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.

 122976 Rev F

OPERATING INSTRUCTIONS

Litelink®
Fiber Optic Audio Transmission System

Model AX-1001

The ***Litelink***® AX-1001 transmission system consists of two audio transceivers in a single housing. This system will transmit high quality bi-directional balanced or unbalanced line level audio signals from one point to another.

Technical Specifications

Signal Bandwidth	50 KHz
In/Out Impedance	600 ohms
In/Out Signal Level	3 volt pp
Input	Balanced or Unbalanced
Linearity and THD	3% max
Signal/Noise Ratio	60dB/min
Optical Loss Budget	0 - 12dB
Operating Wavelength	850 (-1), 1300 (-3,-7), 1550 (-9) nm
Fibers Accommodated	Multimode; -1, -3, Single-mode; -7, -9
Number/Type of Fibers	1,Multimode or Single-mode
Temperature Range	-35º to +75ºC
Operating Power	11-24 VAC/DC @150 ma.
Physical Size (mm)	5.0"(127)L x 1.0" (25.4)W x 3.0"(7)D

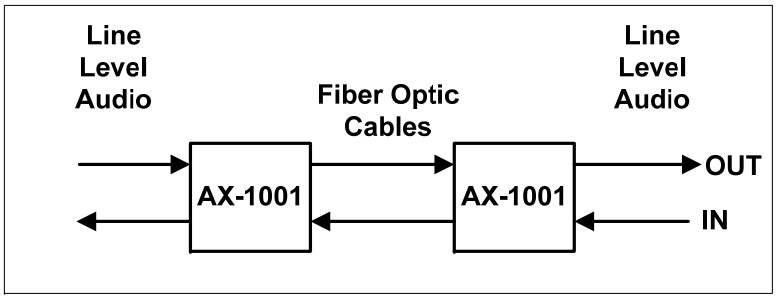
All specifications measured with 1Km of 62.5u multimode fiber and specifications are subject to change without prior notice.

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

Installation Instructions

The diagram below shows the typical installation of the AX-1001 fiber optic transmission system. Note that the AX-1001 contains a separate transmitter and receiver in the same package for two way operation when desired.

To compensate for fiber optic cable losses there is a level adjustment on the receiver portion of the AX-1001. In operation a standard 3 volt pp audio signal (1 volt rms maximum) is applied to the transmitter portion of the AX-1001. The transmitter then converts the audio to modulated light and sends the audio over the fiber optic cable to the receiver. At the receiver the modulated light is converted back into audio. The level adjustment can then be used to adjust the maximum output level to 3 volts pp (1 volt rms) across a 600 ohm load. The range of the level control is adequate to allow the full 0 – 12dB optical path loss range to be accommodated.



Signal Connector Connections

Pin	Function
1	(+) Audio Output
2	(-) Audio Output
3	Common (ground)
4	(-) Audio Input
5	(+) Audio Input

If audio input / output is of the unbalanced type, Add a jumper from the respective (-) signal to ground (pin 3). For example, a balance Tx audio to be transmitted connects to pins 4 and 5. For an unbalance Rx connect to pins 1 and 2, and connect pins 2 & 3 together.

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. Not connected to Housing for Isolated Units)

Indicator Lights

Indicator	Lights when
Pwr	Proper power is present.
Alrm	The loss of signal alarm is activated and the audio signal level is between 0 and 1 volt pp.*
Sig	Rx indicates a signal is being received from fiber. Tx indicates signal is being transmitting by the fiber.

* As a result, the alarm circuit will not operate properly if the audio signal is either intermittent or if it varies between 0 and 1 volt pp.

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

AX-1001-X-ISO

The ISO version of the AX-1001 is exactly the same as the non-ISO version with the exception that there are no electrical connections to the housing. The metal housing is totally isolated from the circuitry of the unit.

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