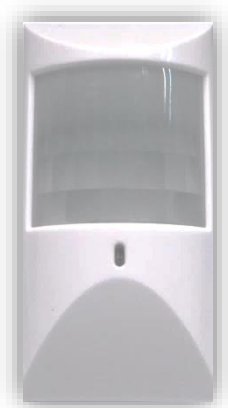


CG500MS

ZIGBEE MOTION SENSOR

USER MANUAL



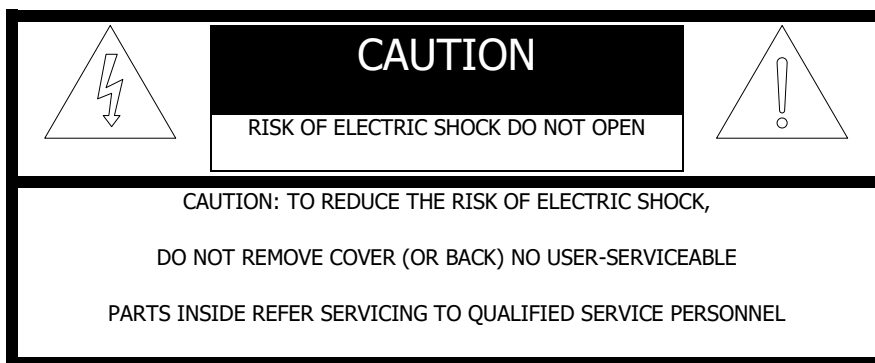
VERSION 1.2

24 FEBRUARY, 2020

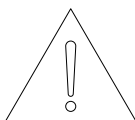
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The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric 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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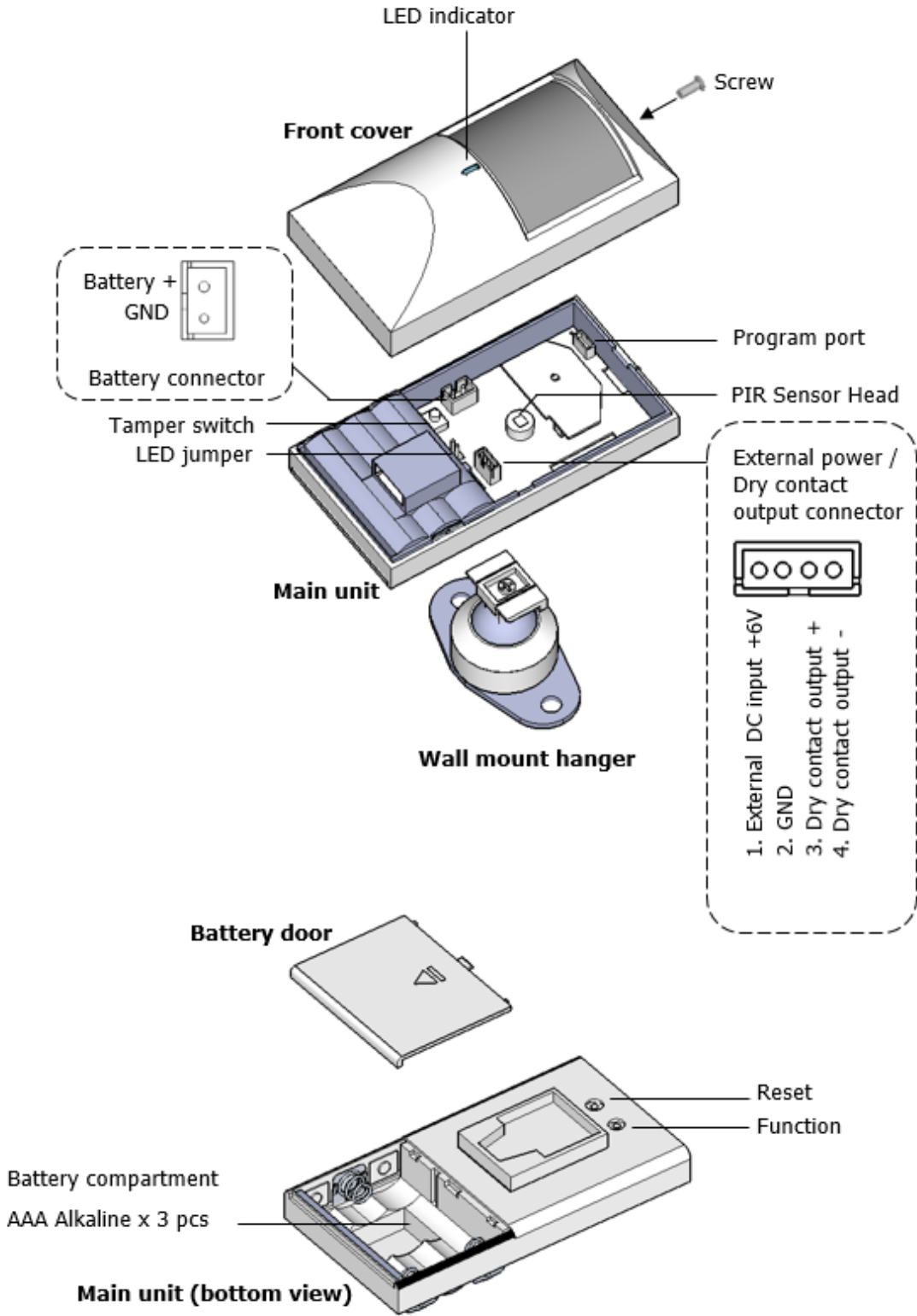
1. Introduction

Thank you for choosing CityGrow's product. CG500MS ZigBee Motion Sensor is highly-functional, user-friendly and installation-friendly. The CG500MS is specially designed for CityGrow home automation system, benenift to energy saving and security purpose.

Description

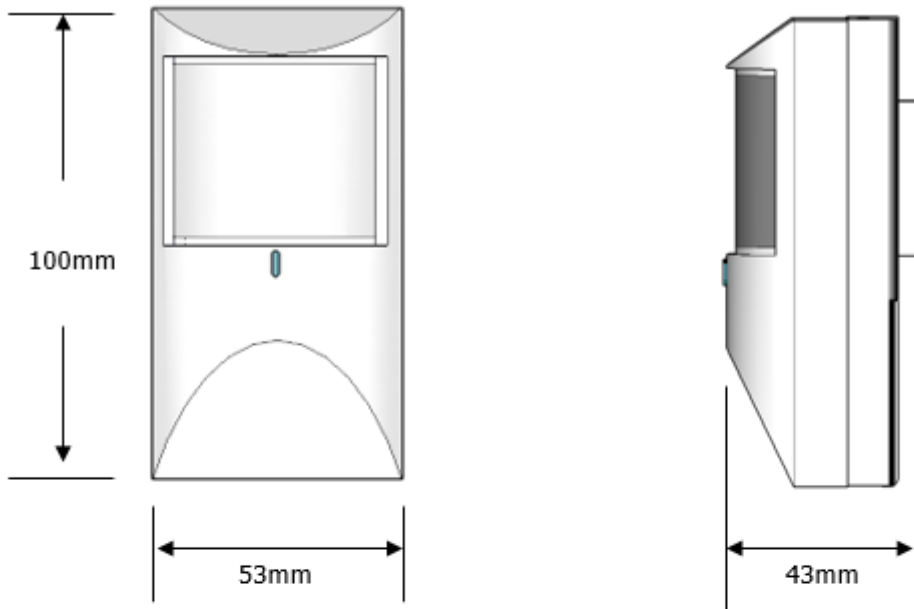
1. ZigBee wireless remote control.
2. Based on IEEE 802.15.4.
3. 2.4GHz radio frequency.
4. Detect motion detect to trigger a scene.
5. Scene control on a group of devices such as lights, curtains, air-conditioners and audiovisual devices.
6. Support mobile devices using iOS and Android platforms.
7. Fully compatible with HomeNet2 mobile App.
8. LED status indicator.
9. LED indicator can be disabled by jumper setting.
10. Powered by 3 x AAA alkaline batteries.
11. Alternative external DV6V input AC power supply – CG101AD Mini Power Supply (Not included).
12. Tamper switch protection.
13. Wall mount hanger for angle adjustment.
14. Dry contact output terminal provided.
15. Easy to install
16. Designed for indoor use.

2. Understanding the product

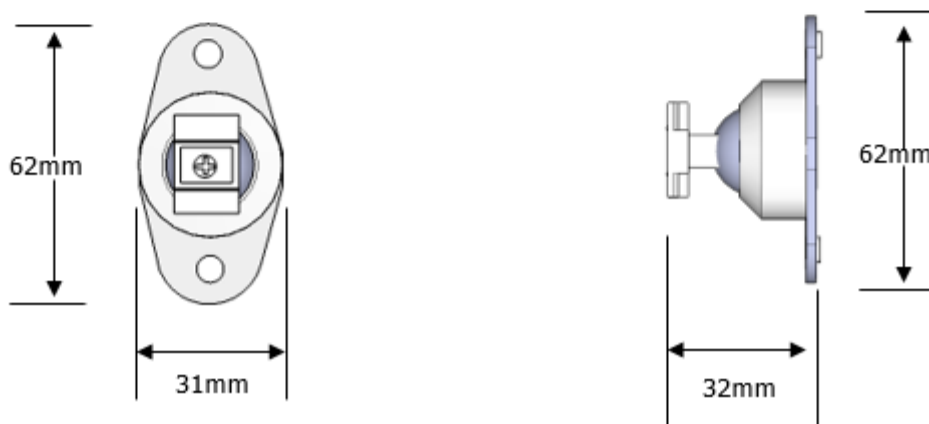


3. Dimension

Main unit

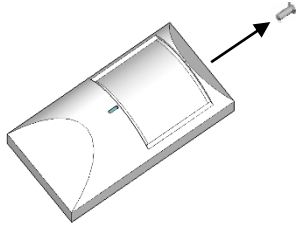


Wall mount hanger

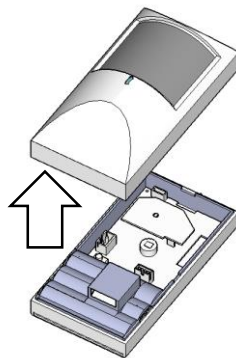


4. Installation

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

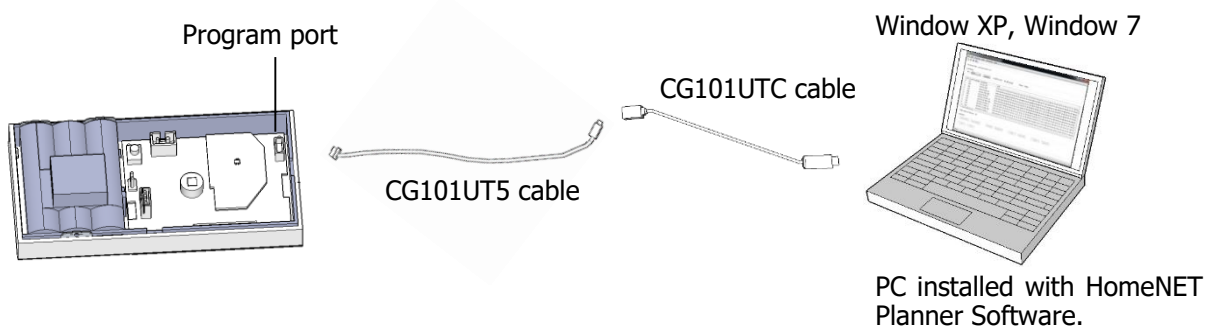


Step 2: Open the front cover.



Step 3: Connect the CG101UT5 and CG101UTC cables to a PC which installed with CityGrow's HomeNET Planner 2 Software.

The CG500MS Wireless Motion Sensor will be powered by the connected PC via the cables, no battery is required in this procedure.



To setup the CG500MS on the HomeNET Planner 2 Software, user should assign a network ID to the CG500MS for performing scene control in the automation system.

Warning: The cables should be remained connected during the setup procedure.

Refer to the user manual of HomeNET Planner 2 Software for product setup details.

Step 4: Upon completion of setup on HomeNET Planner 2 Software, unplug the cables and put the front cover back to the main unit then fasten screw at the top.

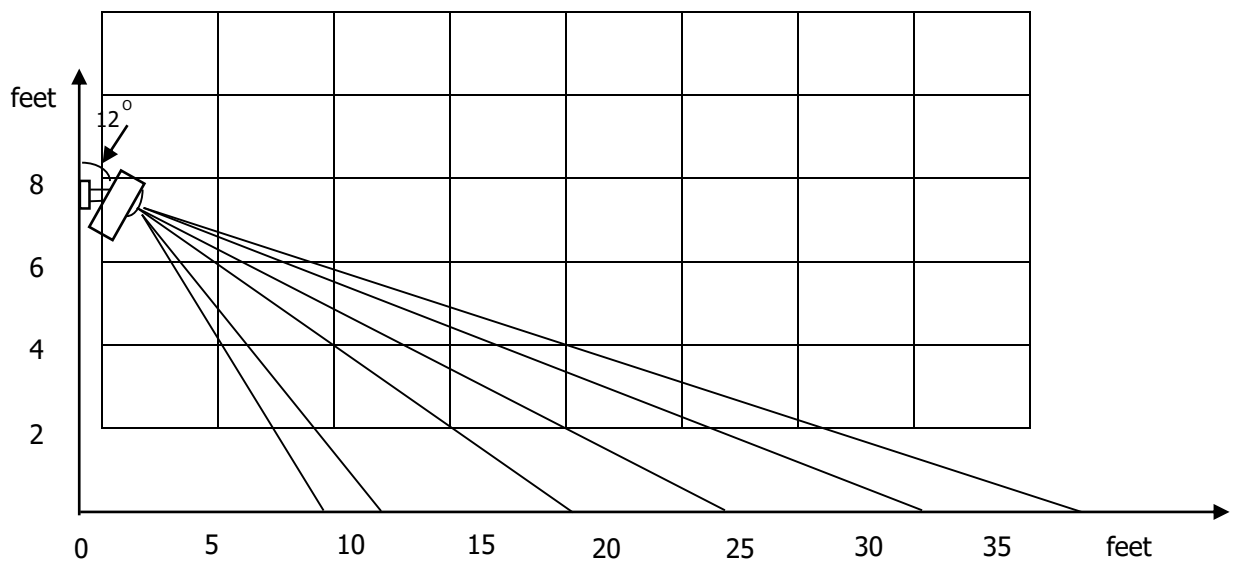
Step 5: Insert 3 pcs of new AAA alkaline batteries into the battery compartment properly. The LED indicator will be brightened up for 2 seconds, if a motion is detected, the LED indicator will be brightened up for 2 seconds again.

Step 6: Mount the CG500MS at a desired location. The following diagram will show a typical example.

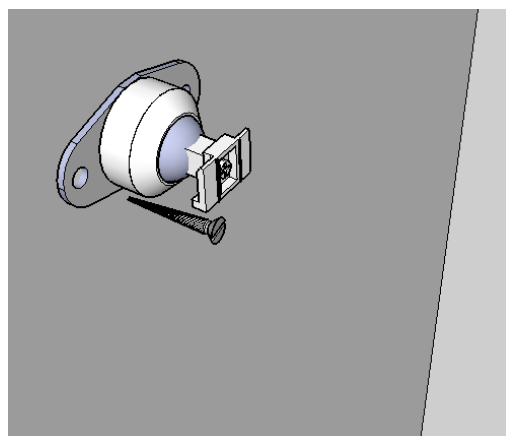
Warning: This product is designed for indoor use only

It is not recommended to install the product near heat or strong radio sources.

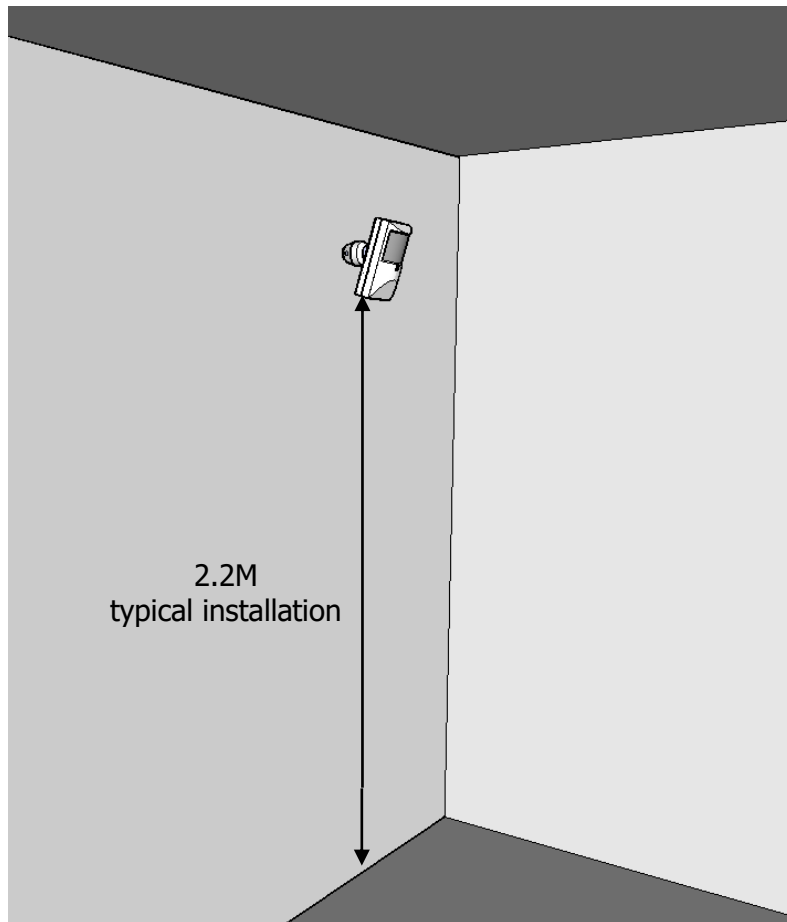
Step 6.1: Select a location to mount the CG500MS, the following diagram will show the motion sensor range and angle.



Step 6.2: Mount the wall mount hanger on the wall



Step 6.3: Insert the CG500MS sensor into the wall mount hanger.



Step 7: Make a movement and test if the CG500MS sensor is operating normally. If a motion is detected, the LED will be brightened up for 2 seconds.

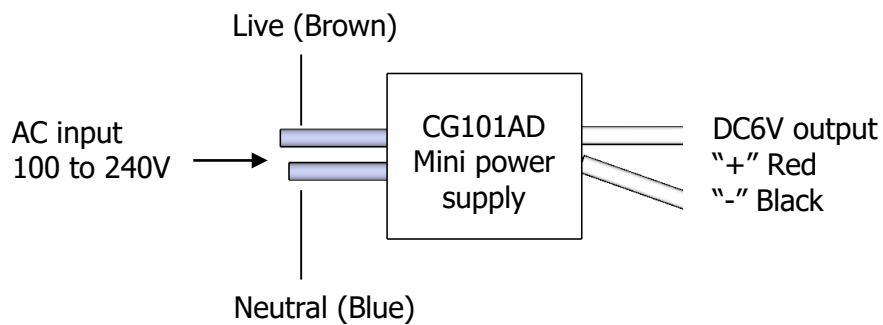
5. Application Notes

5.1. Connect the CG500MS with external power supply

Connect the CG500MS with external power supply CG101AD Mini Power Supply.

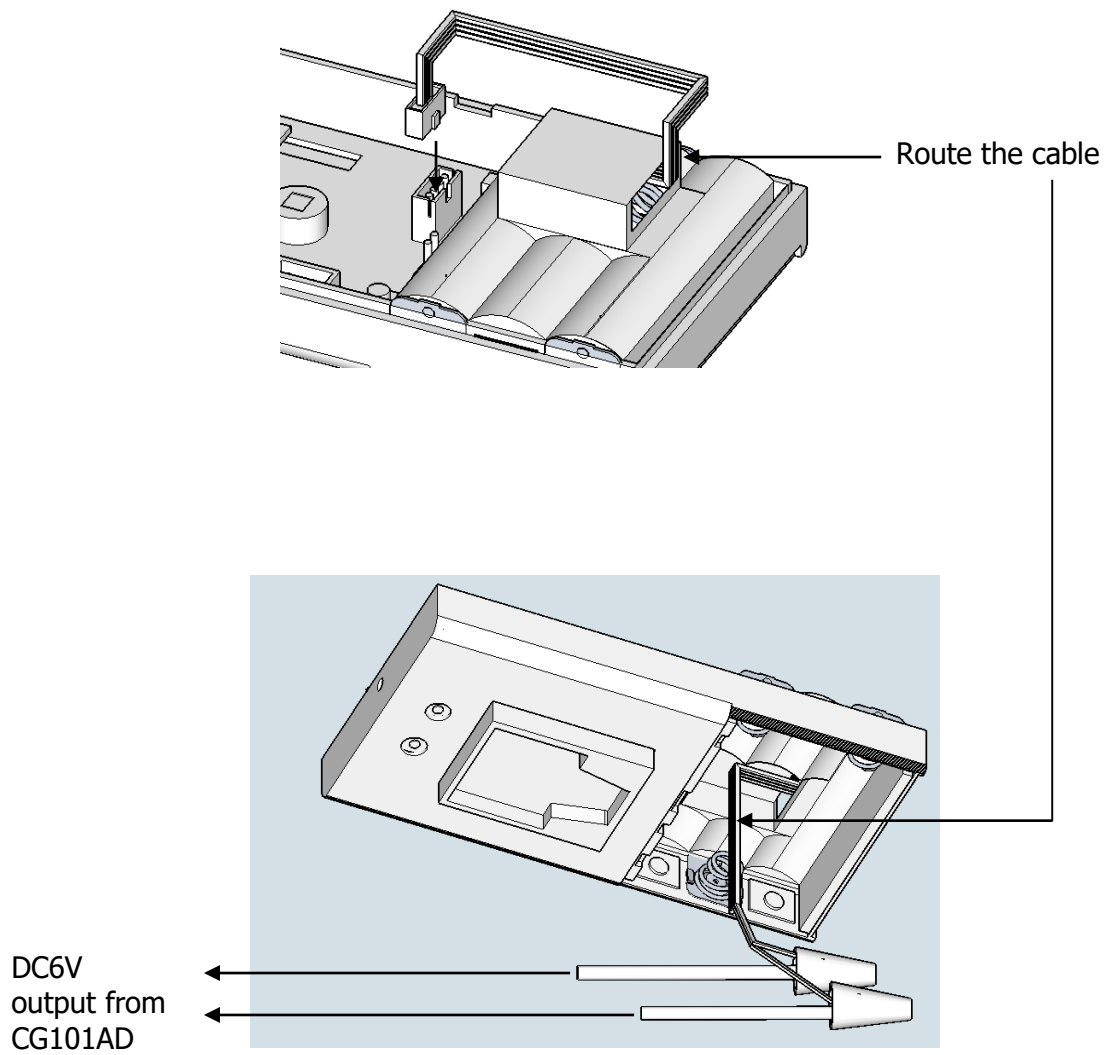
5.1a. Connect the main power cable from the wall box to the Live and Neutral wires of the CG101AD Mini Power Supply (purchase separately).

Make sure the Live is connected to the Brown wire (Live) and Neutral is connected to Blue wire (neutral) of CG101AD.

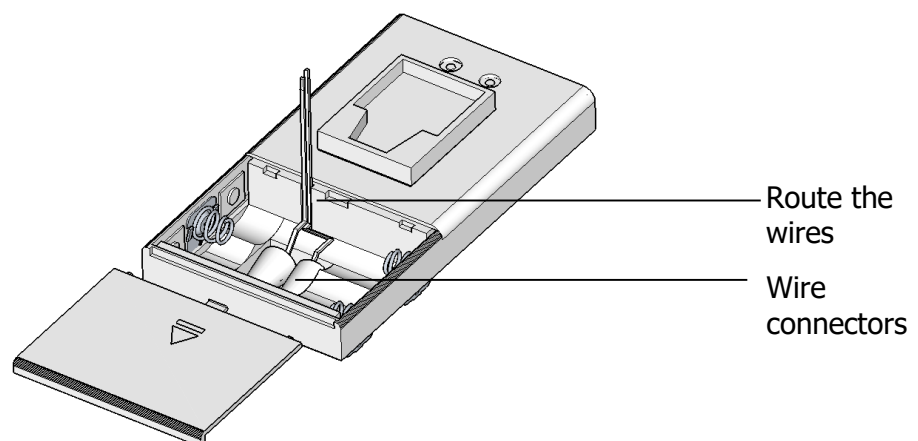


5.1b. Plug the external DC power connector into the external DC socket and route the cable according to the following diagram.

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 battery cover.

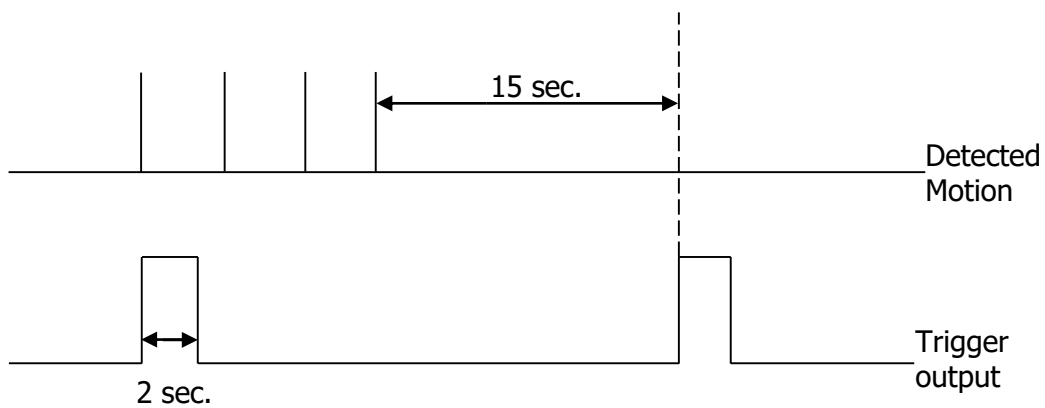


5.2. Dry contact output and intelligent PIR sensing.

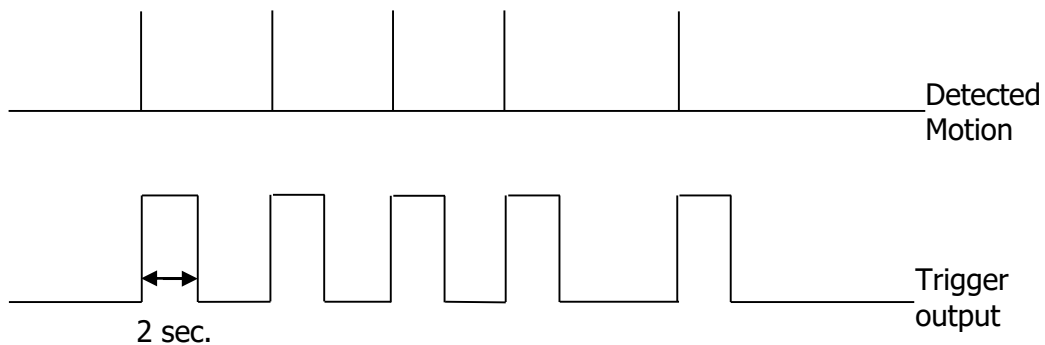
When CG500MS sensors detects any movement, it will send wireless signal to CityGrow's home automation system to trigger a scene, which may include lighting, curtain, audiovisual equipment and air-conditioner.

Dry contact output will also be triggered.

The triggering pattern is as follows:



The pattern above will help to save the battery life. If an external power supply is connected to the external power connector, the trigger output will be automatically changed to the following pattern.



5.3. Tamper switch

When the front cover is removed, the tamper switch will be activated. The dry contact output will be triggered to “always-high” level. The main unit will also send wireless signal to CityGrow’s home automation system. The corresponding action of CityGrow’s home automation can be preset in HomeNET Planner 2 Software. (Please refer to HomeNET Planner 2 User Manual).

6. Specification

Item	Specification
Power supply	AAA alkaline battery x 3 pcs Alternative external DC6V input (Powered by CG101AD, Mini Power Supply)
Communication	ZigBee wireless remote control. Based on IEEE 802.15.4. standard 2.4GHz radio frequency
RF communication distance	100M (open area)
PIR detection	1. Up to 5m radius at 25 °C at 2.2m height 2. Up to 7m radius at 25 °C at 5m height ** depending on the mounting, angle and temperature**
Estimated battery life	1 year (varies on actual usage)
Operating temperature	0°C to 40°C
Operating humidity	5% to 95% non-condensing
Unit Dimension L x W x D (mm)	100 x 53 x 43mm
Storage	-20°C to 70°C