WIRELESS WALL SWITCH & LOAD CONTROLLER
LINE VOLTAGE

intelligent
lighting controls

OVERVIEW

The **Intelligent Lighting Controls** wireless wall switch load controller links to remote occupancy sensors and switches without low voltage wiring in order to provide automatic lighting control. Designed with contractors in mind, the unit is significantly shallower than typical wall controllers, resulting in less crowded wall boxes. Additionally, versatile wiring enables usage with or without a neutral connection and never requires a minimum load. This switch also matches the **ILC** family of wall switch occupancy sensors and 0-10V dimming wall switch sensors. All **ILC** products are proudly made in the USA.

FEATURES

ELECTRICAL FEATURES

- **Accommodates Neutral (3-Wire) and No-Neutral (2-Wire) Installations**
- **Electronically Timed Switching Ensures Long Relay Life**
- **No Minimum Load or External Load Capacitor (MLC) Requirements**
- **Meets Regulatory Guidelines for Current Leakage**

PHYSICAL FEATURES

- **Enclosure is 25-40% Shallower than Other Wall Controllers (< 1" Depth into Wallbox)**
- **Self-Grounding Mounting Strap**
- **Modern Look and Intuitive Easy-Tap Button**

OPERATIONAL FEATURES

- **Pairs in Seconds with Wireless Sensors & Remote Wall Stations**
- **Configurable Time Delays and Operational Modes (e.g. Occupancy, Vacancy, Switch Disable)**
- **Blue Locator LED when Lights are Off**
- **Settings are Adjustable Without Removing Cover Plate**
- **Links with up to 30 sensors and/or switches**

MADE IN THE USA · BAA COMPLIANT · TAA COMPLIANT · RoHS LEAD FREE COMPLIANT

SPECIFICATIONS

ELECTRICAL

OPERATING VOLTAGE
120-277 VAC, Single Phase, 50/60 Hz

LOAD RATINGS
MAX: 800W @ 120VAC
          1200W @ 277VAC
MIN: None

LOAD TYPES
LED Driver/Lamps
CFL, Electronic/Magnetic Ballasts (Fluorescent)
Tungsten (Incandescent)

ESD IMMUNITY
Tested to withstand electrostatic discharge without damage or memory loss.

SURGE IMMUNITY
Tested to withstand surge voltages without damage or loss of operation.

NON-VOLATILE MEMORY
Saves all settings even if power is disrupted.

ENVIRONMENTAL

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

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

OPERATION

OPERATING MODES
Occupancy, Vacancy, Switch Disable

TIME DELAY OPTIONS
1, 5, 10, 15, 20, 30 min.

WIRELESS

RANGE
80' line of site w/o obstruction (walls)
40' with obstruction (walls/floors)

FREQUENCY
915 MHz Band

WIRELESS LINKING
Simple 3 sec. Push Button Process

SECURITY
All Wireless Data is Encrypted

PHYSICAL

SIZE
2.74"H x 1.68"W x 1.39"D
(6.96 x 4.27 x 3.53 cm)
<1" Wallbox Mounting Depth

WEIGHT
4.5 oz

MOUNTING
Single Gang Switch Box

LED STATUS INDICATOR
Bi-color White & Blue

CODE COMPLIANCE

These load controllers can be used to meet ASHRAE 90.1, IECC, & Title 24 energy code requirements.

c UL US LISTED

ORDERING INFO

SAMPLE MODEL # ILC-SWX-851-WH

PRODUCT DESCRIPTION		COLOR*				PACKAGE COUNT	
ILC-SWX-851	Wireless Wall Switch & Load Controller	White	- WH	Light Almond	- LA	Single Pack	**Blank**
		Ivory	- IV	Gray	-GY	10 Pack**	**-J10**

*WALLPLATE NOT INCLUDED

ACCESSORY PART #		COLOR				PACKAGE COUNT	
ILC-SWX-199	Single Gang Wall Plate	White	- WH	Light Almond	- LA	10 Pack**	- J10
		Ivory	- IV	Gray	- GY		

** THE CONTRACTOR PACK OPTION (-J10) REDUCES JOB SITE WASTE AND INVENTORY TIME
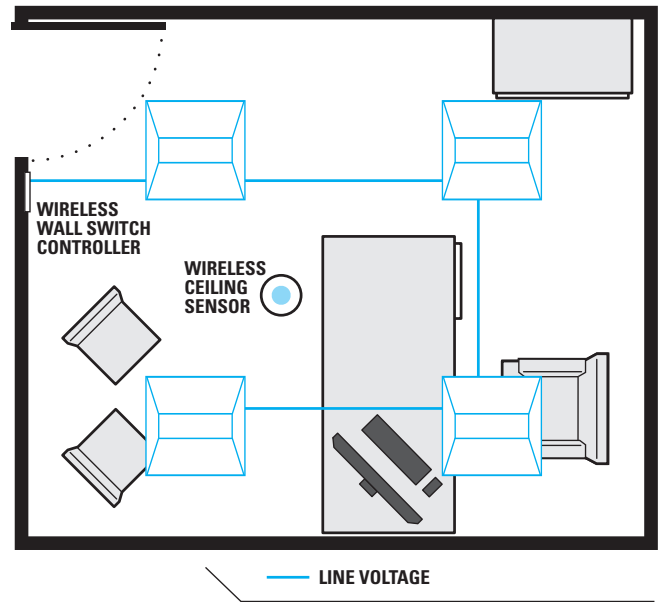
APPLICATIONS

SMALL SPACES

For control of small spaces like a private office, a wireless wall switch controller linked to single wireless ceiling sensor (**ILC-SWX-201-B**) is recommended (see diagram on right). Both occupancy (auto-on) and vacancy (manual-on) operation are achievable in order to meet energy code requirements.

- Small Offices
- Copy Rooms
- Private Restrooms

MEDIUM SIZE SPACES

For control of medium size spaces like a conference room or small classroom, a wireless wall switch controller linked to a single wireless wide view sensor (**ILC-SWX-401-B**) provides an excellent solution. Linking additional sensors is also an option if necessary. Switching from a second location (e.g. 3-way) is achieved by linking a remote wireless wall switch (**ILC-SWX-852**) to the wireless switch controller.

- Small Classrooms
- Conference Rooms
- Short Hallways
- Break Rooms

WIRELESS WALL SWITCH CONTROLLER

WIRELESS CEILING SENSOR

—— **LINE VOLTAGE**
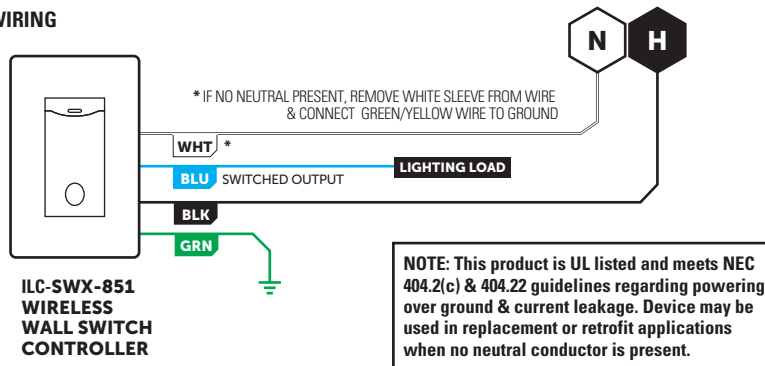
COMPATIBLE WIRELESS DEVICES

The below chart lists the devices that can be used in a **ILC** wireless application. Note that sensors and remote switch & dimmer devices are transmit only devices and therefore must be linked to a load controller for switching or dimming of lighting.

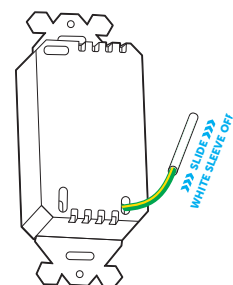| MODEL #	DESCRIPTION	WIRELESS TYPE	POWER TYPE
ILC-SWX-201-B	Small Motion 360° Sensor, PIR	Transmit	Battery
ILC-SWX-401-B	Wide View Sensor, PIR	Transmit	Battery
ILC-SWX-402-B	Long Range Hallway Sensor, PIR	Transmit	Battery
ILC-SWX-851-xx	Wall Switch Load Controller, No Neutral Required, <xx = color>	Transmit & Receive	120/277 VAC
ILC-SWX-852-B-xx	Remote Switch (On/Off), <xx = color>	Transmit	Battery
ILC-SWX-854-B-xx	Remote Dimming Switch (On/Off, Raise/Lower), <xx = color>	Transmit	Battery
ILC-SWX-950	Power Pack Load Controller, 20A	Receive	120/277 VAC
ILC-SWX-950-D2	Power Pack Load Controller, 20A, 0-10V Dimming	Receive	120/277 VAC
ILC-SWX-950-AX	Hybrid Wireless/Wired Power Pack Load Controller, 20A	Transmit & Receive	120/277 VAC
ILC-SWX-950-AX-D2	Hybrid Wireless/Wired Power Pack Load Controller, 20A, 0-10V Dimming	Transmit & Receive	120/277 VAC

WIRING

- Unit works both in installations where Neutral connection is available as well as installations where only Ground connection is present.
- If no neutral is present, remove the white sleeve from the wire & connect the now green/yellow wire to Ground.
- Note, either the white wire or green/yellow wire must be connected. The all green wire is just for safety.

BASIC WIRING

N   H

* IF NO NEUTRAL PRESENT, REMOVE WHITE SLEEVE FROM WIRE & CONNECT GREEN/YELLOW WIRE TO GROUND

WHT *

BLU SWITCHED OUTPUT

LIGHTING LOAD

BLK

GRN

ILC-SWX-851 WIRELESS WALL SWITCH CONTROLLER

NOTE: This product is UL listed and meets NEC 404.2(c) & 404.22 guidelines regarding powering over ground & current leakage. Device may be used in replacement or retrofit applications when no neutral conductor is present.

NEUTRAL TO GROUND CONVERSION DETAIL

- The white wire has a removable sleeve which reveals a green/yellow wire
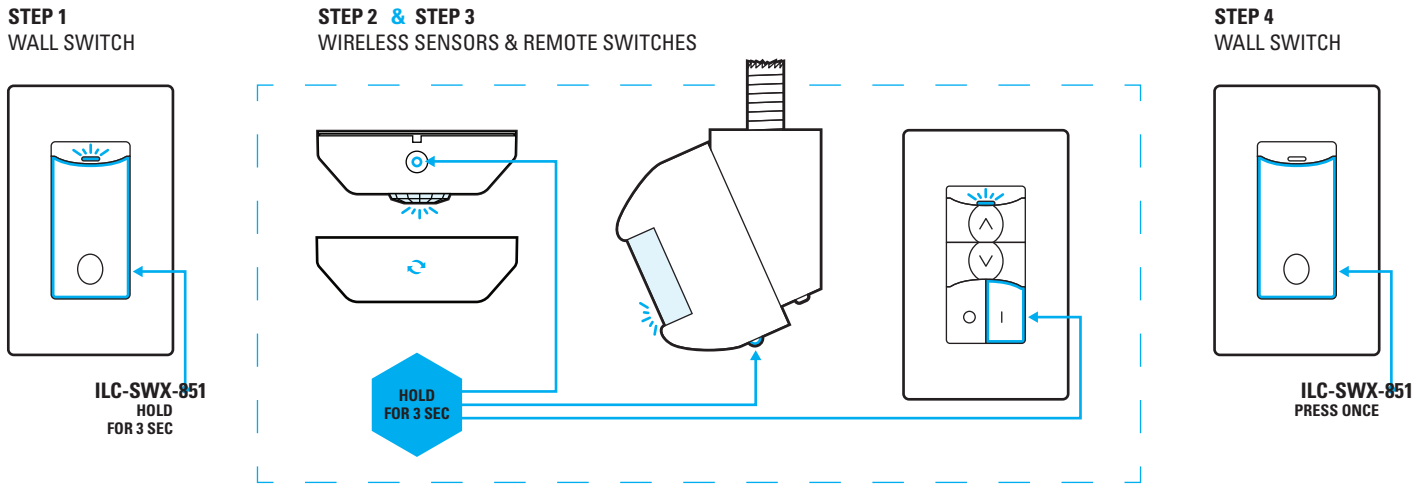
SLIDE WHITE SLEEVE OFF

WIRELESS LINKING (PAIRING)

Linking a wall switch controller with a sensor, power pack, dimmer, or another wall switch controller is quickly done via the following procedure:

Step 1. Enter pairing mode by holding down the wall switch's button for 3 seconds until the LED starts alternating blue and white, then release.

Step 2. At the sensor (or other remote device), hold down the programming button for 3 seconds until the LED starts alternating blue and white. Releasing will link the sensor with the switch in pairing mode (see note 1 below).

Step 3. Repeat step 2 to link another sensor or device.

Step 4. When all devices have been linked, exit pairing mode on the wall switch controller by pressing the button 1 time. Pairing will also be automatically closed after 15 minutes of no new devices being linked.
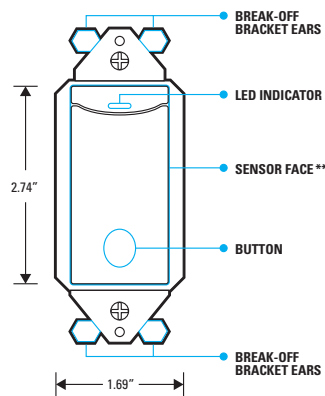
Note 1: Once a device(s) is linked, the alternating LED colors on the wall switch controller will periodically pause and blink out total number of linked devices. There will be no blinks during the pause until after the first device is linked.

STEP 1
WALL SWITCH

STEP 2 & STEP 3
WIRELESS SENSORS & REMOTE SWITCHES

STEP 4
WALL SWITCH

ILC-SWX-851
HOLD
FOR 3 SEC

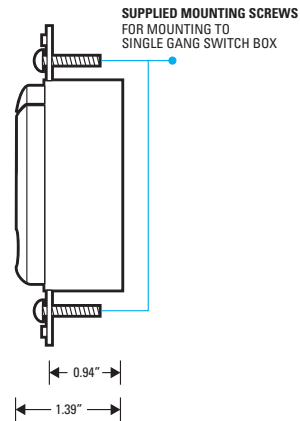HOLD
FOR 3 SEC

ILC-SWX-851
PRESS ONCE

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.
- Unit face is field removable in order to change colors. Contact factory for additional faces.

FRONT

BREAK-OFF BRACKET EARS

LED INDICATOR

SENSOR FACE **

2.74"

BUTTON

BREAK-OFF BRACKET EARS

1.69"

SIDE

SUPPLIED MOUNTING SCREWS
FOR MOUNTING TO
SINGLE GANG SWITCH BOX

0.94"

1.39"

FCC INFORMATION (FCC ID: 2AVRY-SWX0001)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:
1. This device many not cause harmful interference, and
2. This device must accept any interference received, Including interference that may cause undesired operation
Changes and Modifications not expressly approved by BLP Technologies can void your authority to operate this equipment under Federal Communications Commission's rules.

INDUSTRY CANADA INFORMATION (IC: 26012-SWX0001)

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.