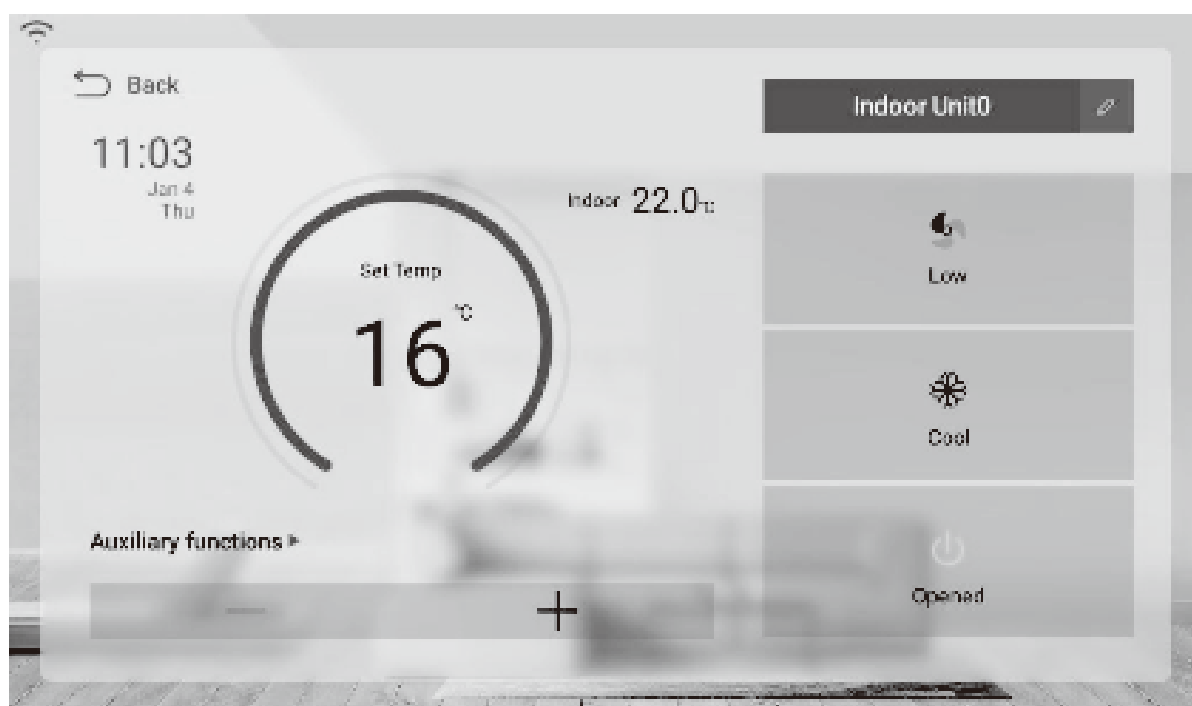


# ComfortStar®

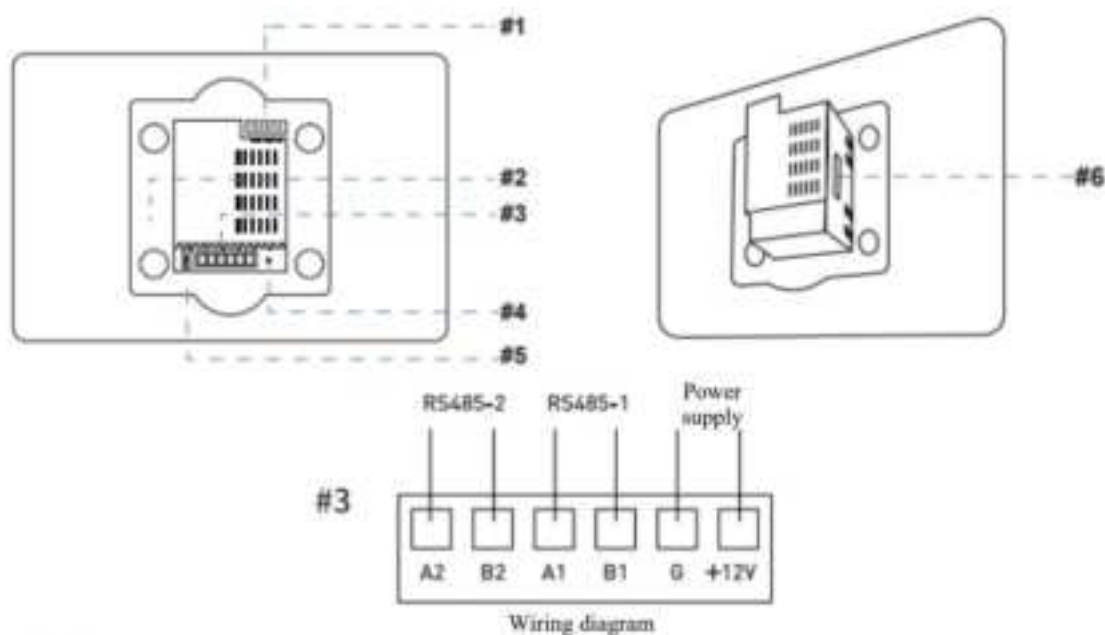
## Installation and Operation Manual — CCWC-100-WIFI Touch Screen Centralized Controller





# Product Information

## Port diagram



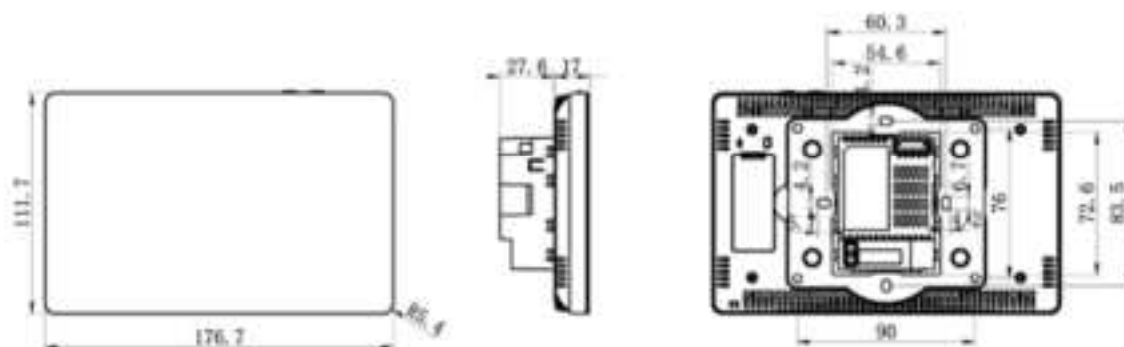
	Name	Mark	Description
#1	8pin white terminal		Reserved
#2	Magnetic-suction backplane for installation		For fixed installation of the centralized controller
#3	6pin green-power-supply communication terminal	A2	RS485-A port, used as a slave to connect to the host computer
		B2	RS485-B port, used as a slave to connect to the host computer
		A1	RS485-A port, connecting the X and K1 of the outdoor unit (K1 of the mini VRF for home may not be connected)
		B1	RS485-B port, connecting Y and K2 of the outdoor unit (K2 of the mini VRF for home may not be connected)
		G	Power supply, 12VDC negative
		12V	Power supply, 12VDC positive
#4	Reset button		Reboot the device
#5	DIP switch		Inside ON: the flash burn-in program mode function of the factory (factory default) Outside OFF: blank screen status (no function)
#6	TF card port		Reserve port for the debugging of MicroSD Card

## Technical specifications

Port	Parameter Item	Specification
WIFI	WIFI standard	IEEE802.11b/g/n (channel 1-14)
	Transmission speed	≤54Mbps
	Frequency range	2.400GHz ~ 2.484GHz
Bluetooth	WIFI standard	Bluetooth 4.2
RS485	Transmission speed	Baud rate ≤9,600 bps
Power	Power supply requirement	DC 12VDC, maximum power consumption 4 W

## Installation and Wiring

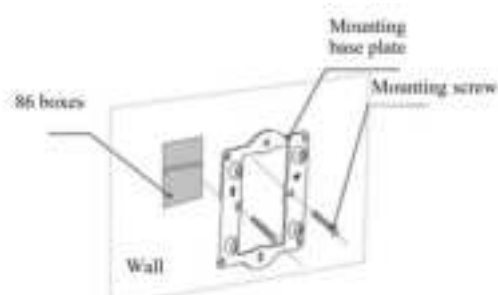
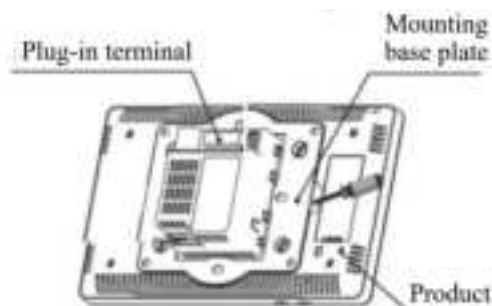
### Installation dimensions



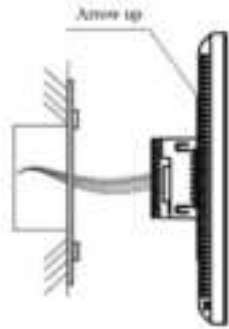
### Installation method

This product allows embedded installation. Please refer to the following requirements to complete the installation of this product.

1. Pull out the plug-in terminal from the product, connect wires respectively with 12V, G, and A1 and B1 terminals of RS485 as required by the wiring standard, and then insert a small flat-blade screwdriver into the mounting base plate to take down this plate.
2. Insert and fasten 2 mounting screws (attached randomly) from the back of the panel into the 2 mounting and fixing bores on the left and right sides of the product's mounting base plate, until the product is securely fastened to the panel. Recommended torque value: 6.0+/-0.5 kgfcm.



3. Plug the connected terminals into the product, and then push the product into the mounting base plate inside the mounting box to suck it directly.



4. Power on the controller after the product is installed.



## Wiring guidance

1. Wiring shall be carried out by professionals under the state of no electricity.
2. Wiring shall be carried out in strict accordance with the wiring diagram. Be sure not to reverse the power cord and the communication cord; do not reverse the power supply terminals 12V and GND; and the A and B ports of RS485 should correspond one-to-one, and should not be reversed.
3. The interior of the product shall be protected from water, mud, and other sundries, and it is necessary to pay attention to the orientation of the equipment to avoid installing it in the wrong direction.

## Function Description

### 1 Startup and loading

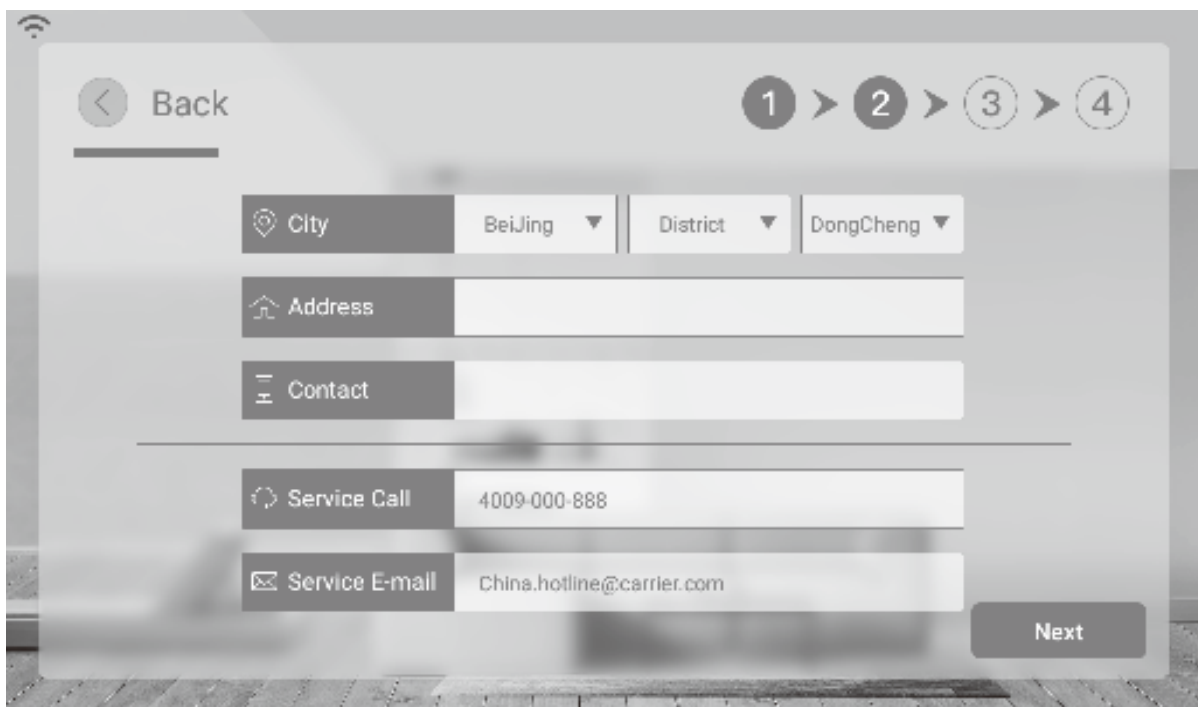
The product enters the boot screen after being powered on, and then loads the interface. The loading process is relatively slow due to the limit of the Android system. Please hold on. The System Configuration interface is entered after loading.

### 2 System Configuration interface

After entering the System Configuration interface, first input the account and password. The default account and password for the service personnel are "admin" and "8699".

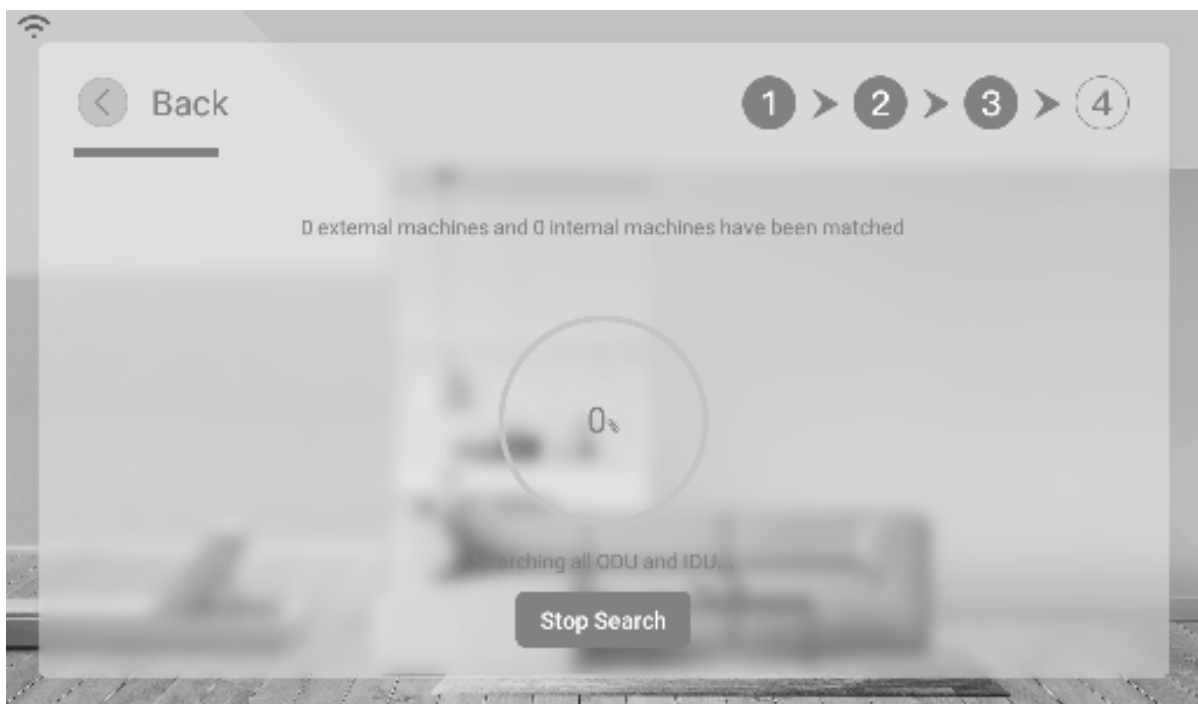
Note: Please correctly select the language, which will determine the initial naming of the device.

Select the city where the device is located and the relevant address (optional).



The screenshot shows a mobile application interface for selecting location information. At the top left is a 'Back' button with a left arrow. At the top right is a progress indicator with four circles numbered 1 to 4; circle 3 is highlighted. Below the progress indicator are three input fields: 'City' with a dropdown menu showing 'BeiJing', 'District' with a dropdown menu showing 'DongCheng', and 'Address' with an empty text box. Below these are two more input fields: 'Contact' with an empty text box, and 'Service Call' with the value '4009-000-888'. Below that is a 'Service E-mail' field with the value 'China.hotline@carrier.com'. At the bottom right is a 'Next' button.

Click Next to enter the Indoor and Outdoor Unit Search interface, and wait for the search result.



The screenshot shows the 'Indoor and Outdoor Unit Search' interface. At the top left is a 'Back' button with a left arrow. At the top right is a progress indicator with four circles numbered 1 to 4; circle 3 is highlighted. Below the progress indicator is a message: '0 external machines and 0 internal machines have been matched'. In the center is a large circular progress indicator showing '0%'. Below the progress indicator is the text 'Searching all QDU and IDU...'. At the bottom center is a 'Stop Search' button.

Verify whether the number of the indoor and outdoor units is correct after searching. Click Next/Finish to enter the Home page if the number is correct.

Otherwise, click Search Again in the Outdoor Unit Information interface.

(If in the Indoor Unit Information interface, click Return in the upper left corner of the interface to return to the Outdoor Unit Information interface)

Back

1 > 2 > 3 > 4

Please confirm the ODU and IDU information

Search

Index	地址
1	0
	--
	--

If the information not right, please check wire connection and system settings

Next

Back

1 > 2 > 3 > 4

Please confirm the IDU number and information

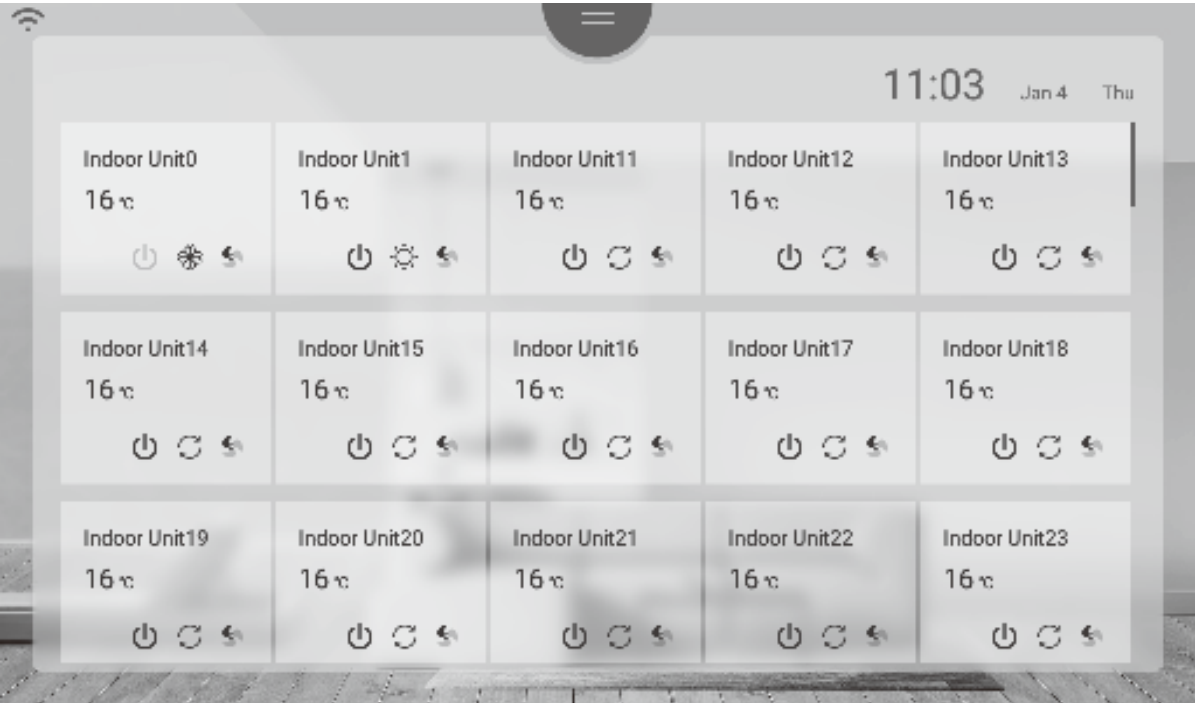
Index	Name	Version
1	Indoor Unit0	--
2	Indoor Unit1	--
3	Indoor Unit11	--
4	Indoor Unit12	--

If the information not right, please check wire connection and system settings

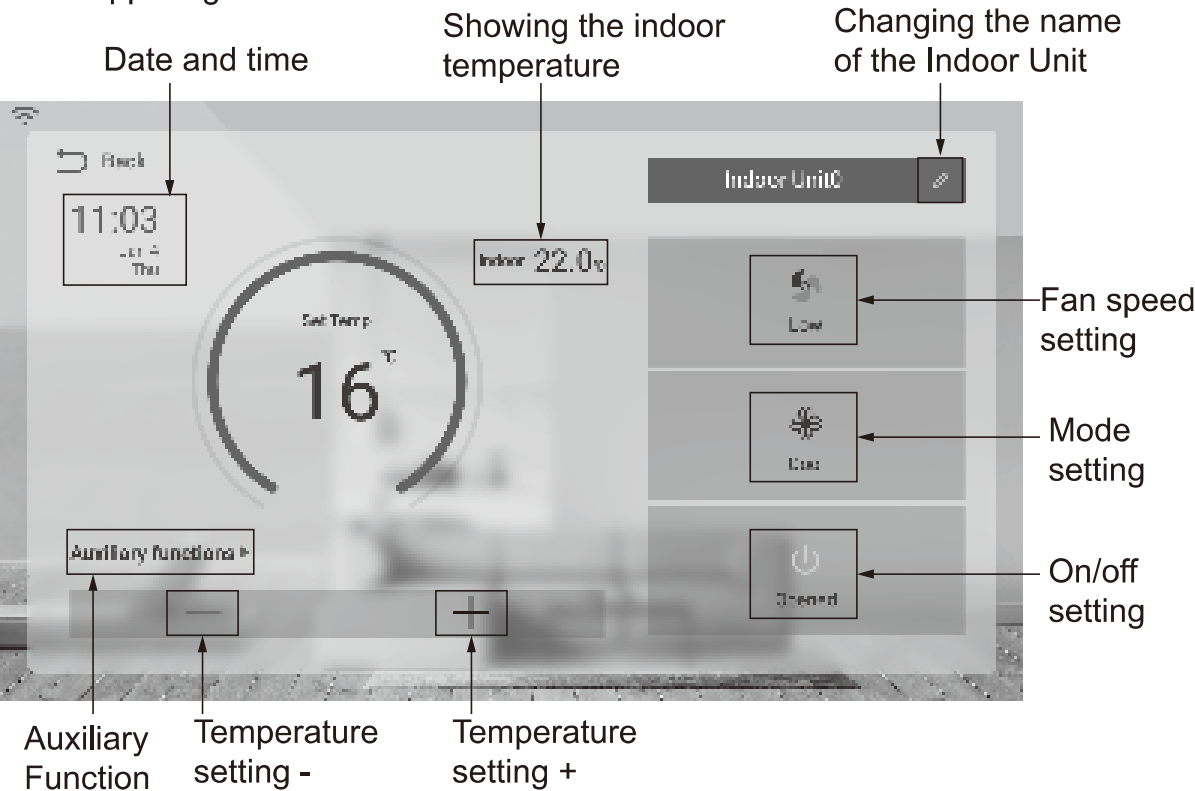
Complete

3 Indoor Unit Master Control interface

The main interface displays a list of all Indoor Units, which includes the name, set temperature/fault condition, on/off status, mode, and fan speed of the Indoor Unit, and the date and time of the centralized controller at its upper right corner. You can click any of the Indoor Units to view its set states and control it.

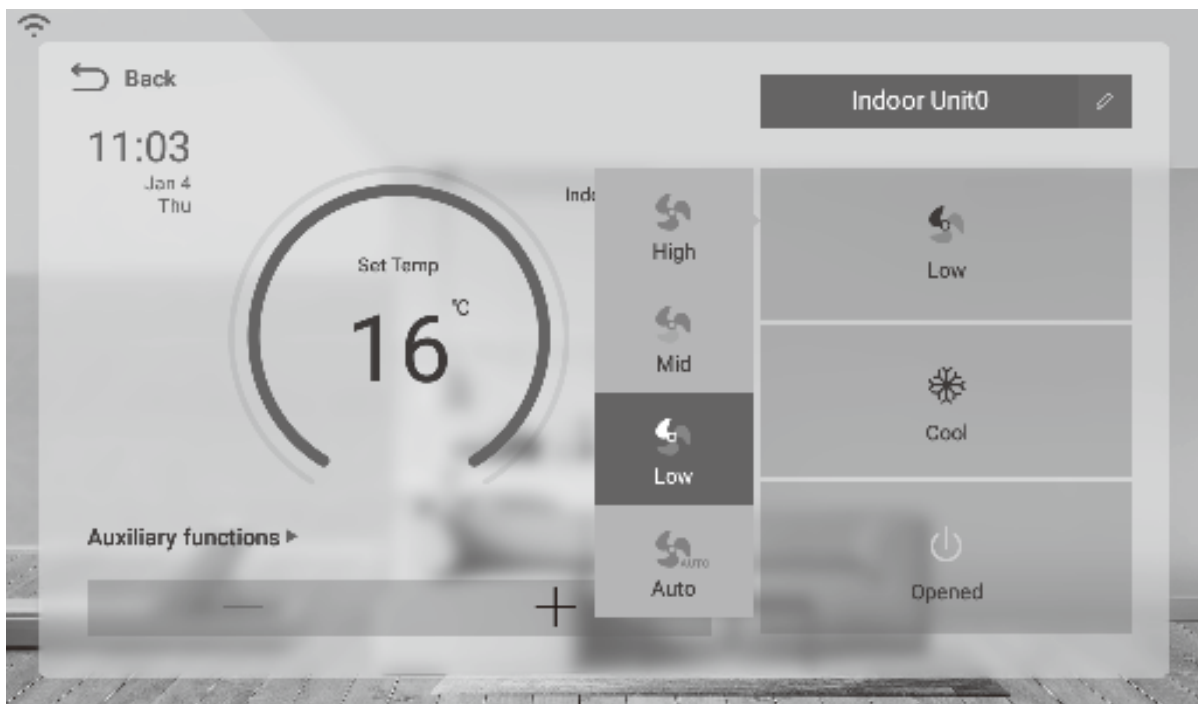


After clicking any Indoor Unit, you can enter the Master Control interface of the corresponding Indoor Unit, and freely edit the name of the Indoor Unit (Room) in the upper right corner.





You can choose fan speed, such as high, medium, low, or auto after clicking the fan speed setting in the Master Control interface.



You can choose the cooling, heating, dehumidification, fan mode, or auto mode after clicking the mode setting in the Master Control interface.

Note: For VRF system, auto mode is cooling actually.

The fan speed can not be changed under the dehumidification mode. The setting temperature can not be changed under the fan mode.



After clicking Auxiliary Function in the Master Control interface, you will enter the Auxiliary Function interface, and can set the on/off status of Lighting, horizontal winging, vertical Swinging, Economy Operation, Mode Lock, Remote Lock, and Electric Auxiliary heater.

Note: Please refer to the actual model for the presence of such additional functions.

The economy operation and electric auxiliary heater control are currently reserve functions on VRF system. Mode Lock only exists in VRF system, and can lock merely the cooling and heating modes at present. It will judge to lock the cooling mode if clicked under non-heating modes. Its icon will change according to the locked mode after the locking.

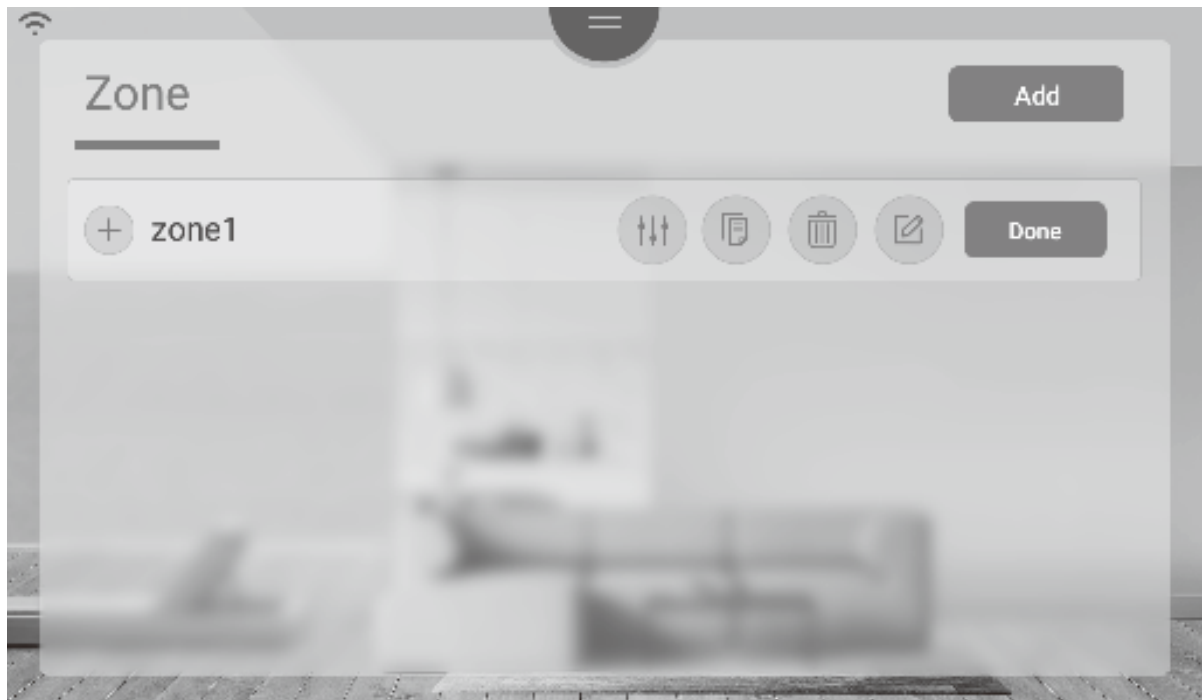
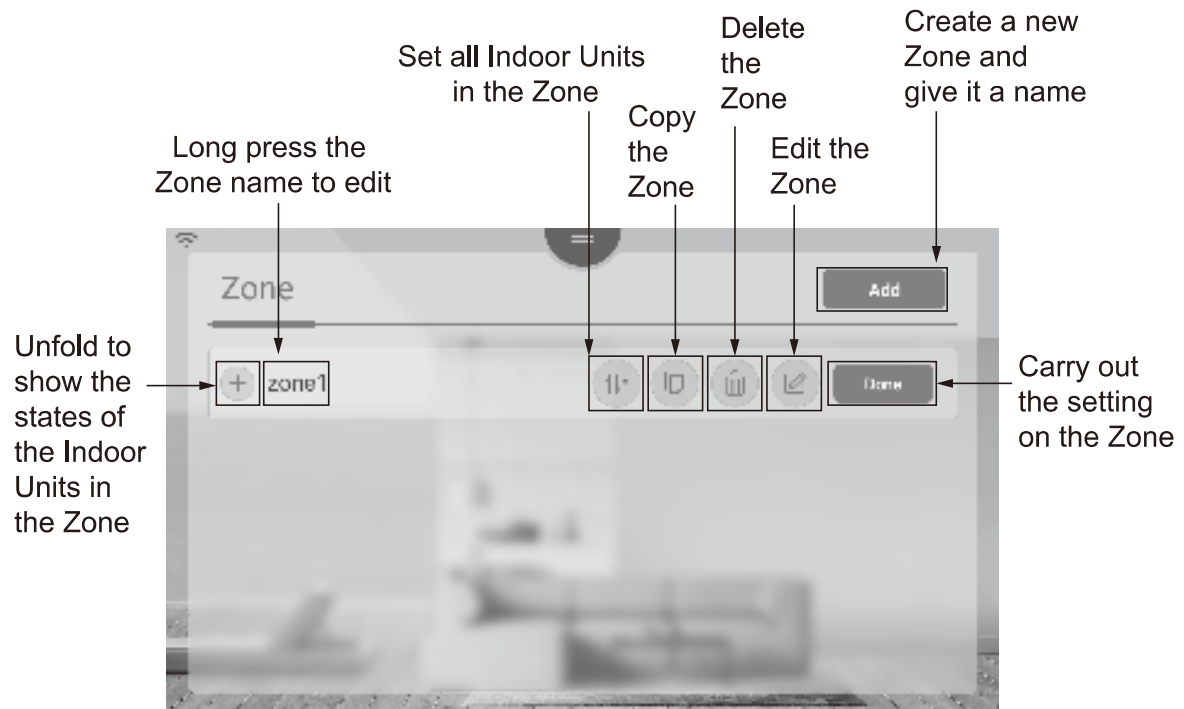
#### 4 Other functions


Click the half circle in the main interface to pop up a setting interface, and then you can use other functions.

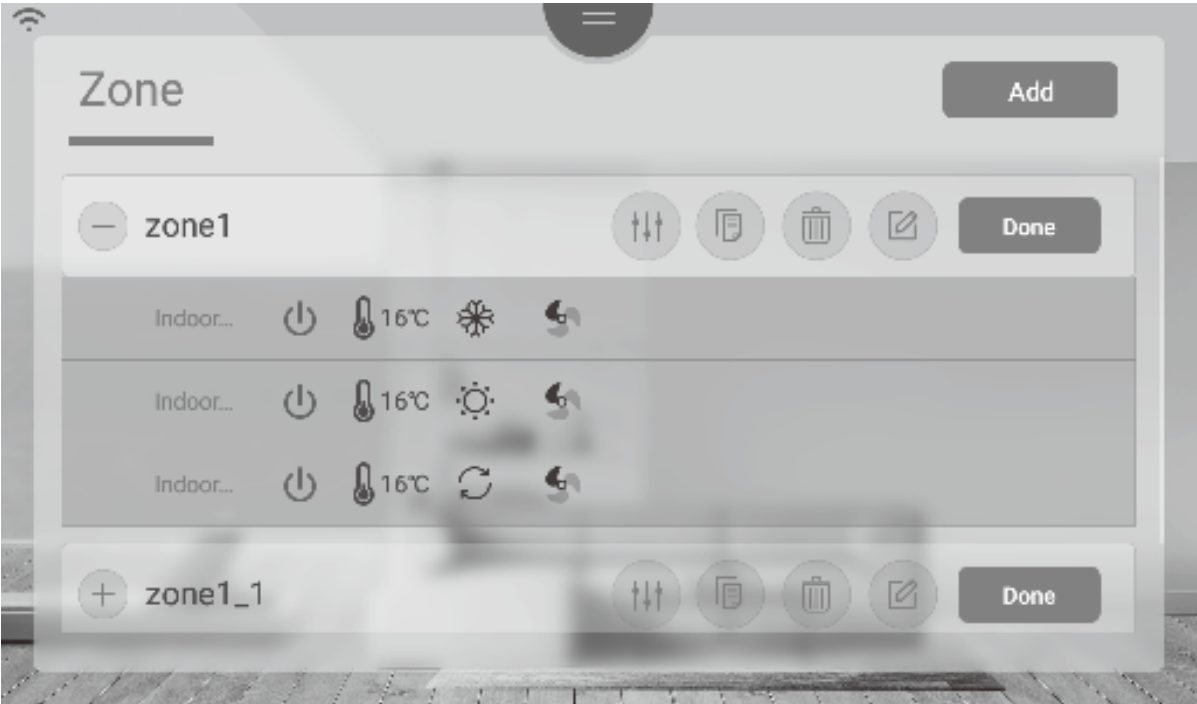





## 1. Zone function:

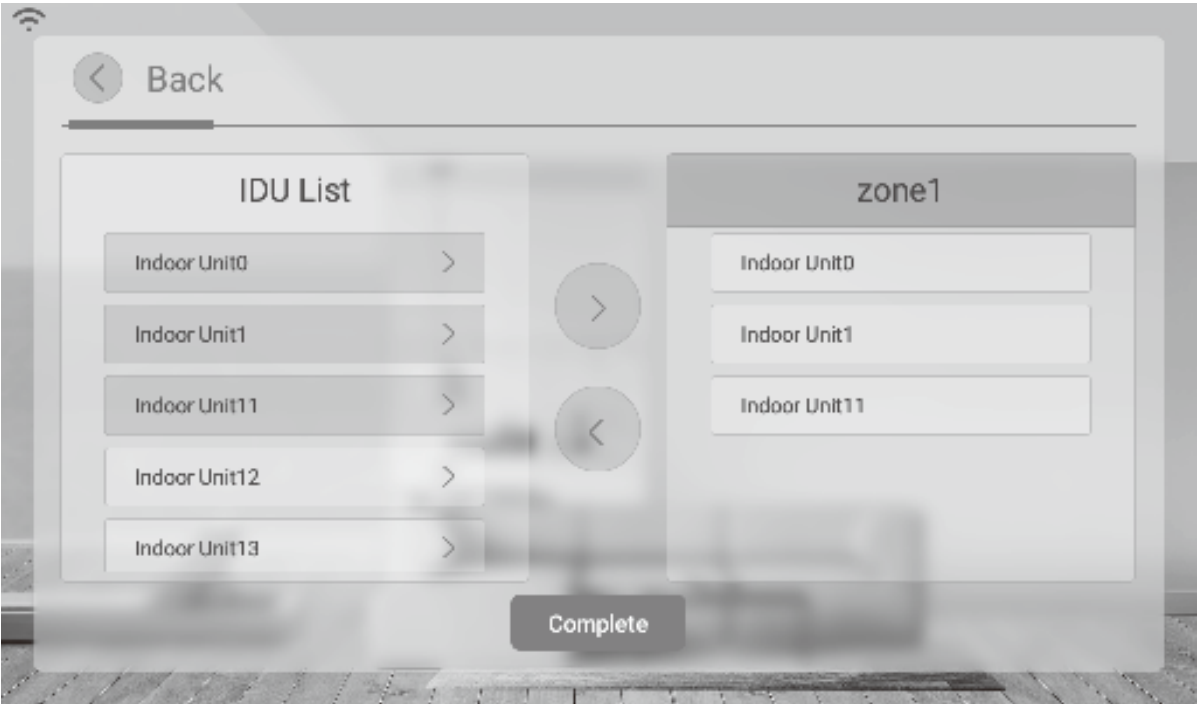
The Zone function means a grouping function, and after grouping, you can set the Indoor Units of a group with one click. You will go to the main Zone Function interface after clicking Zone.




A Zone (ten at maximum) can be created by clicking Adding a Zone. The Zone Name can be edited by long pressing it. The states of the Indoor Units in the Zone can be unfolded to view by clicking .



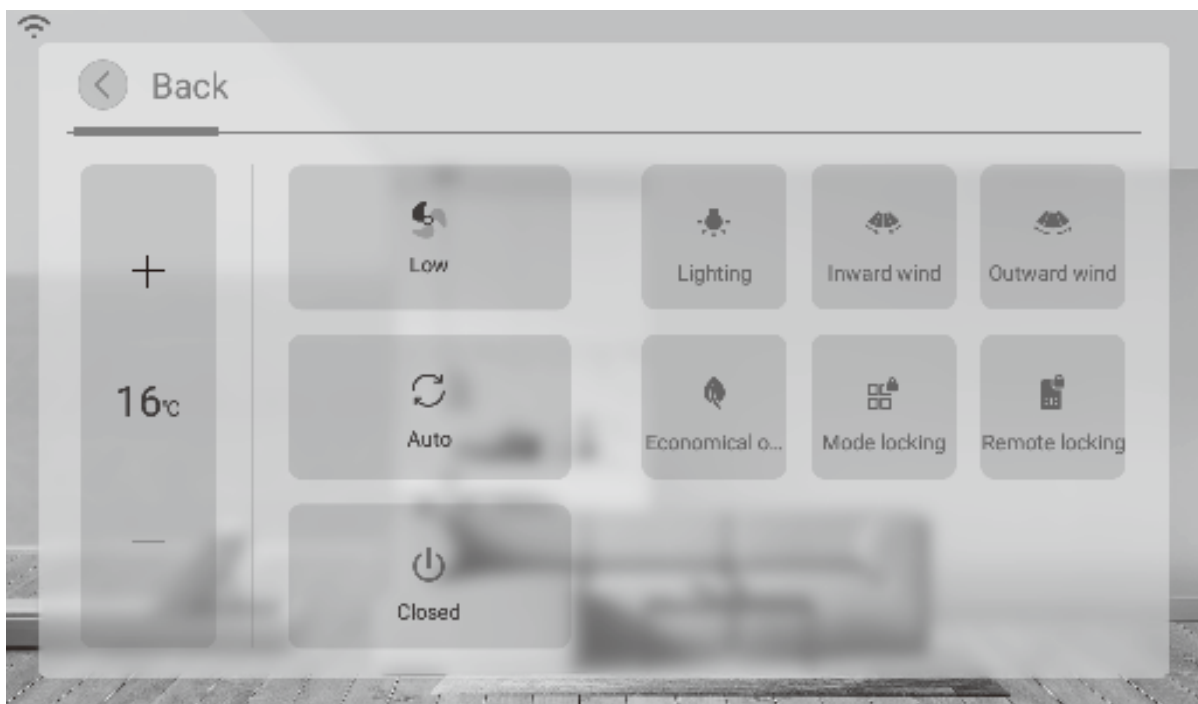
It goes to the editing interface after  is clicked, and you can choose Indoor Units for Zones. The Indoor Unit in the left Indoor Unit list can be added or deleted by clicking it. All Indoor Units can be added with one click by clicking  in the middle, and be deleted with one click by clicking  in the middle.



It goes to the Zone Setting interface after  is clicked. You can uniformly set the operation mode, fan speed, temperature of all Indoor Units in the Zone, which can immediately be carried out once by clicking Carry Out after you return to the Zone Function interface.

Note: Please refer to the actual model for the presence of such auxiliary functions, as stated in the Indoor Unit interface.


The economy operation and electric auxiliary heater control are currently reserve functions on VRF system. Mode Lock only exists in VRF system, and can lock merely the cooling and heating modes at present. It will judge to lock the cooling mode if clicked under non-heating modes. Its icon will change according to the locked mode after the locking.

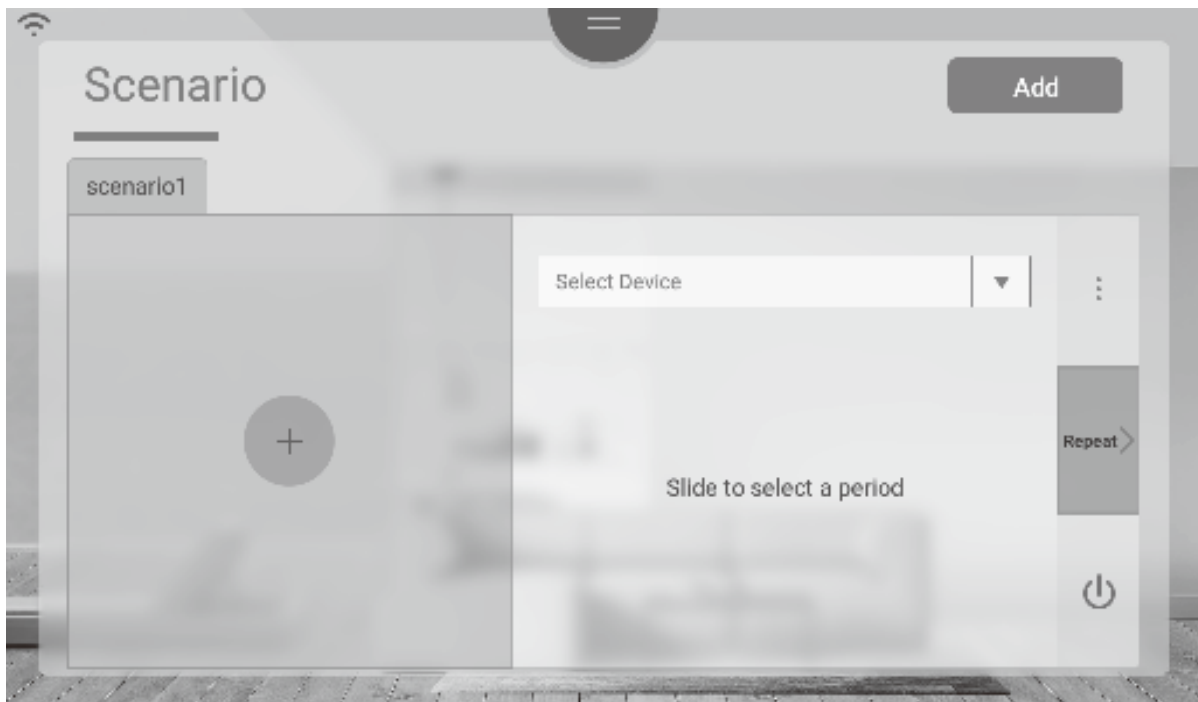
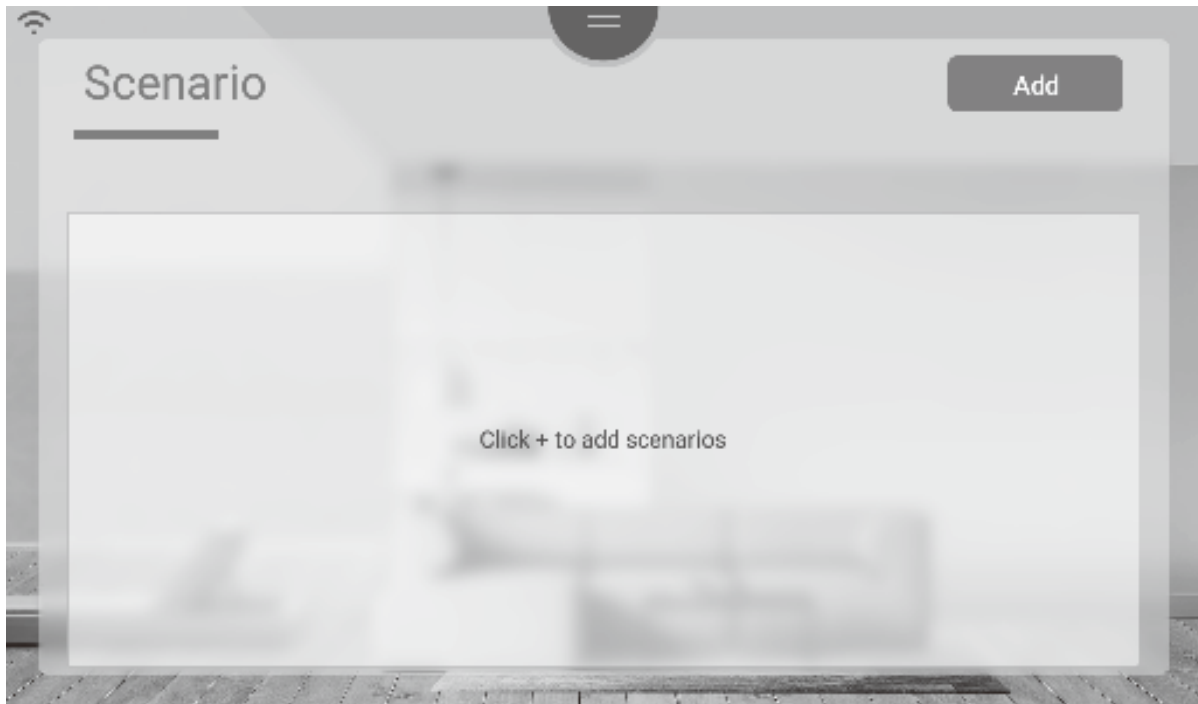


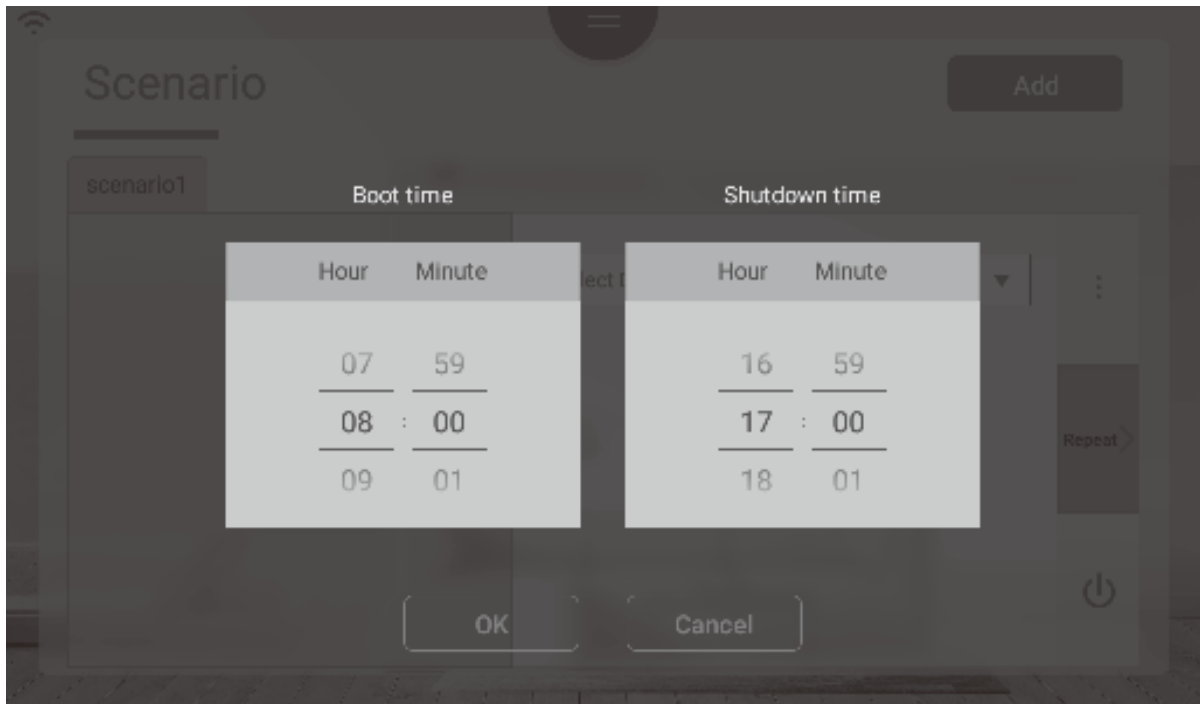
A Zone can be copied by clicking . A Zone can be deleted by clicking .

## 2. Scene function

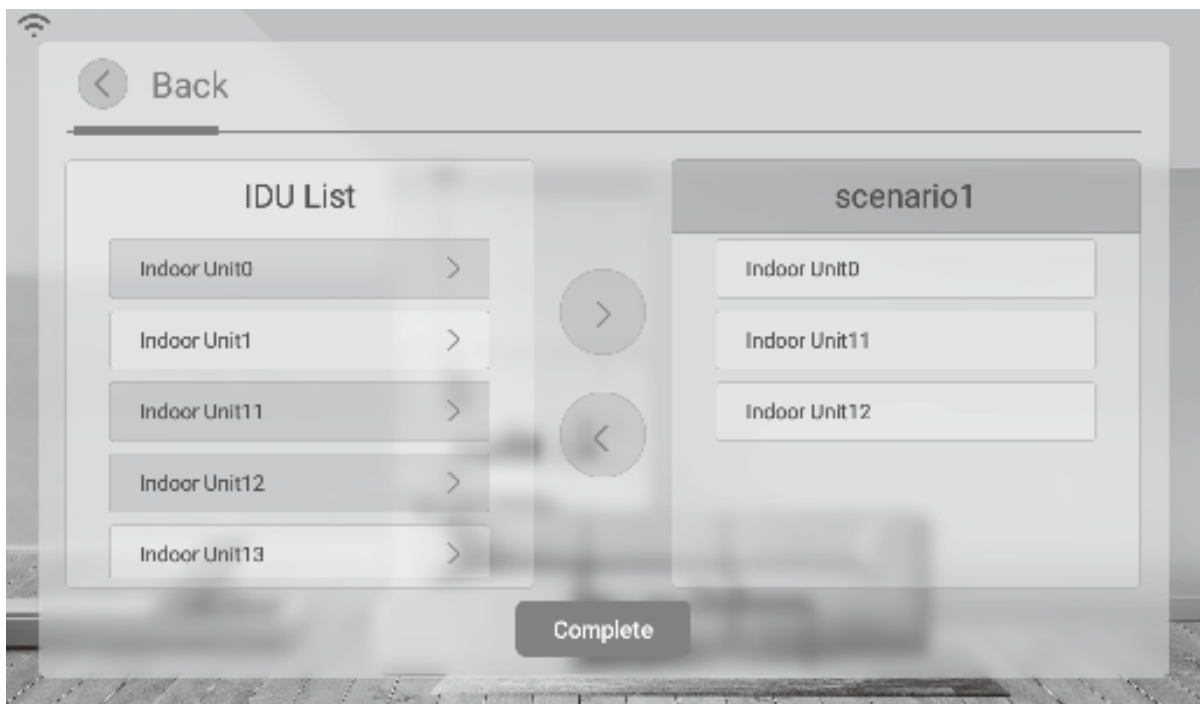
The Scene function allows 10 scenes to be created. You can set the time switch, operation mode, fan speed, and temperature of the Indoor Units in the scene.

A new Scene can be added and named after Add Scene in the upper right corner is clicked, and a time switcher can be added after  on the left side is clicked.

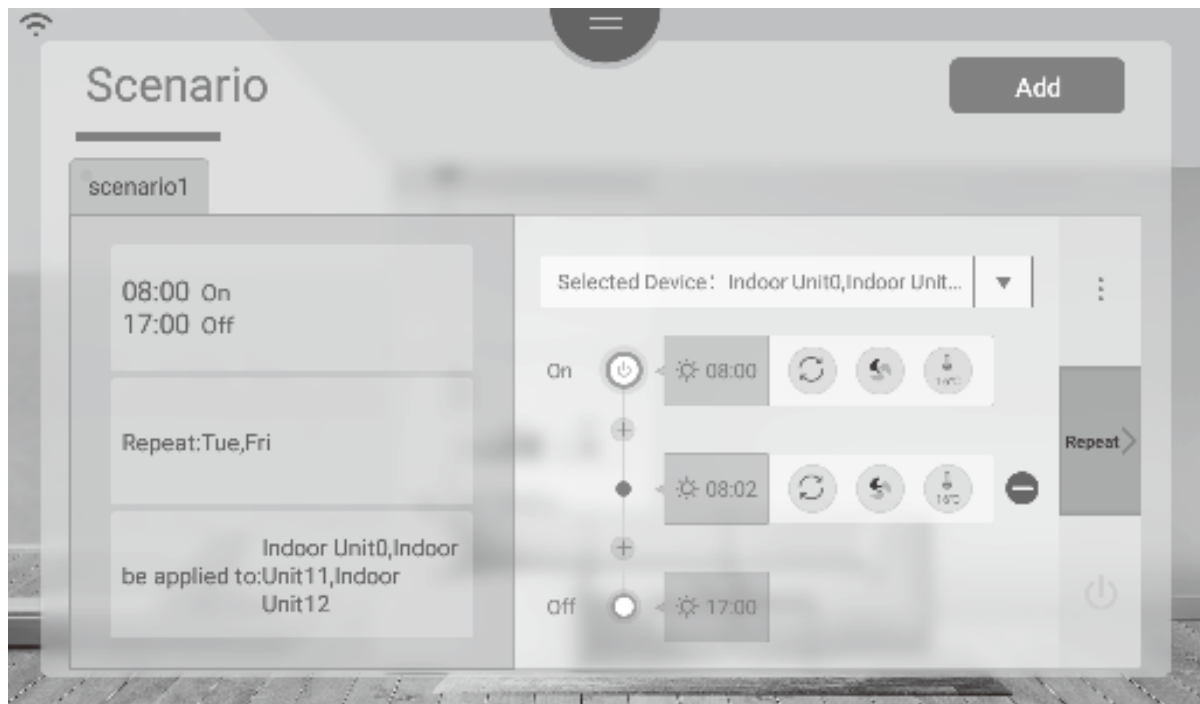




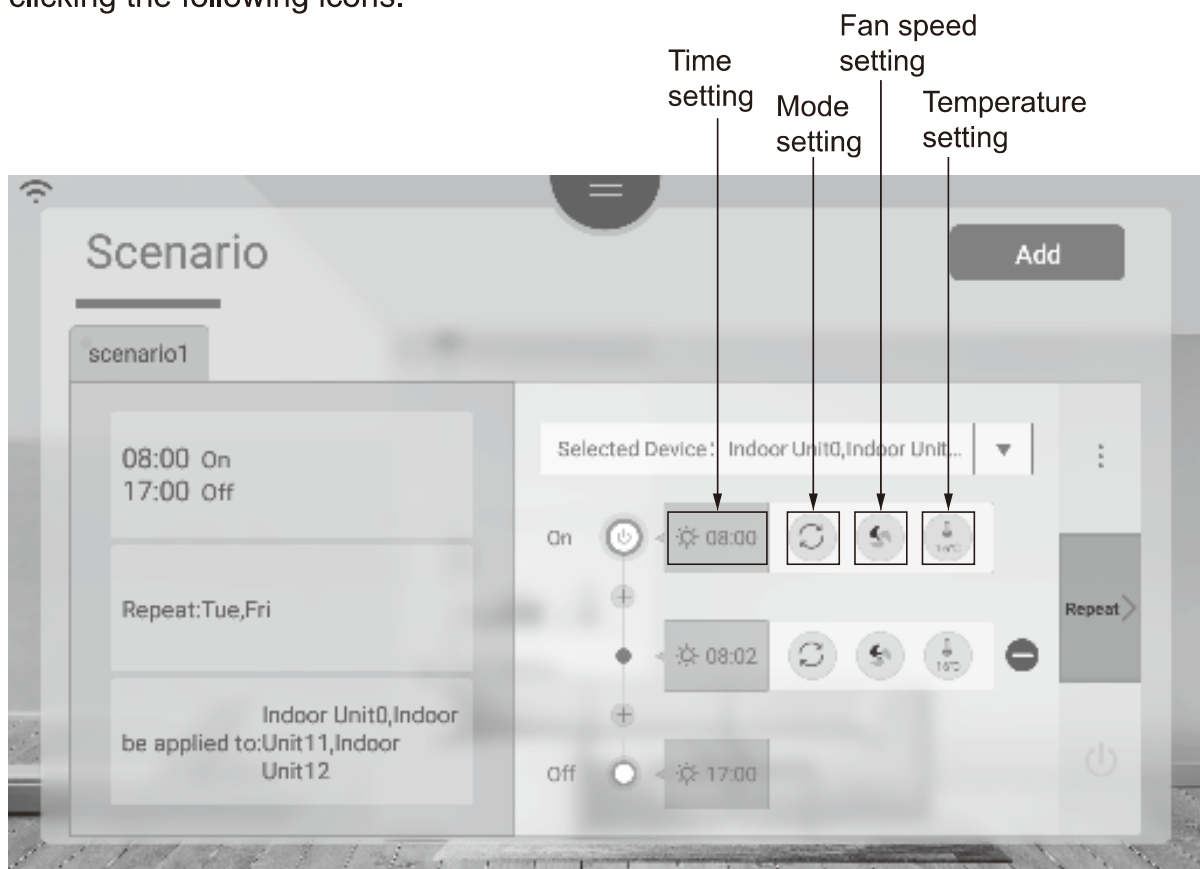
You can click Choose Equipment to add Indoor Units after the time switcher is set.



After that, we can click **+** between the power on and off icons on the right to add another time node (three such nodes at most).

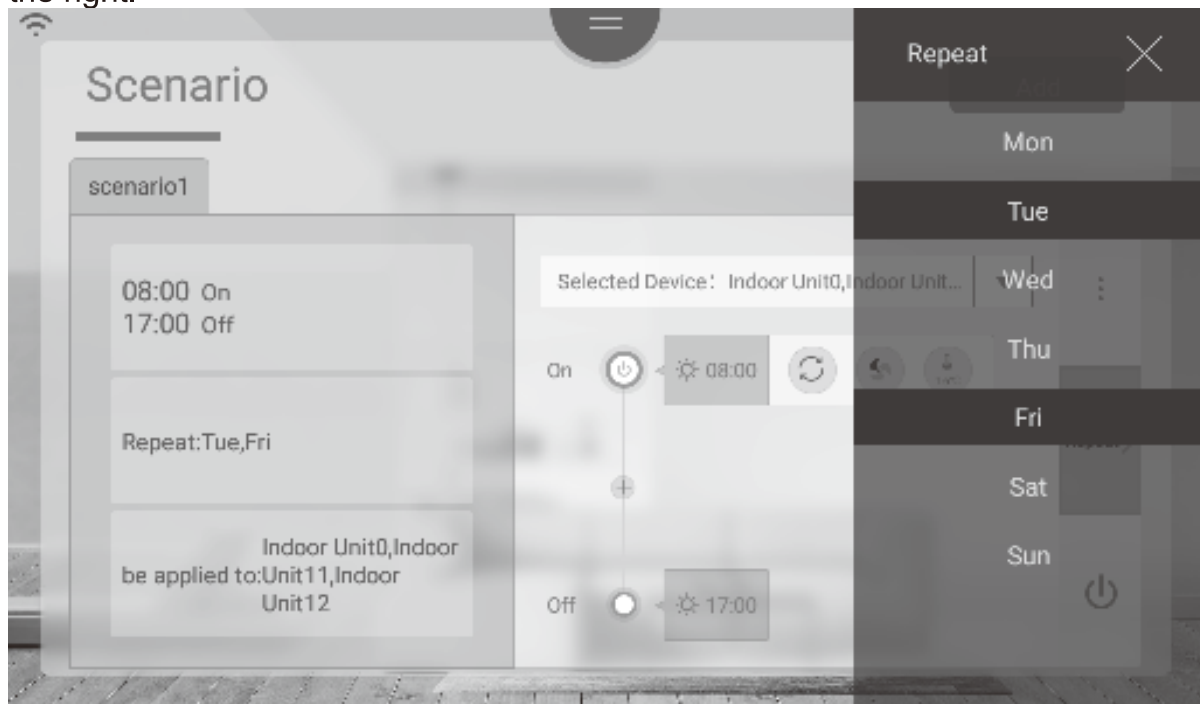


The mode, speed, temperature at every time node can be adjusted after clicking the following icons.

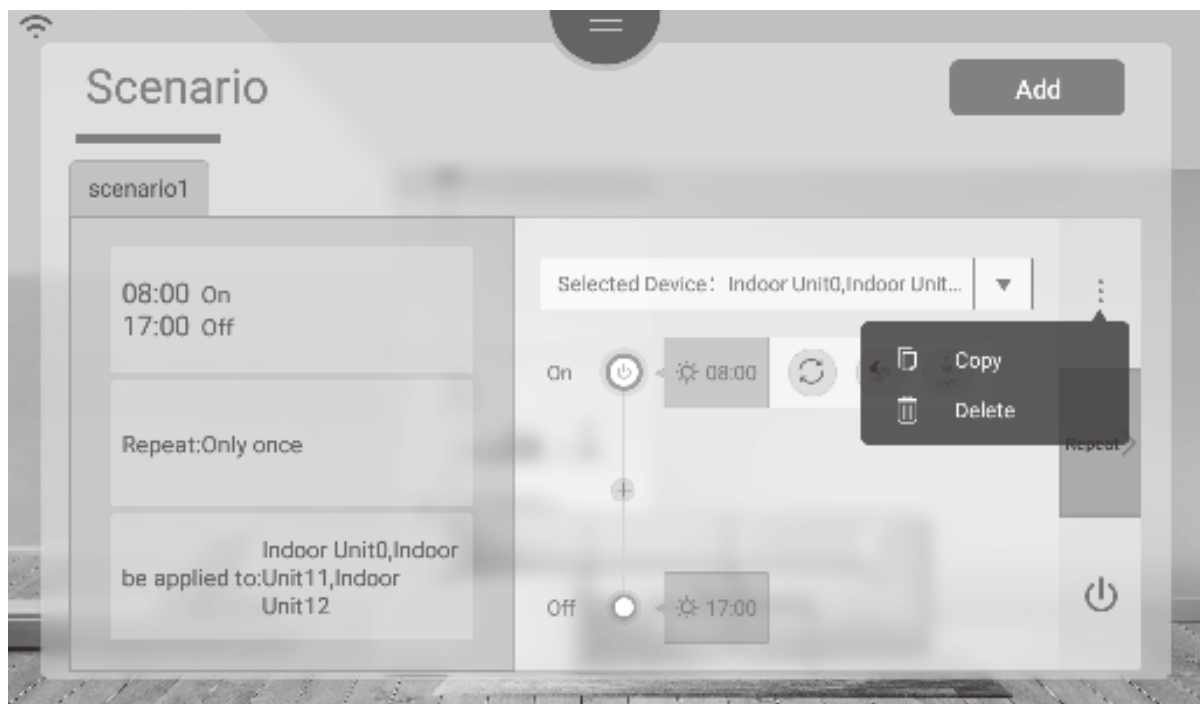






Another date to repeat the scene function can be set after clicking Repeat on the right.



A scene can be copied or deleted by after clicking  .

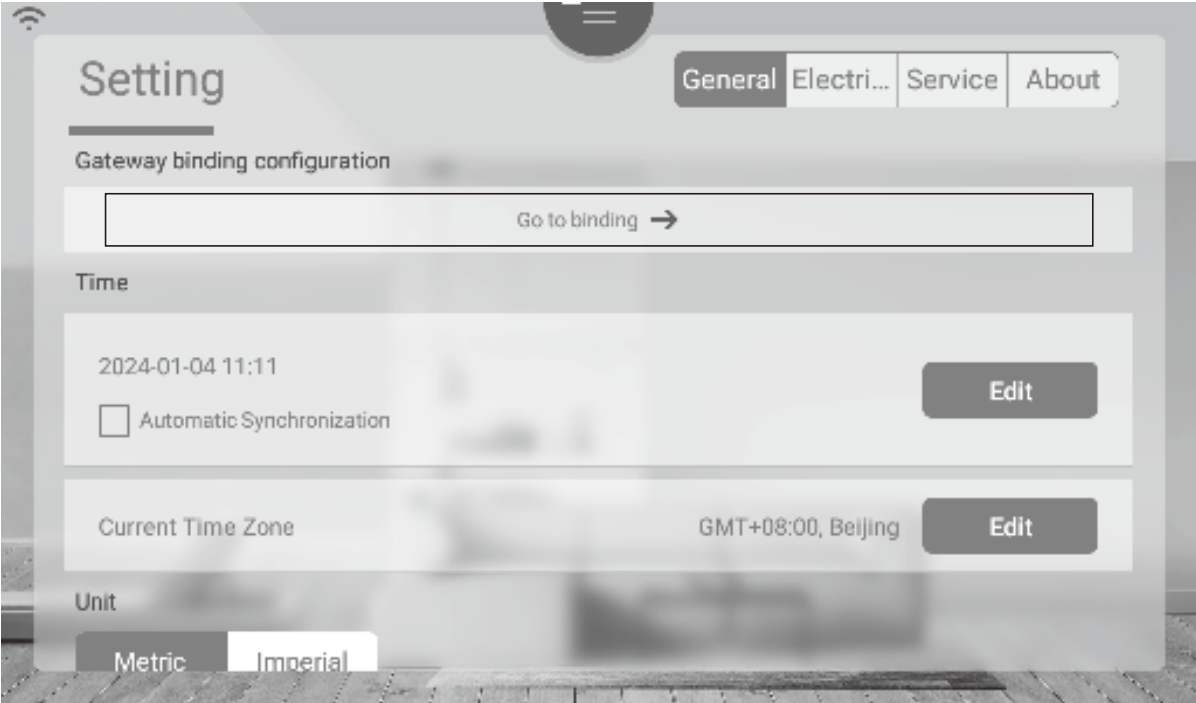


The Scene can be turned on or off by clicking  in the bottom right corner. The Scene turned on shows a green-dot icon before the Scene name  in the upper left corner.

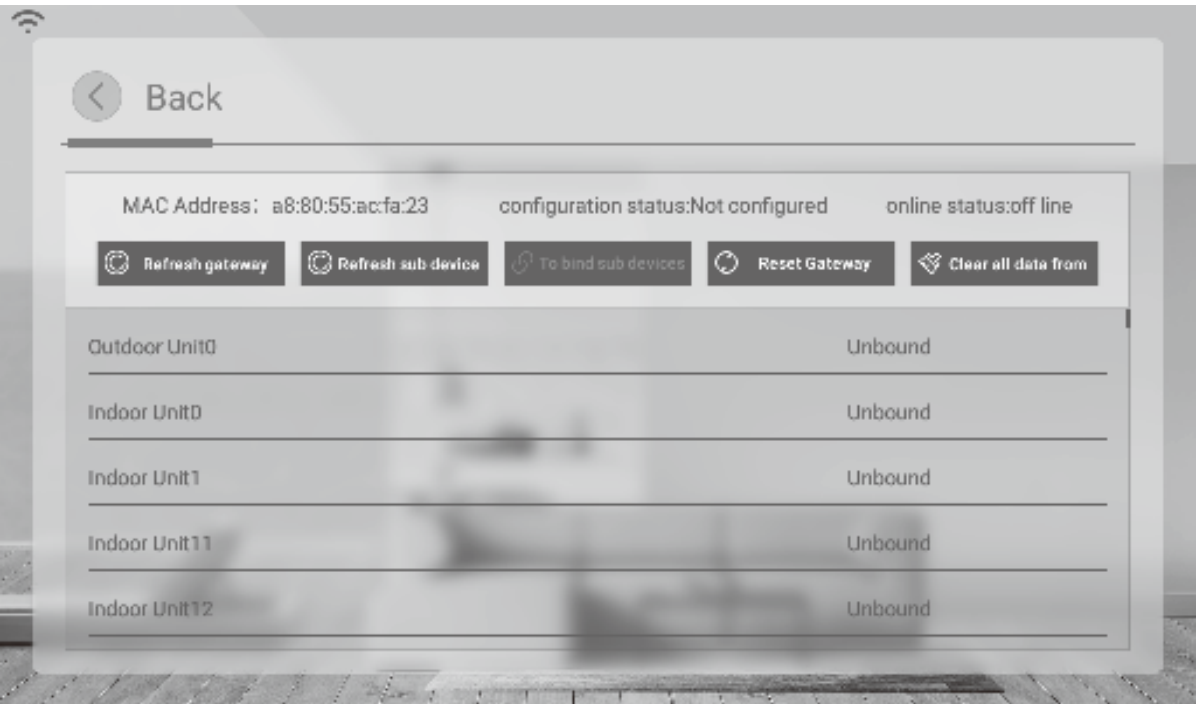
3. Setting function

The Setting consists of General, Electric Energy, Maintenance, and About.

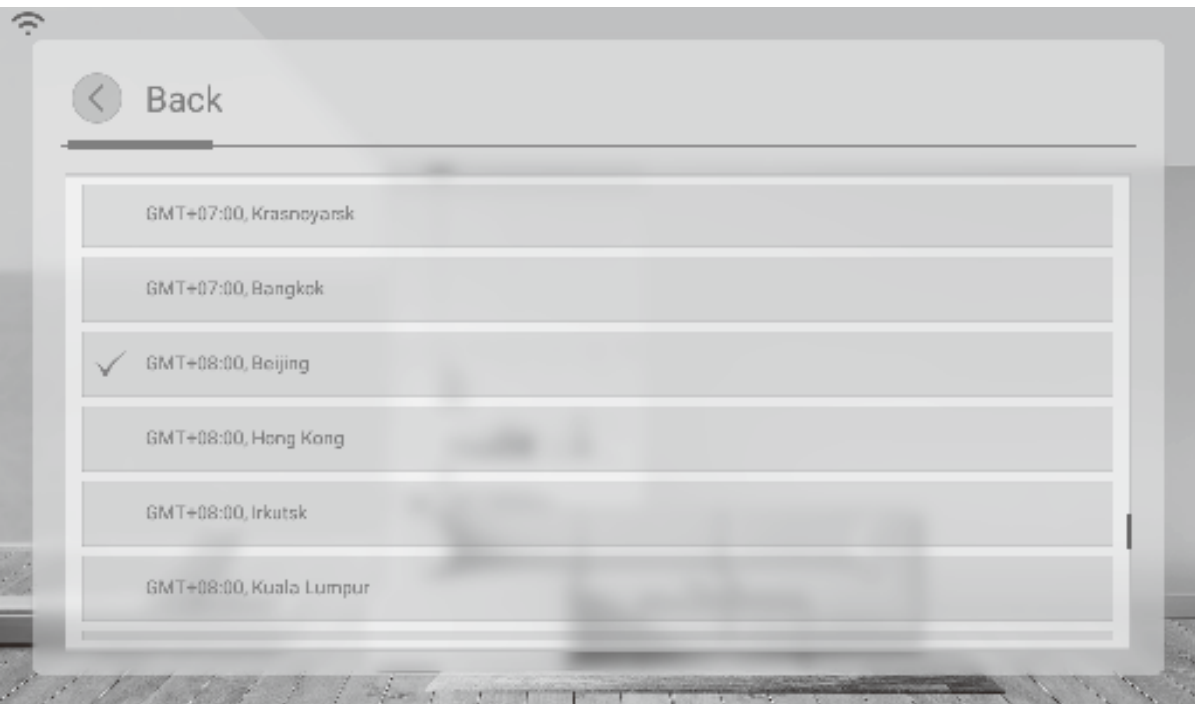
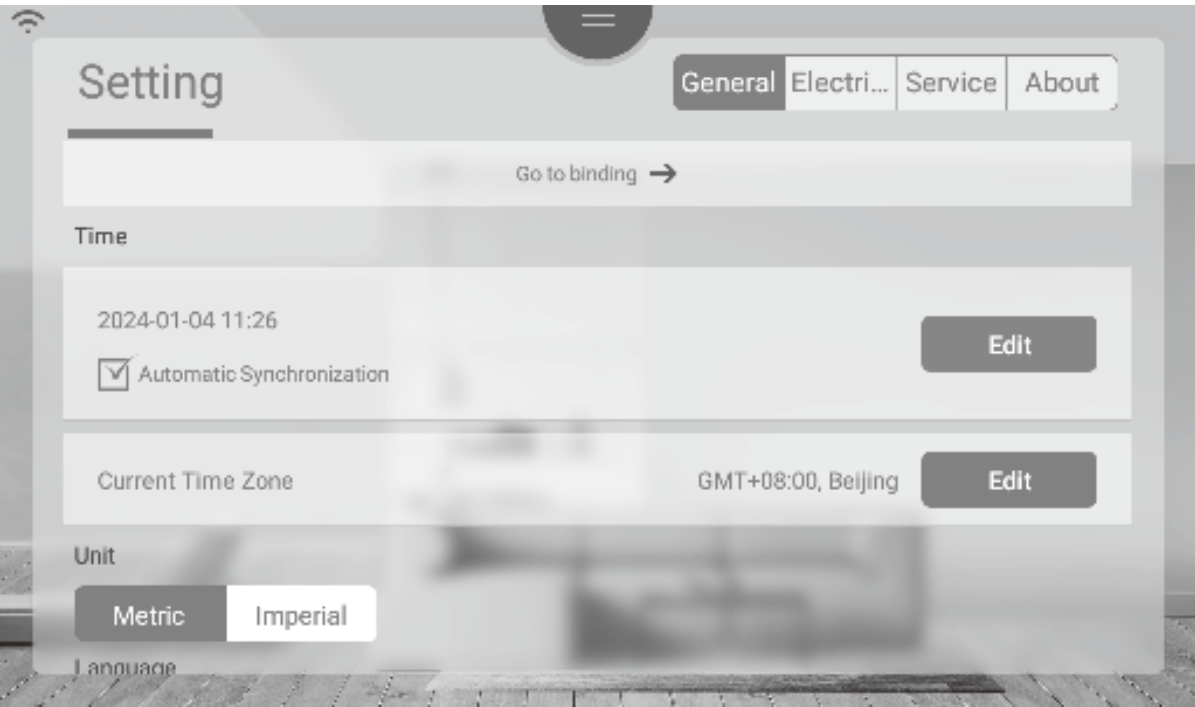
You can click Go to Bind in the red block in the General interface to bind the gateway and control the machine with the mobile App.



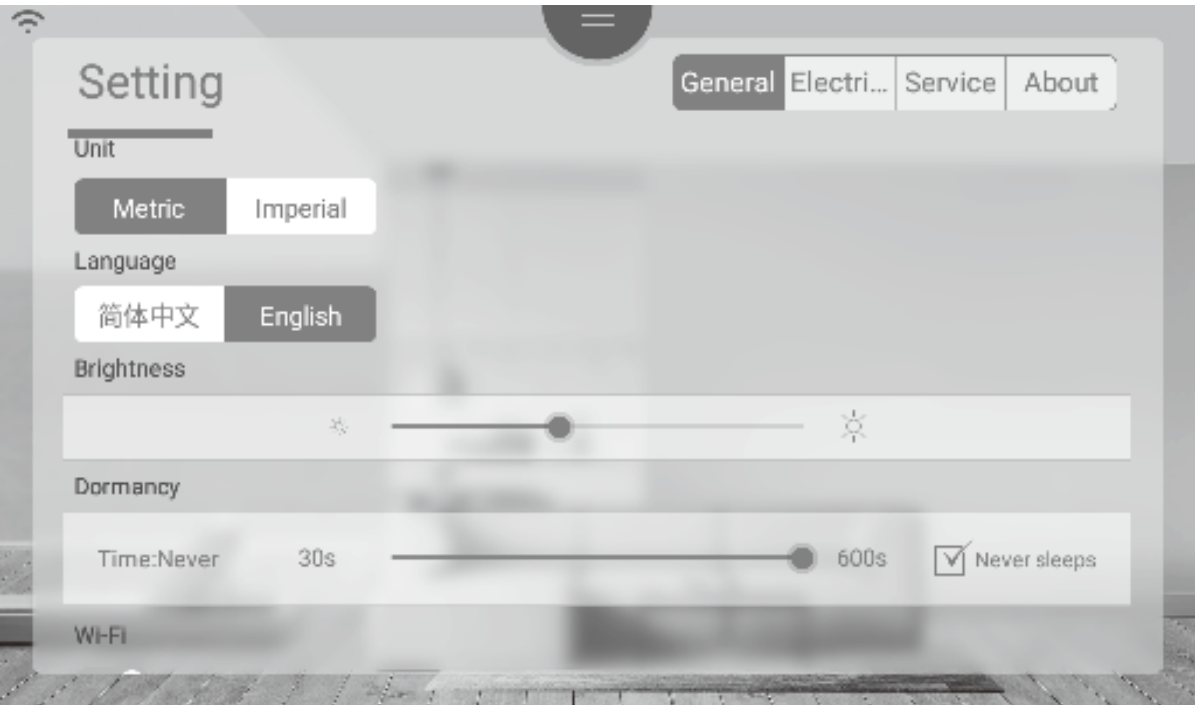
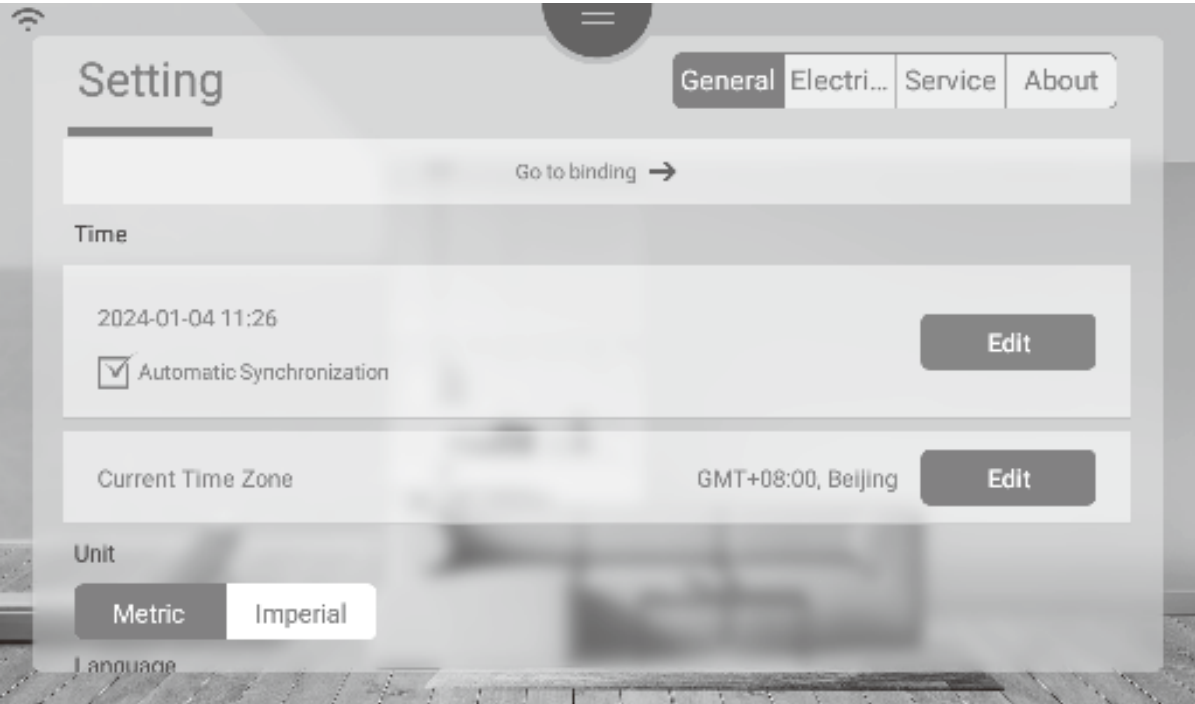
You can click Go to Bind Sub-equipment after clicking Reset Gateway in the Gateway Binding interface and searching for and binding the gateway on APP, and bound Indoor and Outdoor Units can be displayed on APP. (If the APP account is changed, you can click Reset Gateway to reconfigure the network)

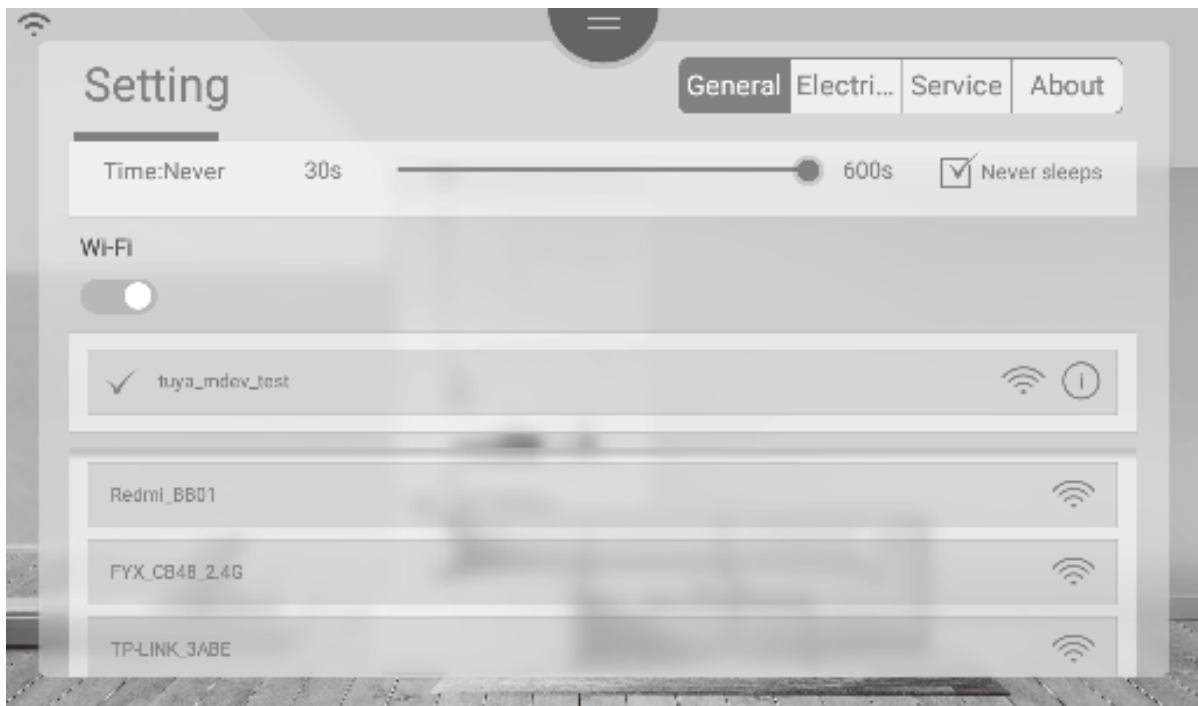


In the General function, you can set the date and time freely if unchecking Auto Network Time Synchronizing, or select the current time zone and check Auto Network Time Synchronizing after WIFI is connected for auto synchronizing of the time of such time zone.



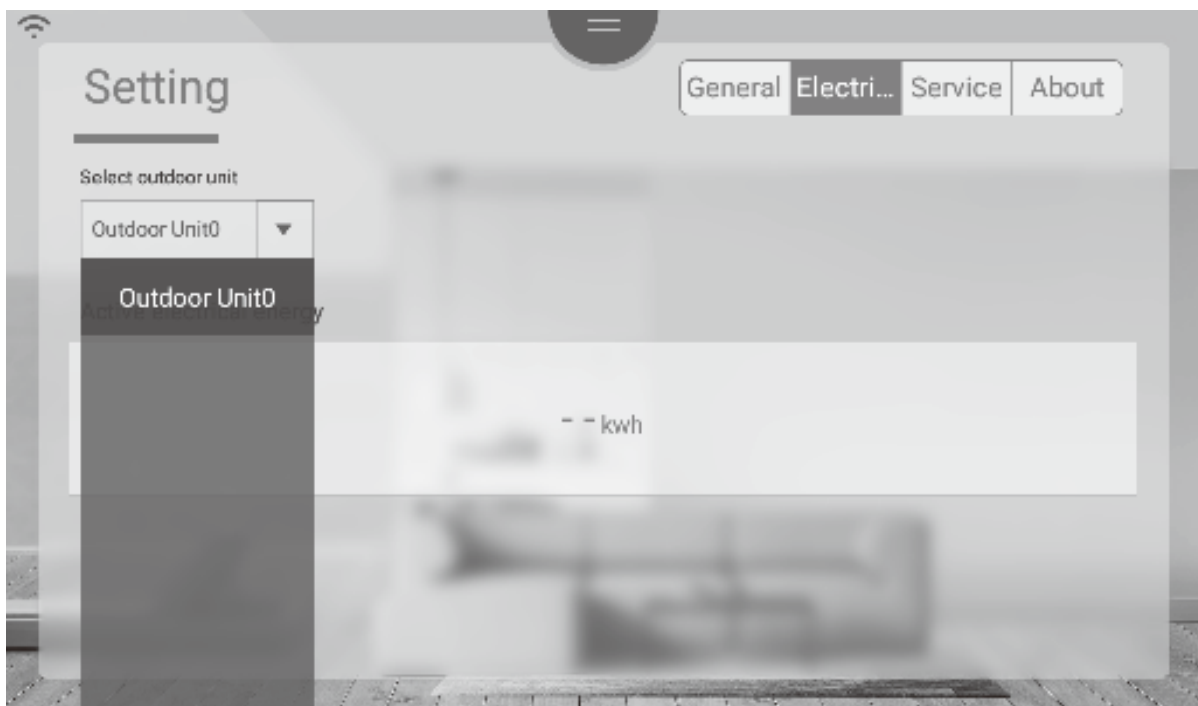
You can freely change between Celsius/Fahrenheit (only Celsius displayed on the APP currently), Chinese and English (The Indoor Unit names will not be changed accordingly if the two languages are switched in the current interface), the screen brightness, the sleep time, and the WIFI setting.





#### Note:

Some functions require a WIFI connection before work, such as network time synchronizing and updating of the centralized controller program. In the Electric Energy function, if the Outdoor Unit is connected to the meter, the ammeter value of the Outdoor Unit can be read in the centralized controller (Note: The meter used shall meet the relevant requirements).



You can input the user name "admin" and password "8699" respectively in Advanced Maintenance to Go to the Advanced Maintenance interface, where you can view the real-time and historical faults of the Outdoor Unit, the parameters of the Indoor and Outdoor Units, and reconfigure the Indoor and Outdoor Units.

Setting

GeneralElectri...ServiceAbout

Advance

Username

Next

Password

Advance

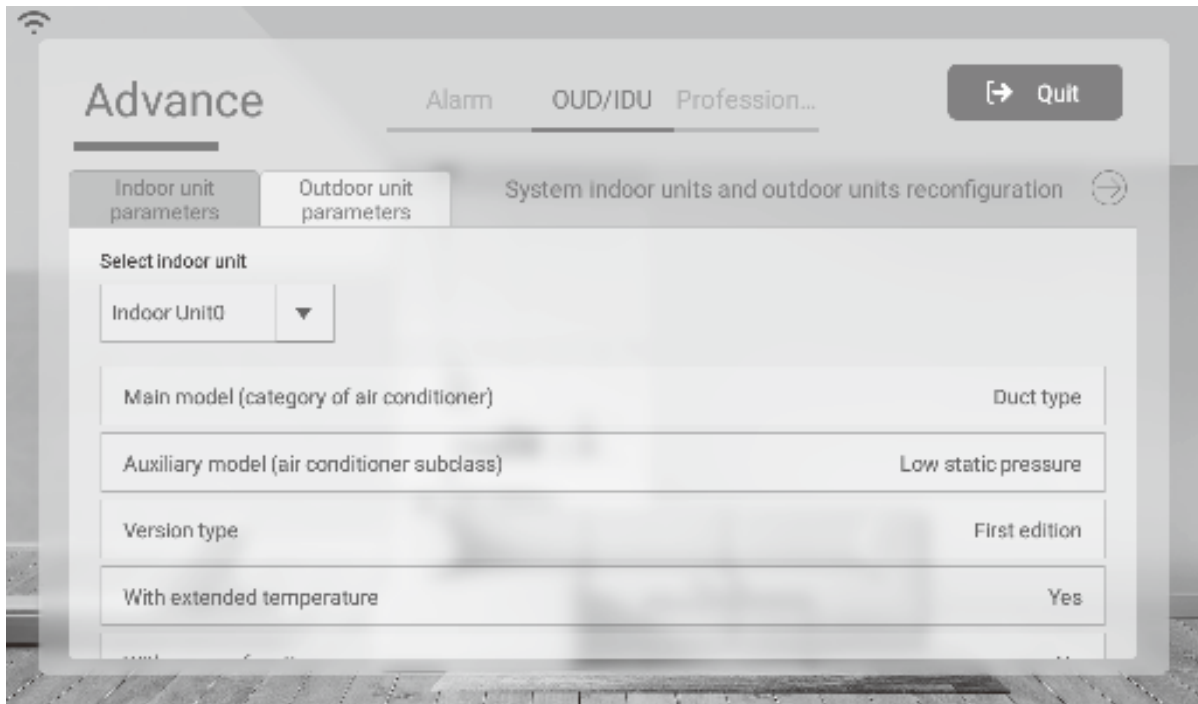
AlarmOUD/IDUProfession...

Quit

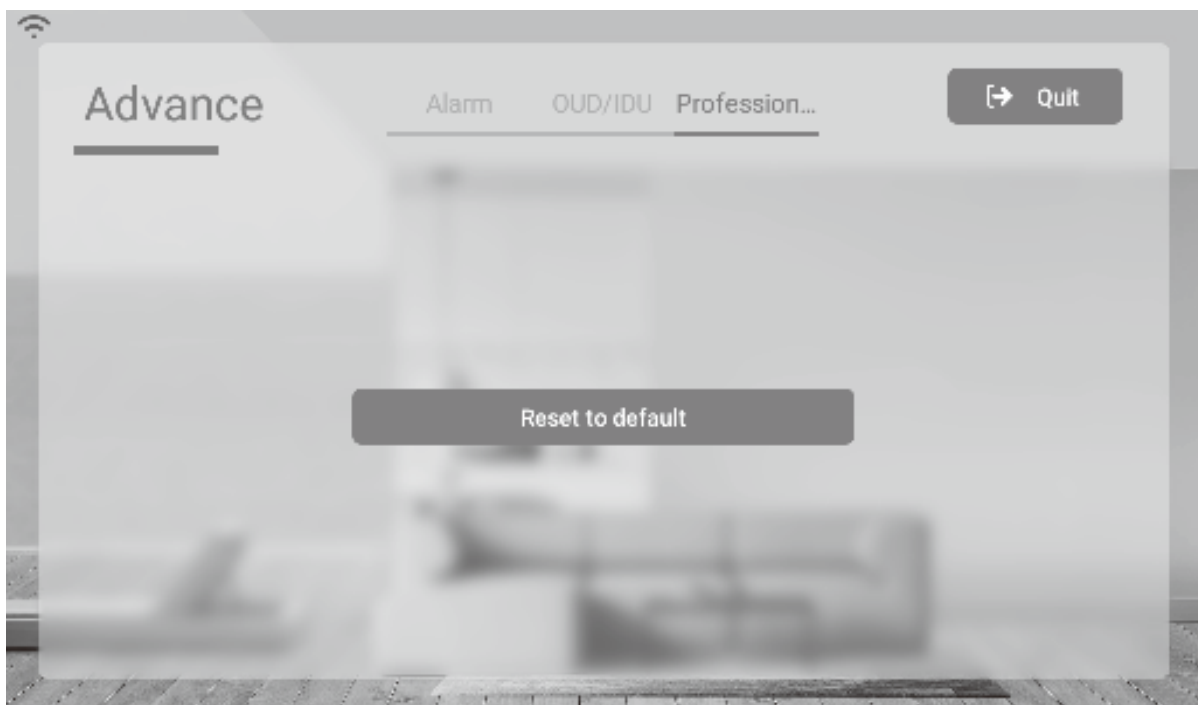
Real time fault

Historical faults

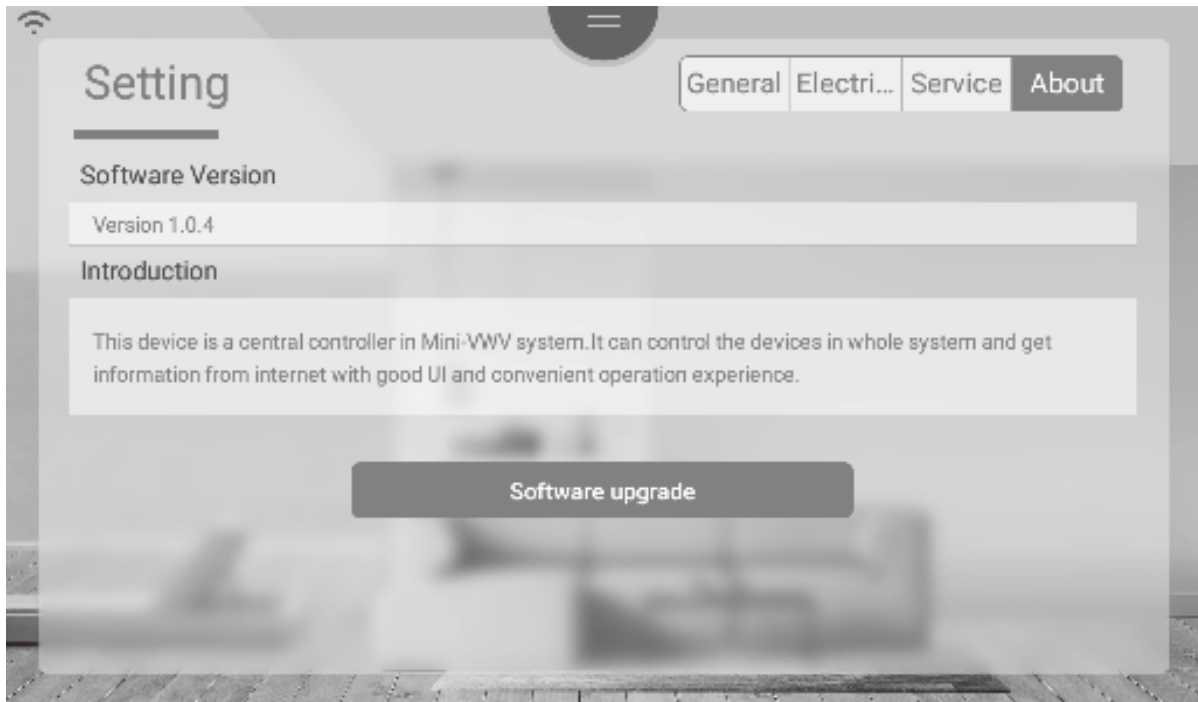
Index	OUD/IDU	Address	Code	Description	Time
1	IDU	#15	Offline	Offline	2024-01-04 11:31:18
2	IDU	#14	Offline	Offline	2024-01-04 11:31:18
3	IDU	#13	Offline	Offline	2024-01-04 11:31:17
4	IDU	#12	Offline	Offline	2024-01-04 11:31:17
5	IDU	#11	Offline	Offline	2024-01-04 11:31:17
6	IDU	#1	Offline	Offline	2024-01-04 11:31:16
7	IDU	#0	Offline	Offline	2024-01-04 11:31:16



In the Professional Setting function, you can reset the product to factory default.



The current software version can be viewed by clicking About, and you can click Software Version Upgrade under an online state to upgrade the software online.



## 5 Operation description for the Gateway APP

We can use the gateway function after binding the gateway in the Setting screen.

### 1. Download method:

- For the iOS system, please search in App Store: Tuya;
- For the Android system, please search in App Store: Tuya;



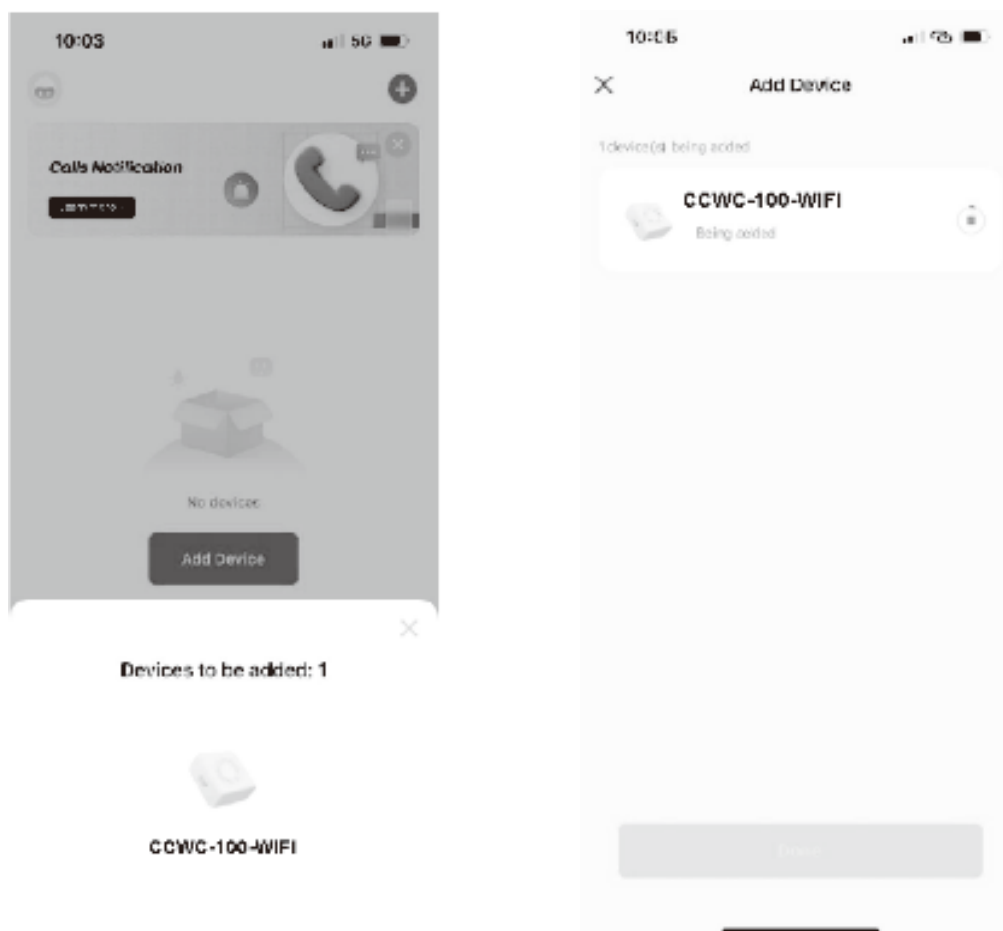
## 2. Installation instruction

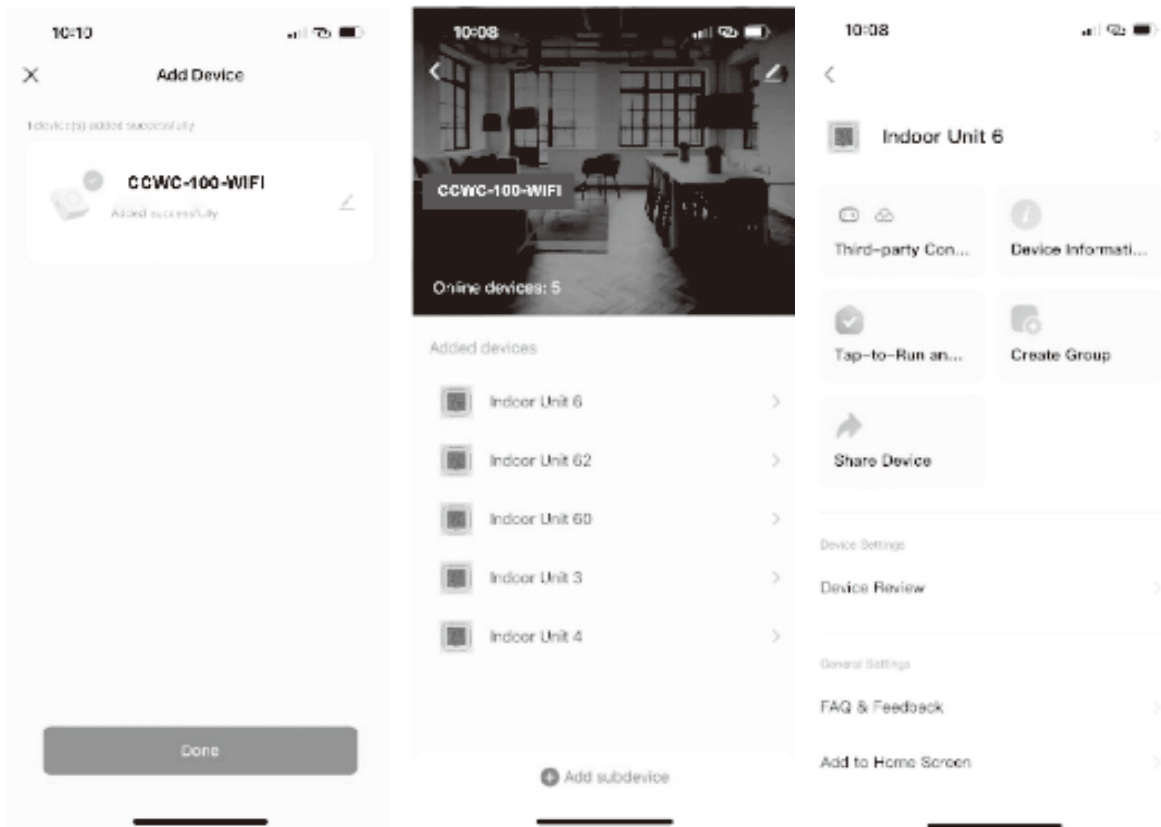
The Android version of the APP requires Android 5 and newer.

The iOS version of the APP requires iOS10 and newer.

## 3. Adding description

1. Connect the centralized controller correctly (Please refer to the "interface definition" to check whether the electrical wiring is correct) to the central air-conditioning system;
2. Click Reset Gateway in the Gateway Binding interface;
3. Connect the mobile to WIFI, and make sure that the mobile and the centralized controller are in the same WIFI;
4. Click "+" or "Add Equipment" after entering the APP Home page. Then you can choose "Large Appliance" and "Air-conditioning (Bluetooth+WIFI)" in the "Manual Adding" page, or choose "Searching" to search equipment;
5. The sub-equipment information can be added after the gateway is added;
6. After searching for and binding the gateway on the APP, click Go to Bind Sub-equipment in the Gateway Binding interface, check the Indoor and Outdoor Units you want to bind, and click Go to Bind. Then the bound Indoor and Outdoor Units can be displayed on the APP. (If the APP account is changed, you can click Reset Gateway to reconfigure the network).





#### 4. Advanced function

##### 1. Voice control:

In "Mine" interface of the APP, click "Voice and Other Third-party Services", select the corresponding intelligent voice service, and then you can watch the tutorial; or in the APP for the "Smart Voice Box", search "Tuya Intelligence", associate the Carrier account in the Tuya Intelligence with that of the Smart Voice Box, authorize the equipment association, and then you can control the equipment by voice;

##### 2. Automatic control

You can manually create trigger adjustments for scenes as well as actions after triggering;

##### 3. One click execution

You can set one-click execution to control or manage equipment in a centralized manner;

##### 4. Household operation

Family members can manage and control the air-conditioning together.

##### 5. Precautions

The network shall be reconfigured before deleting or adding an Indoor Unit in the VFR system, or the equipment control may fail.

The name of the Indoor Unit does not represent its device address, and if you need to inquire its address, please click "Equipment Information" of the equipment.



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