

Installation and
Operation Manual

VH851

VH1651

VH851M

VH1651M

NITEK®

Rev 040810

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

Installation

UTP Video Receiver Hubs are designed to receive standard UTP video and output standard coax video.

Step 1)

Check the twisted pair for distance and 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. The chart below will give you the length of your wires for a measured loop resistance. Also, use a multimeter to test the line to make sure there is no voltage on it. Testing each line and recording the length of each camera run can greatly reduce installation time. For distances greater than 1,500 feet, longer range units may be needed.

| Wire Gage | Distance in Feet (Meters) | | | | | | |
|-----------|---------------------------|---------------|---------------|---------------|----------------|----------------|----------------|
| | 500 (150) | 1000 (300) | 2000 (600) | 3000 (900) | 4000 (1200) | 5000 (1500) | 6000 (1500) |
| 22 | 16 | 32 | 64 | 97 | 129 | 161 | 194 |
| 24 | 26 | 51 | 103 | 154 | 205 | 257 | 308 |
| 26 | 41 | 82 | 163 | 245 | 326 | 408 | 490 |

Step 2)

Connect the twisted pair from each transmitter to the input terminals noting the polarity of the connection. If the wires are reversed the video will be unviewable on the monitor. Reversing the wires will not damage the unit.

Step 3)

The receiver hubs are powered from a 12-24 VAC/VDC power source. In the case of several units a larger central supply may be used.

Step 4)

Remove the front panel of the receiver by pulling the knobs toward you. Inside locate the receiver unit to match the camera you are working on. Set the DIP switches for your camera distance as listed below. Use the setting closest to your actual cable length. If you have no video or a streak through your video your wire pair may be reversed. When finished replace the front panel and lock it in place by pushing the knobs in.

After having adjusted each receiver, connect them to the rest of your video system. Each video channel provides 2 outputs.

| Unmarked positions are OFF | | | | | Video Level Gain | Video Peaking | | |
|----------------------------|-----------------|----|----|----|------------------|---------------|----|---|
| Distance in Feet (Meters) | Switch Position | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| <100-400 (<30-120) | | | | | | | | |
| 400-700 (120-200) | | | | | ON | | | |
| 700-900 (200-275) | | | ON | ON | ON | | | |
| 900-1100 (275-350) | | | ON | ON | | ON | | |
| 1100-1300 (350-400) | | | ON | ON | | ON | ON | |
| >1300 (>400) | ON | ON | ON | ON | | | | |

The settings listed are for normal conditions. Other settings are possible. For sharpness adjust switches 7 and 8. For gain adjust 5 and 6. Switches 1 and 2 or 3 and 4 must be operated in pairs according to distance.

Step 5)

There is also an "Earth Ground" terminal on the rear of the receiver, this connection provides improved surge protection, it is not required for operation. If the "Earth Ground" is not connected the unit will be grounded through the coax shield.

Troubleshooting

Problem
Fix/Cause

Video inverted or rolling and unstable.

- Reverse the wires of the twister pair at either the transmitter or receiver.

Problem
Fix/Cause

No video out at the receiver.

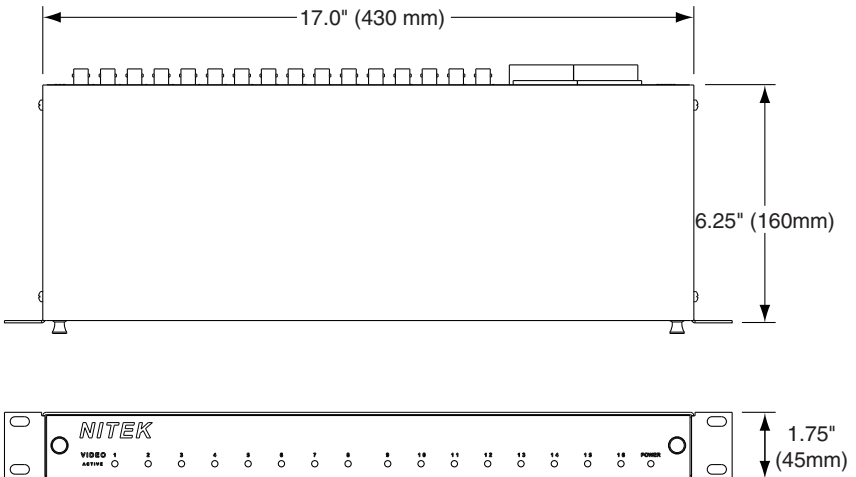
- Check to make sure that there is video in at the transmit end.
- Make sure that the pair of wires you are using is not open or shorted between the transmit and receiver points.
- Check power to the receiver.

Problem
Fix/Cause

Ghost image at the receiver.

- Bridge tap or "T" tap on the twisted pair video line. Remove tap.

VH1651 TOP & FRONT



VH1651M BACK

