

WARRANTY

All fiber optic transmission systems, products and accessories manufactured by Liteway, Inc. and its subsidiaries are fully tested prior to shipment and are warranted against defective materials and workmanship for a period of five full years from the date of the original shipment. Should a problem occur, a Return Material Authorization Number (RMA) must be obtained from Liteway Inc. at (516) 931-2800 and the item returned to Liteway, Inc. 166 Haverford Road, Hicksville, NY 11801, USA, prepaid. Liteway Inc. will then, at its option repair or replace the defective item.

Liteway, Inc. maximum liability under this warranty is limited to the cost of the defective item only. No contingent liabilities of any kind are either assumed or implied.

Any items returned to Liteway, Inc. that have been misused, abused, damaged, modified, connected or adjusted in any way contrary to the instructions furnished by Liteway, Inc. or repaired by unauthorized personnel will not be covered by this warranty. Any non-warranty repairs required will be quoted at the current rate for such services.



Important Notices



CAUTION! AVOID DIRECT EXPOSURE TO BEAM.

All -5, -7, -8, and -9 Models use laser diodes. These solid-state laser diodes are located in the optical ports of these units. Laser diodes produce invisible radiation that may be harmful to human eyes. Never look directly into the optical port of any fiber optic unit designed to operate with single-mode optical fiber.

NOT FOR LIFE SUPPORT SYSTEMS

Liteway, Inc. does not authorize or warrant any of its products or accessories for use in critical life support systems or applications of any kind.

Operating Instructions

Fiber Optic Video & Bidirectional Data Transmission System

Model VDT-1001 Model VDR-1001



The **Litelink**[®] VDT/VDR-1001 system consists of the VDT-1001 transmitter and VDR-1001 receiver. Both units utilize linear modulation and wide-band low noise circuitry to transmit high quality video and two-way PTZ data on a single optical fiber and are compatible with most current PTZ systems.

Technical Specifications

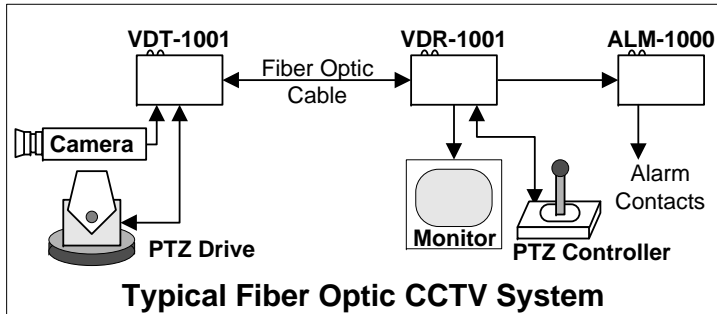
Video Bandwidth	8 MHz (+0, -3dB)
Data Transmission Rate	DC to 115.2 Kb/s
Protocols Supported	RS-232/422/Manchester
Video In/Out Impedance	75 ohms
Video In/Out Level	1 volt peak to peak
Video Signal/Noise Ratio	60 dB typical
Operating Wavelength	850nm (-1), 1300nm (-3,-7), 1550nm (-9)
Optical Output	-14dBm (multimode) -10 dB (single-mode)
Optical Loss Budget	0 - 15 dB (multimode) 0 - 18 dB (single-mode)
Fibers Accommodated	1 multimode (-1,-3), 1 single-mode (-7,-9)
Temperature Range	-35° to +75°C
Power Requirements	11-24 VAC/DC @150 mA
Physical Size (mm)	5.0"(127)L x 1.0" (25.4)W x 3.0"(7)D

All specifications measured with 1Km of 62.5u multimode fiber.

All specifications are subject to change without prior notice.

Installation Instructions

The diagram below shows the typical installation of the VDT-1001 VDR-1001.



Protocol Selections

Switch Settings

Protocol	1	2	3	4	5	6
RS-232	Off	Off	Off	Off	On	On
RS-422	On	On	On	On	Off	Off
RS-485 4W	On	On	On	On	Off	Off
Manchester	On	On	On	On	Off	Off

Video Level Control Adjustment

The video level control should be set for an output of 1 volt peak to peak. Alternately, the control can be set for a pleasing picture. If it is set too low, the picture will appear dull and “washed out”. If it is set too high, the picture will appear harsh or severely distorted.

Alarm Mode Selection

To enable use of alarms	Switch 10 to off
Video alarm enable	Switch 7 to on
DataTx alarm enable	Switch 8 to on
Data Rx alarm enable	Switch 9 to on

Power Terminal Block Connections

Pin	Function
1	Alarm output for use with optional Alarm Sensing Unit ALM-1000. No other connections should be made to this terminal
2	+11 to 24 DC or AC Volts input
3	AC or DC return (Common to Housing)

Be certain to check all connections, settings and voltages before applying power

Data Terminal Block Connections

Pin	Label	Description
1	Tx +	+ data to be Tx on fiber
2	Tx -	- data to be Tx on fiber
3	Ground	
4	Rx -	- data to be Rx from fiber
5	Rx +	+ data to be Rx from fiber

Note RS-232 will only use pins 1, 3, and 5.

Indicator Lights

Indicator	Lights when
Pwr	Proper power is present.
Alrm	The loss of video alarm is activated and there is no video present
Link	Optical signal is present
Vid	A video signal is present
DataTx	A data signal is being transmitted onto fiber.
DataRX	A data signal is being received from fiber.