


# Installation Instructions

## TR515x8 Card

# NITEK®

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

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PHONE (847) 259-8900  
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Internet: [www.nitek.net](http://www.nitek.net)

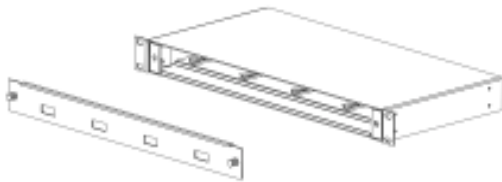
 Reduce risk of fire or electrical shock. Do not expose this product to rain or moisture.

### Specifications

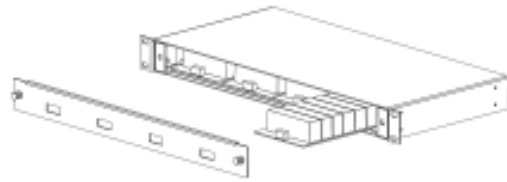
**Power Requirements:** Power is supplied by VH3200

**UTP Wire Length:** up to 1500 feet with passive transmitter

To install the TR515x8, 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 1,500 feet different receiver units are recommended, contact NITEK for specific model numbers.

WIRE GAGE	DISTANCE IN FEET (METERS)						
	500 (152)	1,000 (304)	2,000 (610)	3,000 (914)	4,000 (1219)	5,000 (1524)	6,000 (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

## TR515x8 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 TR515x8 for the distance of your twisted pair line plus any coax on each end. The modules are numbered 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.

Unmarked Positions are Off					Video Level Gain	Video Peaking		
Distance	Switch Position							
	1	2	3	4	5	6	7	8
<100-400 ft. (30-121 m)								
400-700 ft. (121-213 m)					ON			
700-900 ft. (213-274 m)			ON	ON	ON			
900-1,100 ft. (274-335 m)			ON	ON		ON		
1,100-1,300 ft. (335-396 m)			ON	ON		ON	ON	
>1,300 ft. (396 m)	ON	ON	ON	ON		ON		