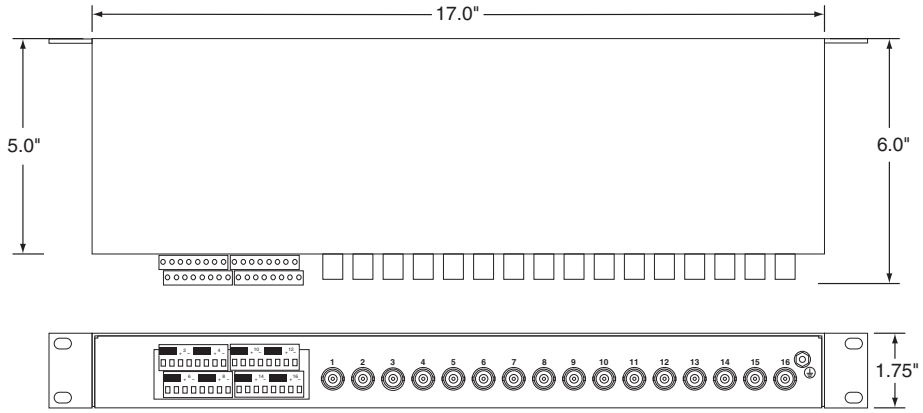
8 & 16 Port UTP Video Hub

The VH839, VH839M, VH1639 and VH1639M Video Balun Hubs are multi-channel video transmission devices that provide a low cost means of sending quality live video over category 2, 3, 4 or 5 twisted pair cable. The system works equally well over existing communication and computer network spare pairs, or new cable installations.

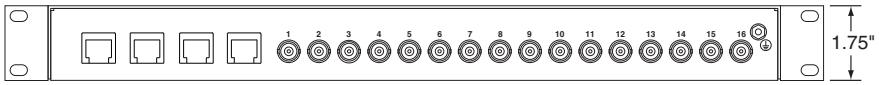
The units can send video up to 1,000 feet when used with other products in the VB37 or VB39 family. When used with model TR515 or TR560 active receivers, distances of 1,500 feet and 3,000 feet respectively can be obtained. The units are designed to provide superior immunity from noise and interference even when run near power lines. Additionally, the unit has built-in surge suppression to protect video equipment from harmful power lines and lightning related type surges.

It can be rack mounted using the supplied mounting ears or used as a desktop unit without the mounting ears.



VH1639 UTP Video Hub

***Note:** VH839 is identical with the exception of 8 BNC ports instead of 16



VH1639M UTP Video Hub

***Note:** VH839M is identical with the exception of 8 BNC ports instead of 16

VER040810

VH839 / VH1639 / VH839M / VH1639M UTP Video Hub

Size	17"W x 6"D x 1.75"H (without mounting ears)
Power Requirements	NONE REQUIRED
Video Input Connection	Standard BNC connector for 1 vpp composite video Monochrome or Color
Video Format	RS170, NTSC, PAL, SECAM, CCIR (Color or B/W)
Twisted Pair Connection	Screw terminals on Standard Models RJ45 Connectors on M Models
Wire Size	12 to 26 AWG Unshielded Twisted Pair
UTP Category	Unshielded Category 2 or better
Common Mode Rejection	>70dB
Operating Frequency	DC to 10 MHz
Recommended Transmission Distance	w/passive units - Up to 1,000 feet w/active units - Up to 3,000 feet
Transient Immunity	Built-in

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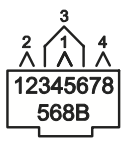
VH839 / VH1639 / VH839M / VH1639M
8 & 16 Port UTP Video Hub

INSTALLATION

The VH839, VH1639, VH839M & VH1639M are Video Balun Hubs with built-in surge protection. The system operates with other NITEK UTP video equipment including other UTP Video Hubs, standard Video Balun Transceivers or active receiver units. It can be mounted in a standard 19" rack cabinet or used as a desktop unit. These systems convert video into twisted pair signals or vice versa.

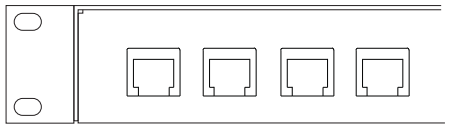
The diagram below shows only a few of the many possible configurations. If you have any questions about your particular application call the NITEK® sales or technical offices.

To hook up the any of the units, connect a video coax to the BNC connector and connect the twisted pair to the matching + and - terminals. For "M" models, connect the twisted pair using RJ45 connectors. At the other end of the twisted pair connect another NITEK® UTP Video unit in the same way. The twisted pair is polarity sensitive so if you are not getting proper video try reversing the twisted pair. It will not hurt the equipment if the pair is reversed but the video will be unusable.



VIDEO PORT

8	-	Vid 4
7	+	Vid 4
6	-	Vid 3
5	+	Vid 1
4	-	Vid 1
3	+	Vid 3
2	-	Vid 2
1	+	Vid 2



"M" Series

TROUBLESHOOTING

Many times it is not possible to know where the telephone cables are routed, so the actual distance of the cable may not be known. An easy way to determine the actual length of the cable is with an ohm meter. Short the wire together at one end and measure the resistance at the other end. 24 AWG wire has a loop resistance of 51 ohms per 1,000 feet, 26 AWG is 82 ohms and 22 AWG is 32 ohms. If you are exceeding the recommended distance for your unit contact NITEK® or your local representative. NITEK® manufactures a wide selection of systems for longer runs and we would be happy to provide you with the correct solution.

Problem Video will not sync, wide white jagged area.
Fix/Cause Reverse wires on twisted pair connection.

Problem No video at receiver.
Fix/Cause Check camera video and coax connections.
Check the twisted pair for opens and shorts.

Problem Ghosts image to the right, horizontal smearing.
Fix/Cause Check for bridge taps or "T" taps on the twisted pair and remove them.