

Optical Switch Evaluation Kit Circuit Board and Software

(Protected by U.S. patent 6823102 and pending patents)

Product Description

The SW-DR-1 optical switch evaluation kit is comprised of a driver board, a switching mounting board, software, a power supply, and a computer interface cable. It is designed to drive and control Agiltron CrystaLatch™ (CL) series and LightBend™ (LB) series optical switches up to 15 switching points. The evaluation board integrates both standard RS-232 and TTL interfaces, allowing the user to easily create flexible and customized control logic configurations. It features real time control and supports all port configurations of Agiltron CL and LB series switches. A user-friendly Windows™ application program is included for multi-purpose switch testing and demonstration.

The standard driver controls one individual switch. Drivers that control multiple switches also are available, please call Sales at (781) 935-1200 for more information.



Features

- RS-232 & TTL Interface
- Real time high speed
- Flexible ports configuration
- User-friendly software
- High reliability

Electrical Specifications

Parameters	Min	Normal	Max	Unit	Notes
Independent Control Channels	1		8		
Switching Voltage		5		V	$V_{sw} \cong 5-0.35 \times I_{sw}$ I _{sw} : Switching current in A
Sustainable Switching Current			1.2	A	Total switching current, continuous
Output Pulse Width	100		3000	µs	Driving pulse duration, software adjustable
Power Supply Voltage	4.75	5.0	5.25	V	
Power Supply Current (No Switching)			50	mA	Hot pluggable. <1.5A inrush current
RS232		±7		V	Direct connection to PC
TTL Interface	Compatible with Standard TTL Logic Level				
Electrical Connector Type	Male AMP 103309-2 or equivalent				
Board Dimension	(L)100mm x (W)60mm x (H)15mm				

Applications & Compatibility

- NxM CrystaLatch™ Switches (N=1,2 M≤8; N=4, M=4)
- NxM LightBend™ Switches (N=1,2 M≤8; N=4, M=4)
- Multi-functional electronic control

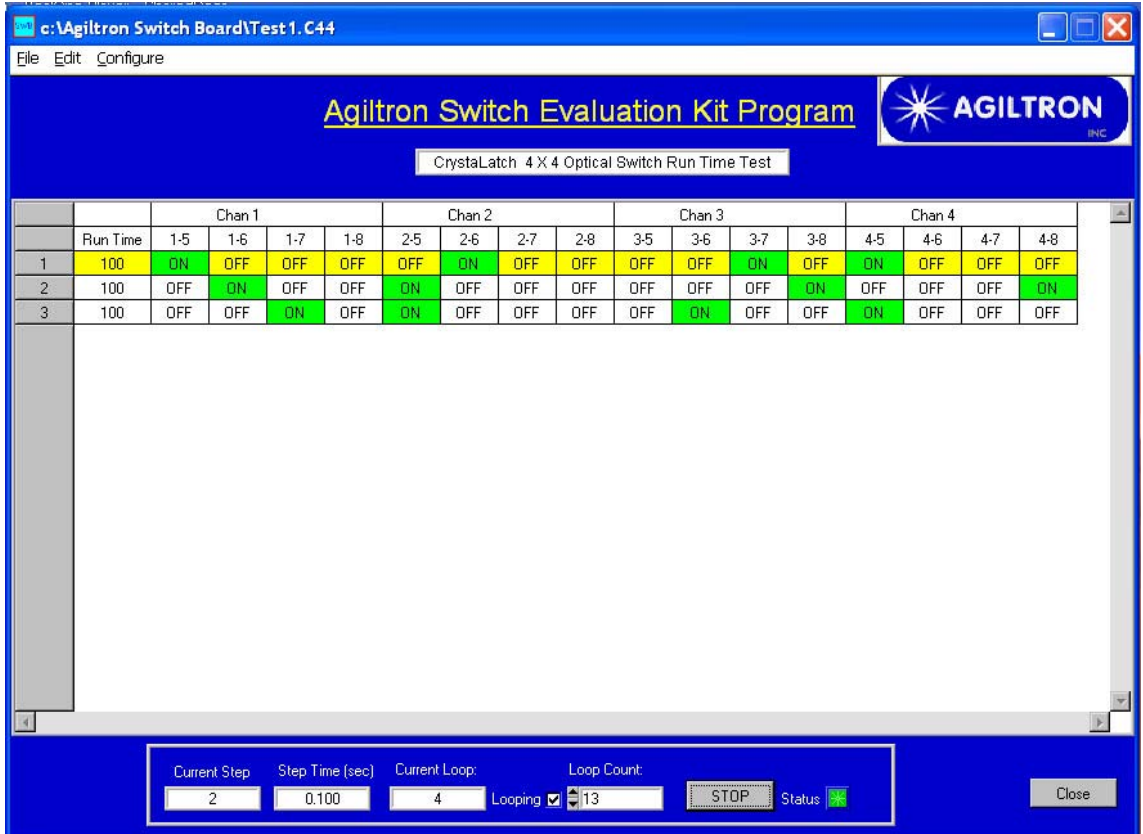
Control Modes

RS-232 Control For customized software development utilizing Command/Response format interface. Also used with the supplied Windows™-compatible software for switch configuration and programmable run time testing.

TTL Control Standard TTL logic level with TTL logic timing diagram. A TTL emulator is available on the circuit board.

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Graphic Example (1x4)



The screenshot shows the 'Agiltron Switch Evaluation Kit Program' window. The title bar indicates the file path is 'c:\Agiltron Switch Board\Test1.C44'. The menu bar includes 'File', 'Edit', and 'Configure'. The main window title is 'CrystaLatch 4 X 4 Optical Switch Run Time Test'. Below the title is a table with columns for 'Run Time', 'Chan 1' (1-5, 1-6, 1-7, 1-8), 'Chan 2' (2-5, 2-6, 2-7, 2-8), 'Chan 3' (3-5, 3-6, 3-7, 3-8), and 'Chan 4' (4-5, 4-6, 4-7, 4-8). The table contains three rows of data. Below the table is a control panel with fields for 'Current Step' (2), 'Step Time (sec)' (0.100), 'Current Loop' (4), and 'Loop Count' (13). There is a 'STOP' button and a 'Status' indicator showing 9%. A 'Close' button is also present.

	Run Time	Chan 1				Chan 2				Chan 3				Chan 4			
		1-5	1-6	1-7	1-8	2-5	2-6	2-7	2-8	3-5	3-6	3-7	3-8	4-5	4-6	4-7	4-8
1	100	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
2	100	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
3	100	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF

Ordering Information

SWDR-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Switch Type	Function	Size(mm)		# of Switch	Control Mode		
	CL switch=22 LB switch=33	1x1=11 1x2=12 2x1=21 1x4=14 4x1=41 1x8=18 8x1=81 Special=00	100x60x15=1 Special=0		1 switch=11 2 switches=22 3 switches=33 . . . 9 switches=99 Special=0	RS-232 & TTL=1 Special=0		