## **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 -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**

Litelink®
Fiber Optic Audio
Signal Distribution

**AM-1004** 

photo pending

The Litelink® The AM-1004 is an optical transmitter that converts an electrical line level audio input signal into four individual optical output signals for distribution over separate fiber optic cables to AR-1001 receivers. The system conveys high quality line level audio signals applications such as public address systems, intercoms and general-purpose audio point-to-point distribution systems.

**Technical Specifications** 

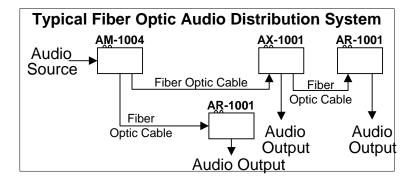
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Signal Bandwidth	30 Hz to 100 KHz
Input Impedance	600 ohms (balanced or unbalanced)
Input Signal Level	3 volt peak to peak, (5 mA)
Signal/Noise Ratio	60 dB/min (ref 1Vpp)
Linearity & THD	3% max
Operating Wavelength	850 (-1), 1300 (-3,-7), 1550 (-9)
Optical Loss Budget	0 – 12 dB
Fibers Accommodated	1 Multimode (-1,-3), 1 Single-mode (-7,-9)
MTBF	100,000 Hours (MIL-HDBK-217D)
Temperature Range	-35° to +75°C
Power Requirements	11-24 VAC/DC @500 mA
Physical Size (mm)	7.0"(178)L x 1.0" (25.4)W x 7.0"(178)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 a typical installation that uses the AM-1004, AX-1001 and AR-1001 for audio distribution.



In the above diagram only two optical outputs are utilized. The AM-1004 provides four optical outputs all of which are active.

## **Signal Connector Connections**

Pin	Function
1	Not used
2	Not used
3	Common (ground) is also connected to the housing
4	(-) Audio Input
5	(+) Audio Input

**Balanced input**: Use terminals 4 and 5 for the input signal only.

Terminal 3 (ground) may be used as a shield if

desired.

Unbalanced input: Use terminal 5 for signal

Jump terminal 3 (ground) to terminal 4 Use terminals 3/4 for the signal return

#### **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 when there is no audio signal present to transmit.	
Sig	An audio signal is being received.	

The **Alarm** switch is used to turn the alarm function on and off.

