GREE
AIR CONDITIONER

OWNER'S MANUAL

Split Air Conditioner *INVERTER*

Thank you for choosing our product.
For proper operation, please read and keep this manual carefully.
If you have lost the Owner's Manual, please contact the local agent or visit
www.gree.com or sent email to global@gree.com.cn for electronic version.

GWC09BC-K6DNA1B
GWC12BC-K6DNA1B
GWC18BD-K6DNA1B
GWC24BE-K6DNA1B

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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. Children should be supervised to ensure that they do not play with the appliance.

If it needs to install, move or maintain the air conditioner, please contact dealer or local service center to conduct it at first. Air conditioner must be installed, moved or maintained by appointed unit. Otherwise, it may cause serious damage or personal injury or death.

⚠️🔥 Appliance filled with flammable gas R32.

📖 Before use the appliance, read the owner's manual first.

📖ℹ️ Before install the appliance, read the installation manual first.

🔧📖 Before repair the appliance, read the service manual first.

The Refrigerant

- To realize the function of the air conditioner unit, a special refrigerant circulates in the system. The used refrigerant is the fluoride R32, which is specially cleaned. The refrigerant is flammable and inodorous. Furthermore, it can leads to explosion under certain conditions. But the flammability of the refrigerant is very low. It can be ignited only by fire.

- Compared to common refrigerants, R32 is a nonpolluting refrigerant with no harm to the ozonosphere. The influence upon the greenhouse effect is also lower. R32 has got very good thermodynamic features which lead to a really high energy efficiency. The units therefore need a less filling.

WARNING：

Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacture. Should repair be necessary, contact your nearest authorized Service Centre. Any repairs carried out by unqualified personnel may be dangerous. The appliance shall be stored in a room without continuously operating ignition sources. (for example: open flames, an operating gas appliance or an operating electric heater.) Do not pierce or burn.

Appliance shall be installed, operated and stored in a room with a floor area larger than $X\,m^2$. (Please refer to table "a" in section of " Safety Operation of Inflammable Refrigerant" for Space X.)

Appliance filled with flammable gas R32. For repairs, strictly follow manufacturer's instructions only. Be aware that refrigrants not contain odour. Read specialist's manual.

⚠️🔥 📖 📖ℹ️ 🔧📖

Precautions
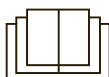
Operation and Maintenance

- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory ormental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.
- Do not connect air conditioner to multi-purpose socket. Otherwise, it may cause fire hazard.
- Do disconnect power supply when cleaning air conditioner. Otherwise, it may cause electric shock.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- Do not wash the air conditioner with water to avoid electric shock.
- Do not spray water on indoor unit. It may cause electric shock or malfunction.
- After removing the filter, do not touch fins to avoid injury.
- Do not use fire or hair dryer to dry the filter to avoid deformation or fire hazard.
- Maintenance must be performed by qualified professionals. Otherwise, it may cause personal injury or damage.
- Do not repair air conditioner by yourself. It may cause electric shock or damage. Please contact dealer when you need to repair air conditioner.
- Do not extend fingers or objects into air inlet or air outlet. It may cause personal injury or damage.
- Do not block air outlet or air inlet. It may cause malfunction.
- Do not spill water on the remote controller, otherwise the remote controller may be broken.
- When below phenomenon occurs, please turn off air conditioner and disconnect power immediately, and then contact the dealer or qualified professionals for service.
  - Power cord is overheating or damaged.
  - There's abnormal sound during operation.
  - Circuit break trips off frequently.
  - Air conditioner gives off burning smell.
  - Indoor unit is leaking.

Precautions

⚠ WARNING

- If the air conditioner operates under abnormal conditions, it may cause malfunction, electric shock or fire hazard.
- When turning on or turning off the unit by emergency operation switch, please press this switch with an insulating object other than metal.
- Do not step on top panel of outdoor unit, or put heavy objects. It may cause damage or personal injury.

Attachment
- Installation must be performed by qualified professionals. Otherwise, it may cause personal injury or damage.
- Must follow the electric safety regulations when installing the unit.
- According to the local safety regulations, use qualified power supply circuit and circuit break.
- Do install the circuit break. If not, it may cause malfunction.
- An all-pole disconnection switch having a contact separation of at least 3mm in all poles should be connected in fixed wiring.
- Including an circuit break with suitable capacity, please note the following table.Air switch should be included magnet buckle and heating buckle function, it can protect the circuit-short and overload.
- Air Conditioner should be properly grounded. Incorrect grounding may cause electric shock.
- Don't use unqualified power cord.
- Make sure the power supply matches with the requirement of air conditioner. Unstable power supply or incorrect wiring or malfunction. Please install proper power supply cables before using the air conditioner.
- Properly connect the live wire, neutral wire and grounding wire of power socket.
- Be sure to cut off the power supply before proceeding any work related to electricity and safety.
- Do not put through the power before finishing installation.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- The temperature of refrigerant circuit will be high, please keep the interconnection cable away from the copper tube.
- The appliance shall be installed in accordance with national wiring regulations.
- Installation must be performed in accordance with the requirement of NEC and CEC by authorized personnel only.

Precautions

⚠ WARNING

- The air conditioner is the first class electric appliance. It must be properly grounding with specialized grounding device by a professional. Please make sure it is always grounded effectively, otherwise it may cause electric shock.
- The yellow-green wire in air conditioner is grounding wire, which can't be used for other purposes.
- The grounding resistance should comply with national electric safety regulations.
- The appliance must be positioned so that the plug is accessible.
- All wires of indoor unit and outdoor unit should be connected by a professional.
- If the length of power connection wire is insufficient，please contact the supplier for a new one. Avoid extending the wire by yourself.
- For the air conditioner with plug, the plug should be reachable after finishing installation.
- For the air conditioner without plug, an circuit break must be installed in the line.
- If you need to relocate the air conditioner to another place, only the qualified person can perform the work. Otherwise, it may cause personal injury or damage.
- Select a location which is out of reach for children and far away from animals or plants.If it is unavoidable, please add the fence for safety purpose.
- The indoor unit should be installed close to the wall.
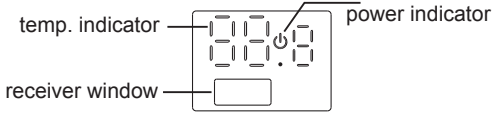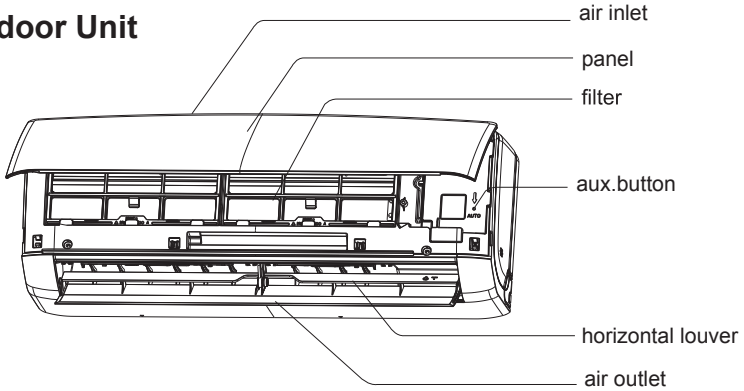
Working temperature range

	Indoor side DB/WB(℃)	Outdoor side DB/WB(℃)
Maximum cooling	35/24	48/30

NOTICE:

- The operating temperature range (outdoor temperature) for cooling only unit is 18℃~48℃.

Parts Name

Indoor Unit

air inlet

panel

filter

aux.button

horizontal louver
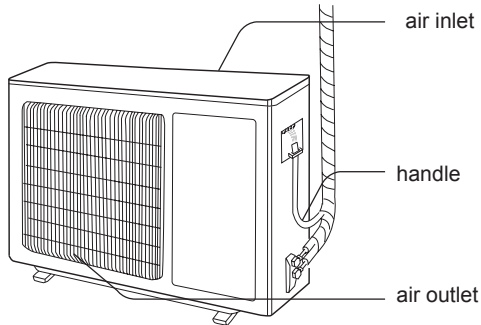
air outlet

temp. indicator

power indicator

receiver window

(Display content or position may be different from above graphics, please refer to actual products)

remote control

Outdoor Unit

air inlet

handle

air outlet

NOTICE:

- Actual product may be different from above graphics, please refer to actual products.
- 0.1℃ temperature setting is only available for remote controller.

Buttons on remote controller

1 ON/OFF button

2 MODE button

3 FAN button

4 TURBO button

5 ▲/ ▼ button

6 ⛆ button

7 ⿻ button

8 SLEEP button

9 I FEEL button

10 TIMER ON/TIMER OFF button

11 CLOCK button

12 QUIET button

13 WiFi button

14 LIGHT button

15 ⛰/⛰ button

16 TEMP button

Introduction for icons on display screen

I feel

Quiet

Operation mode

Auto mode

Cool mode

Dry mode

Fan mode

Heat mode

Set fan speed
(No ◗◖◖, ◗◖◖◖ fan speed. It's displayed only after turning it on.)

Turbo mode

Send signal

Healthy mode

Scavenging functions

8℃ heating function
This is a general remote controller.Some models have this function while some do not. Please refer to the actual models.

Set temperature

X-FAN function

Set time

TIMER ON /TIMER OFF

Clock

Sleep mode

Light

Child lock

Up & down swing

Left & right swing

Temp. display type

⌂ : Set temp.   ⌂ᵢ : Indoor ambient temp.
⌂ᵒ : Outdoor ambient temp.

Introduction for buttons on remote controller

Note:
● This is a general use remote controller, it could be used for the air conditioners with multifunction; For some function, which the model doesn't have, if press the corresponding button on the remote controller that the unit will keep the original running status.
● After putting through the power, the air conditioner will give out a sound. Operation indictor "⏻" is ON (red indicator). After that, you can operate the air conditioner by using remote controller.
● Under on status, pressing the button on the remote controller, the signal icon "📶" on the display of remote controller will blink once and the air conditioner will give out a "de" sound, which means the signal has been sent to the air conditioner.

1 ON/OFF button

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

2 MODE button

Press this button to select your required operation mode.

AUTO   COOL   DRY   FAN   HEAT

● When selecting auto mode, air conditioner will operate automatically according to ex-factory setting. Set temperature can't be adjusted and will not be displayed as well. Press "FAN" button can adjust fan speed. Press " 🔻 " / " 📶 " button can adjust fan blowing angle.
● After selecting cool mode, air conditioner will operate under cool mode. Cool indicator " ❄ "on indoor unit is ON. Press "▲" or "▼" button to adjust set tempe-rature. Press "FAN" button to adjust fan speed. Press " 🔻 " / " 📶 " button to adjust fan blowing angle.
● When selecting dry mode, the air conditioner operates at low speed under dry mode. Dry indicator " 💧 " on indoor unit is ON. Under dry mode, fan speed can't be adjusted. Press " 🔻 " / " 📶 " button to adjust fan blowing angle.
● When selecting fan mode, the air conditioner will only blow fan, no cooling and no heating. All indicators are OFF. Press "FAN" button to adjust fan speed. Press " 🔻 " / " 📶 " button to adjust fan blowing angle.
● When selecting heating mode, the air conditioner operates under heat mode. Heat indicator " ☀ " on indoor unit is ON. Press "▲" or "▼" button to adjust set temperature. Press "FAN" button to adjust fan speed. Press " 🔻 " / " 📶 " button to adjust fan blowing angle. (Cooling only unit won't receive heating mode signal. If setting heat mode with remote controller, press ON/OFF button can't start up the unit).

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Introduction for buttons on remote controller

Note:
● For preventing cold air, after starting up heating mode, indoor unit will delay 1~5 minutes to blow air (actual delay time is depend on indoor ambient temperature).
● Set temperature range from remote controller: 16~30°C.
  Fan speed: auto, low speed, medium speed, high speed.

3　FAN button

Pressing this button can set fan speed circularly as: auto (AUTO), low(◢) ,medium (◢◢), high(◢◢◳).
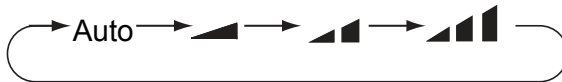
Note:
● Under AUTO speed, air conditioner will select proper fan speed automatically according to ex-factory setting.
● Fan speed under dry mode is low speed.
● X-FAN function：Hold fan speed button for 2s in COOL or DRY mode, the icon "�֎" is displayed and the indoor fan will continue operation for a few minutes in order to dry the indoor unit even though you have turned off the unit. After energization, X-FAN OFF is defaulted. X-FAN is not available in AUTO, FAN or HEAT mode.

　This function indicates that moisture on evaporator of indoor unit will be blowed after the unit is stopped to avoid mould.
　• Having set X-FAN function on: After turning off the unit by pressing ON/OFF button indoor fan will continue running for a few minutes. at low speed. In this period, Hold fan speed button for 2s to stop indoor fan directly.
　• Having set X-FAN function off: After turning off the unit by pressing ON/OFF button, the complete unit will be off directly.

4　TURBO button

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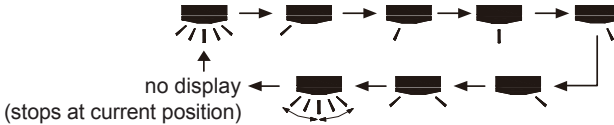
5　▲/ ▼ button

● Press "▲" or "▼" button once increase or decrease set temperature 0.1°C(°F). Holding "▲" or "▼" button, set temperature on remote controller will change quickly. On releasing button after setting is finished, temperature indicator on indoor unit will change accordingly. (Temperature can't be adjusted under auto mode)

Introduction for buttons on remote controller

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

6 🔲 button

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

no display
(stops at current position)

Note:

● Press this button continuously more than 2s, the main unit will swing back and forth from left to right, and then loosen the button, the unit will stop swinging and present position of guide louver will be kept immediately.
● Under swing left and right mode, when the status is switched from off to 🔲, if press this button again 2s later, 🔲 status will switch to off status directly; if press this button again within 2s, the change of swing status will also depend on the circulation sequence stated above.
● The 🔲 function is only available for some models.

7 🔲 button

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

no display
(horizontal louvers stops at current position)
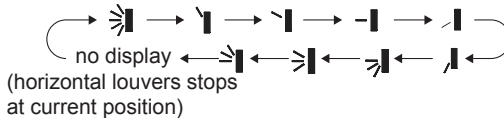
● When selecting " 🔲 ", air conditioner is blowing fan automatically. Horizontal louver will automatically swing up & down at maximum angle.
● When selecting " 🔲、🔲、🔲、🔲、🔲 ", air conditioner is blowing fan at fixed position. Horizontal louver will stop at the fixed position.
● When selecting " 🔲、🔲、🔲 " , air conditioner is blowing fan at fixed angle. Horizontal louver will send air at the fixed angle.
● Hold " 🔲 "button above 2s to set your required swing angle. When reaching your required angle, release the button.

Note:

● " 🔲、🔲、🔲 " may not be available. When air conditioner receives this signal, the air conditioner will blow fan automatically.

Introduction for buttons on remote controller

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

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

8 SLEEP button

Under COOL, HEAT mode, press this button to start up sleep function." ☾" icon is displayed on remote controller. Press this button again to cancel sleep function and " ☾" icon will disappear.After powered on,Sleep Off is defaulted. After the unit is turned off, the Sleep function is canceled.
In this mode, the time of time can be adjusted. Under Fan and Auto and DRY modes, this function is not available.

9 I FEEL button

Press this button to start I FEEL function and ".⫯" will be displayed on the remote controller. After this function is set, the remote controller will send the detected ambient temperature to the controller and the unit will automatically adjust the indoor temperature according to the detected temperature. Press this button again to close I FEEL function and ".⫯" will disappear.

● Please put the remote controller near user when this function is set. Do not put the remote controller near the object of high temperature or low temperature in order to avoid detecting inaccurate ambient temperature.

10 TIMER ON / TIMER OFF button

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

● TIMER OFF button
  "TIMER OFF" button can set the time for timer off. After pressing this button,"🕘" icon disappears and the word "OFF" on remote controller blinks. Press "▲" or "▼" button to adjust TIMER OFF setting. After each pressing "▲" or "▼" button,

Introduction for buttons on remote controller

TIMER OFF setting will increase or decrease 1min. Hold "▲" or "▼" button, 2s later, the time will change quickly until reaching your required time.
Press "TIMER OFF" word "OFF" will stop blinking. "🕒" icon resumes displaying. Cancel TIMER OFF. Under the condition that TIMER OFF is started up, press "TIMER OFF" button to cancel it.

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

11 CLOCK button

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

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

12 QUIET button

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

Note:
● The Quiet function cannot be set up in Fan and Dry mode.
● The Quiet function is only available for some models.

13 WiFi button

Press " **WiFi** " button to turn on or turn off WiFi function. When WiFi function is turned on, the " **WiFi** " icon will be displayed on remote controller; Under status of unit off, press "MODE" and " **WiFi** " buttons simultaneously for 1s, WiFi module will restore to factory default setting.
● This function is only available for some models.

Introduction for buttons on remote controller

14 LIGHT button

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

15 ⌆/⌂ button

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

16 TEMP button

By pressing this button, you can see indoor set temperature, indoor ambient temp-erature or outdoor ambient temperature on indoor unit's display. The setting on remote controlleris selected circularly as below:
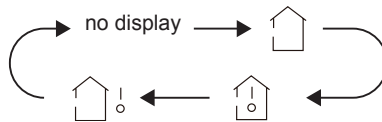
● When selecting "⌂" or no display with remote controller, temperature indicator on indoor unit displays set temperature.
● When selecting "⌂" with remote controller, temperature indicator on indoor unit displays indoor ambient temperature.
● When selecting "⌂" with remote controller, temperature indicator on indoor unit displays outdoor ambient temperature.

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

Function introduction for combination buttons |

Energy-saving function

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

Note:

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

8℃ heating function

Under heating mode, press "TEMP" and "CLOCK" buttons simultaneously to start up or turn off 8℃ heating function. When this function is started up, "⑤" and "8℃ " will be shown on remote controller, and the air conditioner keep the heating status at 8℃ . Press "TEMP" and "CLOCK" buttons simultaneously again to exit 8℃ heating function.

Note:

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

Child lock function

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

Temperature display switchover function

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

Operation guide

1. After putting through the power, press "ON/OFF" button on remote controller to turn on the air conditioner.

2. Press "MODE" button to select your required mode: AUTO, COOL, DRY, FAN,HEAT.

3. Press "▲" or "▼" button to set your required temperature. (Temperature can't be adjusted under auto mode).

4. Press "FAN" button to set your required fan speed: auto, low, medium and high speed.

5. Press " ≩▌ " button to select fan blowing angle.

Replacement of batteries in remote controller

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

signal sender   battery

reinstall

remove

Cover of battery box
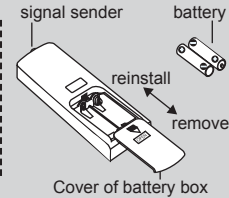
NOTICE

● During operation, point the remote control signal sender at the receiving window on indoor unit.

● The distance between signal sender and receiving window should be no more than 8m, and there should be no obstacles between them.

● Signal may be interfered easily in the room where there is fluorescent lamp or wireless telephone; remote controller should be close to indoor unit during operation.

● Replace new batteries of the same model when replacement is required.

● When you don't use remote controller for a long time, please take out the batteries.

● If the display on remote controller is fuzzy or there's no display, please replace batteries.

Emergency operation

If remote controller is lost or damaged, please use auxiliary button to turn on or turn off the air conditioner. The operation in details are as below:
As shown in the fig. Open panel, press aux. button to turn on or turn off the air conditioner. When the air conditioner is turned on, it will operate under auto mode.

panel

aux. button
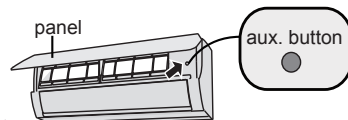
⚠ WARNING:
Use insulated object to press the auto button

Clean and Maintenance

⚠ WARNING

■ Turn off the air conditioner and disconnect the power before cleaning the air conditioner to avoid electric shock.
■ Do not wash the air conditioner with water to avoid electric shock.
■ Do not use volatile liquid to clean the air conditioner.

Clean surface of indoor unit

When the surface of indoor unit is dirty, it is recommended to use a soft dry cloth or wet cloth to wipe it.

NOTICE:

● Do not remove the panel when cleaning it.

Clean filter

1 Open panel
Pull out the panel to a certain angle as shown in the fig.

3 Clean filter
● Use dust catcher or water to clean the filter.
● When the filter is very dirty, use the water (below 45℃) to clean it, and then put it in a shady and cool place to dry.

2 Remove filter
Remove the filter as indicated in the fig.
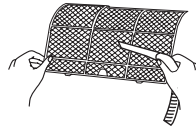
4 Install filter
Install the filter and then close the panel cover tightly.
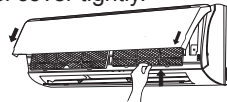
⚠ WARNING

■ The filter should be cleaned every three months. If there is much dust in the operation environment, clean frequency can be increased.
■ After removing the filter, do not touch fins to avoid injury.
■ Do not use fire or hair dryer to dry the filter to avoid deformation or fire hazard.

NOTICE: **Checking before use-season/Checking after use-season**

Malfunction analysis

General phenomenon analysis

Please check below items before asking for maintenance. If the malfunction still can't be eliminated, please contact local dealer or qualified professionals.

Phenomenon	Check items	Solution
Indoor unit can't receive remote controller's signal or remote controller has no action.	● Whether it's interfered severely (such as static electricity, stable voltage)?	● Pull out the plug. Reinsert the plug after about 3min, and then turn on the unit again.
	● Whether remote controller is within the signal receiving range?	● Signal receiving range is 8m.
	● Whether there are obstacles?	● Remove obstacles.
	● Whether remote controller is pointing at the receiving window?	● Select proper angle and point the remote controller at the receiving window on indoor unit.
	● Is sensitivity of remote controller low; fuzzy display and no display?	● Check the batteries. If the power of batteries is too low, please replace them.
	● No display when operating remote controller?	● Check whether remote controller appears to be damaged. If yes, replace it.
	● Fluorescent lamp in room?	● Take the remote controller close to indoor unit. ● Turn off the fluoresent lamp and then try it again.
No air emitted from indoor unit	● Air inlet or air outlet of indoor unit is blocked?	● Eliminate obstacles.
	● Under heating mode, indoor temperature is reached to set temperature?	● After reaching to set temperature, indoor unit will stop blowing out air.
	● Heating mode is turned on just now?	● In order to prevent blowing out cold air, indoor unit will be started after delaying for several minutes, which is a normal phenomenon.

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Malfunction analysis

Phenomenon	Check items	Solution
Air conditioner can't operate	● Power failure?	● Wait until power recovery.
	● Is plug loose?	● Reinsert the plug.
	● Air switch trips off or fuse is burnt out?	● Ask professional to replace air switch or fuse.
	● Wiring has malfunction?	● Ask professional to replace it.
	● Unit has restarted immediately after stopping operation?	● Wait for 3min, and then turn on the unit again.
	● Whether the function setting for remote controller is correct?	● Reset the function.
Mist is emitted from indoor unit's air outlet	● Indoor temperature and humidity is high?	● Because indoor air is cooled rapidly. After a while, indoor temperature and humidity will be decrease and mist will disappear.
Set temperature can't be adjusted	● Unit is operating under auto mode?	● Temperature can't be adjusted under auto mode. Please switch the operation mode if you need to adjust temperature.
	● Your required temperature exceeds the set temperature range?	● Set temperature range: 16℃ ~30℃ .
Cooling (heating) effect is not good.	● Voltage is too low?	● Wait until the voltage resumes normal.
	● Filter is dirty?	● Clean the filter.
	● Set temperature is in proper range?	● Adjust temperature to proper range.
	● Door and window are open?	● Close door and window.
Odours are emitted	● Whether there's odour source, such as furniture and cigarette, etc.	● Eliminate the odour source. ● Clean the filter.

Malfunction analysis

Phenomenon	Check items	Solution
Air conditioner operates abnormally	● Whether there's interference, such as thunder, wireless devices, etc.	● Disconnect power, put back power, and then turn on the unit again.
Outdoor unit has vapor	● Heating mode is turned on?	● During defrosting under heating mode, it may generate vapor, which is a normal phenomenon.
"Water flowing" noise	● Air conditioner is turned on or turned off just now?	● The noise is the sound of refrigerant flowing inside the unit, which is a normal phenomenon.
Cracking noise	● Air conditioner is turned on or turned off just now?	● This is the sound of friction caused by expansion and/or contraction of panel or other parts due to the change of temperature.

Error Code

● When air conditioner status is abnormal, temperature indicator on indoor unit will blink to display corresponding error code. Please refer to below list for identification of error code.

temp. indicator

power indicator

receiver window
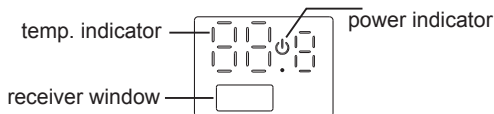
Above indicator diagram is only for reference. Please refer to actual product for the actual indicator and position.

Error code	Troubleshooting
E1/E5/E6/E8/U8/H3/H6	It can be eliminated after restarting the unit. If not, please contact qualified professionals for service.
C5/F0/F1/F2/F4	Please contact qualified professionals for service.

Note: If there're other error codes, please contact qualified professionals for service.

⚠ WARNING

■ When below phenomenon occurs, please turn off air conditioner and disconnect power immediately, and then contact the dealer or qualified professionals for service.
  ● Power cord is overheating or damaged.
  ● There's abnormal sound during operation.   ● Air switch trips off frequently.
  ● Air conditioner gives off burning smell.   ● Indoor unit is leaking.
■ Do not repair or refit the air conditioner by yourself.
■ If the air conditioner operates under abnormal conditions, it may cause malfunction, electric shock or fire hazard.

Safety operation of flammable refrigerant

Qualification requirement for installation and maintenance man

• All the work men who are engaging in the refrigeration system should bear the valid certification awarded by the authoritative organization and the qualification for dealing with the refrigeration system recognized by this industry. If it needs other technician to maintain and repair the appliance, they should be supervised by the person who bears the qualification for using the flammable refrigerant.

• It can only be repaired by the method suggested by the equipment's manufacturer.

Installation notes

• The air conditioner is not allowed to use in a room that has running fire (such as fire source, working coal gas ware, operating heater).

• It is not allowed to drill hole or burn the connection pipe.

• The air conditioner must be installed in a room that is larger than the minimum room area. The minimum room area is shown on the nameplate or following table a.

• Leak test is a must after installation.

table a - Minimum room area (m^2)

	Charge amount (kg)	≤1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2	2.1	2.2	2.3	2.4	2.5
Minimum room area(m^2)	floor location	/	14.5	16.8	19.3	22	24.8	27.8	31	34.3	37.8	41.5	45.4	49.4	53.6
	window mounted	/	5.2	6.1	7	7.9	8.9	10	11.2	12.4	13.6	15	16.3	17.8	19.3
	wall mounted	/	1.6	1.9	2.1	2.4	2.8	3.1	3.4	3.8	4.2	4.6	5	5.5	6
	ceiling mounted	/	1.1	1.3	1.4	1.6	1.8	2.1	2.3	2.6	2.8	3.1	3.4	3.7	4

Maintenance notes

• Check whether the maintenance area or the room area meet the requirement of the nameplate.
  - It's only allowed to be operated in the rooms that meet the requirement of the nameplate.
• Check whether the maintenance area is well-ventilated.
  - The continuous ventilation status should be kept during the operation process.
• Check whether there is fire source or potential fire source in the maintenance area.
  - The naked flame is prohibited in the maintenance area; and the "no smoking" warning board should be hanged.
• Check whether the appliance mark is in good condition.
  - Replace the vague or damaged warning mark.

Welding

• If you should cut or weld the refrigerant system pipes in the process of maintaining, please follow the steps as below:

Safety operation of flammable refrigerant

    a. Shut down the unit and cut power supply

    b. Eliminate the refrigerant

    c. Vacuuming

    d. Clean it with N2 gas

    e. Cutting or welding

    f. Carry back to the service spot for welding

- The refrigerant should be recycled into the specialized storage tank.
- Make sure that there isn't any naked flame near the outlet of the vacuum pump and it's well-ventilated.

Filling the refrigerant

- Use the refrigerant filling appliances specialized for R32. Make sure that different kinds of refrigerant won't contaminate with each other.
- The refrigerant tank should be kept upright at the time of filling refrigerant.
- Stick the label on the system after filling is finished (or haven't finished).
- Don't overfilling.
- After filling is finished, please do the leakage detection before test running; another time of leak detection should be done when it's removed.

Safety instructions for transportation and storage

- Please use the flammable gas detector to check before unload and open the container.
- No fire source and smoking.
- According to the local rules and laws.

Installation dimension diagram

Space to the ceiling

At least 15cm

Space to the wall

At least 15cm

At least 15cm

Space to the wall

At least 300cm

Space to the obstruction

Space to the floor

At least 250cm

Space to the obstruction

At least 50cm

Space to the obstruction

At least 30cm

At least 30cm

Space to the wall

Space to the obstruction

At least 200cm

Drainage pipe

At least 50cm

Space to the obstruction

21
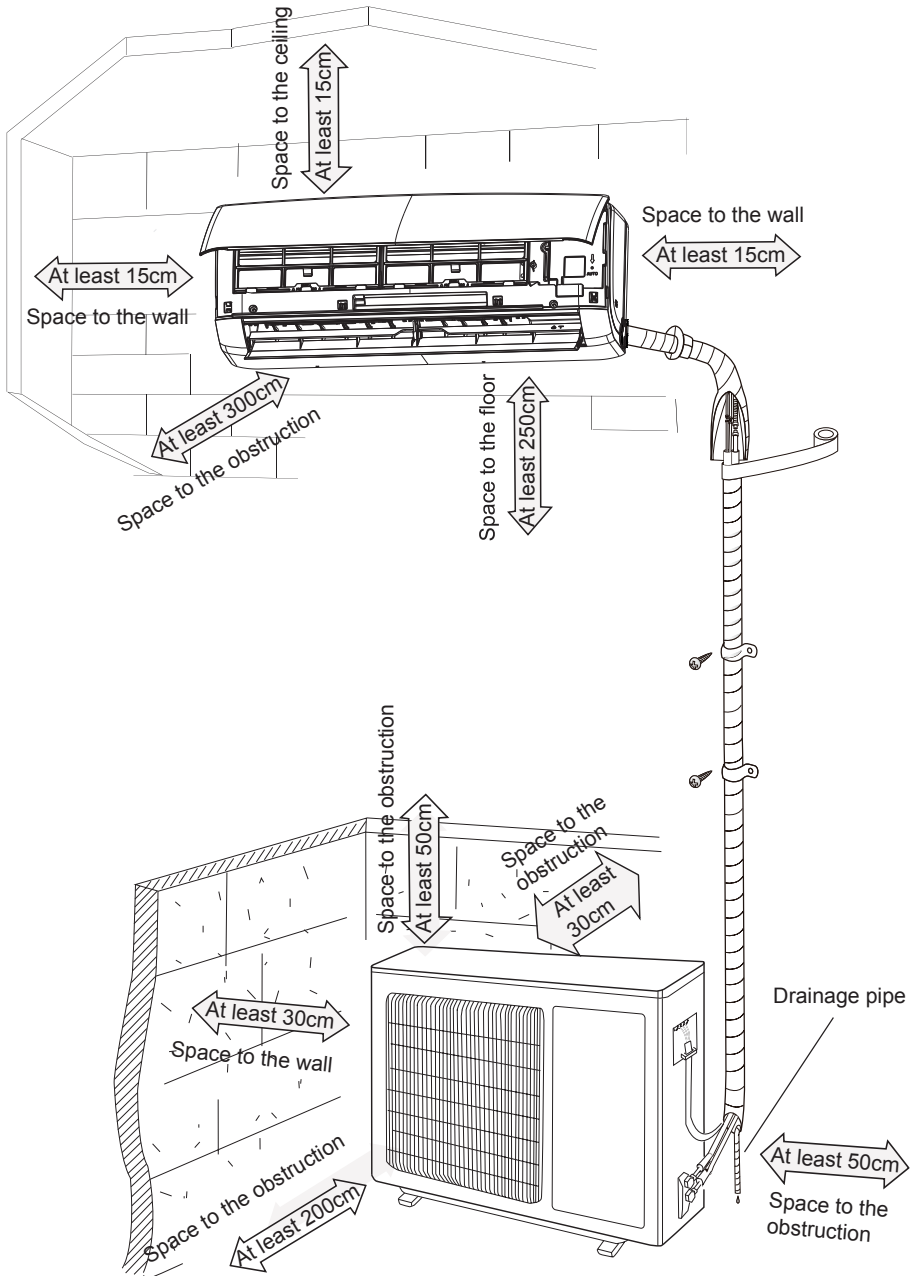
Safety precautions for installing and relocating the unit

⚠ Warning

- **When installing or relocating the unit, be sure to keep the refrigerant circuit free from air or substances other than the specified refrigerant.**
  Any presence of air or other foreign substance in the refrigerant circuit will cause system pressure rise or compressor rupture, resulting in injury.

- **When installing or moving this unit, do not charge the refrigerant which is not comply with that on the nameplate or unqualified refrigerant.**
  Otherwise, it may cause abnormal operation, wrong action, mechanical malfunction or even series safety accident.

- **When refrigerant needs to be recovered during relocating or repairing the unit, be sure that the unit is running in cooling mode.Then, fully close the valve at high pressure side (liquid valve).About 30-40 seconds later, fully close the valve at low pressure side (gas valve), immediately stop the unit and disconnect power. Please note that the time for refrigerant recovery should not exceed 1 minute.**
  If refrigerant recovery takes too much time, air may be sucked in and cause pressure rise or compressor rupture, resulting in injury.

- **During refrigerant recovery, make sure that liquid valve and gas valve are fully closed and power is disconnected before detaching the connection pipe.**
  If compressor starts running when stop valve is open and connection pipe is not yet connected, air will be sucked in and cause pressure rise or compressor rupture, resulting in injury.

- **When installing the unit, make sure that connection pipe is securely connected before the compressor starts running.**
  If compressor starts running when stop valve is open and connection pipe is not yet connected, air will be sucked in and cause pressure rise or compressor rupture, resulting in injury.

- **Prohibit installing the unit at the place where there may be leaked corrosive gas or flammable gas.**
  If there leaked gas around the unit, it may cause explosion and other accidents.

- **Do not use extension cords for electrical connections. If the electric wire is not long enough, please contact a local service center authorized and ask for a proper electric wire.**
  Poor connections may lead to electric shock or fire.

- **Use the specified types of wires for electrical connections between the indoor and outdoor units. Firmly clamp the wires so that their terminals receive no external stresses.**
  Electric wires with insufficient capacity, wrong wire connections and insecure wire terminals may cause electric shock or fire.

Tools for installation

1 Level meter	2 Screw driver	3 Impact drill
4 Drill head	5 Pipe expander	6 Torque wrench
7 Open-end wrench	8 Pipe cutter	9 Leakage detector
10 Vacuum pump	11 Pressure meter	12 Universal meter
13 Inner hexagon spanner		14 Measuring tape

Note:
- Please contact the local agent for installation.
- Don't use unqualified power cord.

Selection of installation location

Basic requirement	Indoor unit
Installing the unit in the following places maycause malfunction. If it is unavoidable, please consult the local dealer: 1.The place with strong heat sources, vapors, flammable or explosive gas, or volatile objects spread in the air. 2.The place with high-frequency devices (such as welding machine, medical equipment). 3.The place near coast area. 4.The place with oil or fumes in the air. 5.The place with sulfureted gas. 6.Other places with special circumstances. 7.The appliance shall not be installed in the laundry.	1. There should be no obstruction near air inlet and air outlet. 2. Select a location where the condensation water can be dispersed easily and won't affect other people. 3. Select a location which is convenient to connect the outdoor unit and near the power socket. 4. Select a location which is out of reach for children. 5. The location should be able to withstand the weight of indoor unit and won't increase noise and vibration. 6. The appliance must be installed 2.5m above floor. 7. Don't install the indoor unit right above the electric appliance. 8. Please try your best to keep way from fluorescent lamp.

Outdoor unit

1. Select a location where the noise and outflow air emitted by the outdoor unit will not affect neighborhood.
2. The location should be well ventilated and dry, in which the outdoor unit won't be exposed directly to sunlight or strong wind.
3. The location should be able to withstand the weight of outdoor unit.
4. Make sure that the installation follows the requirement of installation dimension diagram.
5. Select a location which is out of reach for children and far away from animals or plants.If it is unavoidable, please add the fence for safety purpose.

Requirements for electric connection

Safety precaution

1. Must follow the electric safety regulations when installing the unit.
2. According to the local safety regulations, use qualified power supply circuit and air switch.
3. Make sure the power supply matches with the requirement of air conditioner. Unstable power supply or incorrect wiring or malfunction. Please install proper power supply cables before using the air conditioner.
4. Properly connect the live wire, neutral wire and grounding wire of power socket.
5. Be sure to cut off the power supply before proceeding any work related to electricity and safety. For models with a power plug, make sure the plug is within reach after installation.
6. Do not put through the power before finishing installation.
7. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
8. The temperature of refrigerant circuit will be high, please keep the interconnection cable away from the copper tube.
9. The appliance shall be installed in accordance with national wiring regulations.
10. Appliance shall be installed, operated and stored in a room with a floor area larger than Xm^2. (Please refer to table "a" in section of " Safety Operation of Inflammable Refrigerant" for Space X.)

 Please notice that the unit is filled with flammable gas R32. Inappropriate treatment of the unit involves the risk of severe damages of people and material. Details to this refrigerant are found in chapter "refrigerant".

Grounding requirement

1. The air conditioner is the first class electric appliance. It must be properly grounding with specialized grounding device by a professional. Please make sure it is always grounded effectively, otherwise it may cause electric shock.
2. The yellow-green wire in air conditioner is grounding wire, which can't be used for other purposes.
3. The grounding resistance should comply with national electric safety regulations.
4. The appliance must be positioned so that the plug is accessible.
5. An all-pole disconnection switch having a contact separation of at least 3mm in all poles should be connected in fixed wiring.
6. Including an air switch with suitable capacity, please note the following table. Air switch should be included magnet buckle and heating buckle function, it can protect the circuit-short and overload. (Caution: please do not use the fuse only for protect the circuit)

Air-conditioner	Air switch capacity
09K、12K	10A
18K、24K	16A

Installation of indoor unit

Step one: choosing installation location

Recommend the installation location to the client and then confirm it with the client.

- -

Step two: install wall-mounting frame

1. Hang the wall-mounting frame on the wall; adjust it in horizontal position with the level meter and then point out the screw fixing holes on the wall.
2. Drill the screw fixing holes on the wall with impact drill (the specification of drill head should be the same as the plastic expansion particle) and then fill the plastic expansion particles in the holes.
3. Fix the wall-mounting frame on the wall with tapping screws (ST4.2X25TA) and then check if the frame is firmly installed by pulling the frame. If the plastic expansion particle is loose, please drill another fixing hole nearby.

- -

Step three: open piping hole

1. Choose the position of piping hole according to the direction of outlet pipe. The position of piping hole should be a little lower than the wall-mounted frame, shown as below.
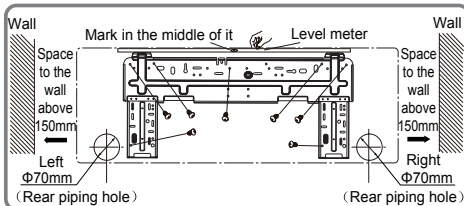
AAC:
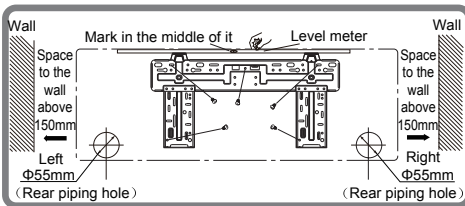
AAD:
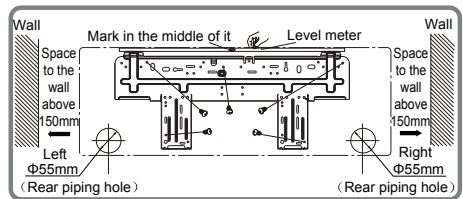
AAE:

Note: Please select the corresponding installation dimensional drawing according to actual wall-mounted plate.

2. Open a piping hole with the diameter of Φ70 on the selected outlet pipe position. In order to drain smoothly, slant the piping hole on the wall slightly downward to the outdoor side with the gradient of 5-10°.
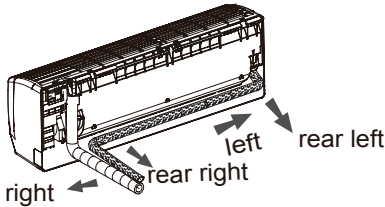
Installation of indoor unit

Note:
- Pay attention to dust prevention and take relevant safety measures when opening the hole.
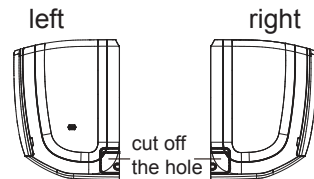- The plastic expansion particles are not provided and should be bought locally.
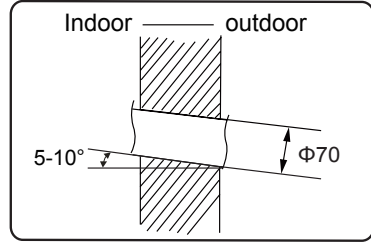
Step four: outlet pipe

1. The pipe can be led out in the direction of right, rear right, left or rear left.


2. When select leading out the pipe from left or right, please cut off the corresponding hole on the bottom case.
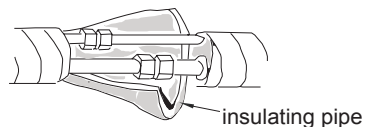

Step five: connect the pipe of indoor unit

1. Aim the pipe joint at the corresponding bellmouth.

2. Pretightening the union nut with hand.

pipe joint union nut pipe

3. Adjust the torque force by referring to the following sheet. Place the open-end wrench on the pipe joint and place the torque wrench on the union nut. Tighten the union nut with torque wrench.
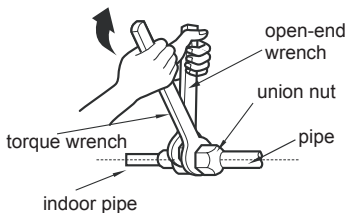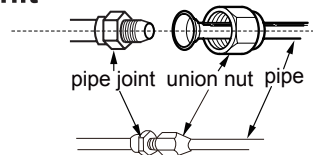
| Hex nut diameter	Tightening torque (N·m)
Φ 6	15~20
Φ 9.52	30~40
Φ 12	45~55
Φ 16	60~65
Φ 19	70~75

4. Wrap the indoor pipe and joint of connection pipe with insulating pipe, and then wrap it with tape.

insulating pipe

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Installation of indoor unit

Step six: install drain hose

1. Connect the drain hose to the outlet pipe of indoor unit.

2. Bind the joint with tape.

outlet pipe   drain hose

tape

outlet pipe   drain hose

drain hose
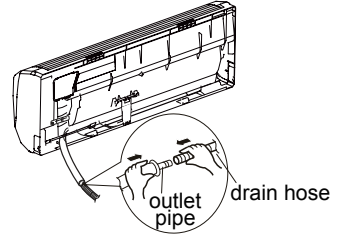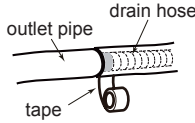
insulating pipe

Note:
- Add insulating pipe in the indoor drain hose in order to prevent condensation.
- The plastic expansion particles are not provided.
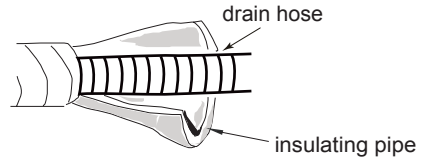
Step seven: connect wire of indoor unit

1. Open the panel, remove the screw on the wiring cover and then take down the cover.

2. Make the power connection wire go through the cable-cross hole at the back of indoor unit and then pull it out from the front side.

screw

panel

wiring cover

3. Remove the wire clip; connect the power connection wire to the wiring terminal according to the color; tighten the screw and then fix the power connection wire with wire clip.

N(1)	2	3	⏚
blue	black	brown	yellow-green

Outdoor unit connection

27
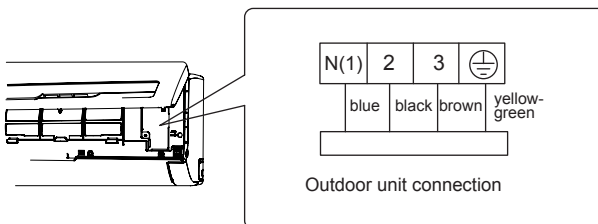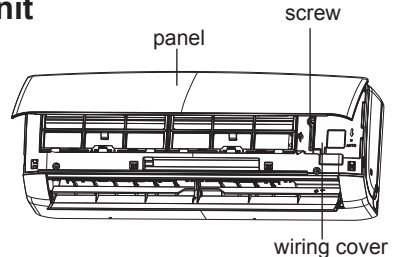
Installation of indoor unit

4. Put wiring cover back and then tighten the screw.

5. Close the panel.

Note:

● All wires of indoor unit and outdoor unit should be connected by a professional.

● If the length of power connection wire is insufficient, please contact the supplier for a new one. Avoid extending the wire by yourself.

● For the air conditioner with plug, the plug should be reachable after finishing installation.

● For the air conditioner without plug, an air switch must be installed in the line. The air switch should be all-pole parting and the contact parting distance should be more than 3mm.

Step eight: bind up pipe

1. Bind up the connection pipe, power cord and drain hose with the band.

indoor and outdoor power cord
gas pipe
indoor unit
band
liquid pipe
drain hose
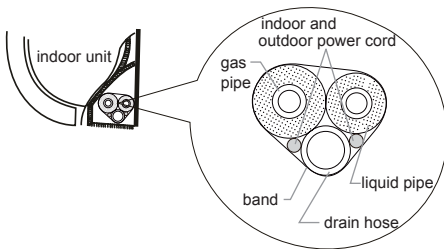
2. Reserve a certain length of drain hose and power cord for installation when binding them. When binding to a certain degree, separate the indoor power and then separate the drain hose.

connection pipe   drain hose   band

indoor power cord
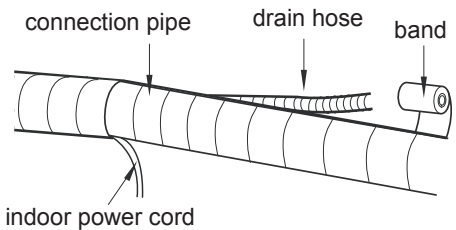
3. Bind them evenly.

4. The liquid pipe and gas pipe should be bound separately at the end.

Note:
● The power cord and control wire can't be crossed or winding.
● The drain hose should be bound at the bottom.

Step nine: hang the indoor unit

1. Put the bound pipes in the wall pipe and then make them pass through the wall hole.

2. Hang the indoor unit on the wall-mounting frame.

3. Stuff the gap between pipes and wall hole with sealing gum.

4. Fix the wall pipe.

5. Check if the indoor unit is installed firmly and closed to the wall.

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Installation of indoor unit

indoor ———— outdoor
wall pipe
sealing gum

upper hook

lower hook of
wall-mounting frame
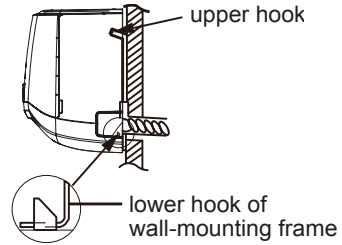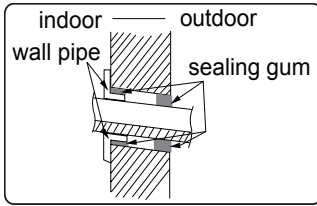
Note:
● Do not bend the drain hose too excessively in order to prevent blocking.

Installation of outdoor unit

Step one: fix the support of outdoor unit
(select it according to the actual installation situation)

1. Select installation location according to the house structure.
2. Fix the support of outdoor unit on the selected location with expansion screws.

at least 3cm above the floor
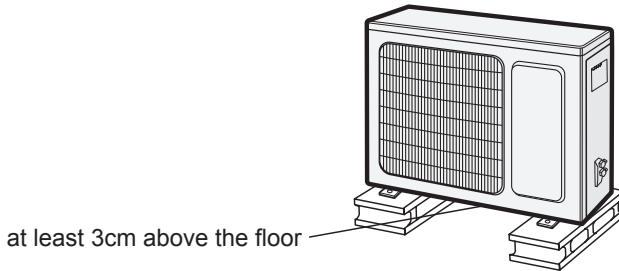
## Step two: install drain joint (Only for cooling and heating unit)

1. Connect the outdoor drain joint into the hole on the chassis, as shown in the picture below.

2. Connect the drain hose into the drain vent.

drain vent
chassis
outdoor drain joint
Drain hose
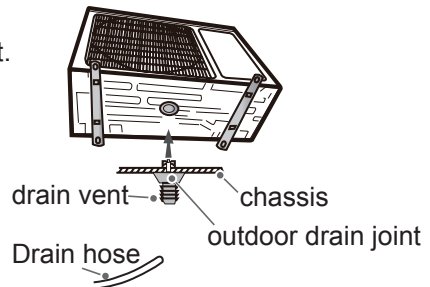
Installation of outdoor unit

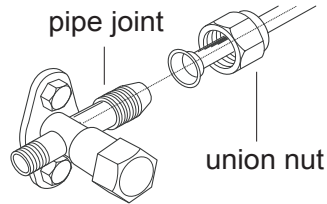## Step four: connect indoor and outdoor pipes

1. Remove the screw on the right handle of outdoor unit and then remove the handle.

screw

handle
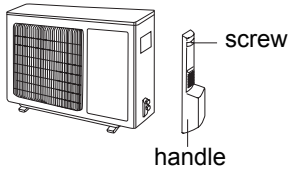
2. Remove the screw cap of valve and aim the pipe joint at the bellmouth of pipe.

liquid pipe

liquid valve

gas pipe

gas valve
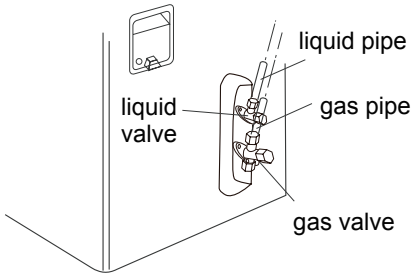
3. Pretightening the union nut with hand.

pipe joint

union nut

4. Tighten the union nut with torque wrench by referring to the sheet below.

Hex nut diameter	Tightening torque (N·m)
Φ 6	15~20
Φ 9.52	30~40
Φ 12	45~55
Φ 16	60~65
Φ 19	70~75

Step five: connect outdoor electric wire

1. Remove the wire clip; connect the power connection wire and signal control wire (only for cooling and heating unit) to the wiring terminal according to the color; fix them with screws.

N(1)	2	3	⏚
blue	black	brown	yellow-green

Indoor unit connection

handle
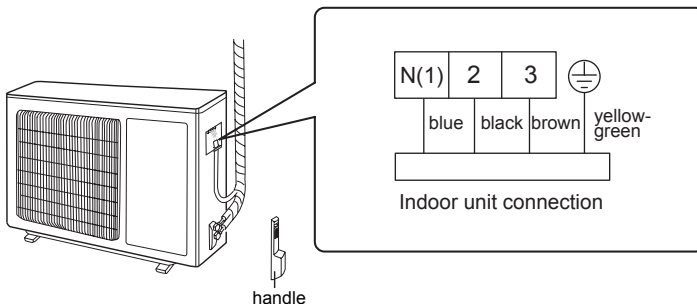
Installation of outdoor unit

2. Fix the power connection wire and signal control wire with wire clip (only for cooling and heating unit).

Note:
- After tighten the screw, pull the power cord slightly to check if it is firm.
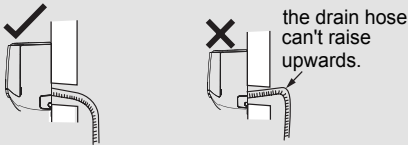- Never cut the power connection wire to prolong or shorten the distance.

Step five: neaten the pipes

1. The pipes should be placed along the wall, bent reasonably and hidden possibly. Min. semidiameter of bending the pipe is 10cm.

2. If the outdoor unit is higher than the wall hole, you must set a U-shaped curve in the pipe before pipe goes into the room, in order to prevent rain from getting into the room.


wall

U-shaped curve
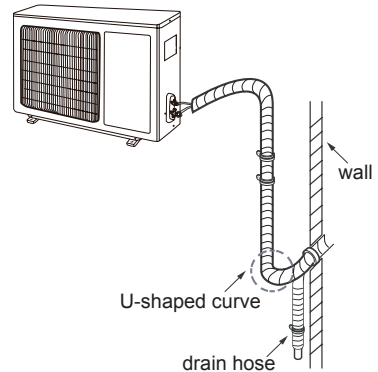
drain hose

Note:

- The through-wal height of drain hose shouldn't be higher than the outlet pipe hole of indoor unit.

the drain hose can't raise upwards.

- The water outlet can't be placed in water in order to drain smoothly.

The water outlet can't be placed in water

- Slant the drain hose slightly downwards. The drain hose can't be curved, raised and fluctuant, etc.

The drain hose can't be fluctuant

The drain hose can't be fluctuant
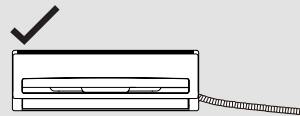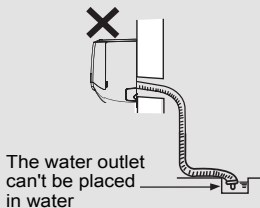
The water outlet can't be fluctuant
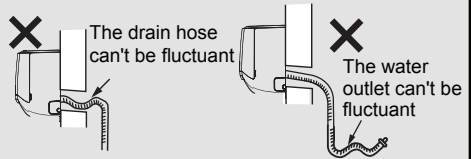
Vacuum pumping

Use vacuum pump

1. Remove the valve caps on the liquid valve and gas valve and the nut of refrigerant charging vent.
2. Connect the charging hose of piezometer to the refrigerant charging vent of gas valve and then connect the other charging hose to the vacuum pump.
3. Open the piezometer completely and operate for 10-15min to check if the pressure of piezometer remains in -0.1MPa.
4. Close the vacuum pump and maintain this status for 1-2min to check if the pressure of piezometer remains in -0.1MPa. If the pressure decreases, there may be leakage.
5. Remove the piezometer, open the valve core of liquid valve and gas valve completely with inner hexagon spanner.
6. Tighten the screw caps of valves and refrigerant charging vent.
7. Reinstall the handle.

liquid valve

gas valve

refrigerant charging vent

nut of refrigerant charging vent

piezometer

valve cap

vacuum pump

inner hexagon spanner

close

open
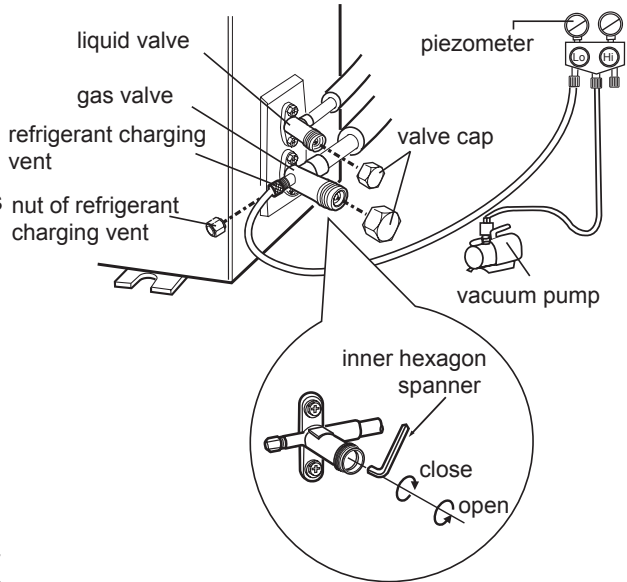
Leakage detection

1. With leakage detector:
   Check if there is leakage with leakage detector.
2. With soap water:
   If leakage detector is not available, please use soap water for leakage detection. Apply soap water at the suspected position and keep the soap water for more than 3min. If there are air bubbles coming out of this position, there's a leakage.

Check after installation

● Check according to the following requirement after finishing installation.

Items to be checked	Possible malfunction
Has the unit been installed 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 of pipeline sufficient?	It may cause condensation and water dripping.
Is water drained well?	It may cause condensation and water dripping.
Is the voltage of power supply according to the voltage marked on the nameplate?	It may cause malfunction or damaging the parts.
Is electric wiring and pipeline installed correctly?	It may cause malfunction or damaging the parts.
Is the unit grounded securely?	It may cause electric leakage.
Does the power cord follow the specification?	It may cause malfunction or damaging the parts.
Is there any obstruction in the air inlet and outlet?	It may cause insufficient cooling (heating) capacity.
The dust and sundries caused during installation are removed?	It may cause malfunction or damaging the parts.
The gas valve and liquid valve of connection pipe are open completely?	It may cause insufficient cooling (heating) capacity.
Is the inlet and outlet of piping hole been covered?	It may cause insufficient cooling (heating) capacity or waster eletricity.

Test operation

1. Preparation of test operation
● The client approves the air conditioner.
● Specify the important notes for air conditioner to the client.

2. Method of test operation
● Put through the power, press ON/OFF button on the remote controller to start operation.
● Press MODE button to select AUTO, COOL, DRY, FAN and HEAT to check whether the operation is normal or not.
● If the ambient temperature is lower than 16℃ , the air conditioner can't start cooling.

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI

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