### WARRANTY

All fiber optic transmission systems, products and accessories manufactured by Liteway, Inc. and it's 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**

LuxLink®
Redundant RF Switch
Model RSW-3002



The RSW-3002 is a two input single output automatic switch designed to implement a redundant, fail-safe RF transmission system with any fiber optic system.

### **Technical Specifications**

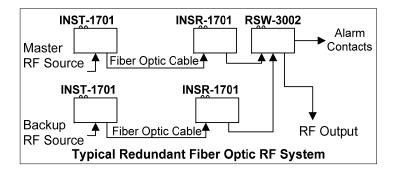
RF Switch Bandwidth	100 Hz to 1 GHz
In/Out Impedance	50 ohms
Isolation	50 dB minimum
Insertion Loss	1 dB maximum
Signal Connectors	BNC
RF Rx Bandwidth	100 Hz to 750 MHz (indicator only)
Rx In Signal Level	+13 dBm (3V peak to peak)
Rx Hysteresis	2-3 dB
Indicator Lights	Pwr, Primary, Secondary, Alarm
Power & control	Removable terminal Block
connectors	
Temperature Range	-35° to +75°C
Alarm Contact Ratings	0.5A 125 VAC 1 ampere 24 VDC
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 diagram below shows the typical installation of the RSW-3002.



Upon loss of the primary signal, the RSW-3002 will

Automatically switch the remaining secondary (backup) signal Activate the front panel Alarm (**Alm**) indicator.

Sound the Alarm audio alert if enabled.

Switch the external relay contacts.

### **Mode Switch**

Setting	Function
Pri	Forces Primary feed to common output
	Auto mode;
	If there is no signal on primary feed, but a signal
Auto	on the secondary feed, the secondary feed is
	connected to common output. Otherwise,
	Primary feed connects to common output.
Sec	Forces Secondary feed to common output

#### **Audio Alert Switch**

When enabled, this allows an audible alert if a fault condition is present

**Indicator Lights** 

Indicator	Lights when
Pwr	Proper power is present.
Alrm*	One or both input signals are not present
Pri	A signal is present at Primary input
Sec	A signal is present at Secondary input.
Fault	The loss of the RF signal at Input 1 (Primary) has occurred and the RF signal at Input 2 (Backup) has been routed to the output.

<sup>\*</sup> Note that if the Alm indicator is enabled the output for the optional ALM-1000 Alarm Sensing Unit will also be enabled.

### **3 Pin 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	Ground, AC or DC return (Common to Housing)

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

### **5 Pin Control Terminal Block Connector Block**

Pin	Function	
Relay	Relay contacts (2 Amp dry contact)	
1	Normally Open Contact	
2	Common Contact	
3	Normally Closed Contact	
External control of Mode		
4	Ground to Force Primary output	
5	Ground to Force Secondary output	

