

## MLAZGAR ASSOCIATES

Mlazgar.com



## **SENSOR**WORX®

SensorWorx.com







## THE NEW STANDARD IN LIGHTING CONTROLS

Enhanced PIR & acoustic occupancy detection



sensorworx.com

Designed in USA

Manufactured exclusively in USA







sensorworx.com

## **PRODUCT OVERVIEW**

- Wall Switch Sensors
- Low Voltage Sensors
- Low Voltage Switches
- Power Packs
- Fixture Mount Sensors
- Line Voltage Sensors
- What's next!





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## **RETROFIT FRIENDLY**

- No neutral required
- Enclosure is 25%-40% shallower than other sensors,
- Reversable line & load wires



## END USER PLEASING

- Stylish flat profile and clean lines
- Intuitive easy-tap button
- Acoustic dual technology



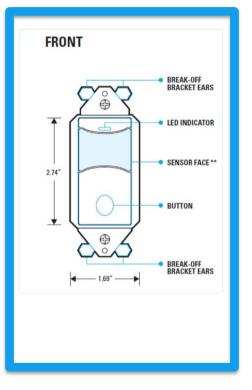
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COMPLIANT



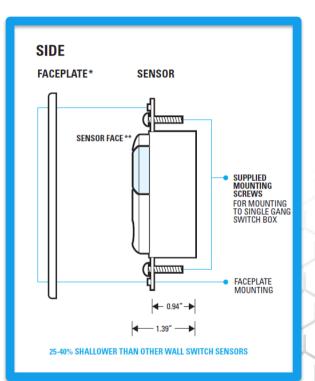






## PHYSICAL FEATURES

- Modern flat front look
- Enclosure is 25%-40% shallower than other sensors, (< 1" depth into wallbox)
- Self-grounding mounting strap
- Vandal resistant lens
- Sensor face snaps off to change colors







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## **ORDERING INFO**

	PRODUCT	DETECTION	# of POLES / DEFAULT OPERATION		COLOR*		PACKAGE CO	UNT
SWX	Wall Switch Sensor 1	Passive Infrared (PIR)0Passive Infrared (PIR) + Daylight <sup>++</sup> 1Passive Dual Technology (PIR/Acoustic)2Passive Dual Technology (PIR/Acoustic) + Daylight <sup>++</sup> 3	1-Pole: Auto On 2-Pole: Partial On <sup>†</sup> 1-Pole: Manual On (Vacancy) 1-Pole: Vacancy Only (CA Title 20/24)	1 2 3 4	lvory	WH IV LA	Single Pack 10 Pack**	Blank J10
		<sup>††</sup> DAYLIGHT DETECTION AVAILABLE ON UNITS THAT DEFAULT TO AUTO-ON OR PARTIAL ON			*WALLPLATE NOT INCLUDED ** THE CONTRACTOR PACK OPTION (-J10) REDUCES JOB SITE WASTE AND INVENTORY TIM		( TIME	

### **COMMON MODELS #s**

SWX-101-WH	Wall Switch Sensor – PIR, Auto On, White
SWX-103-WH	Wall Switch Sensor – PIR, Manual On, White
SWX-121-WH	Wall Switch Sensor – Dual Tech., Auto On, White
SWX-123-WH	Wall Switch Sensor – Dual Tech., Manual On, White

## Wall Switch Sensor w/ 0-10V Dimming





## PARTIAL ON OPERATIONAL MODE

- Meets the new Partial On operational mode of ASHRAE 90.1 (2016)
  & IECC (2015)
  - Automatic On to 50% (configurable)
  - User can raise/lower light level manually
  - Auto Off
- Vacancy Mode (Manual On) also available

## **CONFIGURABLE DIMMING PARAMETERS**

- High/Low Trims
- Turn on Levels (Last User Setting, 100%, 50%, Custom Level)
- Curve Types (Linear, Logarithmic, Square Law)
- Dimming Fade On/Off Times

## LINE POWERWED 0-10V DIMMMER

SWX-823 Series



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## APPLICATION

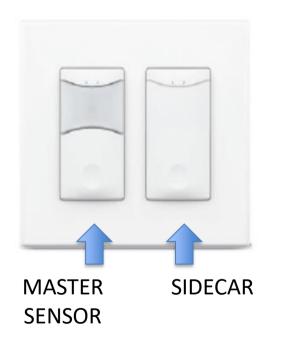
- Standalone 0-10V dimmer that powers from & switches 120/277VAC
- Provides full raise/lower user dimming control
- Multiway switching configurations with common 3-way switches

## FEATURES

- Integrated 0-10V dimming
- 5 stacked LEDs showing dim level
- Decorator style fits common wall plates
- Less than 1" depth in wall
- Configurable dimming parameters (h/l trim, turn on level, etc.)



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## Introducing the SIDECAR<sup>™</sup> KIT... a new solution to an old application

- MASTER SENSOR shares occupancy information with SIDECAR
- Each unit can be configured separately (time delay, operational mode)

#### SWX-102 Series





## SIDECAR<sup>™</sup> APPLICATIONS BATHROOM LIGHTS & FAN



### **INBOARD/OUTBOARD SWITCH REPLACEMENT**



## INTERVAL TIMER SWITCH

SWX-843 Series



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## APPLICATION

 Standalone timer that powers from & switches 120/277VAC

## FEATURES

- 5 LED Time Level Indicators
- Configurable Settings including blink warning!

## **CEILING MOUNT SENSOR**

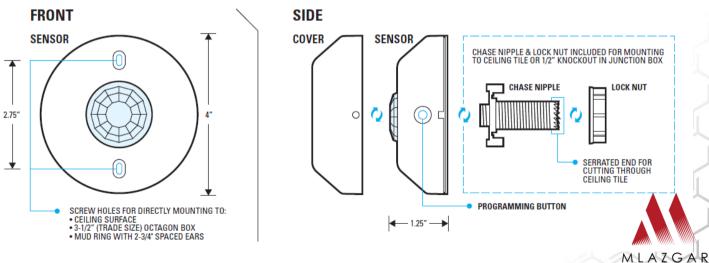


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## LOW VOLTAGE CEILING MOUNT SENSOR

- Small, large and motion lens options
- Reduced diameter and profile
- Includes quick mount chase nipple



## **CEILING MOUNT SENSOR**

## COVERAGE

## $\bigcirc$

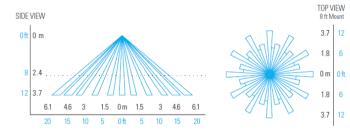
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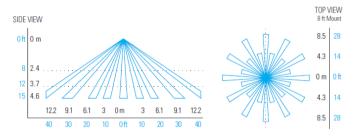
#### SMALL MOTION 360°

- Best choice for detection of small motions from sitting occupants (e.g., hand motion)
- ~500 ft<sup>2</sup> of coverage

#### LARGE MOTION 360°

- Best choice for detection of larger motion (e.g., walking)
- ~2000 ft<sup>2</sup> of coverage
- Longest segment of coverage pattern aligns with screw hole axis on sensor (shown as dotted line on Top View diagram below)





## ORDERING INFO

#### SAMPLE MODEL # SWX-222-1

	PRODUCT		DETECTION		COVERAGE		VOLTAGE		OPTIONS	
SWX	Ceiling Mount Sensor 2	2	Passive Infrared (PIR) Passive Infrared (PIR) + PhotoceII Passive Dual Technology (PIR/Acoustic) Passive Dual Technology (PIR/Acoustic) + PhotoceII	0 1 2 3	Small Motion 360° Large Motion 360°	1 2	Low Voltage	1	Isolated Auxiliary Relay	AR





## LOW VOLTAGE WIDE VIEW & HALLWAY SENSOR

- Excellent small motion detection for classrooms, open areas, & offices
- Effective in pairs for hallways
- Five mounting methods including quick mount chase nipple



## CORNER MOUNT / WIDE VIEW / HALLWAY SENSOR



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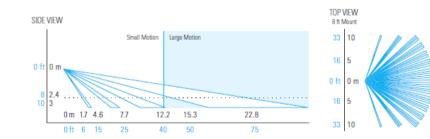


## LOW VOLTAGE WIDE VIEW SENSOR

 Wide View is excellent small motion detection for classrooms,

open areas, & offices

- Effective in pairs for hallways
- Five mounting methods including quick mount chase nipple



#### WIDE VIEW 120°

- Small motion (e.g. hand movements) detection up to 40 ft (12.19 m)
- Large motion (e.g. walking) detection up to 70 ft (21.34 m), perfect for hallway applications

COVERAGE PATTERN

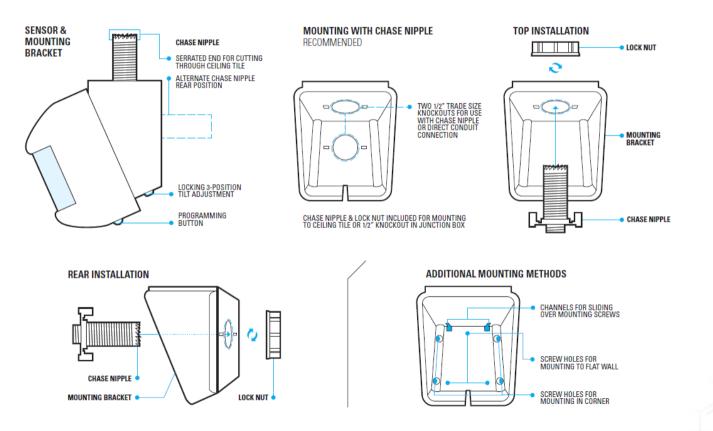
• Designed for 8 to 12 ft (2.44 to 3.66 m) high mounting

## ORDERING INFO

#### SAMPLE MODEL # SWX-421-1

	PRODUCT	DETECTION	COVERAGE	VOLTAGE
SWX	Wide View Sensor 4	Passive Infrared (PIR) 0 Passive Dual Technology (PIR/Acoustic) 2	120° Wide View 1	Low Voltage 1

## INSTALLATION OPTIONS



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## LOW VOLTAGE DAYLIGHT HARVESTING

- Configurable set-point, high/low trims
- Standalone solution or together with occupancy sensors
- Same mechanical features as occupancy sensors
  - Reduced diameter and profile
  - Includes quick mount chase nipple

## LOW VOLTAGE SWITCH





## **FEATURES**

- Intuitive button, "elbow-press capable"
- LED feedback
- Decorator style
- Less than 1" depth in wall
- Locator / Pilot LED with adjustable color (white/blue)



## LOW VOLTAGE SWITCH & DIMMER

#### SWX-803 Series



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## FEATURES

- Integrated 0-10V dimming
- 5 stacked LEDs showing dim level
- Quiet buttons with LED feedback
- Decorator style
- Less than 1" depth in wall
- Configurable dimming parameters (high/low trim, turn on level, etc.)

## **POWER PACK**

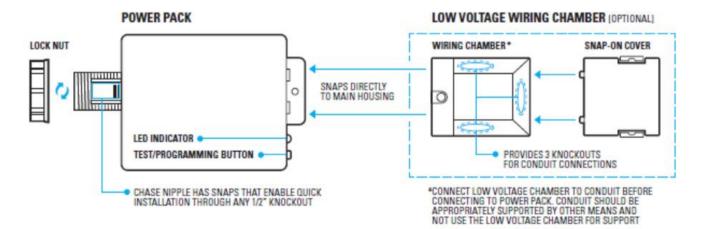


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## CONTRACTOR FRIENDLY FEATURES

- Quick mount chase nipple with snaps
- Test/Programming Button press and hold to toggle relay
- LED Indicator
- Included plastic nut is easy to hand tighten
- Optional accessory low voltage wiring chamber "doghouse"



## POWER PACK w/ AUXILIARY SWITCH INPUT









## LOW VOLTAGE SENSOR + MANUAL CONTROL

- Option adds an input wire from a low voltage switch and a relay status wire
- With a SWX-801 Switch
  - Vacancy (Manual On) operation
  - Basic occupancy operation (Auto-On) with manual switch override
- With a SWX-803 dimmer switch enables
  - Partial On (e.g. Auto-On to 50%) operation
  - Adds full raise/lower dimming control\







#### PARTIAL OFF (Stairwells)

Lighting is at the full bright level when occupied and dropped to the 50% level during unoccupied periods.

### PARTIAL ON

- Unit will turn on connected 0-10V lighting to 50% (level is user configurable) once initially triggered from an occupancy sensor or manual switch.
- The unit will then step lighting up to 100% (level is user configurable) when the connected switch is pressed.
- Lighting will turn off if another switch press is detected or when all connected sensors go to their unoccupied state.

## LINE VOLTAGE SENSORS



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## LINE VOLTAGE SENSORS

- Self-contained units that both power themselves from line power and switch line power
- 800W/1200W @ 120/277VAC, designed for LED loads

	PRODUCT	DETECTION	COVERAGE	VOLTAGE	ENVIRONMENT
SWX	Ceiling Mount Sensor -2	PIR  0    PIR + Daylight  1    Dual Tech (PIR + Acoustic)  2    Dual Tech + Daylight  4    (PIR + Acoustic + Daylight)  3	Small Motion / Standard Range 1 Large Motion / Extended Range 2	MVOLT (120/277 VAC) -2	Standard Environment Blank High Humidity Environment -HE
	PRODUCT	DETECTION	COVERAGE	VOLTAGE	ENVIRONMENT

\* Dual Tech detection options not available for units with the Hallway coverage option.

## FIXTURE MOUNT SENSOR







## CONTRACTOR FRIENDLY FEATURES

- Universal Lens works for High Bay, Low Bay, & Aisleway Applications
- Greater detection range & density than leading high bay and aisleway sensors
- Snap-in chase nipple makes installation quick
- Electronically timed switching designed for LED fixture control
- Integrated bracket drops sensor below bottom of fixture



#### SWX-500 Series



## Photocell Operation (SWX-511)

• On / Off depending on ambient light

## Humid Environment Rating (-HE)

Corrosion protected electronics

## High/Low/Off Operation (-HL)

- Adds 0-10V dimming output
- Lights drop to low setting (30%) after primary occupancy timeout expires
- Lights turn off after secondary timeout expires







## **SENSOR**WORX Wireless Retrofit Controls (Phase 1)



## **BATTERY POWERED SENSORS**





## WALL SWITCH LOAD CONTROLLER - no neutral, no minimum load







## **SENSOR**WORX Wireless Retrofit Controls (Phase 2)



## WIRELESS DIMMING POWER PACK



## WIRELESS REMOTE DIMMER



## THANK YOU!





# MLAZGAR ASSOCIATES S **SENSOR**WORX®