CATALOG NUMBERS	DESCRIPTIONS
SWX-801-xx	LOW VOLTAGE MOMENTARY SWITCH
SWX-803-xx	LOW VOLTAGE 0-10V DIMMING SWITCH

OVERVIEW

The **SENSOR**WORX low voltage decorator wall station functions as a momentary switch with a pulse length of 250 msec. Typically, it is utilized along with any **SENSOR**WORX power pack with the auxiliary switch input option (e.g. model SWX-900-AX). Using a four-conductor low voltage wire (typically 18 AWG), low voltage power, common, and relay status is wired from the power pack to the switch. The switch output is then wired back to the power pack's auxiliary switch input. For applications requiring Vacancy (e.g., Manual On) operation, the switch signals the power pack to turn on lighting after the unit's button is pressed. To achieve multi-way switching, two or more single button units can be wired in parallel.

For three button units with integrated dimming, an additional 0-10V output wire is provided to connect directly to fixtures. By default, the lights will always come on to the last dim level, however the unit can be programmed to turn-on to a preset level in order to accommodate partial-on applications.
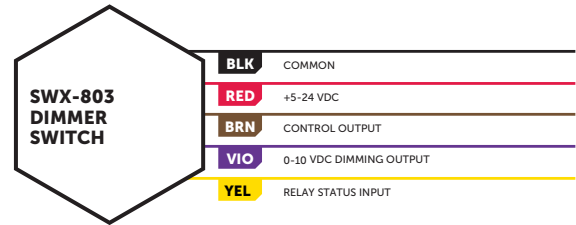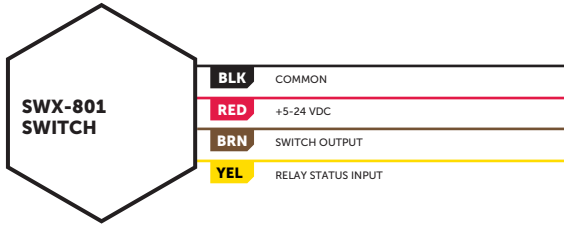
SPECIFICATIONS

ELECTRICAL

OPERATING VOLTAGE
5-24 VDC

CURRENT DRAW
2mA

DIMMING LOAD (Model # SWX-803 only)
50mA, (0-10 VDC ballasts or drivers compliant with IEC 60929 Annex E.2)

MOMENTARY PULSE LENGTH
250 msec

PHYSICAL

SIZE
2.74"H x 1.68"W x 1.39"D
(6.96 x 4.27 x 3.53 cm)
Fits Decorator Switch Plate Opening

DEPTH IN WALL
0.94" (23.88 mm)

WEIGHT
2.5 oz

MOUNTING
Single Gang Switch Box

ENVIRONMENTAL

OPERATING TEMP
32°F to 122°F (0°C to 50°C)

RELATIVE HUMIDITY
0-95% Non-Condensing, Indoor Use Only

FEATURES

- Decorator Style Fits Common Wall Plates (not included)
- Less than 1" Depth in Wall
- Multi-way Switching Capable (e.g., 3-way, 4-way)
- Intuitive Operation

- Matches Styling of SWX Wall Switch Sensor
- Locator LED when Lights are Off
- Modern Look and Intuitive Easy-Tap Button for On/Off, Raise, & Lower
- Five Segment LED Indication of Dim Level

- Configurable Dimming Parameters (High/Low Trims, Turn on Levels, Fade Rates, and Curve Types)
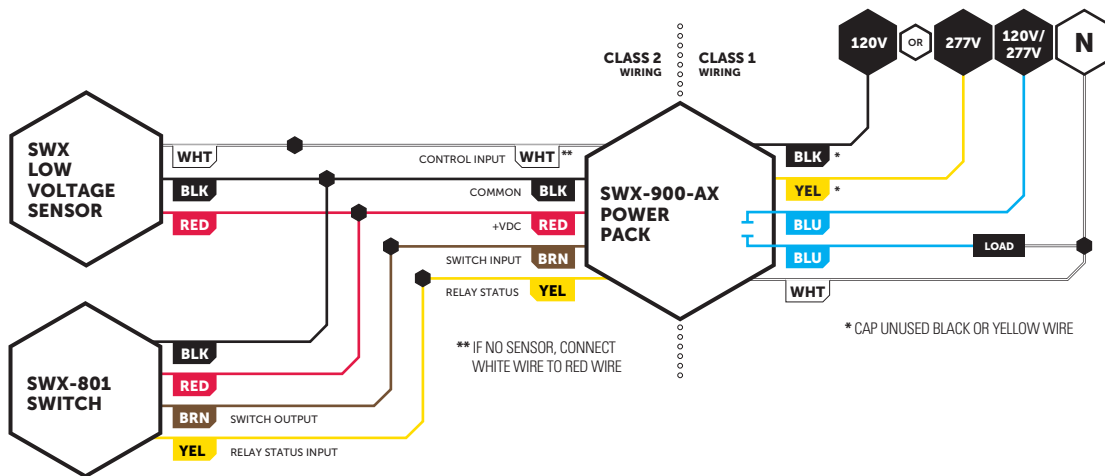- Settings are Adjustable Without Removing Cover Plate

WIRING

STANDARD WIRING

SWX-801 SWITCH	**BLK** COMMON
	RED +5-24 VDC
	BRN SWITCH OUTPUT
	YEL RELAY STATUS INPUT

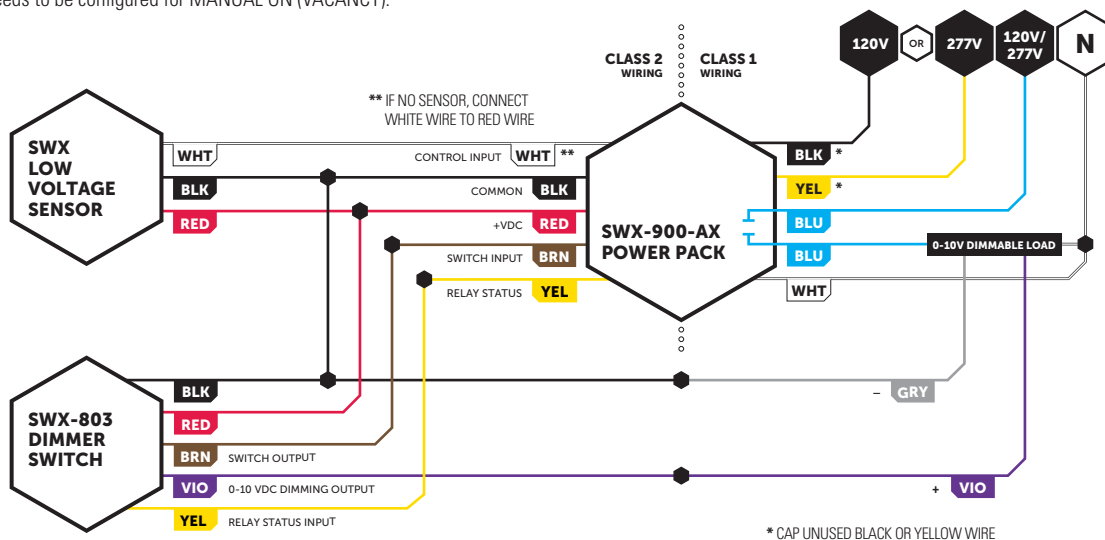|	
SWX-803 DIMMER SWITCH	**BLK** COMMON
	RED +5-24 VDC
	BRN CONTROL OUTPUT
	VIO 0-10 VDC DIMMING OUTPUT
	YEL RELAY STATUS INPUT

MANUAL ON APPLICATION (VACANCY)

- Default operation of the SWX-900-AX is Automatic On (Occupancy) operation. For proper vacancy operation, the SWX-900-AX's OPERATIONAL MODE setting needs to be configured for MANUAL ON (VACANCY).
- Additional SWX-801 switches can be wired in parallel to achieve 3-way (or more) operation.

CLASS 2 WIRING   CLASS 1 WIRING

120V   OR   277V   120V/ 277V   N

SWX LOW VOLTAGE SENSOR — WHT, BLK, RED

CONTROL INPUT **WHT** **
COMMON **BLK**
+VDC **RED**
SWITCH INPUT **BRN**
RELAY STATUS **YEL**

SWX-900-AX POWER PACK — BLK *, YEL *, BLU, BLU, WHT

LOAD

** IF NO SENSOR, CONNECT WHITE WIRE TO RED WIRE

* CAP UNUSED BLACK OR YELLOW WIRE

SWX-801 SWITCH — BLK, RED, BRN SWITCH OUTPUT, YEL RELAY STATUS INPUT

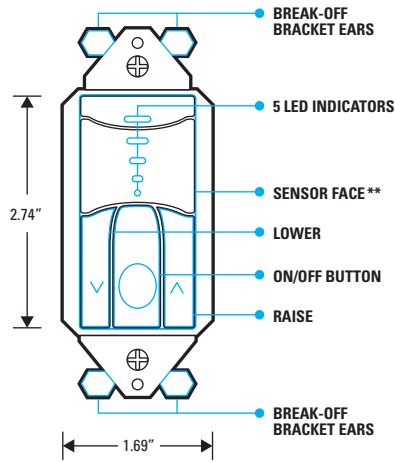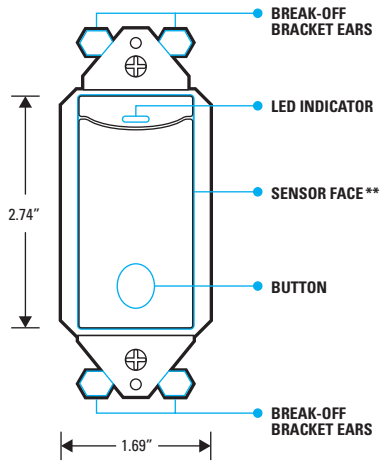**MANUAL ON (VACANCY) OR PARTIAL-ON w/ FULL DIMMING CONTROL**

- Lights turn on to last selected level (default) or to preset level (e.g., partial on).
- If no sensor is present, tie power pack low voltage red to low voltage white wire.
- Default operation of the SWX-900-AX is Automatic On (Occupancy) operation. For proper vacancy or partial-on operation, the SWX-900-AX's OPERATIONAL MODE setting needs to be configured for MANUAL ON (VACANCY).
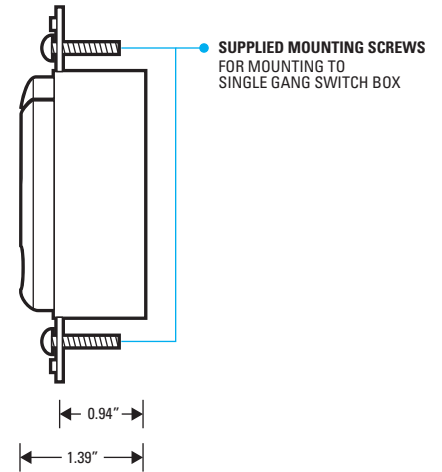

CLASS 2 WIRING   CLASS 1 WIRING

120V   OR   277V   120V/ 277V   N

** IF NO SENSOR, CONNECT WHITE WIRE TO RED WIRE

SWX LOW VOLTAGE SENSOR — WHT, BLK, RED

CONTROL INPUT **WHT** **
COMMON **BLK**
+VDC **RED**
SWITCH INPUT **BRN**
RELAY STATUS **YEL**

SWX-900-AX POWER PACK — BLK *, YEL *, BLU, BLU, WHT

0-10V DIMMABLE LOAD

− **GRY**

SWX-803 DIMMER SWITCH — BLK, RED, BRN SWITCH OUTPUT, VIO 0-10 VDC DIMMING OUTPUT, YEL RELAY STATUS INPUT

+ **VIO**

* CAP UNUSED BLACK OR YELLOW WIRE

INSTALLATION

Designed to mount in 1-gang wall box with 3.28" hole spacing. Units can also share multiple gang wall boxes with other devices.

FRONT

- BREAK-OFF BRACKET EARS
- LED INDICATOR
- SENSOR FACE **
- BUTTON
- BREAK-OFF BRACKET EARS

2.74"
1.69"

- BREAK-OFF BRACKET EARS
- 5 LED INDICATORS
- SENSOR FACE **
- LOWER
- ON/OFF BUTTON
- RAISE
- BREAK-OFF BRACKET EARS

2.74"
1.69"

SIDE

- SUPPLIED MOUNTING SCREWS FOR MOUNTING TO SINGLE GANG SWITCH BOX

0.94"
1.39"

** SENSOR FACE IS FIELD REMOVABLE IN ORDER TO CHANGE COLORS. CONTACT FACTORY FOR ADDITIONAL FACES

CONFIGURATION SETTINGS

CONFIGURATION PROGRAMMING

1 From the lists of Configuration Functions below, note the Button Position and number (#) of the Function to be changed. For example, HIGH TRIM setting is the Right Button, #3.

2 Enter programming mode by pressing and holding the CENTER button until the blue LED begins rapid flashing.

3 Press and release the applicable button for the chosen function. For example, press the RIGHT button 3 times for the HIGH TRIM setting.

4 The LED will flash back the setting number of the current value as it appears in each function's detailed table of values (see following pages). For example, the default HIGH TRIM is setting #2 (10V) for the RIGHT button.

5 Press and release the applicable button the number of times equal to the new setting #. For example, RIGHT button 3 times (for 9V).

6 The LED will flash back the new setting number as confirmation.

7 To save and exit programming mode, press and hold the function's applicable button again until the LED flashes rapidly. The LED will then blink white twice as confirmation of success.
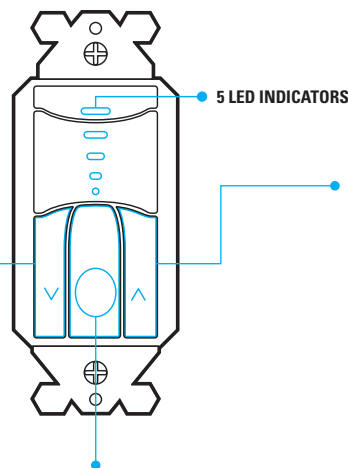
NOTE IF THE LED DOUBLE FLASHES TWICE BLUE AT ANY POINT, REPEAT THE ABOVE PROCEDURE.

CONFIGURATION FUNCTIONS

- 5 LED INDICATORS

LEFT BUTTON

DIMMING

FUNCTION NAME	BUTTON POSITION	FUNCTION #
Turn Off Scheme	Left	2
Low Trim	Left	3
Fade Off Time	Left	4

RIGHT BUTTON

DIMMING

FUNCTION NAME	BUTTON POSITION	FUNCTION #
Turn On Dimming Level	Right	2
High Trim	Right	3
Fade On Time	Right	4
Dimming Curve Type	Right	5

CENTER BUTTON

FUNCTION NAME	BUTTON POSITION	FUNCTION #
LED	Center	7
Factory Reset	Center	8

CONFIGURATION SETTINGS CONT.

CENTER FUNCTION #7 LED FUNCTION

CENTER BUTTON

Single button switch (SWX-801) has an LED that is white when lights are on and is a blue locator LED when lights are off. Dimming switch (SWX-803) has five white LEDs that indicate the current dim level. Locator LED can also be programmed to be be white and/or brighter. Locator LED can also be disabled

SETTING #	DESCRIPTION	NOTES
2	White LED when lights on, blue locator LED when off, normal brightness	Default
3	Blue LED when lights on, white locator LED when off, normal brightness	
4	All LED functionality disabled.	
5	White LED when lights on, blue locator LED when off, increased brightness	
6	Blue LED when lights on, white locator LED when off, increased brightness	

CENTER FUNCTION #8
RESTORE FACTORY DEFAULTS

CENTER BUTTON

SETTING #	DESCRIPTION
3	Restore Factory Defaults

LEFT FUNCTION #2 TURN OFF SCHEME

LEFT BUTTON

SETTING #	VALUES	NOTES
2	Unit fades to low trim and signals relay to open	Default for all models
3	Unit fades dimming output down to 0 volts (i.e. below a connected driver's electronic off level). Relay remains closed	
4	Unit fades dimming output down to low trim level. Relay remains closed	

RIGHT FUNCTION #2 TURN ON DIMMING LEVEL

RIGHT BUTTON

SETTING #	VALUES	NOTES
2	Fade on to 100% of High Trim	
3	Fade on to 50% of High Trim	
4	Fade on to last user level	Default
5	Fade on to current (custom) level	Saves unit's current dim level

LEFT FUNCTION #3 LOW TRIM

LEFT BUTTON

SETTING #	VALUES	NOTES
2	Saves current level as low trim	
3	0%	
4	10% (Default)	Exact output voltage level depends on Dimming Curve selected (e.g. Linear, Log). Light output at each level depends on driver/ballast and luminaire.
5	20%	
6	30%	
7	40%	
8	50%	

RIGHT FUNCTION #3 HIGH TRIM

RIGHT BUTTON

SETTING #	VALUES	NOTES
2	Saves current level as high trim	
3	100% (default)	
4	90%	Exact output voltage level depends on Dimming Curve selected (e.g. Linear, Log). Light output at each level depends on driver/ballast and luminaire.
5	80%	
6	70%	
7	60%	
8	50%	

LEFT FUNCTION #4 FADE OFF TIME

LEFT BUTTON

SETTING #	VALUES	NOTES
2	0.75 Sec	
3	1.5 Sec	Default for all models
4	3 Sec	
5	5 Sec	
6	15 Sec	

RIGHT FUNCTION #4 FADE ON TIME

RIGHT BUTTON

SETTING #	VALUES	NOTES
2	0.75 Sec	
3	1.5 Sec	Default for all models
4	3 Sec	
5	5 Sec	
6	15 Sec	

LEFT FUNCTION #5 MANUAL DIMMING RESPONSE CURVE

RIGHT BUTTON

SETTING #	VALUES	NOTES
2	Linear	Default for all models
3	Log	
4	Square Log	