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 -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.

107326 Rev L

OPERATING INSTRUCTIONS

IRIG or PPS Signal DCLS (TTL) Distribution Amplifier

Model IRGM-8004

The IRGM-8004 is a distribution amplifier that accepts a modulated electrical Digital (DCLS) IRIG A through E or PPS input signals and produces four individual electrical output signals for distribution over four separate coaxial cables to other IRIG receivers.

Technical Specifications

Data Rate	1 pps to 10,000 pps (DC to 20 Mb/s)
Input Impedance	1.5K ohms
Output Impedance	50 ohms
In/Out Signal Level	0/5 volts typical TTL
Output Drive Current	40 mA maximum per channel
Bit Error Rate	10E9 minimum
Leading Edge Rise Time	20 nsec maximum
Signal Connectors	BNC
Number of Outputs	4 channels
Propagation Delay	10 ns typical
Offset between outputs	< 5 ns
MTBF	>100,000 Hours (MIL-HDBK-217)
Temperature Range	-35º to +75ºC
Power Requirements	11-24 VAC/DC @ 275 mA
Physical Size (mm)	5.0"(127)L x 3.0"(76)D x 1.0" (25.4)W

All specifications are subject to change without prior notice.

LuxLink®
Fiber Optic Transmission Systems

www.LuxLink.com
USA 516-931-2800

Installation Instructions

The diagram below shows the typical installation IRIG system that uses the IRGM-8004 for IRIG or PPS distribution.

Typical Fiber Optic IRIG Distribution System
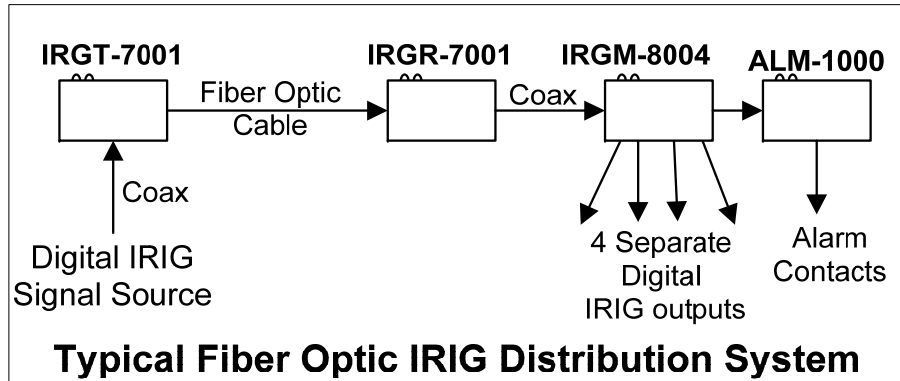
The IRGM-8004 provides four electrical outputs. Multiple IRGM-8004 units may be "daisy-chained" when more than 4 output channels are required.

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

Indicator Lights

Indicator	Lights when
Pwr	Proper power is present.
Alrm	The loss of signal alarm is activated and there is no IRIG or PPS signals present to transmit.
Sig	A data signal is being received.

Note that for very low data rates such as the 1 PPS signal the Sig LED lamp may blink at the data rate. This will not affect any of the output signals at all.

Front Panel DIP Switch

Dip switch #1 is used to turn the alarm function ON and OFF.
Dip switch #2 is used to set the input coupling to AC or DC.

For very low data rates it is important to use the DC coupled position of the DIP switch.

For signals riding on a DC level the AC coupled position will eliminate the DC level portion of the signal but may not operate properly at very low data rates.

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