

## CG102IR-AC - INSTALLATION GUIDE



CG102IR-AC  
IR Transmitter for Air-conditioner control

### Ratings (see product spec. for details)

|                                |               |
|--------------------------------|---------------|
| <b>Operating Voltage</b>       | DC 6V         |
| <b>IR Transmission Voltage</b> | 8M            |
| <b>IR Transmission Angle</b>   | +/- 60 degree |

### Accessories



IR Extension Cable  
(Not included)



Power Adaptor  
(Included)



CG101AD  
Mini Power Supply  
(Not included)

### Before getting started

- ⚠ **WARNING!** It must be installed by a qualified electrician in accordance to all applicable regulations and building codes. Improper wiring can result in personal injury or damage to control units or other equipment. Always turn off circuit breaker or remove main fuse from power line before doing any work. To avoid overheating and possible damage to equipment.
- ⚠ **WARNING!** Do not operate when any lamps removed or burned out; replace any burned out lamps immediately; use only transformers that incorporate thermal protection or fused primary windings. This product is designed for residential and commercial use, for indoor use only.
- ⚠ **WARNING!** Install in accordance to all national and local electrical codes.
- ⚠ **IMPORTANT!** CityGrow® is not liable for any damage incurred with the misuse of the product.
- ⚠ **IMPORTANT!** Pre-setup can only be done by a professional technician or manufacturer agent.

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### IMPORTANT NOTE:

CG102IR-AC should operate with CG100HTH-IR Thermostat. CG100HTH-IR is a wall-mounted thermostat control plate for controlling the temperature and setting. CG102IR-AC should be mounted close to the air-conditioner for transmitting the air-conditioner infra-red signal.

Please follow the steps below to setup the products.

### Step 1. Apply network information to the devices

**Step 1.1** Add the CG100HTH-IR and CG102IR-AC to the project of the HomeNET Planner 2 Software. (Refer to HomeNET Planner 2 Software manual).

**Step 1.2** Set the network information of CG100HTH-IR and CG102IR-AC by using the "Set" button on the "Device List" of HomeNET Planner 2 with CG101UTC, CG101UTU (for CG102IR-AC) and CG101UT5 (for CG100HTH-IR).

### Step 2. Pairing the CG100HTH-IR and CG102IR-AC

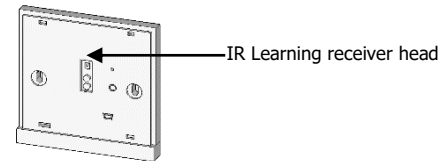
**Step 2.1** Interconnect the CG100HTH-IR and the CG102IR-AC by using CG101UT5.

**Step 2.2** Power up the CG102IR-AC with the AC power adaptor.

**Step 2.3** Hold any button on the CG100HTH-IR then press and release the reset button at the same time to perform Pairing. If the pairing process is successful, "OK" will be shown on the LED display of the CG100HTH-IR. If the pairing process is failed, all the buttons will blink at the same time. In this case, please repeat step 2.1 to 2.5 to retry pairing.

### Step 3. Learning IR signal of air-conditioner to the CG102IR-AC

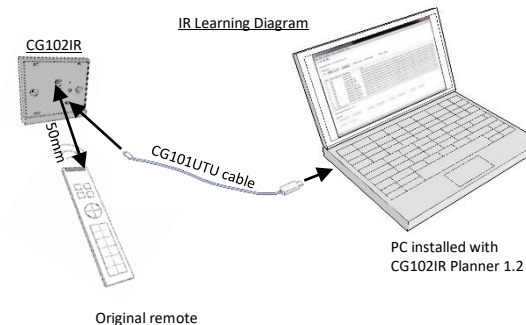
**Step 3.1** Before installing the CG102IR-AC, the user is recommended to complete the learning IR signal process from the original remote of the air-conditioner to the CG102IR-AC in prior. Remove the front cover of CG102IR-AC, you will see the IR learning head.



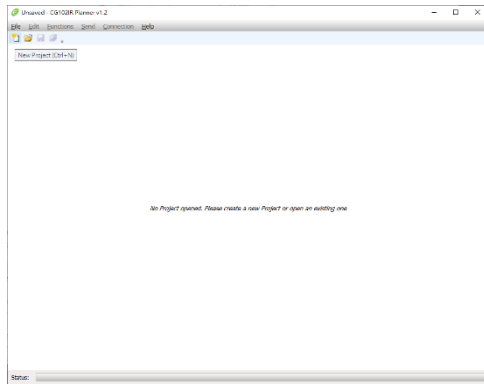
**Step 3.2** Download the "CG102IR Planner 1.2" software from the link below and install onto the computer.

<https://citygrowsys.com/zh-HK/download/#software-download>

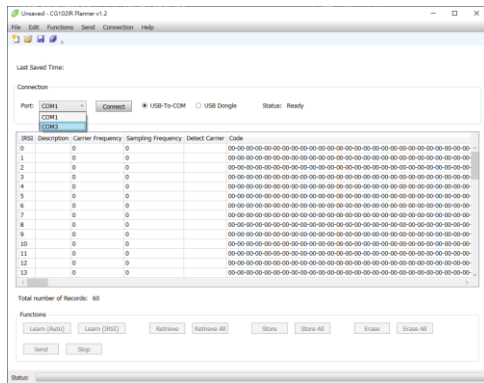
Connect the CG102IR-AC to the PC with the CG101UTU cable (NOT INCLUDED) through the CG102IR-AC USB port. The CG102IR-AC will be powered up by the PC, no AC power adaptor will be required in this procedure. Run the CG102IR Planner 1.2 PC software now.



**Step 3.3** Start a "New Project" on the CG102IR Planner 1.2 software.



**Step 3.4** Select the correct "Port" and click "Connect" to connect the CG102IR-AC with the PC.



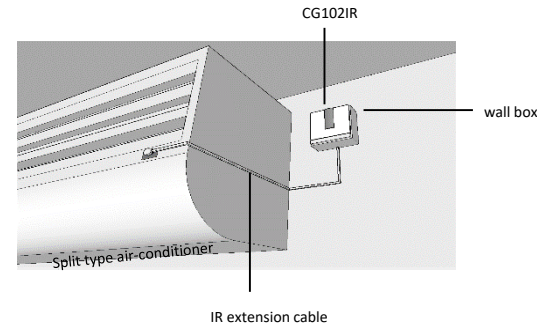
**Step 3.5** Place the original IR remote controller in front of the CG102IR-AC learning head, the best distance is 50mm from the IR learning head. (Please refer to the diagram on Step 3.2)

**Step 3.6** Learn all the IR signals from the remote controller of the air-conditioner individually and save the Project file with file. (Please refer to the CG100HTH-IR Air-Conditioner Kit User Manual for details of the IR signal learning process.)

| IRSI | Function      | 25 | 22°C FAN HIGH |
|------|---------------|----|---------------|
| 0    | OFF           | 26 | 23°C FAN LOW  |
| 1    | DRY           | 27 | 23°C FAN MID  |
| 2    | FAN LOW       | 28 | 23°C FAN HIGH |
| 3    | FAN MID       | 29 | 24°C FAN LOW  |
| 4    | FAN HIGH      | 30 | 24°C FAN MID  |
| 5    | 16°C FAN LOW  | 31 | 24°C FAN HIGH |
| 6    | 16°C FAN MID  | 32 | 25°C FAN LOW  |
| 7    | 16°C FAN HIGH | 33 | 25°C FAN MID  |
| 8    | 17°C FAN LOW  | 34 | 25°C FAN HIGH |
| 9    | 17°C FAN MID  | 35 | 26°C FAN LOW  |
| 10   | 17°C FAN HIGH | 36 | 26°C FAN MID  |
| 11   | 18°C FAN LOW  | 37 | 26°C FAN HIGH |
| 12   | 18°C FAN MID  | 38 | 27°C FAN LOW  |
| 13   | 18°C FAN HIGH | 39 | 27°C FAN MID  |
| 14   | 19°C FAN LOW  | 40 | 27°C FAN HIGH |
| 15   | 19°C FAN MID  | 41 | 28°C FAN LOW  |
| 16   | 19°C FAN HIGH | 42 | 28°C FAN MID  |
| 17   | 20°C FAN LOW  | 43 | 28°C FAN HIGH |
| 18   | 20°C FAN MID  | 44 | 29°C FAN LOW  |
| 19   | 20°C FAN HIGH | 45 | 29°C FAN MID  |
| 20   | 21°C FAN LOW  | 46 | 29°C FAN HIGH |
| 21   | 21°C FAN MID  | 47 | 30°C FAN LOW  |
| 22   | 21°C FAN HIGH | 48 | 30°C FAN MID  |
| 23   | 22°C FAN LOW  | 49 | 30°C FAN HIGH |
| 24   | 22°C FAN MID  |    |               |

When the Learning IR signal process is completed, install the CG102IR-AC.

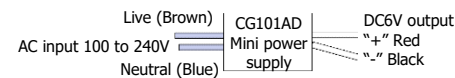
**Control the Split type air-conditioner**



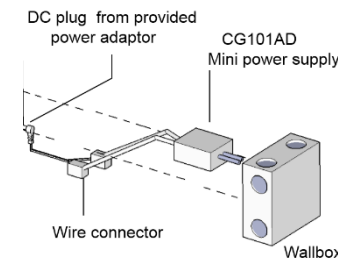
**STEP 1: IMPORTANT!** Turn off main power at the main switch board.



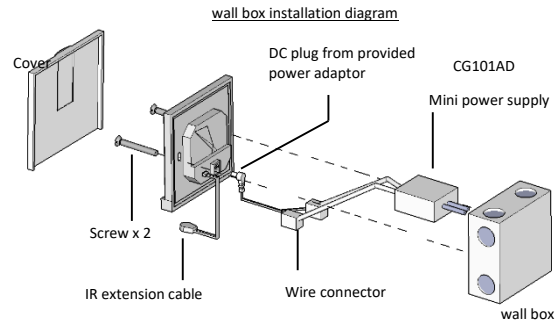
**STEP 2:** Connect the main power cable to the Live and Neutral terminals of the CG101AD Mini Power Supply. The Live (Brown) wire and Neutral (Blue) wire should be connected to the CG101AD Mini Power Supply.



**STEP 3:** The Positive (Red) wire and Negative (Black) wire should be properly connected to the DC plug from the power adaptor. Please refer to the following diagram.



**STEP 4:** Plug the DC plug into the DC jack input of the CG102IR-AC, plug the IR extension cable into the CG102IR-AC IR port on the rear side. Retrofit the CG102IR-AC into the wall box and mount it onto the wall by fastening the two screws at the rear of the switch box.



**STEP 5:** Route the IR extension cable to the IR receiver window of the air-conditioner.

For more details about the product series, please refer to the user manual and product specifications.

For more details on programming of the products, please refer to HomeNET Planner Software user manual.