



# QD-HV123CW

Touch-Screen  
Programmable Thermostat

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## 2.2 Feature

- Be able to operate your air conditioner whenever and wherever you are with your mobile phone.
- Mobile phone control and suitable for Android & IOS system.
- Programmable thermostat
- Everyday Programmable
- Easy to program
- Easy to install
- Full and touch screen
- 24V Hardwire
- Operate on 1 stage Heat and 1 stage cool
- Heat Pump without Aux or Emergency Heat
- Separate heating and cooling swing(cyclerate) adjustments
- 5 minutes compressor delay protection (selectable on or off)
- Gas, Electric or Oil
- Optional temperature display of Fahrenheit or Celsius scale.
- Display temperature calibration

## 1.Preface

Dear client:  
Thanks for choosing QD-HV123CW thermostat series. It's our best wish to bring you convenience for your daily life. Before using, please read the User's Manual carefully. It will help you to use it correctly.

## 2.Production Function Overview

### 2.1 Application

Description	
1 stage Heat and 1 stage Cool	Yes
Gas or Oil Heat	Yes
Electric Furnace	Yes
Heat Pump( NO Aux. or Emergency Heat)	Yes
Heat Only Systems	Yes
Heat Only Systems - Floor or Wall Furnaces	Yes
Cool Only Systems	Yes
Millivolt	Yes



**A trained, experienced technician must install this product.**

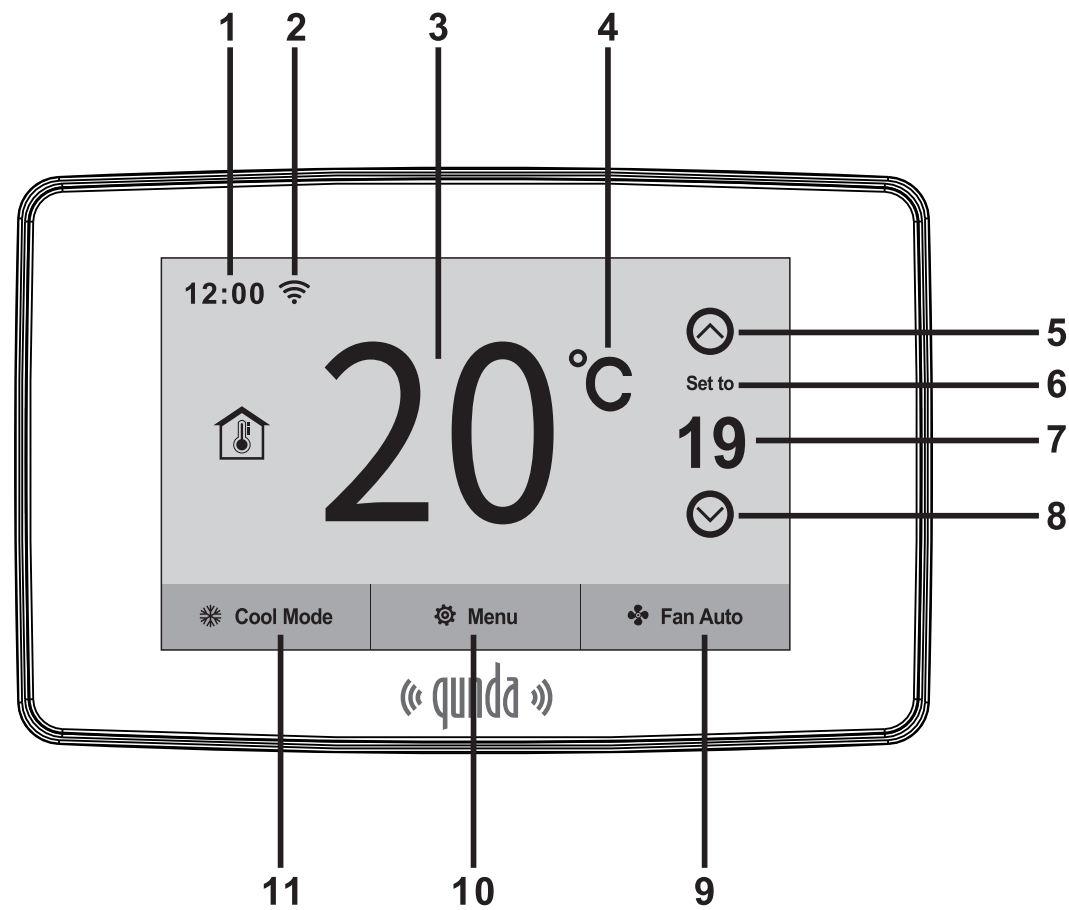
Carefully read these instructions. You could damage this product or cause a hazardous condition if you fail to follow these instructions.

**Ce produit doit être installé par des techniciens formés et expérimentés.**  
Lisez attentivement ces instructions. Si vous ne suivez pas ces instructions, cela peut endommager ce produit ou créer un danger.

Name: QUNDA Control Technology (Jiangsu) Co., Ltd.  
Address: NO.888 Longqiao road,wujiang economy development area,suzhou,jiangsu,China  
Post code: 215200 Web site: www.qunda.com



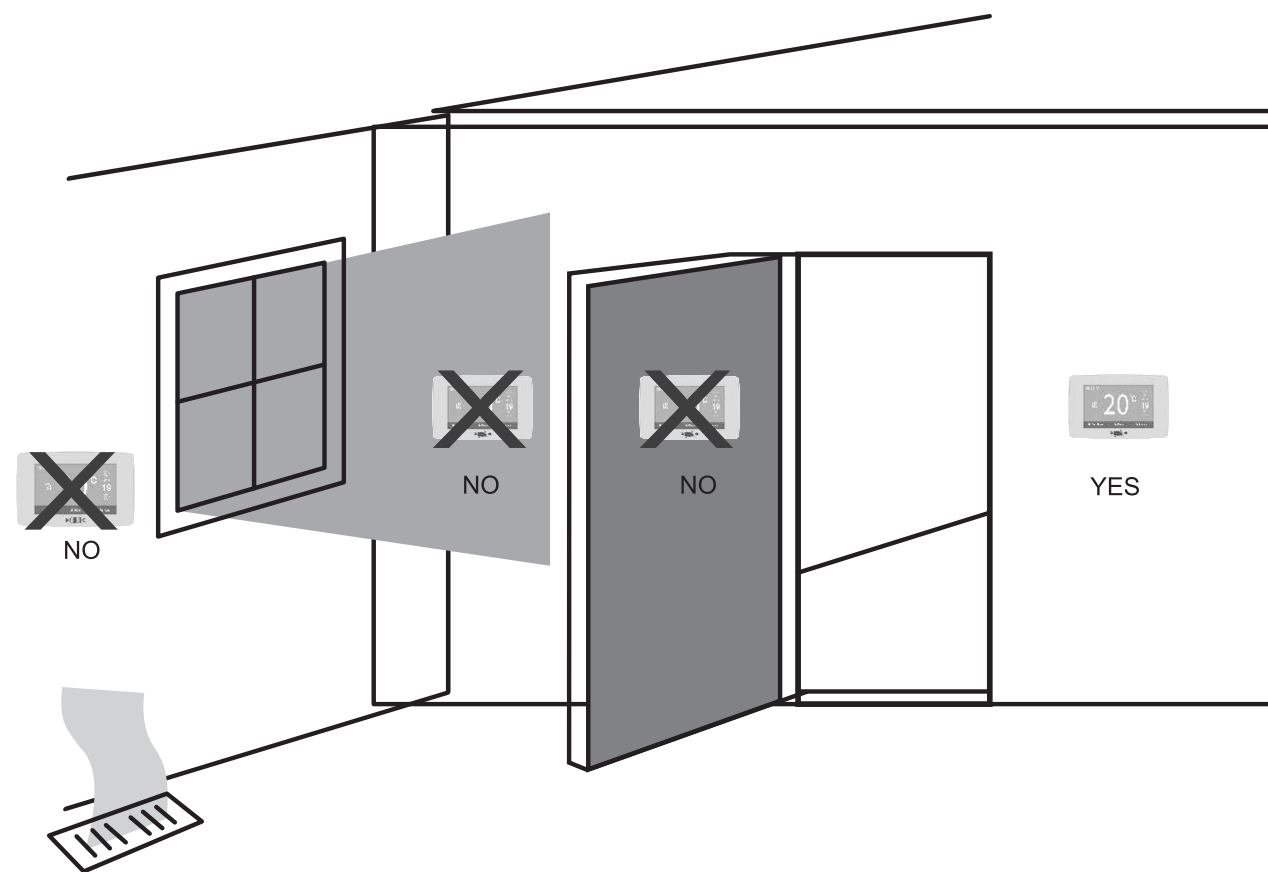
### 3. Diagram and Description



5	Temperature up: Increase the temperature by 1 degree with each touching.
6	Running status: When manual mode is running, displaying Set to; when programming state is running, displaying Schedule.
7	Set temperature: Display the current set temperature.
8	Temperature down: Decrease the temperature by 1 degree with each touching.
9	Fan mode: Select normally open or automatic fan in cooling and heating mode.
10	Parameter setting: Sleep setting, interface setting, WIFI distribution network, weekly timing setting, operation parameter setting and factory Settings can be restored respectively.
11	Mode button: Select Cooling, Heating, or Power off.

Item	Description
1	System clock: The network time is displayed when the network is connected and the local time is displayed when the network is not connected.
2	WIFI icon: This icon is displayed after connected to the network, and the icon will flash when configuring the network.
3	Ambient temperature: Displays the current ambient temperature.
4	Temperature unit: To display the current temperature unit.

The thermostat should be installed approximate 4 to 5 feet above the floor. Select an area with average temperature and good air circulation.



**Do not install** thermostat at following places:

- Close to hot or cold air ducts
- With direct sunlight
- With an outside wall behind the thermostat
- The areas that do not require conditioning
- Where there are dead spots or drafts (in corners or behind doors)
- Where there might be concealed chimneys or pipes

#### Installation Tip

Pick an installation location that is easy for the user to access. The temperature of the location should be representative of the building.



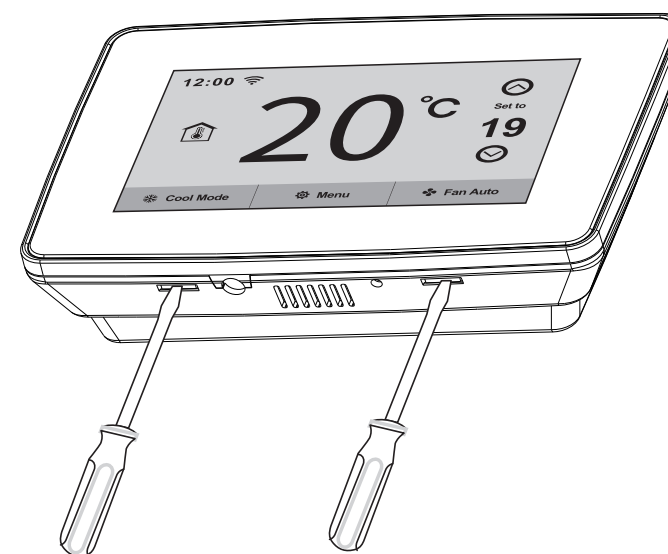
#### Caution: Electrical Hazard

Failure to disconnect the power before beginning to install this product can cause electrical shock or equipment damage.

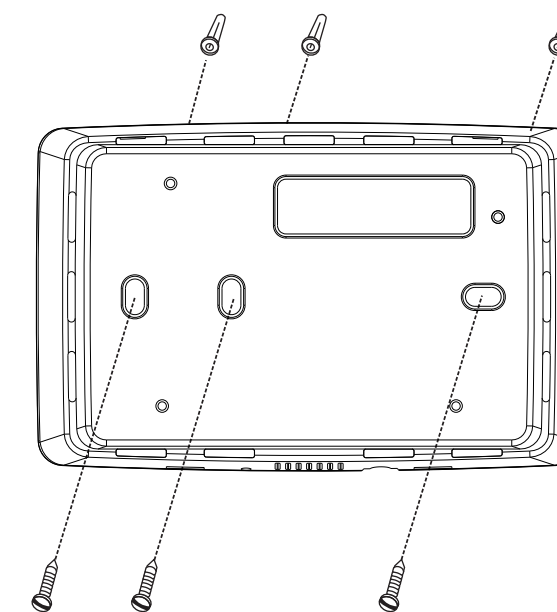


#### Caution: Equipment damage hazard

Do not operate the cooling system if the outdoor temperature is below 50° F (10° C) to prevent possible compressor damage.



Insert the awl into the slot and pry up the front part of the panel to open it.



For horizontal mount put one screw left and one screw right.

## 6.WIRING



### Caution: Electrical Hazard

Failure to disconnect the power before beginning to install this product can cause electrical shock or equipment damage.



### Warning :

All components of the control system and the thermostat installation must conform to Class II circuits per the NEC Code.

### Wiring

- 1.If you are replacing a thermostat. Take notice of the terminal connections on the cases, the wiring connections may not be color coded. For example, the green wire may not be connected to the G terminal.
- 2.Loosen the terminal block screws. Insert wires then retighten terminal block screws.
- 3.Place nonflammable insulation into wall opening to prevent drafts.



### Caution:

Do not over tighten terminal block screws, as this can damage terminal block, and keep the thermostat fitting on the sub-base correctly or it will cause system operation issues.

**Max Torque = 6in-lbs**

### Terminal Designation

- C Common wire from secondary side of cooling system transformer
- O Heat pump changeover valve energizes in cooling
- B Heat pump changeover valve energizes in heating
- W Heat relay

- RH Transformer power for heating
- RC Transformer power for cooling
- G Fan relay
- Y Compressor relay

### Wiring Tips:

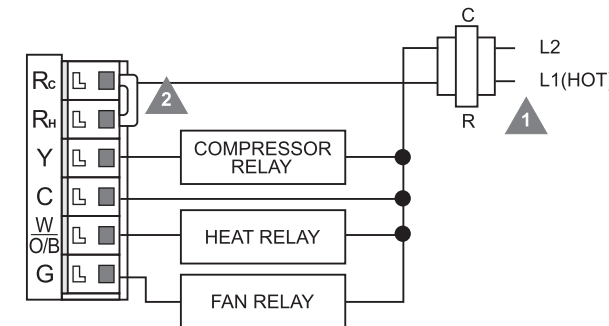
**RH & RC terminals**  
For single transformer systems, leave the jumper wire in place between RH and RC. Remove jumper wire for two transformer systems.

**Wire specifications**  
Use shielded or non-shielded 18 - 22 gauge thermostat wire.

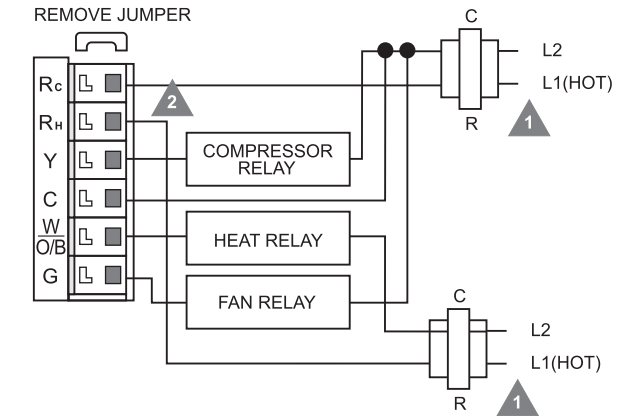
## 7.WIRING DIAGRAMS

- 1 Power supply
- 2 Factory-installed jumper. Remove only when installing on 2-transformer systems
- 3 In heat pump mode, please check the reversing valve to see whether it is in **O** or **B** position, and enter the system to set reversing valve to the position you need.
- 4 The system is in the electronic mode in default setting. If the system is gas or oil supported, enter the setting interface to set it in the gas mode.

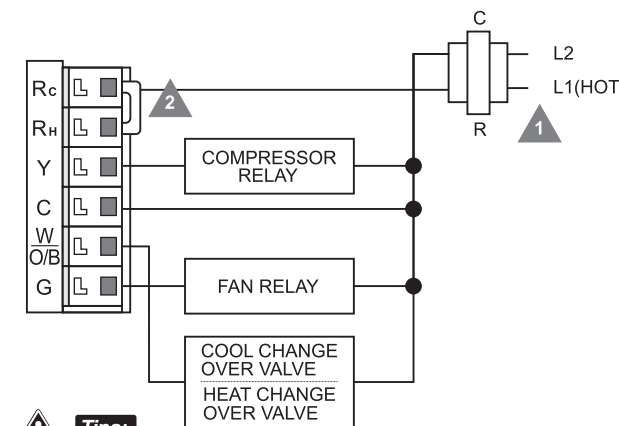
Typical 1H/1C system: 1 transformer



Typical 1H/1C system: 2 transformer



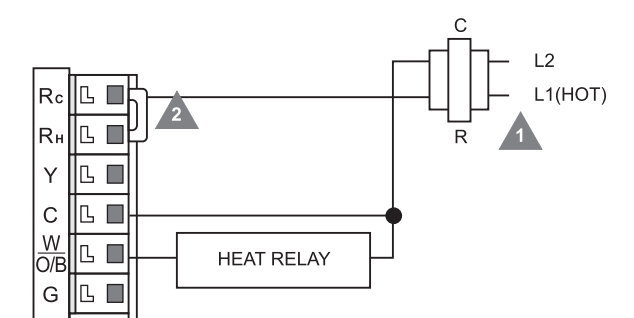
Typical 1H/1C heat pump system



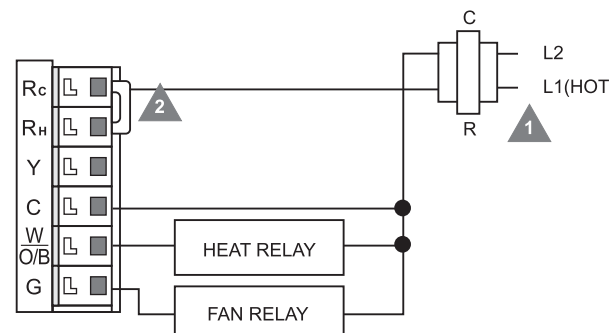
#### Tips:

- 1.Please set on the heat pump system first.
- 2.Please set the valve as heating/cooling system.

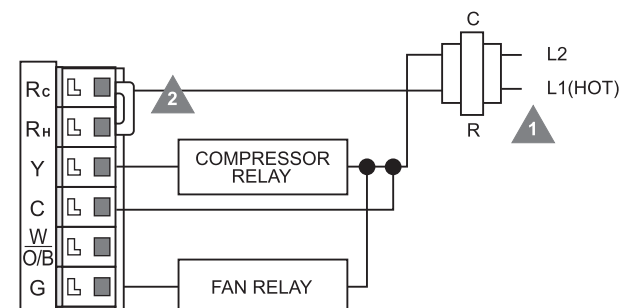
Typical heat-only system



Typical heat-only system with fan



Typical cool-only system

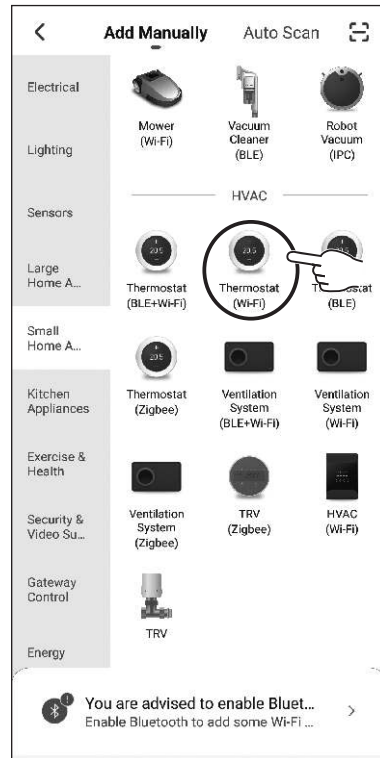




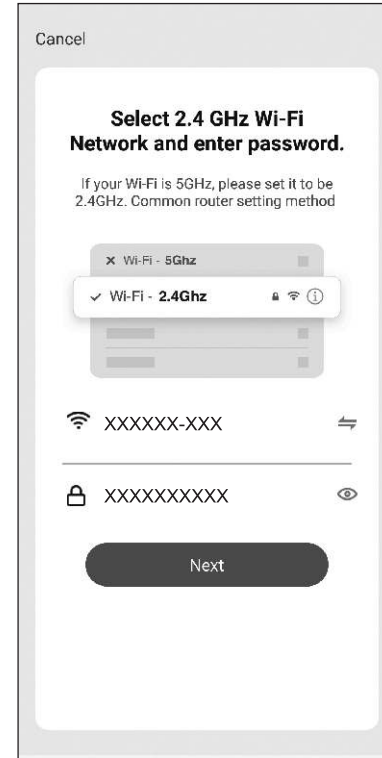
## 8.How to connect WIFI

Connect your phone to the WIFI internet, and download Smart Life  from APP market. Then register according to the hint.

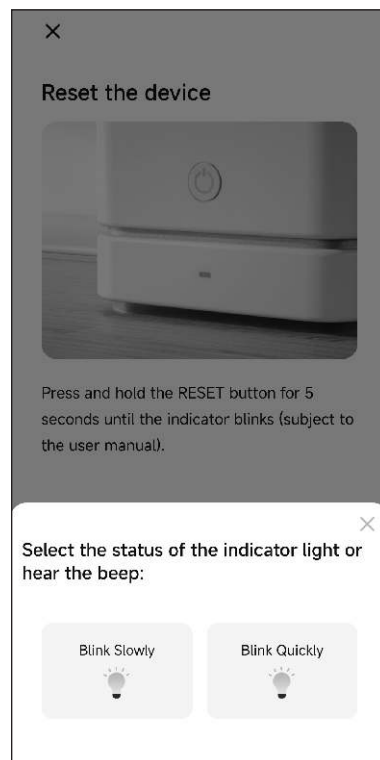
### 8.1 Network configuration(EZ mode).



8.1.1 Choose the thermostat on the list of home appliances.



8.1.2 Choose WIFI and enter the correct password.

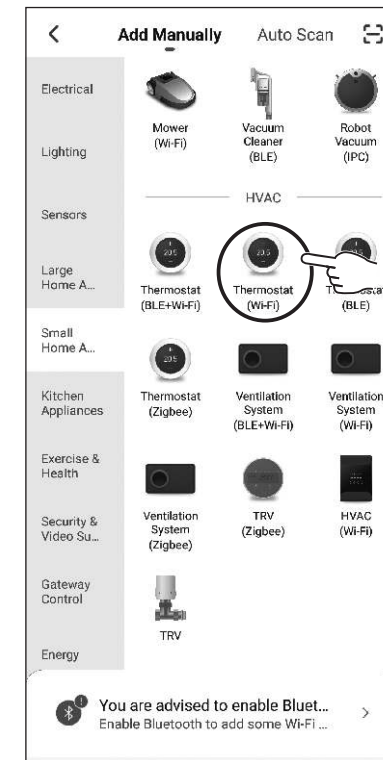


8.1.3 Choose EZ setup for the WIFI setting on the thermostat. Choose quick flashing on the APP

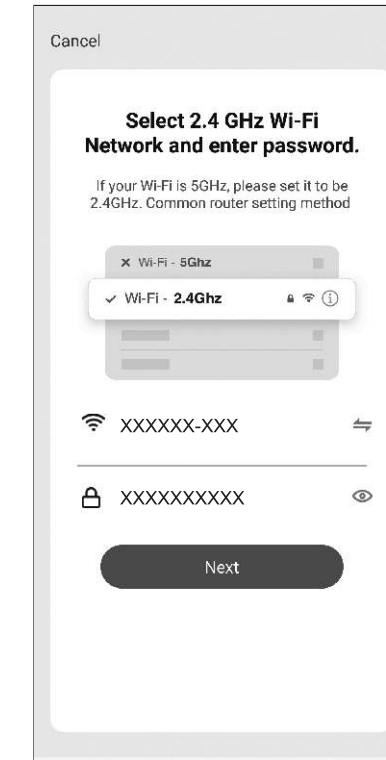


8.1.4 Indicate the successful connection, then click Done.

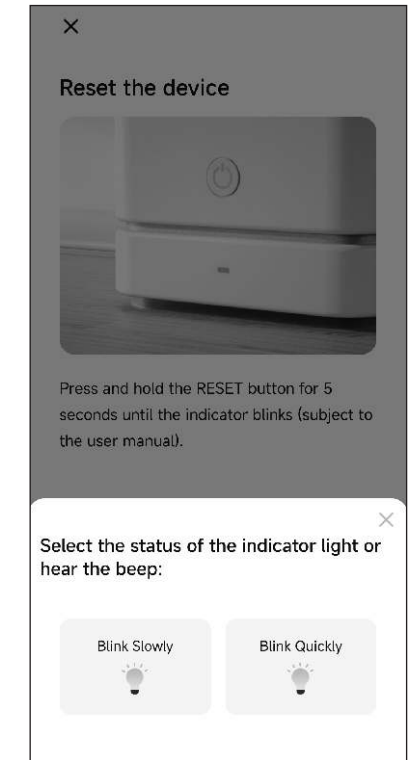
### 8.2 Network configuration(AP mode).



8.2.1 Choose the thermostat on the list of home appliances.



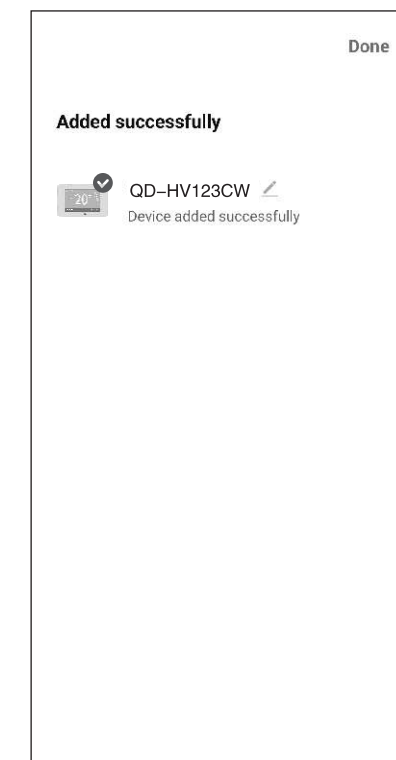
8.2.2 Choose WIFI and enter the correct password.



8.2.3 Choose EZ setup for the WIFI setting on the thermostat. Choose quick flashing on the APP.

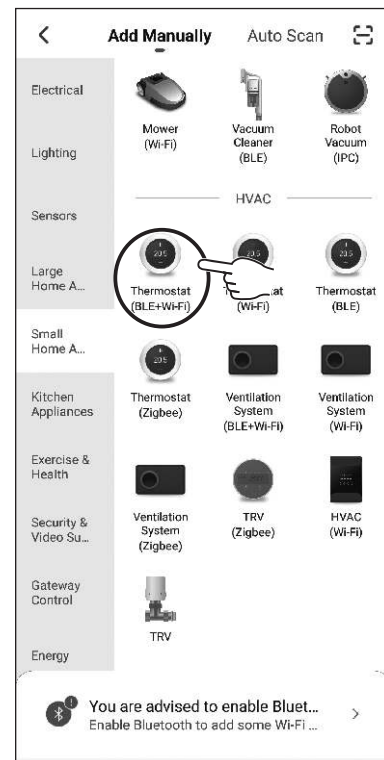


8.2.4 Find the corresponding SmartLife-XXXX or SL-XXXX and connect it.

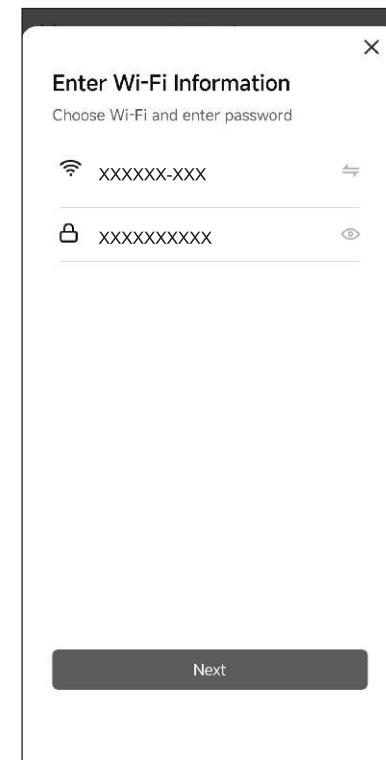


8.2.5 Indicate the successful connection, then click Done.

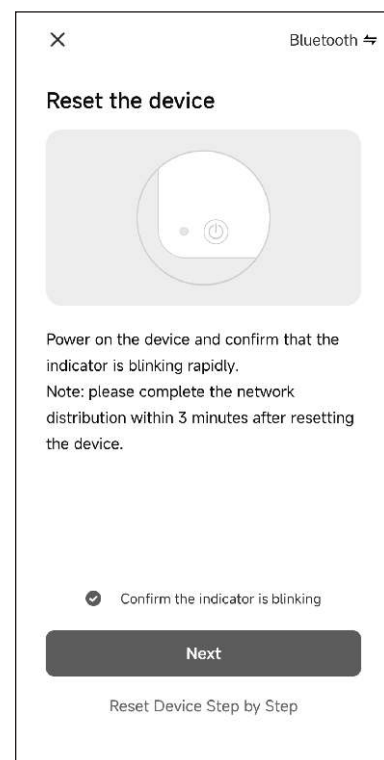
### 8.3 Network configuration(Bluetooth).



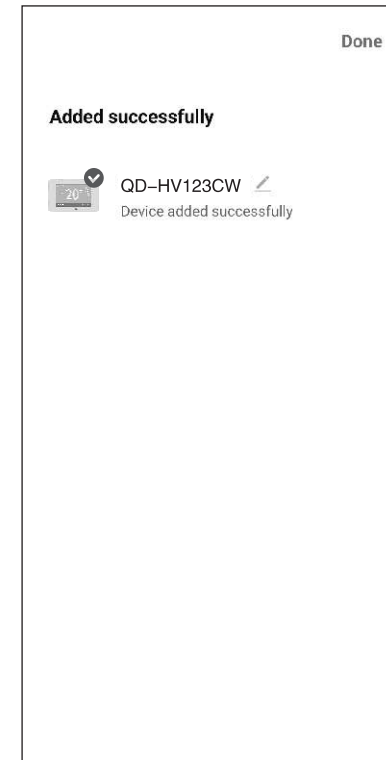
8.3.1 Choose the thermostat on the list of home appliances.



8.3.2 Choose WIFI and enter the correct password.



8.3.3 Choose Bluetooth setup for the WIFI setting on the thermostat, Select Bluetooth at the top-left corner.



8.3.4 Indicate the successful connection, then click Done.

### 8.4 Description of the control interface



#### 8.4.1 Set temperature:

Slide the circle to adjust the setting temperature.

#### 8.4.2 Room temperature:

Indicate the current room temperature.

#### 8.4.3 Working mode:

Click mode symbol to switch the corresponding working modes.

#### 8.4.4 Working condition:

Indicate all the operation.

#### 8.4.5 Power:

To turn on or turn off the power.

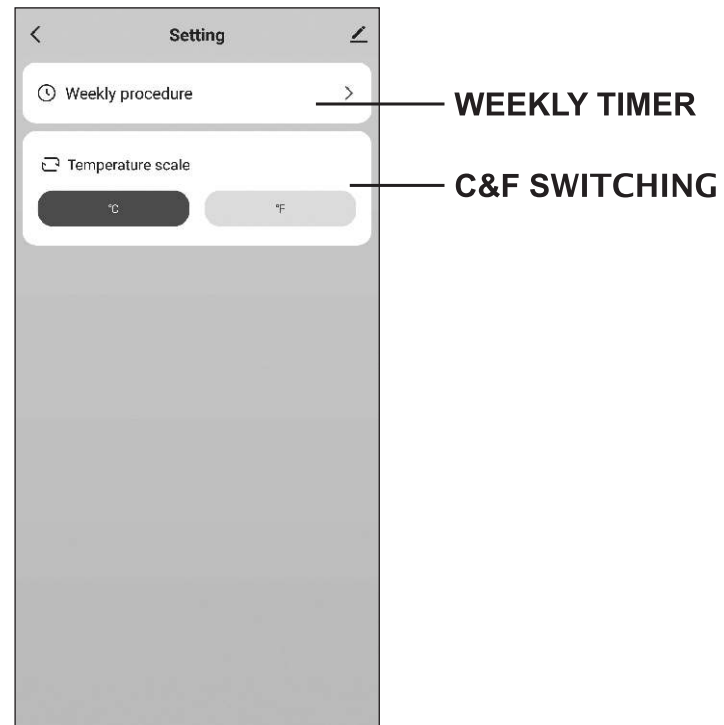
#### Fan mode:

To choose the fan mode is Auto or ON.

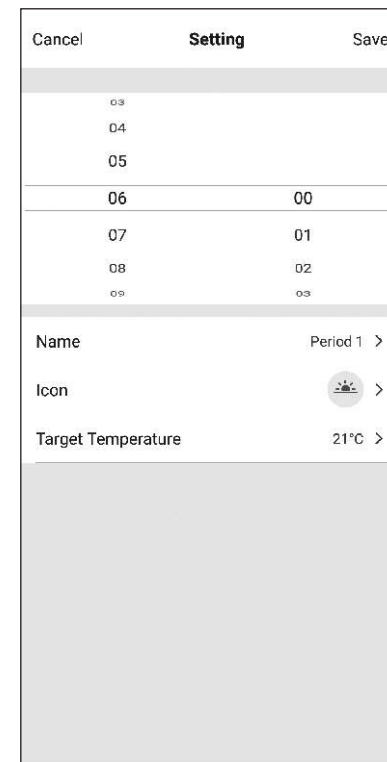
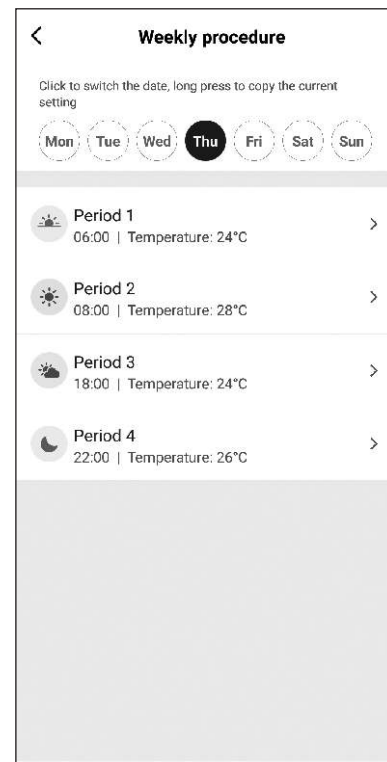
#### Run mode:

To choose the working mode is Manual or Program. Manual corresponds with Hold mode on the thermostat, and Program corresponds with Run mode.

**Setting:** Click setting to enter the interface.

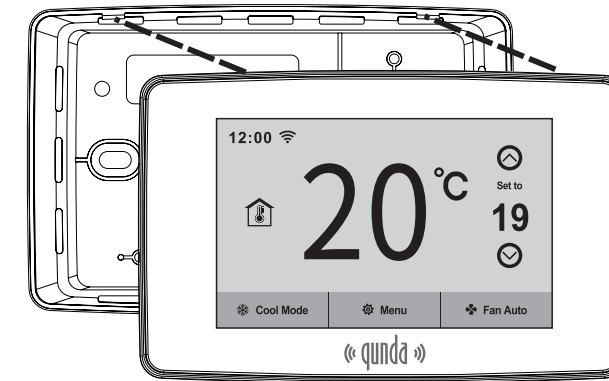


**C & F switching:** Click the temperature unit symbol.  
**Weekly timer:** Click Weekly procedure to enter the setting.

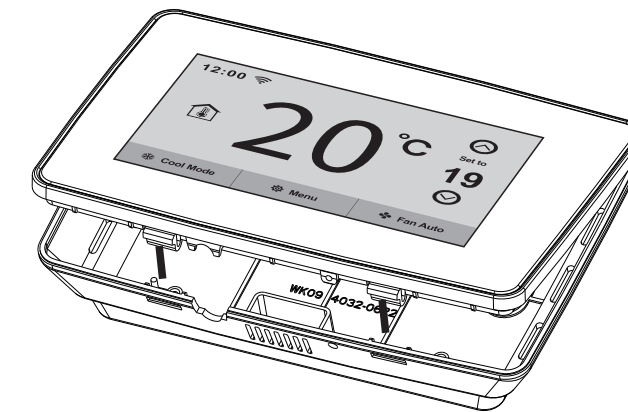


Weekly timer contains seven days a week, and four time periods. Included start time and temperature, click any one of them to enter the setting interface to set time, name, symbol, target temperature.

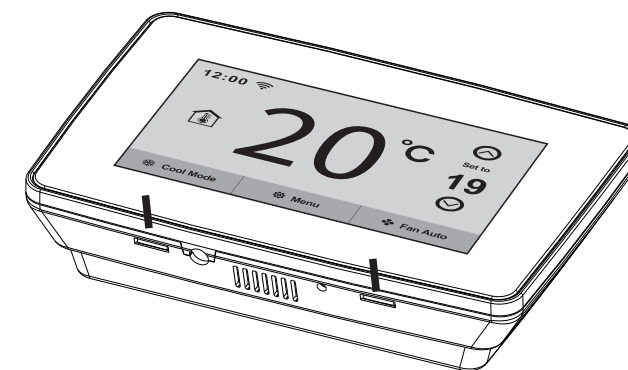
MOUNT THERMOSTAT



Step 1: Aim at the inner snaps in the higher part of the thermostat.



Step 2: Hang the two hooks of the front part at 30° right to the snaps.



Step 3: Press the lower part of the front display panel to complete the installation.



In Step 3, if the user think it is hard to connect the pin, please move the display panel slightly. Then it will be work.

## 10.CAUTION

1. There is preservative on the LCD when out of the factory, users can remove it or not.
2. If you need to remove the preservative, just pull it from the corner and no need to open the thermostat.
3. Don't force to install. When it is hard to connect the pin, move the display panel slightly. After the pin aimed at the port, press the thermostat hard.
4. It is precision electronic products. Don't knock or fall it.
5. Don't let the water, mud into the thermostat.

## 11.Notes for touch screen

1. Please don't touch the screen when the oil or the water stains on your hands.
2. If the screen is stained by water or dusty, it will reduce the sensitivity, even result the touch screen failure.
3. Please use the soft cloth to clean the touch screen.
4. Please don't operate the touch screen with hard objects, to prevent scratching the surface.

## 12.SPECIFICATIONS

The display range of temperature.....	32°F to 97°F ( 0°C to 36°C)
The control range of temperature.....	45°F to 90°F ( 7°C to 32°C)
Load rating.....	1 amp per terminal, 1.5 amp maximum all terminals combined
Display accuracy .....	± 0.5°C
Power source.....	18 to 30 VAC, NEC Class II, 50/60 Hz for hardwire (common wire)
Operating ambient.....	41°F to +95°F(5°C to +35°C)
Operating humidity.....	90% non-condensing maximum
Dimensions of thermostat.....	130mm*83mm*27mm