



# L2-SW

## Basic switch module, no dim, no communication

Sometimes all you need is a light switch. The L2-SW module controls a Zone of lights by reading input signals from attached switches connected to the PDM Port, and creates a Channel signal on the PDM. Up to 128 driver modules can listen to the Channel creating a group, or Zone, of lights. The L2-SW can be “stacked” underneath any driver so both switch inputs and lights can be attached to the same PDM Port. Perfect for closets and single-fixture rooms that require only one PDM port. Only one L2-SW is allowed per Channel to create the PWM Channel signal. The L2-SW also sends 12VDC Accessory Power from the Accessory Power Regulator (L2-APR) to the RJ45 Port through a protection fuse. An L2-APR is required to power the microcontroller in the L2-SW. Up to 16 L2-SW are powered by the L2-APR in the middle of the PDM. The L2-SW is a low cost switch solution and does not communicate over the PDM comm bus. Use an L2-DM if remote control or keypad input is desired. Because the L2-SW uses the same LumenCache wall switches as the L2-DM, upgrading to the controlled L2-DM takes just seconds. The L2-SW includes 6 Modes of operation to support all kinds of basic switch and button inputs. It can read on/off, momentary, top/bottom switches, and occupancy sensing. The occupancy sensor enabled modes have setup macros allowing dimmed automatic restore based on occupancy detection, and can be overridden to full On by pressing a wall switch button.

### POWER & CONNECTIONS

Power consumed	0.2 W (Requires L2-APR on the same L2-PDM)
Top connector	Female 14 pin, 1 alignment pin (plugged)
Bottom connector	Male 14 pin, 1 alignment pin (clipped)
PDM voltage	12-65VDC (pass through)
Port voltage maximum	65VDC (pass through)
Current maximum	1.5A (pass through)
Port current maximum	1.25A
Accessory 12V Protection	1.2A non-resettable fuse

### ZONE CHANNEL OUTPUT

Control channel signal type	0-5VDC, PWM Broadcast
Maximum drivers controlled	128

### PORT SWITCH INPUT

Switch types	1 button momentary, Top/Bottom momentary 2 button, ON/OFF switch, Occupancy detector, Ambient sunlight sensors
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### PHYSICAL/ENVIRONMENTAL

Dimensions	1 x 1.25 x 1.1in (25 x 34 x 30mm)
Operating temperature	+32°F to +122°F (0°C to +50°C)
Operating humidity	5% to 95% Non-condensing
Rating	Dry Rated
Environmental	RoHS
Safety certifications	FCC, CE

### WARRANTY

Duration	5 Years
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## ORDERING INSTRUCTIONS:

PART ID	MODEL	DESCRIPTION
17070300.0	L2-SW	Basic switch module, no dim, no communication



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## L2-SW SET button and indicator LED operation:

The green LED indicator on the front face of the L2-SW indicates one of 6 Mode states (0..5) by flashing the Mode number, then a small pause, then repeating the cycle. Wait for the pause and count the number of flashes to obtain the mode.

Press the SET button on the face of the L2-SW to increment the Mode and cycle from 0 (solid LED indicator) to 5 flashes (Mode 5). Pressing the SET button when you see 5 flashes will return to Mode 0 (LED on solid).

MODE	MODE NAME	PORT DEVICES	DESCRIPTION
0	Always OFF	n/a	Output zone channel remains OFF. Ignores all switch inputs from the Port. Helpful during installation or when a channel needs to always be commanded OFF.
1	Normally Open Switch	N/O door switch, Relay	Sets zone to OFF when the switch input is shorted. Sets zone to 100% when the switch input is open. Motion sensor will set output level to Motion Level. Used for toggle switches or automatic door pushbuttons. 4700k-ohm resistor in series with switch to allow occupancy features.
2	Normally Closed Switch	N/C door switch, Relay	Opposite action of Mode 1. No occupancy detection. Turns on the zone when the input is an open circuit.
3	Button Toggle ON/OFF	Buttons, L3-KP1, L3-TP1	Toggles output between OFF and 100% each time the momentary button is released. Top and Bottom buttons do the same function when using an L3-KP1. No occupancy detection.
(4)	Top/Bottom Switch	L3-WK1	Two momentary buttons: Tap the Top button to set output to ON. Tap the Bottom button to turn OFF the zone. Occupancy detected will set output level to Motion Level if the light is Off. Occupancy ending will turn Off the output. Default mode.
5	Always ON	n/a	Output zone channel remains ON. Ignores all switch inputs from the Port. Helpful during installation or when a channel needs to always be commanded ON.

## Tool-free commissioning using Configuration Macros:

In addition to selecting the 6 Modes of operation, the SET button can be used to run configuration macros that store advanced settings.

To Reset or Store values in the L2-SW memory, count the LED indicator flashes and set the current Mode to one of the modes in the table below, then hold the SET button for 6 seconds or until you see fast flashes. This will run the Configuration Macro as follows:

SET button RESET/STORE functions (HOLD 6 seconds to perform configuration macros)		
MODE	DESCRIPTION	FUNCTION(S) PERFORMED
0	"Low Dimmed"	Resets max to 64. Mode is set to 4.
1	"Half Dimmed"	Resets max to 128. Mode is set to 4.
2	"Motion to 25%"	Resets motion level to 16 (low restore level). Mode is set to 4.
3	"Motion to 50%"	Resets motion level to 64 (medium restore level). Mode is set to 4.
4	"Factory Default"	Resets max to 220. Motion is set to 255 (full on). Mode is set to 4. Reset EEPROM.
5	"Full ON"	Resets max to 255. Mode is set to 4.