)               | ON                               | ON | ON | ON |             | ON | ON            |   |
| >3000 (912)               | ON                               | ON | ON | ON | ON          | ON | ON            |   |

## TR560x8 card and TT560 Transmitter

**1. Connect transmitter to camera** - Refer to the EX560/TT560 manual for the installation of the TT560 transmitter and its DIP switch setting.

**2. Connect twisted pair to VH3200** - The twisted pair connects to the terminal blocks on the rear of the VH3200.

**3. Connect video out to your system** - Using standard coax cable connect from the video out BNC to your system as needed for viewing.

**4. Set DIP switch for distance** - Using the chart below to set the 8 position DIP switch of the TR560x8 for the distance of your twisted pair line plus any coax on each end. The modules are numbers to match the connections. Do not just try settings to see what works. Knowing the distance and setting the switch will save you time and provide you with the best possible picture. Note that the settings listed are for standard communication cable. Should you be using wire gages less than 22 awg or shielded wire with less than 10 pair your setting may vary, call Nitek Tech Support for help.

| Distance in Feet (Meters) | SWITCH POSITIONS                 |    |    |    |             |    |               |   |
|---------------------------|----------------------------------|----|----|----|-------------|----|---------------|---|
|                           | 1-2 and 3-4 must be set in pairs |    |    |    | Video Level |    | Video Peaking |   |
|                           | 1                                | 2  | 3  | 4  | 5           | 6  | 7             | 8 |
| <1000 (304)               |                                  |    |    |    |             |    |               |   |
| >1000 (304)               |                                  |    |    |    | ON          |    |               |   |
| >1500 (456)               |                                  |    | ON | ON |             | ON |               |   |
| >2000 (608)               |                                  |    |    |    | ON          |    | ON            |   |
| >2500 (760)               |                                  |    | ON | ON | ON          |    | ON            |   |
| >3000 (912)               |                                  |    | ON | ON |             | ON | ON            |   |
| >3500 (1064)              | ON                               | ON | ON | ON |             | ON | ON            |   |
| >4000 (1216)              | ON                               | ON | ON | ON | ON          | ON | ON            |   |
| >4500 (1368)              |                                  |    | ON | ON | ON          |    | ON            |   |
| >5000 (1520)              |                                  |    | ON | ON |             | ON | ON            |   |
| >5500 (1672)              | ON                               | ON | ON | ON |             | ON | ON            |   |
| >6000 (1824)              | ON                               | ON | ON | ON | ON          | ON | ON            |   |