

Airwell

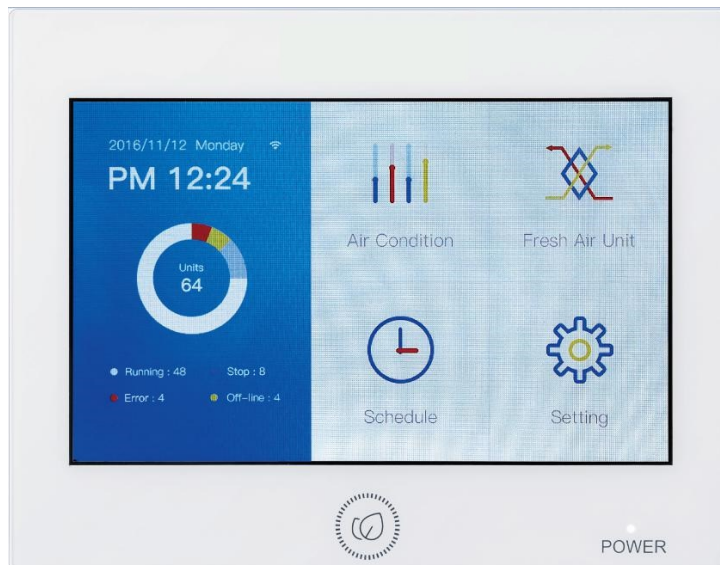
Just feel well



Central controller

RWV09

English Manual



IMPORTANT NOTE:

Read this manual carefully before installing or operating your new air conditioning unit. Make sure to save this manual for future reference.

5-inch Central Controller Operation & Installation Manual

RWV09

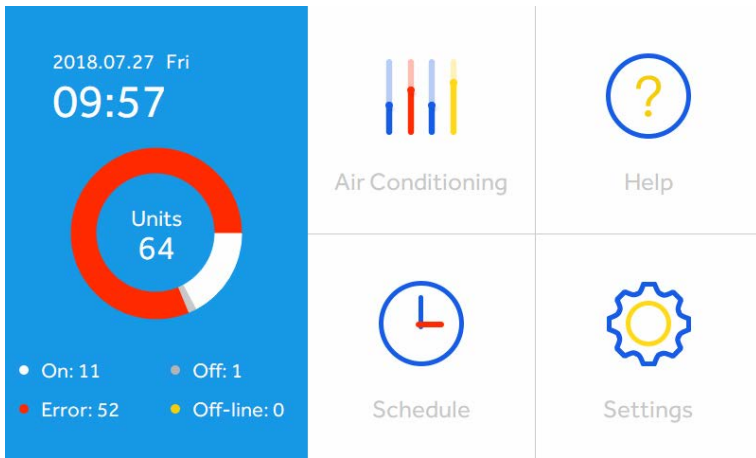
CONTENT

Function introduction of central controller.....	1
Part info for central controller	3
Function operation.....	8
Wiring diagram and Installation.....	50

- Please read this operation manual before using the central controller.
- Please keep this manual carefully and safely.
- The illustration is for reference only, and the word description shall prevail.

Function introduction of central controller

Main interface display



Function overview

Picture 1

This central controller can control VR and Heat Recovery Vent (HRV). A maximum of 64 indoor units of any combination can be controlled to a single central controller. The RWV09 can automatically recognize the model as a VRF or single split/multi split, no need to manually set up.

① When connected to a VRF system, each outdoor requires a ADV05 gateway (VRF 5 outdoor unit can directly connect with this central controller).

Function introduction of central controller

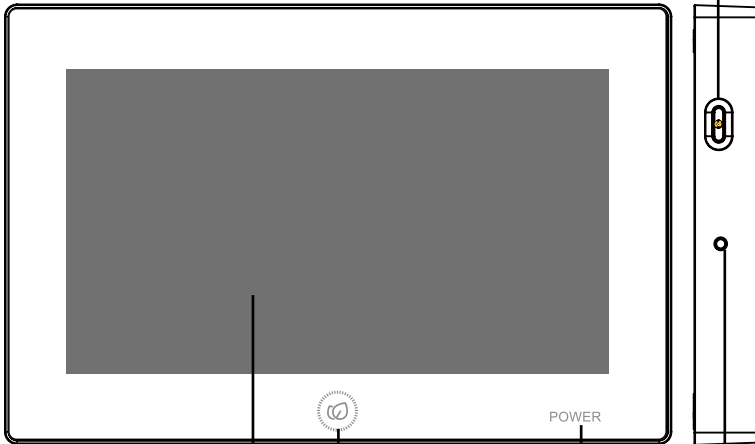
- ③ For VRF, three kinds of controlling mode: Last in first out, Central & Lock can be selected for indoor units.
Last in first out: the indoor unit will execute the last order send by central controller, wired controller or remote controller. For example, if firstly sending low fan speed order by central controller and then sending high speed fan order by wired controller, the indoor unit will execute high fan speed.
Central: central controller enjoys all functions while wired & remote controller can only control ON/OFF of indoor units.
Lock: central controller enjoys all functions while wired & remote controller cannot control indoor units.
- ④ Receiving outer signal input: when receiving outer fire alarm signal, central controller will turn all indoor units off. Note: if no outer signal input, should short circuit the ALARM1 and ALARM2.
- ⑤ Weekly timer setting. Weekly timer for one or some or all units can be set and can run in cycle, or set Except Date and ONCE. the “except date” can be set under “WEEK” of the schedule , and the “once date” can be set at the “ONCE” of the schedule.
- ⑥ ECO (sets maximum and minimum allowable temperature set points) Cool Only/ Heat Only and DST can be set based on actual requirement.

Part info for central controller

Restart button:

Hold Restart button for 10s to restart central controller

Note: If the controller can not turn on automatically after powering on, which indicates the controller is the old version. Hold the restart button for 3s to turn on.



Display/Touch area:

Screensaver key:

Press to turn off screen light and press again to turn on.

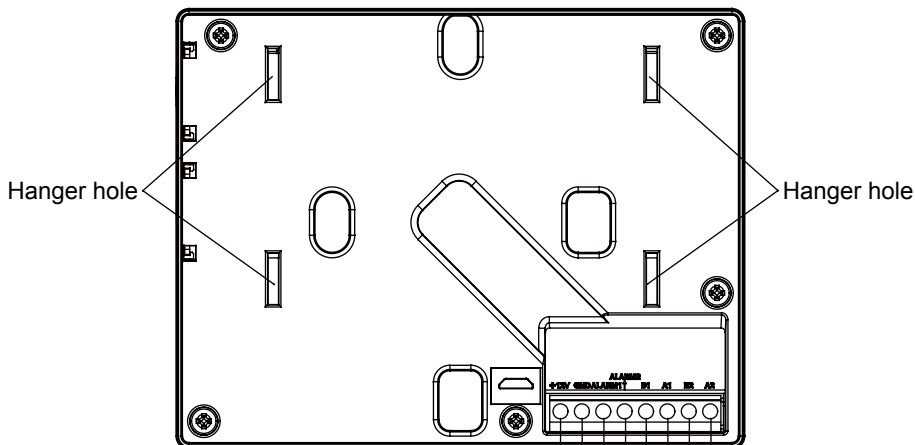
Power light:

Power light will be on after the central controller on.

Reset key:

Press to reboot the central controller.

Part info for central controller

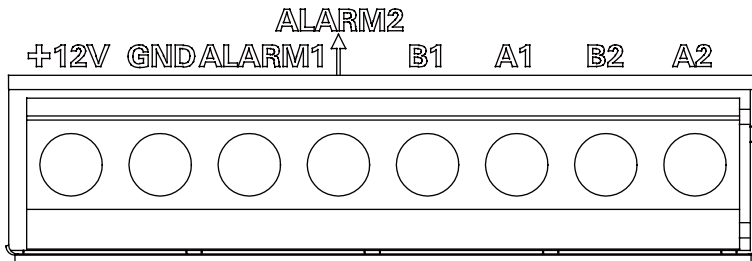


Power: 12V DC, there is +/- for power _____

AC works normally when closed and
all AC turned off when open circuit. _____

Third party interface _____

Communication port for connecting converter. _____



Power (12V, GND): 12V DC, please pay attention to +/- of power.

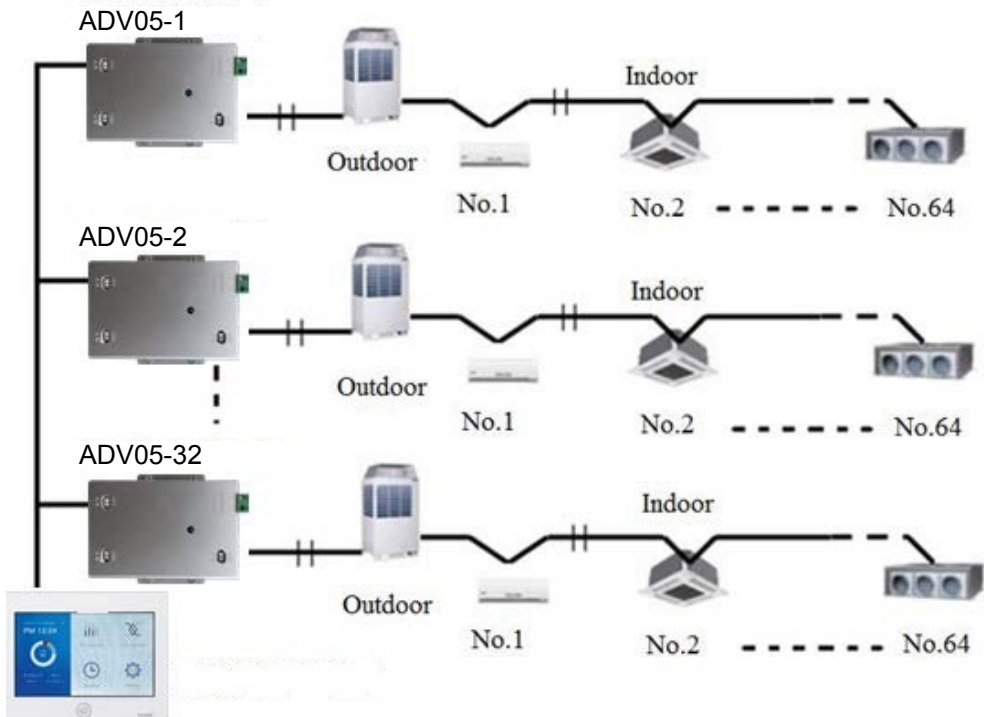
Fire alarm linkage contact (ALARM1, ALARM2): AC works normally when closed and all AC turned off when open circuit. If no fire alarm linkage needed, should short circuit the ALARM1 and ALARM2.

Third party interface (B1, A1): A1 should be connected to 485+ while B1 485-.

Communication port (B2, A2): It is used for connecting converter, please pay attention to +/-.
A2 should be connected to 485+ while B2 485-.

Part info for central controller

System structure chart when controlling VRF:



When applying central controller, it is required to set address by dip switch for easy checking and maintenance

For every system of AC, address starts from No. 1 to last indoor unit of the system. If totally 20 indoor units are connected in one system, address should be 1-20, if 50 in one system, address should be 1-50, the biggest address is 64.

Note: every indoor address starts from 1.

If one indoor unit is connected to converter (ADV05) addressed as No. 1, and its central address is No. 6, the indoor code displayed on central controller is AIRCON-1_6, if one indoor unit is connected to converter (ADV05) addressed as No. 5, and its central address is No. 20, the indoor code displayed on central controller is AIRCON-5_20.

Part info for central controller

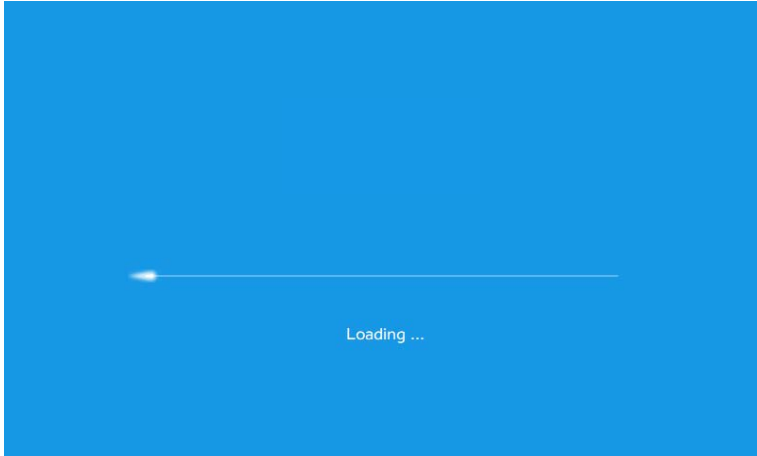
Note: when controlling VRF, the RWV09 can control maximum 32 ADV05 and maximum 64 indoor units.

Part info for central controller

Function operation

Initialization

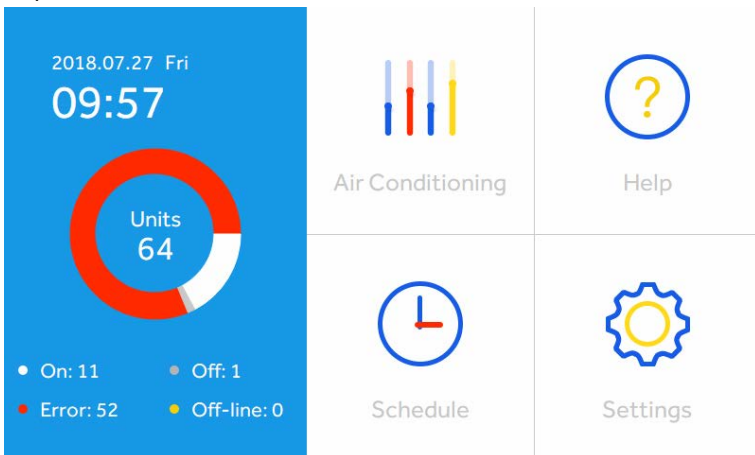
After powering on, controller starts to search for indoor units shown as picture 2 below:



Picture 2

Home Page

When search is completed, the home page will show as below, the left side shows the Qty. of indoor units connected and the Qty. of units in condition as On/Off/Error/Offline. PS: Picture 3 is the example.



Picture 3

Function operation

Indoor units parameter and control

To see the setting for each indoor unit, tap on Air Conditioning. Shown (Picture 4) are the icons indicate the On/Off, Mode, Set Temp, Ambient Temp, Fan Speed and Control Mode of the connected indoor units.

Deep Blue is Auto Mode

Orange is Heating Mode

Green is Fan Mode


Light Blue is Cooling Mode

Purple is Dehumidify Mode

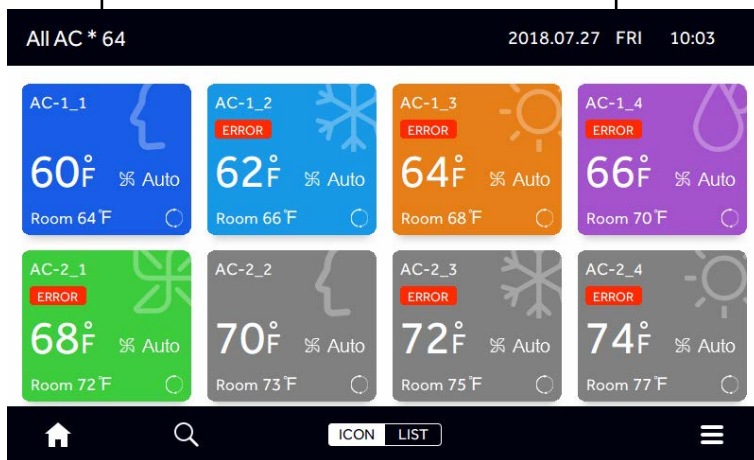
Gray is Indoor unit off

If there's any indoor fault, ERROR icon will show on the controller.

Enter the following interface, the icon type shows ON/OFF, mode, setting temperature, ambient temperature, wind speed and control mode. The AUTO mode is deep blue, light blue is cooling, heating is orange, dehumidification is purple, the air supply is green, and the gray is shutdown. If there is a failure, the fault icon is displayed.

Current indoor unit quantity. Default is all the existing indoor units, you can slide up and down to view. You can click on the second icon  below to select the indoor units you want to view.

Time, you can adjust the time through "Home-Setting-Time"



Click to return to home

Click to select the indoor units you want to view

Click to show the control list.

List display interface

Icon display interface

Function operation

Air condition name, AC-1_2 represents the gateway (ADV05) addressed as NO.1, and its central address is NO.2



Picture 5

If the indoor unit is VRF, the machine number is AIRCON-1_2, which stands for converter board address is 1, and the centralized address is 2.

If the indoor unit is HRV, HRV1-29_1, representing HRV1, the interface board address is 29 and the centralized address is 1.

Tap on the LIST icon, in the middle of the bottom, to display indoor unit state of the system in list form.

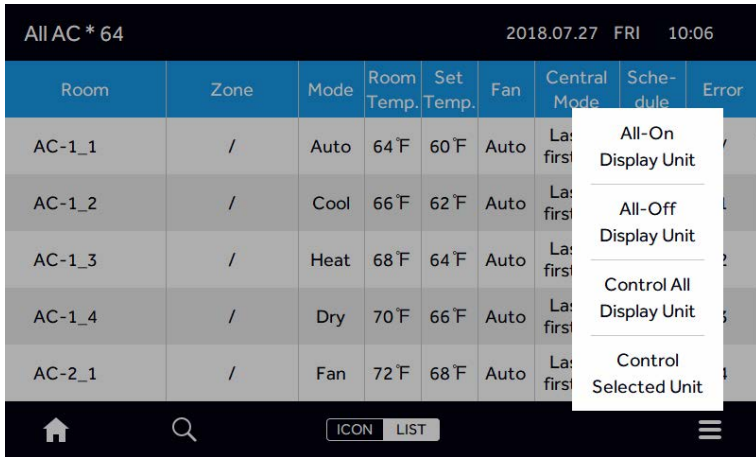
All AC * 64									2018.07.27 FRI 10:05		
Room	Zone	Mode	Room Temp.	Set Temp.	Fan	Central Mode	Schedule	Error			
AC-1_1	/	Auto	64°F	60°F	Auto	Last in first out	No	/			
AC-1_2	/	Cool	66°F	62°F	Auto	Last in first out	No	1			
AC-1_3	/	Heat	68°F	64°F	Auto	Last in first out	No	2			
AC-1_4	/	Dry	70°F	66°F	Auto	Last in first out	No	3			
AC-2_1	/	Fan	72°F	68°F	Auto	Last in first out	No	4			

Home Search ICON LIST Menu

Picture 6

Function operation

Tap the top right bottom pull list , It shows the following interface:

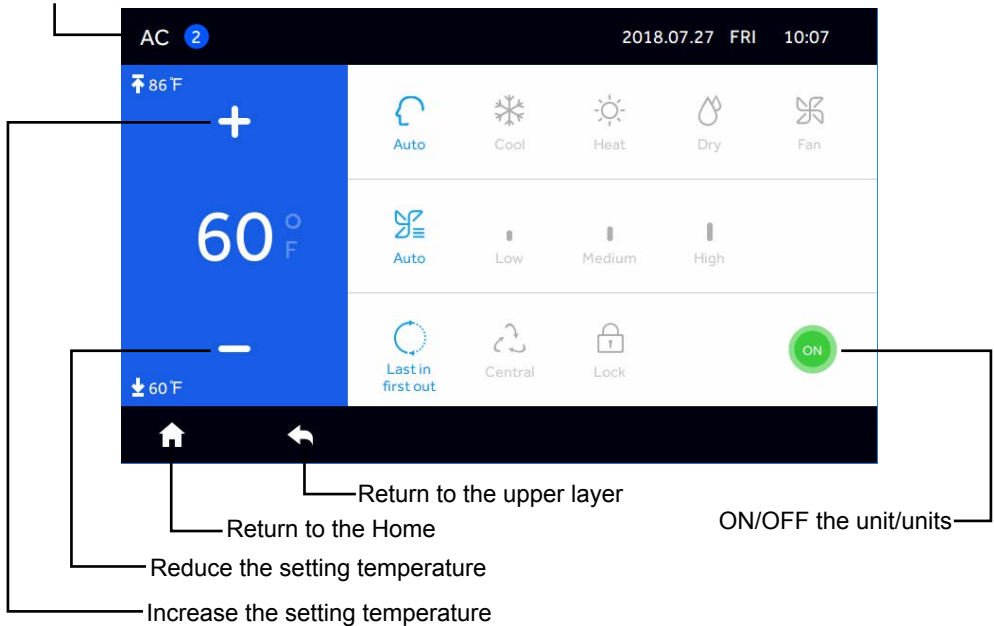


Picture 7

If tap “All-On Display Unit”, all the indoor units that are currently screened are fully opened, if tap “All-Off Display Unit”, all the currently screened indoor units close, if tap “Control All Display Unit”, the following interface is displayed:

Function operation

The quantity of indoor units controlled at present, by clicking the blue number can be used to select indoor units that need to be controlled.



Picture 8

In the upper interface, you can control On/Off, mode, setting temperature, wind speed, control mode, control interface are as above.

Note: mode, wind speed, setting temperature and control mode are not allowed to change under shutdown mode.

In the pull-up list, if you choose to select "Control Selected Unit", the display interface is as follows.

Function operation

All AC * 64		2018.07.27 FRI 10:09						
Room	Zone	Mode	Room Temp.	Set Temp.	Fan	Central Mode	Schedule	Error
<input type="radio"/> AC-1_1	/	Auto	64°F	60°F	Auto	Last in first out	No	/
<input type="radio"/> AC-1_2	/	Auto	66°F	60°F	Auto	Last in first out	No	1
<input type="radio"/> AC-1_3	/	Heat	68°F	64°F	Auto	Last in first out	No	2
<input type="radio"/> AC-1_4	/	Dry	70°F	66°F	Auto	Last in first out	No	3
<input type="radio"/> AC-2_1	/	Fan	72°F	68°F	Auto	Last in first out	No	4
Cancel							Confirm	

Picture 9

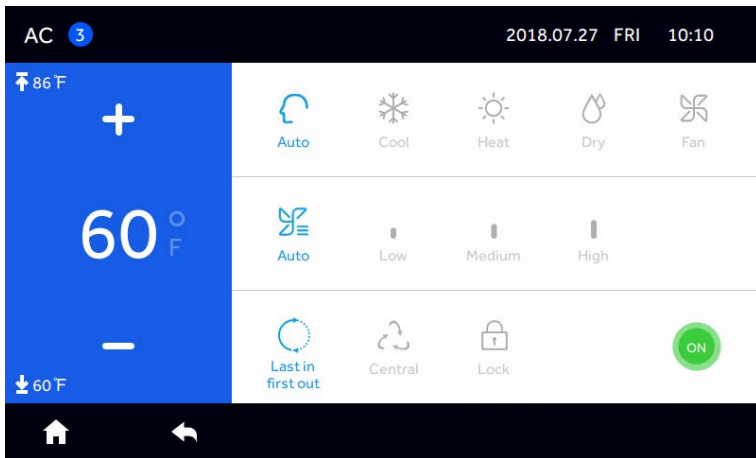
You can check the indoor unit you need to select. The interface is as follows.

All AC * 64		2018.07.27 FRI 10:09						
Room	Zone	Mode	Room Temp.	Set Temp.	Fan	Central Mode	Schedule	Error
<input checked="" type="radio"/> AC-1_1	/	Auto	64°F	60°F	Auto	Last in first out	No	/
<input checked="" type="radio"/> AC-1_2	/	Auto	66°F	60°F	Auto	Last in first out	No	1
<input type="radio"/> AC-1_3	/	Heat	68°F	64°F	Auto	Last in first out	No	2
<input checked="" type="radio"/> AC-1_4	/	Dry	70°F	66°F	Auto	Last in first out	No	3
<input type="radio"/> AC-2_1	/	Fan	72°F	68°F	Auto	Last in first out	No	4
Cancel							Confirm	

Picture 10

After click “Confirm”, the following control interface is entered :

Function operation



Picture 11

Last in first out:

the indoor unit will execute the last order send by central controller,wired controller or remote controller. For example, if firstly sending low fan speed order by central controller and then sending high fan speed orderby wired controller, the indoor unit will execute high fan speed.


Central:

central controller enjoys all functions while wired &remote controller can only control ON/ OFF of indoor units.

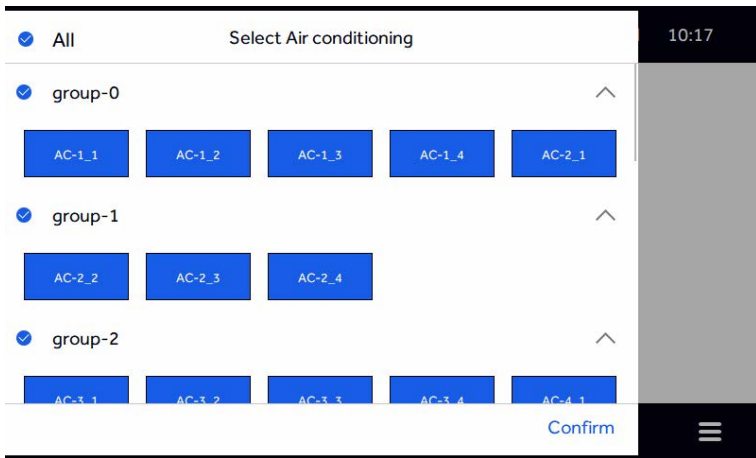
Lock:

central controller enjoys all functions while wired & remote controller cannot control indoor units.

The parameters can be adjusted according to the needs.

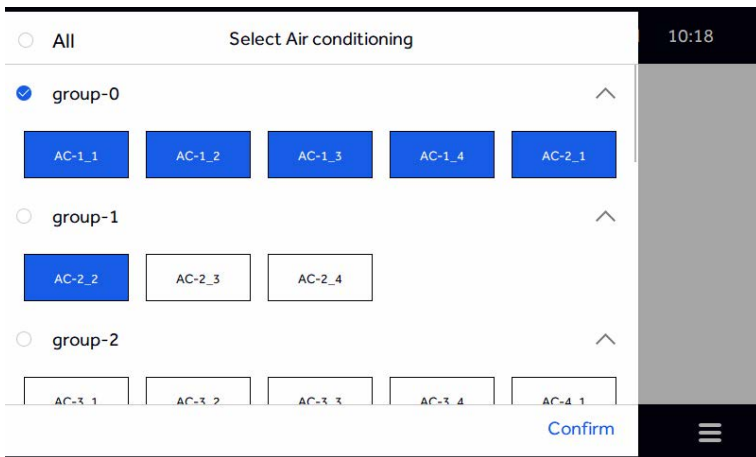
Click on the second icon  in the bottom row, and you can select the indoor units that need to be screened, as shown below.

Function operation



Picture 12

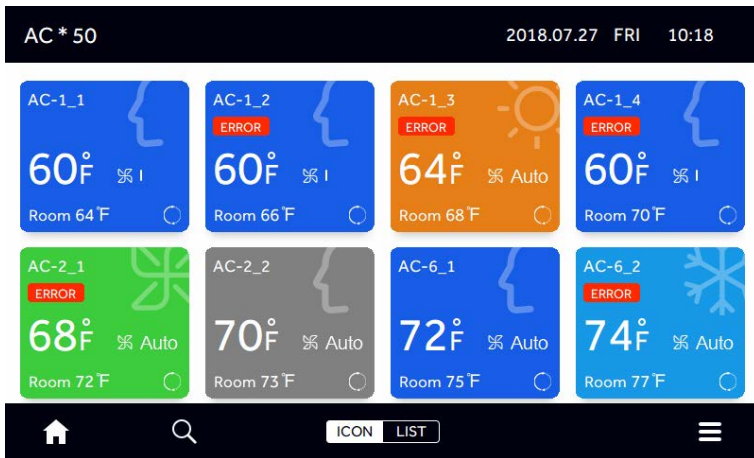
You can tap to select or cancel the indoor units that need to be displayed, in which blue is selected and white is not selected.



Picture 13

After selecting, click "Confirm", and as in Picture 13, the top left corner shows the number of indoor units displayed by the selected so that the user can choose the indoor unit state that needs to be displayed according to the needs.

Function operation



Picture 14

Help

Tap "Help" to enter the "help" interface, slide left and right, or and tap the blue icon to show the basic functionality of the product, the lower right corner shows the product model and the program version number.

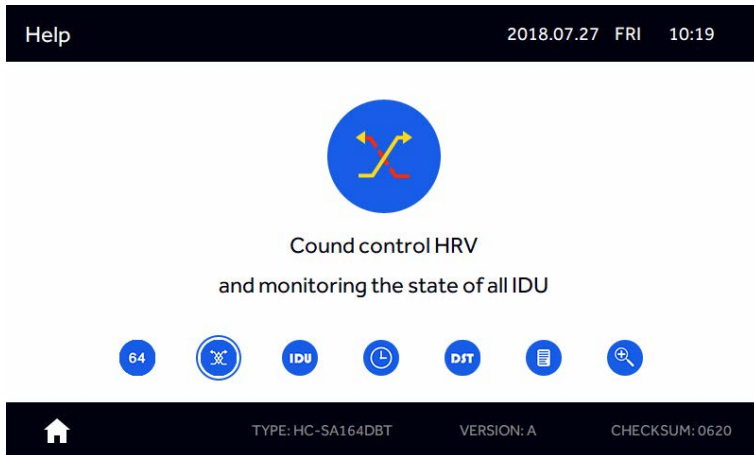


Controller model _____
The software version of a controller _____

Picture 15

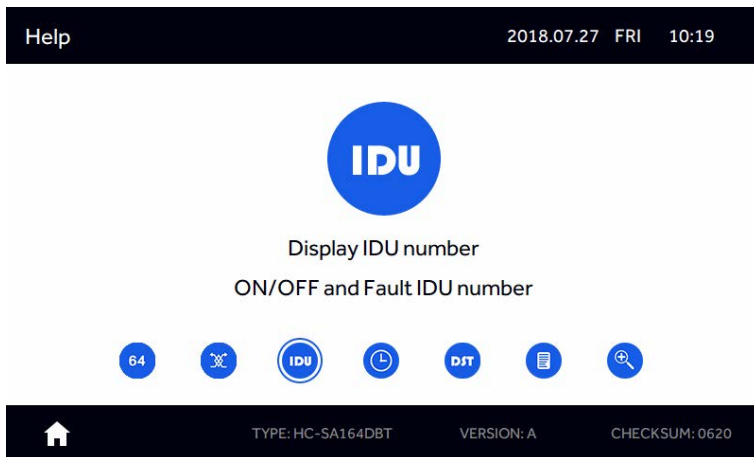
Function operation

The controller can control up to 64 units.



Picture 16

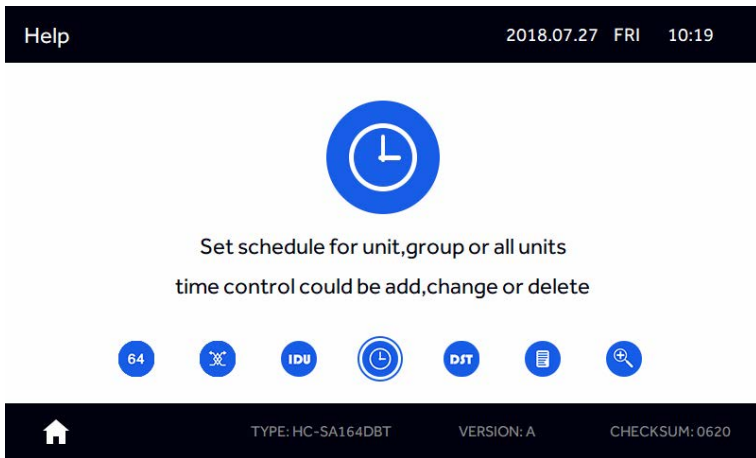
The central controller can monitor and control HRV, up to 4 units.



Picture 17

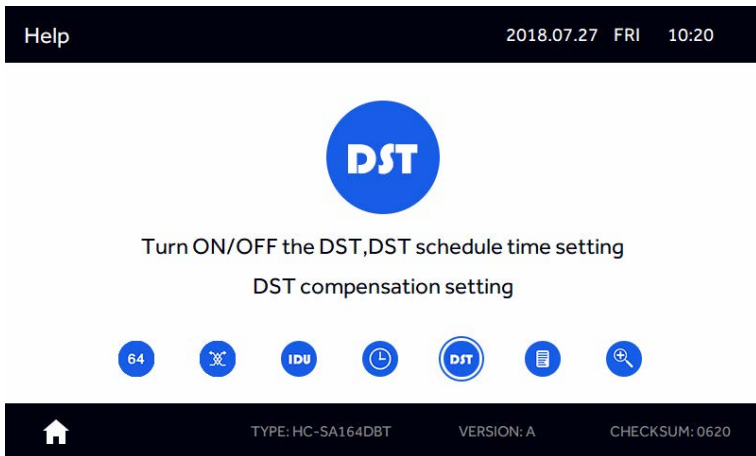
The controller can On/Off the indoor units and check the fault code of the indoor units.

Function operation



Picture 18

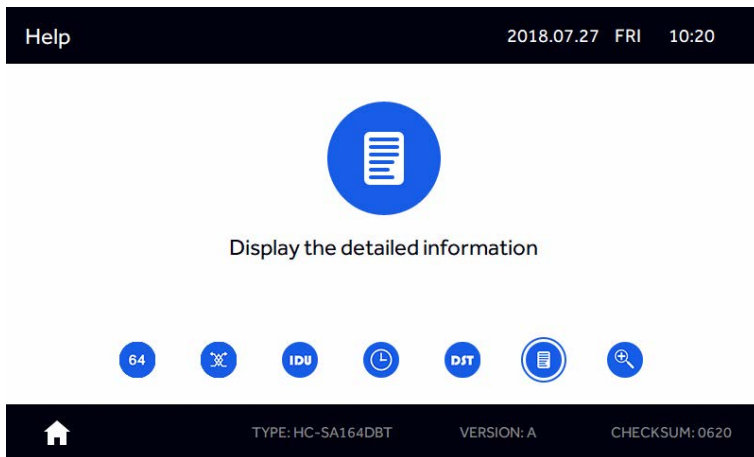
The central controller can add, delete and change the weekly timing control for individual units, groups of units and all units. At most 64 pieces schedules can be set.



Picture 19

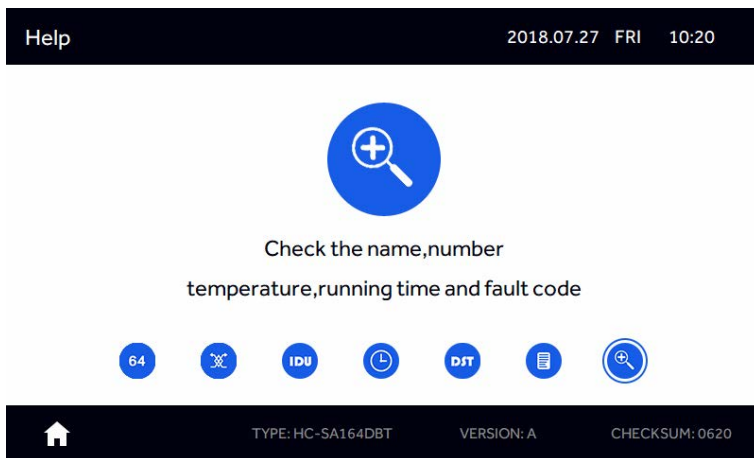
The user can set up and close the daylight saving time according to the needs. After the daylight saving time is opened, dates for start and end of DST can be set.

Function operation



Picture 20

The controller can display the detailed information parameters of the indoor units.



Picture 21

You can set the name of the indoor unit, you can view the fault code.

Function operation

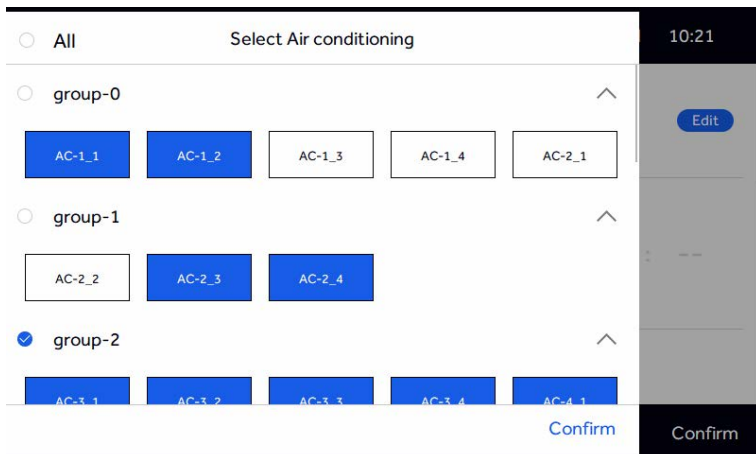
Schedule

At most 64 schedules can be set. Tap on “Schedule” in the home interface. If schedule has been set, the set of schedule information is displayed. If you enter schedule for the first time, it will be blank like below.



Picture 22

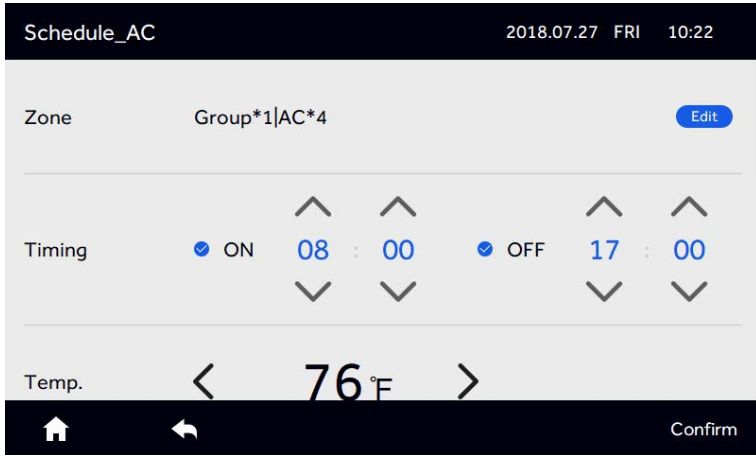
Tap the “+” at the lower right corner to add a new schedule. Next, select the indoor units. Blue represents the indoor units are selected. Tap “All” for the whole system or select the group.



Picture 23

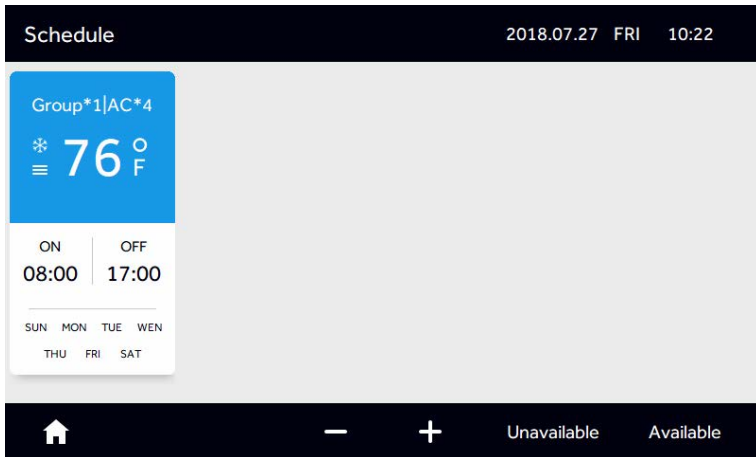
Function operation

After desired units or groups are selected, tap “Confirm” and enter interface as follows. You can set schedule on (start) and off (end) times, mode, temperature, control mode, Once, Cycle and Except. Tap “Edit”, to return to the indoor units selection interface.



Picture 24

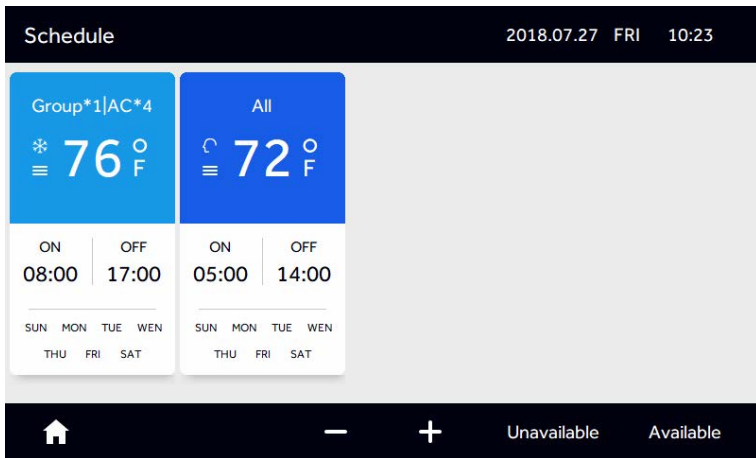
Tap “Confirm”, the display interface is as follows .



Picture 25

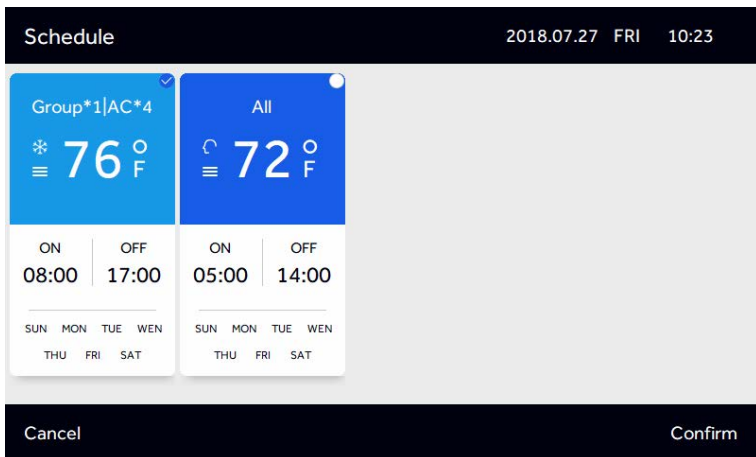
Repeat steps to add another schedule.

Function operation



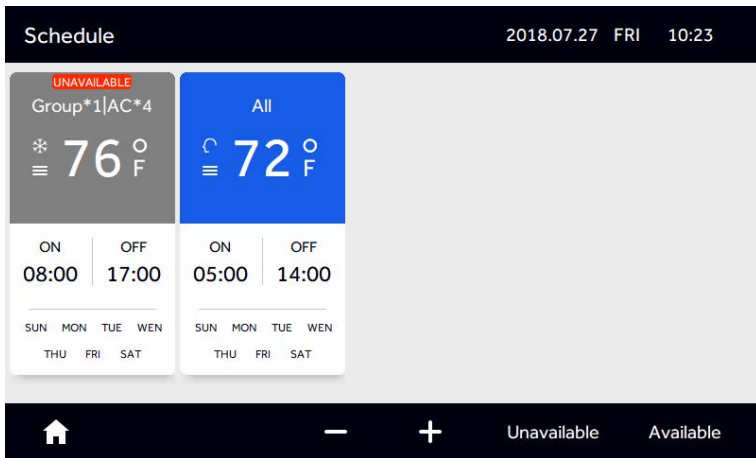
Picture 26

To delete a schedule, firstly, tap the icon '-' in the Picture 26, then small circle will appear like Picture 27, secondly, select the schedules to be deleted. Finally, press the icon 'delete' in the lower right corner



Picture 27

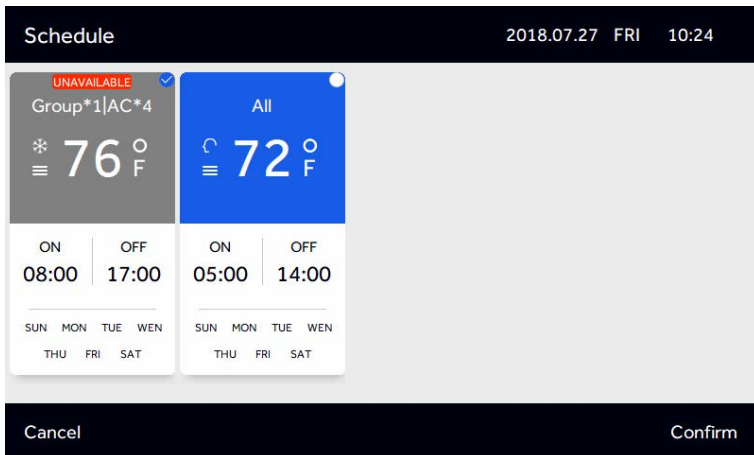
Function operation



Picture 28

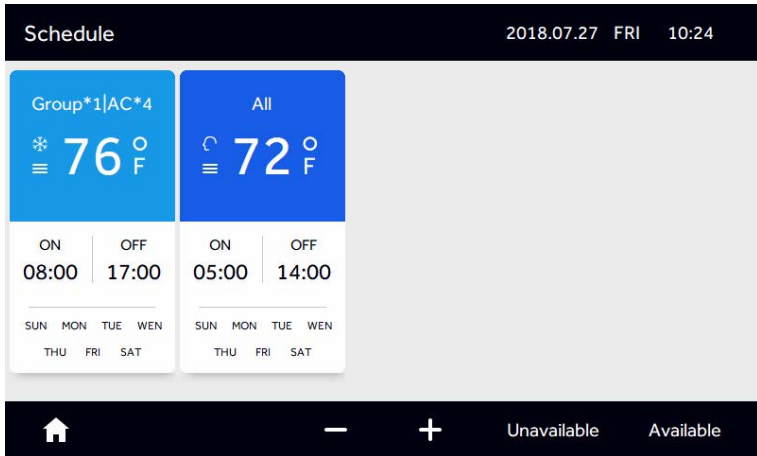
To make a schedule idle, tap on the “Unavailable” icon, see Picture 26. Tap the icon of the desired schedule(s) to idle. After tapping “Confirm”, it shows the schedule as “UNAVAILABLE” as seen in Picture 28.

To reactivate a schedule that is idle then tap “Available” as seen at the bottom right of Picture 28. Tap the icon of the desired schedule(s) to reactivate. Then tap “Confirm” as seen at the bottom right of Picture 29.



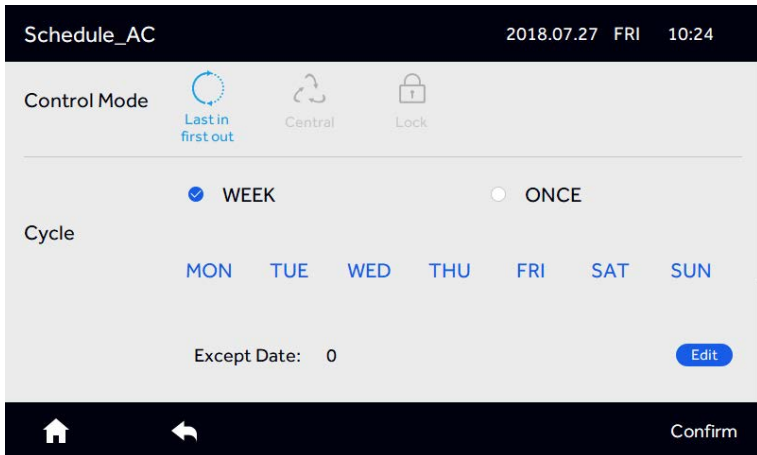
Picture 29

Function operation



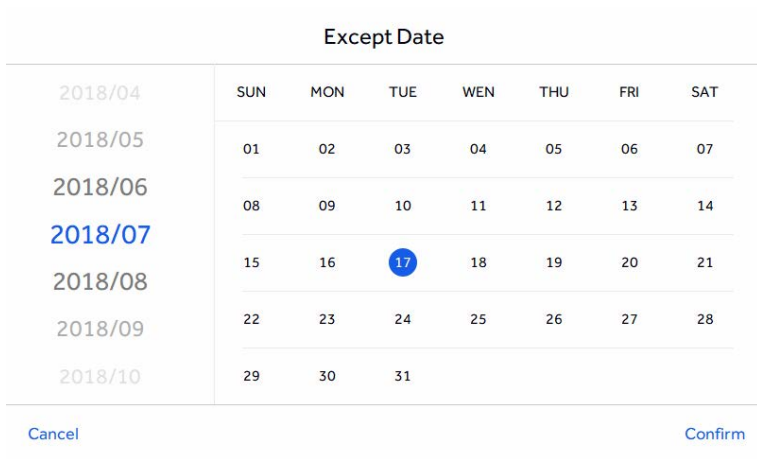
Picture 30

You can set the exception time for the schedule, click “Edit” on the bottom of the week to add and modify the “Except Date”.



Picture 31

Function operation

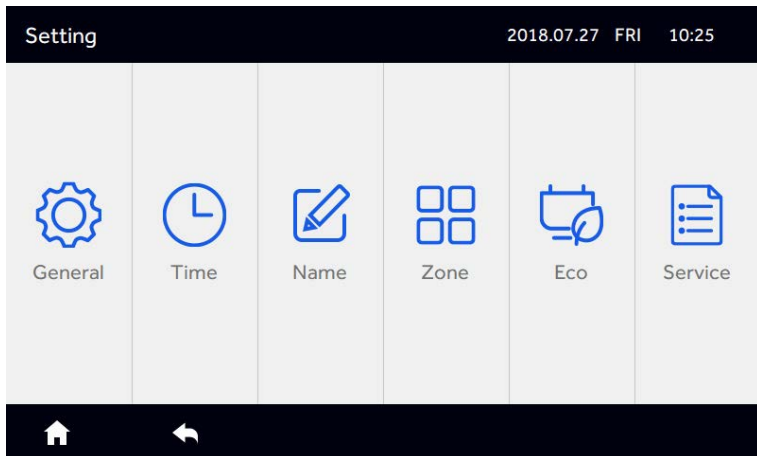


Picture 32

You can choose the date to add the “Except Date”. The “Except Date” represents the date when the corresponding schedule do not execute. The “Except Date” is set in the 6 months prior to the current date and within the time range of the current 2 years.

Setting

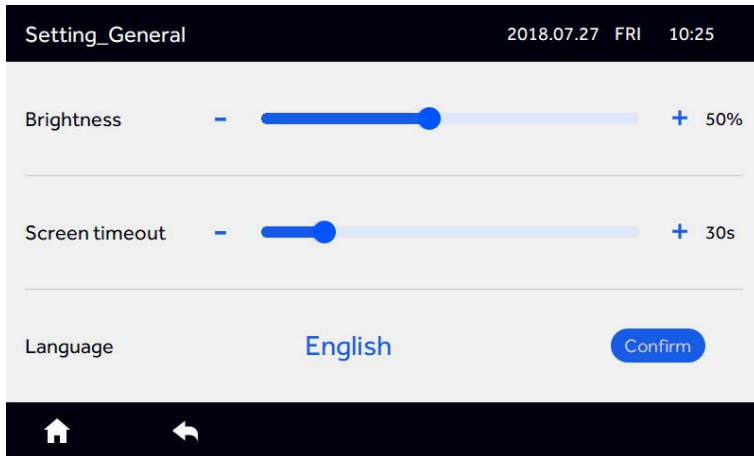
Tap “Setting” on the interface of Picture 3 to enter the setting interface, shown in Picture 33.



Picture 33

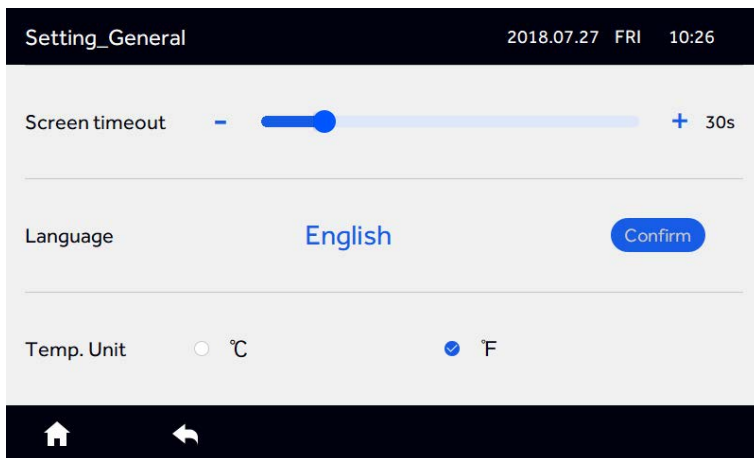
Function operation

1. General



Picture 34

Slide up and down to the view all control settings.

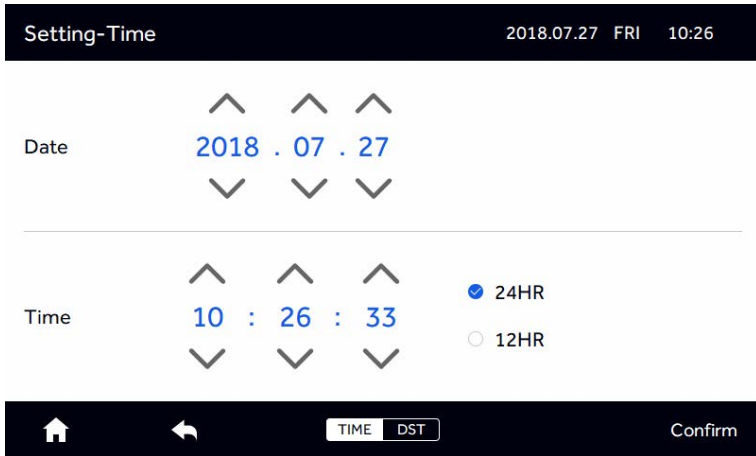


Picture 35

You can change the Backlight brightness, Screensaver time and Fahrenheit switch by tapping and dragging the slider, and currently only support English.

Function operation

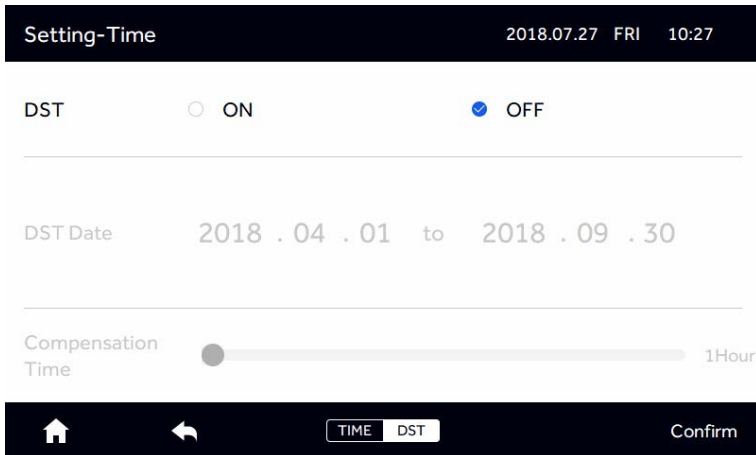
2. Time



Picture 36

You can adjust the time by clicking the up and down arrow, you can taping 24HR and 12HR to switch 24 hours or 12 hours.

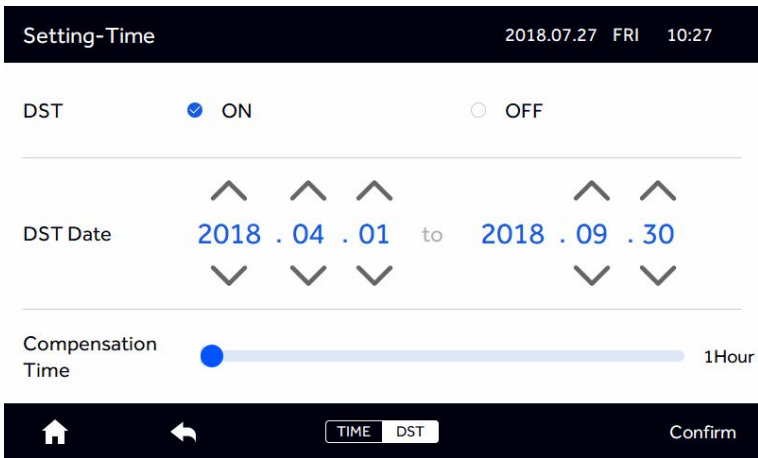
Tap DST



Picture 37

After taping ON, the interface is as follows. You can tap the button to adjust the start and of the daylight saving time, and the time of the daylight saving time. The daylight time compensation can be 1-3 hours. The change needs to be confirmed by "Confirm".

Function operation



Picture 38

3. Name

Tap "Name" to enter the following interface.



Picture 39

Tap the indoor unit to rename.

Function operation



Picture 40

The upper left corner shows physical address: the "Physical address" of the machine, such as AC-5_4, represents the adapter address is 5, and the indoor centralized address is 4. It is convenient for the name and physical address to be checked. It needs to be confirmed by "Done".

4. Zone

Tap "Zone", as shown in Picture 41, Up to 32 group zones can be created.



Picture 41

Function operation

Tap “+”



Picture 42

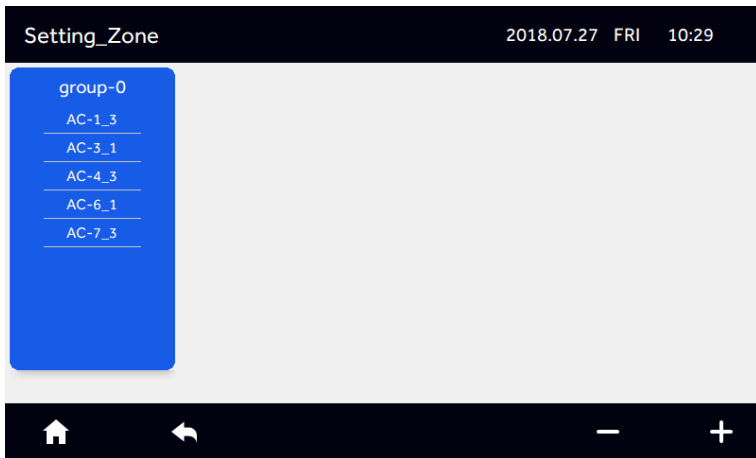
Select indoor units to be added to a zone.



Picture 43

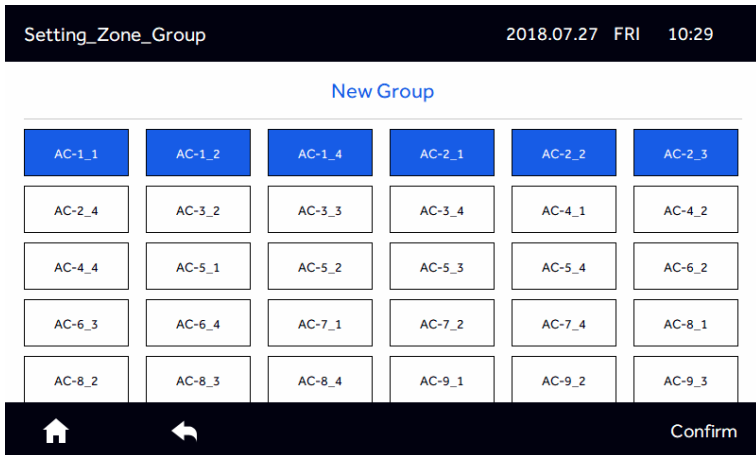
Press “Confirm” to enter the following interface

Function operation



Picture 44

If you want to create a new group, press "+" button on lower right shown as picture 44 and select the indoor units to be added as picture 45



Picture 45

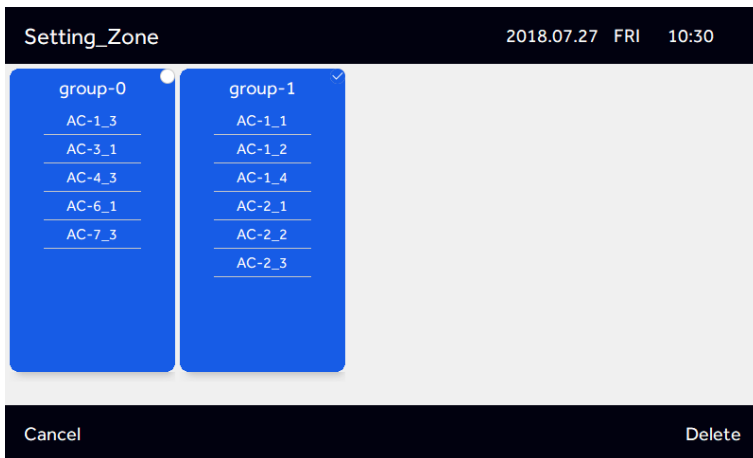
After press "Confirm", add a new "Group", as shown in Picture 46.

Function operation



Picture 46

Tap "-" at the lower right ,then select the zone you want to delete,then tap "delete"to confirm.



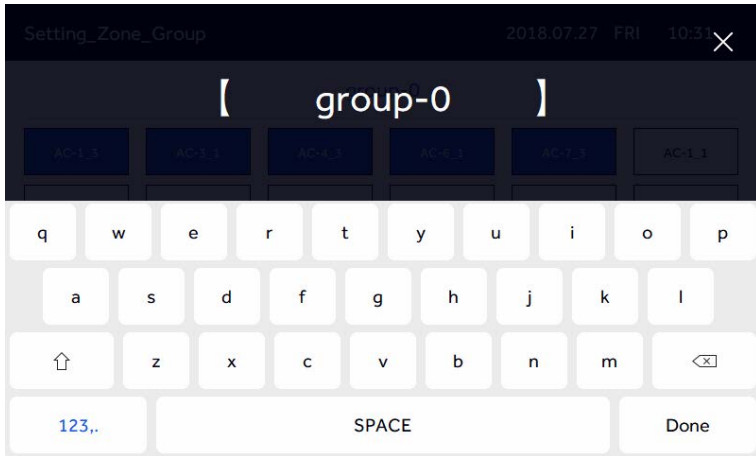
Picture 47

Function operation



Picture 48

Select a group then tap on current name to rename.



Picture 49

Press "Done" to save.

Function operation

ECO

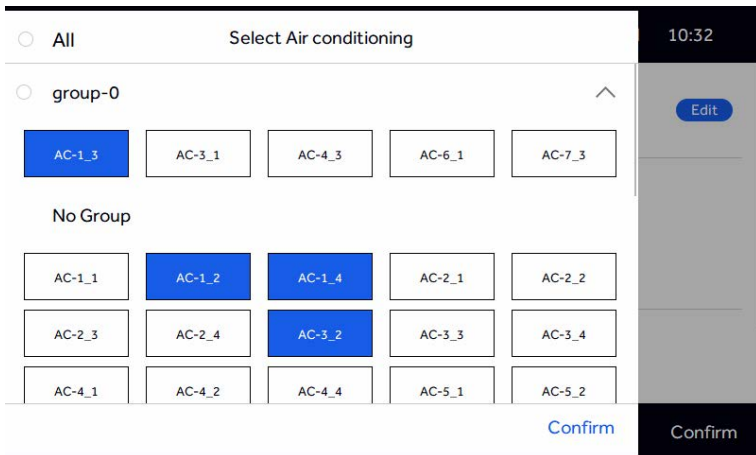
Up to 16 energy saving parameters can be set.

In Picture 33, tap “Eco”,



Picture 50

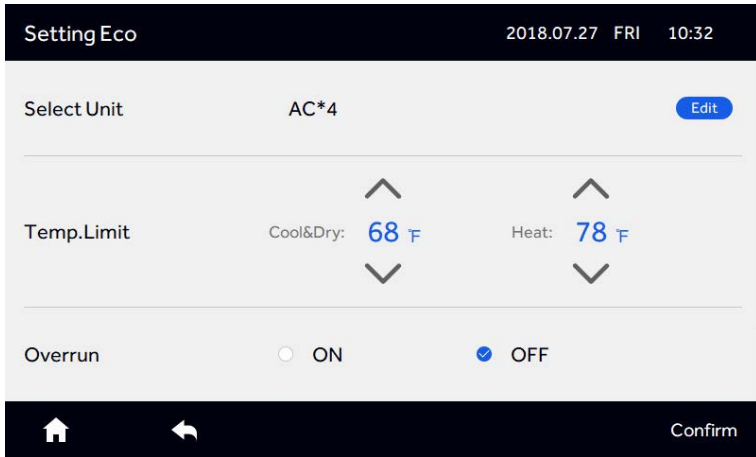
Click “+” to add the indoor units that need to set energy saving.



Picture 51

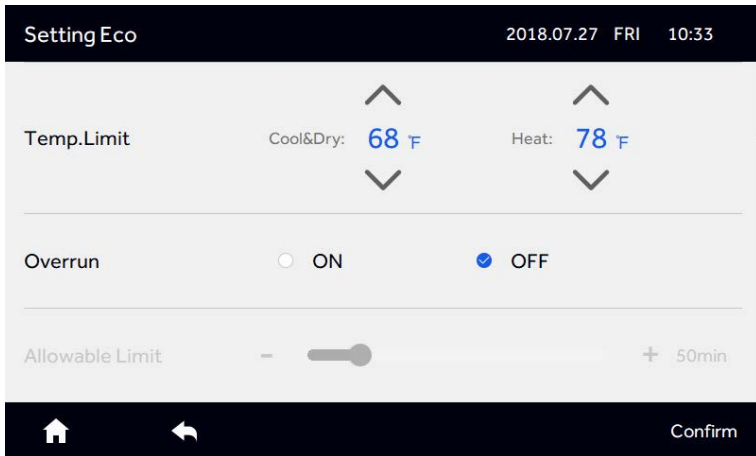
Function operation

After tap “Confirm”, enter the parameter settings of Eco, as shown in Picture 52.



Picture 52

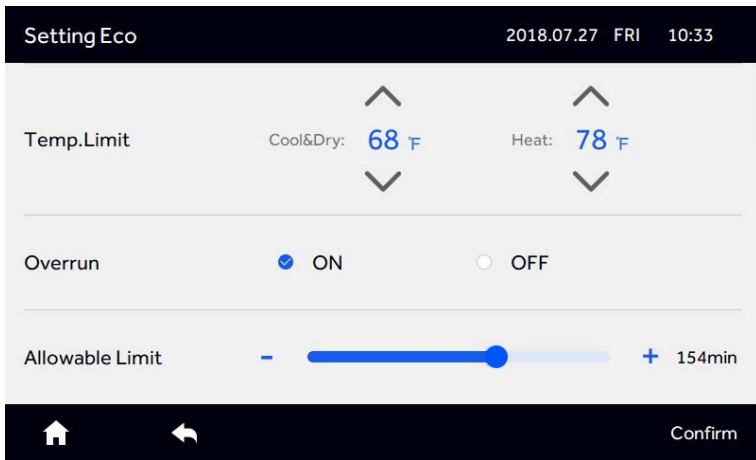
Slide up and down



Picture 53

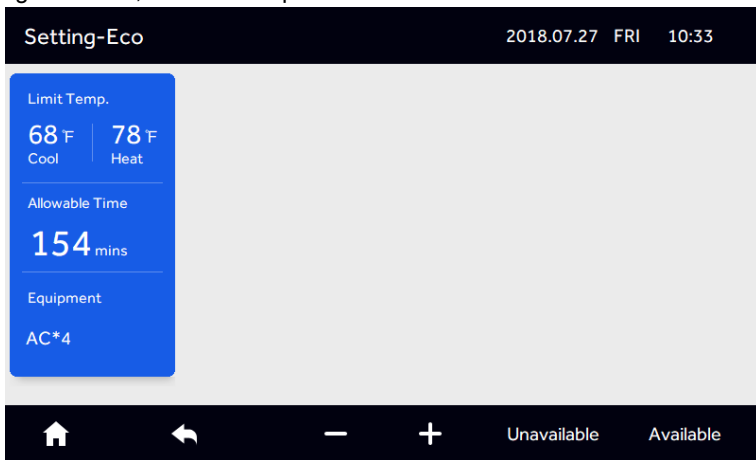
If you tap “Overrun” to ON, you can select Overrun’s time, and it can be adjusted from 10-240 minutes. Overrun mean the amount of time the temperatures can be set beyond the parameter by the user before the control returns it to within the limits set.

Function operation



Picture 54

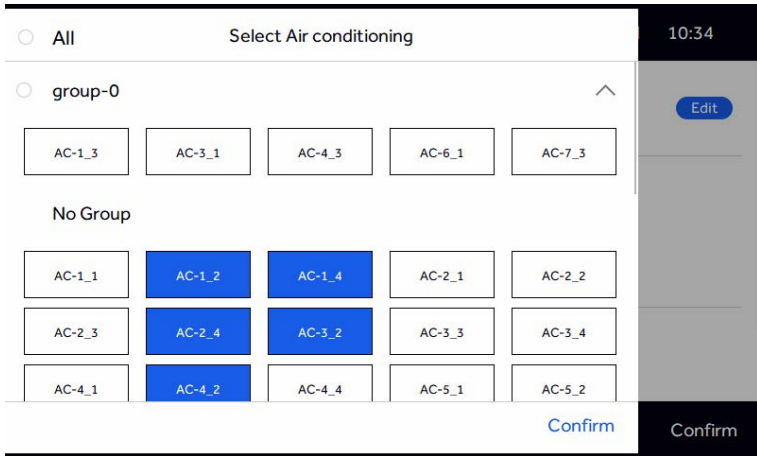
After tapping “Confirm”, the Eco setup information will show as seen in Picture 55.



Picture 55

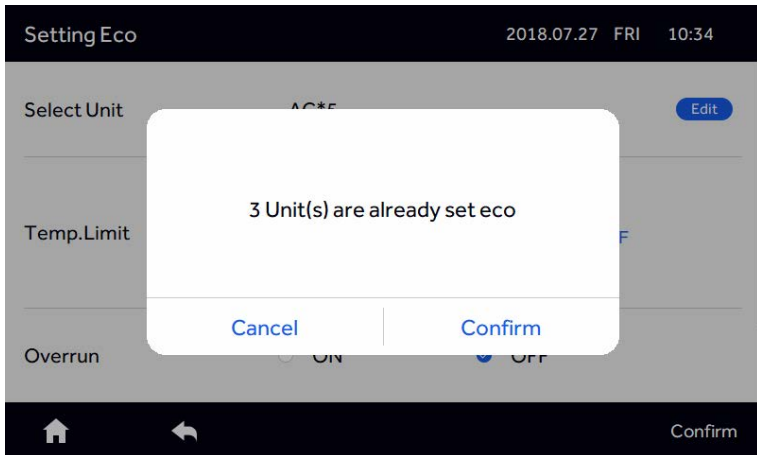
Tap “+” and repeat above steps to add another set of ECO parameters.

Function operation



Picture 56

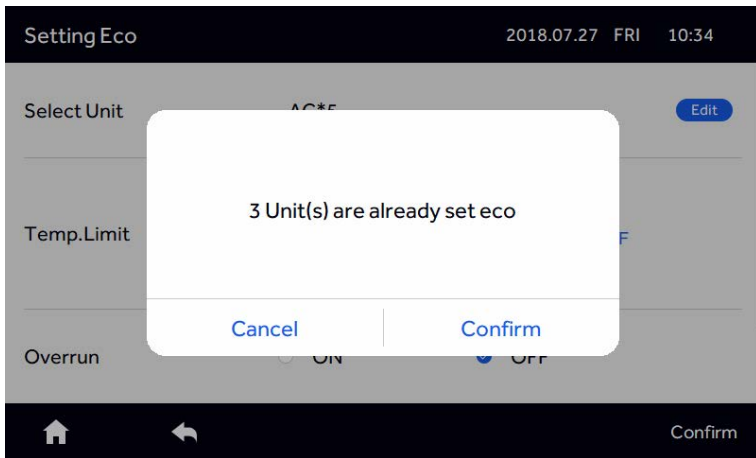
If an indoor unit is already included in a another ECO parameters, a warning prompt will appear.



Picture 57

Tap "Confirm"

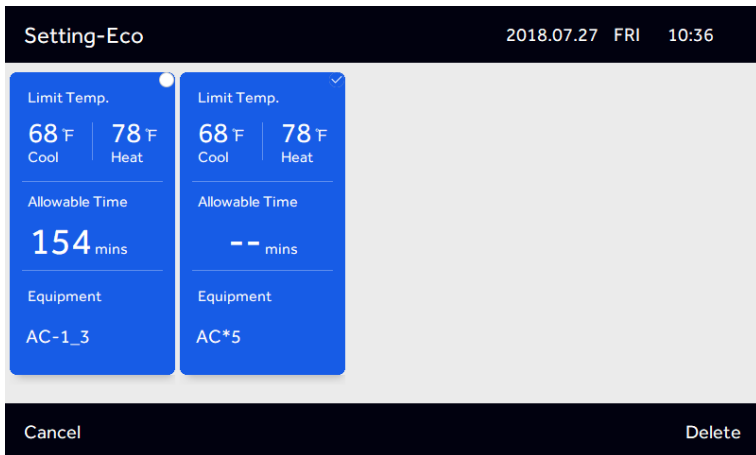
Function operation



Picture 58

If you press “Confirm”, it is set successfully, the conflict indoor unit is cancelled from the previous setting, and the final ECO confirmation is confirmed. If you press “Cancel”, it returns to the previous setting interface.

After tap “-”, select the indoor unit that needs to be deleted, tap “Delete”.

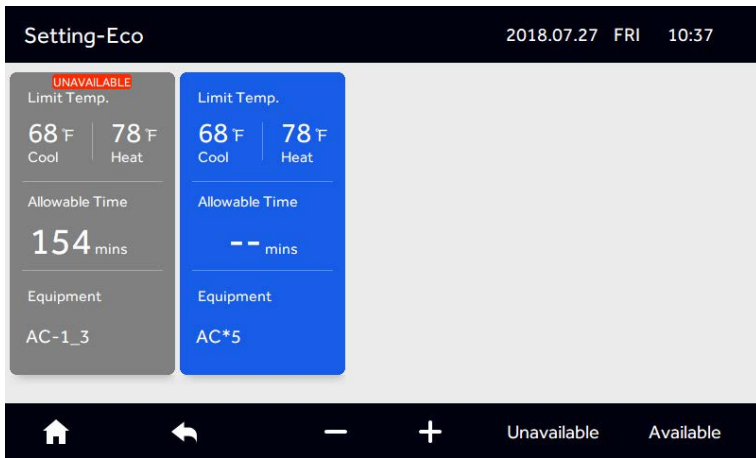


Picture 59

If you tap “Cancel”, returns to the upper layer.

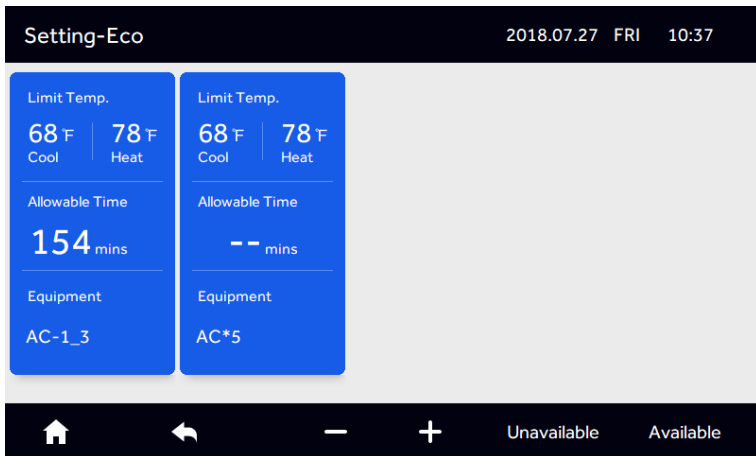
Tap “Unavailable” to idle parameter settings. Press “Confirm” to save.

Function operation



Picture 60

To restore idled parameters, tap “Available” then select the set that needs to be restored. Tap “Confirm” to save.

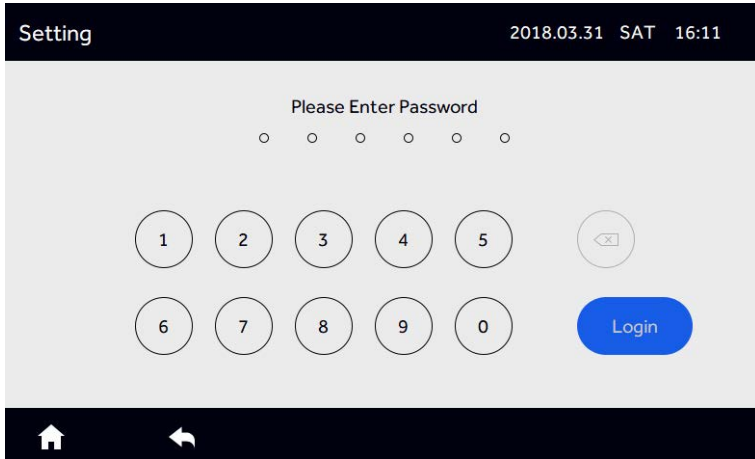


Picture 61

Function operation

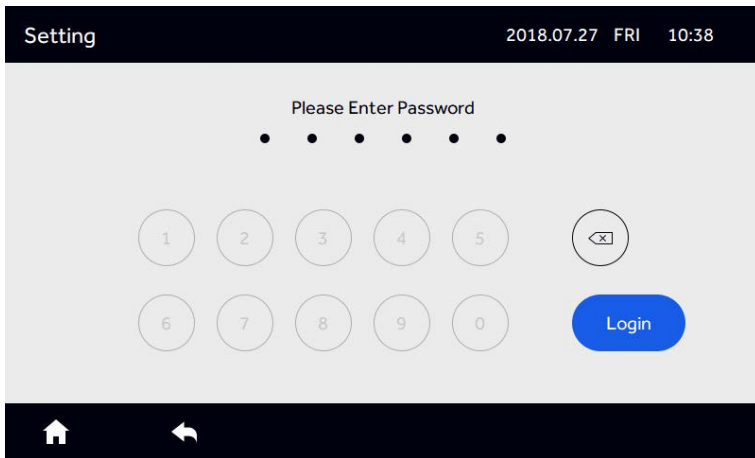
5. Service

Tap “Service” in Picture 33 and tap “Confirm” on pop up that prompts to enter password.



Picture 62

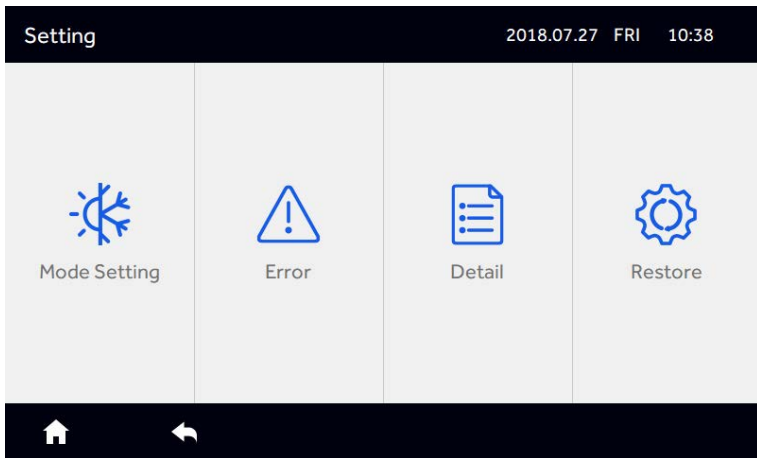
Enter password 841226 and tap “Login”.



Picture 63

After clicking “Login”, go into Picture 64.

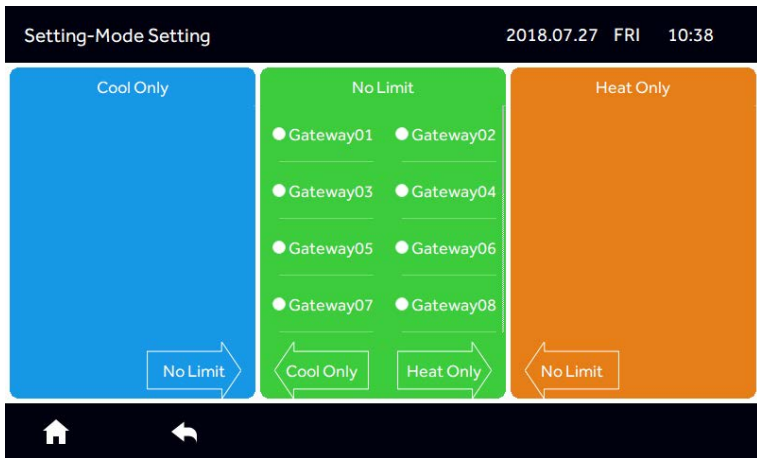
Function operation



Picture 64

(1) Mode Setting

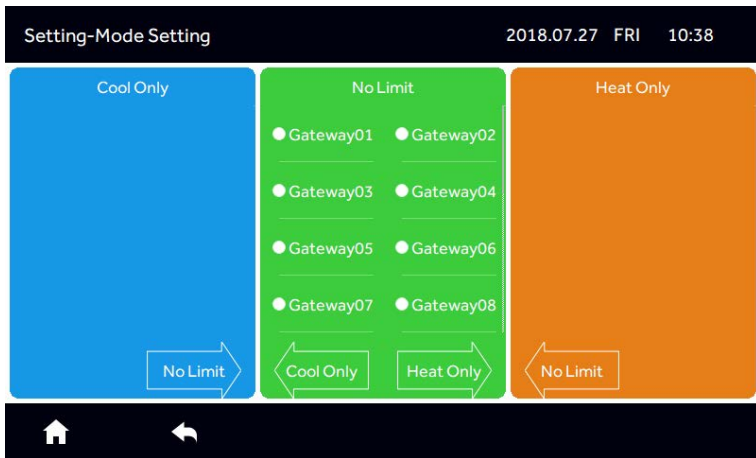
Click "Mode Setting" at the Picture 64 interface



Picture 65

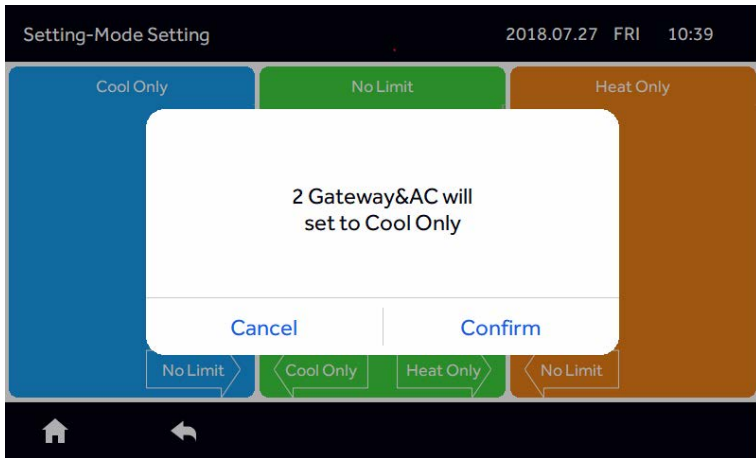
Select the system(s) that needs to be changed and tap the arrow to move to the next column.

Function operation



Picture 66

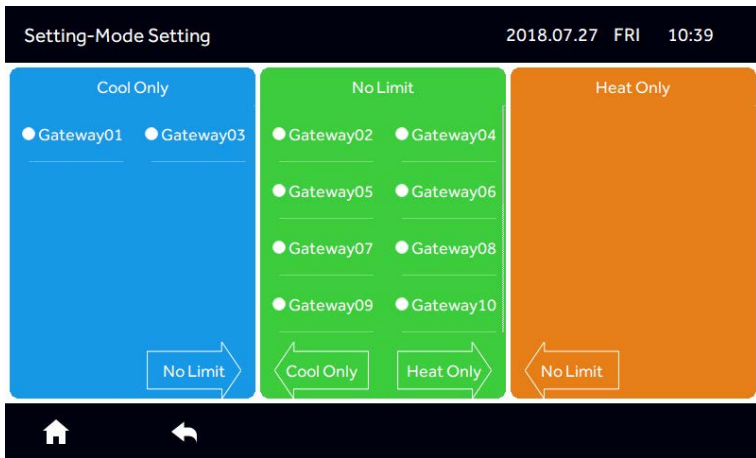
select the corresponding gateway and tap "Cool Only "



Picture 67

Tap "Confirm" to save changes.

Function operation



Picture 68

(2) Error

Tap “Error” in settings menu (Picture 64) to view errors.

Setting_Error				
2018.07.27 FRI 10:40				
Type	Equipment	Error Code	Date	Time
Current	AC-1_2	1	2018.07.27	10:03:07
	AC-1_3	2	2018.07.27	10:03:07
	AC-1_4	3	2018.07.27	10:03:07
	AC-2_1	4	2018.07.27	10:03:07
	AC-2_3	1	2018.07.27	10:03:07

Picture 69

You can slide up and down to see the fault information of other indoor units. Up to 10 faults will be saved for each unit.

Function operation

(3) Detail

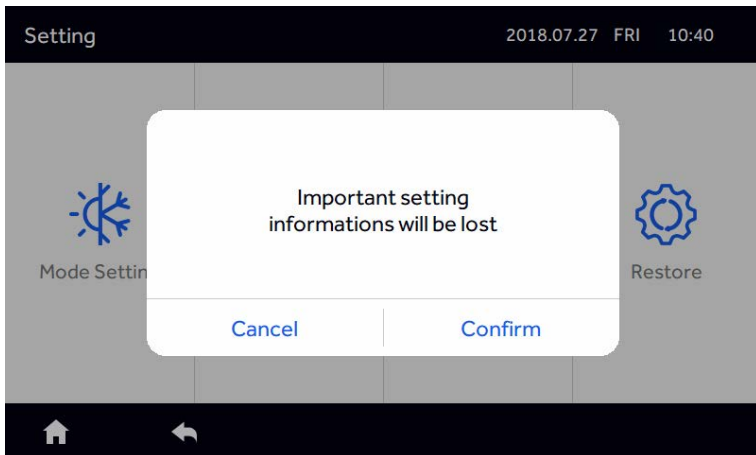
Tap “Detail” in the settings menu (Picture 64) to view unit details such as room temperature, mode, current running time and errors (if any).

Setting_Detail								2018.07.27	FRI	10:40
Name	AC	Room temp.	Mode	Gas pipe Temp.	Liquid pipe Temp.	Running Time	Error			
AC-1_1	1-1	64°F	Cool	342 F	-64°F	00:38	0			
AC-1_2	1-2	66°F	Cool	342 F	-64°F	00:41	1			
AC-1_3	1-3	68°F	Cool	342 F	-64°F	00:41	2			
AC-1_4	1-4	70°F	Cool	342 F	-64°F	00:41	3			
AC-2_1	2-1	72°F	Fan	342 F	-64°F	00:40	4			

Picture 70

Other indoor units can be displayed by sliding up and down.

(4) Tapping “Restore” and “Confirm” will reset the control to factory defaults and clear all settings.



Picture 71

If you click “Confirm” to reinitialize, the controller start to search indoor units, if you click “Cancel”, then exit POP.

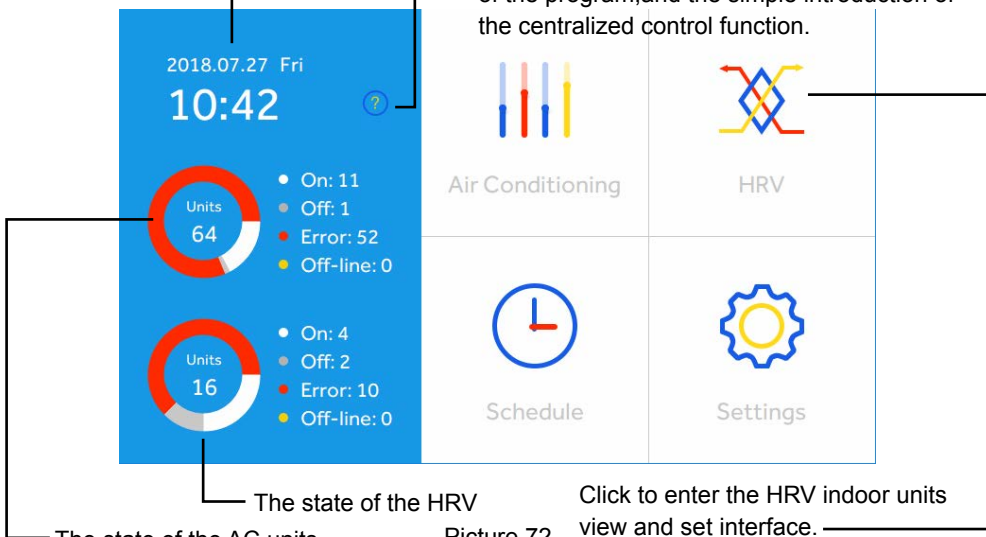
Function operation

HRV

If the system is connected with HRV, the main interface is displayed as follows

Current time

Entering the "Help" interface, you can see the type of the central controller, the version number of the program, and the simple introduction of the centralized control function.



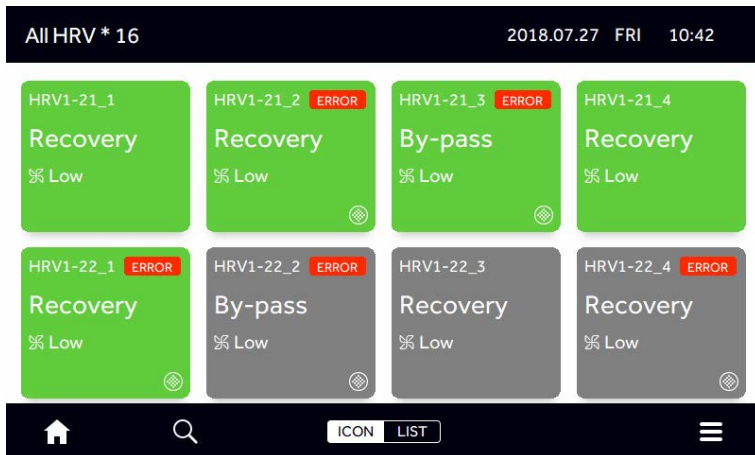
The state of the HRV

Click to enter the HRV indoor units view and set interface.

The state of the AC units

Picture 72

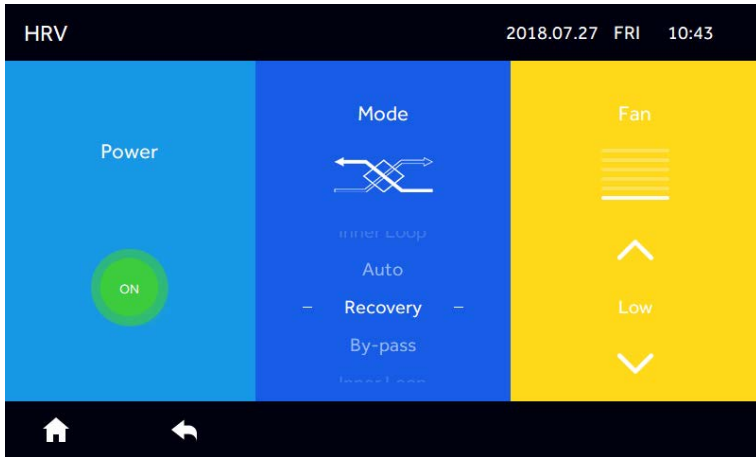
Tap "HRV", to enter the HRV display list interface



Picture 73

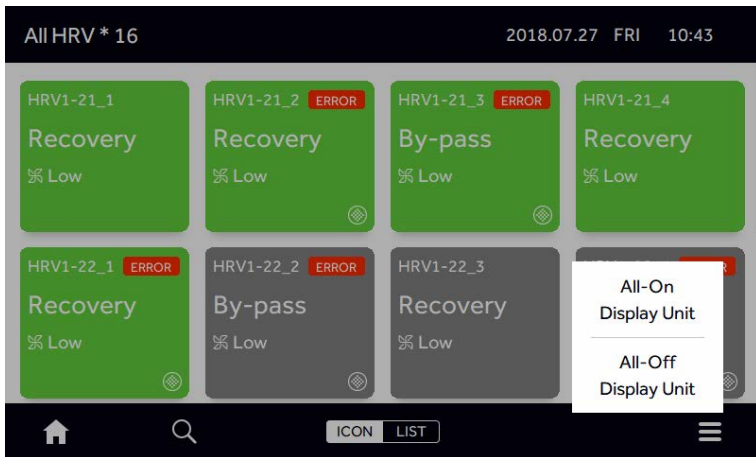
Function operation

Click on the control interface of the HRV units,



Picture 74

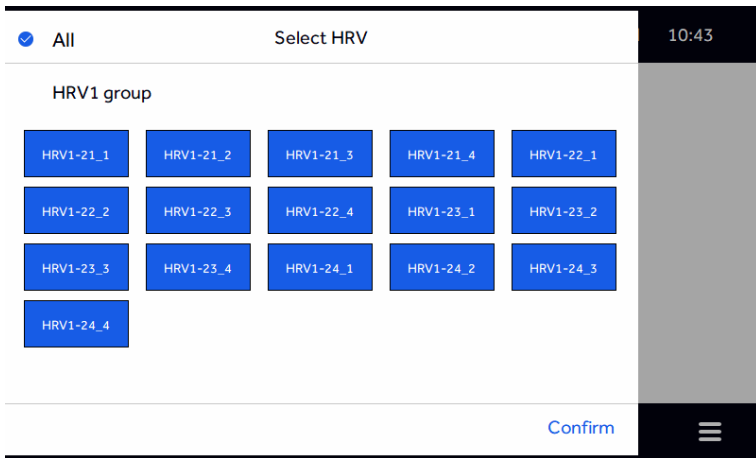
Tap on the lower right-hand menu icon to turn all HRV units on or off.



Picture 75

Tap on the next line of magnifying glass  to select the HRV unit that you need to view

Function operation



Picture 76

Tap "LIST" to view the HRV in the list form. If the HRV is installed, the naming can be set at the Setting-Name interface

All HRV * 16			2018.07.27 FRI 10:44		
Room	Mode	Fan	Link to	Schedule	Error
HRV1-21_1	Recovery	Low	Disabled	No	/
HRV1-21_2	Recovery	Low	Disabled	No	1
HRV1-21_3	By-pass	Low	Disabled	No	2
HRV1-21_4	Recovery	Low	Disabled	No	/
HRV1-22_1	Recovery	Low	Disabled	No	1

At the bottom of the screen, there is a navigation bar with a home icon, a search icon, a toggle switch between "ICON" and "LIST" (with "LIST" selected), and a menu icon.

Picture 77

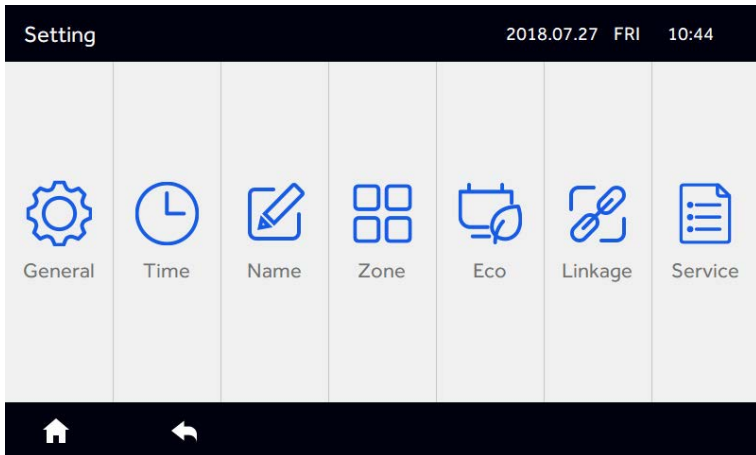
If there is a HRV unit, then AC and HRV can be set separately in schedule, and AC and HRV can be set separately in the middle part of the bottom row.

Function operation



Picture 78

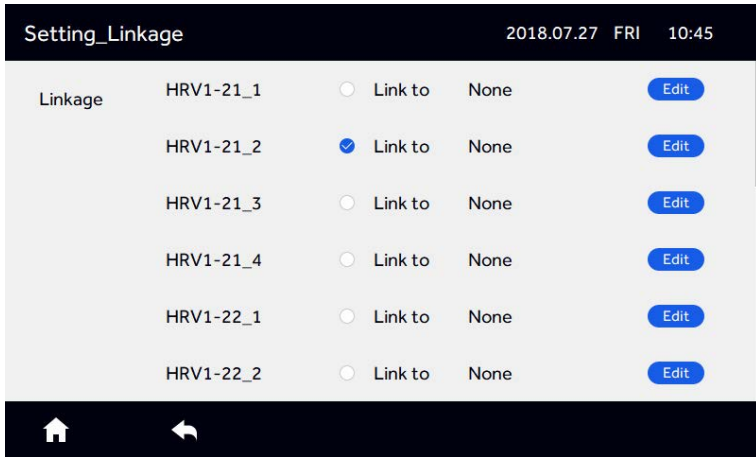
If HRV existence, there is a "Linkage" interface on the "Setting" interface, which allows HRV to interact with ordinary indoor units, as follows



Picture 79

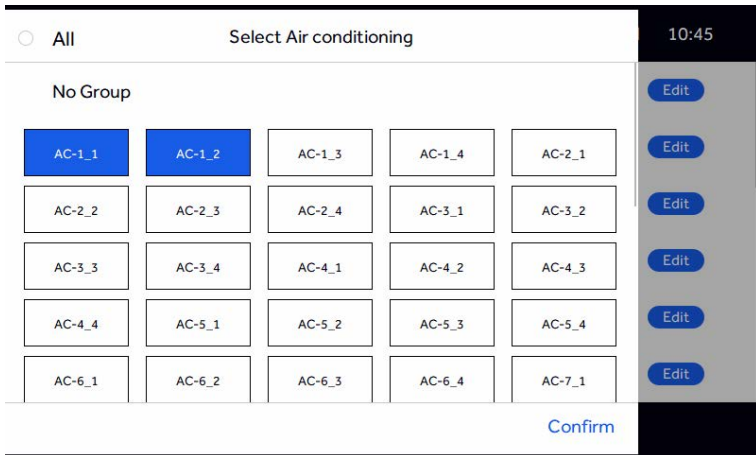
Function operation

Tap “Linkage” to select which HRV unit to link then tap “Edit”.



Picture 80

Select any of the indoor unit to link to the HRV unit. Blue indicates selected. Then tap “Confirm”.



Picture 81

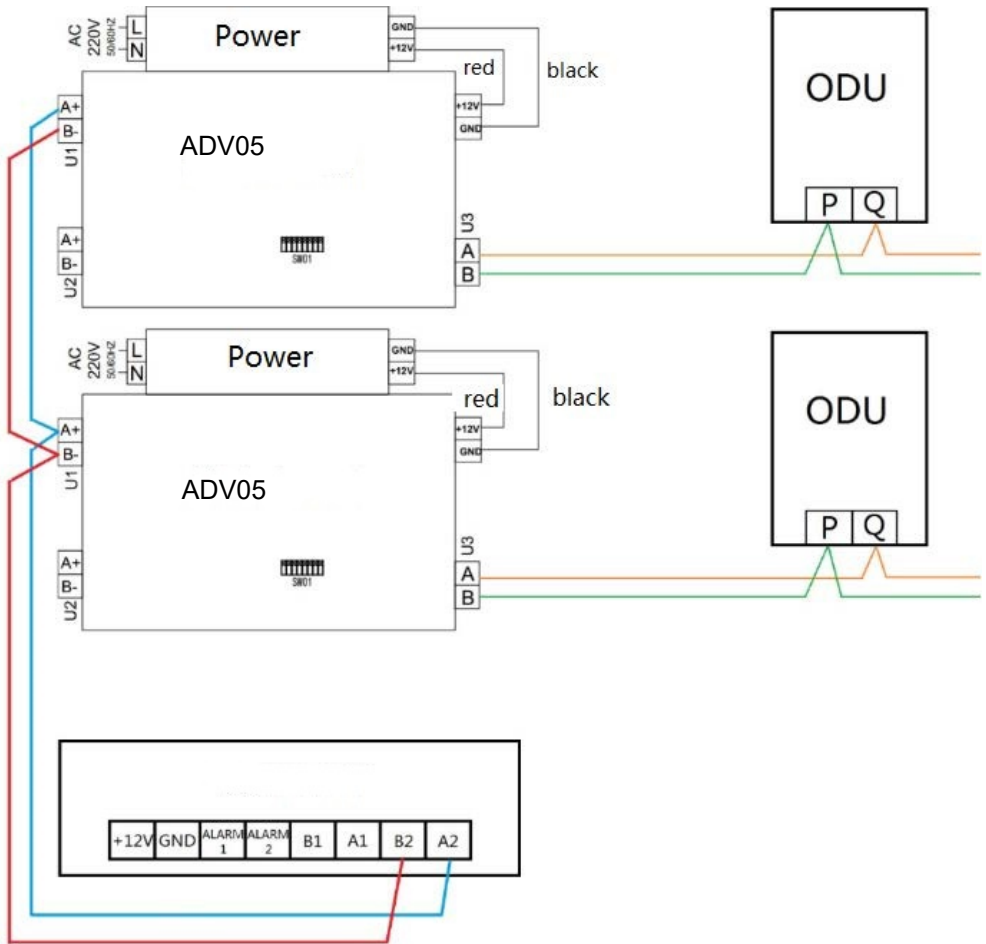
After the linkage, the selected linkage of the indoor units, all closed, the linkage of the HRV off, in the linkage process, the HRV machine can also be manual switch, the implementation of the priority principle, with the last operation as the criterion.

Wiring diagram and Installation

RWV09 can connect with VRF system and HRV simultaneously.

Wiring diagram and Installation

Wiring diagram between central controller and converter gateway ADV05.



Wiring diagram and Installation

All of the communication 485 cables between each module and terminal module to the central controller are double core shielded twisted-pair cable. Specific wiring as the table below:

The length of signal line	Wiring dimension
≤ 100	$0.3 \text{ mm}^2 \times 2$
$100 < x \leq 200$	$0.5 \text{ mm}^2 \times 2$
$200 < x \leq 300$	$0.75 \text{ mm}^2 \times 2$
$300 < x \leq 400$	$1.25 \text{ mm}^2 \times 2$
$400 < x \leq 500$	$2 \text{ mm}^2 \times 2$

Installation condition

Don't install near devices that produce electrical interference such as AC motor, radio transmitters like network routers and consumer electronics.

Other electrical noise producers could include computers, auto-door openers, elevators, or other equipment what can produce noise.

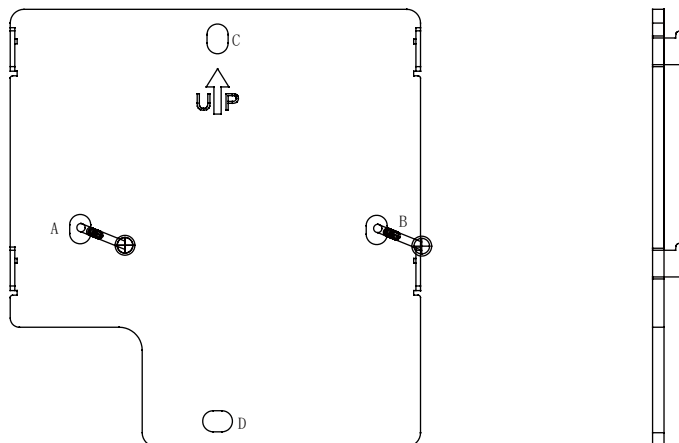
Don't install in wet locations.

It will cause failure if you install in a place that shakes violently.

Don't install in the place where it is exposed to direct sunlight or near to the heat. This will cause failure.

Mounting Control

First, attach the mounting plate to the wall. Using a job box is preferred. Use A and B holes for an 86mm box, use C and D holes for a 120mm box. Please take note of the UP indicator.

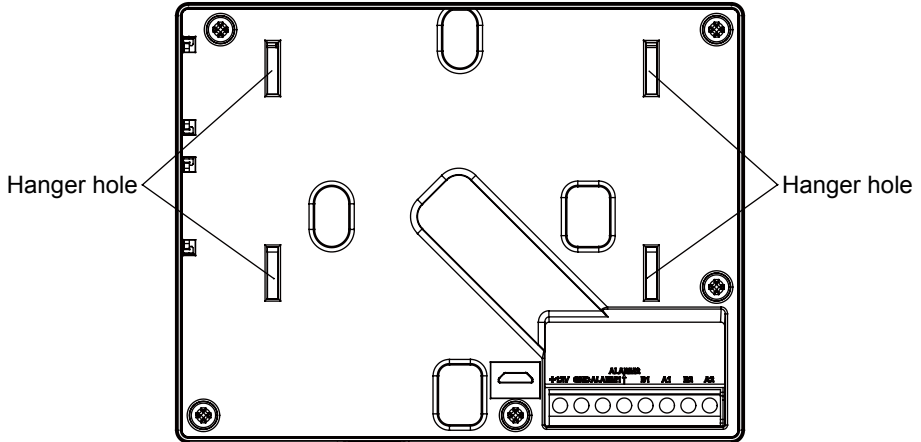


Wiring diagram and Installation

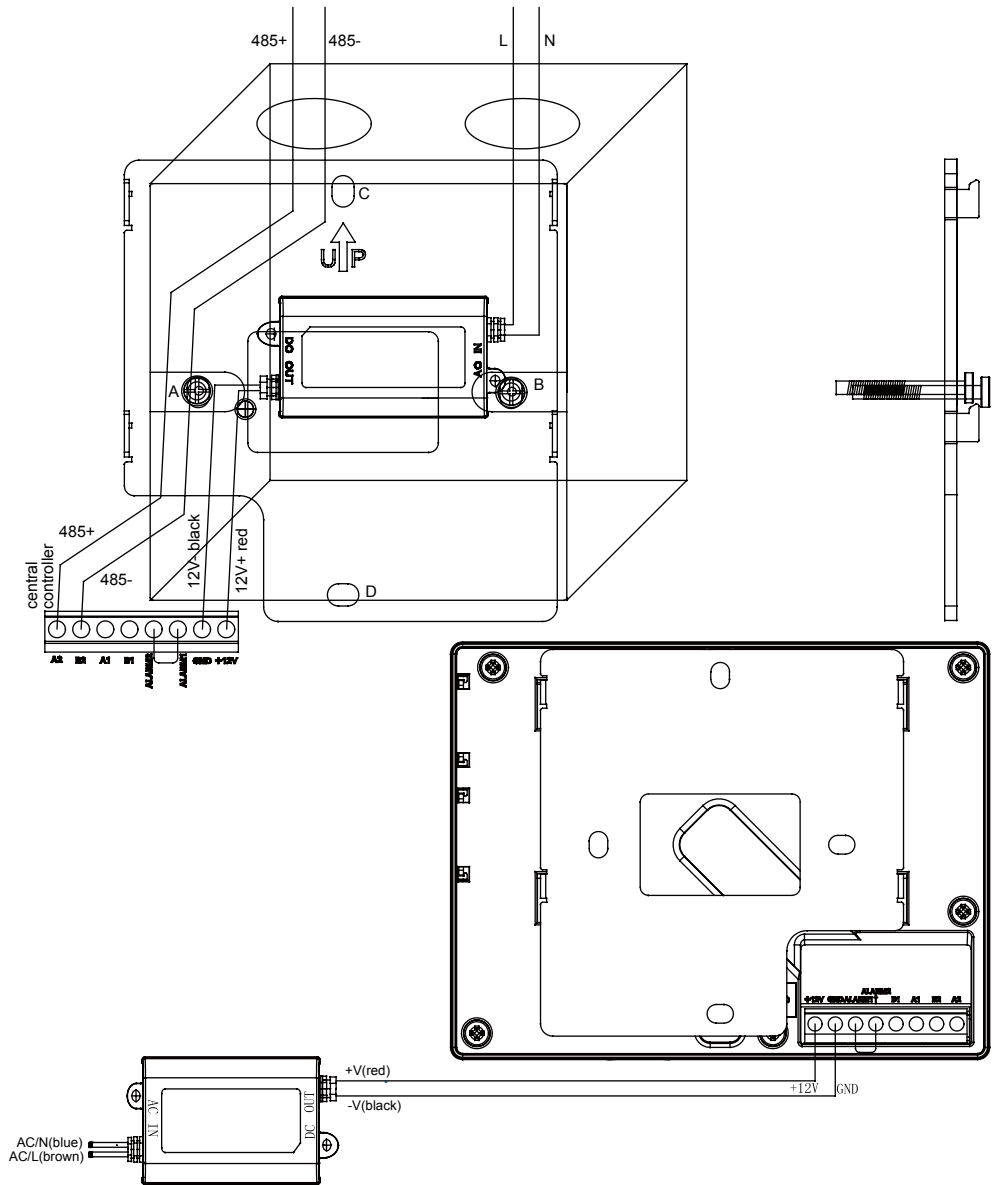
Place the board, AB for 86 cassettes, CD for 120 cassettes. The hanger should be fixed as the picture, please note the UP direction.

The hanging plate is placed in the direction of the illustration, where A/B is the location of the 86 cassette screws, and the C/D is the position of the 120 cassette screws.

The pendant is fixed to the hole of the pendant, please pay attention to the UP direction.

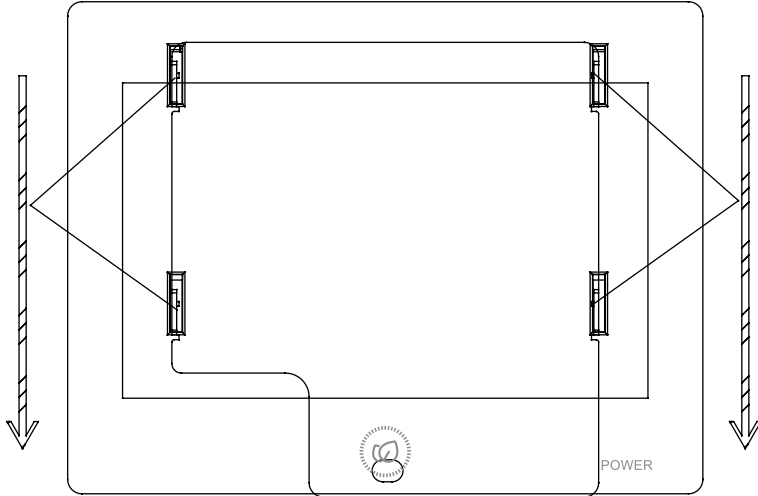


Wiring diagram and Installation

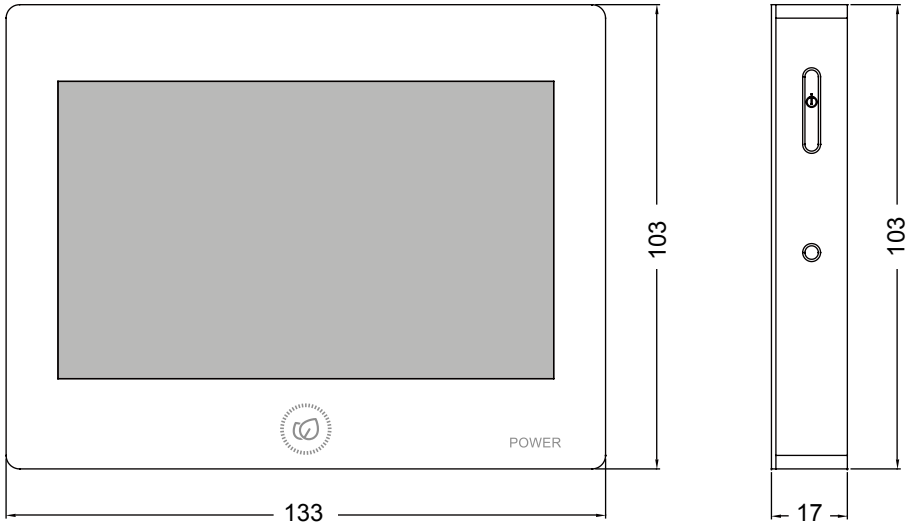


Wiring diagram and Installation

Wiring between power adapter and central controller.



Central Controller Dimension:



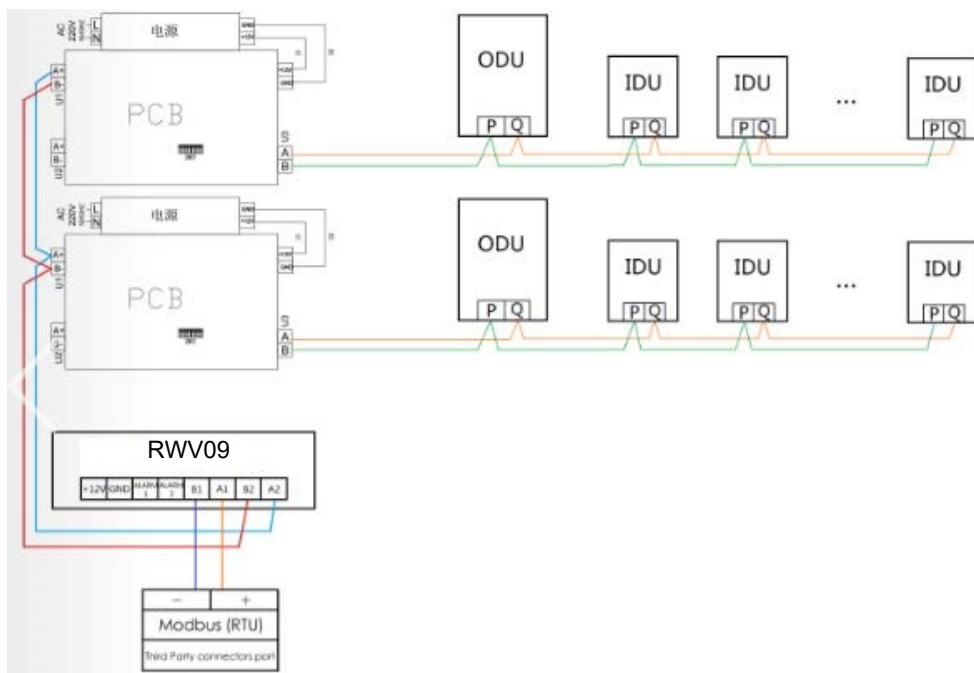
Wiring diagram and Installation

Fix the screw through the bracket on the 86 cassettes and connect the connection. The adapter's AC IN connects to the L and N of 220V, the V+ (RED) collector of the AC OUT, and the AC OUT. Please pay attention to the line order. Then the central controller is fixed down.

Notes:

1. B1A1 is a third party interface, paying attention to the line order.
2. B2A2 for 485 interface, access to ADV05 485 B and A, pay attention to line order.
3. ALARM1 and ALARM2 factory default is connected, if not be connected, then the main interface of the central controller will display alarm information, and all indoor units will be turned off.
4. Third party interface

Through the A1B1 interface, it can access third party devices, and can realize the monitoring and control of third party devices to the central controller.



Wiring diagram and Installation

Third party Modbus

Communication parameter:

Baud rate: 9600

data bits: 8

Check bit: None

Stop bit: 1

One frame command finished,using CRC to check

	VRF	Single split and multi split	HRV
SLAVE ID	Gateway's address (ranging from 1 to 32)	Unit ID:1-16, SLAVE ID 33 Unit ID:17-32, SLAVE ID 34 Unit ID:33-48, SLAVE ID 35 Unit ID:49-64, SLAVE ID 36	Unit ID:1, SLAVE ID 29 Unit ID:2, SLAVE ID 30 Unit ID:3, SLAVE ID 31 Unit ID:4, SLAVE ID 32

1. Discrete Input--Query Function Code: 0x02

BIT	name	meaning	remark
0	indoor 1 whther exist	0- non existent 1-existent	Whether the indoor unit that has been answered.
1	indoor unit 1 status (whether online)	0-not online 1-on line	Whether the registered indoor unit is offline during operation.
2	indoor 2 whther exist	0- non existent 1-existent	Whether the indoor unit that has been answered.
3	indoor unit 2 status (whether online)	0- not online 1- on line	Whether the registered indoor unit is offline during operation.
.....			
126	indoor 64 whther exist	0- non existent 1-existent	Whether the indoor unit that has been answered.
127	indoor unit 64 status (whether online)	0- not online 1- on line	Whether the registered indoor unit is offline during operation.

Wiring diagram and Installation

2. Coil--Query function code: 0x01 Control function code: 0x05/0x0F

BIT	name	meaning	reamrk
0	indoor unit 1 on off	0- off 1- on	Read operation to get the current indoor unit on and off status Write operation changes the indoor unit on and off state
1	indoor unit 2 on off	0-off 1-on	Read operation to get the current indoor unit on and off status Write operation changes the indoor unit on and off state
2	indoor unit 3 on off	0- off 1- on	Read operation to get the current indoor unit on and off status Write operation changes the indoor unit on and off state
3	indoor unit 4 on off	0- off 1- on	Read operation to get the current indoor unit on and off status Write operation changes the indoor unit on and off state
.....			
62	indoor unit 63 on off	0- off 1- on	Read operation to get the current indoor unit on and off status Write operation changes the indoor unit on and off state
63	indoor unit 64 on off	0- off 1- on	Read operation to get the current indoor unit on and off status Write operation changes the indoor unit on and off state

3. Input Register:0x04 Input register (Input Register) query function code: 0x04

WORD	name	range	remark
0	indoor unit 1 ambient temp.	- 30 - - 60	Unit 1 °C,HRV1/HRV2/Fresh air unit model without set temperature, return 0x7FFF
1	indoor unit 1 error code	0 - 256	value of 0 means no error
2	indoor unit 1 HP	0.1HP	This parameter is currently not supported and will return 0x7FFF
3	indoor unit 2 ambient temp.	- 30 - - 60	Unit 1 °C, HRV1/HRV2/Fresh air unit model without set temperature, return 0x7FFF
4	indoor unit 2 error code	0 - 256	value of 0 means no error

Wiring diagram and Installation

WORD	name	range	remark
5	indoor unit 2 HP	0.1HP	This parameter is currently not supported and will return 0x7FFF
.....			
189	indoor unit64 ambient temp.	- 30 - - 60	Unit 1 °C, HRV1/HRV2/Fresh air unit model without set temperature, return 0x7FFF
190	indoor unit 64 error code	0 - 256	value of 0 means no error
191	indoor unit 64HP	0.1HP	This parameter is currently not supported and will return 0x7FFF
.....			
1000	Indoor unit 1 model	0-normally air conditioner 1-HRV 1 2-HRV 2 3-Fresh air unit 4-HRV with coil 254-Unsupported model	If not online, return 0x7FFF
1001	Indoor unit 2 model	0-normally air conditioner 1-HRV 1 2-HRV 2 3-Fresh air unit 4-HRV with coil 254-Unsupported model	If not online, return 0x7FFF
.....			
1063	Indoor unit 64model	0-normally air conditioner 1-HRV 1 2-HRV 2 3-Fresh air unit 4-HRV with coil 254-Unsupported model	If not online, return 0x7FFF

Wiring diagram and Installation

4. Hold Register (Holding Register) Query Function Code 0x03 Control Function Code 0x06/0x10

WORD	name	range	remark
0	indoor unit 1 set temp.	16 - 30	Returns 0x7FFF if the corresponding indoor unit does not exist. Unit 1 °C The air conditioner read operation acquires the current operation mode, and the write operation changes the operation mode. There is no set temperature for HRV1/HRV2/Fresh air unit , the read operation returns 0, and the write operation is invalid.
1	indoor unit 1 operation mode	air conditioning/HRV with coil: 1 - cooling 2 - heating 3 - dehumidifying 4 - fan only 5 - auto HRV1/HRV2/Fresh air unit : 1 - no mode 2 - recovery 3 - by-pass 4 - inner loop 5 - auto	Returns 0x7FFF if the corresponding indoor unit does not exist. The read operation gets the current run mode. The write operation changes the operation mode and writes the mode that is not supported by the corresponding model.

Wiring diagram and Installation

WORD	name	range	remark
2	indoor unit 1 fan speed	air conditioning/HRV with coil: 1 - low speed 2 - mid speed 3 - high speed 4 - auto speed HRV1/HRV2/Fresh air unit : 1 - low speed 2 - low air change 3 - mid speed 4 - high speed 5 - high air change 6 - auto speed	Returns 0x7FFF if the corresponding indoor unit does not exist. Read operation to get the current fan speed: The write operation changes the fan speed and writes to the mode that is not supported by the corresponding model.
3	indoor unit 1 control mode	1. no central 2. LIFO(last in first out) 3. central 4 LOCK	Returns 0x7FFF if the corresponding indoor unit does not exist. The air conditioner air conditioner read operation acquires the current operation mode, and the write operation changes the operation mode. There is no centralized lock on full heat, the read operation returns 0, and the write operation is invalid. .
.....			
252	indoor unit 64 set temp.	16 - 30	Returns 0x7FFF if the corresponding indoor unit does not exist. Unit 1 °C The air conditioner read operation acquires the current operation mode, and the write operation changes the operation mode. There is no set temperature for HRV1/HRV2/Fresh air unit, the read operation returns 0, and the write operation is invalid.

Wiring diagram and Installation

WORD	name	range	remark
253	indoor unit 64 operation mode	air conditioning/HRV with coil: 1 - cooling 2 - heating 3 - dehumidifying 4 - fan only 5 - auto HRV1/HRV2/Fresh air unit : 1 - no mode 2 - recovery 3 - by-pass 4 - inner loop 5 - auto	Returns 0x7FFF if the corresponding indoor unit does not exist. The read operation gets the current run mode. The write operation changes the operation mode and writes the mode that is not supported by the corresponding model.
254	indoor unit 64 fan speed	air conditioning/HRV with coil: 1 - low speed 2 - mid speed 3 - high speed 4 - auto speed HRV1/HRV2/Fresh air unit : 1 - low speed 2 - low air change 3 - mid speed 4 - high speed 5 - high air change 6 - auto speed	Returns 0x7FFF if the corresponding indoor unit does not exist. Read operation to get the current fan speed: The write operation changes the fan speed and writes to the mode that is not supported by the corresponding model.
255	indoor unit 64 control mode	1. no central 2. LIFO(last in first out) 3. central 4 LOCK	Returns 0x7FFF if the corresponding indoor unit does not exist. The air conditioner air conditioner read operation acquires the current operation mode, and the write operation changes the operation mode. There is no centralized lock on full heat, the read operation returns 0, and the write operation is invalid. .

Airwell

Just feel well

WARNING :

The design and specifications are subject to change without prior notice for product improvement. Consult with the sales agency or manufacturer for details.

ATTENTION :

Le design et les données techniques sont donnés à titre indicatif et peuvent être modifiés sans préavis.



AIRWELL RESIDENTIAL SAS

10,Rue du Fort de Saint Cyr,
78180 Montigny le Bretonneux- France
www.airwell-res.com