

## 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 -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

### *Model DX-7101*

### *Fiber Optic RS-232*

### *Data Transceiver*



The DX-7101 is designed to transmit and receive EIA standard RS-232 data signals at data rates from DC to 200 Kb/s. The unit may also be used for point-to-point, or in drop and repeat applications.

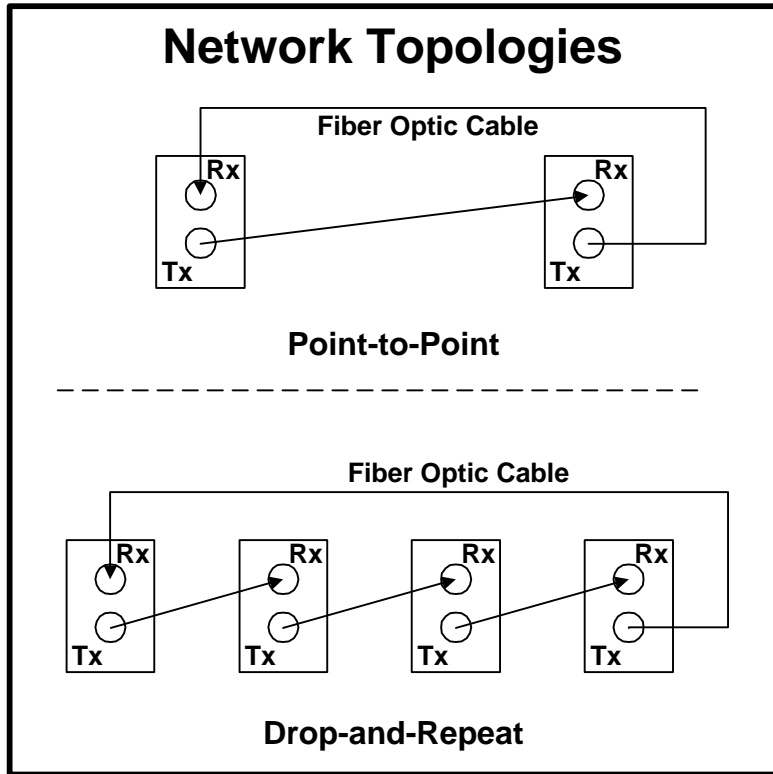
### Technical Specifications

Data Transmission Rate	DC-200Kb/s, Asynchronous
Operating Modes	Simplex, Full Duplex, Drop and Repeat
Protocol	EIA Standard RS-232
Operating Wavelength	850(nm) (-1), 1300 (-3,-7), 1550 (-9)
Fibers Accommodated	Multimode; -1, -3, Single-mode; -7, -9
Optical Budget	0-15 dB Multimode (models -1, -3) 0-18 dB Single-mode (models -7, -9)
Fibers Accommodated	Multimode; -1, -3, Single-mode; -7, -9
Number/Type of Fibers	2 Multimode or 2 Single-mode
Temperature Range	-35° to +75°C
Power Requirements	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 are subject to change without prior notice.

# Installation Instructions

The diagrams below show the location of the connectors and switches as well as the typical fiber and signal connections for the DX-7101 in both point-to-point and drop-and-repeat data transmission systems. For proper operation, the DX-7101 units should always be connected exactly as shown.



Note that in some Master / Slave installations, the DX-7101 specifically connected to the Master may have to be set to the Point-to-Point mode for proper operation.

## Dip Switch Settings

Before applying power set the 10 position DIP switch for the mode of operation desired as follows: Note that "On" is down.

Select DCE / DTE operation

Mode	Sw 7	Sw 8	Sw 9	Sw 10
DCE	Off	Off	On	On
DTE	On	On	Off	Off

Select communication topology

Topology	Switch 6
Point-to-Point	Off
Drop and Repeat	On

Select Alarm modes.

Alarm Mode	Sw 3	Sw 4	Sw 5
Loss of Rd signal only	Off	On	On
Loss of Td signal only	On	Off	On
Loss of Rd or Td	On	On	On
No Alarm	Off	Off	Off

Note that switches 1 and 2 are not used.

The DB-25 Data Signal Connector connections are

Pin	Connection
1,7	Ground
2	Td (DCE) Rd (DTE)
3	Rd (DCE) Td (DTE)
4	Connected to pin 5
6	Connected to pins 8 and 20

All other pins are unconnected.

## Power Terminal Block Connections

Pin	Function
1	Alarm output for use with optional Alarm sensing Unit ALM-1000. <i>No other connections should be made to this terminal</i>
2	11 to 24 VAC/DC
3	AC or DC return (Common to Housing)

## Indicator Lights

Indicator	Lights when
Pwr	Proper power is present.
Alrm	The loss of data alarm is activated and there is no data present.
Td	when a data signal is being transmitted (will not light in drop & repeat mode)
Rd	when a data signal is being received (or repeated in drop & repeat mode)

Be certain to check all connections, settings and voltages before applying power.