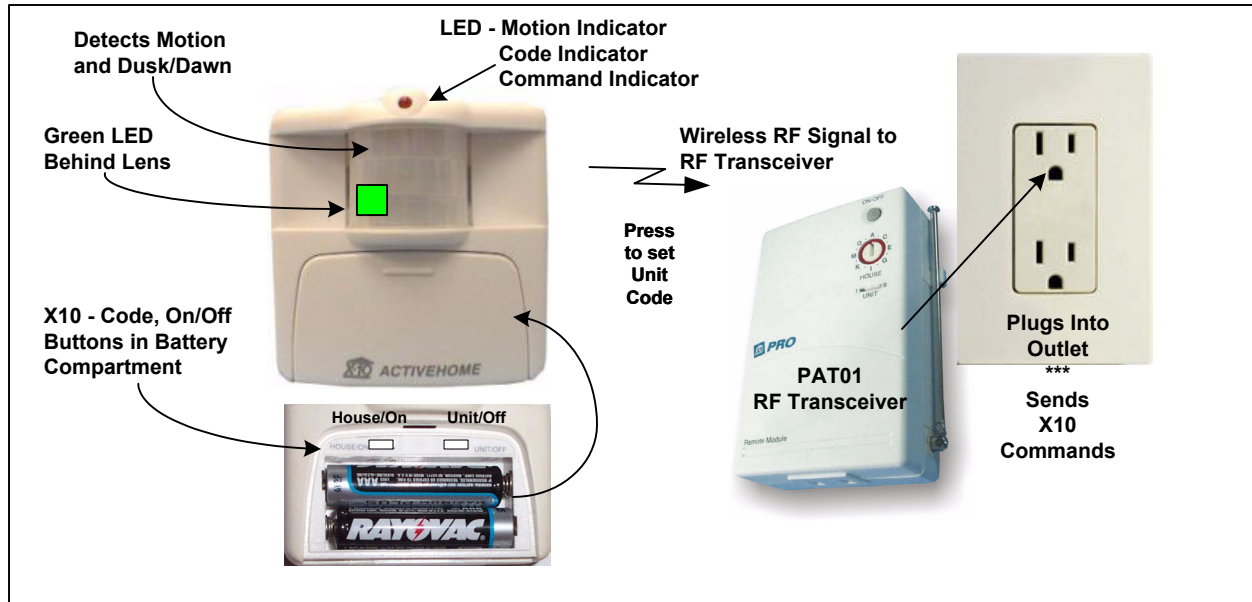


# Occupancy Sensor

# PMS02



**Description:** The Occupancy Sensor, PMS02, is a battery operated, RF Transmitter capable of sensing: Motion and Dusk/Dawn events. It transmits an X10 Command to an X10 PRO RF Base Transceiver (PAT01 sold separately) which then passes the X10 Command onto the AC power lines of the structure. This can be used to control X10 PRO Receiver Modules, i.e. - Light and Appliance Modules, ON/OFF. The X10 Command can also be used, as a trigger, to initiate Macros in the CM11A, ActiveHome Two-Way Computer Interface Module. This would allow for complex routines to be executed as soon as the PMS02 detects motion.

#### Specific Requirements:

2 - AAA Batteries, PAT01 - RF Base Transceiver Module

#### Optional / Supplementary Devices & Modules:

PHH02 Plug-in Chime Module, PLW01 Standard Incandescent Wall Switch Module, PLM01 Plug-in Lamp Module, PAM01/02 Plug-in 2 and 3-pin Appliance Modules.

#### X10 Protocol:

**House Code Dial** - Letters A-P, Default "A" **Unit Number Dial** - Numbers 1-16, Default "1"

Each X10 Receiver Module is set to a unique Unit Number or to an identical Unit Number as desired.

Each X10 Controller operating a specific set of Receiver Modules must be set to the same House Code as the Receivers they are controlling.

#### Electrical Protocol:

Nearly all residential homes are wired SPLIT-PHASE. Each 120V Phase is NOT directly connected with the other 120V phase. If after installation, an X10 Receiver does not respond to a remote Controller, then check to ensure that the breaker serving the X10 Receiver is on the same phase as the Controller. If not, the breaker can be changed to the opposite phase. An alternative solution is recommended, to install a Phase Coupler for improving remote communications throughout the home. See [www.x10pro.com](http://www.x10pro.com), then select Technical Support and PLC Troubleshooting.

#### Installation:

##### Setting up the PMS02:

1. Remove the battery cover on the front of the PMS02 and install two AAA alkaline batteries. Initially the PMS02 defaults to House Code "A" and Unit Code "1" and defaults to See Motion, all the time (24hrs).
2. Plug-in an X10 PRO RF Base Transceiver (PAT01 - sold separately), set the House Code to "A".
3. Install or plug-in an X10 PRO Receiver Module, for Light Appliance control, and set the Receiver Module to House Code "A" / Unit Code "1".

##### Testing the PMS02:

1. Press the House button once, the PMS02 will transmit an RF X10 ON Command and the Red LED will flash.
2. Press the Unit button once, the PMS02 will transmit an RF X10 OFF Command and the Red LED will flash. (The default setting is "A1").
3. Place the Sensor on a shelf or mount it on a wall at least 6 feet above the ground and let it settle for at least 1 minute (default) with no motion before activation.

##### Dawn/Dusk Sensing:

1. The PMS02 has the ability to sense darkness and transmit an X10 ON Command to a unit number "one Unit Number higher" than the Unit Code programmed to sense motion, i.e. - A1+1 = A2.
2. For example: A PMS02 set to House/Unit Code "A1" (for Motion Sensing) will transmit an X10 Unit Code "A2" ON at Dusk and "A2" OFF at Dawn.

**Changing the House and Unit Codes:**

1. Press and hold the House Code button, the Red LED flashes first, goes off and then blinks the current setting.
2. Release and press the desired number of times for the House Code that you want (once for A, twice for B, etc.).
3. Hold the House Code button on the last press; after 3 seconds the Red LED will blink the amount of times to confirm your settings.

Note: For Unit Code changes, perform the same as above but using the Unit Code button.

**Motion Detection only after dusk or 24 hours:**

1. Press and release the Unit Code button once, the Red LED flashes.
2. Press and hold the House button, the Green LED (found behind the lens) turns on. 3 seconds later the Red LED blinks the following settings:
  - a. Once for Motion Detection 24 hours a day.
  - b. Twice for Motion Detection only after dark.
3. To change this setting, release and press the House button once for operation at all times (24hrs), or twice for operation only at night. Hold the button for 3 seconds, on your last press, and the Red LED will report the setting with one or two blinks.

**Delay after Motion before an OFF command is sent::**

1. Press the House button once, the Red LED flashes.
2. Press and hold the Unit button, the Green LED turns ON. 3 seconds later, the Red LED will report the setting as follows:

-1 blink for 1 minute (default).	-6 blinks for 32 minutes.
-2 blinks for 2 minutes.	-7 blinks for 64 minutes.
-3 blinks for 4 minutes.	-8 blinks for 128 minutes.
-4 blinks for 8 minutes.	-9 blinks for 256 minutes.
-5 blinks for 16 minutes.	
3. To change this setting, release and press the Unit button, the number of times that you wish for specific delay amount, and hold the button down for 3 seconds, on the last press, for Red LED verification.

**DEFAULTS:**

After replacing batteries, please wait 30 seconds before the PMS02 will see any motion. After transmission, you need to wait 10 seconds before the PMS02 will see motion again. The default House & Unit Codes for Motion Detection is: "A1" ON.

The default for Motion Detection is: detect at all times (24 HOUR).

The default for Time Out, that "A1" OFF is sent is: 1 minute.

The default House/Unit Codes for Dusk/Dawn, is: "A2" ON at Dusk, "A2" OFF at Dawn.

Note: As with all RF transmitter devices; electrical fields, metal doors or door window frames and appliances can cause interference that can decrease the strength of the transmitted signal. Re-locating the PAT01 RF Base Transceiver may increase your ability to receive the necessary X10 Signals from the PMS02.