WARRANTY

All fiber optic transmission systems, products and accessories manufactured by Liteway, Inc. and it's 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

Video Loss Detector;

Models;

VLD-3002 Dual Channel

VLD-3001 Single Channel

VLD-1001 Single Channel Sync only

The VLD-3002, VLD-3001, and VLD-1001 provides alarm indication when there is a loss of video sync, when there is an extended period of black (obstructed camera lens) or white (intentional blinding camera video signals). The standard versions have a 3 second response time while the –H versions have 0.5 seconds response time.

Technical Specifications

Compatibility	NTSC or PAL
Video Bandwidth	DC to 30 MHz
In/Out Signal Level	1 volt peak to peak
In/Out Impedance	75 ohms
Black level alarm adjustment	100mV to 700mV
White level alarm adjustment	100mV to 1V
Differential Gain	0.1% maximum
Differential Phase	0.1º maximum
Signal / Noise Ratio	85 dB min
Response Time Standard Version	3 seconds typical
Response Time –H Version	Less than 0.5 seconds
Relay Contacts	0.5 A @ 125 VAC; 1.0 A @ 24 VDC
Indicators	Power, Alarm
Channel indicators	Signal, White, Black
Power Requirements	11-24 VAC/DC @150 mA
Temperature Range	-35º to +75ºC
Physical Size (mm)	5.0"(127)L x 1.0" (25.4)W x 3.0"(7)D

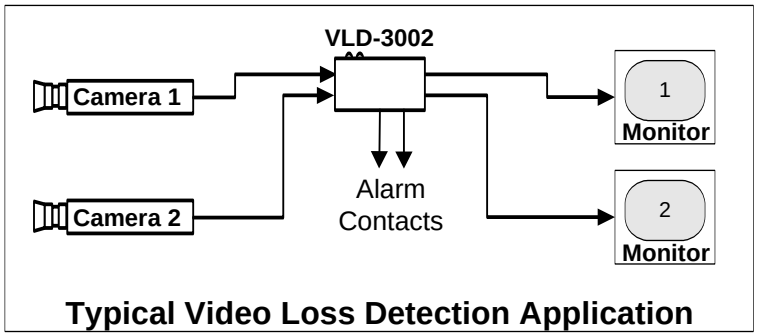
All specifications are subject to change without prior notice.

Litelink®
Fiber Optic Transmission Systems
www.LiteLink.com
USA 516-931-2800

Installation Instructions

The VLD-3002 is a dual channel unit. For each channel there are: Signal, Black, & White level Indicators; Adjustable trigger points for black and white alarm levels; and a normally open relay contact that closes on an alarm condition.

The VLD-3001 is a single channel version of the VLD-3002. The VLD-1001 is a low cost single channel units which only detects video presence only and not black/white levels. Below is a typical application of the VLD-3002.



Typical Video Loss Detection Application

If the video loop through is not used, you must terminate the unused loop through connector with a 75 ohm terminator.

Adjustments

Black level adjustment is used to sense a blocked camera lens or loss of scene illumination. Apply a video signal with the darkest acceptable scene. Slowly adjust the Bk control until the BK threshold indicator just lights. Now turn the Bk control in the reverse direction until the BK threshold indicator just turns off. Any lower level scene will trigger the alarm.

White level adjustment; is used to sense a bright light shining into the camera or an unusually bright change of scene. Apply a video signal with the brightest acceptable scene. Slowly adjust the Wh control until the Wh threshold indicator just lights. Now turn the Wh control in the reverse direction until the Wh threshold indicator just turns off. Any brighter level scene will trigger the alarm.

There is no adjustment for the signal (sync) channel. This alarm will activate when the input video signal drops to 0.5 volts (pp) or less.

Indicator Lights

Indicator	Lights when
Pwr	Proper power is present.
Alm	There is a video loss or threshold violation condition present.
Sig	A video signal is present.
Wh*	Video is above the White level threshold.
Bk*	Video is below the Black level threshold.

*not present on the VLD-1001 model which detects only sync.
Note that the Alm indicator will only be off it there are no loss of video or threshold violations on both channels for the VLD-3002

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)

Relay Terminal Block Connections

Pin	Function
1	Normal Open contact channel 1; connects to pin 2 when an alarm condition on channel 1
2	Normal Open contact channel 1; connects to pin 1 when an alarm condition on channel 1
3	Case Ground
4*	Normal Open contact channel 2; connects to pin 5 when an alarm condition on channel 2
5*	Normal Open contact channel 2; connects to pin 4 when an alarm condition on channel 1

* Only present on the two channel model, VLD-3002

Be certain to check all connections and voltages before applying power. Make sure the removable terminal blocks are fully seated.

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