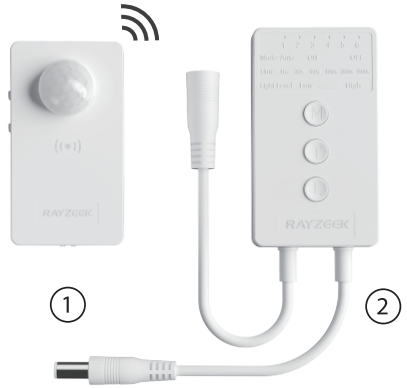
WIRELESS MOTION SENSOR CONTROLLER KITS

User Guide

FCC ID:2BFMX-RZ016W



1. RZ016W
Motion Sensor-Emitter

2. RZ016A
Controller-Receiver

How to use?
Scan for installation video

HOW DOES IT WORK ?

1 The RZ016A is the main controller, which connects with the load. The RZ016A turns On/Off the load by pressing the button or by receiving the wireless signal from the motion sensor(RZ016W).

2 If the motion sensor detects the motion, it will give out a signal to the main controller (RZ016A) to turn on the load. If the motion sensor(RZ016W) does not detect the motion, after the time delay(adjustable) expired, the main controller will turn off the sensor.

3 If the motion sensor detects the motion again, the motion sensor will give out a signal to turn on the load immediately.You can also adjust the time delay and the light level via the main controller if it's connected with a light.

SPECIFICATION

RZ016A

It's a main controller and receiver,the input voltage is 12~24VDC, the output voltage is equal to the input voltage. It's used for controling a 12~24VDC load, like LED lighting.

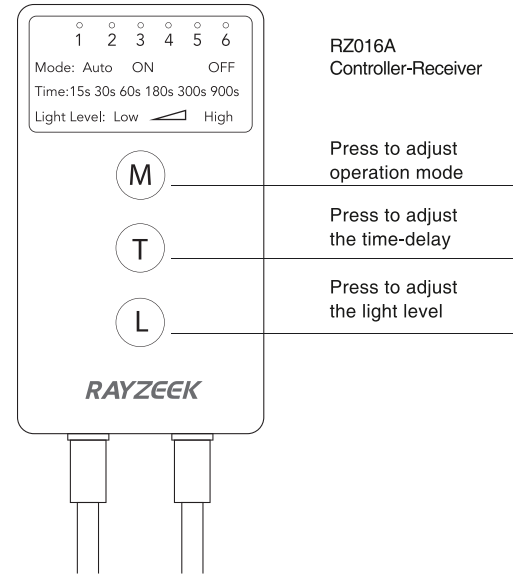
Model No.	RZ016A
Name	Controller-Receiver
Input Voltage	DC 12~24V
Output Voltage	Equal to input voltage
Load current	≤ 5A
Static power	≤ 10 uA
Mode	Auto/ON/OFF
Time Delay	15s、30s、60s、180s、300s、900s. Adjustable
Light Level	20%~100% Adjustable

RZ016W

It's a Motion sensor and a wireless emitter powered by 2pcs AAA batteries, the duration time can be at least for 1 year based on the Ultra-Low-Power technology. The RZ016W can detect movement by detecting Infrared ray emitted by human body. When it detects motion, it will give out a RF signal to the main controller RZ016A to turn on/off the sensor.

Model No.	RZ016W
Name	Motion Sensor-Emitter
Input Voltage	2pcs AAA batteries powered
Output Voltage	Equal to input voltage
Mode	1. Sensor ON/OFF
	2. Light Sensor ON(≤35lux)/OFF
Detect range	5~8 Meters
Wireless trans-mission range	7-20 Meters (7M when batteries voltage is lower than 2.5V)

FUNCTION



M: Mode	Press this button to adjust the operation Mode, there are 3 Modes for option
Auto	The main controller will be controled by motion sensor (RZ016W), turns on/off by receiving the signal from the motion sensor (RZ016W)
ON	The main controller will turn on the load all the time. The motion sensor will not take effect
OFF	The main controller will turn off the load all the time. The motion sensor will not take effect

T: Time-Delay

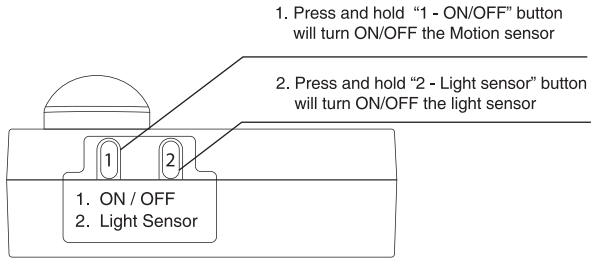
Press this button to adjust the time delay, the time setting on the sensor from the last detected motion until the lights are turned OFF.There are 6 options for time delay:15s、30s、60s、180s、300s、900s.

L: Light Level

Press this button to adjust the lighting light level. The light level will change from 20%~100%

FUNCTION

RZ016W : Motion Sensor-Emitter



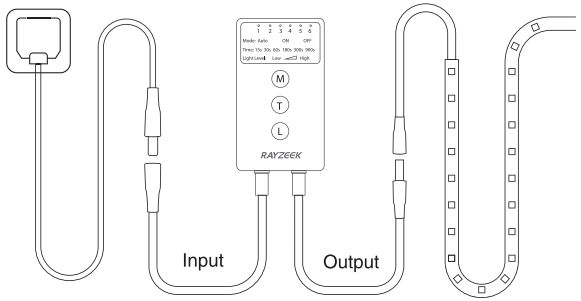
1.&2. LED Indicator Light

ON: Short flash X 2 , Long bright

OFF: Short flash X 3

1. ON/OFF	Press and hold "1- ON/OFF" button will turn ON/OFF the motion sensor.
2. Light Sensor	Press and hold "2-Light Sensor" button will turn ON/OFF the light sensor. If the light sensor is ON, the lux value default setting is 35Lux. The sensor will only detect motion when the ambient brightness is lower than 35Lux. If the light sensor is OFF, the sensor will detect motion all the time.

HOW TO USE?



12~24VDC Power Supply

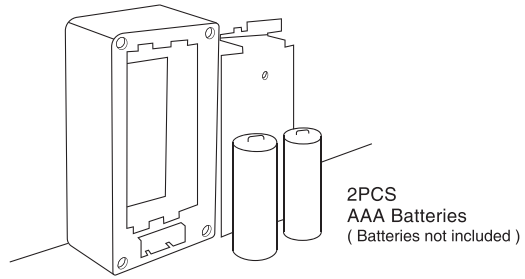
5.5x2.1mm Connector

LED strips light (12~24VDC)

HOW TO USE? & APPLICATION & CAUTIONS

RZ016A: Controller-Receiver

1. Connect RZ016A input(female) connector with 12~ 24VDC power supply, output connector (male) connector with a load, such as a LED strip light. The load will turn on.
2. Adjust the right mode, time delay, and light level.
3. The RZ016A main controller can be fixed by a sticker.



RZ016W: Motion Sensor-Emitter

1. Open the RZ016W(motion sensor) battery cover, put 2pcs AAA batteries inside.
2. Press and hold the "1 - ON/OFF" button to turn the sensor ON or OFF.
3. Press and hold the "2 - Light Sensor" button to turn the light sensor ON or OFF.
4. The RZ016W(motion sensor) can be put on any place without any mounting, and it can be fixed by a sticker or 2pcs screws for option.

Application

Widely used to control a DC 12~24V load, Led lights, Led strip lights, Other devices that require automatic illumnation or alarm functions.

Cautions

1. The products is not waterproof, can not be used in outdoor.
2. Don't expose the motion sensor to direct sunlight or lighting, big wind, near a heater or air conditioner.
3. The motion sensitivity is related with the temperature, the motion sensor is more sensitive at low temperatures and less sensitive at high temperatures.
4. The RF wireless transmission range related with the batteries voltage,if the batteries are new, the transmission range is high , if the batteries voltage are low, the transmission range will reduce to 7meters, if the batteries voltage is lower than 2.2V, the indicator LED will flash to remind to change the batteries.

TROUBLE SHOOTING

Trouble Shooting

The light does not turn on	
a	Check if the controller(RZ016A) is connected with power supply 12V~24VDC.
b	Check if the controller(RZ016A) is at "OFF" mode, push the controller (RZ016A) button "M" , turn the mode to "ON" or "Auto".
The sensor does not work	
a	Check if the motion sensor(RZ016W) is turned "OFF".
b	Check if the RZ016A (Controller) is at "ON"or"OFF" mode, push the RZ016A(Controller) button "M", turn the mode to "Auto" mode.
c	Check if the battery is well mounted, push and hold the button "1" or "2", if the red indicator LED does not flash, it means the batteries are not well mounted or the voltage is low.Mount the batteries again or change new batteries for the sensor.
d	Check if the Light Sensor of motion sensor(RZ016W) is turned "ON",if the Light Sensor is "ON", only the ambient brightness is lower than 35Lux, the sensor will work and turn the light(load) on. You can push and hold the button "2" to turn the light sensor OFF.
The light does not turn off	
a	Check if the controller (RZ016A) is at "ON" mode ,turn the mode to "Auto".
b	Check if the controller (RZ016A) time delay setting is too long, push the button"T" set the time delay to 15s
The motion sensor indicator LED is flashing all the time	
a	The batteries power is low, please change the batteries.
The RZ016W (Motion sensor) transmission range is short than before	
a	The batteries voltage is low, please change the batteries
The RZ016A (controller) can not receive signal from the RZ016W (Motion sensor)	
a	Check if the RZ016W (Motion sensor) is turned "OFF"
b	The RZ016W (Motion sensor) batteries voltage is low, please change the batteries.

FCC statements:
This device complies 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.
NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications or changes to this equipment. Such modifications or changes could void the user’ s authority to operate the equipment.

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.

Federal Communication Commission (FCC) Radiation Exposure Statement
When using the product, maintain a distance of 20cm from the body to ensure compliance with RF exposure requirements.