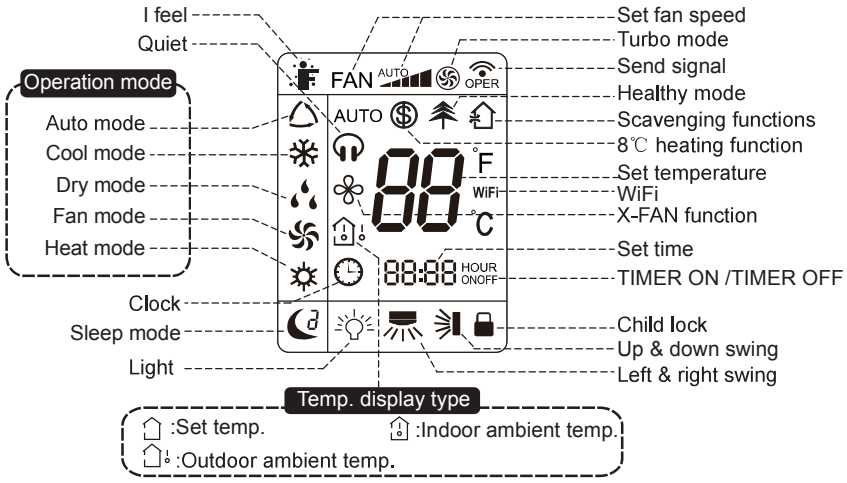
6. Function and Control

6.1 Remote Controller Introduction

Buttons on Remote Controller

1. ON/OFF button
2. MODE button
3. FAN button
4. TURBO button
5. ▲/ ▼button
6. button
7. button
8. SLEEP button
9. I FEEL button
10. TIMER ON / TIMER OFF button
11. CLOCK button
12. QUIET button(This function is unavailable for this model)
13. X-FAN button
14. LIGHT button
15. /button
16. TEMP button

Introduction for icons on display screen



Introduction for buttons on remote controller

Note:

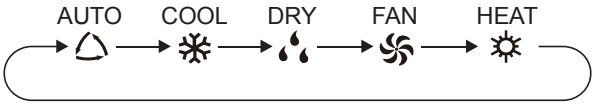
- This is a general use remote controller, it could be used for the air conditionerswith multifunction; For some function, which the model doesnt have, if press the corresponding button on the remote controller that the unit will keep the the corresponding button on the remote controller that the unit will keep theoriginal running status.
- After putting through the power, the air conditioner will give out a sound. Operation indictor " " is ON (red indicator). After that, you can operate the air conditioner by using remote controller.
- Under on status, pressing the button on the remote controller, the signal icon " "on the display of remote controller will blink once and the air conditioner will give out a “de” sound, which means the signal has been sent to the air conditioner.

1. ON/OFF button

Press this button can turn on or turn off the air conditioner. After turning on the air conditioner, operation indicator " ⏻ "on indoor unit's display is ON (green indicator. The colour is different for different models), and indoor unit will give out a sound.

2. MODE button

Press this button to select your required operation mode.



● When selecting auto mode, air conditioner will operate automatically according to ambient temperature. Set temperature can't be adjusted and will not be displayed as well. Press "FAN" button can adjust fan speed. Press " / " button can adjust fan blowing angle.

● After selecting cool mode, air conditioner will operate under cool mode. Cool indicator " ❄ "on indoor unit is ON. Press "▲" or " ▼ " button to adjust set temperature. Press "FAN" button to adjust fan speed. Press " / " button to adjust fan blowing angle.

● When selecting dry mode, the air conditioner operates at low speed under dry mode. Dry indicator " " on indoor unit is ON. Under dry mode, fan speed can't be adjusted. Press " / " button to adjust fan blowing angle.

● When selecting fan mode, the air conditioner will only blow fan,no cooling and no heating. All indicators are OFF.Operation indicator is ON,Press "FAN" button to adjust fan speed. Press " / " button to adjust fan blowing angle.

● When selecting heating mode, the air conditioner operates under heat mode. Heat indicator " ☼ " on indoor unit is ON. Press "▲" or " ▼ " button to adjust set temperature. Press "FAN" button to adjust fan speed. Press " / " button to adjust fan blowing angle. (Cooling only unit won't receive heating mode signal. If setting heat mode with remote controller, press ON/OFF button can't start up the unit.

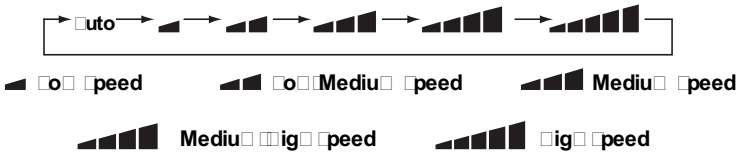
Note:

● For preventing cold air, after starting up heating mode, indoor unit will delay 1~5 minutes to blow air (actual delay time is depend on indoor ambient temperature).

● Set temperature range from remote controller: 16~30℃ (61-86°F);Fan speed: auto, low speed, low-medium speed,medium speed, medium-high speed,high speed.

3. FAN button

Pressing this button can set fan speed circularly as: auto (AUTO), , , , to .



4. TURBO button

Under COOL or HEAT mode, press this button to turn to quick COOL or quick HEAT mode. " " icon is displayed on remote controller. Press this button again to exit turbo function and " " icon will disappear. If start this function, the unit will run at super-high fan speed to cool or heat quickly so that the ambient temp. approachs the preset temp. as soon as possible.

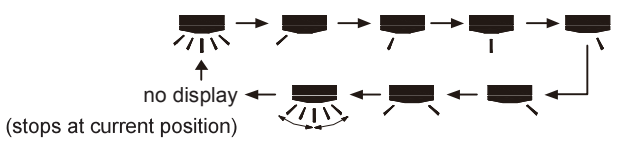
5. ▲/▼ button

● Press " ▲ " or " ▼ " button once increase or decrease set temperature 1℃ (°F). Holding " ▲ " or " ▼ " button, 2s later, set temperature on remote controller will change quickly. On releasing button after setting is finished, temperature indicator on indoor unit will change accordingly. (Temperature can't be adjusted under auto mode)

● When setting TIMER ON, TIMER OFF or CLOCK, press " ▲ " or " ▼ " button to adjust time. (Refer to CLOCK, TIMER ON, TIMER OFF buttons) When setting TIMER ON, TIMER OFF or CLOCK, press " ▲ " or " ▼ " button to adjust time. (Refer to CLOCK, TIMER ON, TIMER OFF buttons)

6. button

Press this button can select left & right swing angle. Fan blow angle can be selected circularly as below:



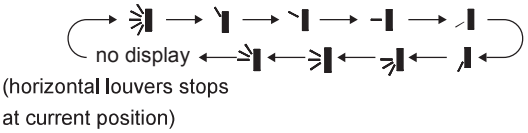
Note:

● Press this button continuously more than 2s, the main unit will swing back and forth from left to right, and then loosen the button, the unit will stop swinging and present position of guide louver will be kept immediately.

● Under swing left and right mode, when the status is switched from off to , if press this button again 2s later, status will switch to off status directly; if press this button again within 2s, the change of swing status will also depend on the circulation sequence stated above.

7. button

Press this button can select up & down swing angle. Fan blow angle can be selected circularly as below:



● When selecting " ", air conditioner is blowing fan automatically. Horizontal louver will automatically swing up & down at maximum angle.
● When selecting " 、 、 、 、 ", air conditioner is blowing fan at fixed position. Horizontal louver will stop at the fixed position.
● When selecting " 、 、 " , air conditioner is blowing fan at fixed angle. Horizontal louver will send air at the fixed angle.
● Hold " "button above 2s to set your required swing angle. When reaching your required angle, release the button.

Note:

● " 、 、 " may not be available. When air conditioner receives this signal, the air conditioner will blow fan automatically.
● Press this button continuously more than 2s, the main unit will swing back and forth from up to down, and then loosen the button, the unit will stop swinging and present position of guide louver will be kept immediately.
● Under swing up and down mode, when the status is switched from off to , if press this button again 2s later, status will switch to off status directly; if press this button again within 2s,the change of swing status will also depend on the circulation sequence stated above.

8. SLEEP button

Press this button, can select Sleep 1 ( ), Sleep 2 ( ), Sleep 3 ( ) and cancel the Sleep, circulate between these, after electrified, Sleep Cancel is defaulted.
Sleep 1 is Sleep mode 1, in Cool modes; sleep status after run for one hour, the main unit setting temperature will increase 1 ℃ , two hours, setting temperature increased 2 ℃ , then the unit will run at this setting temperature; In Heat mode: sleep status after run for one hour, the setting temperature will decrease 1 , two hours, setting temperature will decrease 2℃ , then the unit will run at this setting temperature.
● Sleep 2 is sleep mode 2, that is air conditioner will run according to the presetting a group of sleep temperature curve.
● Sleep 3-the sleep curve setting under Sleep mode by DIY;
(1)Under Sleep 3 mode, press “Turbo” button for a long time, remote controller enters into user individuation sleep setting status, at this time, the time of remote controller will display “1hour”, the setting temperature “88” will display the corresponding temperature of last setting sleep curve and blink (The first entering will display according to the initial curve setting value of original factory);
(2)Adjust “+” and “-” button, could change the corresponding setting temperature, after adjusted, press “Turbo” button for confirmation;
(3) At this time, 1hour will be automatically increased at the timer postion on the remote control, (that are "2hours" or "3hours" or "8hours"), the place of setting temperature "88" will display the corresponding temperature of last setting sleep curve and blink;
(4) Repeat the above step (2)~(3) operation, until 8 hours temperature setting finished,sleep,curve setting finished, at this time, the remote controller will resume the original timer display; temperature display will resume to original setting temperature.
● Sleep3- the sleep curve setting under Sleep mode by DIY could be inquired:
The user could accord to sleep curve setting method to inquire the presetting sleep curve, enter into user individuation sleep setting status, but do not change the temperature, press “Turbo” button directly for confirmation. Note: In the above presetting or enquiry procedure, if continuously within 10s, there is no button pressed, the sleep curve setting within 10s, there is no button pressed, the sleep curve setting status will be automatically quit and resume to display the original displaying. In the presetting or enquiry procedure, press "ON/OFF" button, "Mode" button, "Timer" button or "Sleep" button, the sleep curve setting or enquiry status will quit similarly.

9. I FEEL button

Press this button to start I FEEL function and " " will be displayed on the remote controller. After this function is set, the remote controller will send the detected ambient temperature to the controller and the unit will automatically adjust the indoor temperature according to the detected temperature. Press this button again to close I FEEL function and " " will disappear.
● Please put the remote controller near user when this function is set. Do not put the remote controller near the object of high temperature or low temperature in order to avoid detecting inaccurate ambient temperature.

10. TIMER ON / TIMER OFF button

● TIMER ON button
"TIMER ON" button can set the time for timer on. After pressing this button, " " icon disappears and the word "ON" on remote controller blinks. Press " ▲ " or " ▼ "button to adjust TIMER ON setting. After each pressing " ▲ " or " ▼ " button, TIMER ON setting will increase or decrease 1min. Hold " ▲ " or " ▼ " button, 2s later, the time will change quickly until reaching your required time. Press "TIMER ON" to confirm it. The word "ON" will stop blinking. " " icon resumes displaying. Cancel TIMER ON: Under the condition that TIMER ON is started up, press "TIMER ON" button to cancel it.

● TIMER OFF button

"TIMER OFF" button can set the time for timer off. After pressing this button," "icon disappears and the word "OFF" on remote controller blinks. Press " ▲ " or " ▼ " button to adjust TIMER OFF setting. After each pressing " ▲ " or " ▼ " button, TIMER OFF setting will increase or decrease 1min. Hold " ▲ " or " ▼ " button, 2s later, the time will change quickly until reaching your required time. Press "TIMER OFF" word "OFF" will stop blinking. " " icon resumes displaying. Cancel TIMER OFF. Under the condition that TIMER OFF is started up, press "TIMER OFF" button to cancel it.

Note:

● Under on and off status, you can set TIMER OFF or TIMER ON simultaneously.
● Before setting TIMER ON or TIMER OFF, please adjust the clock time.
● After starting up TIMER ON or TIMER OFF, set the constant circulating valid. After that, air conditioner will be turned on or turned off according to setting time. ON/OFF button has no effect on setting. If you don't need this function, please use remote controller to cancel it.

11. CLOCK button

Press this button to set clock time. " " icon on remote controller will blink. Press " ▲ " or " ▼ " button within 5s to set clock time. Each pressing of " ▲ " or " ▼ " button, clock time will increase or decrease 1 minute. If hold " ▲ " or " ▼ " button, 2s later, time will change quickly. Release this button when reaching your required time. Press "CLOCK" button to confirm the time. " " icon stops blinking.

Note:

● Clock time adopts 24-hour mode.
● The interval between two operation can't exceeds 5s. Otherwise, remote controller will quit setting status. Operation for TIMER ON/TIMER OFF is the same.

12. QUIET button(This function is unavailable for this model)

Press this button, the Quiet status is under the Auto Quiet mode (display " " and "AUTO" signal) and Quiet mode (display " " singal) and Quiet OFF (there is no signal of " " displayed), after powered on, the Quiet OFF is defaulted.

Note:

● The Quiet function cannot be set up in Fan and Dry mode; Under the Quiet mode, the fan speed is not available.
● If Auto Quiet mode has been selected, after the room temperature reached the setting temperature or 10mins later, the AC will immediately enter into the Quiet running status, at this time the fan speed is not adjustable.

13. X-FAN button

Pressing this button in COOL or DRY mode, the icon " " is displayed and the indoor fan will continue operation for 2 minutes in order to dry the indoor unit even though you have turned off the unit. After energization, X-FAN OFF is defaulted.
X-FAN is not available in AUTO, FAN or HEAT mode.This function indicates that moisture on evaporator of indoor unit will be blowed after the unit is stopped to avoid mould.
● Having set X-FAN function on: After turning off the unit by pressing ON/OFF button indoor fan will continue running for about 2 minutes. at low speed. In this period, press X-FAN button to stop indoor fan directly.
● Having set X-FAN function off: After turning off the unit by pressing ON/OFF button, the complete unit will be off directly.

14. LIGHT button

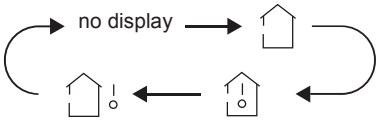
Press this button to turn off display light on indoor unit. " " icon on remote controller disappears. Press this button again to turn on display light. " " icon is displayed.

15. / button(This function is unavailable for this model)

Press this button to achieve the on and off of healthy and scavenging functions in operation status. Press this button for the first time to start scavenging function; LCD displays " ". Press the button for the second time to start healthy and scavenging functions simultaneously; LCD displays " " and " " . Press this button for the third time to quit healthy and scavenging functions simultaneously. Press the button for the fourth t ime to start healthy function; LCD display " " . Press this button again to repeat the operation above.

16. TEMP button

By pressing this button, you can see indoor set temperature, indoor ambient temperature or outdoor ambient temperature on indoor unit's display. The setting on remote controlleris selected circularly as below:



- When selecting " " or no display with remote controller, temperature indicator on indoor unit displays set temperature.
- When selecting " " with remote controller, temperature indicator on indoor unit displays indoor ambient temperature.
- When selecting " " with remote controller, temperature indicator on indoor unit displays outdoor ambient temperature.

Note:

- Outdoor temperature display is not available for some models. At that time, indoor unit receives " "signal, while it displays indoor set temperature.
- It's defaulted to display set temperature when turning on the unit.There is no display in the remote controller.
- Only for the models whose indoor unit has dual-8 display.
- When selecting displaying of indoor or outdoor ambient temperature, indoor temperature indicator displays corresponding temperature and automatically turn to display set temperature after three or five seconds.

Function introduction for combination buttons

1. Energy-saving function

Under cooling mode, press "TEMP" and " CLOCK" buttons simultaneously to start up or turn off energy-saving function. When energy-saving function is started up, "SE" will be shown on remote controller, and air conditioner will adjust the set temperature automatically according to ex-factory setting to reach to the best energy-saving effect. Press "TEMP" and "CLOCK"buttons simultaneously again to exit energy-saving function.

Note:

- Under energy-saving function, fan speed is defaulted at auto speed and it can't be adjusted.
- Under energy-saving function, set temperature can't be adjusted. Press "TURBO" button and the remote controller won't send signal.
- Sleep function and energy-saving function can't operate at the same time. If energy-saving function has been set under cooling mode, press sleep button will cancel energy-saving function. If sleep function has been set under cooling mode, start up the energy-saving function will cancel sleep function.

2. 8℃ heating function(only for the mode with this function)

Under heating mode, press "TEMP" and "CLOCK" buttons simultaneously to start up or turn off 8℃ heating function. When this function is started up, " " and "8℃ " will be shown on remote controller, and the air conditioner keep the heating status at 8℃ . Press "TEMP" and "CLOCK" buttons simultaneously again to exit 8℃ heating function.

Note:

- Under 8℃ heating function, fan speed is defaulted at auto speed and it can't be adjusted.
- Under 8℃ heating function, set temperature can't be adjusted. Press "TURBO" button and the remote controller won't send signal.
- Sleep function and 8℃ heating function can't operate at the same time. If 8℃ heating function has been set under cooling mode, press sleep button will cancel 8℃ heating function. If sleep function has been set under cooling mode, start up the 8℃ heating function will cancel sleep function.
- Under ℉ temperature display, the remote controller will display 46 ℉ heating.

3. Child lock function

Press " ▲ " and " ▼ " simultaneously to turn on or turn off child lock function. When child lock function is on, " " icon is displayed on remote controller. If you operate the remote controller, the " " icon will blink three times without sending signal to the unit.

4. Temperature display switchover function

Under OFF status, press " ▼ " and "MODE" buttons simultaneously to switch temperature display between ℃ and ℉ .

5.Combination "MODE" and "TURBO" buttons:About WIFI function

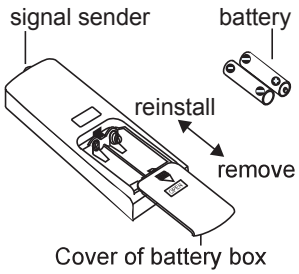
Press "MODE" and "TURBO" button simultaneously to turn on or turn off WIFI function. When WIFI function is turned on, the "**WIFI"** icon will be displayed on remote controller; Long press "MODE" and "TURBO" buttons simultaneously for 10s, remote controller will send WIFI reset code and then the WIFI function will be turned on. WIFI function is defaulted ON after energization of the remote controller.

Operation guide

1. After putting through the power, press "ON/OFF" button on remote controller to turn on the air conditioner.
2. Press "MODE" button to select your required mode: AUTO, COOL, DRY, FAN, HEAT.
3. Press " ▲ " or " ▼ " button to set your required temperature. (Temperature can't be adjusted under auto mode).
4. Press "FAN" button to set your required fan speed: auto, low, medium and high speed.
5. Press "SWING" button to select fan blowing angle.

Replacement of batteries in remote controller

1. Press the back side of remote controller marked with " OPEN ", as shown in the fig, and then push out the cover of battery box along the arrow direction.
2. Replace two 7# (AAA 1.5V) dry batteries, and make sure the position of "+" polar and "-" polar are correct.
3. Reinstall the cover of battery box.



Note:

- During operation, point the remote control signal sender at the receiving window on indoor unit.
- The distance between signal sender and receiving window should be no more than 8m, and there should be no obstacles between them.
- Signal may be interfered easily in the room where there is fluorescent lamp or wireless telephone; remote controller should be close to indoor unit during operation.
- Replace new batteries of the same model when replacement is required.
- When you don't use remote controller for a long time, please take out the batteries.
- If the display on remote controller is fuzzy or there's no display, please replace batteries.

6.2 Operation of Smart Control (Smart Phone, Tablet PC) For Gree

Operation Instructions

Download and install APP

Scan the following QR code with your smart phone and download Wifi Smart.

Install the APP according to its guidance. When successfully installed, your smart phone homepage will show this icon

User of IOS system can search for the Gree Smart in Apple store to download the Apple version APP.

Configuration

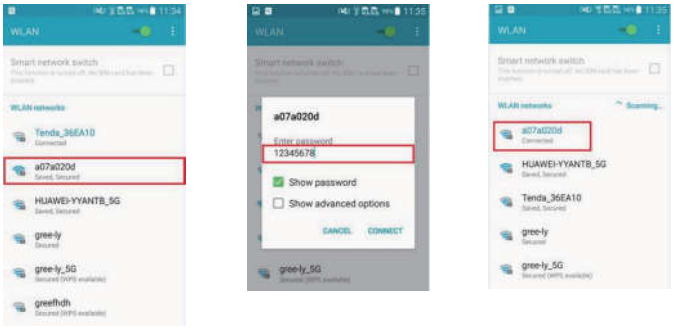
NOTE: Select either the original configuration or AP configuration according to the APP functions.

1.Original configuration

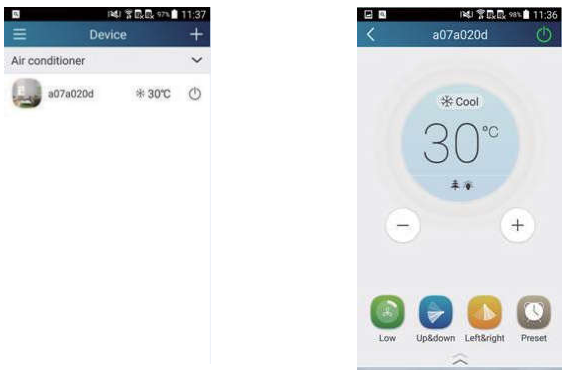
Before operation, please finish the following configuration in order to realize Wifi control and the connection between air conditioner and intelligent device.

(1).Short-distance control setting for air conditioner using Wifi hotspot

Step 1: Air conditioner Wifi is set in AP mode in factory. You can search the air conditioner Wifi hotspot through your smart phone. The name of Wifi hotspot is the last 8 numbers of the air conditioner mac address. Password is 12345678.



Step 2: Open APP and the screen will show the air conditioner that you just connected. Tap the name of this air conditioner on your phone to enter and realize short-distance control, as shown below. Please refer to "Functions introduction" for specific control methods.

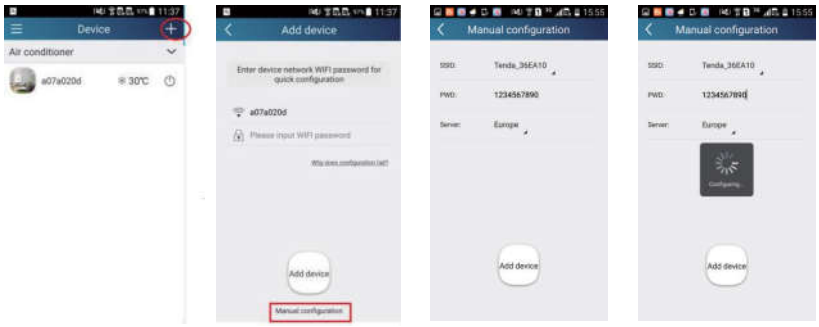


NOTE:One AC can be controlled by 4 smart phones in maximum at the same time.

(2).Short-distance and long-distance control setting for air conditioner connecting with router

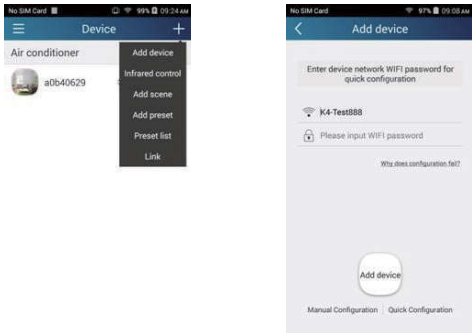
Step 1: Under short-distance control, return to the homepage "Home Control". Tap + t the top right corner of the homepage "Device".

Select "Add device" and enter the page of "Add device". Tap "Manual configuration" and enter the page "Manual configuration".
Step 2: Select the correct network name and enter the password. Select the server (The server setting here must keep the same as the server setting in "Settings" mentioned below. Otherwise, remote control will fail.), then tap the button "Add device" for configuration. At this time, "Configuring" is displayed on the APP. The buzzer in the indoor unit will give out a sound when configuration succeeds.

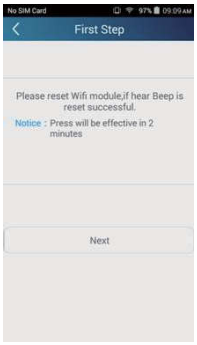


2.AP configuration

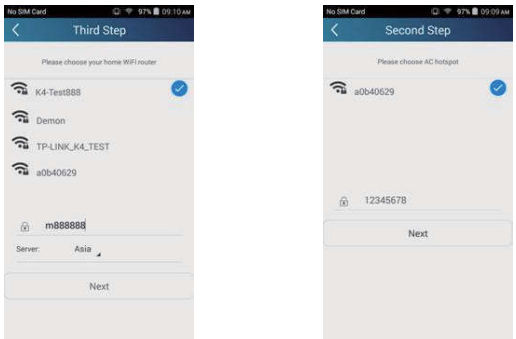
4 steps of configuration
Step 1: Enter homepage "Device", and then tap + at the top right corner.
Select "Add device" and enter the page "Add device". Tap "Manual Configuration".



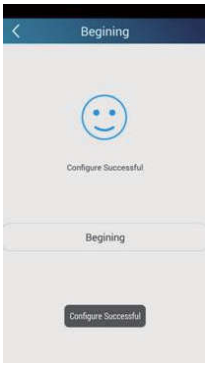
Step 2: Tap "Next" in the First Step.



Step 3: Select the wireless network of air conditioner. APP will show the password 12345678 (default password of the network of air conditioner). Then tap "Next"; select the name of home Wifi router, then enter the correct password and select a server.



Step 4: If configuration is successful, a window will pop up and read "Configuration succeeded". Then configuration is completed.



NOTE: After configuration is completed, the air conditioner hot spot connected to your phone will disAPPear. You should reconnect your phone to the home Wifi router to realize long-distance control.
The above configuration only needs one phone. Other types of phones shall install this APP, connect with the air conditioner hot spot or wireless router of Wifi air conditioner. When connection is done, open the APP to use short-distance operation to control the air conditioner and then you can use the long-distance control.

Functions introduction

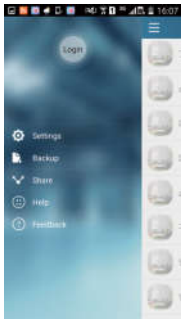
1.User registration

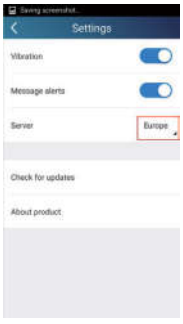
Purpose: To realize long-distance control

Operation instruction: For the first time login, you have to register a new username. If you already have a username, skip the registration step and enter email address and password on the "Login Page" to log in. If password is forgotton, you can reset the password.

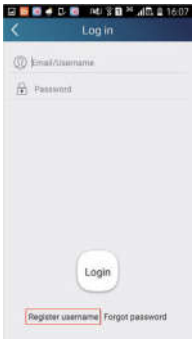
Operation steps:

(1) Select the sever address



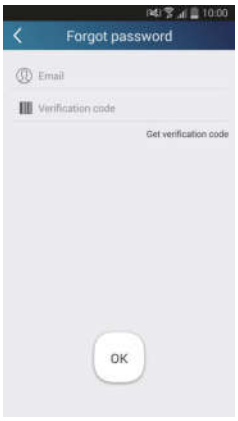


(2) Account login: Slide the page "Device", and enter the page "Menu" on the left. Tap "Login" to enter the page "Register username". New user must first register a username. Tap "Register".



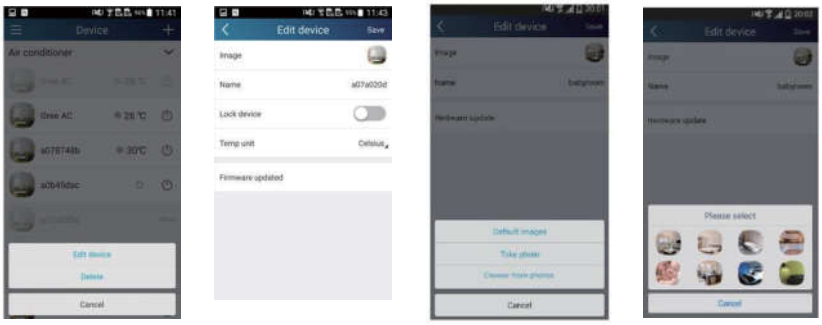
(3) Enter your email address. Wait until you receive the verification code. Enter the code and then tap "OK" to log in.

(4) If password is forgotten, you can reset the password with your email address.
Tap "Forgot password" and enter the page "Forgot password". Tap "Get verification code" to get an email verification code. Enter a new password and tap "OK" to log in.

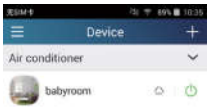


2.Personal settings
Purpose: Set name (device name, preset name, etc.) and images (device image) in order to identify a user easily.
(1) Set device name
After quick configuration, a list of controllable smart devices will be generated. Default name for air conditioner is the last 8 numbers of the air condtioner mac address.

Step 1: Tap and hold "a0b417ac" to enter the page "Edit device". Tap "Image" to select the source of image. Select from "Default images" or "Take photo" or "Choose from photos" and save an image.



Step 2: Tap "Name" to change device name. Save it and the new device name will be shown. Enable button "Lock device" to lock the device so that other smart phones can't search the device. Tap "Temp unit" to change the temperature unit.

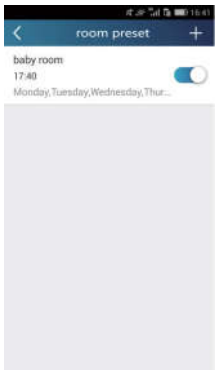


Step 3: Tap "Firmware update" to upgrade the firmware of the device. Tap"1.8" and then the device will be updated automatically.

(2) Set preset name

Step 1: Tap + at the top right corner of the homepage "Device". Select "Add preset" and enter the page "Preset edit".

Step 2: Choose the time. Tap "Name". As shown in the picture, its name is "baby room". For timer type, select "On". Then select the repeating days. Save the setting of preset name.



(3) Set device image

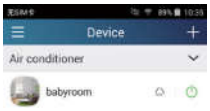
Please refer to step 1 in 2(1)

3.Control functions

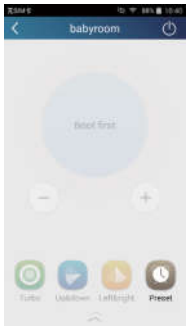
(1) Common control functions: General control on the operation of smart devices (On/Off, temperature, fan speed, mode, etc.) and the setting of advanced functions (air exchange, dry, health, light, sleep, energy saving upper limit).

Step 1: General control

Enter the homepage "Home control" first. Take "babyroom"as an example.

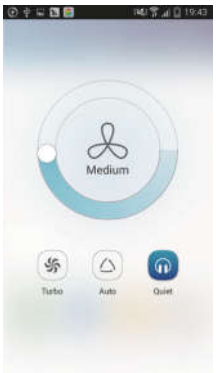


Tap "babyroom" and enter the page of air conditioner control. Tap ⏻ to turn on the control switch.



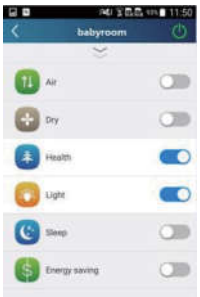
Tap + or − to increase or decrease temperature. Tap Cool to change working mode. Tap Turbo to enter the page of fan speed adjustment.

Tap and go around the circle to adjust fan speed.



Step 2: Advanced settings

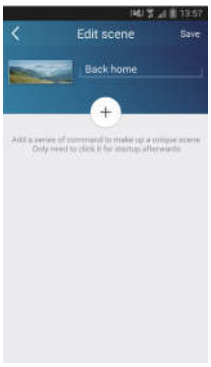
Tap to enter advanced settings. You may select "Air", "Dry", "Health", "Light", "Sleep" or "Energy saving".



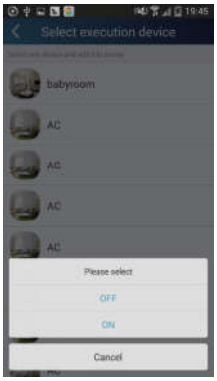
(2) Advanced control functions: Set scene; Preset; Link; Infrared control (only APPlicable to smart phones with infrared emitter)

Set scene: Preset the operation of several smart devices by one tap.

On the page "Home control", tap the image of "Home control" to enter the page "Edit scene".

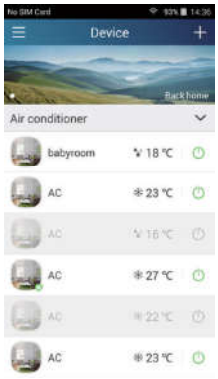


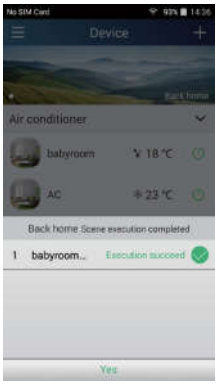
Tap "Add scene" and edit the scene name, for example, "Back home". Add execution devices.
Tap to add commands. On the page "Select execution device", select the air conditioner named "babyroom". Then select "ON" or "OFF".



Continue to select the next execution device as instructed above. Tap to set the interval.

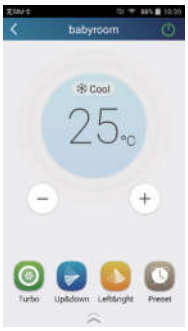
Tap "Save". Tap the scene picture displayed on homepage "Device" to send the command. Then the scene "Back home" will be in execution. You may view the execution condition of the scene.



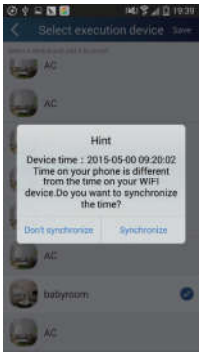


(3) Preset includes single-device preset and multi-device preset
Single-device preset: This can preset a certain device to be On/Off at a specific time.
On the homepage "Device", take air conditioner "babyroom" as an example. Tap

at the bottom of the page "babyroom". Then you will enter the page "Preset edit".

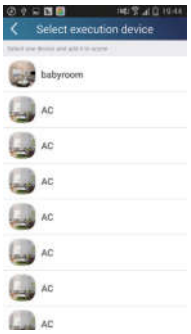


Slide up and down to set the time. If you need to synchronize the time, tap " synchronize". If such "Hint" interface doesn't show up, please skip this operation step.



Tap "Name" to customize the preset name.
Preset device can't be selected and it will default to "babyroom". Select "On" for the timer type. Select repeating days to complete the preset.

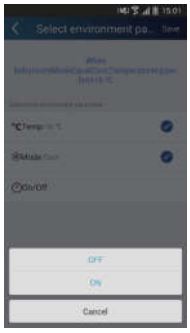
Multi-device preset: This can preset multiple devices to execute a command at a specific time.
Please refer to the instructions as how to set preset time, name, timer type and repeating days for a single device.
Tap "Preset device" to select one or more devices. Then return to the page "Device".



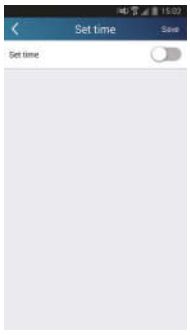
(4) Link(This function is APPlicable to some models)
Select a master device. When the environment satisfies the parameters as set in the master device, slave devices will execute commands to realize devices linkage.
Step 1: Set the parameters of master device (Select master device, select environment parameters, select master device status).
Tap + at the top right corner of the homepage "Device". Select "Link" and enter the page "Add linkage". Tap "Device/Param" to enter the page "Select device". Take "baby room" as an example. Tap "babyroom".

Enter the page "Select environment parameters".

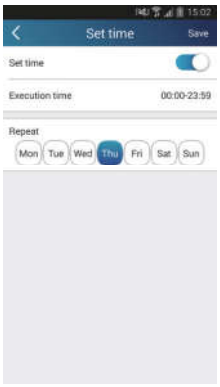
Tap "Temperature" to enter the page "Select temperature parameter". Slide up or down to adjust temperature. Tap "Upper limit" or "Lower limit".
Tap "Mode" and "On/Off" to select the status of master device. Then tap "Save".



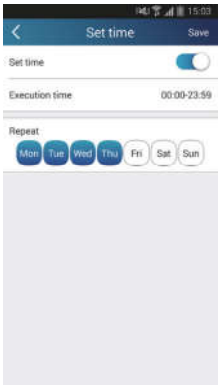
Step 2: Set time parameter for linkage. Tap "Time parameter" to enter the page "Set time". Slide rightwards to turn on the setting time.



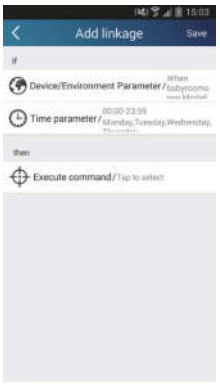
Tap "Execution time"; then tap "Start" and "Stop" to set start time and stop time respectively. Tap "OK" at the top right corner to save the setting.



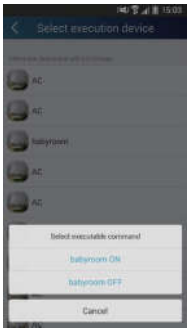
Tap the days below "Repeat" to select the repeating days. Then tap "Save".



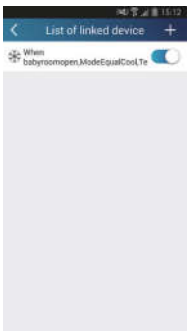
Step 3: Select "Execute command"
Tap "Execute command" and enter the page "Select device".



Tap the name of device that you want to control. Tap "ON" or "OFF" and then tap "Save" to complete the linkage.



Tap "Save" and then repeat the above steps to set linkage of several scenes.

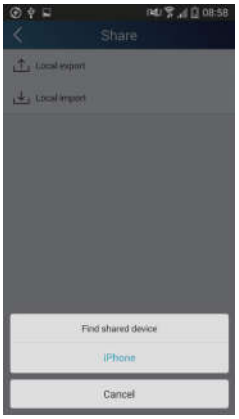


(5) Infrared control (only APPlicable to smart phones with infrared emitter).
Function: Smart phone can be used as a remote controller.
Tap + at the top right corner of the homepage "Device". Select "Infrared" and enter the page "Remote controller". Tap ^ and slide up to enter the page of advanced functions.

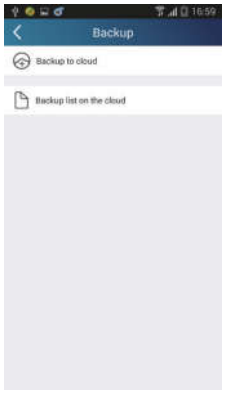
Tap ⏻ to turn on the device. Tap Mode to select mode. Tap ✥ to adjust fan speed and swing angle. Tap "Health", "Energy saving", "Sleep" etc. to set advanced functions.
Tap "Sleep" to enter the page "Sleep". You can select "Traditional sleep", "Expert sleep" or "DIY sleep". Tap "DIY sleep" and then tap the left and right arrows to set sleep time. Tap up and down arrows to adjust temperature at a specific sleep time.

4.Menu functions
Menu functions (Share, Set, History, Feedback)
(1) Share: To share quick configuration information and unit's information, including local export and local import.
For local import, you just need to tap "Local import" and wait for the data download.
Local export
Step 1: Export local data to another smart phone.
Enter "Menu" on the left side and tap "Share" to enter the page "Share". Then tap "Local export".

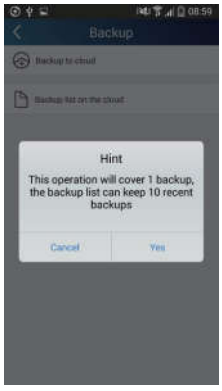
Step 2: Another smart phone to be imported.
Tap the model name and wait for the download.



(2) Backup: To keep backup of the quick configuration information and unit's information, including backup to cloud and backup list on the cloud.
Backup to cloud
Enter the "Menu" on the left and tap "Backup".



Tap "Backup to cloud" and then tap "Yes". Then wait for the data download.

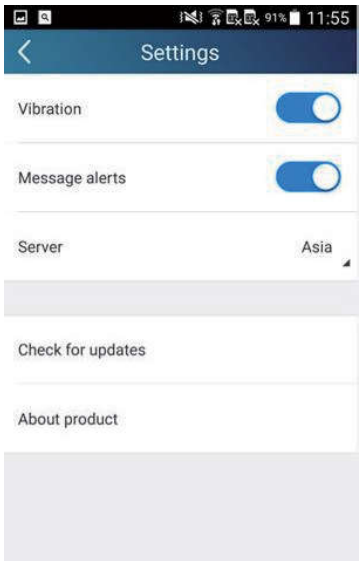


Select "Backup list on the cloud". Then backup records will APPear. Tap "Record" to download data and recover data to local unit.

(3) Settings

User can set vibration, message alerts, server, updates, etc. The server setting here must be the same as the server setting in "Configuration" mentioned before.

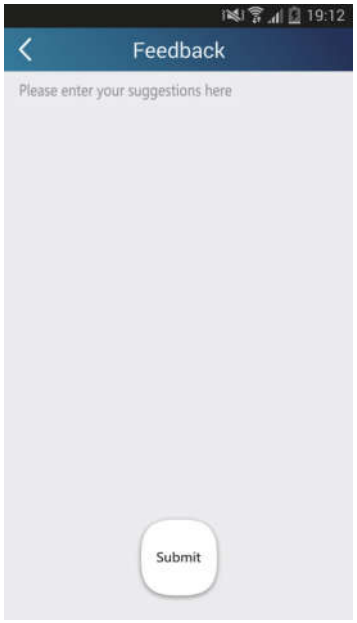
Otherwise, remote control will be invalid.



(4) Feedback

User can feedback suggestions to back-stage management for maintenance and development.

Tap "Feedback". Enter your suggestions and then submit it.



6.3 Operation of Smart Control (Smart Phone, Tablet PC)

Operation Instructions

Download and install APP

Scan the following QR code with your smart phone and download Wifi Smart.

Install the APP according to its guidance. When successfully installed, your smart phone homepage will show this icon

User of IOS system can search for the Wifi Smart in Apple store to download the Apple version APP. Android user can search "WiFi Smart" on Google Play to download it.

Configuration

NOTE: Select either the original configuration or AP configuration according to the APP functions.

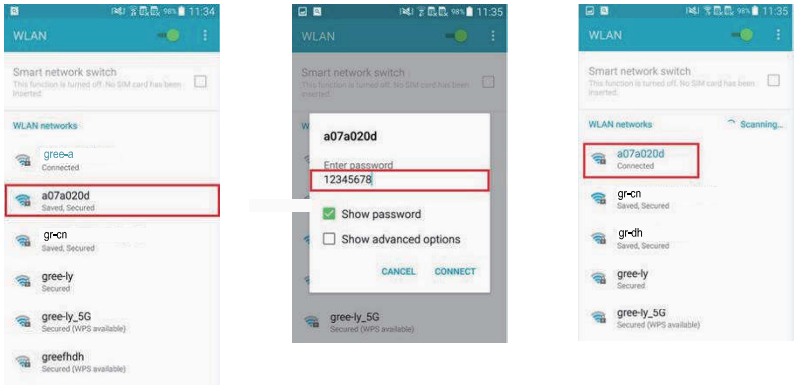
1.Original configuration

Before operation, please finish the following configuration in order to realize Wifi control and the connection between air conditioner and intelligent device.

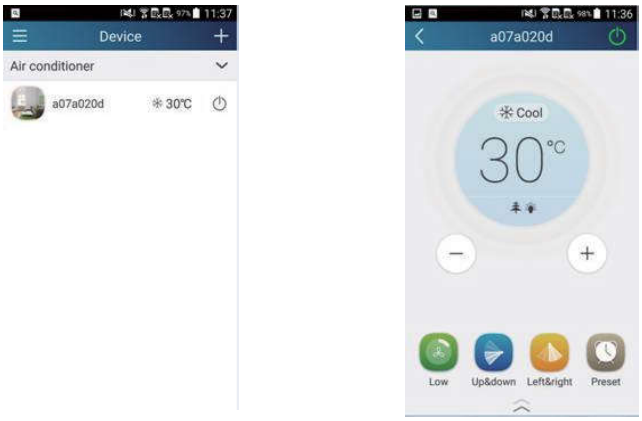
(1).Short-distance control setting for air conditioner using wifi hotspot

Step 1: Air conditioner wifi is set in APP mode in factory.

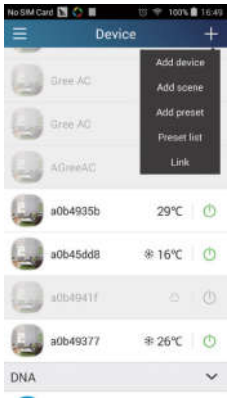
You can search the air conditioner wifi hotspot through your smart phone.The name of wifi hotspot is the last 8 numbers of the air conditioner mac address. Password is 12345678.



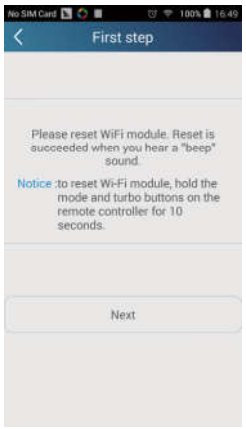
Step 2: Open APP and the screen will show the air conditioner that you just connected. Tap the name of this air conditioner on your phone to enter and realize short-distance control, as shown below. Please refer to "Functions introduction" for specific control methods.



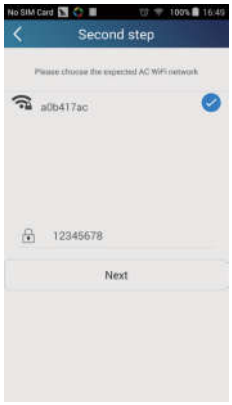
2.Configuration method for Android phones
4 steps of configuration
Step 1: Enter homepage "Device", and then tap + at the top right corner.
Select "Add device" and enter the page "Add device".
Tap "Manual configuration" and enter the page "Manual configuration".

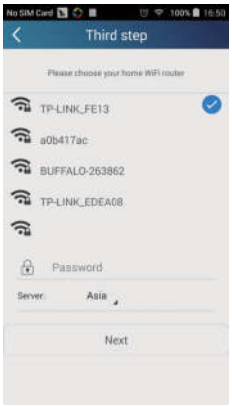


Step 2: Tap "Next" in the First Step.



Step 3: Select the wireless network of air conditioner. APP will show the password 12345678 (default password of the network of air conditioner). Then tap "Next"; select the name of home WiFi router, then enter the correct password and select a server.



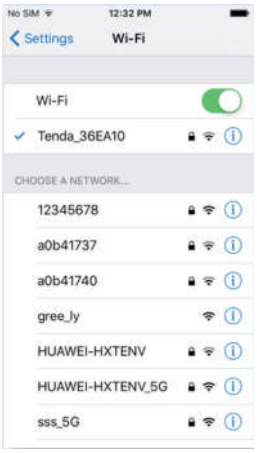


Step 4: If configuration is successful, a window will pop up and read “WIFI module starts to connect the configured wireless router”.Then configuration is completed.

NOTE: After configuration is completed, the air conditioner hot spot connected to your phone will disappear. You should reconnect your phone to the home WiFi router to realize long-distance control.The above configuration only needs onephone. Other types of phones shall install this APP, connect with the air conditioner hot spot or wireless router of WiFi air conditioner. When connection is done, open the APP to use short-distance operation to control the air conditioner and then you can use the long-distance control.

3.Configuration method for Apple phones

Step 1: Turn on Wi-Fi “Settings” on the phone.



Step 2: In general, the hot spot signal of air conditioner is the last 8 bits of MAC address. Eg: Select “a0b41737” and enter the defaulted password “12345678” to connect it.

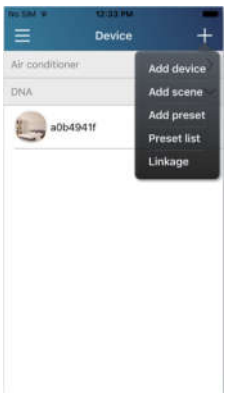
Step 3: Turn on APP, press “+” button, press “Add device” to enter into the page of “Add device” and then select “Manual configuration”. Enter wireless router’s SSID and PSW on the page of “Manual configuration”. The display on the server will be the same as the selection when registering the account (server selection in “Setting”).

Eg: WiFi name: Tenda_XXX;

WiFi password:123456789

Server: Europe

Check whether the filled information is correct. If the information is wrong, configuration will fail. Press “Configuration” to start configuration.



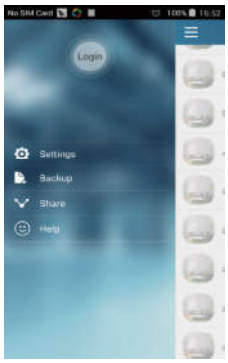
Notice:

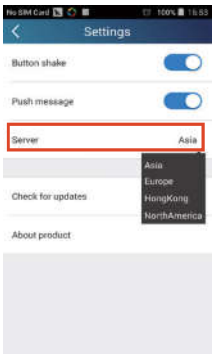
- Finally, press “Configuration”, and APP will send the filled information to Wifi Smart. At this time, the buzzer will give out a sound, which indicates it has started to connect the wireless router.

- If the name of router or the password is wrong, Wifi Smart can't connect to the wireless router. 2 mins later, please conduct the configuration operation again. Reset Wi-Fi adaptor by pointing you remote at the indoor unit and holding the mode and Turbo buttons on your remote control for 10 seconds and until you hear the beep.
- Wrong server selection will cause long-distance control invalid. Therefore, please make sure thatthe server selection when registering the account is the same as this one.
- If the password is blank, no password is defaulted for the wireless router, which is the OPEN mode.
- Configuration should be conducted at one time. As for other phones, they can automatically search for the device after connecting to the wireless router (such as Tenda_XXX) and turning on the APP.

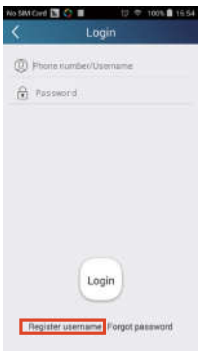
Functions introduction

1.User registration
Purpose: To realize long-distance control.
Operation instruction: For the first time login, you have to register a new username. If you already have a username, skip the registration step and enter email address and password on the "Login Page" to log in. If password is forgotton, you can reset the password.
Operation steps:
(1) Select the sever address.

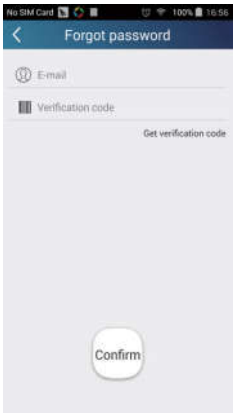




(2) Account login: Slide the page "Device", and enter the menu page on the left.Tap "Login" to enter the page "Register username". New user must first register a username. Tap "Register".

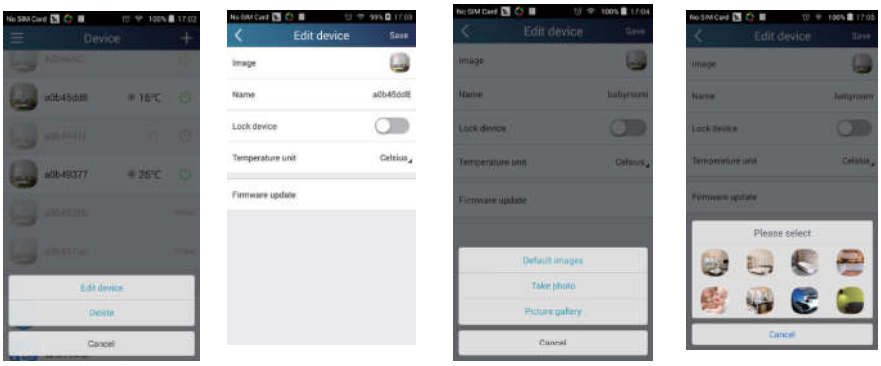


(3) If password is forgotten, you can reset the password with your email address.
Tap "Forgot password" and enter the page "Forgot password". Enter your registered email account the first. Tap "Get verification code" to get an email verification code. Enter a new password and tap "OK" to log in.

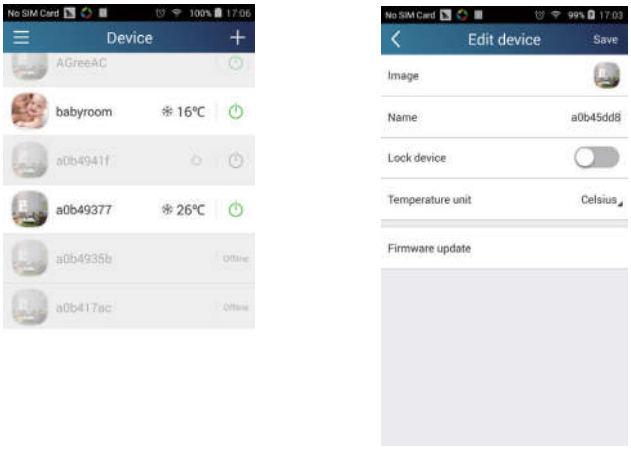


2.Personal settings
Purpose: Set name (device name, preset name, etc.) and images (device image) in order to identify a user easily.
(1) Set device name
After quick configuration, a list of controllable smart devices will be generated. Default name for air conditioner is the last 8 numbers of the air condtioner mac address.

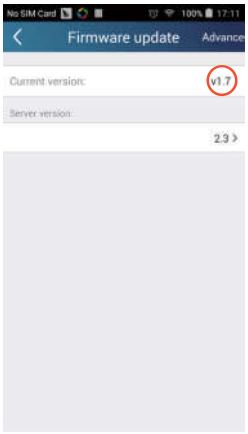
Step 1: Tap and hold the Wifi model name, such as “a0b417ac”, to enter the page "Edit device". Tap "Image" to select the source of image. Select from "Default images " or " Take photo" or "Choose from photos" and save an image.



Step 2: Tap "Name" to change device name. Save it and the new device name will be shown. Enable button "Lock device"to lock the device so that other smart phones can’t search the device. Tap "Temperature unit" to change the temperature unit.



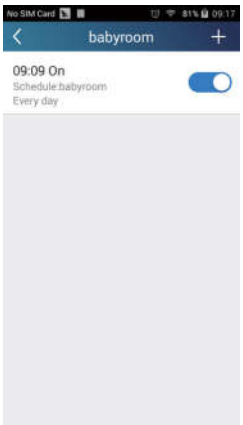
Notice: If this device is not locked, other phones within the local area network can be found through wifi smart APP and operate the device.
Step 3: Tap "Firmware update" to upgrade the firmware of the device. Tap"1.7" and then the device will be updated automatically.



(2) Set preset name

Step 1: Tap + at the top right corner of the homepage "Device". Select "Add preset" and enter the page "Preset edit".

Step 2: Choose the time. Tap "Name". As shown in the picture, its name is "baby room". For timer type, select "On". Then select the repeating days. Save the setting of preset name.



(3) Set device image

Please refer to step 1 in 2(1)

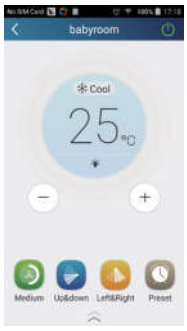
3.Control functions

(1) Common control functions: General control on the operation of smart devices (On/Off, temperature, fan speed, mode, etc.) and the setting of advanced functions (air exchange, dry, health, light, sleep, energy saving upper limit).

Step 1: General control

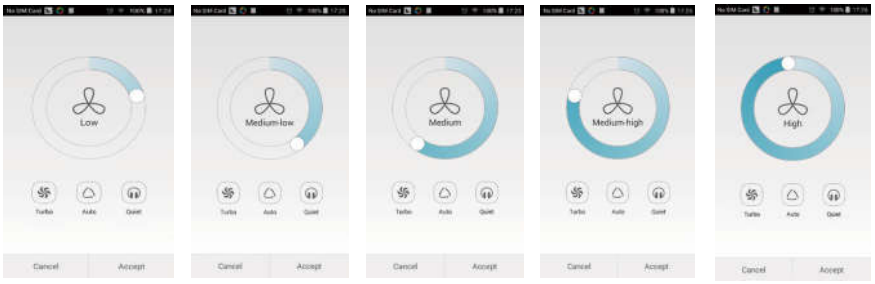
Enter the homepage "Device" first. Take "babyroom" as an example.

Tap "babyroom" and enter the page of air conditioner control. Tap to turn on the control switch.



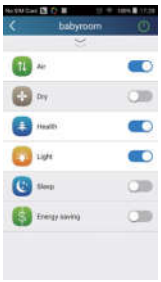
Tap or to increase or decrease temperature. Tap to change working mode. Tap to enter the page of fan speed adjustment.

Tap and go around the circle to adjust fan speed.



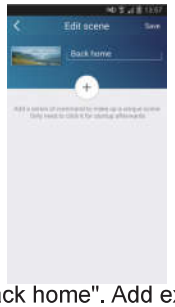
Step 2: Advanced settings

Tap to enter advanced settings. You may select "Air", "Dry", "Health", "Light", "Sleep" or "Energy saving".



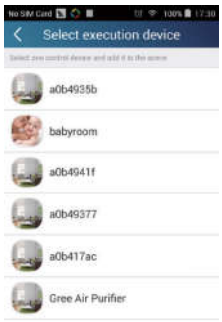
(2) Advanced control functions; Set scene; Preset; Link: Infrared control(only applicable to smart phones with infrared emitter)

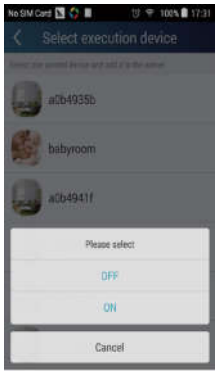
Set scene: Preset the operation of several smart devices by one tap. On the page "Device", tap the image of "Device" to enter the page "Edit scene".



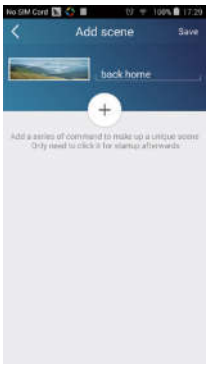
Tap "Add scene" and edit the scene name, for example, "Back home". Add execution devices.

Tap to add commands. On the page "Select execution device", select the air conditioner named "babyroom". Then select "ON" or "OFF".

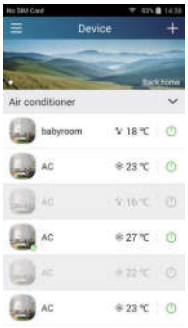


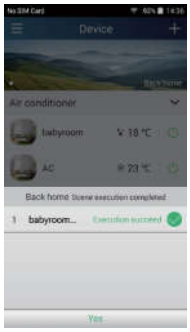


Continue to select the next execution device as instructed above. Tap 0.5s to set the interval.



Tap "Save". Tap the scene picture displayed on homepage "Device" to send the command. Then the scene "Back home" will be in execution. You may view the execution condition of the scene.

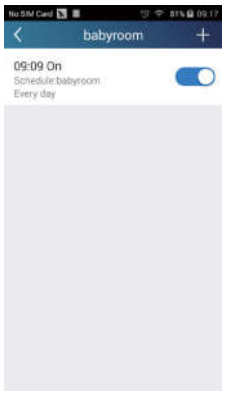




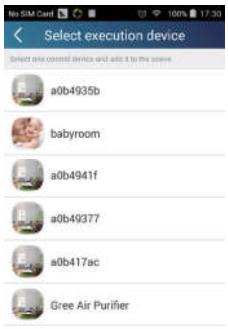
(3) Preset includes single-device preset and multi-device preset
Single-device preset: This can preset a certain device to be On/Off at a specific time.
On the homepage "Device", take air conditioner "babyroom" as an example. Tap Preset at the bottom of the page "babyroom". Then you will enter the page "Preset edit".

Slide up and down to set the time. If you need to synchronize the time, tap " synchronize". If such "Hint" interface doesn't show up, please skip this operation step.

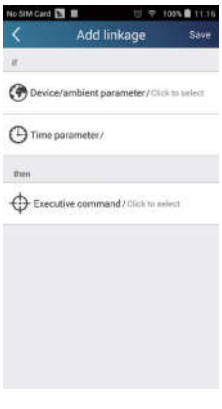
Tap "Name" to customize the preset name.
Preset device can't be selected and it will default to "babyroom". Select "On" for the timer type. Select repeating days to complete the preset.



Multi-device preset: This can preset multiple devices to execute a command at a specific time.
Please refer to the instructions as how to set preset time, name, timer type and repeating days for a single device.
Tap "Preset device" to select one or more devices. Then return to the page "Device".

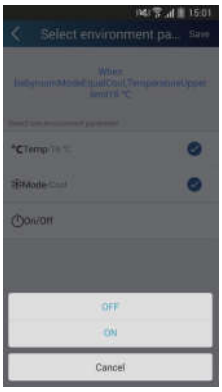


(4) Link(This function is applicable to some models)
Select a master device. When the environment satisfies the parameters as set in the master device, slave devices will execute commands to realize devices linkage.
Step 1: Set the parameters of master device (Select master device, select environment parameters, select master device status).
Tap + at the top right corner of the homepage "Device". Select "Link" and enter the page "Add linkage". Tap "Device/Param" to enter the page "Select device". Take "baby room" as an example. Tap "babyroom".

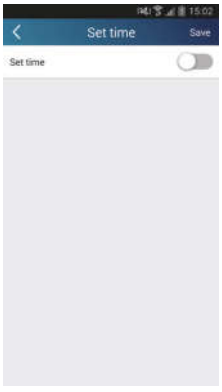


Enter the page "Select environment parameters".

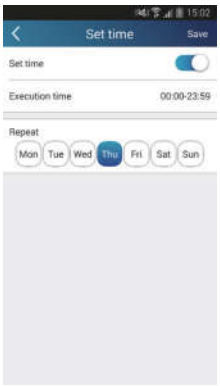
Tap "Temperature" to enter the page "Select temperature parameter". Slide up or down to adjust temperature. Tap "Upper limit" or "Lower limit".
Tap "Mode" and "On/Off" to select the status of master device. Then tap "Save".



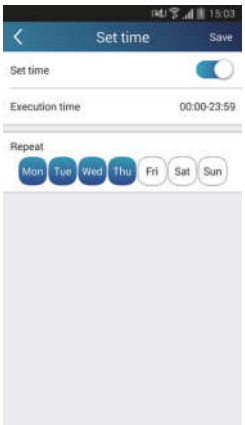
Step 2: Set time parameter for linkage. Tap "Time parameter" to enter the page "Set time". Slide rightwards to turn on the setting time.



Tap "Execution time"; then tap "Start" and "Stop" to set start time and stop time respectively. Tap "OK" at the top right corner to save the setting.

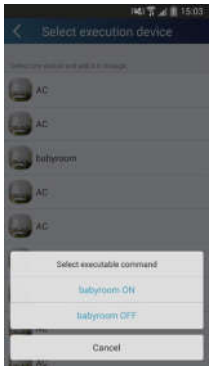


Tap the days below "Repeat" to select the repeating days. Then tap "Save".

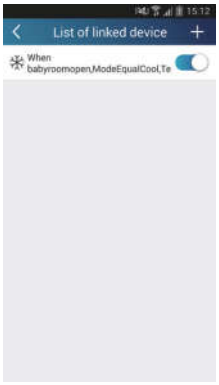


Step 3: Select "Execute command" Tap "Execute command" and enter the page "Select device".

Tap the name of device that you want to control. Tap "ON" or "OFF" and then tap "Save" to complete the linkage.



Tap "Save" and then repeat the above steps to set linkage of several scenes.



4.Menu functions

Menu functions (Share, Set, History, Feedback)

(1) Share: To share quick configuration information and unit's information, including local export and local import.

For local import, you just need to tap "Local import" and wait for the data download.

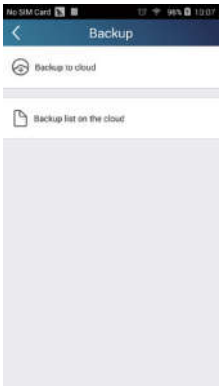
Local export

Step 1: Export local data to another smart phone.

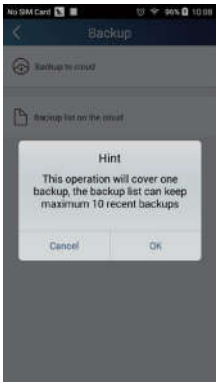
Enter menu page on the left side and tap "Share" to enter the page "Share". Then tap "Local export".

Step 2: Another smart phone to be imported.
Tap the model name and wait for the download.

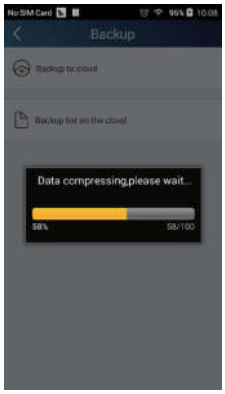
Notice:
This function requires that the two phones are of the same operating system. They are either Android phones or Apple phones,and are connecting to the same wireless router.
(2) Backup: To keep backup of the quick configuration information and unit's information, including backup to cloud and backup list on the cloud.
Backup to cloud
Enter the menu page on the left and tap "Backup".



Tap "Backup to cloud" and then tap "Yes". Then wait for the data download.



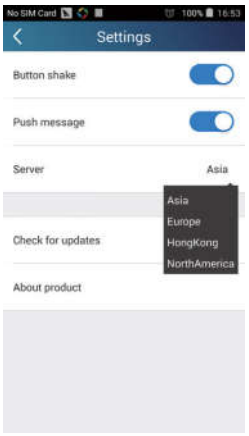
Select "Backup list on the cloud". Then backup records will appear. Tap "Record" to download data and recover data to local unit.



(3) Settings

User can set vibration, message alerts, server, updates, etc. The server setting here must be the same as the server setting in "Configuration" mentioned before.

Otherwise, remote control will be invalid.



(4) Help

Please refer to “Help” of APP for the instruction of the latest functions.

6.4 Brief Description of Modes and Functions

● Indoor Unit

1.Temperature Parameters

Indoor preset temperature (Tpreset)

Indoor ambient temperature (Tamb.)

2.Basic functions (The temperature in this manual is expressed by Centigrade. If Fahrenheit is used, the switchover between them Tf=TcX1.8+32.)

Once the compressor is energized, there should be a minimum interval of 3 minutes between two start-ups. But if the unit is de-energized and then energized, the compressor can restart within 3 minutes.

(1)Cooling mode

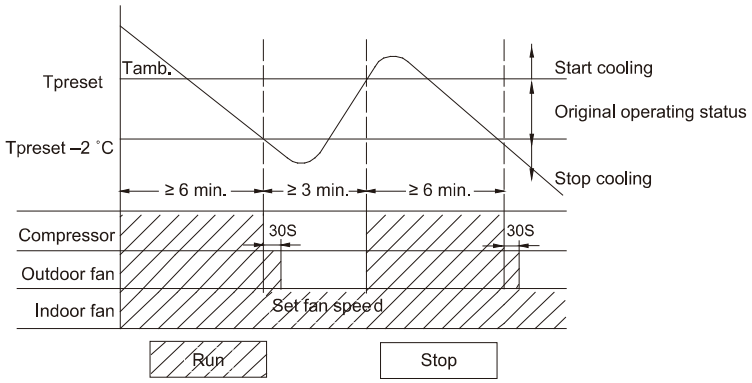
① Cooling conditions and process

When Tamb. ≥Tpreset, the unit starts cooling operation. In this case, the compressor and the outdoor fan operate and the indoor fan operates at set speed.

When Tamb. ≤Tpreset-2°C, the compressor will stop, the outdoor fan will delay 30 seconds to stop, and the indoor fan will run at the set speed.

When Tpreset-2°C<Tamb.<Tpreset, the unit will maintain its previous running status.

In cooling mode, temperature setting range is 16~30°C; the indoor unit displays operation icon, cooling icon and set temperature.



② When outdoor unit has malfunction or stops for protection, indoor unit will keep previous operation status and display malfunction code.

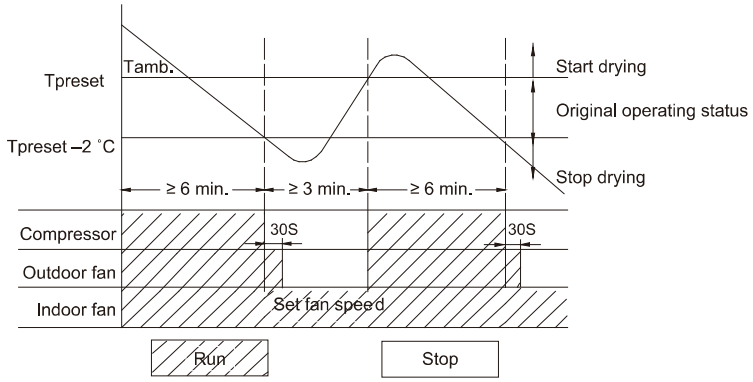
(2)Dry Mode

When Tamb.>Tpreset, the unit operates in cooling mode. Meanwhile, compressor and outdoor fan operate, and indoor fan operates at set fan speed (low fan speed, quiet fan speed or auto quiet fan speed).

When Tpreset-2°C<Tamb. ≤Tpreset, the unit keeps previous operation status.

When Tamb.≤Tpreset-2°C, the compressor will stop, the outdoor fan will stop with a time lag of 30s and indoor fan operate at set fan speed (low fan speed, quiet fan speed or auto quiet fan speed).

Under this mode, the temperature setting range is 16~30°C. Display displays operation icon, drying icon and set temperature.



(3)Heating mode (not available for cooling only type)

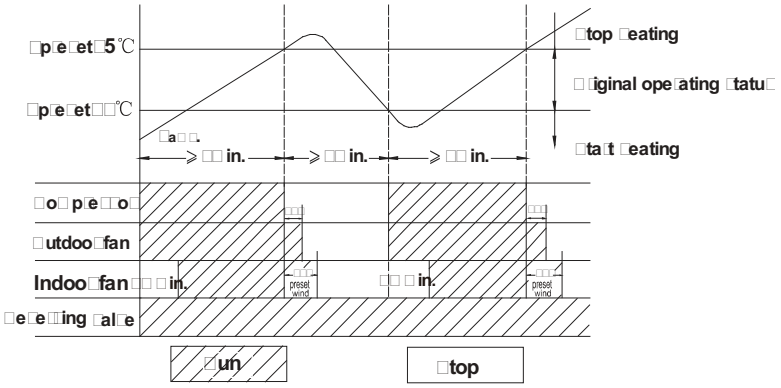
① Heating conditions and process

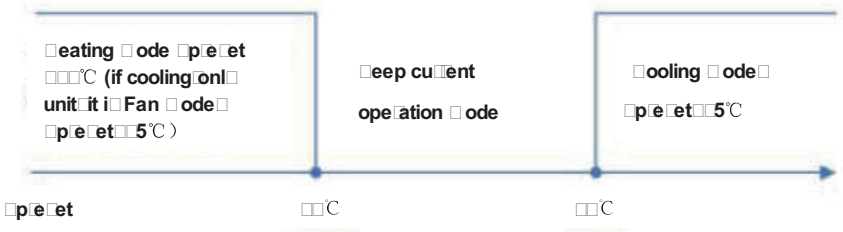
When Tamb. ≤Tpreset+2°C, the unit starts heating operation. In this case, compressor and outdoor fan operate simultaneously; the indoor fan operates at cold-air prevention mode.

When Tamb.≥Tpreset+5°C,the compressor will stop, the outdoor fan will stop with a time lag of 30s; the indoor fan blows residual heat.

When Tpreset+2°C<Tamb.<Tpreset +5°C, the unit will maintain its previous running status.

Under this mode, temperature setting range is 16~30°C; the indoor unit displays operation icon, heating icon and set temperature.





Service Manual

Tpreset õ5℃
Tpreset õī ℃
Tamb.
≥ min.
≥ min.
≥ min.
Stop heating
Original operating status
Start heating
Compressor
Outdoor fan
Indoor fan
min.
preset wind
preset wind
Reversing valve
Run
Stop

② Defrosting and Oil Return
When receiving the signal of defrosting and oil return, the horizontal louver(big one) will rotate to the position where the angle is minimum and the other horizontal louver(small one) will close. In 10 seconds later, indoor fan will stop operation. During defrosting, oil return and 5 minutes after quit, all indoor pipe temperature sensors will not be detected. When receiving oil return signal or defrosting signal sent by outdoor unit, Heating indicator on indoor unit is off for 0.5s and then blinks for 10s.
③ Blow residual heat
In heating mode, when temperature reaches the set temperature, the compressor and outdoor fan will stop.
The horizontal louver (big one) will rotate to the default position for cooling and the other one (small one) will close. Indoor unit will operate at set speed for 60s and then stop operation.
When the unit is in heating mode or auto heating mode, and also the compressor and indoor fan are operating, if turning off the unit,compressor and outdoor fan will stop. Horizontal louver (big one) will rotate to the position where gentle wind is blown out (default position for cooling) and the other horizontal louver (small one) will close. Indoor unit will operate at low speed for 10 seconds and then the unit will be turned off.

(4)Fan Mode
In this mode, indoor fan operates at set speed while compressor and outdoor fan stop operation. The set temperature range is 16~30°C. Operation icon and set temperature are displayed.

(5)Auto Mode
In this mode, operation mode (Cool, Heat, Fan) will be automatically selected according to change of ambient temperature. Operation icon, actual operation icon and set temperature will be displayed. There is 30s delay for protection when changing mode. The protection function is as the same as that under each mode.
① When Tamb.≥26°C the unit will operate at cooling mode, the default set temperature is 25°C.
② When Tamb. ≤21°C the unit will operate at heating mode, the default set temperature is 20°C if the cooling only unit operates at fan mode, the default set temperature is 25°C;
③ When 22°C≤Tamb.≤25°C and the unit is turned on for the first time, if it changes to auto mode from other mode, the previous operation mode will be maintained; If it changes to auto mode from dry mode, the unit will operate at fan mode.
④ When the unit operates at auto mode, the frequency of compressor is as the same as that under cooling mode, while it is as the same as that under heating mode.
Protection function
A. Under cooling mode, the protection function is as the same as that under cooling mode.
B. Under heating mode, the protection function is as the same as that under heating mode.

Heating mode Tpreset ćīš ℃ (if cooling only unit is Fan mode, Tpreset 5℃)
Keep current operation mode
Cooling mode Tpreset 5℃
Tpreset
ī¦ ℃
īź ℃

(6) “8°C” Heating
Under heating mode, press buttons “Temp” and “Clock” simultaneously, the 8°C heating function will be activated and “cold air prevention” will be shielded.
① 8°C heating can’t co-exist with sleep function. If 8°C heating function is set, it can be cancelled by pressing sleep button, In that case, the set temperature will be that before entering 8 heating; If sleep function is set, press buttons “Temp” and “Clock” simultaneously to activate 8°C function and cancel sleep function at the same time.
② Set temperature is 8°C and it is displayed on the indoor display panel.

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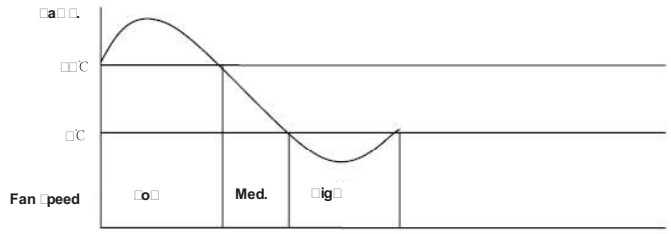
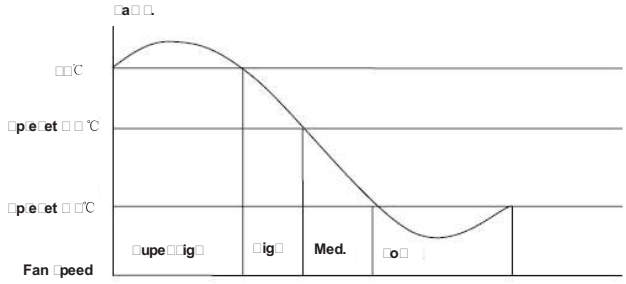
Technical Information

③ In this mode, TURBO can't be set and fan speed can't be adjusted.
④ In this mode, when compressor operates, fan speed will be adjusted as follows; when compressor stops operation, indoor unit will operate at blowing residual heat.
When Tindoor amb. ≤9°C, indoor fan operates at high fan speed;
When 9°C ＜ Tindoor amb. ＜ 11°C, indoor fan operates at medium fan speed;
When Tindoor amb.≥11°C, indoor fan operates at low fan speed;
When changing among low high, medium, and low speeds, the minimum operation time is 210 seconds.
⑤ The unit with memory function can memorize 8°C heating mode.



(7)Energysaving Function
① In cooling mode, when receiving command of energysaving sent by remote control, the controller enters energysaving mode; If the unit is under energysaving mode already, such command will not be executed.
② When remote control is set to display set temperature, "dual 8"nixie tube displays "SE".
③ In this mode, when compressor operates, fan speed will be adjusted according to auto fan mode under energysaving operation; when compressor stops operation, indoor fan will operate at low speed.
a. When Tamb.≥31°C, indoor fan will operate at super high speed;
b. When 31°C>Tamb.≥Tpreset+3°C, indoor fan will operate at high speed;
c. When Tpreset+1<Tamb.<Tpreset+3°C indoor fan will operate at medium speed;
d. When Tamb.≤Tpreset+1°C indoor fan will operate at low speed;
Note: The switchover among superhigh speed, high speed, medium speed and low speed requires minimum 210seconds of operation.



④ In this mode, set temperature will be automatically adjusted according to actual operation conditions.
3.Other Control
(1)Clock Timer
Timer ON
If timer ON is set during operation of the unit, the unit will continue to operate. If timer ON is set at unit OFF, upon ON time reaches the unit will start to operate according to previous setting status.
Timer OFF
If timer OFF is set at unit OFF, the system will keep standby status. If timer OFF is set at unit ON, upon OFF time reaches the unit will stop operation.
Timer Change
Although timer has been set, the unit still can be turned on/off by pressing ON/OFF button of the remote controller. You can also set the timer once again, and then the unit will operate according to the last setting.
If timer ON and timer OFF are set at the same time during operation of the unit, the unit will keep operating at current status till OFF time reaches.
If timer ON and timer OFF are set at the same time at unit OFF, the unit will keep off status till ON time reaches.
Each day in future, the system will operate according to preset mode till OFF time reaches and stop operation till ON time reaches. If ON time and OFF time are the same, OFF command will prevail.
(2)Auto Button
If this button is pressed, the unit will operate in AUTO mode and indoor fan will operate at auto speed; meanwhile, the swing motor operates. Press this button again to turn off the unit.
(3)Buzzer

Upon energization or availably operating the unit or remote controller, the buzzer will give out a beep.

(4)Sleep Function

Cooling mode、Dry mode: Basing on the set temperature of remote controller, after turning on the sleep function for a few hours, set temperature will increase properly and automatically according to human body's comfort.

Heating mode: Basing on the set temperature of remote controller, after turning on the sleep function for a few hours, set temperature will decrease properly and automatically according to human body's comfort.

(5)Turbo Function

This function can be set in cooling or heating mode to quickly cool or heat the room.

(6)X-FAN Function

① When the unit is operating at COOL or DRY mode(it is not available under AUTO, HEAT, FAN modes), the X-FAN function can be turned on/off. When it is turned on,once pressing ON/OFF button to turn off the unit, indoor fan will continue operation at low speed for 2 minutes. Within the 2 minutes, horizontal louver will keep its previous status while cold plasma and static dedusting will be forced to be turned on and other loads will be turned off. Then the complete unit will be turned off; When X-FAN function is set to be off,once pressing ON./OFF button, the complete unit will be turned on immediately.

② During X-FAN operation, press X-FAN button, the indoor fan, horizontal louver, cold plasma and static-dedusting will be turned off immediately.

(7)Control of Indoor Fan

Indoor fan can be set by remote control within the range of Mute, Fan speed 1, Fan speed 2, Fan speed 3, Fan speed 4, Fan speed 5 and Turbo and Fan will operate at low, med. high or super high speed accordingly. And also, auto fan speed can be set. Under auto fan speed mode, indoor fan will automatically select high, med., low or mute speed according to change of ambient temperature.

① Under Auto Heat mode or regular Heat mode, auto fan speed will be as follows:

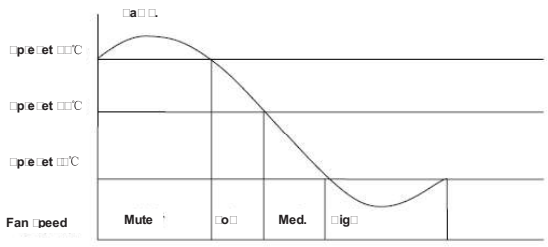
When Tamb.<Tpreset-3°C, indoor fan will operate at high speed;

When Tpreset-3°C≤Tamb.<Tpreset+2°C indoor fan will operate at med. speed;

When Tpreset+2°C≤Tamb.<Tpreset+4°C, indoor fan will operate at low fan speed;

When Tamb≥Tpreset+4°C indoor fan will operate at mute.

Control Diagram of Auto Fan Speed under HEAT Mode



② Under FAN or COOL mode: if it is auto cooling mode or regular cooling mode, auto fan speed will be as follows:

When Tamb.≥Tpreset+3°C, indoor fan will operate at high speed;

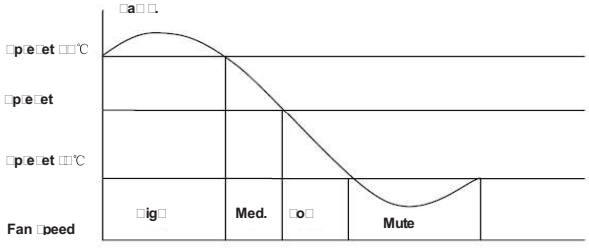
When Tpreset<Tamb.<Tpreset+3°C indoor fan will operate at med. speed;

When Tpreset-2°C<Tamb.≤Tpreset, indoor fan will operate at low speed;

When Tamb.≤Tpreset-2°C indoor fan will operate at mute;

③ There is no auto fan speed under DRY mode

Note: Fan speed "High", "Med." and "Low" are respectively corresponding to "Fan speed 5", "Fan speed 3" and "Fan speed 1". There is 210 seconds delay for fan speed switchover of auto fan.

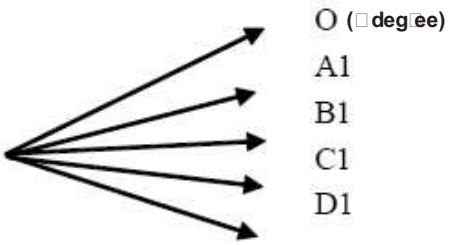


(8)Vertical Swing

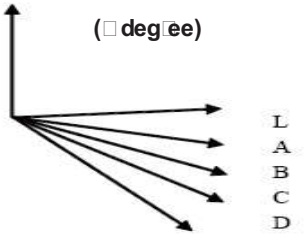
① Small Horizontal Louver

After energization, vertical swing motor will firstly have the horizontal louver rotate anticlockwise to position O to close air outlet. If swing function has not been set after startup of the unit, horizontal louver will turn clockwise to position D1 in HEAT mode. If swing function is set when starting up the unit, the horizontal louver will swing between O and D1.There are 7 swing status of horizontal louver: Positions O, A1, B1, C1 and D1, swing between O and D1 and stop at any position between L and D (angles between O and D1 are equiangular). Upon turning off the unit, the horizontal louver will close at position O. Swing function is available only when

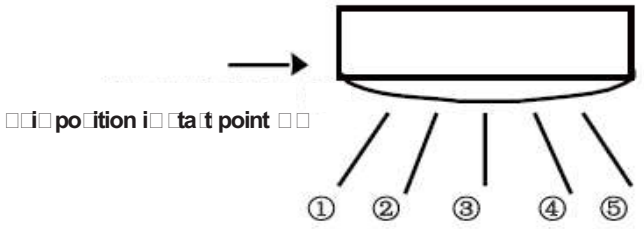
swing function is set and indoor fan is operating.
Note:
a. If the position is set between O and D1, A 1and C1 or B1 and D1 by remote controller, the horizontal louver will swing between O and D1.
b. For model 9K/12K, only when big horizontal louver rotates to the second position for heating(62°of corresponding angle), this louver will be activated
c. Under cooling mode, this horizontal louver will be always in the position O.



② Big Horizontal Louver
After energization, up & down swing motor will firstly have the horizontal louver rotate anticlockwise to position O to close air outlet. If swing function has not been set after startup of the unit, horizontal louver will turn clockwise to position D in HEAT mode, or turn clockwise to level position L in other modes. If swing function is set when starting up the unit, the horizontal louver will swing between L and D.There are 7 swing status of horizontal louver: Positions L, A, B, C and D, swing between L and D and stop at any position between L and D (angles between L and D are equiangular). Upon turning off the unit, the horizontal louver will close at position O.
Note: If the position is set between L and B, A and C or B and D by remote controller, the horizontal louver will swing between L and D.



(9)Horizontal Swing
Upon energization, the vertical louver will be reset to the start position firstly and then stop in the middle position. When setting horizontal swing, there are 7 status: Position ① , Position ② , Position ③ , Positon ④ , Position ⑤ , swing between ① and ⑤ and stop at any position between ① and ⑤ . If setting horizontal swing during operation of the unit, the horizontal swing motor will drive the louver to swing horizontally. When cancelling horizontal swing or it is not set when turning on the unit, the louver will stop in the current.



(10)Display
① Operation and Mode Icons
Upon energization, the unit will display all icons within 3 seconds. Under standby state, LED lamp of standby is on. If the unit is turned on by remote controller, LED lamp of operation is on; meanwhile, the mark of current running mode will be displayed. If the light button is turned off, no mark will be displayed.
② Display of Nixie Tube on Indoor Unit
When energized & started for the first time, the indoor unit defaults to displaying current set temperature (16~30°C). When set temperature display is set by remote controller, it will display set temperature; when room temperature display is set, it will display room or outdoor temperature. After that, when operating the remote controller for other settings, the temperature display method will keep original. When operating the remote controller during room temperature display, the set temperature will be displayed for 5 seconds firstly and then room temperature display returns. If there is malfunction, corresponding malfunction code will be displayed. For example, if ambient temperature sensor has malfunction, “F1” will be displayed; if indoor pipe temperature has malfunction, “F2”

will be displayed; if jumper cap has malfunction, “C5” will be displayed.

(11)Memory Function

① Memory when power failure upon turning on the unit

◆ Memory content: ON status, mode, up&down swing, light, set temperature, set fan speed, general timer, Fahrenheit/ Centigrade

◆ General timer can be memorized. Timer will be recalculated from the time of energization.

◆ Clock timer can’t be memorized.

② Memory when power failure upon turning off the unit

◆ Memory content: ON status, mode, up&down swing, light, set temperature, set fan speed, general timer, Fahrenheit/ Centigrade

◆ General timer can be memorized. Timer will be recalculated from the time of energization.

◆ Clock timer can’t be memorized.

(12)I Feel function

When I FEEL command is received by controller, and also the ambient temperature is received from remote control, the controller will operate according to the ambient temperature sent by the remote controller (For cold blow prevention, the unit operates according to the ambient temperature sensed by the air conditioner). The remote controller will send ambient temperature data to the controller for every 10 minutes. When the data has not been received for 11 minutes, the unit will operate according to the temperature sensed by the air conditioner. If I FEEL function is not selected, the ambient temperature will be that sensed by the air conditioner. Ambient temperature of I FEEL displayed by controller is 1 ~59°C.

(13)Health and Cold Plasma Function(Optional)

When the unit is operating, turn health or cold plasma to be ON/OFF by health button in remote control (if there is no such button in remote control, the health is on as default). Only when health or cold plasma is turned on and indoor fan is operation, such function can be activated.

(14)Static Dedusting Function(Optional)

When the unit is operating, turn static dedusting ON/OFF by health button in remote control (if there is no such button in remote control, the health is on as default). Only when static dedusting is turned on and indoor fan is operation, such function can be activated.

(15)Fahrenheit Display

Nixie tube displays current set temperature. If remote signal is Fahrenheit, the temperature will be displayed in Fahrenheit. The set temperature range is 16~30°C. Under Auto mode, in COOL operation and FAN operation, 25°C will be displayed, while in HEAT operation and FAN operation, 20°C will be displayed. For cooling-only controller, only 25°C will be displayed.

(16)Locked protection to Indoor Fan Motor

If the indoor fan motor keeps low rotation speed for a continuous period of time after startup, the unit will stop operation and display“H6”.

(17)Mute Mode

① Auto Mute: When selecting fan speed of auto mute, the fan speed will be adjusted according to change of ambient temperature; when temperature meets the requirement of the setting, the unit will operate at lowest speed.

② Mute mode: When selecting fan speed of mute, the unit will directly operate at lowest fan speed.

This position is start point

(18)Compulsive Defrosting Function

① Start up compulsory defrosting function

Under ON status, set heating mode with remote controller and adjust the temperature to 16°C. Press “+, -, +, -, +,-” button successively within 5s and the complete unit will enter into compulsory defrosting status. Meanwhile, heating indicator on indoor unit will ON 10s and OFF 0.5s successively. (Note: If complete unit has malfunction or stops operation due to protection, compulsory defrosting function can be started up after malfunction or protection is resumed.

② Exit compulsory defrosting mode

After compulsory defrosting is started up, the complete unit will exit defrosting operation according to the actual defrosting result, and the complete unit will resume normal heating operation.

(19)Refrigerant Recycling Function

① Enter refrigerant recycling function

Within 5min after energizing (unit ON or OFF status is ok), continuously press LIGHT button for 3 times within 3s to enter refrigerant recycling mode; Fo is displayed and refrigerant recycling function is started. At this moment, the maintenance people closes liquid valve. After 5min, stick the thimble of maintenance valve with a tool. If there is no refrigerant spraying out, close the gas valve immediately and then turn off the unit to remove the connection pipe.

② Exit refrigerant recycling function

After entering refrigerant recycling mode, when receive any remote control signal or enter refrigerant recycling mode for 25min, the unit will exit refrigerant recycling mode automatically If the unit is in standby mode before refrigerant recycling, it will be still in standby mode after finishing refrigerant recycling; if the unit is in ON status before refrigerant recycling, it will still run in original operation mode.

● Outdoor Unit

1. Compensation function of input parameters

According to the structure of wall-mounting unit, considering the comfortability for operation, indoor ambient temperature when the compressor is at OFF status is higher than set temperature under heating mode.

2. Control of detecting the availability of parameters

For ensuring the safety and reliability of operation, please insert the outdoor discharge temperature sensor into the corresponding temperature sensor bushing to make sure that the control system can detect system discharge temperature accurately. Otherwise, the unit will stop operation and it displays malfunction of discharge temperature sensor (discharge temperature sensor hasn't been inserted
well), which can only be resumed by pressing ON/OFF button on remote controller. Basic functions:

3. Cooling mode

3.1 Working condition and process for cooling

3.1.1 If compressor is at OFF status, and T_{preset}-($T_{indoor\ amb.}$- $T_{indoor\ amb.\ compensation\ of\ cooling}$) ≤0°C, the unit operates in cooling mode;

3.1.2 During cooling operation, if 0°C ≤ T_{preset}-($T_{indoor\ amb.}$- $T_{indoor\ amb.\ compensation\ of\ cooling}$) <3°C, the unit still operates in cooling mode;

3.1.3 During cooling operation, if 3°C ≤ T_{preset}-($T_{indoor\ amb.}$- $T_{indoor\ amb.\ compensation\ of\ cooling}$) , the unit stops operation when reaching the temperature point in cooling.

3.2 under the mode,the temperature setting range is 16~30°C.

4. Dry mode

4.1 Working conditioner and process for drying is same as that for cooling mode;

4.2 Temperature setting range is 16~30°C;

5. Fan mode

5.1 Compressor, outdoor fan and 4-way valve are all turned off;

5.2 Temperature setting range is 16~30°C.

6. Heating mode

6.1 Working conditioner and process of heating($T_{indoor\ amb.}$ is the actual temperature detected by indoor ambient temperature sensor; △ $T_{indoor\ amb.\ compensation\ of\ heating}$ is indoor ambient temperature compensation during heating operation).

6.1.1 If compressor is at OFF status, and $T_{indoor\ amb.}$ - $T_{indoor\ amb.\ compensation\ of\ heating}$ -T_{preset} ≤-1°C, the unit operates in heating mode.

6.1.2 During heating operation, if 0°C≤ ($T_{indoor\ amb.}$- $T_{indoor\ amb.\ compensation\ of\ heating}$)-$T_{preset}$ <2°C, the unit still operates in heating mode.

6.1.3 During heating mode, if 2°C≤ ($T_{indoor\ amb.}$ - $T_{indoor\ amb.\ compensation\ of\ heating}$)-$T_{preset}$, the unit stops operation when reaching the temperature point in heating.

6.2 Under this mode, the temperature setting range is 16~30°C.

7. Defrosting control heating mode

7.1 If it turns to defrosting time and it detected that the defrosting temperature is satisfied for 3mins successively, the unit turns into defrosting process.

7.2 Defrosting-starting: compressor stops operation and restart it up after 90s delayed,

7.3 Defrosting-ending: Compressor stops operation and it starts up after 90s delayed.

7.4 When any one of below defrosting-ending conditions is satisfied, the unit will quit from defrosting operation:

7.4.1 $T_{outdoor\ tube}$≥$T_{quit\ temperature\ 1}$ for defrosting;

7.4.2 Defrosting operation time is reached $T_{max.defrosting\ time}$.

8. Control of compressor

8.1 Frequecny of compressor intangibly controls the frequency according to the relation between ambient temperature and set temperature, and the change speed of ambient temperature;

8.2 Under cooling, heating or drying mode, compressor will be started up after outdoor fan is started for 5s.

8.3 At the OFF status, stop operation because of protection and switchover to fan mode, the compressor stops operation immediately.

8.4 Under each mode: Once the compressor is started up, it can be stopped only after operation.

8.5 Under each mode, one the compressor is stopped, it can be restarted up only after 3min delayed

9. Control of outdoor fan

9.1 When turn off the unit by remote controller, stop operation because of protection or stop operation after reaching the temperature point, outdoor can stop operation only after the compressor is stopped for 1min;

9.2 Under fan mode: outdoor fan stops operation.

9.3 defrosting-starting: enter into defrosting. Outdoor fan stops operation after compressor stops for 50s.

9.4 Defrosting-ending: quit defrosting. When the compressor stops operation, the outdoor fan operates.

10. Control of 4-way valve

10.1 4-way valve status under cooling, drying and fan modes: OFF;

10.2 When the unit turned on and operated in heating mode, the 4-way valve is energized immediately.

10.3 If turn off unit or switch to other mode in heating mode, the 4-way valve is de-energized after the compressor stops for 2min;

10.4 When the unit is turned off because of each protection, the 4-way valve is de-energized after 4 mins delayed.

10.5 Defrosting-starting: enter into defrosting. After the compressor stops for 50s, the 4-way valve will be de-energized.

10.6 Defrosting-ending: quit defrosting. After the compressor stops for 50s, the 4-way valve is energized.

11. Freeze protection

11.1 Under cooling or drying mode, After compressor is turned on in 6 min later, if $T_{inner\ tube}$≤$T_{limit\ temperature\ of\ freeze\ protection}$,operation frequency of compressor will stop rising;If $T_{inner\ tube}$≤$T_{decrease\ frequency\ temperature\ of\ freeze\ protection}$, operation frequency of compressor may decrease;

11.2 Under cooling or drying mode, if it's detected that $T_{inner\ tube}$≤$T_{stop\ operation\ temperature\ of\ freeze\ protection}$ for 3min successively, the unit will stop

operation due to freeze protection. If $T_{inner\ tube} \geq T_{temperature\ of\ freeze\ protection}$ and the compressor has stopped for 3min, the complete unit can resume operation.

11.3 If the unit is stopped because of freeze protection for 6 times successively, it can't resume operation automatically and the malfunction will be displayed continuously, which can only be resumed by pressing ON/OFF button. During operation, if operation time of compressor is over, the times of stop operation because of freeze protection will be cleared. If turn off the unit or switch to fan/ heating mode, malfunction and times of malfunction is eliminated immediately.

12. Overload protection

12.1 Overload protection under cooling or drying mode: If $T_{overload\ stop\ operation\ temp.\ in\ cooling} \leq T_{outdoor\ tube}$, the unit stops operation because of overload in cooling; if $T_{outdoor\ tube} < T_{overload\ limit\text{-}frequecny\ temp\ in\ cooling}$ and the compressor has stopped for 3min, the complete unit can resume operation.

12.2 Under cooling or drying mode, if $T_{overload\ limit\text{-}frequecny\ temp.\ in\ cooling} \leq T_{outdoor\ tube}$, the frequency of compressor may decrease;

12.3 Overload protection under heating mode: If $T_{overload\ stop\ operation\ temp.\ in\ heating} \leq T_{indoor\ tube}$, the unit stops operation because of overload in heating; if $T_{indoor\ tube} < T_{overload\ limit\text{-}frequecny\ temp.\ in\ heating}$ and the compressor has stopped for 3min, the complete unit can resume operation.

12.4 Under heating mode, if $T_{overload\ limit\text{-}frequecny\ temp.\ in\ heating} \leq T_{indoor\ tube}$, operation frequency of compressor may decrease;

12.5 If the unit is stopped because of overload protection for 6 times successively, it can't resume operation automatically and the malfunction will be displayed continuously, which can only be resumed by pressing ON/OFF button. During operation, if operation time of compressor is over, the times of stop operation because of overload protection will be cleared. If turn off the unit, fan or switch to fan/ heating mode, malfunction and times of malfunction is eliminated immediately.

13. Discharge temperature protection of compressor

13.1 If $T_{stop\ operation\ temperature\ for\ discharge} \leq T_{discharge}$, the unit stops operation because of discharge protection; If $T_{discharge} < T_{normal\ speed\ decreasefrequency\ for\ discharge}$ and compressor has stopped for 3min, the complete unit can resume operation;

13.2 If $T_{normal\ speed\ decrease\text{-}frequency\ for\ discharge} \leq T_{discharge}$, operation frequency of compressor may decrease;

13.3 If the unit is stopped because of discharge protection of compressor for 6 times successively, it can't resume operation automatically,which can only be resumed by pressing ON/OFF button. During operation, if operation time of compressor is over, the times of stop operation because of discharge protection will be cleared. If turn off the unit, or switch to fan/heating mode, malfunction and times of malfunction is eliminated immediately.

14. Current protection function

14.1 If $I_{AC\ current} \geq I_{limit\ frequency\ current\ for\ current\ protection}$,operation frequency of compressor will stop rising;

If $I_{AC\ current} \geq I_{decrease\ frequency\ current\ for\ current\ protection}$,operation frequency of compressor may decrease;

If $I_{AC\ current} \geq I_{stop\ operation\ current\ for\ current\ protection}$,the unit will stop operation because of overcurrent protection.

14.2 If the unit is stopped because of overcurrent for 6 times successively, it can't resume operation automatically, which can only be resumed by pressing ON/OFF button. During operation, if operation time of compressor is over, the times of stop operation because of overcurrent protection will be cleared.

15. Voltage drop protection

During operation of compressor, if the voltage is decreasing quickly, the system may stop operation and voltage drop malfunction is caused. 3min later, the system will be restarted up automatically.

16. Communication malfunction

When it hasn't received the correct signal from indoor unit for 3min, the unit will stop operation because if communication malfunction; If communication malfunction is eliminated and compressor has stopped for 3min, the complete unit can resume operation.

17. IPM module protection

After compressor is turned on, if the overcurrent happens for IPM module, or control voltage is too low because of abnormal causes, IPM will detect module protection signal immediately. Once it detected the module protection signal, the unit will stop operation because of module protection. If module protection is resumed and compressor has stopped for 3min, the complete unit will resume operation.

If the unit is stopped because of module protection for 3 times successively, the unit can resume operation automatically unless press ON/OFF button. If the operation time for compressor is over, the times of stop operation because of module protection will be cleared.

18. Overheat protection of module

18.1 If $T_{normal\ speed\ frequency\text{-}decreasing\ temp.\ of\ module} \leq T_{module}$, the operation frequency of compressor may decrease;

18.2 If $T_{stop\ operation\ temperature\ of\ module} \leq T_{module}$, the syste will stop operation for protection. If $T_{module} < T_{frequency\text{-}limiting\ temperature\ of\ module}$ and compressor has stopped for 3min, the complete unit will resume operation;

18.3 If the unit is stopped because of overheating of compressor module for 6 times successively, it can't resume operation automatically,which can only be resumed by pressing ON/OFF button. During operation, if operation time of compressor is over, the times of stop operation because of compressor overheating protection will be cleared. If turn off the unit, or switch to fan mode, times of malfunction is eliminated immediately.

19. Overload protection of compressor

19.1 If it detected that the overload switch for compressor is open for 3min successively, the complete unit will stop operation for protection;

19.2 If overload protection is resumed and compressor has stopped for 3min, the complete unit can resume operation;

19.3 If the unit stops operation because of overload protection for compressor for 3times successively, it can't resume operation automatically, which can only be resumed by pressing ON/OFF button. After compressor has operated for 30min, overload protection times for compressor will be eliminated.