

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

LuxLink® Optical Bypass Switch

Single Channel Models OS-3131, OS-2131

Dual Channel Models OS-3231, OS-2231



The OS-3131 and OS-2131 are three pole fiber optic switches that can be remotely controlled. The optical path through the units is purely optical; i.e. there is no optical-to-electrical-to-optical conversion. As a result there is no electrical loss or electrical bandwidth limit on the fiber optic path. The optical path can be selected via a front panel switch or via contact closure inputs. Common applications for this device are optical routing, system bypass, ring network restoration, and loop-back testing.

Technical Specifications

Switching Time	< 10 ms
Back Reflection	< -50 dB
Insertion Loss	< 2.2 dB
Cross-talk	< -50 dB
Mechanical Life	> 1 Million cycles
Electrical/Signal Connector	5 pin removable terminal block
Temperature Range	-35° to +70°C
Operating Power Requirements	11 to 24 VAC/DC @150 mA 11 to -48 VDC for ISO Version
Physical Size (mm) single	5.0"(127)L x 1.0" (25.4)W x 4.0"(101.6)D
Physical Size (mm) dual	5.0"(127)L x 2.2" (56.6)W x 4.0"(101.6)D

Models, wavelength, connector

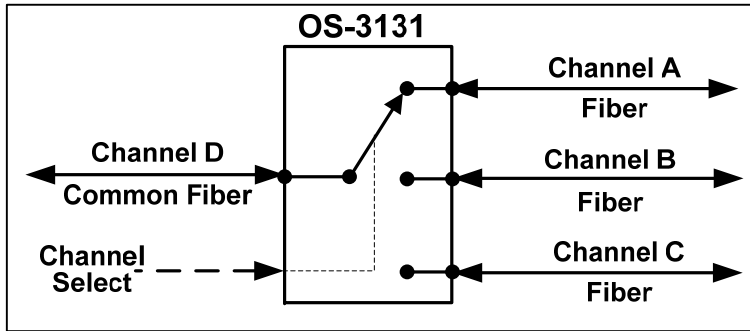
-3 = 850/1310nm Multimode ST/PC	-4 = 850/1310nm Multimode- SC/PC
-5 = 850/1310nm Single-mode SC/PC	-7 = 1310/1550nm Single-mode FC/PC

Specifications are subject to change without prior notice.

Installation Instructions

Common applications for this device are optical routing, system bypass, ring network restoration, and loop-back testing.

The diagram below shows the basic functions of the OS-3131.



The OS-3131 and OS-2131 switch will go to the A=D (Common) state under any of the following conditions:

- 1) The rear panel control signals are 00 and the front panel mode switch is set to A=D
- 2) The rear panel control signals are 01

The OS-3131, (non-latching version), will go to the A=D state if or when there is a loss of electrical power. The OS-2131, (latching version), will stay in the last know state before the loss of power.

Note that the OS-3231 is two OS-3131 switches in parallel and in a single housing.

Power/Signal Terminal Block Connections

Pin	Label	Function
1	Pwr+	Power + (see below for voltage)
2	Pwr-	Power – (see below for voltage)
3	C	Switch Control
4	C'	Switch Control Prime
5	Gnd	Ground

Power/Signal Terminal Block Operating Voltages

Pin	Models OS-3131 OS-2131	Models OS-3131-ISO OS-2131-ISO
Pwr +	11 - 24 Volts AC/DC	Ground
Pwr -	Ground	-12 to -48 Volts DC (+/- 2.0 Volts)

Power/Signal Terminal Block Control Functions

C C'	Optical Path
0 0	Optic Switch controlled by front panel selection.
0 1	Optical Port A is routed to optical port D
1 0	Optical Port B is routed to optical port D
1 1	Optical Port C is routed to optical port D

(0 = no connection, and 1= connected to ground)

Note that when there is any input to pins 3 and/or 4 the input will override the setting of the front panel selector switch

Indicator Lights

Indicator	Lights when
Power	Proper power is present
A=D	Optical Port A is routed to optical port D
B=D	Optical Port B is routed to optical port D
C=D	Optical Port C is routed to optical port D

Front Panel Mode Selector

Note that the front panel selector only functions when there is no input to Control pins 3 and 4 (C and C'). When there is any input to pins 3 and/or 4 the input will override the setting of the front panel selector switch.

Position	Function
A=D	Optical port A is routed to optical port D
B=D	Optical Port B is routed to optical port D
C=D	Optical Port C is routed to optical port D