



### SPECIFICATIONS

SIZE: 2.74"H x 1.68"W x 1.63"D  
6.96 cm x 4.27 cm x 4.14 cm  
(not including ground strap)

WEIGHT: 5 oz

MOUNTING: Single gang switch box

OPERATING TEMP:

-4° to 122° F (-20° to 50° C)

RELATIVE HUMIDITY

20 to 75% non-condensing

MAXIMUM LOAD:

800 W @ 120 VAC / 1200 W @ 277 VAC  
(Fluorescent/Tungsten/LED)

1A @ 24 VAC/VDC

MINIMUM LOAD: None

MOTOR LOAD: 1/4 HP

LOAD FREQUENCY: 50/60 Hz

SILICONE FREE

ROHS COMPLIANT

**RDT™**  
**WIRELESS**

WIRELESS FREQUENCY: 902 MHz (RDT™)

WIRELESS RANGE GUIDELINES:

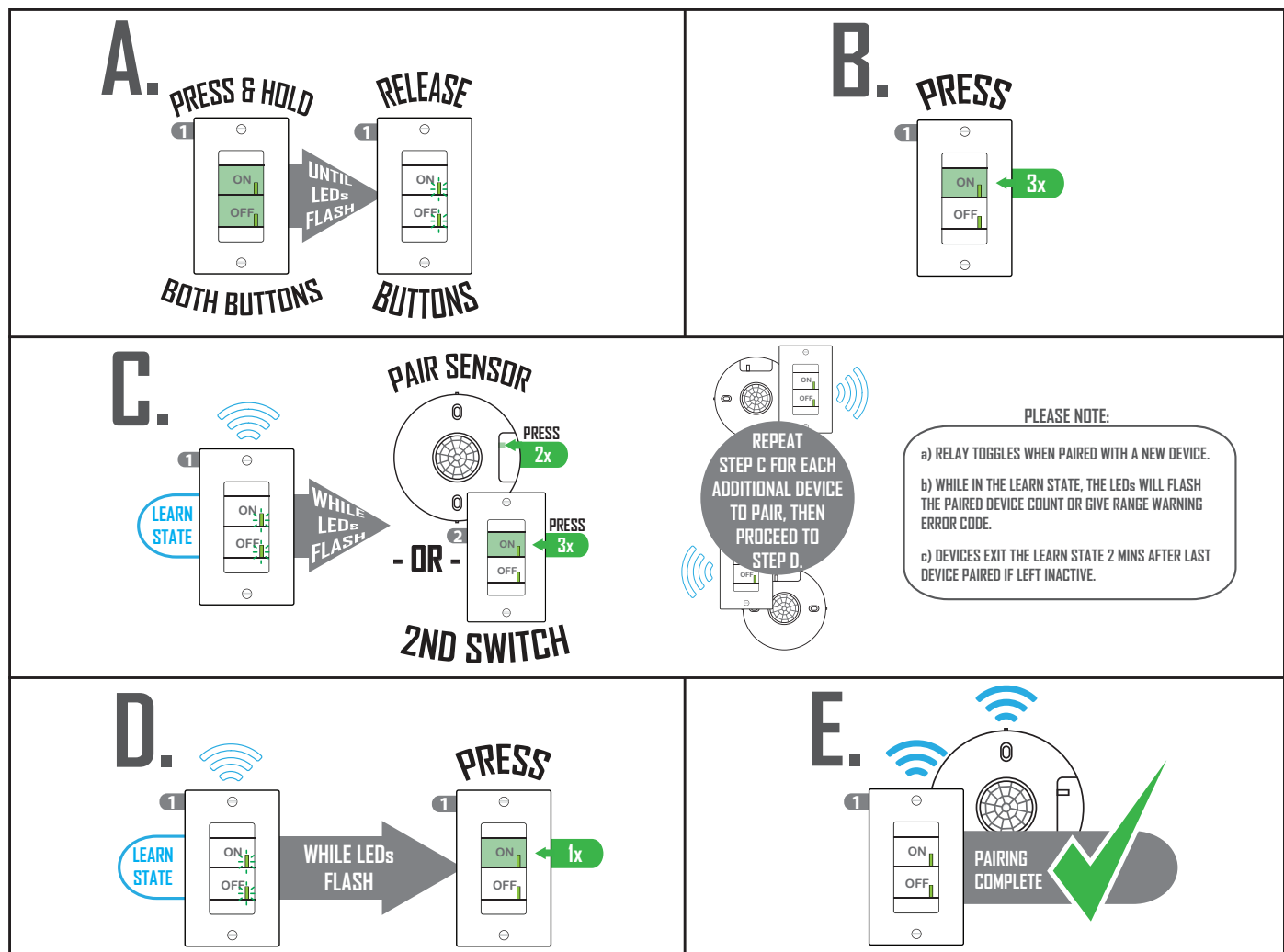
Line of Sight: >100 ft (31 m); e.g. corridor

Plasterboard / Dry Wood: 98 ft (30 m), max 5 walls

Concrete: 32 ft (10 m), max 1 wall/ceiling

MAX PAIRED DEVICES: 20

### PAIRING INSTRUCTIONS



### SETUP INSTRUCTIONS

The following five procedures should be reviewed completely prior to setting up wireless switch units for use with **CM xx WR** wireless sensors or other RDT™ Wireless devices. Consult the **CM xx WR** instruction sheet for additional sensor setup procedures.

\* Denotes factory setting

#### Switch Learn Mode (Pairing Mode) - see diagrams A-D above

The operational state when a switch unit will accept teach broadcasts from remote devices (e.g. sensors). Once received, the remote device will be added to the switch unit's list of learned (paired) devices.

**Step 1.** Press and hold both switch buttons for 3 seconds (i.e. until button LEDs start flashing together). See **Diagram A** above.

**Step 2.** Press switch's ON button 3 times (**Diagram B** above). Switch will now be in "learn mode"

#### Notes:

1. While in *Switch Learn Mode*, the switch unit's LEDs will rapid flash then slow blink the number of learned devices, and repeat (**Diagram C** above). See reverse side for more details regarding device count blinkout.
2. The unit will stay in *Switch Learn Mode* for 2 minutes after last device was learned, or until switch's ON button is pressed (**Diagram D** above).
3. Each time a new device is learned by (e.g. paired with) the switch, the switch will toggle its relay. Wait a minimum of 4 seconds before pairing another device.

#### Sensor Teach Mode - see diagram C above

The operational state of a sensor when it will transmit its sensor ID to facilitate pairing with other devices. This procedure is valid for **CM xx WR** series sensors. For pairing other RDT™ Wireless devices (e.g. rocker switch), consult instructions for that device.

**Step 1.** While switch is in *Switch Learn Mode*, press and release sensor button 2 times (**Diagram C** above)

**Step 2.** The sensor's LED will rapid flash when transmitting

#### Note:

1. Sensor resumes normal operation after one transmission is sent.
2. Use this procedure to unpair a sensor when a switch is in *Unlearn* mode.

#### Pairing a 2nd Switch - see diagram C above

To pair a 2nd **SPODMR WR** switch or a RDT™ Wireless rocker switch (model **XCR 1PWH**) follow below procedure:

**Step 1.** While the first **SPODMR WR** switch is in *Switch Learn Mode*, press and release the 2nd switch's ON button (or rocker button) 3 times (**Diagram C** above)

#### Operational Modes

Selection of Auto-On, Manual-On, or Predictive w/ Expiration operating modes.

**Step 1.** Press and hold both switch buttons for 3 seconds (i.e. until button LEDs start flashing together)

**Step 2.** Press switch's ON button 5 times

**Step 3.** LED will begin flashing current setting (see selections 1-3 below)

**Step 4.** To change setting, press switch's ON button the number of times corresponding to the new desired setting from the below choices:

- 1 - Auto-On:  
Load will automatically turn on when occupied and off when vacant. Pressing OFF will turn the load off and disable occupancy detection until ON is pressed.
- 2 - Manual-On/Vacancy (\*default for -SA option units):  
Sensor functions as a vacancy detector, turning load off after occupancy is no longer detected. Load must be turned on manually by pressing ON button each time the room is entered. After the sensor times out, there is a 10 second grace period in which detection of occupancy will automatically turn the load back on.
- 3 - Predictive Mode w/ Expiration (\*default for non-SA units):  
Load will automatically turn on when occupied and off when vacant. Load can be overridden to off by pressing OFF button. The load will remain off if the room remains occupied. However, after the room becomes vacant, the switch will revert back to auto on/off operation after *Occupancy Time Delay* expires.

**Step 5.** Switch's LED will flash back current setting (repeats 3 times, then exits)

#### Occupancy Time Delay

The length of time a switch's relay will remain closed after the last occupied transmission from a sensor has been received. When paired with **CM xx WR** series **PIR** sensors, the *Occupancy Time Delay* can be set from the switch (see below) or from the sensor (**recommended**). See sensor instruction sheet.

When paired with **CM PDT xx WR** series **Dual Tech** sensors, the *Occupancy Time Delay* must be set from the sensor (see sensor instruction sheet) and only after it is paired with the **SPODMR WR** switch. This ensures that the sensor's internal Microphonics time delay matches the switch's *Occupancy Time Delay*.

**Step 1.** Press and hold both switch buttons for 3 sec (until LEDs start flashing)

**Step 2.** Press switch's ON button 2 times

**Step 3.** LED will begin flashing current setting (see selections 1-13 below)

**Step 4.** To change setting, press switch's ON button the number of times corresponding to the new desired setting from the below choices:

- |             |               |               |               |
|-------------|---------------|---------------|---------------|
| 1 - 30 sec  | 5 - 10.0 min* | 9 - 20.0 min  | 13 - 30.0 min |
| 2 - 2.5 min | 6 - 12.5 min  | 10 - 22.5 min |               |
| 3 - 5.0 min | 7 - 15.0 min  | 11 - 25.0 min |               |
| 4 - 7.5 min | 8 - 17.5 min  | 12 - 27.5 min |               |

**Step 5.** LED will flash back new setting (repeats 3 times, then exits)

#### Notes:

1. The sensor *Heartbeat Setting* will need to be adjusted on the sensor to match this setting if 5 minutes or under, and be set to 5 minutes for any higher setting.

### ADDITIONAL SETTINGS & MODES

#### Unlearn (Unpair)

When a teach broadcast is received by a switch from a remote device, it is removed from the unit's list of learned (paired) devices.

**Step 1.** Press and hold both switch buttons for 3 seconds (i.e. until button LEDs start flashing together)

**Step 2.** Press switch's ON button 4 times

#### Notes:

1. While in *Unlearn Mode*, the unit will rapid flash then slow blink the number of learned devices, and repeat.
2. Unit stays in *Unlearn Mode* for 2 minutes, or until one device is unlearned. Press sensor button 2 times to unlearn (unpair).
3. Each time a new device is unlearned by (e.g. unpaired with) the switch, the switch will toggle its relay.

#### Switch Diagnostic / Reset / Unlearn All

Provides options to reset and/or unlearn currently paired remote devices. Also provides total paired and inactive device count information.

**Step 1.** Press and hold both switch buttons for 3 seconds (i.e. until button LEDs start flashing together)

**Step 2.** Press switch's ON button 9 times

**Step 3.** LED will begin flashing current setting (see selections 1-8 below)

**Step 4.** To change setting, press switch's ON button the number of times corresponding to the new desired setting from the below choices:

- 1 - Do nothing\*
- 2 - Reset settings to factory default and unlearn all
- 4 - Unlearn all paired devices
- 5 - Reset settings to factory defaults (without unlearning devices)
- 6 - Learned Device Count
- 7 - Inactive Sensor Count (paired sensors that have stopped transmitting)
- 8 - Unlearn All Inactive Sensors

**Step 5.** LEDs will flash back current setting (repeats 3 times, then exits)

#### Switch Status LED Operation

Controls the normal operation of the button's LEDs on the switch unit.

**Step 1.** Press and hold both switch buttons for 3 seconds (i.e. until button LEDs start flashing together)

**Step 2.** Press switch's ON button 11 times

**Step 3.** LED will begin flashing current setting (see selections 1-2 below)

**Step 4.** To change setting, press switch's ON button the number of times corresponding to the new desired setting from the below choices:

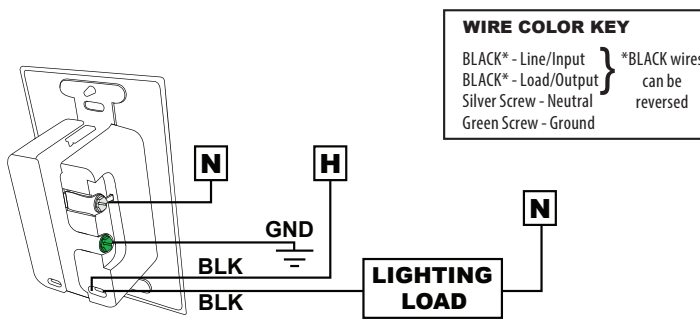
- 1 - LEDs enabled\* (indicates current status of relay)
- 2 - LEDs disabled

**Step 5.** LED will flash back current setting (repeats 3 times, then exits)

**Note:** In disabled mode, LEDs will still flash when button is pushed, device is in *Learn* or *Unlearn* mode, or when device is flashing back a setting or error code.

# WIRING & INSTALLATION

1. Turn off power to switch box at the circuit breaker.
2. Connect Ground wire to the GREEN screw.
3. Connect Neutral wire to the SILVER screw.
4. Connect one BLACK wire to Line power. Use a wire nut to secure connection.
5. Connect second BLACK wire to Load. Use wire nut to secure connection.
6. Affix switch and cover to wall using provided screws.
7. Turn power back on to switch box.



**WIRE COLOR KEY**  
 BLACK\* - Line/Input } \*BLACK wires  
 BLACK\* - Load/Output } can be  
 Silver Screw - Neutral } reversed  
 Green Screw - Ground

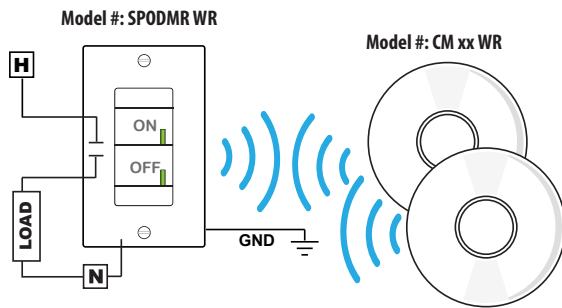
Scan QR code to access video demonstrations



<http://bit.ly/1aszSqd>

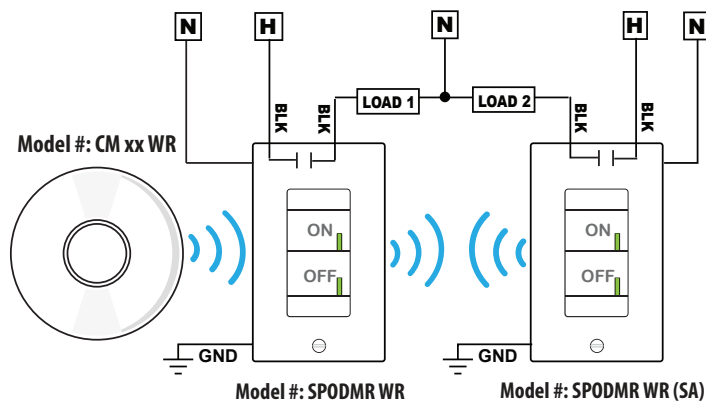
## EXAMPLE APPLICATION DIAGRAMS

### SINGLE-LEVEL CONTROL:



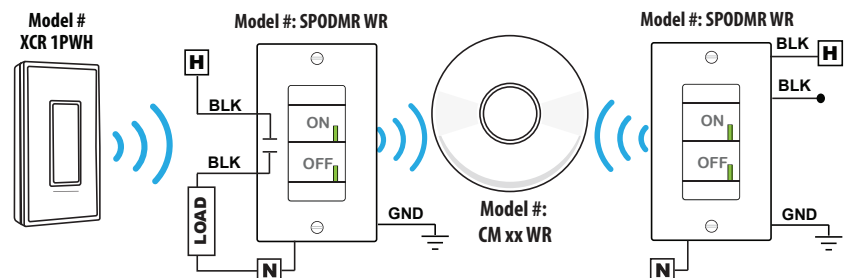
### BI-LEVEL CONFIGURATION:

For Bi-level applications, put both SPODMR WR switches into *Learn* mode and then pair all sensors. Do not pair the SPODMR WR devices to each other. Note one switch should be set to *Manual On/Vacancy* operating mode.



### MULTIWAY (3-WAY) CONFIGURATION:

For 3-way applications using two SPODMR WR switches, each switch must be individually paired with the other switch and all sensors. For example, put the first SPODMR WR in *Learn* mode and pair the other SPODMR WR switch and all sensors. When complete, put the second SPODMR WR switch in *Learn* mode and pair the first SPODMR WR and all sensors. Pairing any one SPODMR WR switch with a wireless rocker switch (model #XCR 1PWH) will also provide 3-way functionality.



## LED STATUS INDICATORS & ERROR CODES

### WHILE IN LEARN OR UNLEARN MODE:

**PAIRING/DEVICE COUNT:** During pairing, LEDs rapid flash together, pause, then slow flash 1x for each learned (paired) device, wait 2 seconds, and then repeat (e.g., for 4 paired devices the LEDs would rapid flash, pause, slow flash 4x, pause, then repeat).

**RANGE WARNING:** A double rapid flash indicates a paired device may be at the limit of the wireless range.

### WHILE IDLE:

**SENSOR LOW BATTERY WARNING:** A rapid flash followed by 3 blinks indicates a paired sensor has low battery.

**LOST TRANSMISSION ERROR CODES:** If all paired occupancy sensors stop transmitting, 15 minutes after the last transmission from the last occupancy sensor the LEDs will begin blinking an error code (rapid flash followed by a single blink) and the switch will enter toggle mode, defaulted On. Clear error code by pairing a new occupancy sensor, issuing an *Unlearn All* command or initiating an *Unlearn All Inactive Devices* command.

**AcuityBrands**  
 Expanding the boundaries of lighting™

TITLE 24 SYSTEM COMPONENT  
 ASSEMBLED in U.S.A.



### WARRANTY

5-year limited warranty. Complete warranty terms located at [www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)

READ AND FOLLOW ALL SAFETY INSTRUCTIONS!  
 SAVE THESE INSTRUCTIONS AND DELIVER TO OWNER AFTER INSTALLATION

- To reduce the risk of death, personal injury or property damage from fire, electric shock, falling parts, cuts/abrasions, and other hazards please read all warnings and instructions included with and on the fixture box and all fixture labels.
- Before installing, servicing, or performing routine maintenance upon this equipment, follow these general precautions.
- Installation and service should be performed by a qualified licensed electrician.
- Maintenance should be performed by qualified person(s) familiar with the products' construction and operation and any hazards involved. Regular maintenance programs are recommended.
- **DO NOT INSTALL DAMAGED PRODUCT!** This product has been properly packed so that no parts should have been damaged during transit. Inspect to confirm. Any part damaged or broken during or after assembly should be replaced.

<p><b>CAUTION: RISK OF PRODUCT DAMAGE</b></p> <ul style="list-style-type: none"> <li>✓ Electrostatic Discharge (ESD): ESD can damage product(s). Personal grounding equipment should be worn during all installation or servicing of the unit.</li> <li>✓ Do not touch individual electrical components, as this can cause ESD and affect product performance.</li> <li>✓ Do not stretch or use cable sets that are too short or are of insufficient length.</li> <li>✓ Do not tamper with contacts.</li> <li>✓ Do not modify the product.</li> <li>✓ Do not change or alter internal wiring or installation circuitry.</li> <li>✓ Do not use product for anything other than its intended use.</li> </ul>	<p><b>WARNING - RISK OF ELECTRIC SHOCK</b></p> <ul style="list-style-type: none"> <li>✓ Disconnect or turn off power before installation or servicing.</li> <li>✓ Verify that supply voltage is correct by comparing it with the product information.</li> <li>✓ Make all electrical and grounded connections in accordance with the National Electrical Code (NEC) and any applicable local code requirements.</li> <li>✓ All wiring connections should be capped with UL approved recognized wire connectors.</li> <li>✓ All unused connector openings must be capped.</li> </ul>	<p><b>WARNING - RISK OF BURN OR FIRE</b></p> <ul style="list-style-type: none"> <li>✓ Do not exceed maximum wattage, ratings, or published operation conditions of product.</li> <li>✓ Do not overload.</li> <li>✓ Follow all manufacturer's warnings, recommendations and restrictions to ensure proper operation of product.</li> </ul> <p><b>CAUTION - RISK OF INJURY</b></p> <ul style="list-style-type: none"> <li>✓ Wear gloves and safety glasses at all times when installing, servicing or performing maintenance.</li> </ul>
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<p><b>COMPLIANCE INFORMATION</b></p> <p>SPODMR WR: FCC: VR8-SSIINTR002 IC: 7791A-SSIINTR002              CM xx WR: FCC: VR8-SSIINTR003 IC: 7791A-SSIINTR003</p> <p>These devices comply with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.</p> <p>CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.</p> <p><b>CAN RSS-Gen/CNR-Gen:</b>              This device complies with Industry Canada licence-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.</p> <p>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.</p> <p>Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.</p> <p>Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.</p> <p>Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:              —Reorient or relocate the receiving antenna.              —Increase the separation between the equipment and receiver.              —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.              —Consult the dealer or an experienced radio/TV technician for help.</p>
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