



CG201 SERIES Wireless Home Automation System

User Manual



CityGrow Technology
www.citygrow.org

IMPORTANT NOTES

PLANNING

To fully understand this **CG** product and its proper functions, please read this manual before installation.

IMPORTANT

1. All **CG** products can be installed in standard BS4662 single switch boxes with internal dimensions of 65mm x 65m x 35mm .
2. This device requires a neutral AC connection
3. This system requires a COORDINATOR, Model number is CG100C. The appearance of this COORDINATOR is same as an one gang light switch. It works as the heart of the system, it also works same as an one gang light switch. In order to identify the COORDINATOR, you can either look at the model label at the rear cabinet, or looking at the label "COORDINATOR"----- located inside the switch cover.
4. Within a network, you only need one COORDINATOR, more than one COORDINATOR is not allowed.

WIRELESS REMOTE CONTROLLER

The Wireless remote controller operates at 2.4GHz, IEEE802.15.4, The operating range is approximately 60 meters in an open area point to point, subject to environment conditions. The control distance can be extended if you install more devices at different locations.

PRODUCT SAFETY

In accordance with BS4662, all switch products can be installed in a standard switch box. The **CG** unit complies with EN60669-1 , EN60669-2 (for switch, dimmer) and BS1363(for AC socket). Furthermore, the effective radiated power of the device does not exceed 100mW which complies with Office of the Telecommunication Authority (OFTA), Hong Kong telecommunication order.

! WARNING! Improper use or installation can cause SERIOUS INJURY, DEATH or LOSS/DAMAGE OF PROPERTY.

! WARNING! Install in accordance with all national and local electrical codes.

! WARNING! Have a professional electrician do the installation

! Important! CityGrow is NOT liable for any damage incurred with the misuse of this product.

! Important! Do NOT use a power screw driver to install this device

! Important! Pre-setup only could be done by professional worker or manufacturer agent.

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REGULATORY COMPLIANCE

FCC RF Radiation Exposure statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

FCC ID: WSFCG201AS-EM

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.

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.

IMPORTANT! Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

TROUBLESHOOTING

If **CG** unit does not function properly after installation, please refer to the TROUBLESHOOTING GUIDE section

CHOOSING THE RIGHT LOCATION

It is important to select the right location for your light switch, dimmer and AC socket. **It should be:**

1. Easily accessible for programming and other operations.
2. In a location away from water, humidity, direct sunlight and dust.
3. The performance of wireless network relies on the wireless connection between the devices location in your house. During installation, pay attention that the range and performance of the wireless control system is highly dependent on
 - a. Distance between devices
 - b. Layout of the house
 - c. Walls separating devices
 - d. Electrical equipment located near the devices
 - e. Refer to Quick Installation Guide for the selection of installation location

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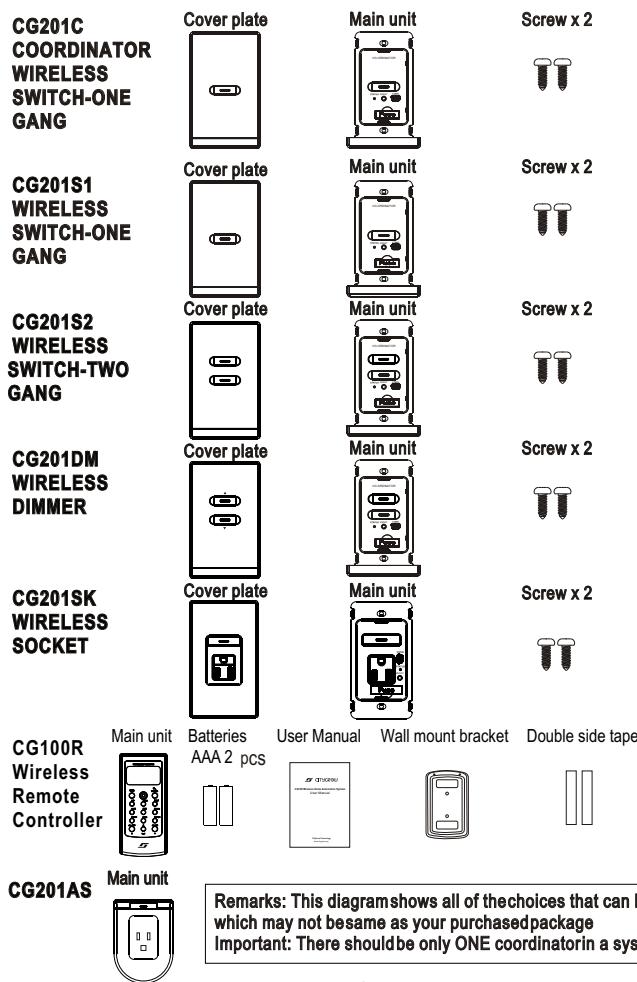
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1.CG201 PACKAGE COMPONENT



2.INTRODUCTION

Thank you for selecting **ST** product , this intelligent Home Automation system is working on IEEE 802.15.4 Communication standard. It offers beneficial features like

- 1.Wireless control at 2.4Ghz
- 2.Wireless control distance can be extended by locating different **ST** devices at different location , these devices form a communication network.
- 3.Bi-directional communication that you can either control or monitor the status of your **ST** devices
- 4.Simple installation procedures
- 5.Simple wiring, extra data cable is NOT required
- 6.Central control box is NOT required
- 7.Energy saving, NO minimum load is required

Other than the above, with one Wireless remote controller, you can control 10 different groups of device and five different light moods. The Wireless remote controller can handle maximum 50 devices registration (add the device to groups or moods), and maximum 200 control actions in different groups and moods. That means you can totally control up to 50 devices (if you have bought 50 lightswitch, dimmer or sockets). Maximum device handling details of the Wireless remote controller are stated in section 9.4 of this manual.

You can also pre-program more than one Wireless remote controller into your house, because in some cases you may want to put more Wireless remote controller in your house for different users or locate several Wireless Remote Controller in different rooms.

The TIMER function allows you to pre-program the automatic ON TIME or OFF TIME of your lightswitch, dimmer or AC socket to save the energy.

The Mood (Scenario) lighting function allows you to create your favourite scenario lighting effect.

The ALL ON and ALL OFF function is convenience for you to switch on or switch off all devices by a single button when you come or leave your house.

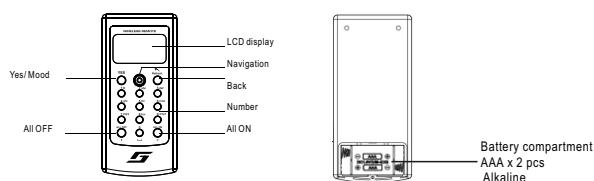
This product operates as a standard wall-mount switch, dimmer and AC socket, it can be retrofitted in standard wall-box.

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3. UNDERSTANDING OF WIRELESS REMOTE CONTROLLER

Wireless Remote Controller

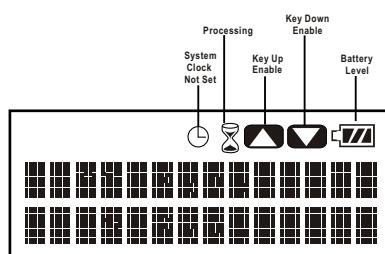


3.1 Buttons

Buttons	Screen Display	Operation	Action
Yes/Mood	Device Status Page	Press	Switch to Mood Control: press 1-5 to select mood
	Menu	Press	Go to next menu
Navigation	Device Status Page	Left/Right	Device Control Page (Gp 1-5 Gp 6-10)
	Device Status Page	Down	Show system date and time
	Device Status Page	Press	Go to Menu
	Device Status Page	Up	Cancel current control process
	Menu	Up/Down	Scroll menu items
		Press	Go to next menu Select current menuitems
Number	Device Status Page	Press	Control a ON/OFF of device ingroup
	Menu	Press	Enter dimmer Level control page when all the device in group are dimmer
All OFF	Device Status Page	Press	Turn OFF allthe devices
	Edit Name	Press	change case
All ON	Device Status Page	Press	Turn ON allthe devices
	Edit Name	Press	Backspace

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3. UNDERSTANDING OF WIRELESS REMOTE CONTROLLER



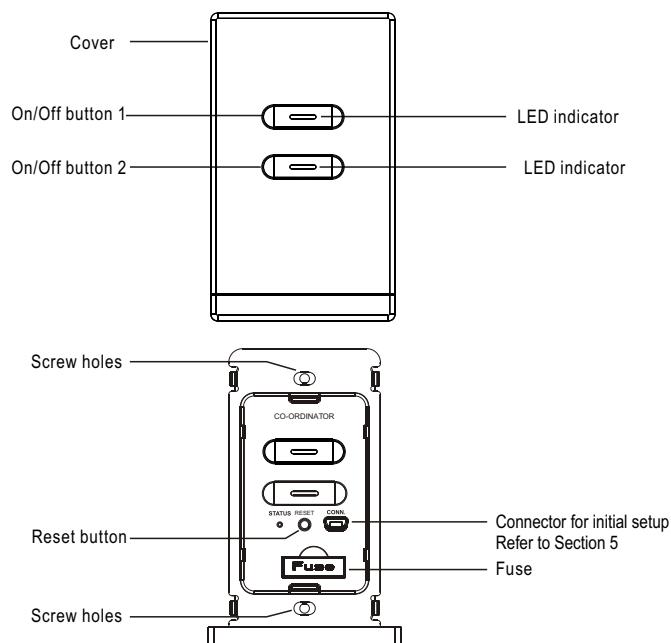
3.2 LCD Display Icons

Icon	Display	Indication
System Clock Not Set	(Flashing)	The system clock is not set
Processing		Processing request, busy
Key Up Enable/ Key Down Enable		Operation of navigation button up anddown is enabled
Battery Level		Battery full Battery half Battery Low Need to replace battery immediately

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4. UNDERSTANDING OF THE DEVICES

4.1 Two Gang Light switch

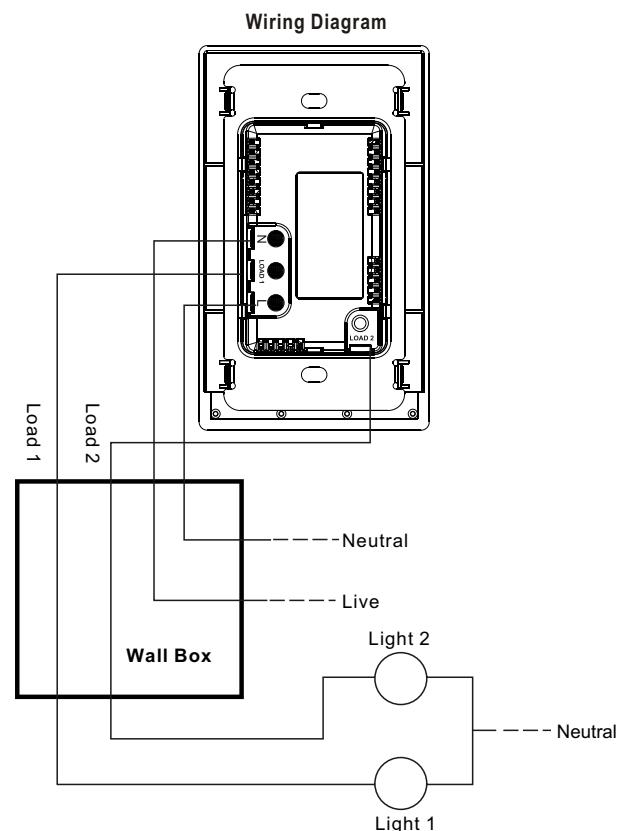


Remarks : 1. For one gang lightswitch , same as above but only have button 1.
2. For dimmer, same as above but Δ and ∇ are printed on the cover, to indicate up anddown function ofthe dimmer buttons

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4. UNDERSTANDING OF THE DEVICES

4.1 Two Gang Light switch

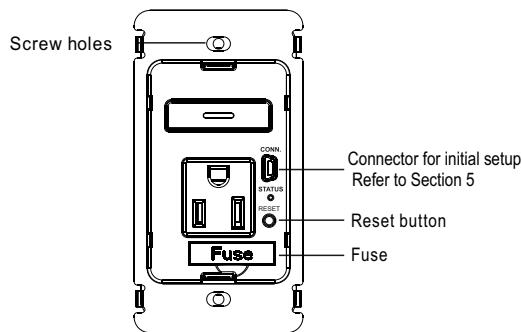
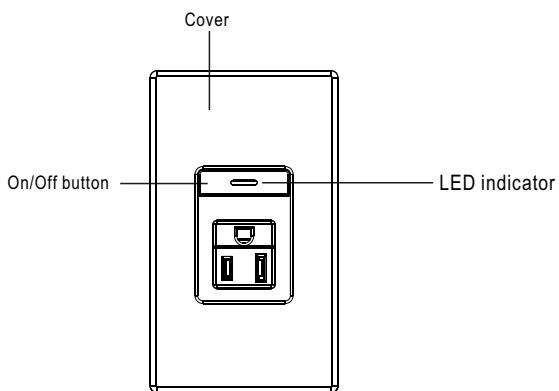


Remarks : for one gang lightswitch and Dimmer, same as above but only one load can be connected

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4. UNDERSTANDING OF THE DEVICES

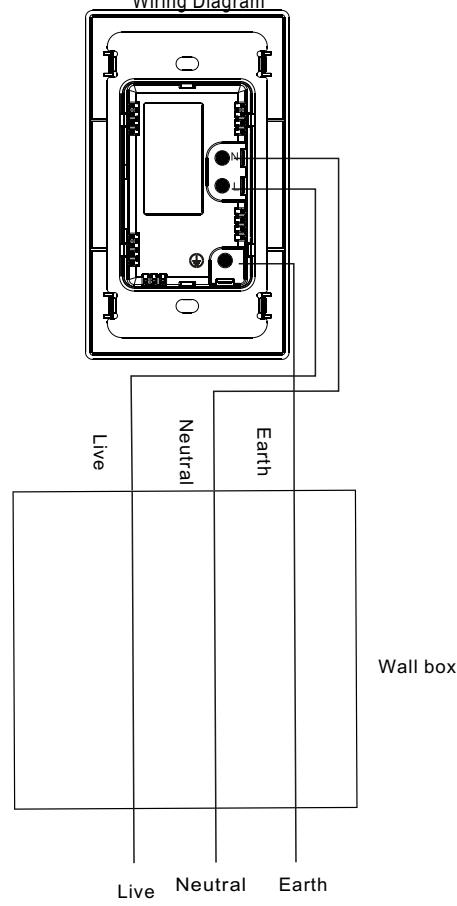
4.2 AC socket



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4. UNDERSTANDING OF THE DEVICES

Wiring Diagram



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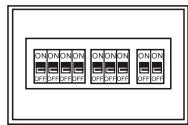
5. INSTALLATION

Coordinator : It is recommended to be installed at the center of the whole system.

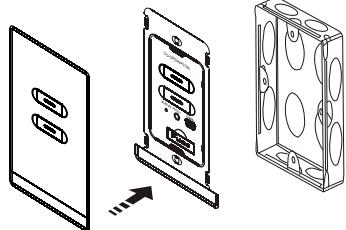
Other device: During installation, user shall check the signal coverage of the location for installation

5.1 INSTALLATION METHOD

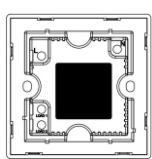
- a) Always turn off the power source at the Miniature Circuit Breaker (MCB) before installation, maintenance or servicing of light fittings



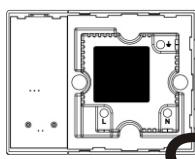
- b) Loosen the screws of the original wall switch, remove the switch and disassemble the wiring.



- c) Connect the main power cable to the Live and Neutral terminals at the rear cabinet of the devices. Then connect the load cable to the Load terminals



One gang, Two gang lightswitch
Or dimmer



AC socket

Sk

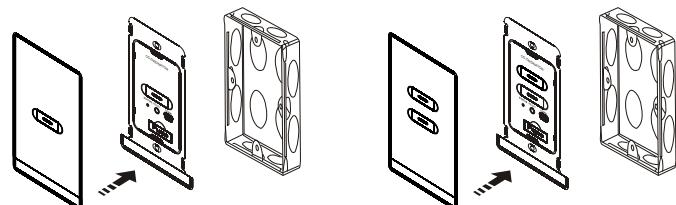
* Please Refer To Appendix 12.4 For The Wire Specification*

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5. INSTALLATION

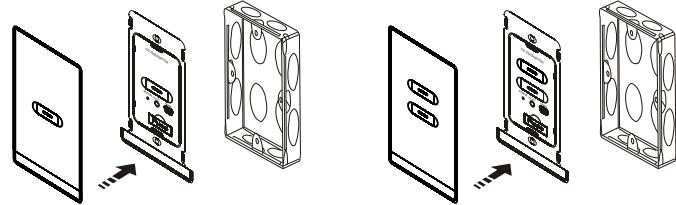
- d) Fasten the screws of all terminals and check that the wires are properly secured

- e) Retrofit the switch into the standard switch box and mount it on the wall by fastening the two screws at the rear of the switch box

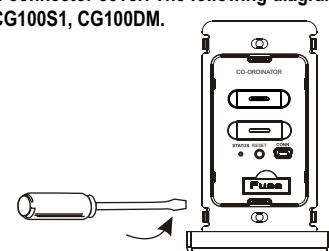


- f) Pre-program the system according to the procedures indicated in section 6 to 11

- g) Clip the Cover Plate of the switch , Dimmer or AC socket back in place



Remarks: in the following sections, you will be required to connect the provided cable to connect to the USB shape connector of the light switch or AC socket or Dimmer. Please use a screw driver to open the connector cover. The following diagram is for CG100S2, do the same for CG100C, CG100S1, CG100DM.



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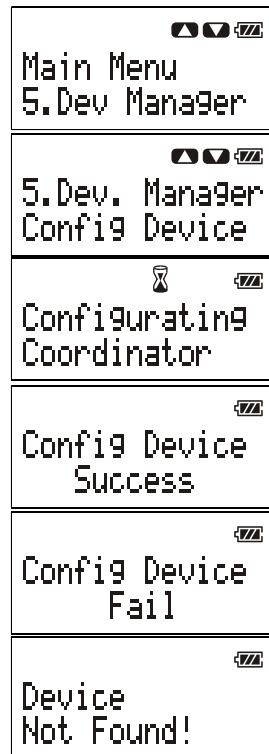
6. Device Configuration

This section provides information for user to link up their CG100 devices to form a wireless network. The device configuration is fundamental process for wireless control of each CG100 device. User is required to configure the Coordinator (CG100C) primarily before configuring the other CG100 devices. Also, the system allows only ONE Coordinator (CG100C) is configured in the network. The procedures to configure the coordinator and the other CG100 devices are illustrated in following sections.

6.1 Coordinator

To configure the coordinator, perform the following steps.

- 1 -Power up the Coordinator (CG100C) and Wireless remote controller(CG100R).
- 2 -Connect the Wireless remote controller to the Coordinator through the provided cable.
- 3 -Press the "Navigation" button of the Wireless remote controller to enter Menu, and then scroll to "Dev. Manager" of the Menu.
- 4 -Press "Yes" button to enter "Dev. Manager" Menu, and then scroll to find "Config Device".
(Note: All the device in system need to re-configure if the Coordinator is configured)
- 5 -Press "Yes" button to configure the Coordinator.
(Note: The icon  is indicating that Wireless remote controller is configuring the Coordinator)
(Note: The process to configure coordinator may take a minute)
- 6 -When the coordinator is configured successfully, the Wireless remote controller will show "Success". During the configuration of Coordinator, if "Fail" or "Device Not Found" is shown on the display, please check the power of the Coordinator and the connection between the Coordinator and Wireless remote controller. Then perform step 1 to step 5 again.



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6. Device Configuration

6.2 Device

When the Coordinator (CG100C) is configured successfully, user may configure other CG100 devices to establish network connection with the Coordinator. To achieve the best system performance, user is strongly advised to test the system coverage of the location that is planned to install the CG100 devices. On the other hand, when a CG100 device is configured successfully, the system coverage will be increased by the newly added CG100 device (Figure 6-1).

Therefore, user is strongly recommended to install and configure the CG100 devices which are close to the Coordinator firstly for extending the system coverage for other CG100 devices which are far from the Coordinator. The procedures to test the system coverage and to configure the CG100 devices are illustrated in Section 6.2.1 and Section 6.2.2.

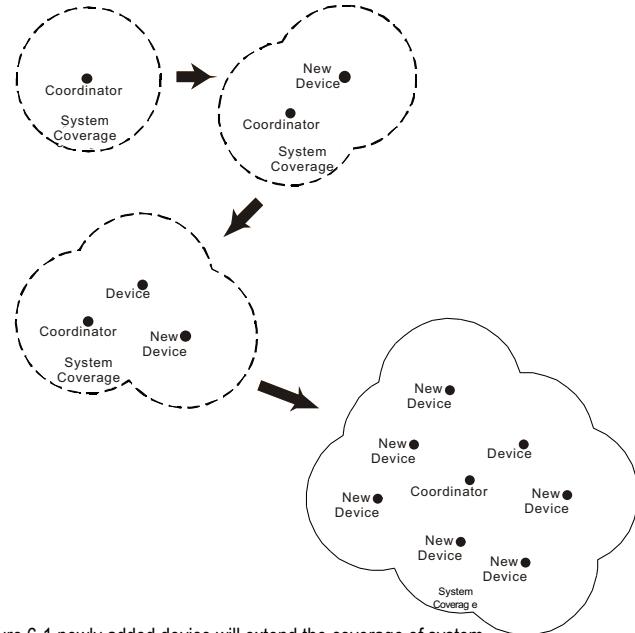


Figure 6-1 newly added device will extend the coverage of system.

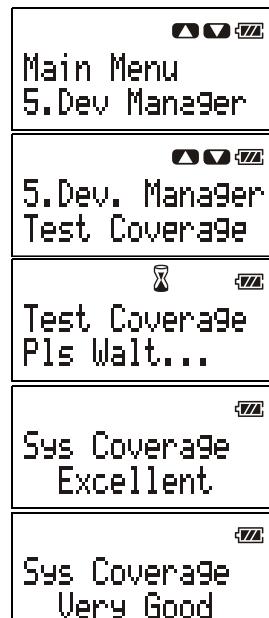
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6. Device Configuration

6.2.1 Test Coverage

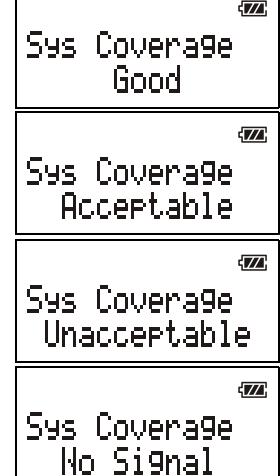
To test the system coverage before configuring a new device, perform following steps

- 1 -Place the Wireless remote controller (which is used to configure the Coordinator before) to the location which is planned to install the new device.
 - 2 -Press the "Navigation" button to enter Menu, select "Dev. Manager", and then go to "Test Coverage" and press "Yes".
(Note: The icon  is indicating the Wireless remote controller is testing the network coverage.)
 - 3 -After several second, the testing result will show on the screen.
- If the result is either Excellent, Very Good, Good or Acceptable, user can install the new device to the tested location. Otherwise, user may need to change the installation location



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6. Device Configuration



After finding a correct location for device installation, user may install the new CG100 device to such location and prepare to configure the new device.

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6. Device Configuration

6.2.2 Configuration

To configure a new CG100 device, perform following steps.

- Power up the new CG100 device.
- Connect the Wireless remote controller (which is used to configure the Coordinator before) to the new device through the provided cable.
- Press the navigation button to enter Menu, then select "Dev. Manager" and go to "Config Device".
- Press "Yes" button to configure the new device.
(Note: The icon  is indicating the new device is trying to connect to the network).
- If the device is configured successfully, the wireless remote controller will show "Config Device Success".
During the configuration of new device, if "Fail" or "Device Not Found" is shown by wireless remote controller, please check the power of the new device and the connection between the new device and wireless remote controller. Then perform step 1 to step 4 again.



Repeat steps stated in Section 6.2.1 and Section 6.2.2 to install the rest of the devices

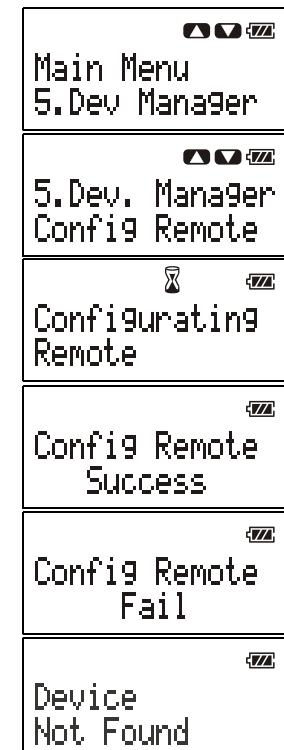
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6. Device Configuration

6.3 Wireless Remote Controller

During the configuration of coordinator, the wireless remote controller will be self-configured automatically. User may use such wireless remote controller to configure other new device in the network. On the other hand, when there are more than one wireless remote controller within the system, user shall configure the other wireless remote controller (which are not used to configure coordinator) manually before using the wireless remote controller. To configure the handheld remote manually, perform following steps.

- Connect the new wireless remote controller to any successful configured CG100 Coordinator/device through the provided cable.
- Press the navigation button to enter Menu, then select "Dev. Manager" and go to "Config Remote".
- Press "Yes" button to configure the wireless remote controller.
- When the wireless remote controller is configured successfully, the wireless remote controller will show "Config Remote Success".
During the configuration of wireless remote controller, if "Fail" or "Device Not Found" is shown by the wireless remote controller, please check the power of the Coordinator/device and the connection between the Coordinator/device and wireless remote controller. Then perform step 1 to step 3 again



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7. Group Device

After the CG100 devices are installed and configured, user may assign a corresponding button (1-10) on Wireless remote controller to control one or more devices (maximum three), which is called group control. The procedures of adding device to a group and controlling grouped devices are illustrated in Section 7.1 and Section 7.2 - 7.3 respectively.

7.1 Add Device to Group

To add device to group control, perform following steps.

- Connect the Wireless remote controller (which is configured before) to the desired device (eg. One-gang Switch, Two-gang Switch, Dimmer Switch, Socket, etc.) through the provided cable.
- Press the "Navigation" button to enter Menu, then select "Group Config".
(Note: All the groups will show on the screen, user may scroll to view the groups.)
- Press "Yes" button to select the desired group.
(Note: If there is no device added to the group, the Handheld will show "(Empty)".)
- Scroll down to find "Add Device"
(Note: If there are three devices already added to the group, the "Add Device" function will be disabled and user may not found such function within the group.)
- Press "Yes" button to add device
The Wireless remote controller will show "Press Desired Device", and the status LED of connected device will keep flashing.
- Press the desired device control button on the device to add the device to the group.



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7. Group Device

For example, when the Wireless remote controller is connecting with the Two-gang Switch and user press the second button of the switch, the device control function of the second button of the switch will be added to the group.

- When the device is added to the group successfully, the Wireless remote controller will show "Add Device Success". If "Fail" or "Device Not Found" is shown on the Wireless remote controller during the above process, please check the power of the Coordinator/device and the connection between the Coordinator/device and Wireless remote controller.
- And you can also check the memory information of Wireless remote controller(see Section 9.4). Then perform step 1 to step 6 again.

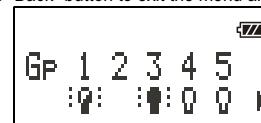


7.2 On/OFF Control

After the devices are added to different groups, user may control the group of device(s) through a single button (1 - 10 buttons) on the Wireless remote controller.

Important: Please ensure the wireless remote controller is within the system coverage before controlling any device.

Following examples show the procedures to control a group of device.
Press and hold the "Back" button to exit the menu and show the device status page.



From the above example of device status page:

- Group 1: Device(s) is/are HALF ON
- Group 2: No device in Group 2
- Group 3: Device(s) is/are ON
- Group 4: Device(s) is/are OFF
- Group 5: Device(s) is/are OFF

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7.Group Device

User can use the "Navigation" button and push to right to show the status of group 6 to 10.



From the above example of device status page:

- Group 6: Device(s) is/are OFF
- Group 7: Device(s) is/are ON, and the timer function of one or more device(s) within group 7 is/are enabled (see Chapter 10).
- Group 8: Device(s) is/are ON
- Group 9: Device(s) is/are HALF ON
- Group 10: Device(s) is/are OFF

User may press any button 1-10 on Wireless remote controller to turn ON/OFF of the device. For example, the statu(s) of device(s) in group 8 is/are ON. When user presses button "8" on Wireless remote controller, the Wireless remote controller will turn OFF all the devices in group 8. After all the devices in group 8 are OFF, the status of devices will feedback to wireless remote controller and the status of group 8 will be changed from :1: to 0.

Another example, the statu (s) of device(s) in group 9 is/are HALF ON. When user presses button "9" on Wireless remote controller, the Wireless remote controller will turn OFF all the devices in group 9.

After all the devices in group 9 are OFF, the status of devices will feedback to Wireless remote controller and the status of group 9 will be changed from :0.5: to 0.

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7.Group Device

7.3 Dimmer Level Control

When all the devices within a group are dimmers (CG100DM), user may set an exact dimming level to control the dimmers. Following example show the procedures to set dimming level of a group of device.

Press and hold the "Back" button to exit the menu and show the device status page. Assume all the devices in group 3 are dimmers, press the button "3" to enter dimmer level control page.



Dimmer level control:

- Left: Dim-down.
- Right: Dim-up
- Up: Turn ON (100%)
- Down: Turn OFF (0%)

7.4 Get Status

User may update the status of devices in device status page after the remote is powered ON or wake-up. Following example show the procedures to get the current status of devices of in groups.

Important: Please ensure the Wireless remote controller is within the system coverage before getting status of devices.

Press and hold the "Back" button to exit the menu and show the device status page. Press the "Back" button to update status.



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7.Group Device

7.5 Delete Device

To delete a device in a group, perform following steps.

- 1- Press the "Navigation", button to enter Menu, then select "Group Config", select the target group and select the target device in the target group.
- 2- Press "Yes" button to enter the device option menu, and then select "Del Device".
- 3- Press "Yes" button again to delete the device. The Wireless remote controller will show "Confirm Del?", user may press "Yes" button again to confirm deleting the device or press "Back" button to cancel.
- 4- If the device is deleted successfully, the Wireless remote controller will show "Complete!".



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7.Group Device

7.6 Delete All Devices in Group

To delete all devices in a group, perform following steps.

- 1- Press the "Navigation" button to enter Menu, then select "Group Config". Select the target group and scroll down to find "Del All Device"
- 2- Press "Yes" button to delete all the devices in the target group. The Wireless remote controller will ask user to confirm deleting all the device in target group, user may press "Yes" button again to confirm deleting the devices or press "Back" button to cancel.
- 3- If all the devices are deleted successfully, the Wireless remote controller will show "Complete!"



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7. Group Device

7.7 Delete All Devices in All Groups

To delete all devices in all groups, perform following steps.

- 1- Press the "Navigation" button to enter Menu, then select "Group Config" and scroll down to find "Del All Gps"
- 2- Press "Yes" button to delete all devices in all groups. The Wireless remote controller will show "Del All Device in Groups?", User may press "Yes" button again to confirm deleting the devices or press "Back" button to cancel.
- 3- If all the devices are deleted successfully, the Wireless remote controller will show "Complete!"

7.8 Advanced Function

7.8.1 Edit Group Name

To edit the name of a group, perform following steps.

- 1- Press the "Navigation" button to enter Menu, then select "Group Config" and select the target group, then scroll down to find "Edit Name"
- 2- Press "Yes" button to edit the name of selected group.
"Left/Right" buttons: Change the position of cursor
"ALL OFF" button: Change the case (a/A/1)
"ALL ON" button: Backspace
"Yes" button: Save the name
"Back" Button: Cancel edit name



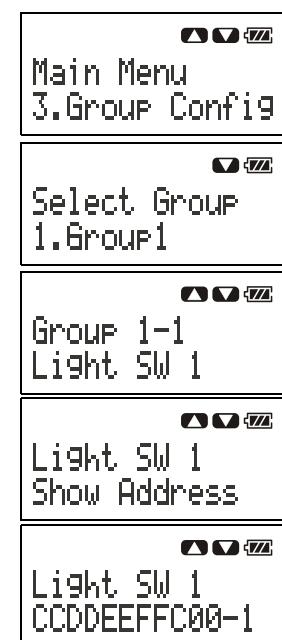
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7. Group Device

7.8.2 Show Device Address

To view the unique address of the device, perform following steps.

- 1- Press the "Navigation" button to enter Menu, then select "Group Config", select the target group and select the target device in the target group
- 2- Press "Yes" button to enter the device option menu, and then select "Show Address"
- 3- Press "Yes" button again show the unique address of all the device.



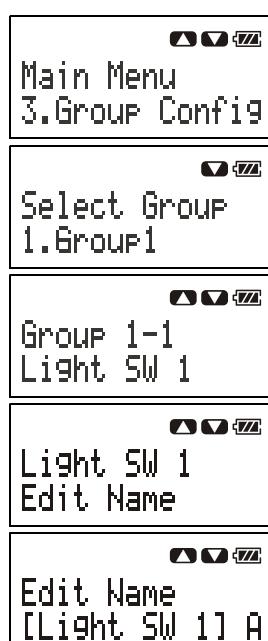
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7. Group Device

7.8.3 Edit Device Name

To edit the device name of grouped device, perform following steps

- 1- Press the "Navigation" button to enter Menu, then select "Group Config", select the target group and select the target device in the target group.
- 2- Press "Yes" button to enter the device option menu, and then select "Edit Name".
- 3- Press "Yes" button to edit the name of selected device.
"Left/Right" buttons: Change the position of cursor
"ALL OFF" button: Change the case (a/A/1)
"ALL ON" button: Backspace
"Yes" button: Save the name
"Back" Button: Cancel edit name



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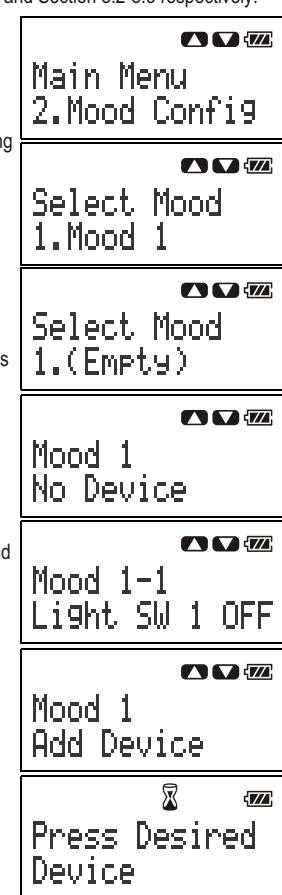
8. Mood Control (Scenario)

After the CG100 devices are installed and configured, user may add devices to different scenario (Mood 1 to Mood 5) for mood control. The procedures of adding device to Mood and controlling devices by Mood are illustrated in Section 8.1 and Section 8.2-8.3 respectively.

8.1 Add Device to Mood

To add a device to a mood control, perform following steps.

- 1- Connect the Wireless remote controller(which is configured before) to the desired device (eg. One-gang Switch, Two-gang Switch, Dimmer Switch, Socket, etc.) through the provided cable.
- 2- Press the "Navigation" button to enter Menu, then select "Mood Config".
(Note: All the moods will show on the screen, user may scroll to view the moods.)
(Note: If there is any device added to the mood, the Wireless remote controller will show the name of the mood. Eg. The default mood name of the first mood is "Mood 1")
(Note: If there is no device added to the mood, the Handheld will show "(Empty)".)
- 3- Press "Yes" button to select the desired mood.
(Note: If there is no device added to the mood, the Wireless remote controller will show "No Device".)
(Note: If there is/are device(s) added to the mood, the Wireless remote controller will show the name and corresponding action of the device.)
- 4- Scroll down to find "Add Device"
- 5- Press "Yes" button to add device.
The Wireless remote controller will show "Press Desired Device", and the status LED of connected device will keep flashing
- 6- Press the desired device control button on the device to add the device to the mood.
For example, when the Wireless remote controller is connecting with the Two-gang Switch and user press the second of the switch, the device control function of the second load of the switch will add to the mood.

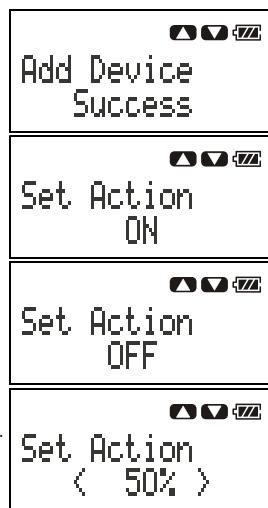


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8. Mood Control (Scenario)

- 7- When the device is added to the mood successfully, the Wireless remote controller will show "Add Device Success".
 8- After all device is added to the mood successfully, the Wireless remote controller will ask user to set the action of the device during mood control.
 (Note: If the device is a dimmer (CG100DM), user may also set the dimming level of the dimmer during mood control.)
 (Note: During setting the action of the device, the Wireless remote controller can also control the device with the setting action for user to tune the mood.)

If "Fail" or "Device Not Found" is shown by the Wireless remote controller during the above process, please check the power of the Coordinator/device and Wireless remote controller. And also please check the memory information of Handheld remote (see Section 9.4). Then perform step 1 to step 8 again.



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8. Mood Control (Scenario)

8.2 Control Devices

After the devices are added to different moods, user may control the devices through the mood control function of Wireless remote controller.

Important Please ensure the Wireless remote controller is within the system coverage before controlling any device.

Following examples show the procedures to apply mood control.

Press and hold the "Back" button to exit the menu and show the device status page.



Press "Yes/Mood" button to enter mood control page.

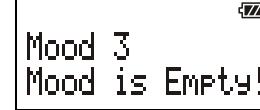


Press button "1-5" to select the desired mood.

After all the device in the selected mood are controlled, the Wireless remote controller will show "Completed!"



If there is no device in the selected mood, the Wireless remote controller will show "Mood is Empty".



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8. Mood Control (Scenario)

8.3 Delete Device

To delete a device in a mood, perform following steps.

- 1- Press the "Navigation" button to enter Menu, then select "Mood Config". Select the target mood and select the target device in the target mood.
- 2- Press "Yes" button to enter the device option menu, and then select "Del Devices".
- 3- Press "Yes" button again to delete the device. The Wireless remote controller will show "Confirm Del?", User may press "Yes" button again to confirm deleting the devices or press "Back" button to cancel.
- 4- If the device is deleted successfully, the Wireless remote controller will show "Complete!"



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8. Mood Control (Scenario)

8.4 Delete All Devices in All Groups

To delete all devices in all mood, perform following steps.

- 1- Press the "Navigation" button to enter Menu, then select "Mood Config", select the target mood and scroll down to find "Del All Device".
- 2- Press "Yes" button to delete all the devices in the target mood. The Wireless remote controller will ask user to confirm. Press "Yes" button again to confirm deleting the devices or press "Back" button to cancel.
- 3- If all the devices are deleted successfully, the Wireless remote controller will show "Complete!"



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8. Mood Control (Scenario)

8.5 Delete All Devices in All Groups

To delete all devices in all mood, perform following steps.

- 1- Press the navigation button to enter Menu, then select "Mood Config" and the scroll down to find "Del All Moods".
- 2- Press "Yes" button to delete all devices in all moods.
The wireless remote controller will show "Del All Device in Moods?", User may press "Yes" button again to confirm deleting the devices or press "Back" button to cancel.
- 3- If all the devices are deleted successfully, the wireless remote controller will show "Complete!"



8.6 Advance Function

8.6.1 Edit Mood Name

To edit the name of a group, perform following steps.

- 3- Press the navigation button to enter Menu, then select "Mood Config" and select the target mood, the scroll down to find "Edit Name".
- 4- Press "Yes" button to edit the name of selected mood.
"Left/Right" buttons: Change the position of cursor
"ALL OFF" button: Change the case (a/A/1)
"ALL ON" button: Backspace
"Yes" button: Save the name
"Back" Button: Cancel edit name



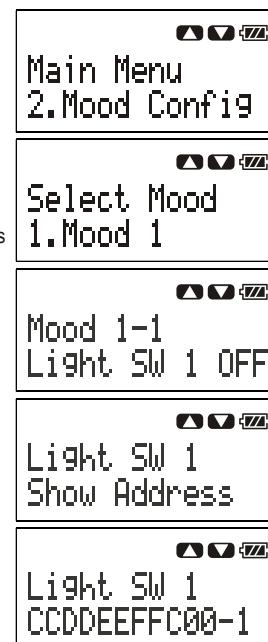
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8. Mood Control (Scenario)

8.6.2 Show Device Address

To view the unique address of the device, perform following steps.

- 1- Press the "Navigation" button to enter Menu, then select "Mood Config". Select the target mood and select the target device in the target mood.
- 2- Press "Yes" button to enter the device option menu, and then select "ShowAddress".
- 3- Press "Yes" button again to show the unique address of the device.



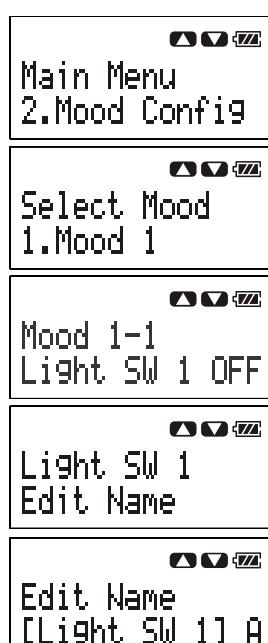
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8. Mood Control (Scenario)

8.6.3 Edit Device Name

To edit the device name of device in mood, perform following steps.

- 1- Press the "Navigation" button to enter Menu, then select "Mood Config", select the target mood and select the target device in the target mood.
- 2- Press "Yes" button to enter the device option menu, and then select "Edit Name".
- 3- Press "Yes" button to edit the name of selected device
"Left/Right" buttons: Change the position of cursor
"ALL OFF" button: Change the case (a/A/1)
"ALL ON" button: Backspace
"Yes" button: Save the name
"Back" Button: Cancel edit name



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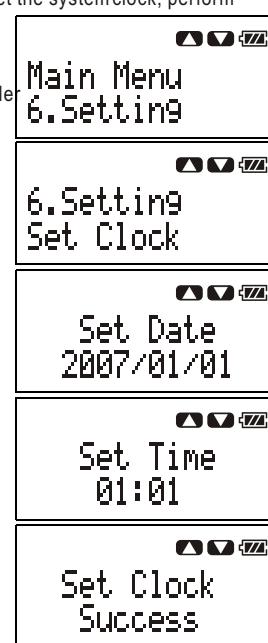
9. System Setting

9.1 System Clock

User is required to set the system clock for timer control. When the system clock is not set, the icon will keep flashing on LCD. To set the system clock, perform following steps:

- 1- Press the "Navigation" button to enter Menu, and then select "Setting" → "Set Clock".
(Note: Please ensure the Wireless remote controller is within the coverage of the system before setting the system clock.)
- 2- Use "Navigation" button and number buttons (1-10) to set the date and then press "Yes" button to continue.
- 3- Use "Navigation" button and number button (1-10) to set the time and then press "Yes" button to confirm.

After the system clock is set successfully, the Wireless remote controller will show "Success". If the system clock fails to set, please check the system coverage and ensure the Coordinator is powered ON, and then repeat step 1 to 3 again.



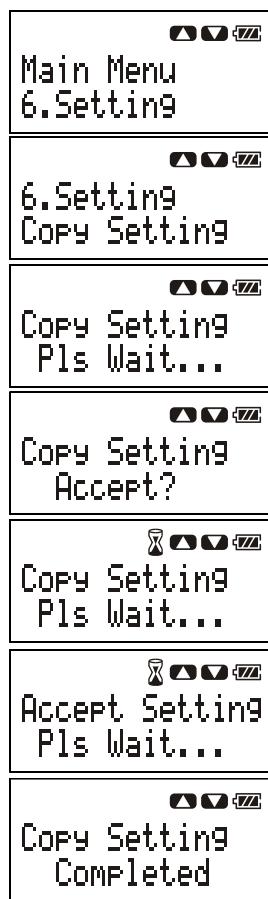
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9. System Setting

9.2 Copy Setting

You are able to copy the setting of Wireless remote controller to another Wireless remote controller through the provided cable. To copy the setting, perform follow steps:

- 1- Connect the source Wireless remote controller to a destination Wireless remote controller through the provided cable.
- 2- Press the "Navigation" button to enter Menu, and then select "Setting" → "Copy Setting" on the source Wireless remote controller.
- 3- Press any button on destination Wireless remote controller to wake up the remote.
- 4- Press "Yes" button on the source Wireless remote controller to prepare to copy setting. The destination Wireless remote controller will ask user to accept the setting.
- 5- Press "Yes" button on the destination Wireless remote controller to accept the setting.
- 6- After the setting is copied successfully, both the source and destination Wireless remote controller will show "Copy Setting Completed".



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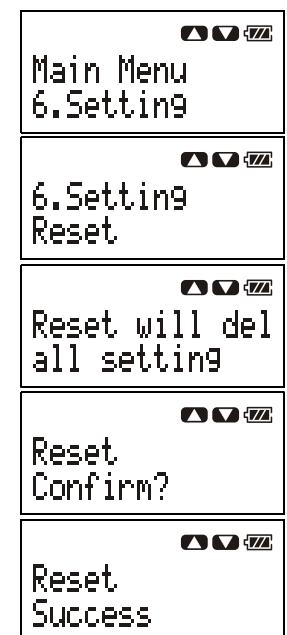
9. System Setting

9.3 Reset

User may reset the Handheld remote to factory default setting and all the setting of the Wireless remote controller will be deleted.

To reset the Wireless remote controller, perform following steps.

- 1- Press the "Navigation" button to enter Menu, then select "Setting" → "Reset".
- 2- Press "Yes" button to start reset the Wireless remote controller. The Wireless remote controller will show the warning message "Reset will del all setting" and then ask user to confirm.
- 3- If the user confirms to delete all the setting, press "Yes" button again to reset the Wireless remote controller. Otherwise, press "Back" button to cancel the reset.
- 4- After finishing reset process, the Wireless remote controller will show "Reset Success".



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9. System Setting

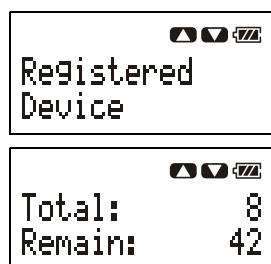
9.4 Memory Information

User may inquire the memory information of the Wireless remote controller from the setting menu ("Setting" → "Memory info").

There are two types of memory information showing for the user----- the "Registered Device" and "Device Added to Gps and Moods".

9.4.1 Registered Device

The Wireless remote controller can register maximum 50 devices to the memory for group or mood control. The number of device is referring to the number of "device loads" added to the Wireless remote controller.



There are some examples:

When user added the load of a one-gang switch to group 1 of the Handheld remote controller,

→ the number of registered device is 1.

When user added the load of one-gang switch to group 3, mood 1 and mood 2 of the Wireless remote controller,

→ the number of registered device is also 1.

When user added the "load 1" and "load 2" of a two-gang switch to group 1 of the Wireless remote controller,

→ the number of registered device is 2.

When user added the "load 1" of a two-gang switch to group 1 and "load 2" of the same two-gang switch to group 3 of the Wireless remote controller.

→ the number registered device is 2.

When user added the load of a socket to group 1 of the Wireless remote controller

→ the number of registered device is 1.

When user added the load of dimmer switch to group 1 of the Wireless remote controller

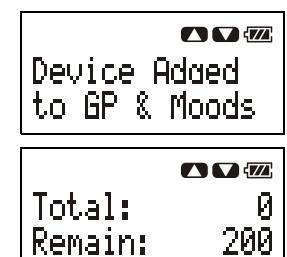
→ the number of registered device is 1.

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9. System Setting

9.4.2 Device Added to GPs and Moods

The Wireless remote controller can be added with maximum 200 device records to the memory for group or mood control.



There are some examples:

When user added the load of a one-gang switch to group 1 of the Wireless remote controller,

the number of registered device is 1.

the number of device added to Gps and Moods is 1.

When user added the load of a one-gang switch to group 1, group 3, mood 1 and mood 2 of the Wireless remote controller,

the number of registered device is 1.

the number of device added to Gps and Moods is 4.

When user added the both "load 1" and "load 2" of a two-gang switch to group 1 of the Wireless remote controller,

the number of registered device is 2.

the number of device added to Gps and Moods is 2.

When user added the "load 1" of a two-gang switch to group 1 and "load 2" of the same two-gang switch to group 3 of the Wireless remote controller,

the number of registered device is 2.

the number of device added to Gps and Moods is 2.

When user added the load of a socket to group 1 of the Wireless remote controller,

the number of registered device is 1.

the number of device added to Gps and Moods is 1.

When user added the load of a dimmer switch to group 1 of the Wireless remote controller,

the number of registered device is 1.

the number of device added to Gps and Moods is 1.

When user added the load of a socket to all the groups (group 1 to group 10) and all the moods (mood 1 to mood 5) of the Wireless remote controller,

the number of registered device is 1.

the number of device added to Gps and Moods is 15.

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9. System Setting

9.5 Version

To view the firmware version of Wireless remote controller, perform following steps.

- 1- Press the "Navigation" button to enter Menu, then select "Setting" → "About"
- 2- Press "Yes" button to view the firmware version.



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10. Timer Function

User is able to configure the timer function of a device after the system clock is configured. To configure the timer of the device, perform following steps.

Important: Please ensure the Wireless remote controller is within the system coverage and the target device is operating before configuring the timer function.

- 1- Press the Navigation button to enter Menu, and then select "Device Timer".

(Note: All the groups and moods will show on the screen, user may scroll to view the groups and moods.)

(Note: If there is any device added to the group/mood, the Wireless remote controller will show the name of the group/mood.)

(Note: If there is no device added to the group/mood, the Handheld will show "(Empty)".)

- 2- Press "Yes" button to select the desired group/mood.

(Note: if there is no device added to the group, the Wireless remote controller will show "No Device".)

(Note: If there is/are device(s) added to the group, the Wireless remote controller will show the name of the device.)

- 3- Press "Yes" button to select the device. The Wireless remote controller will get the timer setting of the selected device wirelessly.

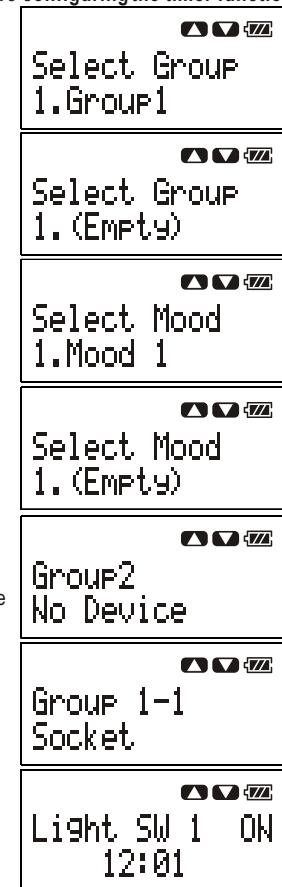
- 4- After the timer setting of the device is obtained successfully, the Wireless remote controller will show the ON time, OFF time and weekly schedule of the device.

When the timer setting is "--:--". Which is indicating such timer function of the device is disabled. For example, when the timer setting of a lightswitch is

"Light SW 1 ON --:--"

"Light SW 1 OFF 12:02"

Which means the ON timer of the light switch is disabled and the light switch will only turn OFF at 12:02.



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10. Timer Function

- 5- Press "Yes" to set ON and OFF timer.

If the timer function is disabled, press up/down button to enable the timer.

If user wants to disable the timer function, press up/down to disable the timer.

After the ON/OFF timer is set, press "Yes" button to send the new timer setting to the device.

- 6- User may also set the weekly schedule of the timer function:

MON-SUN

MON-FRY Only

SAT&SUN Only

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Sunday

Press "Yes" button to enable or disable the weekly schedule

During setting the weekly schedule:

◆ - Enabled

◊ - Disabled

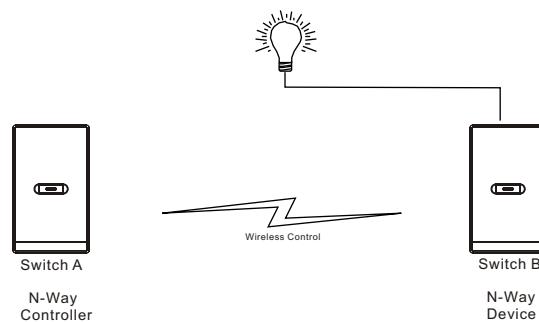


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11. N-Way Configuration

N-Way function is a special feature of the CG100 devices. Through the N-Way configuration, user may use a CG100 device to control the load of another CG100 device wirelessly.

For example, when there is a wall light installed in the corridor and user is desired to control the wall light at both end of the corridor. User may install two one-gang switches to both end of the corridor and the wall light may connect to only one of the switch (Switch B) (see Figure 11-1).



User may configure the switch A as a N-Way Controller and Switch B as a N-Way Device. After N-Way configuration, user can use the control button on both Switch A and Switch B to control the same light.

Note:

When the device is a N-Way Controller, user cannot re-configure the device as a N-Way Device before removing the N-Way function of the device.

When the device is a N-Way Device, the user cannot re-configure the device as a N-Way Controller before removing the N-Way function of the device.

To remove the N-Way function of the device, please refer to Section 11.2..

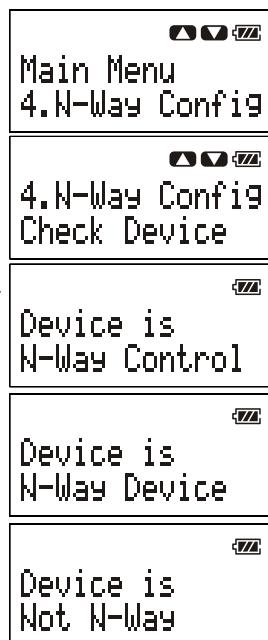
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11. N-Way Configuration

11.1 Check Device

To Check the device is configured as N-Way controller or N-Way device, perform following steps.

- 1- Connect the Wireless remote controller to the device through the provided cable.
- 2- Press the "Navigation" button to enter Menu, then select "N-Way Config" → "Check Device".
- 3- Press "Yes" button to start checking the device. If the device is a N-Way controller, the Wireless remote controller will show "Device is N-Way Control". If the device is a N-Way device, the Wireless remote controller will show "Device is N-Way Device". If the device is not a N-Way controller or device, the Wireless remote controller will show "Device is Not N-Way".



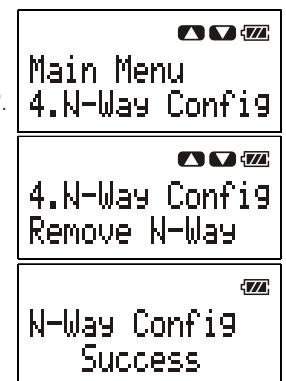
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11. N-Way Configuration

11.2 Remove N-Way Function of Device

To remove the N-Way function of a N-Way controller or N-Way device, perform following steps.

- 1- Connect the Wireless remote controller to the device through the provided cable
- 2- Press the "Navigation" button to enter Menu, then select "N-Way Config" → "Remove N-Way". If the N-Way function is removed successfully, the Wireless remote controller will show "N-Way Config Success".



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11. N-Way Configuration

11.3 Configure the N-Way Function

To configure the N-Way function, perform following steps.

- 1- Connect the Wireless remote controller to the desired N-Way controller through the provided cable.
- 2- Press the "Navigation" button to enter Menu, then select "N-Way Config" → "Config Device". The Wireless remote controller will show "Press Desired Controller", and the status LED of connected device will keep flashing. User may press the desired device control button on the device to configure the control button with N-Way Controller function. When the desired control button is pressed, the Wireless remote controller will show "Controller set Finished".
- 3- After configured the desired controller, the Wireless remote controller will show "Pls connect other Device" and "Then Press "OK" Or "Yes"". Connect the Wireless remote controller to the desired N-Way device through the provided cable and press "Yes" button to configure the N-Way device.
- 4- The Wireless remote controller will show "Press Desired Device", and the status LED of connected device will keep flashing. User may press the desired device control button on the device to configure the load of device to be a N-Way device. When the desired control button is pressed, the Wireless remote controller will show "Device Set Finished".



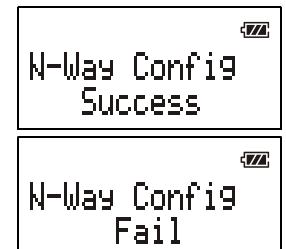
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11. N-Way Configuration

- 5- After configured the N-Way Device, the N-Way controller will try to communicate with the N-Way device wirelessly. If the N-Way controller can communicate with the N-Way device successfully, the Wireless remote controller will show "N-Way Config Success". Otherwise, the Wireless remote controller will show "N-Way Config Fail".

If N-Way function fail to configure, please check:

- Whether the device is a N-Way device but want to configure as N-Way controller.
- Whether the device is a N-Way controller but want to configure as N-Way device.
- The power of the devices.
- The cable connection between the device and Wireless remote controller.
- The wireless connection between two device. (User may check the wireless connection by using the Wireless remote controller to control the device which is desired to configure as N-Way device at the location of the device which is desired to configure as N-Way controller.)



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12. APPENDIX

12.1 Specifications--Devices

Specification	Product	COORDINATOR (1 Gang switch) CG201C	1 Gang Switch CG201S1	2 Gang Switch CG201S2	AC socket CG201SK	Dimmer CG201DM
Voltage	220 to 240Vac					
Maximum Load	2000W		2000W	1000W x 2	13A	400W
Line Frequency	50 Hz					
Communication standard	IEEE802.15.4 (Zigbee Technology)					
Bi-directional control	Yes					
Radio Frequency	2.4GHz					
Operating Temperature	0 to 40 degC					
Operating Humidity	0% to 95%					
Mounting Centers	60.3mm					
Fuse Type and Rated Current	10Amp/250V Ceramic Tube Fuse (Time Lag)		10Amp/250V Ceramic Tube Fuse (Time Lag)	10Amp/250V Ceramic Tube Fuse (Time Lag)	BS1362 13A Fuse	5Amp/250V Ceramic Tube Fuse (Time Lag)
Load type	Detail					
Incandescent Lamp	---	Yes	Yes	Yes	Yes	Yes
Fluorescent Lamp	Power Factor >0.85	Yes	Yes	Yes	Yes	Not applicable
Low voltage Halogen lamp(12V) (with Transformer)	Power Factor >0.85	Yes	Yes	Yes	Yes	Not applicable
Low voltage Halogen lamp(12V) (with Dimmable Electronic Transformer)	Power Factor >0.85	Yes	Yes	Yes	Yes	Yes
Halogen lamp (220V)	Power Factor >0.85	Yes	Yes	Yes	Yes	Yes
Energy Saving Lamp	Power Factor >0.85	Yes	Yes	Yes	Yes	Not applicable
Campact Fluorescent lamp	Power Factor >0.85	Yes	Yes	Yes	Yes	Not applicable
Cold Cathode Neon lamp	Power Factor >0.85	Yes	Yes	Yes	Yes	Not applicable

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12. APPENDIX

12.2 Specifications Wireless Remote Controller

Specification	Product	Wireless Remote Controller
Control Function		On/off Switch, Dimmer, All on, All off, Device excluding capability in Allon/ All, Scenariosetting, Timer, Realtime Time clock, Device setting, Networking, Bi-directional control, Device status monitoring, Device Grouping, Multi-way switch setting, Device name Editing, Remote name Editing, Navigation control setting
Scenario setting		5 Mood Settings
LCD display		Dot matrix LCD display, STN type
LCD backlight		White colour
Battery level indicator		4 levels
Timer function		Yes
Device control		Up to 50
Battery		2 x AAA Alkaline Batteries
Transmission distance		Over 60M in open area, (Transmission distance can be extended if more devices are installed - - Wireless Networking Technology)
Communication Standard		IEEE802.15.4 (Zigbee Technology)
Bi-directional control		Yes
Radio Frequency		2.4GHz
Operating Temperature		0 to 40 degC
Operating Humidity		0% to 95%

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12. APPENDIX

12.3 TroubleShooting Guide

Symptom	Possible Cause	Solution
Main Light or LED indicator does not turn ON	1.Wires are not properly secured or connected in the terminals	Make sure the wires are secured, screws are fastened and the Live, Neutral or load wires have been connected to the correct terminals
	2.MCB is OFF or has been tripped	Switch on the MCB . If a breaker continually trips, contact a registered electrician to determine the cause of the problem.
	3.Fuse has blown out	Replace the fuse with one of the same rating
	4.Lightbulbs are not properly installed or lightbulbs have burned out	Reinstall the lightbulbs or replace the light bulbs
	5.The Service switch is in off position	Remove the cover plate, and slide the service switch to ON position
	6.Unknown	Remove the cover plate, push the Reset button once
	7.Improper loads are connected	Refer to section 12.1, and check the load type
Devices is not responding to the Wireless Remote Controller	1.Not programmed properly	Refer to "Installation of System" section of this manual
	2.Battery of remote control is too low	Replace new battery for Remote
	3.AC Voltage is too low	Make sure supply voltage is within the specification
	4.Wiring is not correct	Re-check wiring according to this manual
	5.Physical distance between two devices is too far.	Relocate the devices or add another device between them
	6.Remote control is too far away	Try closer location, or add one more device at boundary location to extend the control distance
	7. Unknown	Try switch off the MCB, 30 seconds later, switch on again

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12. APPENDIX

Unable to program	1.Provided cable is not plugged firmly	Check cable, unplug and then plug in again
	2.Battery level of Handheld Remote is too low	Replace with new battery
	3.Improper programming method	Refer to "Installation of System" section of this manual
	4.Wiring is not correct	Check wiring according to this manual
	5.Fuse is broken or not installed	Check fuse
	6.Over maximum number of devices	Maximum number of devices is 50, Maximum records is 200
	7.Service switch is in Off position	Check switch position
		Check the Memory info of Wireless Remote controller according to section 9.4

12.4

Ranges of rated currents A	Rigid conductors (solid or stranded) ³⁾	
	Nominal cross-sectional areas mm ²	Diameter of largest conductor mm ²
up to and including 4 ¹⁾ above 4 up to and including 6 ²⁾ above 6 up to and including 10 ²⁾	-	-
	From 0.75 up to 1.5 inclusive From 1 up to 2.5 inclusive	1.45 2.13

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