

## 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.

## OPERATING INSTRUCTIONS

### Fiber Optic MIDI Transmission System

#### MIDI-2101-x Transmitter MIDI-2201-x Receiver

The MIDI-2101/2201 system consists of the MIDI-2101 transmitter and MIDI-2201 receiver. This system will transmit all standard MIDI 1.0 data signals over beyond the specified 50 foot (15 meter) limit without signal loss or interference between the two MIDI units.



#### Technical Specifications

Bandwidth	DC – 1.0 Mb/s (Includes 31.25 Kbaud)
Protocol supported	MIDI 1.0 (all formats)
Rise / Fall Time	Less than 100 nanoseconds
Bit-error Rate	1 x 10 <sup>-9</sup> (worse case)
Signal Connectors	5 pin 180° DIN
Input Isolation	Optical Isolation 10 KV/us
Output Drive	25mA maximum (5 times MIDI 1.0)
Operating Wavelength	850 (-1), 1300 (-3,-7), 1550 (-9)
Optical Output	-15 dBm typical
Optical Loss Budget	0 – 10 dB
Optical Connectors	Multimode fiber models (-1, -3) ST/PC, Single-mode fiber models (-7,-9) FC/PC
Temperature Range	-35° to +75°C
Power Requirements	11-24 VAC/DC @ 160 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.

All specifications are subject to change without prior notice.

# Installation Instructions

The diagrams below show the location of the connectors for the MIDI-2101 and the MIDI-2201. For proper operation, the units should always be connected as shown.

## MIDI-2101 Transmitter Considerations

The MIDI IN connector on this unit should be connected to the standard MIDI signal to be transmitted over the fiber optic cable via a standard 5 position 180° DIN connector cable. If a MIDI Thru output signal is required, it may be obtained from the MIDI OUT connector on the unit.

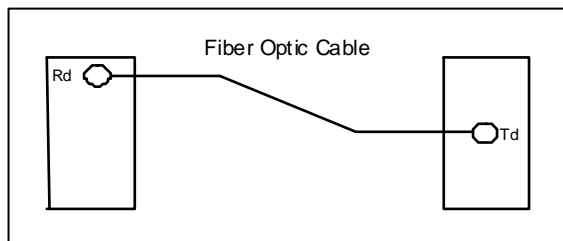
## MIDI-2201 Receiver Considerations

The MIDI OUT connector on this unit should be connected to any device that should receive the MIDI signal being transmitted over the fiber optic cable. A standard 5 position 180° DIN connector cable should be used

## MIDI-2101/2201 Transmitter/Receiver Considerations

When the MIDI-2101 and MIDI 2201 units are connected with fiber optic cable the result is a one-way transmission system. MIDI signals applied to the MIDI IN connector of the MIDI-2101 transmitter will appear at the MIDI OUT connector on the MIDI-2201

Note that you must connect the Tx port of one unit to the Rx port of the other unit with the appropriate size fiber optic cable



## 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	There is no valid fiber optic connection between the units.
Tx, Rx	A MIDI data signal is being transmitted or received. At low data rates these indicators may blink with data.
Link	A valid fiber optic connection exists between the two MIDI units connected together. If the Link light is not on MIDI data will not be transmitted