

# 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 two 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.

# Operating Instructions

## MIDI Twisted Pair Transmission System

### Model MIDI-1001



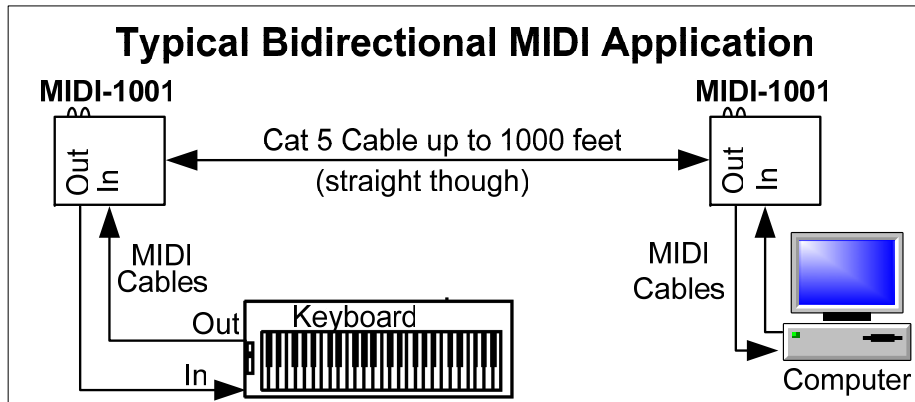
The *MidiExtender*<sup>™</sup> MIDI-1001 system consists of two MIDI-1001 transceivers. These units utilize transmission techniques that allow standard MIDI (Musical Instrument Digital Interface) data signals to be transmitted and received over a standard CAT5 data transmission cable over distances of 1000 feet. The unit is designed to operate in simplex, full duplex or drop-and-repeat modes.

### Technical Specifications

Protocol	MIDI 1.0
Input Termination	Opto-isolated per MIDI 1.0
Output	per MIDI 1.0
Data Rate	0 to 100 Kbaud (31.250 Kbaud standard)
MIDI connectors	5 position 180 ° DIN
MIDI ports	MIDI IN, MIDI OUT
Transmission Media	CAT5 data transmission cable
Transmission Connectors	RJ-45
Transmission Distance	0 to 1000 feet (330m)
Temperature Range	-20° to +75°C
Power Requirements	11-24 VAC/DC @ 160 mA
Power Connector	Removable terminal block
Physical Size (mm)	5.0"(127)L x 1.0" (25.4)W x 3.0"(7)D

# Installation Instructions

The diagram below shows the typical installation of the MIDI-1001 transmission system.



## Step by Step Installation Procedure

1. Set the front panel DIP switch on one MIDI-1001 unit to "A" and the front panel DIP switch on the other MIDI-1001 to "B".
2. Connect Power to one of the MIDI-1001 units. It does not matter which unit you choose to supply power. At this point the **Pwr** and **Alm** indicators on that unit will light.
3. Connect the straight (not a crossover) CAT 5 data transmission cable between the two units. Now on both units the **Pwr & Link** indicator lights will be on and that the **Alm**, **Td** and **Rx** indicators are OFF on both units.
4. Connect the MIDI cables to the appropriate equipment to be used. The MIDI signal from MIDI output of your equipment goes to the MIDI IN port of the MIDI-1001

## 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)

Note that the terminal blocks are removable to allow easy wire hookup.

## Indicator Lights

Indicator	Lights when
Pwr	Proper power is present.*
Alrm	The loss of link alarm is activated and there is no link present.
Link	A valid communications link is present
Tx	MIDI signals are being transmitted on to the Cat 5 cable. (the MIDI in connector is active)
Rx	MIDI signals are being received from the Cat 5 cable. (the MIDI out connectors is active)

Note that the **Tx** and **Rx** indicators may blink with the data or remain OFF if no data is being sent.

\* The MIDI-1001 system can be powered from either unit. The power to the second unit will be conveyed by the CAT-5 cable. Either unit can be the source but none of the indicators will light on the remote unit until the CAT-5 cable is connected.

## Troubleshooting

- Make sure to use CAT 5 (or better) straight through (not crossover) data transmission cable. Cable can not go through a router or any other device.
- Make sure that one MIDI-1001 units is set to "A" and the other to "B"
- Make sure your Midi cables are not plugged into the wrong port. MIDI OUT of your equipment connects to MIDI IN of MIDI-1000.