

# **CG102RV3**

ZIGBEE REMOTE

# **USER MANUAL**



CG102RV3

ZigBee Remote

VERSION 1.0

17 FEBRUARY, 2020

#### Disclaimers and Copyright

Nothing contained in this publication is to be construed as granting any right, by implication or otherwise, for the manufacture, sale, or use in connection with any method, apparatus, or product covered by letters patent, or as insuring anyone against liability for infringement of letters patent.

Efforts have been made to ensure the accuracy and reliability of the data contained in this publication; however, CityGrow Energy Systems Limited makes no representation, warranty, or guarantee in connection with this publication and hereby expressly disclaims any liability or responsibility for loss or damage resulting from its use or from the use of any product or methodology described herein; for any violation of any federal, state, or municipal regulation with which this publication may conflict; or for the infringement of any patent from the use of this publication. Nothing contained in this publication should be viewed as an endorsement by CityGrow Energy Systems Limited of any particular manufacturer's products.





### **CAUTION**



RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,

DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE

PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL



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.
- 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.



### **Table of content**

1.	Introduction	1
2.	Understanding the product	2
3.	Dimension	3
4.	Getting started	4
5.	Operating instruction	5
6.	Charge the battery	6
7.	Specification	7



#### 1. Introduction

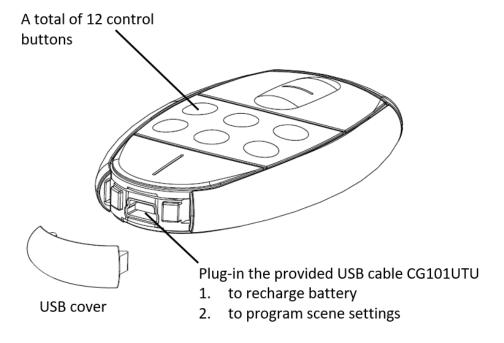
Thank you for choosing CityGrow's product. CG102RV3 ZigBee Remote is highly-functional, user-friendly and installation-friendly. The CG102RV3 is a ZigBee remote controller that enables remote control lighting devices, curtains, air-conditioners and IR devices, specially designed for CityGrow home automation system.

#### **Description**

- 1. ZigBee wireless remote control.
- 2. Based on IEEE 802.15.4.
- 3. 2.4GHz radio frequency.
- Remote control on CityGrow's smart devices such as switches, dimmers and IR devices.
- 5. Support scene control on lighting, curtain, air-conditioning and IR devices.
- 6. Control up to 12 customized settings.
- 7. Control up to 50 lights/device independently.
- 8. Support multiple remotes within the same ZigBee wireless network.
- 9. Support two-way control function.
- 10. 128bits AES high-speed and secure encryption transmission.
- 11. Transmission range up to 100M.
- 12. Powered by inbuilt rechargeable lithium battery.
- 13. Long batter life.
- 14. Rubber keypad.
- 15. Handy design.
- 16. Compact keychain size.

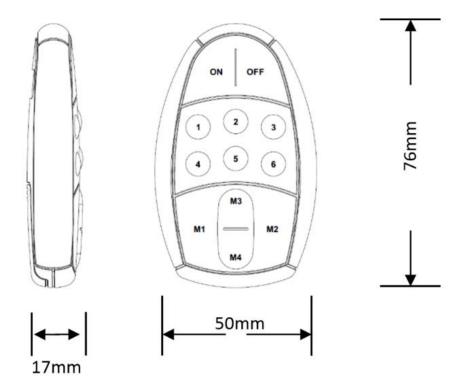


### 2. Understanding the product





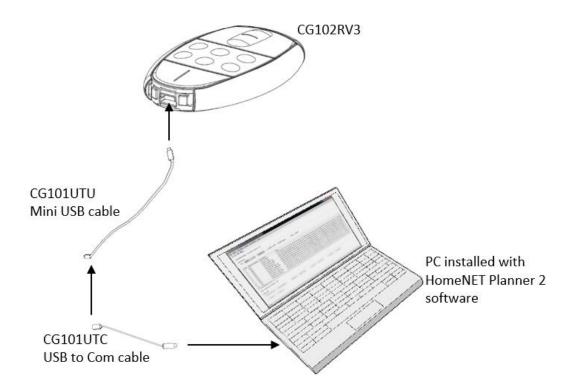
## 3. Dimension





### 4. Getting started

- 4.1. Complete the installation of all the CityGrow's ZigBee products before setting up the CG102RV3 ZigBee Remote.
- 4.2. Complete the program setup of all the installed CityGrow's ZigBee products.
- 4.3. To setup scene control function with the CG102RV3 ZigBee Remote, the scene control settings on other CityGrow control plate, such as CG100H4-MD and CG800H4-MD, should be completed in prior.
- 4.4. Connect the CG102RV3 with the USB port of a DC5 adaptor (with a minimum supply of 100mA) with the CG101UTU Mini USB Cable (included) to recharge the battery of the CG102RV3 for 2 hours before setup.
- 4.5. Add the CG102RV3 to your home wireless network, please get the following items ready:
  - a. CG101UTU mini USB cable (included)
  - b. CG101UTC USB to Com cable (not included, purchase separately)
  - c. A Windows PC installed with CityGrow's HomeNET Planner 2 software.
  - d. The project setup file with the wireless network settings.
- 4.6. Connect the cables according to the following diagram.

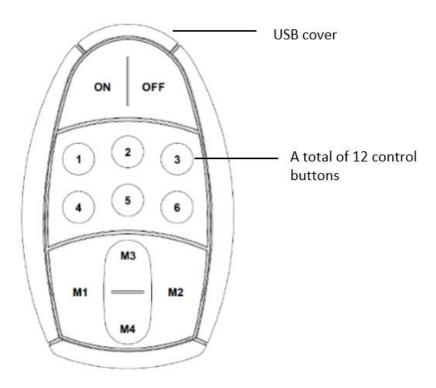


4.7. Refer to HomeNET Planner 2 manual for detailed setup for the CG102RV3.



### 5. Operating instruction

- Press the control button on the CG102RV3 once to enable the preset scene.
- The CG102RV3 will send RF signal to control the installed devices, such as lights, curtains, air-conditioners or IR devices though the wall mounted ZigBee switches or control plates.
- Upon completion of the scene enabling function, the CG102RV3 will automatically switch back to sleep mode, to prolong battery life.





### 6. Charge the battery

- Remove the USB cover at the front of the product.
- Connect the USB port with the CG101UTU cable.
- Connect the other of the CG101UTU cable with a DC5V adaptor (minimum 0.1A) or connect to the USB port of a computer to charge the battery.
- Charge the inbuilt battery for 2 hours.
- Upon completion of charging, press the button to test the functions.



7. Specification

Item	Description
Power supply	Rechargeable inbuilt lithium battery
	DC5V 0.1A
ZigBee wireless communication	ZigBee wireless remote control
	Based on IEEE 802.15.4
RF frequency	2.4GHZ
Featured function	12 control buttons - support up to a maximum of 12
	customized scene control settings
	Two-way control function
	Automatic sleep mode to prolong battery life
	Mini USB battery recharge port
	Full charge time: 2 hours (DC5V 0.1A)
Current consumption	Peak current: 80mA max.
	Sleep current: 10uA typical
Maximum number of devices can be programmed in scene setting	50
Remote control distance	100M
(M, line of sight)	
Operating temperature	0°C to 40°C
Operating humidity	5% to 95% non-condensing
Unit Dimension L x W x D (mm)	76 x 50 x 17mm
Storage	-20°C to 70°C