



CG102IR-AC, IR Transmitter for Air-conditioner control

## CG102IR-AC Installation guide

### Ratings

Operation Voltage DC6V, 500mA  
 IR transmission range 8M  
 IR transmission angle +/- 60 degree

### Accessories



IR extension cable  
(Not included)



Power adaptor  
(included)



CG101AD  
mini power supply  
(Not included)

### Before getting started



**WARNING!** The product must be installed by a qualified electrician in accordance with 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 control units with any lamps removed or burned out; replace any burned out lamps immediately; use only transformers that incorporate thermal protection or fused primary windings. !The product is designed for residential and commercial use, for indoor use only.



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



**IMPORTANT!** Citygrow® is not liable for any damage incurred with the misuse of this product.



**IMPORTANT!** Pre-setup can only be done by a professional worker or manufacturer agent.

### Attention !!

This product can only work with CG100HTH-IR. CG100HTH-IR is a wall mount type thermostat. It sends wireless ZigBee control signals to this product to emit IR signal to control the air-conditioner.

Please follow the steps below to setup the product.

#### 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 Software.( refer to HomeNET Planner 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 with CG101UTC, CG101UTU (for CG102IR-AC) and CG101UT5 (for CG100HTH-IR).

#### Step 2. Binding the control between 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 by using the included AC power adaptor.

**Step 2.3** Hold down one of the buttons on CG100HTH-IR.

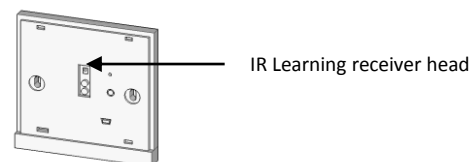
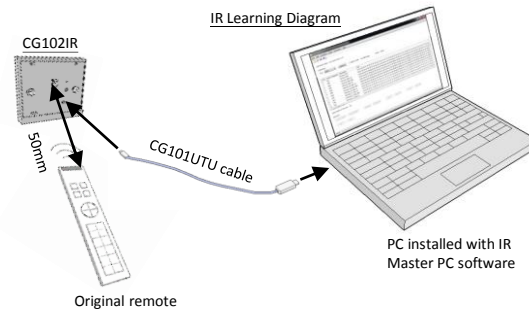
Keep holding the button of CG100HTH-IR, then press and release the reset button of the CG100HTH-IR.

When the binding process is success, "ok" will be shown on the LED display of the CG100HTH-IR.

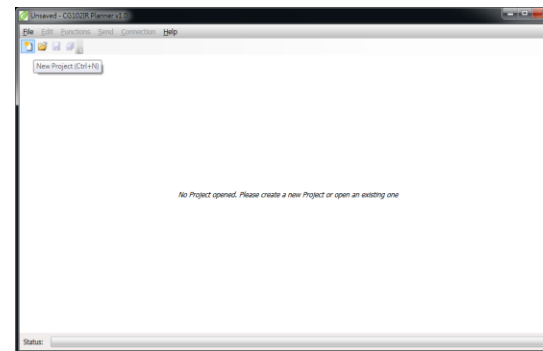
If the binding process is fail, please repeat step 2.1 to 2.5 for retry.

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

**Step 3.1** Download the "CG102IR Planner" software from <http://citygrow.com/Software.php?Keywords=CG102IR%20Planner>, and install the software to a computer (Microsoft Windows XP/Vista/7). Then, connect the CG102IR-AC to the computer with CG101UTC, CG101UTU. Run the CG102IR Planner software and create a new project.



IR Learning receiver head



**Step 3.2** Select the correct Port of the CG101UTC (you may check the port number from the "Device Manager" of Windows) and press "Connect" button.

**Step 3.3** Learn all the IR signal from your existing remote controller of the air-conditioner to the CG102IR-AC according to following Table 1 IR Signal learning table.

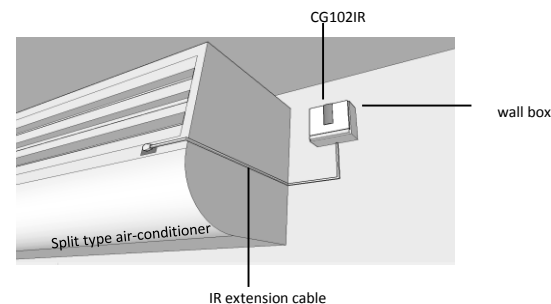
IRSI	Function	25	22°C FAN HIGH
0	OFF	26	23°C FAN LOW
1	DRY	27	23°C FAN MID
2	FAN LOW	28	23°C FAN HIGH
3	FAN MID	29	24°C FAN LOW
4	FAN HIGH	30	24°C FAN MID
5	16°C FAN LOW	31	24°C FAN HIGH
6	16°C FAN MID	32	25°C FAN LOW
7	16°C FAN HIGH	33	25°C FAN MID
8	17°C FAN LOW	34	25°C FAN HIGH
9	17°C FAN MID	35	26°C 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		

\*\*\*See user manual for learning example\*\*\*

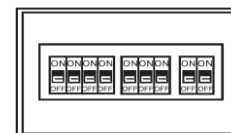
### Installation instruction

After the IR code learning process, you can install the product now.

#### Control the Split type air-conditioner



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

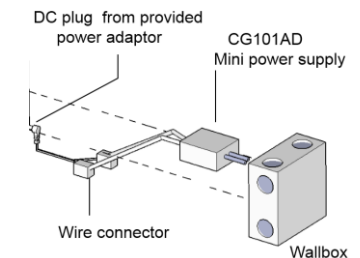


**STEP 2:** Connect the main power cable from the wall box to the Live and Neutral wires of the CG101AD Mini Power Supply (purchase separately).

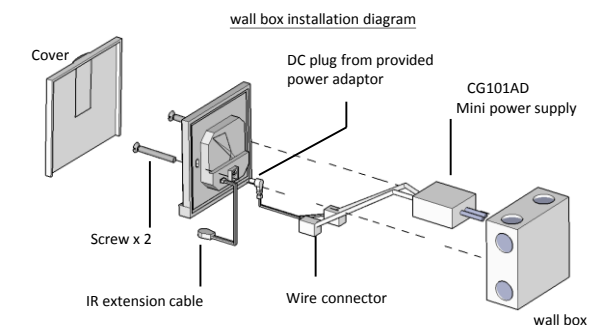
Make sure the Live is connected to the Brown wire (Live) and Neutral is connected to Blue wire (neutral) of CG101AD.



**STEP 3:** Make sure the DC output from CG101AD, red wire (positive) and black wire (negative) is correctly connected to the "DC plug of the provided power adaptor, DC plug is "center positive". See following...



**STEP 4:** Plug the DC plug into the DC jack input of CG102IR, then plug the IR extension cable into the rear of CG102IR. Then, install CG102IR by fastening the two screws onto the wall box. See following.....



**STEP 5:** Route the IR extension cable to the IR receiver window of the A/C. See fig. 1

Details:

1. For detail operation and specification, please refer to user manual and product specification.

2. For detail programming of the product, please refer to HomeNET Planner Software user manual.  
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