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 –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

Litelink®
Fiber Optic Wiegand®
Data Transmission System

Model WT-7001
Model WR-7001

The *Litelink*® WT/WR-7001 system consists of the WT-7001 transmitter and WR-7001 receiver. Both units utilize digital encoding techniques to transmit and receive the Wiegand interface over a single optical fiber conductor.

Technical Specifications

Protocol	Wiegand[1]
Channels	Data 0 and Data 1
Input / Output Level	5 volts and 0 volts
Input / Output Impedance	1 K ohms
Data Pulse Width	20 to 100 usec typical
Data Pulse Interval	200u to 2 msec typical
Transmitter DC output	+5 VDC @500 mA(max)
Operating Wavelength	850nm (-1), 1310nm (-3,-7), 1550nm (-9)
Optical Loss Budget	0 - 15 dB (multimode)
	0 - 18 dB (single-mode)
Fibers Accommodated	1 multimode (-1,-3), 1 single-mode (-7,-9)
Temperature Range	-35º to +75ºC
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 measured with 1Km of 62.5u multimode fiber.and are subject to change without prior notice.

Wiegand ® is a trademark of EMERSON ELECTRIC CO, and is used here to indicate the "Access Control Standard - Wiegand™ Card Reader Interface: SIA AC-01 (1996.10)"

Litelink®
Fiber Optic Transmission Systems

www.LiteLink.com
USA 516-931-2800

Installation Instructions

The diagram below shows the typical installation of the WT-7001 and WR-7001.

Typical Fiber Optic Wiegand Application
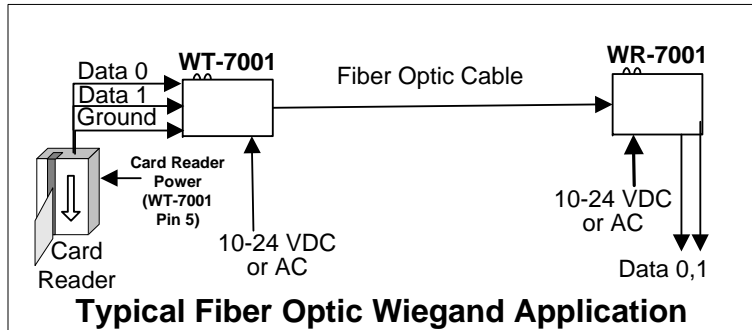
.
As a convenience, the WT-7001 provides a 5 VDC output, which can be used to power the peripheral that is transmitting to the WT-7001. This voltage is available pin 5. The common for this voltage is pin 3 (ground). Peripherals that require 12 VDC will require a separate power supply

Note that ground (or signal common) must be connected for proper operation.

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 ground (or signal common) must be connected for proper operation

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

106571 Rev H

Data Terminal Block Connections

Pin	Label	Description
1	D 0	Data Zero. A pulse on this conductor indicates a data bit with the binary value of zero
2	D 1	Data One. A pulse on this conductor indicates a data bit with the binary value of one
3	Gnd	Ground (and common data return)
4		No connection, not used
5	V out	+5 VDC (100 mA max) output (WT-7001 only). This output can only be used to power external Wiegand code readers that operate from 5 volts DC.

Indicator Lights

Indicator	Lights when
Pwr	Proper power is present.
Alrm	The loss of link alarm is activated and there is no valid fiber optic link present.
Link	A valid fiber optic link is present
Data 1	A data 1 signal is present.
Data 0	A data 0 signal is present.

Alarm Mode Selection

With Alarm On, the alarm will be active when there is no link detected