EOPC-100

Wireless Lighting Control System

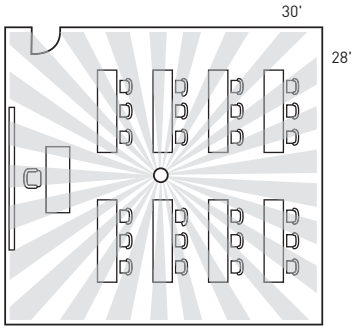
Wireless Self-Powered PIR Ceiling Mount Extended Range Occupancy Sensor

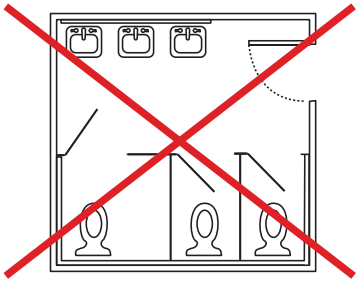
Input Voltage:..... Self-Powered, Optional Battery
Operating Life at Full Charge:..... 72 hrs
Connection to Wireless Network:..... Transmits signal to Wall Switch Receiver (EOSW) via Radio Frequency
Environment ..... For Indoor Use Only
- Operating Temperature .....32° to 131°F (0° to 40°C)
- Storage Temperature..... 23° to 176°F (-5° to 80°C)
- Relative Humidity.....5 to 95% (non condensing)

Patent Pending

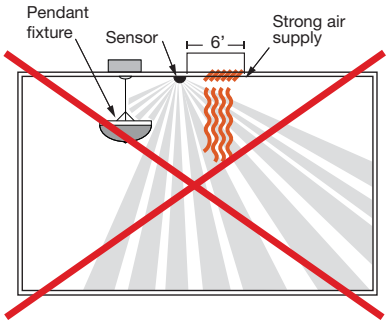
Quick Start Guide

SENSOR PLACEMENT (12' MAX. HEIGHT)





Warning: Do Not Mount in a dark room (< 3 fc). If necessary, please insert optional battery.



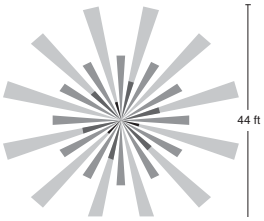
Mount sensor at least 6' away from hot air supply. Avoid obstacles that block sensor's line-of-sight.

COVERAGE PATTERN

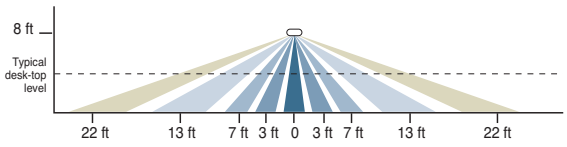
The EOPC-100 provides a 360° coverage pattern.The coverage shown represents maximum coverage for walking motion at a mounting height of 8 feet.

Extended Range Lens (Standard)
EOPC-100

MAJOR MOTION
Ideal: 44ft diameter @8ft
Minimum: 35ft diameter @ 8ft



MINOR MOTION
Ideal: 30ft diameter @8ft
Minimum: 25ft diameter @ 8ft



PAIRING OF SENSOR TO RECEIVER LOAD(S)

*It is recommended that pairing of devices be done prior to installing ceiling sensor.

Step 1: Enter Pairing Mode

Press and Hold "Pairing" Button on Receiver for 3 Seconds then release:

- "Pairing" LED blinks 2 times/ second to confirm pairing mode

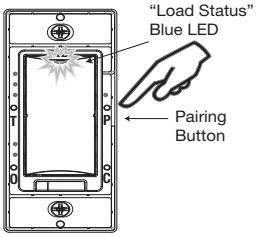
<u>For EOSW-101</u>

- Load 1 turns **ON** and is ready to be paired
- Button LED is Solid **ON**

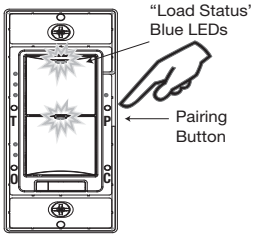
<u>For EOSW-102</u>

- Load 1 & 2 turn **ON** and are ready to be paired
- Button 1 & 2 LED are Solid **ON**

EOSW-101 Series



EOSW-102 Series



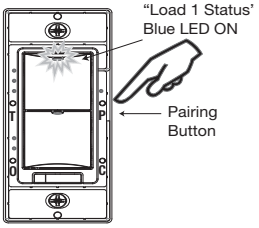
Step 2: Selecting a Specific Load to Pair (EOSW-102)

*If both loads are to be controlled by Occupancy Sensor than skip this step.

Tap the "Pairing" button once while in pairing mode:

- Load 2 turns **OFF** and Load 1 remains **ON**
- Load 1 is now active and ready to be paired to selected transmitters
- Load 1 LED is Solid **ON**

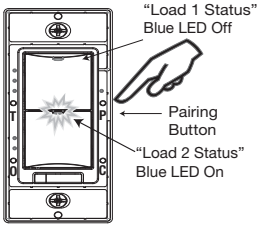
EOSW-102 Series



Tap the "Pairing" button once again while in pairing mode:

- Load 1 turns **OFF** and Load 2 turns **ON**
- Load 2 is now active and ready to be paired to selected transmitters
- Load 2 LED is Solid **ON**

EOSW-102 Series



Tap the "Pairing" button a thrid time while in pairing mode:

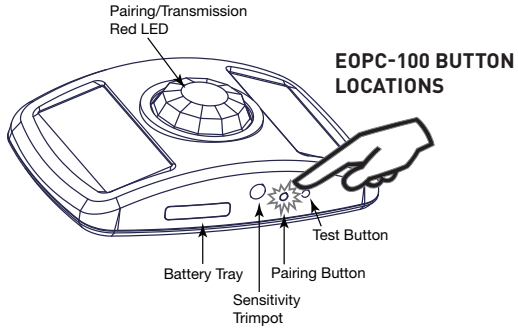
- Load 1 and Load 2 turn **ON** again

Step 3: Pair Occupancy Sensor to Receiver

* While the receiver is in pairing mode and the load you want to pair the sensor with is **On:**

Tap the "Pair" button on the Occupancy Sensor

• The selected load(s) will flash OFF/ON for visual pairing confirmation



Step 4: Exit "Pairing" Mode on Receiver

Once a device is paired with the receiver the receiver will automatically exit "pairing" mode.

• The receiver will also exit "pairing" mode if no device is paired to it within 30 seconds.

• Pressing and holding the pairing button for 3 seconds also exits the pairing process.

Note: To pair additional remote devices to the same load, repeat Step 1 to re-enter "Pairing" mode.

Testing the loads paired to the occupance sensor

To test the loads paired to the occupance sensor:

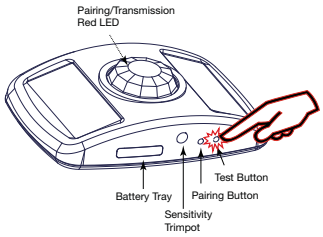
Tap the "Pair" button while no receiver is in "Test" mode to toggle the load on and off.

TESTING THE OCCUPANCY SENSOR

"Test" mode allows you to perform a sensor walk test to define the coverage area, optimum sensitivity settings, and product placement.

* WattStopper recommends you use a battery to perform test mode otherwise the sensor may not have enough power.

In "Test" mode, the sensor turns **OFF** all loads of receivers within range after 5 seconds of no detection and begins a 10 minute test period.



Step 1: To Enter Test Mode

Tap the "Test" button on the Occupancy Sensor

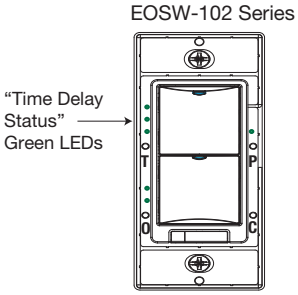
• The corresponding LED on the EOSW receiver blinks to confirm time delay selection for reciever(s) paired with the sensor that is in "Test" mode.

• The LED stops blinking once the sensor exits test mode.

• When the sensor doesn't detect motion, all loads controlled by the sensor will turn **OFF** after 5 seconds of operation.

Step 2: Exit "Test" Mode

• The sensor will automatically exit test mode after 10 minutes and each load will go back to their selected time delay default value or back to the user set value. (i.e. Load 1 = 15 minutes, Load 2 = 30 minutes.)



Note: The 10 minute window is more than likely to require that the sensor be fully charged or use the battery. To manually exit "Test" mode to bypass the 10 minute window and reset it back to normal operation:

Tap the "Test" button on the Occupancy Sensor again

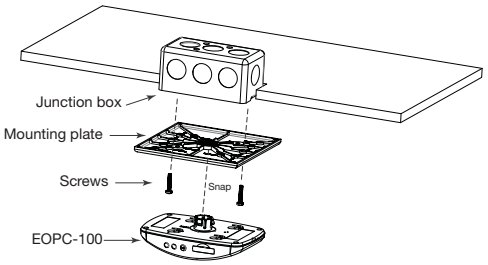
• The sensor exits test mode and the LED stops blinking.

SENSOR MOUNTING

Mounting to junction box:

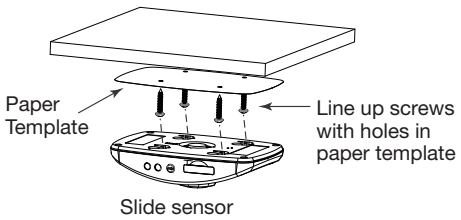
The EOPC-100 can be mounted to a pre-installed junction box using the mounting plate that is provided.

1. Attach mounting plate to junction box with the provided screws.
2. Snap the sensor onto the mounting plate.



Through ceiling tile:

The EOPC-100 can be mounted to the surface with the provided screws or by using the double-sided tape. Use the provided paper template to mark the surface.

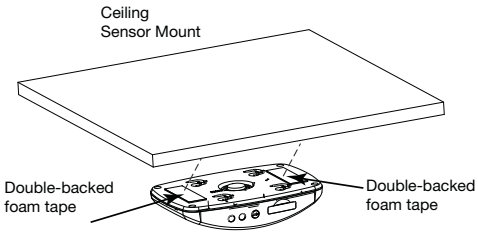


SENSOR MOUNTING

The EOPC-100 can be mounted to any flat surface, or placed directly on the surface.

Mounting to wood or non metal surfaces

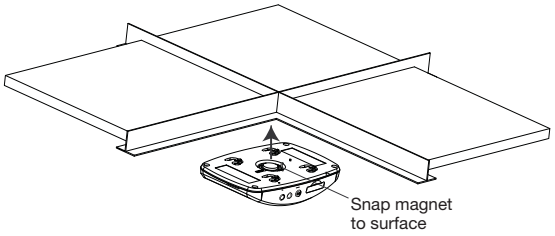
1. Attach the mounting plate to the desired location with the provided self-tapping screw or double-backed tape.
2. Snap the sensor onto the mounting plate.



Mounting to metal surfaces

1. Use the super magnets on the back of the sensor to mount to any metal surface such as fixtures or metal desks.
2. Simply snap the sensor onto the surface.

WARNING: Do Not Install To Cover a Junction Box Having Class 1, 3 or Power and Lighting Circuits.

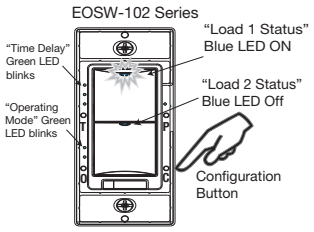


SETTING LOAD PARAMETERS ON THE RECEIVER

Step 1: Enter Configuration Mode

Press and Hold "Configuration" Button (C) for 3 Seconds

- Load 1 turns **ON** and Load 2 turns **OFF.** (Load 1 is now active).
- "Time Delay" and "Operating Mode" LEDs begin to blink to indicate their current settings for the specific load

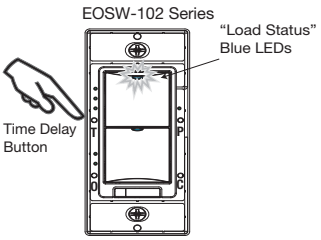


Note: If no Occupancy Sensor is Paired to the device then the "Time Delay" LED will be not be lit.

Step 2: Modifying "Time Delay"

Tap the "Time Delay" Button (T) to cycle through options of 5min/15min/30min

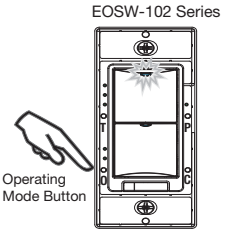
- Corresponding Time Delay LED confirms time delay selection for specific load



Step 3: Modifying "Operating Mode"

Tap the "Operating Mode" Button (O) to alternate between "Manual-On" and "Automatic-On" settings

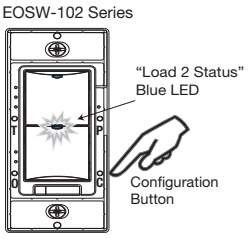
- Corresponding LED confirms operating mode selection for specific load



Step 4: Modfying Load 2 Parameters

Tap "Configuration" Button (C) once to alternate between Loads. (Load 2 is now active).

- Push-button LED that is lit will correspond to Load being modified
- Repeat step 2 and 3

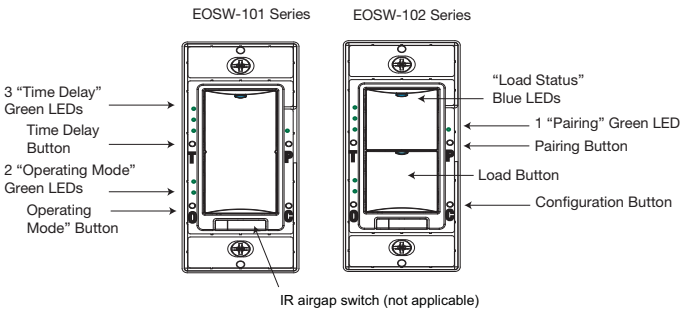


Note: If no sensor is paired to the load then only "Operating Mode" LED will be lit and will be on manual.

Step 5: Exit "Configuration" Mode

- Press and Hold "**Configuration**" **button** for 3 seconds

EOSW-101/EOSW-102 BUTTON AND LED LOCATION



LOAD PARAMETERS

The EOSW-101 Defaults to Manual On/Auto OFF.*

The EOSW-102 Defaults to Auto On 50%/Auto OFF for Load 1; or Manual On/Auto OFF for Load 2.

* Auto-OFF is enabled according to the sensor Time Delay when a sensor is paired to the load, regardless of whether the load was turned on automatically with occupancy or manually using a switch. When occupancy is no longer detected and the time delay has expired the load will shut off.

TROUBLESHOOTING

- In an indoor environment, the wireless controls have a typical range of 30-150 feet. As the obstructions and/or noise interference is lighter or heavier the range will be more or less.
- Noise interference can be either line noise (from motors) or Radio Frequency (RF)
- Switches go into a reduced range mode when in programming (under 15 feet)
- Range can be reduced by overloading the switch (switch is only rate at 10A)
- Range can be reduced by metal objects (metal decreases the effectiveness of RF transmission)
- Output power is regulated by the FCC
- Receiver sensitivity is fixed
- Fixed Antennas are integrated into the product

Consider Factors Affecting the Environment:

- Device placement
- Obstructions (metal, concrete, other construction materials)
- Interference

Obstructions:

- Does the system work more reliable at close range (without obstructions)?
- Identify nearby metal, concrete and other objects possibly affecting signal strength
- Can either device be relocated (even slightly) away from obstructions to improve the system performance?

Interference:

- Does the system work better at certain times of the day?
- Look for pieces of equipment that may affect wireless performance when they are ON
- Try using a signal strength meter to measure 315MHz (RF) noise floor and quantify packet receiving reliability

Product variations:

- Replace one piece of hardware at a time to isolate any variation in product performance

Sensor does not learn:

- Please charge for 10 minutes in indoor light or sunlight before attempting to use. (or insert optional battery)

Sensor does not communicate to receiver:

- Check pairing of the sensor after install and commissioning, press test button to test the range (WITH A CHARGED SENSOR) if the load toggles, the range is good. If the load does not toggle, pull the sensor off the ceiling, verify charge by seeing the LED on the SENSOR flash, then press test button to test with the device close to the receiver, if still no load toggle, the device is either not charged or has not been paired properly (or may have even been unlearned) (see pairing section above)

If device still doesn't respond:

- Make sure the sensor is un-paired to the receiver by placing the receiver into pairing mode then tapping the pairing button on the sensor three times.

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11/2012
16585rX2
Please Recycle

REV	DESCRIPTION	INT:	REV. DATE	APPROVED
X1	ECO C05399	CR	8/21/2012	CG
X2	ECO C0XXXX	CR	11/13/2012	CG

MATERIAL: White 80g/m sq
Uncoated, recycled stock preferred

Final Trim Size: 17" (Wide) x 11" (High)

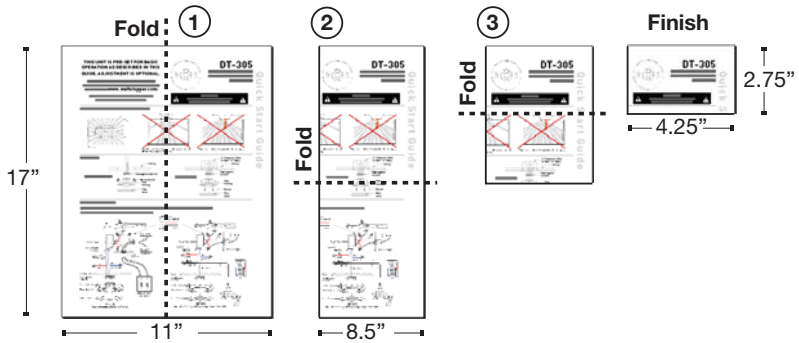
Ink: CMYK

Print: Two Sides

 # Pages: 4

 # Sheets: 2

TITLE BOX PAGE ONLY.
DO NOT MAKE FILM • DO NOT PRINT



IF YOU HAVE ANY QUESTIONS REGARDING SPECIFICATIONS OR REQUIRE ADDITIONAL FILE FORMATTING, PLEASE CONTACT Engineering

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WattStopper
SANTA CLARA, CALIFORNIA

Title: EOPC-100 Quick Start Guide

Drawing #:	Original Drwg. Date: 08 DEC 11	Rev #:
16585	Rev. Date: 13 NOV 12	X2