

Occupancy Sensor Switch

RZ021-5A-N

Descriptions

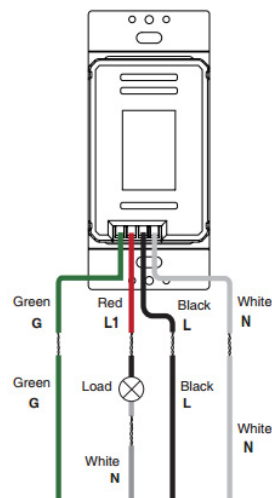
The RZ021 series occupancy sensor switch can automatically turn lights or fans on and off by detecting heat emitted by the motion, it's designed to replace a standard light or fan switch. The products use advanced passive infrared sensor(PIR) and MCU control technology which offers better stability than the traditional motion sensor, it's easy and accurate to adjust the Time Delay, Detection Range, Light sensor value, and operating mode (Occupancy / Vacancy / On-Off) .



Specifications

| | |
|-----------------------------|---|
| Power Source | 110V~277VAC |
| Detection Range | 150° |
| Power Frequency | 50/60Hz |
| Detection Distance | 7-9m max (<27°C) |
| Light sensor | Default 25Lux(±10Lux), 15Lux, 35Lux , OFF optional. |
| Time-Delay | Default 1min(15secs, 1min, 3mins, 5mins, 15mins, 30mins adjustable) |
| Working Humidity | < 93%RH |
| Installation Height | 1.2m~1.6m |
| Motion Detection Speed | 0.6~1.5m/s |
| Working Temperature | -20~+40°C |
| Incandescent / Halogen | 550W / 120VAC |
| Fluorescent / Ballast / LED | 550W/ 120VAC 800W/ 277VAC |

Wiring Diagram



Adjustment

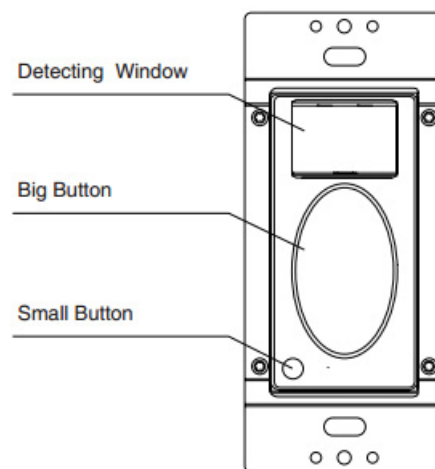
1. After connecting the switch, the RZ021 default time-delay is 1min, ambient light sensor value: 25Lux, the switch is in Occupancy sensor mode, when sensor detects motion, the green indicator will flash
2. Short press the big button, can turn on/off the load temporarily, when the time delay expires, the sensor will turn to the last operating mode.
3. Short press the small button, can turn on/off the load. The switch will enter into ON/OFF mode, at this mode, the switch works as a normal on/off switch and won't turn load on/off by motion detection. when motion detected, the red indicator LED will flash to indicate that the switch is in ON/OFF mode, until user press the big button to escape the ON/OFF mode.
4. Press and hold the big button for more than 4 seconds, can change the time-delay, the red indicator will flash

Flash 1 time --- 15seconds

Flash 2 times --- 1min

Flash 3 times --- 3mins

Flash 4 times --- 5mins



5. Press and hold the small button for more than 4 seconds can change the mode: the red indicator will flash:

Flash 1 time --- Vacancy mode

Flash 2 times --- Occupancy mode

Flash 3 times --- Occupancy mode without light sensor mode

6. Press the big button and small button at the same time, can change the sensitivity, light sensor value, and restore to factory settings, the red and green indicator will flash at the same time.

Flash for 1 time --- Low sensitivity

Flash for 2 times --- High sensitivity

Flash for 3 times --- Light sensor value 15Lux

Flash for 4 times --- Light sensor value 25Lux

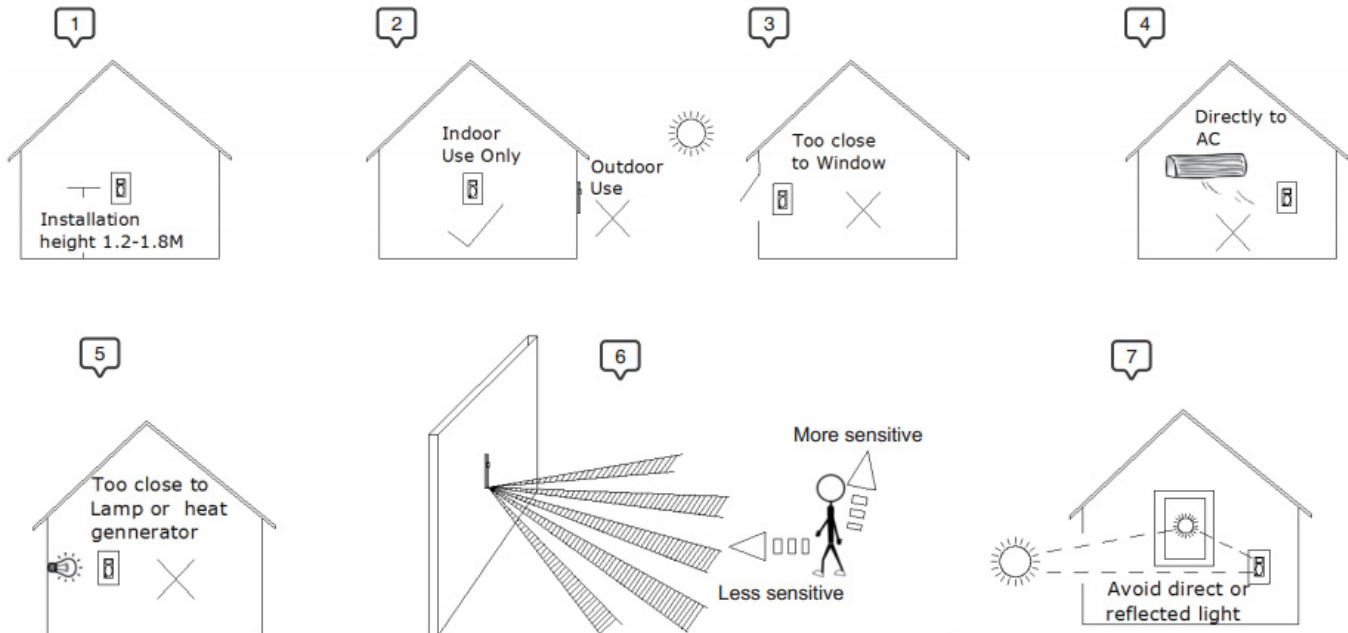
Flash for 5 times --- Light sensor value 35Lux

Flash for 6 times --- Restore to factory settings

Working Modes

| | | |
|--|---|---|
| Occupancy mode | Auto ON-Auto OFF (after time delay) Manual ON -Manual OFF (after time delay) | When motion is detected and the ambient light value is lower than set value, the load will automatically turn on, then automatically turn off when the selected time delay has expired. Press the big button can manually turn ON/OFF the load and time delay will also take effect. |
| Vacancy mode | Manual ON and Auto OFF (after time delay) Manual ON - Manual OFF (after time delay) Auto ON within 30 seconds after delay time, After 30 seconds will only be turned on by big button. | The load will turn on ONLY when the big button is used, and automatically turn off when the selected time delay has expired. The big button can manually turn ON/OFF the load, and time delay will also take effect. If the time delay has expired, the load will turn off; the load will turn on again automatically if motion is detected within 30 seconds after time delay; After 30 seconds, the load will only be turned on by pressing the big button. |
| Occupancy mode without light sensor | Auto ON and Auto OFF day and night Manual ON -Manual OFF (after time delay) | The load will automatically turn on when motion is detected all over the day even at day time, and automatically turn off when the time delay has expired. The big button can manually turn ON/OFF the load, and time delay will also take effect. |
| ON/OFF mode | Manual ON and Manual OFF (Press big button to escape) | Short press the small button, the load will be turned on/off, and the sensor will enter into ON/OFF mode , at this mode, when sensor detects motion, the red indicator LED will flash to indicate that the switch is in ON/OFF mode , the load will not turn on/off, until user press the big button to escape the ON/OFF mode . |

Choose The Right Place For Installation



Trouble Shooting Guide

| Problem | Cause | Solution |
|--|---|---|
| Lights won't turn on | Wired incorrectly | Check if green indicator flashes or not, if yes, check the load wiring, or the load function; if not, check if the wiring is the same with the diagram |
| | Bulbs blown | Check if the bulb still functions or replace |
| | sensor in <i>ON/OFF mode</i> | Check if the red LED indicator will flash when motion detected, press big button to escape. |
| | Ambient Light too bright, than setting value on switch | Draw the curtain to make the room darker, wave hand, Check if the light turns on, if turns on, adjust light sensor value to 35Lux, or turn the switch to Occupancy mode without light sensor mode |
| | Sensor not detecting your movement | Move closer to the sensor |
| Lights stay on | Time set too long | Adjust the time delay to 15 seconds and check if the light will turn off |
| | Wired incorrectly | Check if wiring is the same with the diagram |
| | sensor in <i>ON/OFF mode</i> | Check if the red LED indicator will flash when motion detected, press big button to escape. |
| | Frequent changes in heat are being detected | Aim sensor away from heat sources, heat vent, air condition, pet |
| Lights keep turning on and off (cycling) | Changes in heat are being detected from a fixed heat source | Check the sensing area for heat source, reposition the sensor |
| | Changes in heat are being detected from a moving object | Check the sensing area for moving heat source: vehicles, pedestrians, animals, moving trees and alter the aim of the sensor |
| | Light and heat is being reflected back onto the sensor | Alter aim of the sensor or paint the reflecting surface with a dull finish |
| | Sudden temperature changes due to storms or high winds | Turn sensor off until storm passes or install in a sheltered location |

TIP: If you don't know exactly what the reason caused the trouble, and how to solve it you can try to restore the factory setting by pressing the big and small button at the same time until the red and green indicator flash for 6 times.