

CG500MS

ZIGBEE PIR MOTION SENSOR

USER MANUAL



CG500MS

ZigBee PIR Motion Sensor

VERSION 1.2

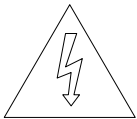
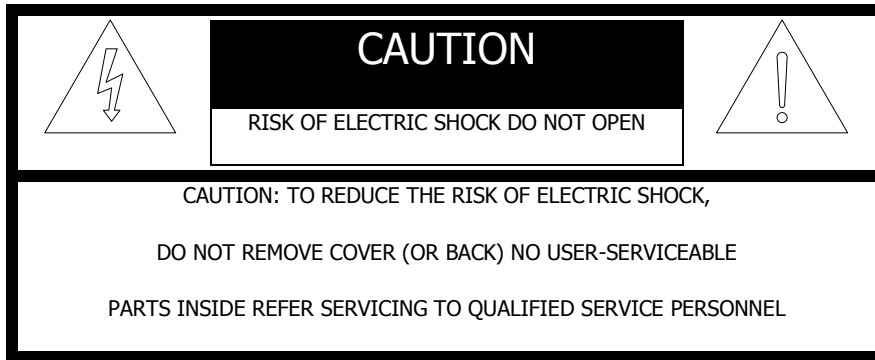
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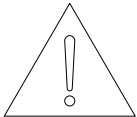
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The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

IMPORTANT SAFETY INSTRUCTIONS READ BEFORE OPERATING EQUIPMENT

This product was designed and manufactured to meet strict quality and safety standards.

There are, however, some installation and operation precautions which you should be particularly aware of.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. If the provided plug does not fit into your outlet, consult an electrician for replacement of the outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

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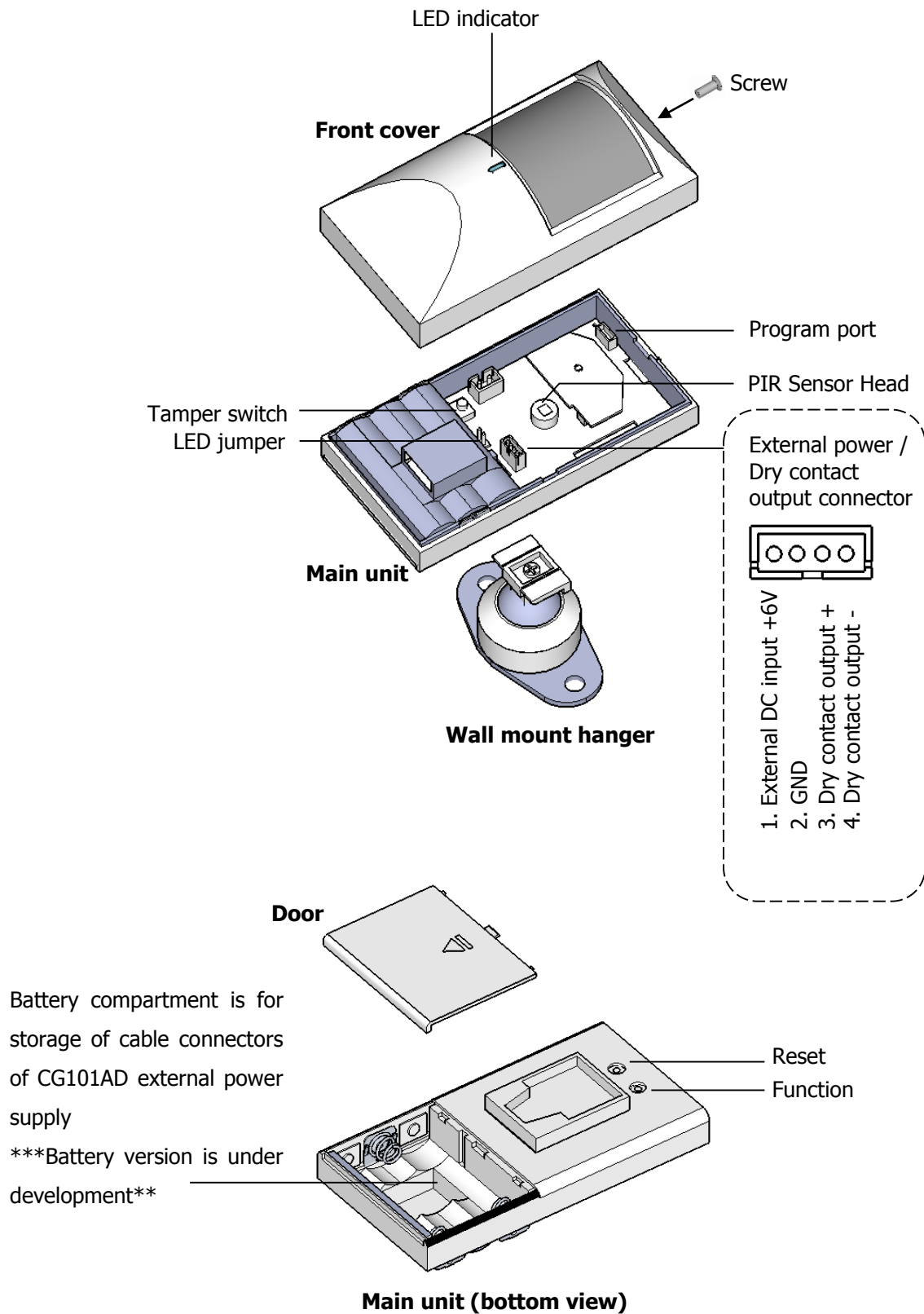
1. Introduction

Thank you for buying Citygrow's product. CG500MS ZigBee PIR Motion Sensor is designed for easy installation. The application can be home automation, energy saving and security purpose.

Description

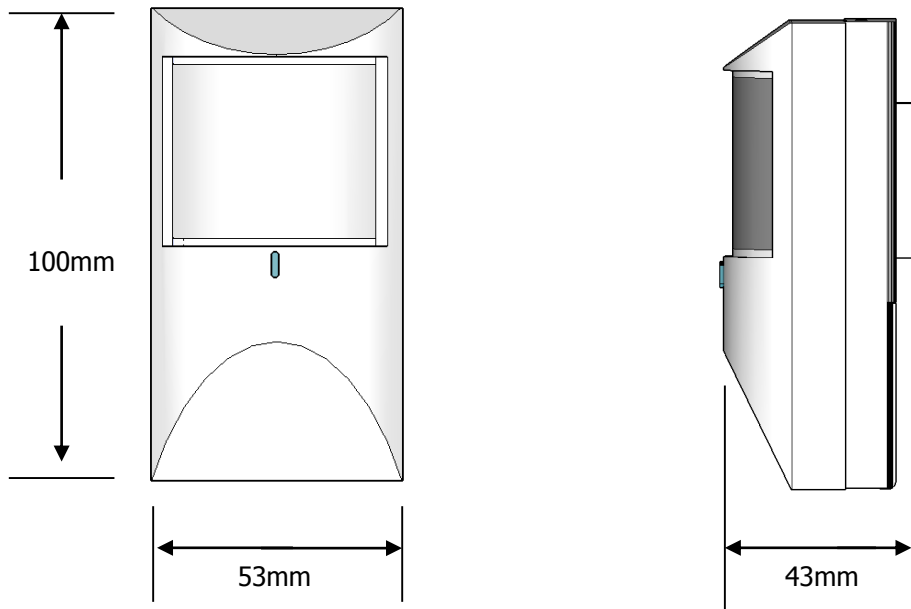
1. ZigBee wireless remote control.
2. Based on IEEE 802.15.4.
3. 2.4GHz radio frequency.
4. Motion detect to trigger a scene.
5. Scene setting can be a groups of light, curtain, AV, A/C, Fan.....etc.
6. Interface with iPhone, iPad and Android mobile devices.
7. Working with Citygrow's HomeNET App.
8. LED indicator for power and status.
9. LED indicator can be disabled by jumper setting.
10. Power connector for external AC power supply.
11. Tamper switch protection.
12. Wall mount hanger for angle adjustment
13. Dry contact output terminal provided.
14. Easy to install.

2. Understanding of the product

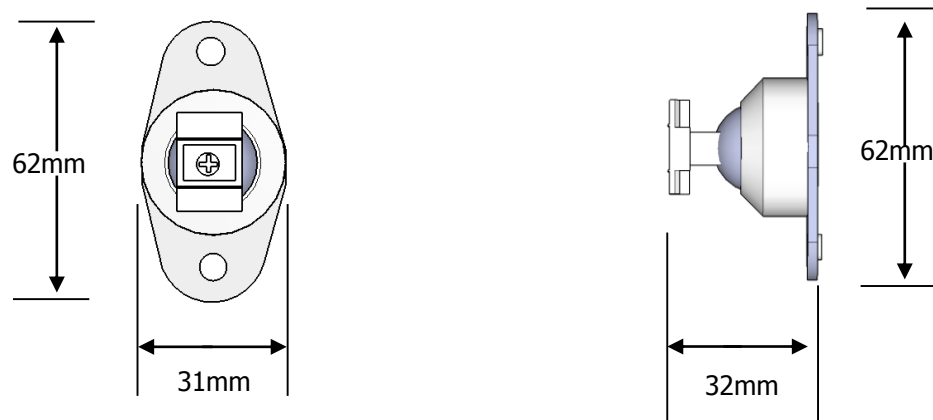


3. Dimensions

Main unit

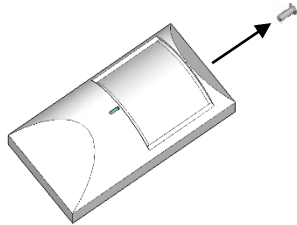


Wall mount hanger

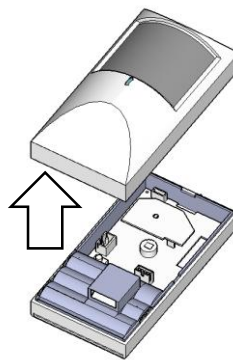


4. Installation

Step 1: Open the front cover by removing the fixing screw.



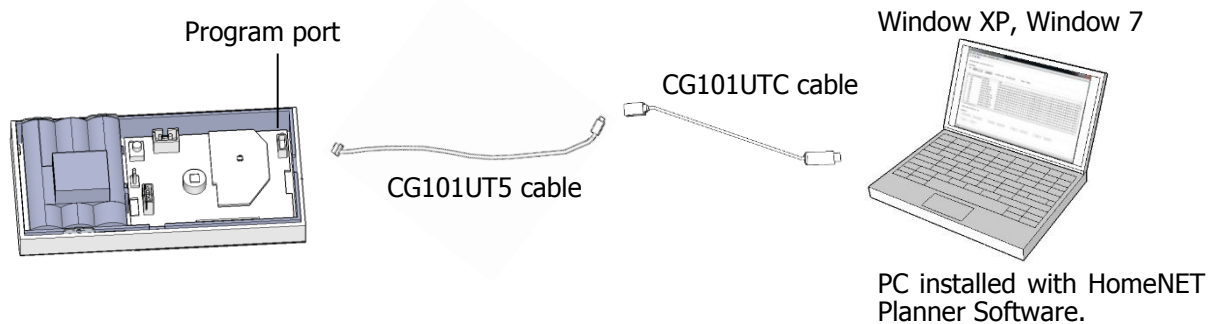
Step 2: Open the front cover.



Step 3: Connect the CG101UT5, CG101UTC cable from the program port to a PC that installed with Citygrow's HomeNET Planner Software.

Website to download: www.citygrowsys.com

Please note that you DO NOT need to insert the batteries or connect the product with external power. During this setup process, the PC will power the product through the cables.



During the setup process with HomeNET Planner, two different processes are needed. One is to assign the network ID to the PIR sensor, the second is to set the scene / mood for home automation control. Please do not disconnect the cables during the entire setup process.

Refer to the user manual of HomeNET Planner Software for setting up the product in more details.

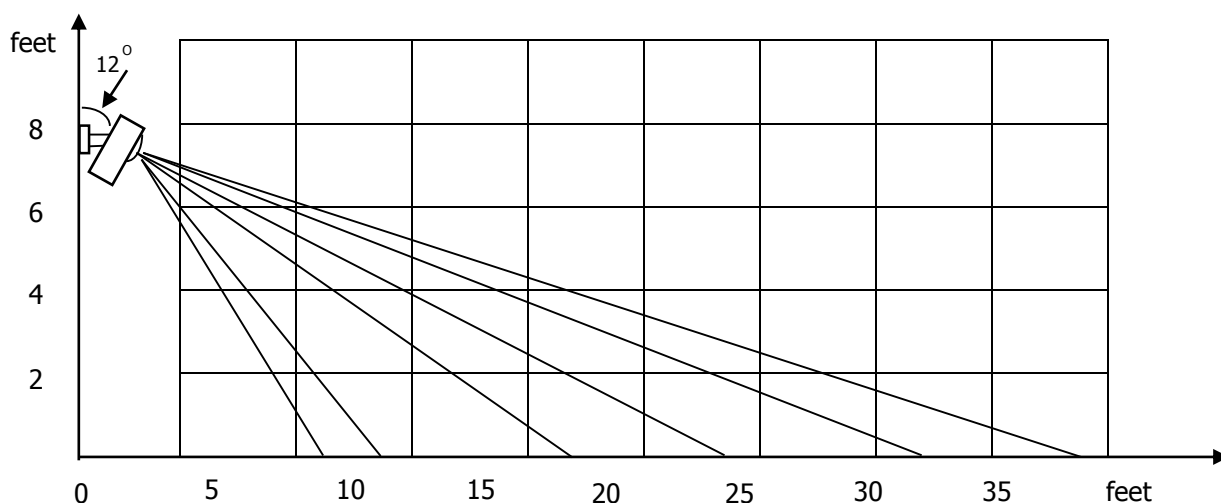
Step 5: After finishing all the setup steps with HomeNET Planner Software, please unplug the cables and put the front cover back to the main unit and fix it with the screw at the top of the product.

Step 6: Connect the CG101AD external power supply to the CG500MS. The LED indicator will be ON for 2 seconds, if a motion is detected, the LED indicator will be ON for 2 seconds again.

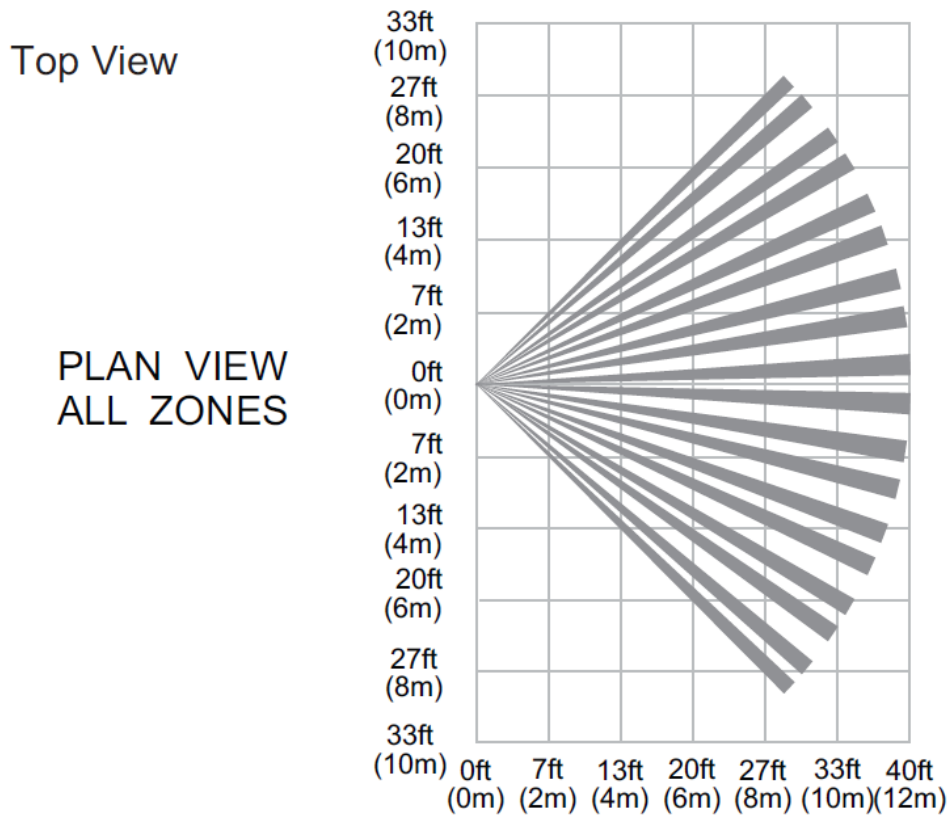
Step 7: Mount the PIR sensor at a location for your application. The following diagram will show a typical example.

Warning!! This product is not designed for outdoor use. Install this product indoor only. It is not suggested to locate this product close to big metal, heat or strong radio sources.

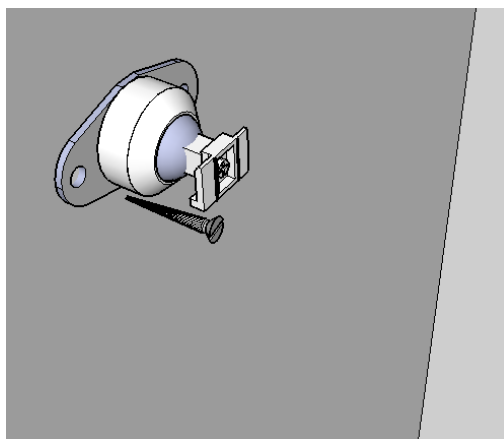
Step 7.1: Select a location to mount the PIR sensor, the follow diagram will show the PIR sensor range and angle.



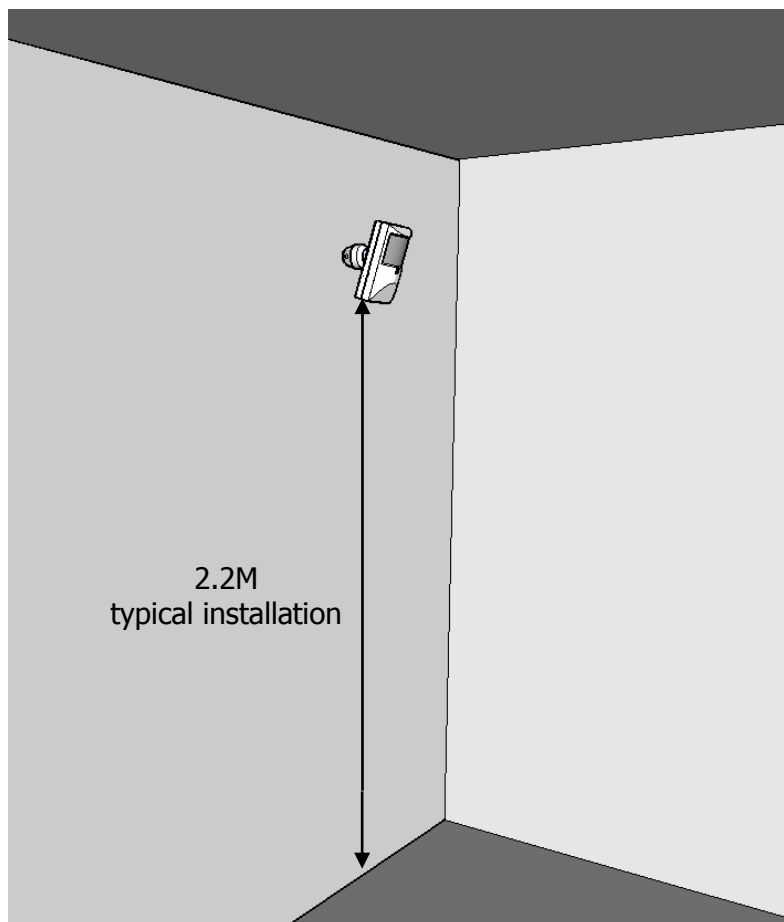
Horizontal pattern and angle



Step 7.2: Mount the wall mount hanger on the wall



Step 7.3: Insert the PIR sensor into the wall mount hanger.



Step 8: Very important !! Try a walk test and see the LED indicator is operating correctly or not. If a motion is detected, the LED will be ON again for 2 seconds.

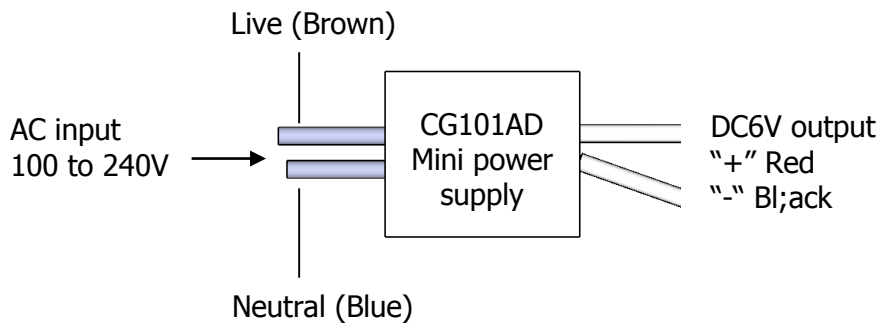
If everything is correct, remove the front cover again and remove the LED jumper. (see section 2). Then, during normal operation, the LED indicator will not be ON again.

5. Application notes

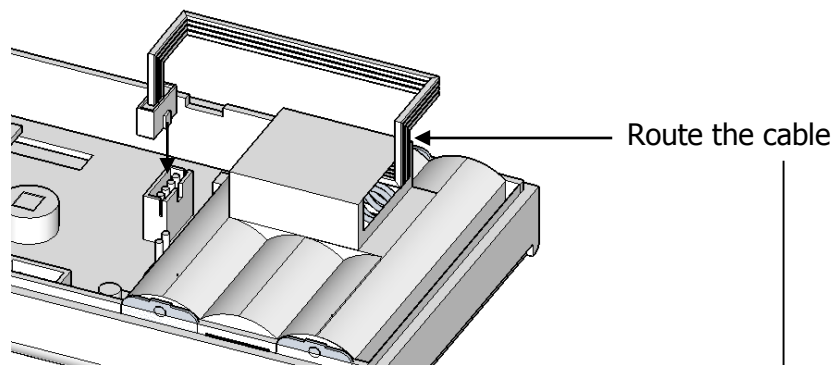
5.1. Connect the PIR with external power supply

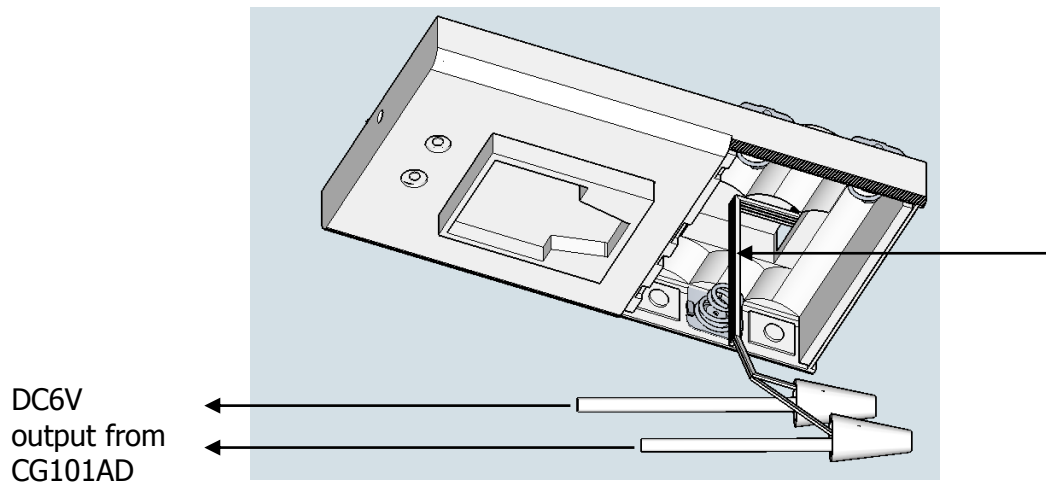
You need to connect the PIR sensor with external power supply CG101AD, and so it is no need to change the battery after a period of time.

5.1a. Connect the main power cable from the wall box to the Live and Neutral wires of the CG101AD Mini Power Supply (purchase separately).
Make sure the Live is connected to the Brown wire (Live) and Neutral is connected to Blue wire (neutral) of CG101AD.

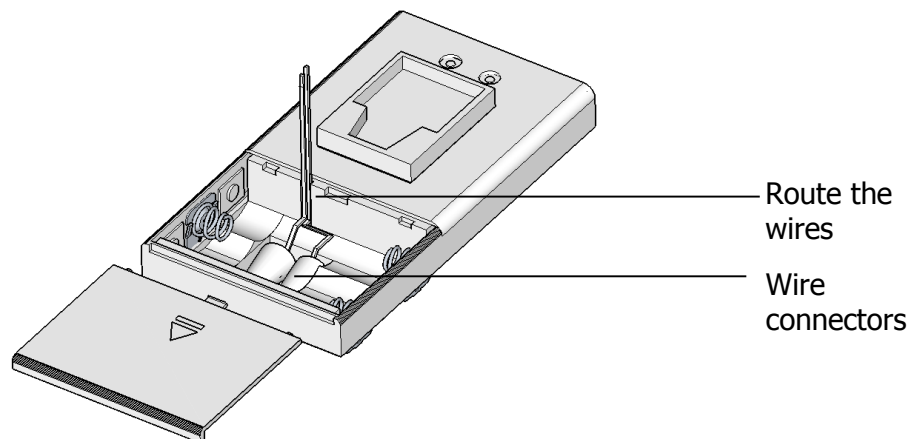


5.1b. Plug the provided external DC power connector into the external DC socket and route the cable according to the following diagram. Then connect the DC output of the CG101AD to the external DC power connector, pay attention to the polarity of the wires, black is GND, red is DC 6V.





5.1c. locate the wire connectors inside the recess area of the battery compartment and address the cable before closing the door.



5.2. Dry contact output and intelligent PIR sensing.

When PIR detects moving object, it will send the wireless signal to Citygrow's home automation system to trigger a scene that may include lighting, curtain, AV equipment, A/C Etc.

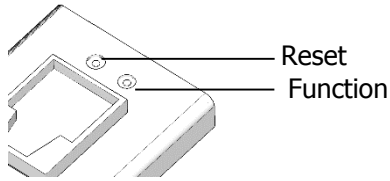
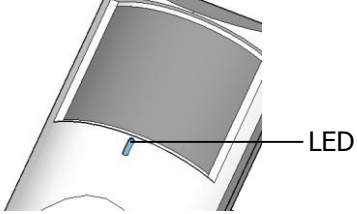
Secondly the dry contact output will also be triggered.

5.3. Tamper switch

When front cover is removed, the tamper switch will be activated. The dry contact output will be triggered to become always at "high" level. The main unit will also send the wireless signal to the home automation system. The action of the home automation can be preset in HomeNET Planner Software. (Please refer to HomeNET Planner User Manual).

6. Clear Memory

In order to perform the Clear Memory function, please follow the below steps:

 <p>Reset Function</p>	<p>STEP 1</p> <ul style="list-style-type: none"> - - Press and HOLD Function button
	<p>STEP 2</p> <ul style="list-style-type: none"> - CONTINUE holding onto the Function Button. - Press and release the Reset Button once.
 <p>LED</p>	<p>STEP 3</p> <ul style="list-style-type: none"> - Wait until the LED Indicator begins BLINKING. - Release the Function Button.
	<p>STEP 4</p> <ul style="list-style-type: none"> - Press and release the Function Button again to stop blinking.
	<p>STEP 5</p> <ul style="list-style-type: none"> - Press and release the Reset Button. - The memory inside of the product has now been cleared.

7. Specification

Item	Specification
Power requirement	1. External DC6V input (Powered by CG101AD AC input, DC output Mini power supply)
ZigBee Wireless communication	<ol style="list-style-type: none"> 1. ZigBee wireless remote control. 2. Based on IEEE 802.15.4. standard 3. 2.4GHz radio frequency
RF communication distance	100M (open area)
PIR detection	<ol style="list-style-type: none"> 1. Up to 5m radius at 25 deg C at 2.2m height 2. Up to 7m radius at 25 dec C at 5m height <p>** depending on the mounting, angle and temperature**</p>
Operational temperature	0 deg C to 40 deg C
Humidity	5% to 95% non-condensing
Storage	-20 deg C to 70 deg C
Dimension L X W x D (mm)	100x53x43mm