# Wireless SensorSwitch AIR App-Less Pairing Guide Quick Start Guide

Welcome to the wireless SensorSwitch App-Less Pairing Quick Start Guide for the wireless SensorSwitch AIR product line. This guide is designed to provide you with clear, step-by-step instructions to ensure a smooth and efficient installation process using wireless SensorSwitch AIR solutions. Whether you are setting up a small office or an open floor plan space, we have you covered. Our goal is to help you maximize performance and reliability while minimizing setup time. Let's get started and bring your wireless lighting control system to life with confidence and ease.

# ACRONYMS AND DEFINITIONS

**BLE** = Bluetooth Low Voltage

**PIV** = Power Interrupt Verification

Wireless SensorSwitch AIR is a wireless product line that allows devices to communicate with one another.

App-less does not use of a mobile app to perform an action.

**Group** is a collection of Bluetooth<sup>®</sup> enabled devices linked together, allowing them to communicate with one another wirelessly and act in unison based on a predetermined behavior.

**Behavior** is a programmed lighting action where a device or system performs executions based on factors like occupancy, vacancy, daylight level and switch control.

**Provisioning** is a similar process to Bluetooth pairing, however provisioning bonds devices together to form a Bluetooth mesh network. Provisioning is often used interchangeably with pairing.

**Mesh** is a technology that allows multiple Bluetooth Low Energy (BLE) devices to communicate with each other over a BLE radio.

**Configurator** is a single node that is responsible for the mesh network topology. It keeps track of all the nodes in a mesh group.

**App-Less Pairing** is a proprietary method of BLE device provisioning that does not use an app. There are three ways to pair devices without an app.

**Power Interrupt Verification (PIV)** is a proprietary method that commences automatic provisioning based on a specific wiring practice and timed relay power cycles.

# APP-LESS PAIRING USING POWER INTERRUPT VERIFICATION

Mostly used for small room control, this app-less pairing method utilizes Power Interruption Verification to commence autopairing. This method of pairing is wiring dependent such that the wireless SensorSwitch AIR device or embedded luminaires placed on the load side of a wireless SensorSwtich AIR switch (SPODMRA SSA or WSXA SSA).

#### **KEY TAKE AWAY:**

- (1) Wireless SensorSwitch AIR devices or embedded luminaires must be on the load side of the wireless SensorSwitch AIR switch.
- (2) PIV is relay dependent. Ensure your total load is within the limit of the switch relay rating.

#### Conference Room 2 entry ways Application Typical



- Wireless SensorSwitch AIR Embedded Luminaire
- Distributed wireless SensorSwitch AIR devices (1 PP5 SSA and 2 CMS SSA) placed on the load side of a switch single zone.

# APP-LESS PAIRING USING POWER INTERRUPT VERIFICATION

#### WORKFLOW

Step 1: Install your wireless SensorSwitch AIR luminaires or devices as shown in the application typical.

**Step 2:** Locate the PIN hole behind the wall plate and insert the wireless SensorSwitch AIR tool as shown below. The visual response from the LED will indicate a double blink every second.



**Step 3:** Press and hold any front button for approximately 6 seconds or until the LED begins to rapid flash and remove the wireless SensorSwitch AIR tool. This is an indication that auto-pairing has started.

**Observance:** There will be an audible relay cycle that will turn the lights off and on. The lights will transition from bright to dim and back to bright. There will be a final rapid flash from the LED indicating auto-pairing is complete.

#### Operate your newly formed wireless SensorSwitch AIR group.

**PRO TIP 1** – After group formation, you can make setting changes from the wall switch or ceiling mount sensor through push button programming, check installation sheet for available options.

**PRO TIP 2** – Typically, app-less pairing using PIV is faster for group formation. There may be advantages in using a hybrid startup practice: Forming a group using PIV and bonding your phone after the group is formed. Using the app is useful for daylighting, advanced zoning, and report generation. You can bond the CLAIRITY+ mobile app from app-less paired group using setting code 8.

# APP-LESS PAIRING USING JOIN AND ACCEPT SETTING CODES

This app-less pairing method supports provisioning across multiple mains and larger standalone spaces. Like PIV, this method is simple, quick and straightforward. With Join / Accept pairing, devices can be easily connected, controlled and scaled across more than 1 branch circuits. Wireless SensorSwitch AIR devices with a button are used in this method of programming.

# **KEY TAKE AWAY:**

- (1) Limited to wireless SensorSwitch AIR devices with a button.
- (2) Requires a second touch point to an installed device.

#### **Application Typical:**



# APP-LESS PAIRING USING JOIN AND ACCEPT SETTING CODES

#### WORKFLOW

Step 1: Install your wireless SensorSwitch AIR devices as shown in the application typical.

**Step 2:** Press and hold the device interface button for approximately 6 seconds until the LED begins to rapid flash indicating "Active Configuration" is starting.

Observance: Active configuration mode has a recognizable LED blink pattern, which is 2 blinks every second.

Active configuration for PP5 SSA and CMS SSA will last for 30 seconds. Simply inserting the wireless SensorSwitch AIR tool in the wall switch will start active configuration on that device, however, it will remain in active configuration until the tool is removed.



**Step 3:** While the device is in active configuration, press the button 6 times, to place that device into "Join Mode". Continue join mode process until you reach the last device, which will be used to bond all devices in place.

A device will remain in join mode for 10 minutes. If placing a device in join mode was a mistake, a second join mode entry will exit the mode.

**Step 4:** On the last device while in active configuration, press the button on that device 7 times, placing that device into "Accept Mode". The accepting device will be assigned the configurator role and will automatically form a group with the device in join mode.

Operate your newly formed wireless SensorSwitch AIR group.

Pro Tip 1 and 2 still apply

## HYBRID APP-LESS PAIRING USING BOTH PIV and JOIN / ACCEPT

This app-less pairing method combines the two previous methods, potentially saving time depending on the application's wiring setup. Start by using PIV to pair wireless SensorSwitch AIR device or embedded luminaires placed on the load side of a wireless SensorSwitch AIR Switch. After PIV is complete, place the other wireless SensorSwitch AIR devices in "Join Mode" using the device button interface. While the other devices are in join mode, return to the switch used in PIV and place it into accept mode. All devices that were in join mode will be accepted into the wireless SensorSwitch AIR group.

#### **KEY TAKE AWAY:**

- (1) The devices on another branch circuit are limited to the wireless SensorSwitch AIR devices with a button.
- (2) Requires a second touch point to an installed device.

#### **Application Typical:**



# HYBRID APP-LESS PAIRING USING BOTH PIV and JOIN / ACCEPT

### WORKFLOW

Step 1: Begin PIV Pairing



Step 2: Begin Join Pairing on all other wireless SensorSwitch AIR devices.

- A. Place each device in active configuration followed by Join mode
- B. Repeat A for each device in the space



Step 3: Place any device from the PIV-formed group into accept mode, bonding all join devices to the group.



# Operate your newly formed wireless SensorSwitch AIR group.

#### Pro Tip 1 and 2 still apply

**PRO TIP 3** – See our CLAIRITY+ Quick Start Guide for app base features and functionality

