

A decorative scrollwork graphic in the top-left corner of the title banner, featuring intricate, swirling patterns in a light gray color.

# Split Air Conditioner

OWNER'S MANUAL

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GREE AIR CONDITIONERS

Thank you for choosing GREE air conditioners. For proper operation, please read this owner's manual carefully before operating the unit and save it for future reference.





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This symbol indicates items that should not be attempted or are prohibited.



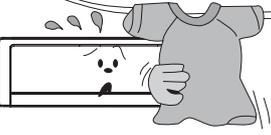
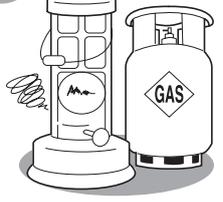
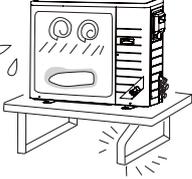
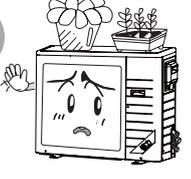
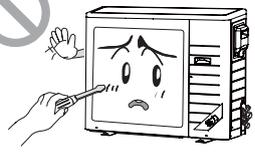
This symbol indicates that items should be followed

Thank you for choosing GREE air conditioner, please read this owner's manual carefully before operating the unit and store it for future reference.  
The figures in this manual may be different with the material objects, please refer to the material objects for reference.

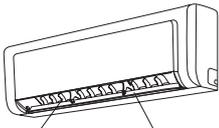
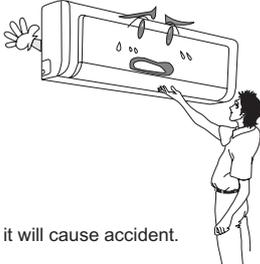
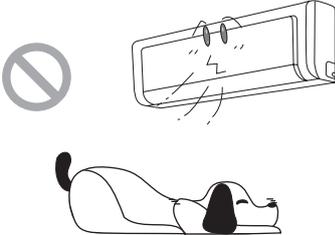
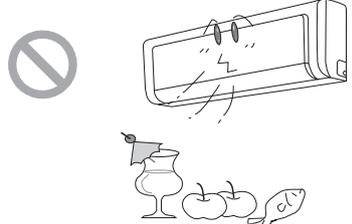
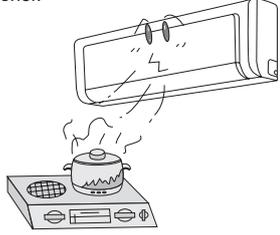


Do not dispose this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.

## ◆ Operation and maintenance-notice for operation

<p>⚠ Unit must be properly grounded!</p>   <p>Please consult a qualified technician.</p>	<p>★ Be sure to pull out the power plug when not using the air conditioner for prolonged periods.</p>  	<p>★ Select the most appropriate temperature. Setting at extreme temperatures can cause improper operation and excessive energy consumption.</p> 
<p>★ Don't leave windows and doors open for prolonged periods while operating the air conditioner.</p>  <p>It can decrease the system capacity.</p>	<p>★ Do not block the air intake or outlet vents of the units.</p>   <p>It can decrease the system capacity or cause a malfunction.</p>	<p>★ Keep all combustibles away from the units and the conditioned space.</p>  
<p>★ Please verify that the unit stand is strong enough to properly support unit.</p>   <p>Replace if it is damaged.</p>	<p>★ Do not step on the outdoor unit or place items on it.</p>  	<p>★ Do not attempt to repair the air conditioner.</p>   <p>Incorrect repair will lead to improper operation and the risk of personal injury. Contact the service center to repair.</p>

## ◆ Notices for operation

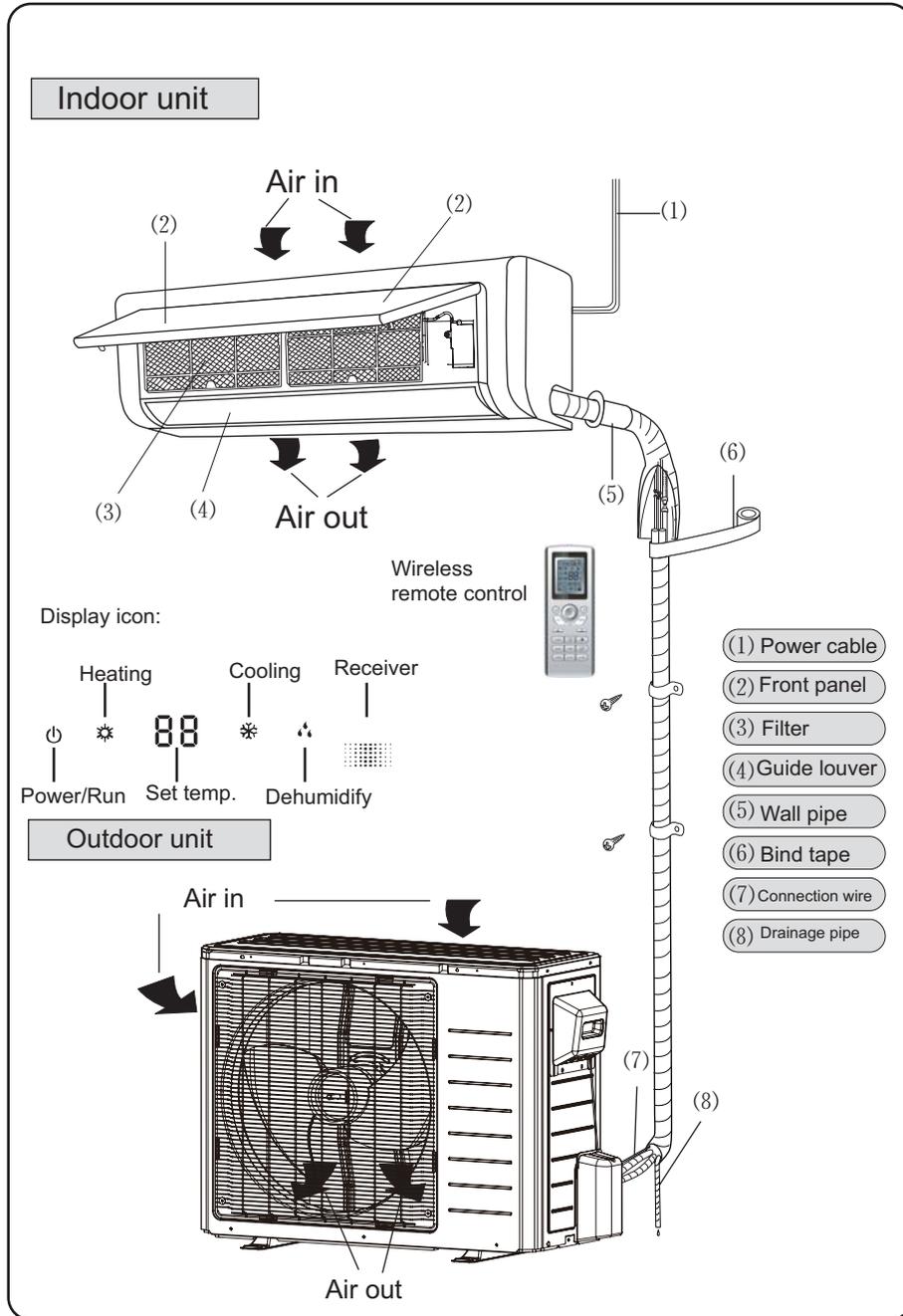
<p>★ If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a qualified technician in order to avoid a hazard.</p> 	<p>★ The airflow direction can be adjusted. Adjust the vertical airflow direction by adjusting the louvers of upward/downward direction. Then, adjust the left and right louvers for horizontal air-flow.</p>  <p>Louver of left/right direction      Louver of upward/downward direction.</p>
<p>★ Do not insert your hands or foreign objects into the air intake or outlet vents.</p>  <p>Otherwise it will cause accident.</p>	<p>★ Do not set the airflow directly onto people, animals, or plants as it causes problems.</p> 
	<p>★ Do not use the air conditioner for any other purpose except environmental comfort.</p> 
<p>★ Splashing water on the air conditioner can cause electric shock and malfunction.</p> 	<p>★ Do not place a source of heat near the air conditioner.</p> 

◆ Notices for use

※ Working temperature range		
	Indoor side DB/WB(°F)	Outdoor side DB/WB(°F)
Maximum cooling	115/84	115/82
Minimum cooling	61/52	41/-
Maximum heating	86/-	86/73
Minimum heating	41/-	5/1.4

The operating temperature range (outdoor temperature) for cooling unit is 41~115°F;  
for cooling and heating unit is 5~115°F.

◆ Names and functions of each part



## ◆ Operation of wireless remote control

Name and function of wireless remote control

**Note:** Be sure that there are no obstructions between receiver and remote controller; Don't drop or throw the remote control; Don't let any liquid in the remote control. Do not put the remote control directly under the sunlight or any place where is very hot.

Signal transmitter



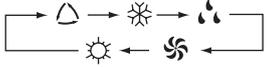
Remote control

ON/OFF button

- Press this button, the unit will be turned on, press it once more, the unit will be turned off. When turning on or turning off the unit, the Timer, Sleep function will be canceled, but the presetting time is still remained.

MODE button

- Press this button, Auto, Cool, Dry, Fan, Heat mode can be selected circularly. Auto mode is default while power on. Under Auto mode, the temperature will not be displayed; Under Heat mode, the initial value is 28°C (82°F); Under other modes, the initial value is 25°C (77°F).



- △ AUTO
- ❄ COOL
- 💧 DRY
- 🌀 FAN
- ☀ HEAT  
(Only for cooling and heating unit.)

SLEEP

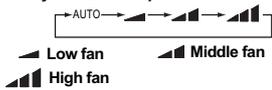
SLEEP button

- Press this button, Sleep On and Sleep Off can be selected. After powered on, Sleep Off is defaulted. After the unit is turned off, the Sleep function is canceled. After Sleep function set up, the signal of Sleep will display. In this mode, the time of timer can be adjusted. Under Fan and Auto modes, this function is not available.

FAN

FAN button

- Press this button, Auto, Low, Middle, High speed can be circularly selected. After powered on, Auto fan speed is default. Under Dehumidify mode, Low fan speed only can be set up.



AUTO
  Low fan
  Middle fan
  High fan

CLOCK

CLOCK button

- Press this button, the clock can be set up, signal blink and display. Within 5 seconds, the value can be adjusted by pressing + or - button, if continuously press this button for 2 seconds above, in every 0.5 seconds, the value on ten place of Minute will be increased 1. During blinking, repress the Clock button, signal will be constantly displayed and it denotes the setting succeeded. After powered on, 12:00 is defaulted to display and signal will be displayed. If there is signal be displayed that denotes the current time value is Clock value, otherwise is Timer value.

LIGHT

LIGHT button

- Press this button at unit On or Off status, Light On and Light Off can be set up. After powered on, Light On is defaulted.

TURBO

TURBO button

- In Cool or Heat mode, press this button can turn on or turn off the Turbo function. After turned on the Turbo function, its signal will be displayed. When switching the mode or changing fan speed, this function will be canceled automatically.

## ◆ Operation of wireless remote control

### Names and functions of wireless remote control

**Notice:** This is a universally used remote control shows all the functions. Some functions may not be carried out depending on the actual models, if press the corresponding button on the remote control that the unit will not receive this signal and will keep the original running status.



Remote control

#### X-FAN

##### X-FAN button

- Press this button, can turn on or turn off the drying. In Cool and Dehumidifying mode, press this button and will display "BLOW", at this time the Blow is turned on. If repress this button, "BLOW" will be concealed, at this time the Blow function is turned off. After powered on, Blow OFF is defaulted. When operating the ON/OFF button, or switching mode to Cool or Dehumidifying mode, the Blow function will keep the original status. If unit is turned off, Blow OFF only can be set up and send the signal. In Auto, Fan as well as Heat mode, Blow function can not be set up and there is no "BLOW" displaying.

##### - button

- Presetting temperature can be decreased. Press this button, the temperature can be set up, continuously press this button and hold for two seconds, the relative contents can quickly change, until unhold this button and send the order that the °C (°F) signal will be displayed all the time. The temperature adjustment is unavailable under the Auto mode, but the order can be sent by if pressing this button.

+

##### + button

- For presetting temperature increasing. Press this button, can set up the temperature, when unit is on or unit is off. Continuously press and hold this button for more than 2 seconds, the corresponding contents will be changed rapidly, until unpress the button then send the information, °C (°F) is displaying all along. In Auto mode, the temperature can not be set up, but operate this button can send the signal. Centigrade setting range :16-30; Fahrenheit scale setting range 61-86.

TEMP

##### TEMP button

- Press this button, could select displaying the indoor setting temperature or indoor ambient temperature. When the indoor unit firstly power on it will display the setting temperature, if the temperature's displaying status is changed from other status to "⬆️", displays the ambient temperature, 5s later or within 5s, it receives other remote control signal that will return to display the setting temperature. If the users haven't set up the temperature displaying status, that will display the setting temperature. (This function is applicable to partial of models)
- After powered on, the setting temperature displaying is defaulted, (according to customers requirements to display, if there is no requirement that will default to display the presetting temperature and there is no icon displayed on wireless remote control). Press this button, (When displaying ⬆️), will display presetting temperature; (when displaying ⬆️) will display indoor ambient temperature, ⬆️ current displaying status will not be changed. If current displays indoor ambient temperature, if received the other remote control signal, it will display presetting temperature, 5s later, will back to display the ambient temperature. (This function is applicable to partial of models)

## ◆ Operation of wireless remote control

### Name and function of wireless remote control

**Notice:** This is a universally used remote control shows all the functions. Some functions may not be carried out depending on the actual models, if press the corresponding button on the remote control that the unit will not receive this signal and will keep the original running status.



Remote control



#### SWING UP and DOWN BUTTON

- Press this button, to set up swing angle, which circularly changes as below:



This is an universal use remote controller. If it received the following three kinds of status, the swing signal is: ➤



When the guide louver start to swing up and down, if turn off the Swing, the air guide louver will stop at current position.

➤ which indicates the guide louver swings up and down between that all five positions.



#### AIR BUTTON

- There is no this function for this unit. If press this key, the main unit will click, but it also runs under original status.

#### TIMER ON

##### TIMER ON BUTTON

- Timer On setting: Signal "ON" will blink and display, signal ☉ will conceal, the numerical section will become the timer on setting status. During 5 seconds blink, by pressing + or - button to adjust the time value of numerical section, every press of that button, the value will be increased or decreased 1 minute. Hold pressing + or - button, 2 seconds later, it quickly change, the way of change is: During the initial 2.5 seconds, ten numbers change in the one place of minute, then the one place is constant, ten numbers change in the tens place of minute at 2.5 seconds speed and carry. During 5s blink, press the Timer On button, the timer on setting succeeds. The Timer On has been set up, repress the timer on button, the Timer On will be canceled. Before setting the Timer, please adjust the Clock to the current actual time.

#### TIMER OFF

##### TIMER OFF BUTTON

- Once press this key to enter into TIMER OFF setup, in which case the TIMER OFF icon will blink. The method of setting is the same as for TIMER ON.



##### HEALTH BUTTON

- Press this button, can set up Health function on or off. After unit is turned on, Health function ON is defaulted. Some models don't have this function.

#### I FEEL

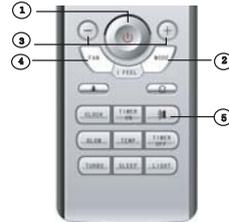
##### I FEEL BUTTON

- Press this button, can set the I FEEL function on or off. When operating other function and after signal was sent out, the I FEEL information will be sent out every 200ms. After I FEEL function turned on, the remote control will send the temperature information to main control every 10 minutes.

## ◆ Operation of wireless remote control

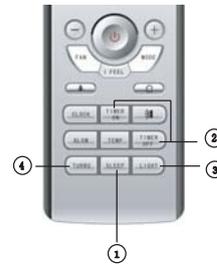
### Guide for operation- general operation

1. After powered on, press ON/OFF button, the unit will start to run.(Note: When it is powered off, the guide louver of main unit will close automatically.)
2. Press MODE button, select desired running mode, or press COOL or HEAT mode to enter into the corresponding operation directly.
3. Pressing + or - button, to set the desired temperature (It is unnecessary to set the temp. at AUTO mode.)
4. Pressing FAN button, set fan speed, can select AUTO FAN, LOW, MID and HIGH.
5. Pressing  button, to select the swing.



### Guide for operation- Optional operation

1. Press SLEEP button, to set sleep.
2. Press TIMER ON and TIMER OFF button, can set the scheduled timer on or timer off.
3. Press LIGHT button, to control the on and off of the displaying part of the unit (This function may be not available for some units).
4. Press TURBO button, can realize the ON and OFF of TURBO function.



### Introduction for special function

#### ★ About blow function

This function indicates that moisture on evaporator of indoor unit will be blown after the unit is stopped to avoid mould.

1. Having set blow function on: After turning off the unit by pressing ON/OFF button indoor fan will continue running for about 10 min. at low speed. In this period, press blow button to stop indoor fan directly.
2. Having set blow function off: After turning off the unit by pressing ON/OFF button, the complete unit will be off directly.

#### ★ About Blow over heat function(This function is applicable to partial of models)

When the unit is running in Heat mode or Auto Heat mode, compressor and indoor fan is running, to turn the unit off, the compressor, outdoor fan will stop running. The upper and lower guide board rotate to horizontal position, then the indoor fan will run at low fan speed, 10s later, the unit will turn off.

#### ★ About AUTO RUN

When AUTO RUN mode is selected, the setting temperature will not be displayed on the LCD, the unit will be in accordance with the room temp. automatically to select the suitable running method and to make ambient comfortable.

#### ★ About turbo function

If start this function, the unit will run at super-high fan speed to cool or heat quickly so that the ambient temp. approaches the preset temp. as soon as possible.

## ◆ Operation of wireless remote control

### ★ Lock

Press + and - buttons simultaneously to lock or unlock the keyboard. If the remote controller is locked, the icon  will be displayed, in which case, press any button, the icon will flicker three times. If the keyboard is unlocked, the icon will disappear.

### ★ Swing up and down function

1. Press swing up and down button for more than 2s, the main unit will swing up and down, release the button, the unit will stop swinging and the present position of the louver will be maintained
2. Under swing mode, when it is switched from off to , if the button is pressed 2s later,  status will switch to off.

### ★ Switching between Fahrenheit and Centigrade

With the unit off, press MODE and - buttons simultaneously to switch between °C and °F.

### ★ Defrost Function

It indicates: the unit will be under defrost status after starting this function by remote control. If unit is turned off by remote control, the unit will not stop defrosting until it is finished. If mode is switched by remote control, the new mode won't be carried out until defrosting finished.

Defrost function on or off: If remote control is off, press mode button and X-FAN button simultaneously can start or cancel defrost function. If the unit is under defrost mode, remote control will display H1. If switch to heat mode, remote control will display H1, which flickers for 5s. In order to cancel H1 display, press +/- button, you will find setting temp. displayed.

After remote control is powered off, the new defrost function will be defaulted to be closed.

### Changing batteries and notices

1. Slightly press , in the direction of the arrow to push the back cover. (As show in fig.1)
2. Remove the old batteries. (As show in fig.1)
3. Insert two new AAA1.5V batteries, and pay attention to the polarity. (As show in fig.2)
4. Attach the back cover of wireless remote control. (As show in fig.2)

### ★ NOTE:

- When changing the batteries, do not reuse old batteries, otherwise, it can cause the malfunction of the wireless remote control.
- If the wireless remote control will not be used for a prolonged period of time, remove the batteries to avoid damage.
- It should be placed at where is 1m away from the TV set or stereo equipment.
- If the wireless remote control will not operate properly, please remove the batteries for 30s and reinsert, if it still will not operate, replace the batteries.

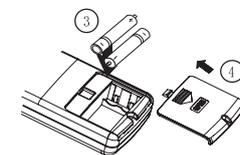
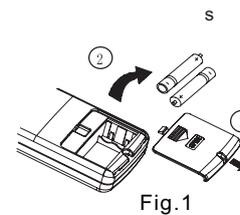


Fig. 2

## ◆ Manual Operation

### Display indicator light control of indoor unit

Permits the turning off of the display light.

- To turn on display light : When setting the light function, the icon  will display on the remote controller screen by pressing this button. In which case, the display indicator light will be on if the AC receives this signal.
- To turn off display light : To cancel the light function, the icon  will disappear on the remote controller screen by pressing this button. In which case, the display indicator light will be off if the AC receives this signal.

### Manual Operation

If the wireless remote control is lost or broken, please use the manual switch button. The unit will run in the Auto mode, but the temperature and fan speed cannot be changed:

Open the panel, the manual switch is on the display box.

- To turn on the unit: Press the button, the unit will run in the Auto mode. The micro-computer will adjust to the indoor temperature to select (Cooling, Heating, Fan) and obtain the comfortable environment.
- To turn off the unit: Press the button again to cancel the emergency operation.

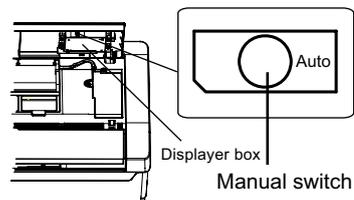


Fig.3

## ◆ Clean and care



### Caution

- Turn power off and pull out the power plug before cleaning air conditioner, or it may cause electric shock.
- Never sprinkle water on the indoor or outdoor units to clean because it can cause an electric shock.
- Volatile liquid (i.e. thinners or gasoline) will damage the air conditioner. (Wipe the units with a dry soft cloth, or a cloth slightly moistened with water or mild cleanser.)

#### Clean the front panel

When cleaning the front panel, please use a soft cloth moistened with water below 113 °F below, then completely dry the surface.

Note: Please do not immerse the front panel in water, due to there are electronic components and circuit diagrams on the front panel.

#### Clean the air filter (Recommended once every three months)

NOTE: If dust is above normal, the air filters should be cleaned more often.  
After taking off the filter, do not touch the fins of indoor unit, in order to avoid injuries

#### ① Take down the air filter

Open the front panel to an angle, pull the air filter downward and remove it, please see the Fig. 4(a, b).

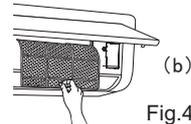
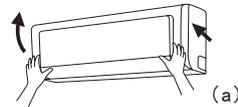
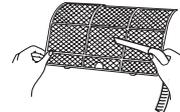


Fig.4

#### ② Clean the air filter

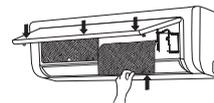
To clean the dust adhering to the filters, you can either use a vacuum cleaner, or wash them with warm water and mild detergent, (below 113°F), and dry it in the shade.

NOTE: Never use water above 113°F to clean, or it can cause deformation or discoloration.



#### ③ Insert the air filter

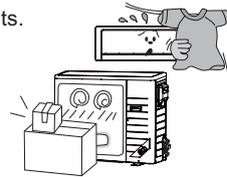
Reinsert the filters along the direction of arrows, and close the front panel.



## ◆ Clean and care

### Check before use

- ① Be sure that nothing obstructs the air outlet and intake vents.
- ② Check that the ground wire is properly connected.
- ③ Check that new batteries have been installed in the remote control.
- ④ Check that the installation stand of the outdoor unit is in good condition and properly anchored. If damaged, please contact the service center.



### Maintain after use

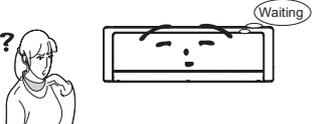
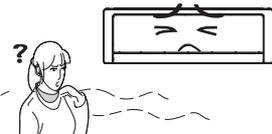
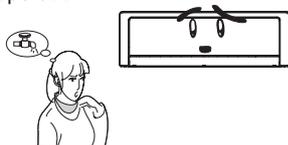
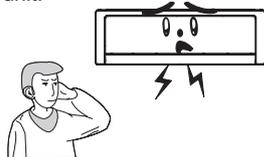
- ① Turn main power off.
- ② Clean the filter and indoor and outdoor units.
- ③ Clear dust and obstructions from the outdoor unit.
- ④ Repaint any corrosion spots on the outdoor unit to prevent it from spreading.
- ⑤ Cover the outdoor unit to avoid rain water from entering.

## ◆ Troubleshooting

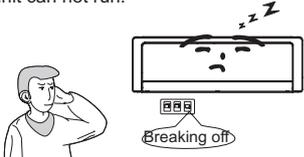
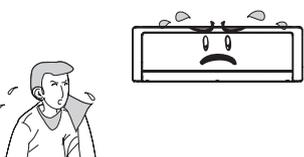
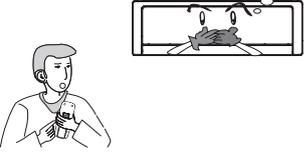


### CAUTION

Don't attempt to repair the air conditioner by yourself, it can cause an electric shock or fire. Please check the following items before asking for repair, it can save your time and money.

Event	Troubleshooting
<p>Unit does not operate immediately when the air conditioner is restarted.</p> 	<ul style="list-style-type: none"> <li>Once the air conditioner is stopped, it will not operate in approximately 3 minutes to protect itself.</li> </ul>
<p>There is unusual smell blowing from the outlet after operation is started.</p> 	<ul style="list-style-type: none"> <li>The unit has no peculiar smell by itself. If has, that is due to the smell accumulated in the ambient.</li> <li>Solution method: Cleaning the filter. If problem persists, clean the air conditioner.</li> </ul>
<p>Sound of water flow can be heard during the operation.</p> 	<ul style="list-style-type: none"> <li>The sound is due to refrigerant flowing through the system if is not considered malfunction.</li> </ul>
<p>In COOL mode, sometimes a mist sand is emitted from the air outlet vent.</p> 	<ul style="list-style-type: none"> <li>When the indoor temperature and humidity are very high, this phenomenon would happen. This is caused by the room air is swiftly cooled down. After running for a while, indoor temperature and humidity will fall down, the mist will fade away.</li> </ul>
<p>Creaking noise can be heard when start or stop the unit.</p> 	<ul style="list-style-type: none"> <li>This is caused by the deformation of plastic due to the changes of temperature.</li> </ul>

## ◆ Troubleshooting

Event	Troubleshooting
<p>The unit can not run.</p> 	<ul style="list-style-type: none"> <li>● Has the power been shut down?</li> <li>● Is power plug loose?</li> <li>● Is the circuit protection device tripped off or not?</li> <li>● Is voltage higher or lower? (Tested by professionals)</li> <li>● Is the TIMER correctly used?</li> </ul>
<p>Cooling(Heating) efficiency is not good.</p> 	<ul style="list-style-type: none"> <li>● Is Temp. setting suitable?</li> <li>● Are the inlet and outlet vents obstructed?</li> <li>● Is filter dirty?</li> <li>● Are the windows and doors closed?</li> <li>● Did Fan speed is set at low speed?</li> <li>● Is there any heat sources in the room?</li> </ul>
<p>Wireless remote control is not available.</p> 	<ul style="list-style-type: none"> <li>● The unit is interfered by abnormal or frequent functions switchover occasionally the controller cannot operate. At this time, you need to pull out of the plug, and reinsert it.</li> <li>● Is it in its receiving range? Or obstructed? To check the voltage in wireless remote control inside is charged, otherwise to replace the batteries.</li> <li>● Whether the wireless remote control is damaged.</li> </ul>
<p>If water leakage in the room.</p>	<ul style="list-style-type: none"> <li>● The air humidity is on the high side.</li> <li>● Condensing water over flowed.</li> <li>● The connection position of indoor unit drainage pipe is loosed.</li> </ul>
<p>If water leakage in outdoor unit.</p>	<ul style="list-style-type: none"> <li>● When the unit is running in COOL mode, the pipe and connection of pipe would be condensed due to the water cooled down.</li> <li>● When the unit is running in Auto Defrosting mode the ice thawed and flowed out.</li> <li>● When the unit is running in HEAT mode, the water adhered on heat exchanger dripped off.</li> </ul>
<p>Noise from indoor unit is emitted.</p>	<ul style="list-style-type: none"> <li>● The sound of fan or compressor relay is switching on or off.</li> <li>● When the defrosting is started or stop running, it will sound. That is due to the refrigerant flowed to the reverse direction.</li> </ul>

## ◆ Troubleshooting

Event	Troubleshooting
Indoor unit cannot deliver air.	<ul style="list-style-type: none"> <li>● In HEAT mode, when the temperature of indoor heat exchanger is very low, that will stop deliver air in order to prevent cool air. (Within 2min)</li> <li>● In HEAT mode, when the outdoor temperature is low or high humidity, there are much frost be formed on the outdoor heat exchanger, that the unit will automatically defrost, indoor unit stop blowing air for 3-12min. During the defrosting, there is water flowing out or vapor be produced.</li> <li>● In dehumidifying mode, sometimes indoor fan will stop, in order to avoid condensing water be vaporized again, restrain temperature rising.</li> </ul>
Moisture on air outlet vent.	<ul style="list-style-type: none"> <li>● If unit is running under the high humidity for a long time, the moisture will be condensed on the air outlet grill and drip off.</li> </ul>
	
<p><b>Immediately stop all operations and unplug the unit, contact the installing contractor in following situations.</b></p>	
<div style="border: 1px solid black; padding: 10px;"> <p>!!! There is harsh sound during operation.  The terrible odors emitted during operation.  Water is leaking in the room.  Air switch or protection switch often breaks.  Careless splash water or something into unit.  There is an abnormal heat in power supply cord and power plug.</p> <div style="border: 1px solid black; border-radius: 15px; padding: 5px; display: inline-block; margin-left: 20px;"> ▶ Stop running and pull out of the plug. </div> </div>	

## ◆ Notices for installation



### Important Notices

1. The unit installation work must be done by qualified personnel according to the local rules and this manual.
2. Before installing, please contact with local authorized maintenance center, if unit is not installed by the authorized maintenance center, the malfunction may not solved, due to discommodious contacts.
3. When removing the unit to the other place, please firstly contact with the authorized Maintenance Center in the local area.

### Basic Requirements For Installation Position

Install in the following place may cause malfunction. If it is unavoidable contact with service center please:

- Place where strong heat sources, vapors, flammable gas or volatile object are emitted.
- Place where high-frequency waves are generated by radio equipment, welders and medical equipment.
- Place where a lot of salinities such as coast exists.
- Place where the oil (machine oil) is contained in the air.
- Place where a sulfured gas such as the hot spring zones is generated.
- Other place with special circumstance.

### Indoor Unit Installation Position Selection

1. The air inlet and outlet vent should be far from the obstruction, make sure that the air can be blown through the whole room.
2. Select a position where the condensing water can be easily drained out, and the place is easily connected for outdoor unit.
3. Select a location where the children can not reach.
4. Can select the place where is strong enough to withstand the full weight and vibration of the unit. And will not increase the noise.
5. Be sure to leave enough space to allow access for routine maintenance. The height of the installed location should be 98.4 in. or more from the floor.
6. Select a place about 1m or more away from TVset or any other electric appliances.
7. Select a place where the filter can be easily taken out.
8. Make sure that the indoor unit installation should accord with installation dimension diagram requirements.
9. Do not use the unit in the immediate surroundings of a laundry a bath a shower or a swimming pool.

### Outdoor Unit Installation Position Selection

1. Select a location from which noise and outflow air emitted by unit will not inconvenience neighbors, animals, plants.
2. Select a location where there should be sufficient ventilation.
3. Select a location where there should be no obstructions cover the inlet and outlet vent.
4. The location should be able to withstand the full weight and vibration of the outdoor unit and permit safe installation.
5. Select a dry place, but do not expose under the direct sunlight or strong wind.
6. Make sure that the outdoor unit installation dimension should accord with installation dimension diagram, convenient for maintenance, repair.
7. The height difference of connecting the tubing within 16.4 ft., the length of connecting the tubing within 32.8 ft..
8. Select a place where it is out of reach for the children.
9. Select a place where will not block the passage and do not influence the city appearance.

## ◆ Notices for installation

### Safety Requirements For Electric Appliances

1. The power supply should be used the rated voltage and AC exclusive circuit, the power cable diameter should be satisfied.
2. Don't drag the power cable emphatically.
3. It should be reliably earthed, the installation work should be operated by the professional. The air switch must have the functions of magnetic tripping and heat tripping, in order to protect the short circuit and overloading.
4. The minimum distance from the unit and combustive surface is 4.9 ft..
5. The appliance shall be installed in accordance with national wiring regulations.
6. An all-pole disconnection switch having a contact separation of at least 0.12 in. in all poles should be connected in fixed wiring.

#### Note:

- Make sure that the Live wire or Zero line as well as the earth wire in the family power socket can not be wrong connected, there should be reliable and no short circuit in the diagram.
- wrong connection may cause fire.

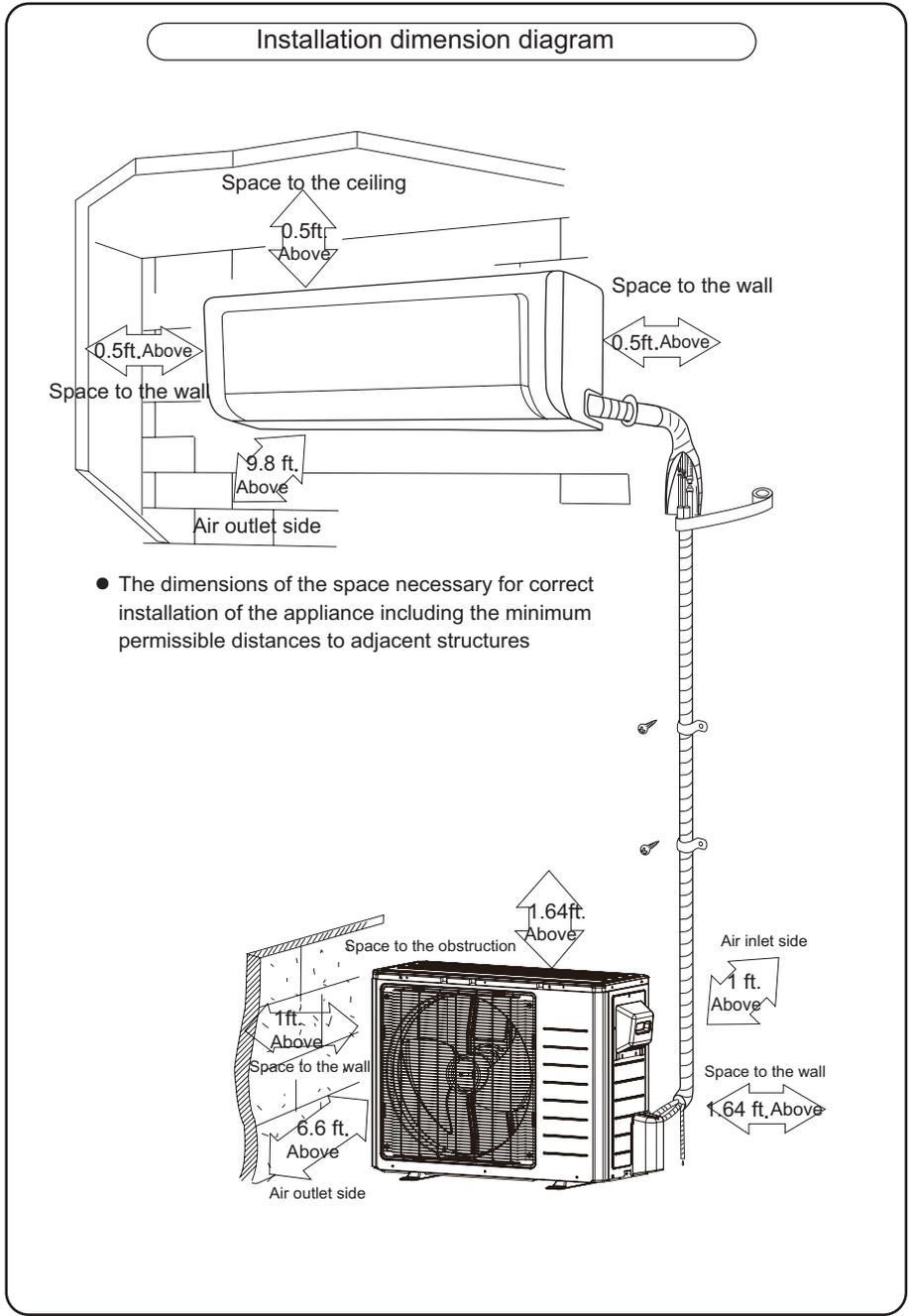
### Grounding requirements

1. Air conditioner is type I electric appliance, thus please do conduct reliable earthing measure.
2. The yellow-green two-color wire in air conditioner is earthing wire and cannot be used for other propose. It cannot be cut off and be fix it by screw, otherwise it would cause electric shock.
3. The earth resistance should accord to the National Criterion.
4. The user power must offer the reliable earthing terminal. Please don't connect the earthing wire with the following place:
  - ① Tap water pipe.
  - ② Gas pipe.
  - ③ Contamination pipe.
  - ④ Other places that professional personnel consider them unreliable.
5. The model and rating values for fuses according the silk print on fuse cover or related PCB board.

### Other

1. The temperature of refrigerant circuit will be high, please keep the interconnection cable away from the copper tube.
2. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.□□
3. Children should be supervised that they do not play with the appliance.

◆ Installation dimension diagram



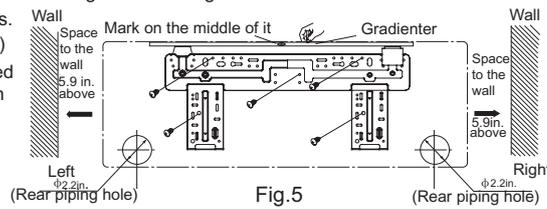
## ◆ Install indoor unit

### Install the rear panel

1. Always mount the rear panel horizontally. Due to the water tray of indoor unit has been adopted the both-way drainage design, the outlet of water tray should be adjusted slightly down when installing, that is taking the outlet of the water tray as the center of a circle, the included angle between the evaporator and level should be 0 or more, that is good for condensing water drainage.

2. Fix the rear panel on the wall with screws. (Where is pre-covered with plastic granula)

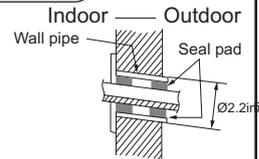
3. Be sure that the rear panel has been fixed firmly enough to withstand the weight of an adult of 132.3 lb., further more, the weight should be evenly shared by each screw.



### Install the piping hole

1. Make the piping hole ( $\Phi 2.2$ in.) in the wall at a slight downward slant to the outdoor side.

2. Insert the piping-hole sleeve into the hole to prevent the connection piping and wiring from being damaged when passing through the hole.

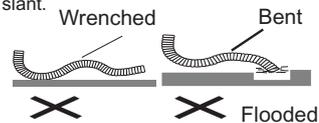


### Install the water drainage pipe

1. For well draining, the drain hose should be placed at a downward slant.

2. Do not wrench or bend the drain hose or flood its end by water.

3. When the long drainage hose passing through indoor, should wrap the insulation materials.



### Connect indoor and outdoor electric wires

1. Open the surface panel.

2. Remove the wiring cover (Fig.6).

3. Route the power connection cord and signal control wire (for cooling and heating unit only) from the back of the indoor unit and pull it toward the front through the wiring hole for connection.

4. Reassemble the clamp and wiring cover.

5. Recover the surface panel.

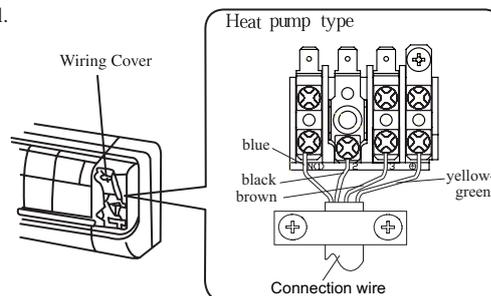


Fig.6

## ◆ Install indoor unit

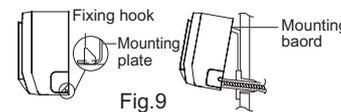
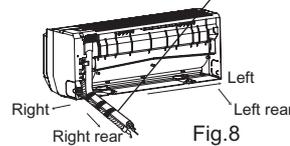
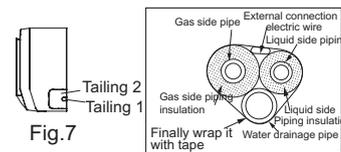
### NOTE:

When connecting the electric wire if the wire length is not enough, please contact with the authorized service shop to buy a exclusive electric wire that is long enough and the joint on the wire are not allowed.

- The electric wiring must be correctly connected, wrong connection may cause spare parts malfunction.
- Tighten the terminal screw in order to prevent loose.
- After tighten the screw, slight pull the wire and confirm whether is it firm or not.
- If the earth wire is wrong connection, that may cause electric shock.
- The cover plate must be fixed, and tighten the connection wire, if it is poor installed, that the dust, moisture may enter in or the connection terminal will be affected by outside force, and will cause fire or electric shock.

### Install the indoor unit

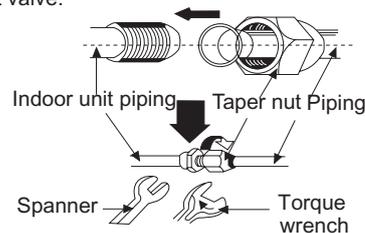
- The piping can be lead out from right, right rear, left left rear.
1. When routing the piping and wiring from the left or right side of indoor unit, cut off the tailings from the chassis in necessary(Show in Fig.7)
    - (1) Cut off the tailings 1 when routing the wiring only;
    - (2) Cut off the tailings 1 and tailings 2 when routing both the wiring and piping.
  2. Take out the piping from body case, wrap the piping electric wire, water pipe with tape and pull them through the piping hole (As show in Fig.8)
  3. Hange the mounting slots of the indoor unit on the upper tabs of the rear panel and check if it is firm enough.(As show in Fig.9)
  4. The height of the installed location should be 8.2ft. or more from the floor.



### Install the connection pipe

1. Align the center of the piping flare with the relevant valve.
2. Screw in the flare nut by hand and then tighten the nut with spanner and torque wrench refer to the following:

Hex nut diameter	Tightening torque (N · m)
Φ1/4	15~20
Φ 3/8	31~35
Φ 1/2	50~55
Φ 7/11	60~65
Φ 3/4	70~75



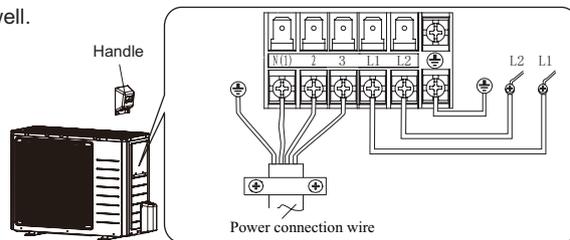
NOTE: Firstly connect the connection pipe to indoor unit, then to outdoor unit; pay attention to the piping bending, do not damage the connection pipe; the joint nut couldn't tighten too much, otherwise it may cause leakage.

## ◆ Install outdoor unit

### Electric wiring

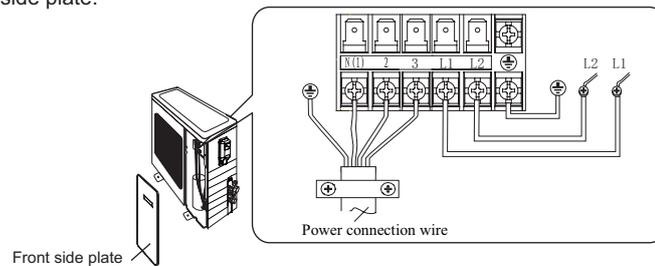
For 18K UNIT:

1. Disassemble the handle on the outdoor unit right side plate.
2. Take off wire clamp. Connect and fix power connect cord (for cooling and heating unit, connect and fix power connect cord and signal control wire) to terminal of line bank. Wiring should fit that of indoor unit.
3. Fix the power connection cable with wire clamp, (for cooling and heating unit, use the wire clamp to fix the power connection cable and the signal control wire), then connect the corresponding connector.
4. Ensure wire has been fixed well.
5. Install the handle.



For 24K UNIT:

1. Remove the front side plate.
2. Take off wire clamp. Connect and fix power connect cord to terminal of line bank. Wiring should fit that of indoor unit.
3. Fix the power connection cable with wire clamp, then connect the corresponding connector.
4. Ensure wire has been fixed well.
5. Install the front side plate.



NOTE:

- Wrong wiring may cause spare parts malfunction.
- After the cable fixed, make sure there should be a free space between the connection and connection and fixing place on the lead wire.

## ◆ Install outdoor unit

### Air purging and leakage test

1. Connect charging hose of manifold valve to charge end of low pressure valve (both high/low pressure valves must be tightly shut).
2. Connect joint of charging hose to vacuum pump.
3. Fully open handle of Lo manifold valve.
4. Open the vacuum pump to evacuate. At the beginning, slightly loosen joint nut of low pressure valve to check if there is air coming inside. (If noise of vacuum pump has been changed, the reading of multimeter is 0) Then tighten the nut.
5. Keep evacuating for more than 15mins and make sure the reading of multi-meter is -14.5 PSI.
6. Fully open high/low pressure valves.
7. Remove charging hose from charging end of low pressure valve.
8. Tighten bonnet of low-pressure valve. (As shown in Fig.10)

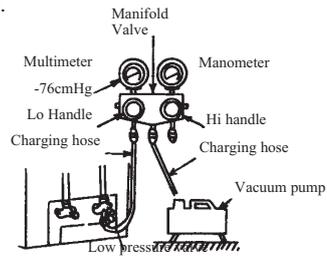
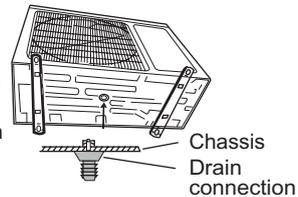


Fig. 10

### Condensate drainage of outdoor unit (no for cooling only)

The condensate and defrosting water formed during heating in the outdoor unit can be properly discharged by drainage pipe.

Installation method: set the drain connection in  $\varnothing 1$  hole of the chassis has been installed and then connect drainage pipe with drain nozzle, so that condensate and defrosting water can be properly discharged.



◆ Check after installation and test operation

Check after installation

Items to be checked	Possible malfunction
Has it been fixed firmly?	The unit may drop, shake or emit noise.
Have you done the refrigerant leakage test?	It may cause insufficient cooling(heating) capacity
Is heat insulation sufficient?	It may cause condensation and dripping.
Is water drainage well?	It may cause condensation and dripping.
Is the voltage in accordance with the rated voltage marked on the nameplate?	It may cause electric malfunction or damage the part.
Is the electric wiring and piping connection installed correctly and securely?	It may cause electric malfunction or damage the part.
Has the unit been connected to a secure earth connection?	It may cause electrical leakage.
Is the power cord specified?	It may cause electric malfunction or damage the part.
Is the inlet and outlet been covered?	It may cause insufficient cooling(heating) capacity.
Has the length of connection pipes and refrigerant capacity been recorded?	The refrigerant capacity is not accurate.

Test Operation

1. Before test operation

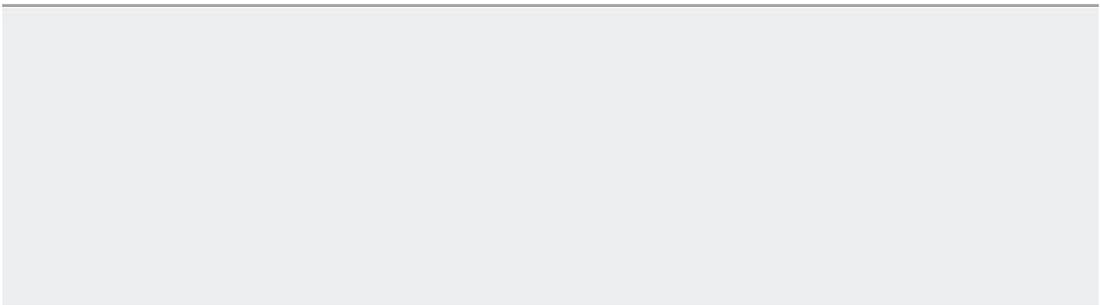
- (1) Do not switch on power before installation is finished completely.
- (2) Electric wiring must be connected correctly and securely.
- (3) Cut-off valves of the connection pipes should be opened.
- (4) All the impurities such as scraps and thrums must be cleared from the unit.

2. Test operation method

- (1) Switch on power, press "ON/OFF" button on the wireless remote control to start the operation.
- (2) Press MODE button, to select the COOL, HEAT (Cooling only unit is not available), FAN to check whether the operation is normal or not.

## ◆ Malfunction Tab

Name of malfunction	Display of double digit code	Display of lamp		
		Running lamp	Cooling lamp	Heating lamp
Refrigerant system high pressure protection	E1	blink 1 time		
Anti-freezing protection	E2	blink 2 times		
Compressor exhaust high temperature protection	E4	blink 4 times		
AC over-current protection	E5	blink 5 times		
Communication failure between indoor unit and outdoor unit	E6	blink 6 times		
Anti-high temperature protection	E8	blink 8 times		
No feedback of indoor fan motor	H6	blink 11 times		
Jumper cap malfunction protection	C5	blink 15 times		
Indoor ambient sensor open or short circuit	F1		blink 1 time	
Indoor tube sensor open or short circuit	F2		blink 2 times	
Outdoor ambient sensor open or short circuit	F3		blink 3 times	
Outdoor tube sensor open or short circuit	F4		blink 4 times	
Exhaust sensor open or short circuit	F5		blink 5 times	
Over load limit / drop frequency	F6		blink 6 times	
Over current limit / drop frequency	F8		blink 8 times	
High exhaust temperature limit / drop frequency	F9		blink 9 times	
Over voltage protection for PN	PH		blink 11 times	
AC current detect circuit malfunction	U5		blink 13 times	
Compressor reverse protection	U4		blink 14 times	
Over compressor phase current protection	P5		blink 15 times	
Inlet tube sensor malfunction	b5		blink 19 times	
Outdoor DC fan motor malfunction	L3		blink 21 times	
Outlet tube sensor malfunction	b7		blink 22 times	
Door malfunction	FC			
Compressor overload sensor malfunction	FE			
Defrosting	H1			blink 1 time
Static clearing dust protection	H2			blink 2 times
Compressor over load protection	H3			blink 3 times
System abnormal protection	H4			blink 4 times
IPM protection	H5			blink 5 times
PFC protection	HC			blink 6 times
Compressor loss step protection	H7			blink 7 times
Heating anti-high temperature drop frequency	H0			blink 10 times
Startup failure	Lc			blink 11 times
Compressor protection against loss of phase	U2			blink 12 times
Compressor phase current detection circuit malfunction	U1			blink 13 times
Compressor demagnetization protection	HE			blink 14 times
Loading EEPROM malfunction	EE			blink 15 times
Communication failure between main board and driver board	P6			blink 16 times
Capacitor charge malfunction	PU			blink 17 times
IPM sensor circuit malfunction	P7			blink 18 times
IPM high temperature protection	P8			blink 19 times
PN voltage drop protection	U3			blink 20 times
Low PN voltage protection	PL			blink 21 times
Current detect circuit malfunction or Current sensor malfunction	Pc			
Compressor loss of phase protection	Ld			
Compressor locked rotary protection	LE			
IPM over temperature limit / drop frequency	EU			
4-way valve reversal abnormal	U7			
Disconnection of the exhaust temperature sensor	U8			
AC power zero voltage detect error	U9			
Over tube temperature drop frequency	FA			
Anti-freezing limit / drop frequency	FH			



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