## CH-250 PIR Multi-way Wall Switch Vacancy Sensor



Ideal for hallways, stairwells and large rooms with multiple entrances

Compliant with
California Title 24-2008

Product Overview

## Description

The CH-250 Passive Infrared (PIR) Multi-way Vacancy Sensor provides automatic lighting shutoff for applications in the home including those with multiple switch locations. It is engineered to comply with California's Title 24-2008 residential energy code.

## Operation

The CH-250 operates as a manual-on sensor. Users must press the pushbutton to turn on lighting. The $\mathrm{CH}-250$ employs PIR technology to sense the difference between the infrared energy from a person in motion and the background space. It keeps lighting on as long as motion is detected and provides automatic shutoff, following a user-selected time delay, when motion is no longer detected. Users may turn the connected load off manually.

## Features

- Replaces single- or multi-pole switches
- Provides multi-way control when used with other CH-250s or RH-253s
- Adjustable time delay, 15 seconds to 30 minutes
- Lighted switch for visibility in darkened rooms
- Low-profile styling
- Choice of five decorator colors; lens is colormatched to device


## Multi-way Operation

A CH-250 connected to other $\mathrm{CH}-250$ s and/ or RH-253 Decorator Single Pole Momentary Switches provides true multi-way on/off control. An occupant simply presses the on/off pushbutton of any connected device to turn on the lighting. Lights remain on as long as one of the $\mathrm{CH}-250$ s continues to detect occupancy. The user may turn off the lighting by pressing the on/off button on any of the connected devices. If the room becomes vacant and lights are on, they will be switched off automatically following the time delay of the last CH-250 to detect occupancy.

## Applications

$\mathrm{CH}-250$ s are appropriate for residential applications where the switch location has an unobstructed line of sight of the room. Multiple $\mathrm{CH}-250$ s are ideal for hallways, stairwells and large rooms with multiple entrances, as each sensor expands the coverage area.

## PROJECT <br> LOCATIONITYPE

- Operates most common types of residential lighting
- Relay-based switching
- No current leakage to load in off mode for safety
- Compatible with decorator wall plates
- CA Title 24 compliant

Installation \& Wiring

Controls \& Coverage

- $120 \mathrm{VAC}, 60 \mathrm{~Hz}$; neutral required
- Load ratings: 0-600 watt incandescent, LED, fluorescent, compact fluorescent (CFL), magnetic low voltage (MLV) or electronic low voltage (ELV) or $1 / 6 \mathrm{hp}$ motor
- Time delay settings: 15 seconds, $5,15,30$ minutes
- PIR coverage: $180^{\circ}, 600 \mathrm{ft}^{2}\left(56 \mathrm{~m}^{2}\right)$
- $2.67^{\prime \prime} \times 1.73^{\prime \prime} \times 1.77^{\prime \prime}(68 \mathrm{~mm} \times 44 \mathrm{~mm} \times 45 \mathrm{~mm})$ $\mathrm{L} \times \mathrm{W} \times \mathrm{D}$
- Operating conditions: $32-131^{\circ} \mathrm{F}\left(0-55^{\circ} \mathrm{C}\right), 95 \%$ RH, non-condensing; for indoor use only
- UL and cUL listed
- Five year warranty


## Wiring Diagrams



For single pole applications, cap off the yellow wire. Up to four multi-location sensors may be connected together. For details on connecting RH-253s for multi-location control, see the RH-253 cut sheet.


Product Controls

## Coverage Pattern



To access adjustment dial, gently pull the lock bar away from the switch face and slide the on/off button down.


Ordering Information

|  | alog No. | Color | Description | Voltage | Rating | Coverage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\square$ | CH-250-W | White | PIR Multi-way Wall Switch Vacancy Sensor | $120 \mathrm{VAC}, 60 \mathrm{~Hz}$ | 0-600W incandescent, LED, fluorescent, CFL, MLV, ELV lighting load or $1 / 6 \mathrm{hp}$ motor load | $180^{\circ}$, max. $600 \mathrm{ft}^{2}$ $\left(56 \mathrm{~m}^{2}\right)$ |
| $\square$ | CH-250-I | Ivory |  |  |  |  |
| $\square$ | CH-250-LA | Light Almond |  |  |  |  |
| $\square$ | CH-250-A | Almond |  |  |  |  |
| $\square$ | CH-250-B | Black |  |  |  |  |

Order wall plate separately.

