

## 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, 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!** The laser diodes used in all -7 and -9 Fiber Optic Transmission systems manufactured by Liteway, Inc. utilize solid-state laser diodes located in the optical ports of these units. These laser diodes produce invisible radiation which may be harmful to human eyes. As a result one should 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 AES/EBU Digital Audio Transmission System

### Model AT-8001, AR-8001



The AT/AR-8001 system consists of the AT-8001 transmitter and AR-8001 receiver and will transmit high quality conventional balanced or unbalanced AES/EBU digital audio signals between two points over a distance of several miles.

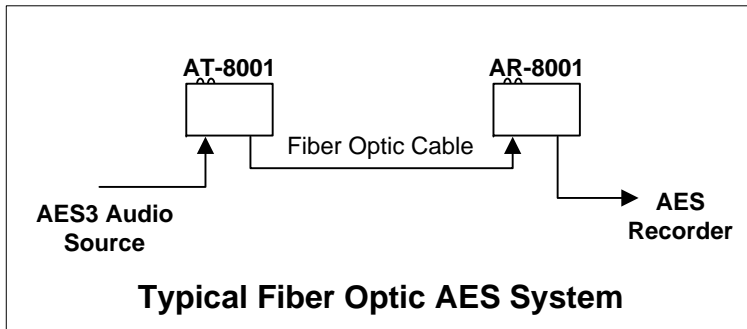
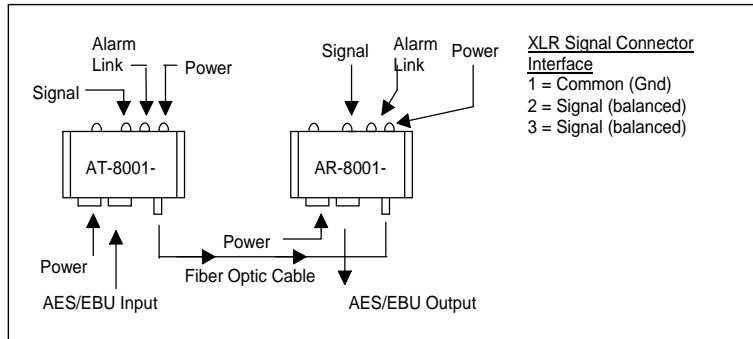
### Technical Specifications

Signal Bandwidth	6 MHz
In/Out Impedance	110 ohms balanced, 75 ohms unbalanced
In/Out Connectors	XLR balanced, RCA unbalanced
Sampling Rate Supported	32 KHz, 44 KHz, 48.1 KHz, 96 KHz
Protocol Compliance	AES3 (IEC 60958 type I and II)
Optical Loss Budget	0 - 10dB
Operating Wavelength	850 (-1), 1300 (-3,-7), 1550 (-9) nm
Fibers Accommodated	Multimode; -1, -3, Single-mode; -7, -9
Temperature Range	-35° to +75°C
Operating Power Requirements	11-24 VAC/DC @200 mA
Physical Size (mm)	5.0"(127)L x 3.0"(76)D x 2.23"(56.6)W

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

# Installation Instructions

The diagram below shows the typical installation of the AT-8001 and AR-8001 fiber optic audio transmission units. A balanced or unbalanced AES/EBU digital audio signal is applied to the appropriate connector (XLR or RCA) on the AT-8001 transmitter. The transmitter then converts the digital audio signal to light and transmits it over the fiber optic cable to the AR-8001 receiver. At the receiver, the signal is detected and converted back into an exact replica of the balanced or unbalanced digital audio input signal. There are no user adjustments required. Installation simply requires the connection of the various cables.



The AT-8001 has an additional XLR (balanced) output for loop applications.

The AR-8001 has two XLR outputs (balanced) in parallel for repeater applications.

125017 Rev G

## Signal Connector Connections (XLR/RCA)

Pin	Function
XLR-1	ground
XLR-2	signal (balanced) 110 ohms
XLR-3	signal (balanced) 110 ohms
RCA pin	signal (unbalanced) 75 ohms
RCA shell	signal return (unbalanced) 75 ohms (ground)

Note that ground is also connected to the housing

## Power Terminal Block Connections

Pin	Function
1	Alarm output for use with optional Alarm Sensing Unit ALM-1000. <b>No other connections should be made to this terminal</b>
2	10 to 18 or 24 VAC, + 10 to +18V or +24DC,
3	AC or DC return (Common and connected to Housing)

## Indicator Lights

Indicator	Lights when
Pwr	Proper operating power is present.
Sig	A digital audio signal is present
Alrm	There is no digital audio signal or no fiber optic link
Link	A valid fiber optic link is present

Note: The AT-8001 can accept either balanced (via XLR connector) or unbalanced (via RCA connector) inputs. Use one or the other. Do not use both simultaneously.

The AR-8001 will reproduce both balanced and unbalanced outputs simultaneously. Both may be used if desired.