

Health & Safety, Use & Care and Installation guide 產品安全指引、使用説明及安裝指南

Split Air Conditioner 分體式冷氣機 ZEN Inverter

Model 產品型號: ASV09000R / ASV12000R / ASV18000R / ASV22000R / ASH09000R / ASH12000R /

ASH18000R / ASH22000R

Thank you for choosing our product. For proper operation, please read and keep this manual carefully. If you have lost the User's Manual, please contact the customer service or visit www.whirlpool.com.hk

感謝您選擇我們的產品。對於正確的操作,請仔細閱讀並妥善保存本説明書。 若遺失使用説明書,請聯繫客戶服務或瀏覽 www.whirlpool.com.hk



www.whirlpool.com.hk

Content

Operation Not	ices
---------------	------

Precautions	1-6
Parts name	
Screen Operation Guide	
Buttons on remote controller	9
Introduction for buttons on remote controller	10-15
Function introduction for combination buttons	16-17
Operation guide	18
Replacement of batteries in remote controller	18
Emergency operation	19
Maintenance	
Clean and maintenance	19-21
Malfunction	
Malfunction analysis	22-25
Installation Notice	
Installation dimension diagram	26
Safety precautions for installing and relocating the unit	
Tools for installation	
Selection of installation location	29-30
Requirements for electric connection	
Installation	
Installation of indoor unit	32-36
Installation of outdoor unit	37-39
Vacuum pumping	40
Leakage detection	40
Check after installation	41
Test operation	
Configuration of connection pipe	
Pipe expanding method	44
Connecting the cable	45

Explanation of Symbols

- Please read all instructions carefully before using this product.
- When using the appliances, should always follow this instruction to reduce the risk of fire, electric shock, and injury to person.
- Please keep this manual. If you deliver the appliance to other users, do handover this manual together.



Indicates a hazardous situation that, if not avoided, will result in death or serious injury.



Indicates a hazardous situation that, if not avoided, could result in death or serious injury.



Indicates a hazardous situation that, if not avoided, may result in product damage and injury.



Indicates important but not hazard-related information, used to indicate risk of property damage.



Indicates a hazard that would be assigned a signal word WARNING or CAUTION.



Operation and Maintenance

- 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 (including remote control).
- Do not use extension cord. Otherwise, it may cause fire hazard.
- Disconnect power plug before 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 use flammable detergent to clean the appliance, such as gasoline, to avoid fire hazard.
- 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.

⚠ WARNING

- 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 or strange smell.
 - Indoor unit is leaking.
- 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.
- Always turn off the air conditioner by remote control first.
 Do not use the power supply circuit breaker or pull off the plug to turn it off.

⚠ WARNING

- Do not step on top panel of outdoor unit, or put heavy objects. It may cause damage or personal injury.
- Do not touch the power plug, circuit breaker and emergency button when your hands are wet.
- Do not twist or press the power supply cord, and make sure it is not broken.
- Do not pull out the power plug by pulling the power cord, it may cause the power cord damage and electric shock.
- Long and direct exposure to cool air might be harmful to health. It is advisable to set the louvers in order to avoid direct cool air and deflect it within the room.
- Upon malfunctioning first turn the appliance off by pressing the ON/OFF button on the remote control, and then disconnect it from power supply.
- Do not switch the appliance on and off too often as this can damage the appliance.
- Do not place any objects on the outdoor unit.
- Disconnect the air conditioner from the power supply if it is to be left unused for a long period of time or during a thunder/lightning storm.
- This product contains Fluorinated Greenhouse Gases covered by the Kyoto Protocol, the refrigerant gas being in a hermetically sealed system. Refrigerant gas: R410a has a Global Warming Potential (GWP) 1975.



Installation

- 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.
- The appliance shall be connected to electric supply with safety grounding. The appliance must be connected to an electrical leakage protection switch with sufficient capacity.
- Do not 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.

⚠ WARNING

- 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.
- The yellow-green wire in air conditioner is grounding wire, which cannot 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.

Precautions



- 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.
- Instructions for installation and use of this product are provided by the manufacturer.

Working temperature range

For some models:

	Indoor side DB/WB(°C)	Outdoor side DB/WB(°C)
Maximum cooling	32/23	43/26
Maximum heating	27/-	24/18

NOTICE:

• The operating temperature range (outdoor temperature) for cooling only unit is -15° C $\sim 43^{\circ}$ C ; for heat pump unit is -15° C $\sim 43^{\circ}$ C

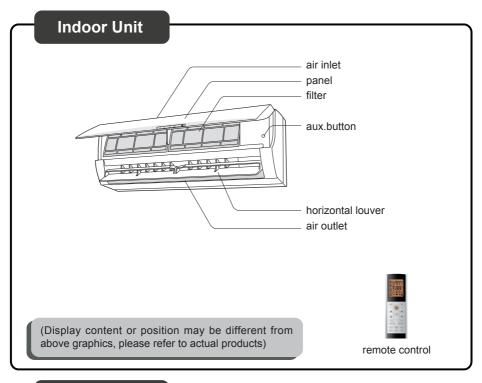
For some models:

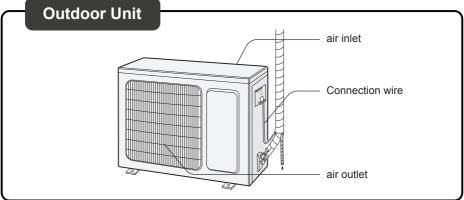
	Indoor side DB/WB(°C)	Outdoor side DB/WB(°C)
Maximum cooling	32/23	43/26
Maximum heating	27/-	24/18

NOTICE:

• The operating temperature range (outdoor temperature) for cooling only unit is -7°C ~ 48°C; for heat pump unit is -7°C ~ 48°C.

Parts Name



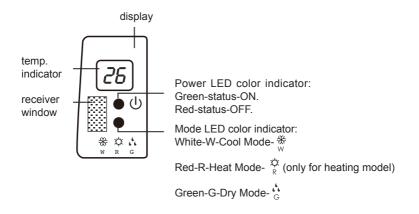


NOTICE:

Actual product may be different from above graphics, please refer to actual products.

Parts Name

Display



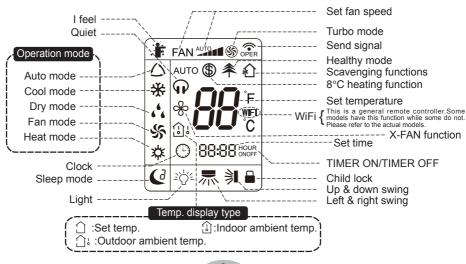
Display content or position may be different from above graphics, please refer to actual products.

Buttons on remote controller



- ON/OFF button
- 2 MODE button
- 3 FAN button
- 4 TURBO
- 5 ▲/ ▼ 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



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 indicator "()" 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.



- After selecting cool mode, air conditioner will operate under cool mode. Cool indicator "※" on indoor unit is ON. Press "▲" or "▼" button to adjust set temperature. Press "FAN" button to adjust fan speed. Press "兲" / "¾" 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 "示" / "¾" button to adjust fan blowing angle.
- When selecting fan mode, the air conditioner will only blow fan, no cooling and no heating. All indicators are OFF,Operation indicator is ON. Press "FAN" button to adjust fan speed. Press" ▼ " " " " " button to adjust fan blowing angle.
- When selecting heating mode, the air conditioner operates under heat mode. Heat indicator "☆ " on indoor unit is ON. Press "▲" or "▼" button to adjust set temperature. Press "FAN" button to adjust fan speed. Press "¬," / "¾" 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).

10

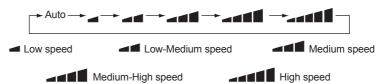
Note:

- 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 (61-86°F); Fan speed: auto, low speed, low-medium speed, medium speed, medium-high speed, high speed.

3 FAN button

This button is used for setting Fan Speed in the sequence that goes from AUTO, ...

, , , , , , , , , , then back to Auto.



Note:

- It's Low fan speed under Dry mode.
- 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 until 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 until 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 1°C (°F).
Holding "▲" or "▼" button, 2s later, set temperature on remote controller
will change quickly. On releasing button after setting is finished, temperature
indicator on indoor unit will change accordingly. (Temperature can't be adjusted
under auto mode)

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

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.
- This 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:

- When selecting " 🗦 I", 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 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:

- 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 Ŋ, if press this button again 2s later, Ŋ 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.

12

8 SLEEP button

- Press this button, can select Sleep 1 ((1), Sleep 2 ((2), Sleep 3 ((3)) and cancel the Sleep, circulate between these, after electrified, Sleep Cancel is defaulted.
- Sleep 1 is Sleep mode 1, in Cool modes; sleep status after run for one hour, the main unit setting temperature will increase 1°C, two hours, setting temperature increased 2°C, then the unit will run at this setting temperature; In Heat mode: sleep status after run for one hour, the setting temperature will decrease 1°C, two hours, setting temperature will decrease 2°C, then the unit will run at this setting temperature.
- Sleep 2 is sleep mode 2, that is air conditioner will run according to the presetting a group of sleep temperature curve.
- Sleep 3-the sleep curve setting under Sleep mode by DIY;
- (1)Under Sleep 3 mode, press "Turbo" button for a long time, remote controller enters into user individuation sleep setting status, at this time, the time of remote controller will display "1hour", the setting temperature "88" will display the corresponding temperature of last setting sleep curve and blink (The first entering will display according to the initial curve setting value of original factory);
- (2)Adjust " ▲ " and " ▼ " button, could change the corresponding setting temperature, after adjusted, press "Turbo" button for confirmation;
- (3) At this time, 1hour will be automatically increased at the timer postion on the remote control, (that are "2hours" or "3hours" or "8hours"), the place of setting temperature "88" will display the corresponding temperature of last setting sleep curve and blink;
- (4) Repeat the above step (2)~(3) operation, until 8 hours temperature setting finished, sleep, curve setting finished, at this time, the remote controller will resume the original timer display; temperature display will resume to original setting temperature.
- Sleep3- the sleep curve setting under Sleep mode by DIY could be inquired:

The user could accord to sleep curve setting method to inquire the presetting sleep curve, enter into user individuation sleep setting status, but do not change the temperature, press "Turbo" button directly for confirmation. Note: In the above presetting or enquiry procedure, if continuously within 10s, there is no button pressed, the sleep curve setting within 10s, there is no button pressed, the sleep curve setting status will be automatically quit and resume to display the original displaying. In the presetting or enquiry procedure, press "ON/OFF" button, "Mode" button, "Timer" button or "Sleep" button, the sleep curve setting or enquiry status will quit similarly.

9 I FEEL button

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

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

1 1 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 " \(\Lambda \) " or " ▼ " button to adjust TIMER ON setting. After each pressing " ▲ " or " ▼ " button, TIMER ON setting will increase or decrease 1 min. 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. " (1) " 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 " A " or " ▼ " button to adjust TIMER OFF setting. After each pressing " ▲ " or " ▼ " button, TIMER OFF setting will increase or decrease 1min. Hold " ▲ " or " ▼ " button, 2s later, the time will change guickly until reaching your required time. Press "TIMER OFF" word "OFF" will stop blinking. " (1) " icon resumes displaying.

Cancel TIMER OFF. Under the condition that TIMER OFF is started up, press "TIMER OFF" button to cancel it.

Note:

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

11 CLOCK button

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

Note:

- Clock time adopts 24-hour mode.
- The interval between two operation can't exceeds 5s. Otherwise, remote controller will guit 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 "\overline{\Pi}" and "AUTO" signal) and Quiet mode (display "\overline{\Pi}" signal) and Quiet OFF (there is no signal of "\overline{\Pi}" displayed), after powered on, the Quiet OFF is defaulted.

Note:

- The Quiet function can be set up in all modes; Under the Quiet mode, the fan speed is not available.
- When quiet function is selected:

Under cooling mode: indoor fan operates at notch 4 speed. 10 minutes later or when indoor ambient temperature≤28°C, indoor fan will operate at notch 2 speed or quiet mode according to the comparison between indoor ambinet temperature and set temperature.

Under heating mode: indoor fan operates at notch 3 speed or quiet mode according to the comparison between indoor ambient temperature and set temperature. Under dry, fan mode: indoor fan operates at quiet mode.

Under auto mode: the indoor fan operates at the auto quiet mode according to actual cooling, heating or fan 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 remote controller 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.

14 LIGHT 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;

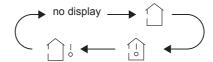
Function introduction for combination buttons

LCD displays "全". Press the button for the second time to start healthy and scavenging functions simultaneously; LCD displays " 全" and " 本". Press this button for the third time to quit healthy and scavenging functions simultaneously. Press the button for the fourth time to start healthy function; LCD display "本". Press this button again to repeat the operation above.

• This function is applicable to partial of models.

16 TEMP button

By pressing this button, you can see indoor set temperature, indoor ambient temperature or outdoor ambient temperature on indoor unit's display. The setting on remote controller is 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 " \(\hightarrow\) 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.

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.

Function introduction for combination buttons

- 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.

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

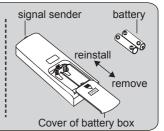
Under OFF status, press " \blacktriangledown " and "MODE" buttons simultaneously to switch temperature display between °C and °F.

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 speed, low-medium speed, medium-high speed, high speed.
- 5. Press " | " button to select fan blowing angle.

Replacement of batteries in remote controller

- Press the back side of remote controller marked with "\(\overline{\overl
- 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.



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.

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.

Use insulated object to press the auto button

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 and maintenance

Clean filter



Open panel

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



3

Clean filter

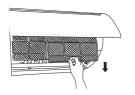
- Use dust catcher or water to clean the filter.
- When the filter is very dirty, use the water (below 45°C) to clean it, and then put it in a shady and cool place to dry.



2

Remove filter

Remove the filter as indicated in the fig.





Install filter

Install the filter and then close the panel cover tightly.



A

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.

Clean and Maintenance

NOTICE: Checking before use-season

- 1. Check whether air inlets and air outlets are blocked.
- 2. Check whether air switch, plug and socket are in good condition.
- 3. Check whether filter is clean.
- 4. Check whether mounting bracket for outdoor unit is damaged or corroded. If yes, please contact dealer.
- 5. Check whether drainage pipe is damaged.

NOTICE: Checking after use-season

- 1. Disconnect power supply.
- 2. Clean filter and indoor unit's panel.
- 3. Check whether mounting bracket for outdoor unit is damaged or corroded. If yes, please contact dealer.

Notice for recovery

- Many packing materials are recyclable materials.
 Please dispose them in appropriate recycling unit.
- 2. If you want to dispose the air conditioner, please contact local dealer or consultant service center for the correct disposal method.

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
	 Whether it's interfered severely (such as static electricity, stable voltage)? 	 Pull out the plug. Reinsert the plug after about 3 mins, and then turn on the unit again.
	 Whether remote controller is within the signal receiving range? 	Signal receiving range is 8m.
Indoor unit	Whether there are obstacles?	Remove obstacles.
can't receive remote controller's	 Whether remote controller is pointing at the receiving window? 	 Select proper angle and point the remote controller at the re- ceiving window on indoor unit.
controller has no action.	 Is sensitivity of remote contro- ller 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 cont- roller appears to be damaged. If yes, replace it.
	Fluorescent lamp in room?	Take the remote controller close to indoor unit.
	• Fluorescent tamp in room:	Turn off the fluoresent lamp and then try it again.
	Air inlet or air outlet of indoor unit is blocked?	Eliminate obstacles.
No air emitted from indoor unit	 Under heating mode, indoor temperature is reached to set temperature? 	 After reaching to set temper- ature, indoor unit will stop bl- owing 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 sev- eral minutes, which is a nor- mal phenomenon.

Phenomenon	Check items	Solution
	• Power failure?	Wait until power recovery.
	• Is plug loose?	Reinsert the plug.
Air	Air switch trips off or fuse is burnt out?	 Ask professional to replace air switch or fuse.
conditioner	Wiring has malfunction?	• Ask professional to replace it.
can't operate	 Unit has restarted immediately after stopping operation? 	Wait for 3 mins, 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	 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.
be adjusted	 Your required temperature exceeds the set temperature range? 	• Set temperature range: 16°C ~30°C.
	• Voltage in too law?	Wait until the voltage
Cooling (heating) effect is not good.	Voltage is too low?	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.

Phenomenon	Check items	Solution
Odours are emitted	Whether there's odour source, such as furniture and cigarette, etc.	Eliminate the odour source.Clean the filter.
Air conditioner operates abnormally suddenly	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.

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

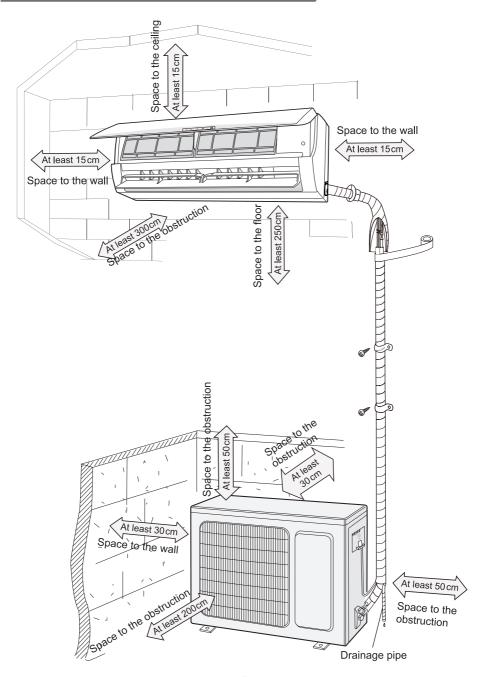
Note: If there're other error codes, please contact qualified professionals for service.



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 or strange 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.

Installation dimension diagram



Safety precautions for installing and relocating the unit

To ensure safety, please be mindful of the following precautions.

Marning

- 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		12 Universal meter
13 Inner hexagon spa	anner	14 Measuring tape	

Note:

- Please contact the local agent for installation.
- Do not use unqualified power cord.

Selection of installation location

Basic requirement

Installing the unit in the following places may cause 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.

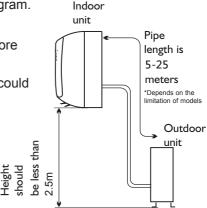
Model	Standard Tubing Length (m)	Min. of Tubing Length (m)	Max. of Tubing Length (m)	Limit of Elevation Difference H (m)	Required extra refrigerant when the connecting tube over 10m (g/m)
ASV09000R	5m	3m	15m	10m	15
ASV12000R	5m	3m	20m	10m	15
ASV18000R	5m	3m	25m	10m	15
ASV22000R	5m	3m	25m	10m	15
ASH09000R	5m	3m	15m	10m	20
ASH12000R	5m	3m	20m	10m	20
ASH18000R	5m	3m	25m	10m	50
ASH22000R	5m	3m	25m	10m	50

Note: If addition of refrigerant has to be charged, type R410a to be used ONLY. Otherwise, air conditioner with any malfunction occurs, it will be out of warranty scope.

Selection of installation location

Indoor unit

- 1. There should be no obstruction near air inlet and air outlet. Air can be easily blown to every concern of room.
- 2. Select a location where the condensation water can be dispersed easily and will not 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 will not increase noise and vibration.
- 6. Do not install the indoor unit right above the electric appliance.
- 7. Please try your best to keep way from fluorescent lamp.
- 8. Where piping and wall hole can be easily arranged.
- 9. Observe the required distance from ceiling and wall according to the installation dimension diagram.
- 10. Where the air filter can easily be removed.
- 11. Keep the unit and remote control 1m or more from television, radio etc.
- 12. Do not put anything near the air inlet that could obstruct it.
- The indoor unit is not suitable to be installed in areas used for laundry.
- 14. The appliance must be installed 2.5m above floor.

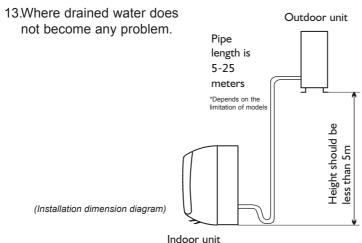


(Installation dimension diagram)

Selection of installation location

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 will not 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.
- 6. Avoid installing it where flammable gas could leak.
- 7. The distance between Indoor and outdoor unit should be 5 meters and can go up to maximum 25 meters with additional refrigerant charge.
- 8. Do not install the outdoor unit in a dirty or greasy place, near a vulcanization gas exit.
- 9. Avoid installing it at the roadside where it could be soiled with muddy water.
- 10.A fixed base where operating noise will not increase.
- 11. Where the air outlet is not obstructed.
- 12. The installation position shall be able to withstand the weight and vibration of the outdoor unit and ensure safe installation;



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.
- 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.

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. For models with a power plug, make sure the plug is within reach after installation.
- 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)

Туре	Model	Required Capacity of air break switch	
	ASV09000R	10A	
	ASV12000R	13A	
	ASV18000R	16A	
Split On/Off	ASV22000R	25A	
	ASH09000R	10A	
	ASH12000R	13A	
	ASH18000R	16A	
	ASH22000R	25A	

Installation of indoor unit

Step one: choosing installation location

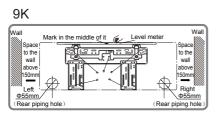
Recommend the installation location to the client and then confirm it with the client.

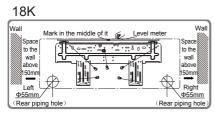
Step two: install wall-mounting frame

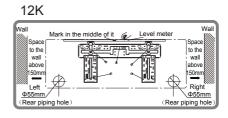
- 1. Hang the wall-mounting frame on the wall; adjust it in horizontal position with the level meter and then point out the screw fixing holes on the wall.
- 2. Drill the screw fixing holes on the wall with impact drill (the specification of drill head should be the same as the plastic expansion particle) 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.

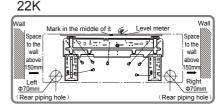
Step three: open piping hole

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.







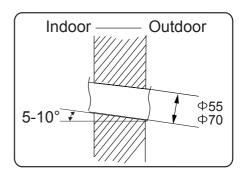


2. Open a piping hole with the diameter of Φ55 or Φ70 on the selected outlet pipe position. In order to drain smoothly, slant the piping hole on the wall slightly downward to the outdoor side with the gradient of 5-10°.

Installation of indoor unit

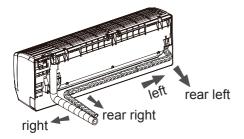
Note:

 Pay attention to dust prevention and take relevant safety measures when opening the hole.

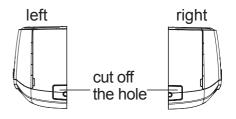


Step four: outlet pipe

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

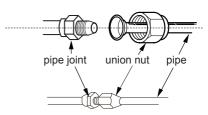


When select leading out the pipe from left or right, please cut off the corresponding hole on the bottom case.



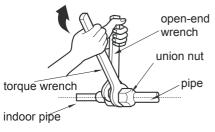
Step five: connect the pipe of indoor unit

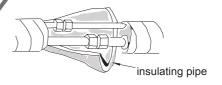
- 1. Aim the pipe joint at the corresponding bellmouth.
- 2. Pretightening the union nut with hand.



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.

Installation of indoor unit



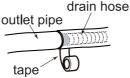


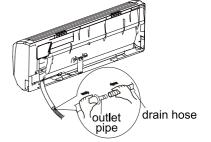
Wrap the indoor pipe and joint of con-nection pipe with insulating pipe, and then wrap it with tape.

Model	Liquid Pipe size	Torque (kg.m)	Nut width	Min. thickness	Gas Pipe size	Torque (N.m)	Nut width	Min. thickness
ASV09000R	φ6 (1/4 inch)	1.5~2	17mm	0.6mm	φ9.52 (3/8 inch)	3.1~3.5	22mm	0.71mm
ASV12000R	φ6 (1/4 inch)	1.5~2	17mm	0.6mm	φ9.52 (3/8 inch)	3.1~3.5	22mm	0.71mm
ASV18000R	φ6 (1/4 inch)	1.5~2	17mm	0.6mm	φ16 (5/8 inch)	6.0~6.5	27mm	0.71mm
ASV22000R	φ6 (1/4 inch)	1.5~2	17mm	0.6mm	φ16 (5/8 inch)	6.0~6.5	27mm	0.71mm
ASH09000R	φ6 (1/4 inch)	1.5~2	17mm	0.6mm	φ9.52 (3/8 inch)	3.1~3.5	22mm	0.71mm
ASH12000R	φ6 (1/4 inch)	1.5~2	17mm	0.6mm	φ9.52 (3/8 inch)	3.1~3.5	22mm	0.71mm
ASH18000R	φ6 (1/4 inch)	1.5~2	17mm	0.6mm	φ16 (5/8 inch)	6.0~6.5	27mm	0.71mm
ASH22000R	φ6 (1/4 inch)	1.5~2	17mm	0.6mm	φ16 (5/8 inch)	6.0~6.5	27mm	0.71mm

Step six: install drain hose

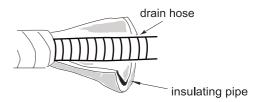
- Connect the drain hose to the outlet pipe of indoor unit.
- 2. Bind the joint with tape.





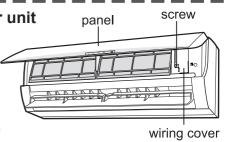
Note:

- Add insulating pipe in the indoor drain hose in order to prevent condensation.
- The plastic expansion particles are not provided.



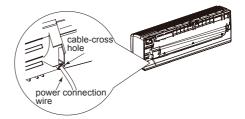
Step seven: connect wire of indoor unit

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

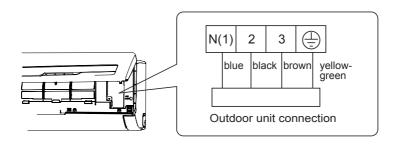


Installation of indoor unit

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.



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.



- 4. Put wiring cover back and then tighten the screw.
- 5. Close the panel.

Note:

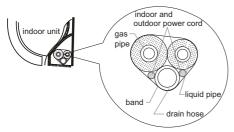
- All wires of indoor unit and outdoor unit should be connected by a professional.
- If the length of power connection wire is insufficient, please contact the supplier for a new one. Avoid extending the wire by yourself.
- For the air conditioner with plug, the plug should be reachable after finishing 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.
- * Please refer to Page 45 of "Connecting the cable", which is regarding the cable specifications and requirements.

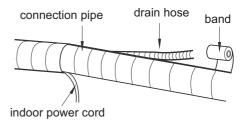
Installation of indoor unit

Step eight: bind up pipe

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



 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.



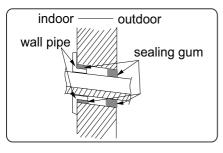
- 3. Bind them evenly.
- 4. The liquid pipe and gas pipe should be bound separately at the end.

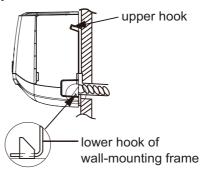
Note:

- 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.





Note:

• Do not bend the drain hose too excessively in order to prevent blocking.

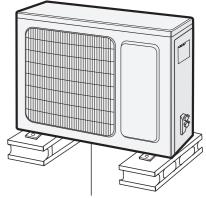
Installation of outdoor unit

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.

Note:

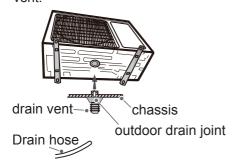
- Take sufficient protective measures when installing the outdoor unit.
- Make sure the support can withstand at least four times of the unit weight.
- The outdoor unit should be installed at least 3cm above the floor in order to install drain joint.
- For the unit with cooling capacity of 2300W ~5000W, 6 expansion screws are needed; for the unit with cooling capacity of 6000W ~8000W, 8 expansion screws are needed; for the unit with cooling capacity of 10000W ~16000W, 10 expansion screws are needed.



at least 3cm above the floor

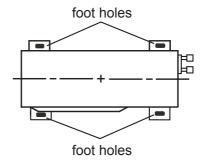
Step two: install drain joint (Only for cooling and heating unit)

- 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.



Step three: fix outdoor unit

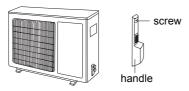
- 1. Place the outdoor unit on the support.
- 2. Fix the foot holes of outdoor unit with bolts.



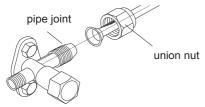
Installation of outdoor unit

Step four: connect indoor and outdoor pipes

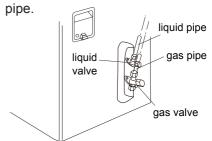
1. Remove the screw on the right handle of outdoor unit and then remove the handle



3. Pretightening the union nut with hand.



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

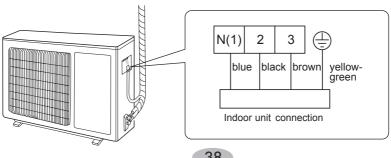


4. Tighten the union nut with torque wrench by referring to the sheet below.

Model	Liquid Pipe size	Torque (kg.m)	Nut width	Min. thickness	Gas Pipe size	Torque (N.m)	Nut width	Min. thickness
ASV09000R	φ6 (1/4 inch)	1.5~2	17mm	0.6mm	φ9.52 (3/8 inch)	3.1~3.5	22mm	0.71mm
ASV12000R	φ6 (1/4 inch)	1.5~2	17mm	0.6mm	φ9.52 (3/8 inch)	3.1~3.5	22mm	0.71mm
ASV18000R	φ6 (1/4 inch)	1.5~2	17mm	0.6mm	φ16 (5/8 inch)	6.0~6.5	27mm	0.71mm
ASV22000R	φ6 (1/4 inch)	1.5~2	17mm	0.6mm	φ16 (5/8 inch)	6.0~6.5	27mm	0.71mm
ASH09000R	φ6 (1/4 inch)	1.5~2	17mm	0.6mm	φ9.52 (3/8 inch)	3.1~3.5	22mm	0.71mm
ASH12000R	φ6 (1/4 inch)	1.5~2	17mm	0.6mm	φ9.52 (3/8 inch)	3.1~3.5	22mm	0.71mm
ASH18000R	φ6 (1/4 inch)	1.5~2	17mm	0.6mm	φ16 (5/8 inch)	6.0~6.5	27mm	0.71mm
ASH22000R	φ6 (1/4 inch)	1.5~2	17mm	0.6mm	φ16 (5/8 inch)	6.0~6.5	27mm	0.71mm

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.



Installation of outdoor unit

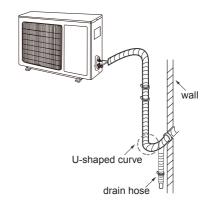
2. Fix the power connection wire and signal control wire with wire clip (only for cooling and heating unit).

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 six: neaten the pipes

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



Note:

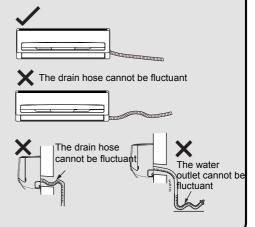
 The through-wall height of drain hose should not be higher than the outlet pipe hole of indoor unit.



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



 Slant the drain hose slightly downwards. The drain hose cannot be curved, raised and fluctuant, etc.



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.

liquid valve

gas valve

refrigerant charging

nut of refrigerant

charging vent

vent

piezometer

vacuum pump

valve cap

inner hexagon

spanner

- 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.

Note:

- In case of removing value cap indoor unit, remove a nut with small diameter firstly. Otherwise, seal cap with bigger diameter will fly out.

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 3 mins. 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 waste 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°C, the air conditioner cannot start cooling.

Configuration of connection pipe

- 1. Standard length of connection pipe
 - 5m
- 2.Min. length of connection pipe is 3m.
- 3.Max. length of connection pipe.

Cooling capacity	Max length of connection pipe
5000Btu/h (1465W)	15
7000Btu/h (2051W)	15
9000Btu/h (2637W)	15
12000Btu/h (3516W)	20
18000Btu/h (5274W)	25

Cooling capacity	Max length of connection pipe
24000Btu/h (7032W)	25
28000Btu/h (8204W)	30
36000Btu/h (10548W)	30
42000Btu/h (12306W)	30
48000Btu/h (14064W)	30

- 4. The additional refrigerant oil and refrigerant charging required after prolonging connection pipe
 - After the length of connection pipe is prolonged for 10m at the basis of standard length, you should add 5ml of refrigerant oil for each additional 5m of connection pipe.
 - The calculation method of additional refrigerant charging amount (on the basis of liquid pipe):
 - Additional refrigerant charging amount = prolonged length of liquid pipe × additional refrigerant charging amount per meter
 - Basing on the length of standard pipe, add refrigerant according to the requirement as shown in the table. The additional refrigerant charging amount per meter is different according to the diameter of liquid pipe. See the following sheet.

Configuration of connection pipe

Additional refrigerant charging amount for R410A

Diameter of co	nnection pipe	Outdoor unit throttle		
Liquid pipe(mm)	Gas pipe(mm)	Cooling only(g/m)	Cooling and heating(g/m)	
Ф6	Ф9.52 ог Ф12	15	20	
Ф6 ог Ф9.52	Ф16 ог Ф19	15	50	
Ф12	Ф19 ог Ф22.2	30	120	
Ф16	Ф25.4 ог Ф31.8	60	120	
Ф19	-	250	250	
Ф22.2	-	350	350	

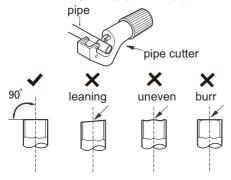
Pipe expanding method

Note:

Improper pipe expanding is the main cause of refrigerant leakage. Please expand the pipe according to the following steps:

A: Cut the pipe

- Confirm the pipe length according to the distance of indoor unit and outdoor unit.
- Cut the required pipe with pipe cutter.



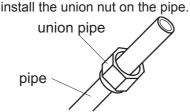
B: Remove the burrs

 Remove the burrs with shaper and prevent the burrs from getting into the pipe.



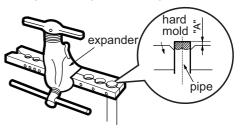
C: Put on suitable insulating pipe D: Put on the union nut

 Remove the union nut on the indoor connection pipe and outdoor valve;



E: Expand the port

• Expand the port with expander.



Note:

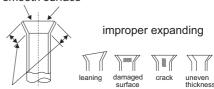
 "A" is different according to the diameter, please refer to the sheet below:

Outer diameter	A(mm)		
(mm)	Max	Min	
Ф6-6.35(1/4")	1.3	0.7	
Ф9.52(3/8")	1.6	1.0	
Ф12-12.7(1/2")	1.8	1.0	
Ф15.8-16(5/8")	2.4	2.2	

F: Inspection

Check the quality of expanding port.
 If there is any blemish, expand the port again according to the steps above.

smooth surface



the length is equal

Connecting the cable

CAUTION:

- Make sure that the colour of wires and the terminal number of the outdoor unit are the same as those of the indoor unit.
- 2. Use an individual power circuit specifically for the air conditioner. As for the wiring method, refer to the circuit diagram on the appliance.
- 3. Check that the cable specification conforms to the table as follows.
- 4. Check the wires and make sure that they are all tightly fastened after cable connection. The cable should be tightly fastened by cable clamp.
- 5. Be sure to install an earth leakage circuit breaker in a wet or moist area.

Cable Specifications

Туре	Model	Power cord	Power connecting cable	Main power supply (Note)
	ASV09000R	3G1.0	4G1.0	To indoor
	ASV12000R	3G1.0	4G1.0	To indoor
Split On/off	ASV18000R	3G1.5	4G1.5	To indoor
	ASV22000R	3G2.5	4G2.5	To indoor
	ASH09000R	3G1.0	4G1.0	To indoor
	ASH12000R	3G1.0	4G1.0	To indoor
	ASH18000R	3G1.5	4G1.5	To indoor
	ASH22000R	3G2.5	4G2.5	To indoor

目錄

操作須知	
注意事項	48-53
產品介紹	
界面操作指南	
	EG
遙控器功能介紹 遙控器顯示屏圖案介紹	
遙控器功能指示 特殊功能簡介	
操作指南	
更換遙控器電池	
緊急操作指南	
系心体 IF 拍用	00
維護須知	
清潔和保養	67-68
故障分析	
	69-72
故障分析	03-12
安裝前準備須知	
安裝指示	73
安裝安全指引	74
安裝工具	75
選擇安裝位置	75-77
用電連接安排	78
安裝須知	
室內機的安裝	79-83
室外機的安裝	
氣體排空	
泄漏檢測	
安裝後的檢查	
運行測試	
連接管道的配置	
擴充管道的方法	
電線連接	

圖示説明

- 使用本產品前,請仔細閱讀所有説明。
- 在使用本產品時,應遵循這指引説明,以減少火災,電擊和造成人身傷害的危險。
- 請妥善保存本説明書。如果將本產品交付其他用戶,請連同此説明書一併轉交。

⚠ 危險

指示危險情況,如果不能避免,會導致死亡或嚴重傷害。

♠ 警告

指示危險情況,如果不能避免,會導致死亡或嚴重傷害。

重要

指示危險狀況,如果不能避免,可能導致產品受損或受傷。

注意

表示重要但不至於引發危險的信息,用來表示財產損失的風險。



表示將分配一個信號詞 警告 或 重要。



操作和維護

- 本產品並不適宜由身體、感官或心智能力缺憾,或缺乏經驗和知識的人士 (包括兒童)所使用,除非他們已獲得負責他們安全的人就使用本產品之監 督或指導。
- 請監督小童以確保他們不會玩弄此產品(包括遙控器)。
- 不要使用多用插座。否則,可能會引起火災。
- 在清洗冷氣機前,請拔出電源插座。否則,可能導致觸電。
- 如果電源線損壞,必須由製造商,其服務代理商或相關的專業人員,以避免 危險更換。
- 不要使用易燃的清潔劑來清潔此產品,如汽油,以避免火災危險。
- 不要灑水室內機。這可能導致觸電或故障。
- 去除過濾器後,不要觸摸散熱片,以避免受傷。
- 不要用火或吹風機烘乾過濾器,以避免變形或火災。
- 維修必須由合格的專業人員進行。否則,可能會造成人身傷害或損壞。



- ◆ 不要自行修理空調。這可能導致觸電或損壞。當你需要維修冷氣機請與經銷 商聯繫。
- 不要延長手指或物品插入冷氣機入風口和出風口。這可能會造成人身傷害或 損壞。
- 不要擋住出風口或進風口。這可能會導致故障。
- 不要灑水在遙控器上,否則遙控器可能被打破。
- 當以下現象發生時,請關掉冷氣機,必須立即切斷電源,然後聯繫經銷商或 有資格的專業人員進行維修。
 - 電源線過熱或損壞。
 - 操作過程中有異響。
 - 斷線跳閘頻繁開關。
 - 冷氣機散發出燒焦或異味。
 - 室內機漏水。
- 如果冷氣機不正常的條件下工作,可能會導致故障,觸電或火災的危險。
- 當打開或緊急操作開關關閉設備,請按下此開關與金屬以外的絕緣物體。
- ●務必先使用遙控器關閉冷氣機。不要使用電源斷路器或以拔下插頭方式來關閉冷氣機。



- 不要踩室外機的頂部面板上,或把重物。這可能會導致損壞或人身傷害。
- 當手濕時,切勿觸摸電源插頭,斷路器和緊急按鈕。
- 不要扭曲或按壓電源線,並確保它不被損毀。
- 不要拉扯電源線以拔出插頭,可能引致電源線損壞和觸電。
- ◆若長時間直接受冷氣吹送,會損害健康。我們建議將冷風平均送到房間每個位置。
- 如機件發生故障,請先按下遙控器上的 ON/OFF 按鈕,關閉冷氣機,然後中斷電源。
- 切勿頻繁的開關冷氣機,因為那樣操作會損壞冷氣機。
- 切勿放置物件於室外機上。
- 如長期不使用冷氣機或遇上雷電或閃電時,請中斷冷氣機的電源。
- 本產品含有京都條約協定的氟化溫室氣體的製冷劑,製冷劑已經被完全密封 在製冷系統裡面,製冷劑類別是 R410a,它是具有全球變暖潛勢值 (GWP 值),1975。



安裝事項

- 安裝必須由合格的專業人員進行。否則,可能會造成人身傷害或損壞。
- 安裝設備時必須遵循電氣安全法規。
- 據當地安全法規,使用合格的電源電路和漏電保護開關。
- 必須安裝漏電保護開關。否則可能會導致故障。
- 固定佈線中,要安裝一個接觸點斷開距離至少有 3mm 的全極斷開開關。
- ●包括適當容量的漏電保護開關,請注意。空氣開關應包括磁體扣和扣加熱功能,為產品出現短路和過載時候提供保護。
- 該設備應安全接地以連接供電。設備必須連接到具有足夠容量的漏電保 護裝置。
- 不要使用不合格的電源線。
- 確保電源與冷氣機的要求匹配。供電不穩定或不正確的接線或故障。請在使用冷氣機之前安裝適當的電源線。
- 正確連接火線,零線和電源插座的接地線。
- 請務必在進行相關的電力和安全的任何工作之前,先切斷電源。



- 在安裝完成之前,不要接通電源。
- 如果電源線損壞,必須由製造商,其服務代理商或相關的專業人員更換,以 避免危險。
- 製冷劑迴路的溫度會很高,請保持互聯電纜遠離銅管。
- 該設備應安裝符合國家配線規定。
- 黃綠色電線為冷氣機接地線,這是不能被用於其它目的。
- 接地電阻應符合國家電氣安全規定。
- 設備必須正確定位,使得插頭可連接使用。
- 室內機和室外機的所有電線應該由專業人員來連接。
- 如果電源連接線的長度不夠,請聯繫供應商換一個新的。切忌自行延長 電線。



- 對於冷氣機插頭,插頭應在安裝完成後可接上。
- 對於無插頭的冷氣機中,一個漏電保護開關必須安裝在內。
- 如果您需要將冷氣機移到其他地方,只有合技術資格的人可以完成這項工作。否則,可能會造成人身傷害或損壞。
- 選擇一個兒童接觸不到的地方,遠離動物或植物。如果無法避免,請加圍欄 以達到安全的目的。
- 室內機應靠折牆壁安裝。
- 請根據製造商提供的説明書進行安裝和使用本產品。

工作溫度範圍

	室內 DB / WB (°C)	室外 DB / WB (°C)
最大製冷	32/23	43/26
最大製暖	27/-	24/18

注意:

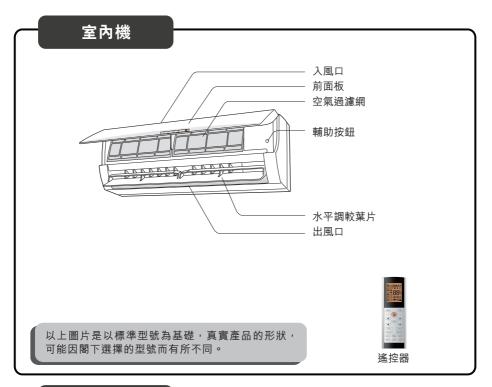
運行中的溫度範圍,單位製冷時的工作溫度範圍 (室外溫度)為 -15°C ~ 43°C;對於熱泵機組為 -15°C ~ 43°C。

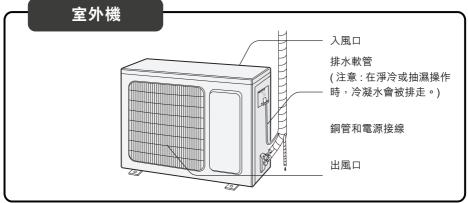
	室內 DB / WB (°C)	室外 DB / WB (°C)
最大製冷	32/23	43/26
最大製暖	27/-	24/18

注意:

運行中的溫度範圍,單位製冷時的工作溫度範圍 (室外溫度)為 -7° C ~ 48° C;對於熱泵機組為 -7° C ~ 48° C。

產品介紹

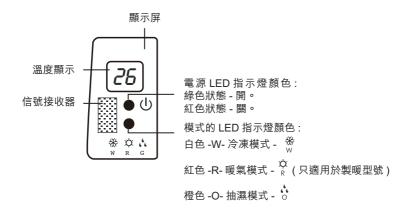




注意:

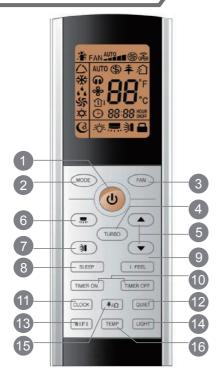
以上圖片是以標準型號為基礎,真實產品的形狀,可能因閣下選擇的型號 而有所不同。

顯示屏



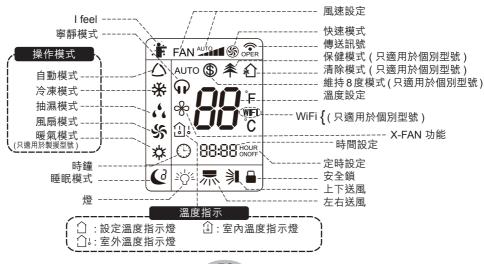
以上圖案是以標準型號為基礎,個別型號可能有所不同,以實物為準。

遙控器功能介紹



- 1 開/關按鈕
- 2 操作模式按鈕
- 3 風速按鈕
- 4 快速按鈕
- 5 ▲/▼按鈕
- 7 津上下送風按鈕
- 8 睡眠模式按鈕
- 9 I FEEL 感應按鈕
- 10 時間制開/關按鈕
- 11 時鐘設定按鈕
- 12 寧靜模式按鈕
- 13 WiFi 無線網絡通訊按鈕
- 14 室內機燈按鈕
- 16 溫度區按鈕

遙控器顯示屏圖案介紹



注意:

- 這是一般使用的遙控器,它適用於多功能冷氣機;雖然當中一些功能是某些型號 沒有的,但如果按下遙控器上的相應按鈕,該功能將保持原來的運行狀態。
- 接通電源後,冷氣機會發出聲音。操作指示燈 " (山)" 會顯示 (紅色指示燈)。在此之後,您可以通過使用遙控器來操作冷氣機。
- ●按下遙控器上的按鈕,所述信號顯示燈 " 令" 會在顯示器上閃爍一次,而冷氣機 會發出 "咇"的聲音,這意味著該信號已經被發送到冷氣機。

開/關按鈕

此按鈕作開/關機用途。開機後,室內機的顯示屏 "()"圖案亮起綠燈(個別型號會亮起其他顏色燈),同時室內機會發出開機指示聲音。

2 操作模式按鈕

按此按鈕選擇所需模式。



- 自動模式:冷氣機會因應當時室內環境溫度而自動調節合適溫度。此模式下不能設定所需濕度,同時濕度亦不會顯示出來。可按 "風速設定" 調節風速。亦可按
 湯 / 測 調節送風角度。
- ◆ 冷凍模式:遙控器上會顯示 ※ 圖案。按 "▲"及"▼"按鈕調節所需溫度。可按 "風速設定"調節風速。亦可按 등 / 〕調節送風角度。
- ●抽濕模式:遙控器上會顯示 "♣" 圖案。 冷氣機會以低風速運行。 抽濕模式下, 不能調節風速,但可按 票 / ¾調節送風角度。
- 風扇模式:冷氣機不會製冷及暖氣,此模式只會出風。風扇模式下,可調節風速 及送風角度。
- ●暖氣模式:遙控器顯示"菜"圖案,同時室內機"菜"圖案下的紅燈亮起。按
 "▲"及"▼"調節溫度,按風速按鈕調節風速。亦可按 憑/訓調節送風角度。

注意:

- 當啟動暖氣模式後,為避免吹出冷風,冷氣機會於暖氣模式後 1-5 分鐘才產吹出暖風(實際時間會按當時室內溫度而定)。
- 暖氣模式下可用遙控器調節 (1) 溫度 16-30°C (61-86°F); (2) 風速:自動,低至中風速,中至高風速及高風速。

3 風速按鈕

按此按鈕選擇所需風速,風速次序由: ◢ ,◢◢▮ ,◢◢▮▮ ,◢◢▮▮, ¾▮▮, 然後返回自動模式,如下圖:



注意:

- 於抽濕模式下,風速會以低風速運行。
- 乾燥功能:在冷凍或抽濕暖氣模式下,持續按住風速按鈕2秒以上,遙控器顯示 屏會出現"令"圖案。此功能是將室內機內的濕氣吹乾,以防止霉菌滋生。當啟 動此功能,當關機後,室內機的風扇會持續運作數分鐘把濕氣乾。此功能不能於 自動模式,風扇模式及暖風模式下進行。
- 啟動乾燥功能後,若按開/關按鈕關機,室內機會持續於低風速運作數分鐘。若在此時要關閉乾燥功能,持續按住風速按鈕2秒以上,室內機會關閉停止乾燥功能。
- 乾燥功能關閉時,若按開/關按鈕關機,室內機會立即關閉。

4 快速按鈕

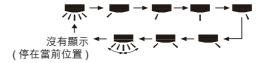
於冷凍及暖氣模式時按下快速按鈕,會啟動快速冷凍及快速暖氣功能。此時遙控器會顯示"圖家。若要取消快速功能,請再次按快速按鈕,此時"圖"圖案會消失。快速模式會以超高速運作,使於最短時間內達到預調溫度。

5 ▲/ ▼ 按鈕

按 "▲"或 "▼"按鈕調節溫度。每次以 1 度為基礎。持續按住 "▲"或 "▼"不少於 2 秒,溫度會快速變更,放開按鈕,溫度會停止跳動,此時室內機會按所調節之溫度而作調整。(於自動模式下,不能調整溫度)

● 當要設定"計時"或"時間"時,按"▲"或"▼"作調整。詳情請參閱"計時設定"及"時間設定"。

按此按鈕選擇左右送風角度,次序如下:



注意:

- ◆持續按住此按鈕不少於2秒,風葉會由左至右循環轉動,當不再按此按鈕時,風 葉會停於當前位置。
- 若在沒顯示時按此按鈕,會轉到 尽 若再於不多於 2 秒後再多按一次, 尽 會再次 消失,再次按下按鈕,風葉會按上圖次序再次運作。
- 此功能只適用於個別型號。

7 🔰 上下送風按鈕

按此按鈕選擇上下送風角度,次序如下:

- 當選擇 " 🔰 " 時,風葉會以最大角度上下自動擺動。
- 當選擇 "Ŷ【、≯【、≯】"時,風葉會於該顯示之角度擺動。
- ●按住"割"按鈕不少於2秒,可設定你所需的上下送風角度,當風葉到達想要的 角度時放開按鈕即可。

注意:

- 若 → ストラー 不能使用時,此時風葉會自動擺動。
- 若長按此按鈕,風葉會上下不停擺動,此時放開按鈕,風葉會停止擺動及停在當前位置。
- 若在沒顯示時按此按鈕,會轉到 **測** 若再於不多於 2 秒後再多按一次, **測** 會再次 消失,再按,風葉會按上圖次序再次運作。

睡眠模式按鈕

- 按此按鈕選擇睡眠模式。共有3種睡眠模式。每按一次此按鈕,會按次序進入不同睡眠模式,分別為睡眠模式(1) (1) ,睡眠模式(2) (2) ,睡眠模式(3) (3) 及取消。
- ●睡眠模式(1):於冷凍模式下,睡眠模式啟動1小時後,會將所設定之溫度提升1度,2小時後會提升2度,之後的時間會維持這個升2度後的溫度。於暖氣模式下,睡眠模式啟動1小時後,會將所設定之溫度降低1度,2小時後會降低2度,之後的時間會維持這個降2度後的溫度。
- 睡眠模式 (2):冷氣機內預設了一系列的睡眠溫度,此模式會按照預設溫度運行。
- 睡眠模式 (3): 此睡眠模式為自設模式
 - (1) 長按快速按鈕 (Turbo),會進入自設睡眠模式狀態,此時遙控器時間顯示位置會顯示"1hour",同時溫度顯示位置會閃爍及顯示上次設定睡眠模式之溫度。(若第一次使用此設定,會顯示出廠時廠方設定之溫度)
 - (2) 按 "▲"及"▼"按鈕調校所需溫度,然後按快速按鈕 (Turbo) 確定。
 - (3) 此時時間顯示位置會顯示"2hours"或"3hours"或"8hours",溫度顯示位置會閃爍及顯示上次設定之溫度。
 - (4) 重覆步驟 (2) 及 (3),直至完成 8 小時的睡眠溫度設定,此時遙控器會回復正常顯示狀態。
- 睡眠模式 (3): 自設睡眠模式設定查詢: 用戶可查看之前所輸入的設定,先進入睡眠模式 (3),但不要更改溫度設定,按快速按鈕 (Turbo)作確認。注意:若於以上設定過程內,連續 10 秒沒有按任何按鈕,睡眠模式設定便會自動退出,此時遙控器會回復正常顯示。若於設定時按"開/關"按鈕,模式按鈕 (Mode),時間按鈕 (Timer)或睡眠模式按鈕 (Sleep),睡眠模式溫度設定都會無效,自動退出。

9 I FEEL 感應按鈕

按"I FEEL"按鈕啟動感應功能,遙控器顯示屏會顯示"上"圖案。

感應功能是室內機會感應遙控器週邊的溫度,從而自動調節室內溫度。再次按此按鈕關閉此功能,此時"**計**"圖案會消失。

啟動此功能後,請將遙控器擺放在用戶附近。切勿將遙控器放置於太高或太低溫的 地方,會影響感測溫度的準確性。

10 時間制開/關按鈕

• 開啟時間制按鈕

"TIMER ON"是設定開機時間制。按後遙控器顯示屏上"①"圖案會消失,同時"ON"會 閃爍。 按"▲"或"▼"按鈕調節 冷氣機開機時間。每按"▲"或"▼"1次,分別增加及減少1分鐘。長按"▲"或"▼"按鈕,2秒後時間跳動會加快。

選擇開機時間後再按"TIMER ON"確認。"ON"圖案會停止閃爍,同時顯示"(-)"。要取消計時:只要在計時模式啟動下,按"TIME ON"按鈕即可。

■關閉時間制按鈕

"TIMER OFF"是設定關機時間。按後遙控器顯示屏上"①"圖案會消失,同時"OFF"會閃爍。按"▲"或"▼"按鈕調節冷氣機關機時間。每按"▲"或"▼"1次,分別增加及減少1分鐘。長按"▲"或"▼"按鈕,2秒後時間跳動會加快。

選擇開機時間後再按 "TIMER OFF" 確認。 "OFF" 圖案會停止閃爍,同時顯示 "①"。要取消計時:只要在計時模式啟動下,按 "TIME OFF" 按鈕即可。

注意:

- ●無論冷氣機處於開啟或關閉狀態下,都可以同時調節時間制開/關(TIMER ON/OFF)
- 於設定時間制前,請先設定時鐘。
- 當時間制開/關啟動後,會按循環啟動及關閉(意思是每天於設定時間會自動開啟或關閉)。若設定時間制,開/關(ON/OFF)按鈕無效。若不需要此功能,就將功能取消。

11 時鐘按鈕

按此按鈕設定時鐘。遙控器上"()"圖案會閃爍時,於5秒內按"▲"或"▼"設定時間。每按一次"▲"或"▼"時間會增加或減少1分鐘。若長按"▲"或"▼"按鈕,2秒後時間跳動會加快。

注意:

- 時鐘採用 24 小時模式。
- 設定時鐘時,若5秒內沒有確認,設定未能完成及無效,會跳出時鐘設定模式。 這情況與時間制開/關設定相同。

12 寧靜模式按鈕

按此按鈕進入寧靜模式。寧靜模式會於自動寧靜模式下進行,遙控器會顯示 "AUTO"及"介"符號,寧靜模式會以"介"代表,若關閉寧靜模式"介" 符號會消失。於開機時,寧靜模式預設為關閉。

注意:

- 寧靜模式可於任何模式下啟動: 寧靜模式啟動時, 不會顯示風速及不能調校。
- 寧靜模式啟動:

於冷凍模式:室內機風扇會以4速運行,10分鐘後或室內溫度低於28度,室內機風扇會以2速運行,或寧靜模式會視乎室內設定及所設定溫度而作調整。

於暖氣模式:室內機風扇會以3速運行,或視乎室內設定及所設定溫度而作調整。 於抽濕及風扇模式:室內機風扇以寧靜模式運行。

於自動模式:室內機風扇會以自動寧靜模式運行,同時會按實際冷凍,暖氣或風扇

• 此模式只適用於個別型號。

13 WiFi 無線網絡通訊按鈕

按無線網絡通訊按鈕"WiFi"啟動無線網絡功能。當啟動後,遙控器會顯示"WiFi"圖案。當遙控器關閉時,同時按模式"MODE"及"WiFi"按鈕,WiFi功能會回復出廠設定。

• 此功能只適用於個別型號。

14 室內機燈按鈕

按此按鈕可將室內機的顯示燈關掉,遙控器上"臺灣"圖案會消失。 再按一次重啟室內機燈,此時遙控器顯示"臺灣"圖案。

按此按鈕開啟及關閉健康及清除功能。第一次按此按鈕會啟動清除功能,此時顯示屏顯示"**介**"圖案。

特殊功能簡介

第二次按此按鈕會同時啟動健康及清除功能,此時顯示屏會顯示"**心**"及"**本**"及圖案。第三次按此按鈕會退出健康及清除功能。

第四次按會啟動健康功能,顯示屏顯示"♠"圖案。

• 此功能只適用於個別型號。

16 温度區按鈕

按此按鈕可於室內機顯示屏查看室內設定溫度,室內環境溫度或外環境溫度。 於遙控器上選擇次序如下:



- 遙控器顯示" 介 " 或沒有顯示,室內機顯示屏顯示之溫度為室內機的設定溫度。
- 遙控器顯示" ",室內機顯示屏顯示之溫度為室內環境溫度。
- 遙控器顯示" ○」。",室內機顯示屏顯示之溫度為室外環境溫度。

注意:

- 室外環境溫度顯示只適用於個別型號。若該型號不設室外環境溫度顯示,當選擇此圖案時,所顯示之溫度為室內設定溫度。
- 當開機時,預設顯示溫度為室內設定溫度。此時遙控器沒有溫度顯示。
- 只適用於室內機設有"88"顯示之型號。
- 若選擇顯示室內或室外環境溫度, 3-5 秒後會自動轉為顯示室內設定溫度。

節能功能

於冷凍模式下,要啟動/關閉節能功能,請同時按溫度區按鈕 (TEMP) 及時鐘按鈕 (CLOCK)。當節能功能啟動後,遙控器會顯示 "SE",冷氣機會將設定溫度調節為出廠模式,從而達到最節能效果。再同時按溫度區按鈕 (TEMP) 及時鐘按鈕 (CLOCK) 退出節能功能。

注意:

• 於節能功能下,風速為自動預設,不能調節。

特殊功能簡介

- 於節能功能下,預設溫度不能調校。此時快速按鈕無效。
- 睡眠模式及節能功能不能同時使用。於冷凍模式下啟動了節能功能,若此時按睡眠模式,節能功能會被取消。相反若於睡眠模式下啟動節能功能,節能功能會啟動而取消睡眠模式。

安全鎖

要啟動/關閉安全鎖,請同時按"▲"或"▼"。當安全鎖啟動,遙控器會顯示"量"圖案,此時若操作遙控器,"量"圖案會閃爍3次,操作不會被接納。

溫度單位°C/°F切換

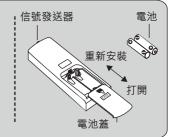
要轉換溫度單位,於關機狀態下,同時按"▼"及模式按鈕 (MODE),遙控器顯示 屏會交替顯示°C及°F。

操作指南

- 1. 接通電源後,按下遙控器上的開/關按鈕 (ON/OFF) 啟動冷氣機。
- **2.** 按模式按鈕 (MODE) 選擇所需要的模式:自動,冷凍,抽濕,風扇及暖氣(只適用於個別型號)。
- 3. 按 "▲"及"▼"按鈕調節所需溫度。(於自動模式下不能調校溫度)
- **4.** 按風速按鈕 (FAN) 設置所需風速:自動,低風速,低至中風速,中風速,中至高風速,高風速。
- 5. 按"氵"按鈕選擇所需出風角度。

更換遙控器電池

- 1. 按遙控器的背面標記 臺, 沿箭頭方向打開池蓋。
- 2. 更換兩顆 7 號 (AAA 1.5V) 乾電池,並確保 "+"極及"-"極是正確的。
- 3. 重新安裝電池蓋。



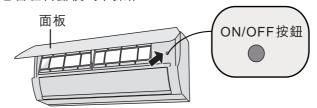
注意:

- 在操作的過程中,將遙控器指向室內機接收窗口以接收發送信號。
- 信號發送器和接收窗口之間的距離不應大於8米,它們之間應沒有障礙物。
- 房間內的營光燈或無線電話能干擾搖控器所發出的信號;室內機運轉時遙控器應盡量靠近操作。
- 當需要更換電池時,需要換同型號的新電池。
- 長時間不使用遙控器,請取出電池。
- 若遙控器顯示模糊不清或沒有顯示,請更換電池。

緊急操作指南

如果遙控器丟失或損壞,請用輔助按鈕來啟動或關閉冷氣機。詳細的操作 如下:

如下圖所示,打開面板,按"ON/OFF"按鈕來啟動或關閉冷氣機。當冷氣機接通時,它會在自動模式下操作。



▲ 警告:

使用絕緣物體按下自動按鈕

清潔和保養

- 在清潔冷氣機前,請關閉冷氣機並斷開電源,以避免電擊。
- 不要用水清洗冷氣機,以免觸電。
- 不要使用揮發性液體清潔冷氣機。

清潔室內機表面

若室內機的表面骯髒了,建議使用柔軟的乾布或濕布擦拭。

注意:

● 清潔時,不要取下面板。

清潔和保養

清潔濾網

1

打開面板

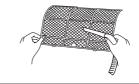
拉出面板到一定的角度,如圖中所示。



3

清潔濾網

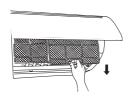
- 用吸塵器或清水清洗濾網。
- ●若濾網非常骯髒,請使用清水 (45°C以下)進行清潔,然後 把它放在陰涼處晾乾。



2

移除濾網

如圖所示取下過濾器。



4

安裝濾網

重新安裝濾網並輕力關閉面板。



▲ 警告

- 濾網應每三個月清洗一次。若操作環境較多塵埃,請增加清潔次數。
- 移除濾網後,不要觸摸散熱片,以避免受傷。
- 請勿使用火或吹風機去乾燥濾網,避免變形或火災。

清潔和保養

注意:請在使用前檢查

- 1. 檢查入風口和出風口是否被堵塞。
- 2. 檢查斷路器,插頭和插座是否完好。
- 3. 檢查濾網是否清潔。
- 4. 檢查安裝支架,室外機有否損壞或腐蝕。若有損壞,請諮詢經銷商。
- 5. 檢查排水管有否損壞。

注意:請在使用後檢查

- 1. 切斷電源。
- 2. 清潔濾網和室內機面板。
- 3. 檢查安裝支架,室外機有否損壞或腐蝕。若有損壞,請諮詢經銷商。

注意:

- 大部份包裝物料都是採用可循環再用物料製造。請棄置這些包裝物料於適當的回收單位。
- 2. 若需要棄置冷氣機,請與銷售商或客戶服務聯絡正確棄置方法。

故障分析

普遍現象分析

要求維修之前,請檢查以下項目。若故障仍無法解決,請諮詢當地經銷商或合格的專業人員。

現象	檢查項目	解決方案
	● 是否受到嚴重的干擾(如靜電· 穩定的電壓)	拔出插頭再重新連接電源, 約3分鐘後再啟動設備。
	● 遙控器是否在信號接收範圍內?	● 信號接收範圍為8米。
	● 周邊是否有障礙物?	●移除障礙物。
室內機無法接 收遙控器的信 號或遙控器沒	遙控器有否指向室內機接收 窗口?	● 選擇合適的角度,讓遙控器指向室內機的接收窗口。
有反應	遙控器的感應度是否不足; 顯示屏是否模糊不清或無顯示?	檢查電池電量是否不足,若不 足請更換電池。
	● 當操作遙控器時無顯示?	檢查遙控器是否損壞,若是 出現損壞情況,請更換遙控 器。
	● 室內是否有熒光燈?	操作時請把遙控器靠近 室內機。
		關掉熒光燈,然後再次啟動 設備。
	室內機的出或入風口是否被堵塞?	●移除堵塞物。
室內機無法發	● 在暖氣模式下·室內溫度達到 設定溫度?	室內温度達到設定温度後、 室內機會停止出風。
出風	● 暖氣模式是否剛啟動?	● 為防止吹出冷空氣·室內機 將延遲數分鐘後才出風·這 屬正常現象。

故障分析

現象	檢查項目	解決方案
冷氣機不能操作	 ●是否停電? ●插頭是否鬆脫? ●漏電保護開關跳製或保險絲被燒斷? ●連接的線路有故障? ●當冷氣機停止操作後,並立即重新啟動? ●遙控器的功能設定是否正確? 	 ◆ 待電力恢復。 ◆ 重新插入插頭。 ◆ 請專業人員更換漏電保護開關或保險絲。 ◆ 請專業人員更換。 ◆ 待關機3分鐘後再次啟動設備。 ◆ 重新設定功能。
薄霧從室內 機的出風口 發出	● 室內的温度及濕度是否相對 較高?	■ 因為室內空氣迅速冷卻。一段時間後,室內溫度和濕度將會降低,而霧會消失。
不能調整設置溫度	●是否正在運行自動模式?●你所設定的溫度是否超出可設定溫度範圍?	 溫度設置不能在自動模式下進行。 若您需要調整溫度,請切換操作模式。 溫度設定範圍: 16 ℃ - 30 ℃。
冷凍 (暖氣) 效果不理想	是否電壓不足?濾網太骯髒?設定溫度有否在適當的範圍內?門或窗戶是否打開了?	● 待電壓恢復正常。● 清洗濾網。● 調節溫度在適當的範圍內。● 關閉門窗。

故障分析

現象	檢查項目	解決方案
有異味發出	● 是否有異味源·如家具和香煙等?	資務資務資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資本資
冷氣機運行突 然異常	● 是否有干擾·如打雷·無線設 備等?	● 斷開電源,再重啟電源,然 後再啟動冷氣機。
室外機發出煙霧氣體	● 暖氣模式是否正開啟?	● 在暖氣模式下,冷氣機進行 除霜時,有可能產生水蒸 氣,屬正常現象。
水流嘈音	● 冷氣機是否剛啟動或關閉?	● 聲音是製冷劑流動所產生, 屬正常現象。
破裂聲	● 冷氣機是否剛啟動或關閉?	● 破裂聲是由於室內温度變化,導致機體面板或其他部件膨脹或收縮時所產生的聲音。

故障分析

故障提示

■ 當冷氣機出現異常狀態,室內機的溫度顯示燈會閃爍,顯示相應的故障代碼。 請參閱下表識別故障代碼

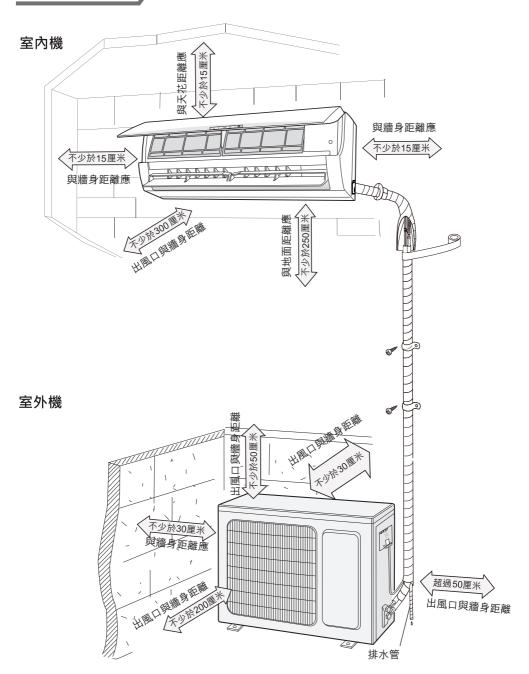
故障代碼	故障排除				
E1					
E5					
E6					
E8	重新啟動冷氣機後可回復正常狀態。否則請與合資格 人員或客戶服務中心聯絡。				
U8					
H3					
H6					
C5					
F1					
F2	請與合資格人員或客戶服務中心聯絡。				
F0					

注意:若有其他故障代碼出現,請諮詢合資格的專業人員或客戶服務中心。

▲ 警告

- 當出現以下情況時,請關掉冷氣機,並必須立即切斷電源,然後聯繫經銷商或合資格的專業服務:
 - 電源線過熱或損壞。
 - 操作過程中有異響。
 - 漏電保護開關跳閘頻繁開關。
 - 冷氣機散發出燒焦或異味。
 - 室內機漏水。
- 不要自行修理或自行改裝冷氣機。
- 如果冷氣機在不正常的環境下操作,可能會導致故障,觸電或火災的危險。

安裝指示



安裝安全指引

為確保安全,請嚴格遵照以下警告

⚠ 警告:

- 在安裝或搬運冷氣機時,請確保製冷劑迴路內除了生產商所指定製冷劑外,不可含有空氣及其他物質。若製冷劑迴路內含有空氣或其他外來物質,會使系統壓力上升或壓縮機破裂,造成受傷。
- 在安裝或搬運冷氣機時,切勿使用不符合生產商規定的製冷劑。否則會引致不 正常運作,機構故障或可能導致嚴重安全事故。
- 若在搬運或維修時需要補充製冷劑,必須確定在冷凍模式下進行,並確保將高壓閥門(液態閥門)完全關上。約30-40秒後再完全關上低壓閥門(氣態閥門),然後立即關閉冷氣機並切斷電源。請確保補充製冷劑時間不多於1分鐘。若補充製冷劑時間太長,空氣會進入而倒塞,會導致壓力上升或壓縮機破裂而引致受傷。
- 於補充製冷劑過程中,必須確保液態及氣態閥門完全關上,同時確保冷氣機切斷電源後才把喉管分離。
 若壓縮機運行過程中,閥門開了或連接管未連接好,空氣會進入,會導致壓力上升或壓縮機破裂而引致受傷。
- 於安裝過程中,必須確保連接管完全地安全連接後才啟動壓縮機。若壓縮機運行過程中,閥門開了或連接管未連接好,空氣會進入,會導致壓力上升或壓縮機破裂而引致受傷。
- 請確保冷氣機安裝的地方沒有腐蝕性氣體或可燃氣體洩漏。若於冷氣機週邊有氣體洩漏,有機會引致爆炸等安全事故。
- 切勿使用延長線或接線連接電源。若電源線長度不足, 請與客戶服務或認可之 技術人員聯絡。 連接不良可導致網票或以災。
 - 連接不良可導致觸電或火災。
- 確保使用指定或認可的電線連接內室及內外機。牢牢地夾住導線,使他們的終端接收沒有外部壓力。
 - 能力不足,錯誤的導線連接和不安全的接線端子的電線可能導致觸電或火災。

安裝工具

1 水平尺	2 螺絲批		3 電鑽
4 鑽頭	5 塑膠脹管		6 扭力扳手
7 開口扳手	8 管道切割刀		9 洩漏檢測儀
10 真空泵	11 壓力錶		12 萬用表
13 內六角扳手		14	. 度尺

注意:

- 請聯繫當地代理商進行安裝。
- 不要使用不合格的電源線。

選擇安裝位置

基本要求

在以下地方安裝裝置可能出現故障若未能避免,請諮詢當地經銷商:

- 1. 具有很強的熱源,蒸汽,易燃,易爆氣體或含有揮發物的地方。
- 2. 高頻設備的地方(如焊接機、醫療設備)。
- 3. 近海地方。
- 4. 在空氣中散布油或煙霧的地方。
- 5. 有硫化氣體的地方。
- 6. 有特殊情況的地方。
- 7. 設置於洗衣房的地方。

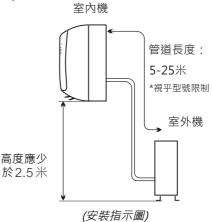
型號	標準管道長度 (米)	最短的管道長度 (米)	最長的管道長度 (米)	高度差距限制 (米)	所需的額外冷凍劑數 量(克/米)
ASV09000R	5 米	3 米	15 米	10 米	15
ASV12000R	5 米	3 米	20 米	10 米	15
ASV18000R	5 米	3 米	25 米	10 米	15
ASV22000R	5 米	3 米	25 米	10 米	15
ASH09000R	5 米	3 米	15 米	10 米	20
ASH12000R	5 米	3 米	20 米	10 米	20
ASH18000R	5 米	3 米	25 米	10 米	50
ASH22000R	5 米	3 米	25 米	10 米	50

*注意:當冷凍劑需要額外的增加時,只能使用 R410a 的冷凍劑。否則,引致冷氣機 產生的不良反應/故障,保養服務均視作無效。

選擇安裝位置

室外機

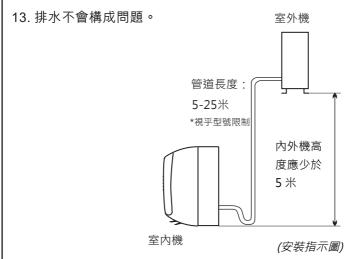
- 1. 入風口和出風口範圍不應有障礙物,以讓風順利吹至整個空間。
- 2. 選擇冷凝水能夠容易地分散,也不會影響到其他人的位置。
- 3. 選擇一個地點既方便連接室外機及在電源插座附近。
- 4. 選擇一個兒童接觸不到的地方。
- 5. 位置應能承受室內機的重量,也不會增加噪音和震動。
- 6. 不要安裝室內機於電器上方。
- 7. 與熒光燈保持距離。
- 8. 可輕易進行管道接駁及在牆身鑽孔的位置。
- 9. 依照安裝指示圖保持機身與天花及牆身應有的適當距離。
- 10. 空氣過濾網可輕易拆去。
- 11. 冷氣機和遙控器與電視機、收音機等電器至少保持 1 米的距離。
- 12. 不要在入風口前放置任何物件防礙吸風。
- 13. 室內機不應安裝在用作乾衣的地方。
- 14. 室內機必須安裝於與地面距離為 2.5 米。



選擇安裝位置

室外機

- 1. 選擇一個當室外機發出噪音和流出熱空氣時仍不會影響周邊的位置。
- 2. 位置應通風乾燥,室外機將不能直接暴露在陽光或強風下。
- 3. 位置應能承受室外機的重量。
- 4. 請確保安裝遵循安裝尺寸圖的要求。
- 選擇兒童接觸不到的地方,儘量遠離動物或植物。如果無法避免,請加圍欄以達到安全目的。
- 6. 避免在易燃氣體容易泄漏的地方安裝。
- 7. 室內機和室外機應保持5米距離,如有額外冷凍劑時,最長可增至25米。
- 8. 應遠離有油污和硫化氣體排出的位置。
- 9. 避免在有泥濘的路旁安裝室外機。
- 10. 有固定的底部,不易增加操作噪音的位置。
- 11. 出風口無任何堵塞物。
- 12. 能夠承托機身的重量和振動,並確保安全。



用電連接安排

安全預防措施

- 1. 必須嚴厲遵照電力安全監管條例下安裝此產品。
- 2. 按照本港安全規則,必須使用符合品質要求的電源電路及開關。
- 確保電源與冷氣機的電力要求吻合。不穩定的電源或不正確連接會引致故障。 請於啟動前確保正確安裝電源線。
- 4. 正確連接火線,中線及地線到插座。
- 5. 請確保切斷電源後才作任何與電力相關的工作。
- 6. 切勿在未安裝完畢前連上或接誦電源。
- 7. 若電源線受損,必須聯絡客戶服務或合資格的技術人員或銷售商作更換。
- 8. 製冷劑迴路之溫度較高,請確保連接線遠離銅管。
- 9. 此產品必須按國家佈線法規進行。

接地線連接要求

- 1. 必須由專業人員正確接地。請確保它有效接地,否則會導致觸電。
- 2. 黃綠線為空調器接地線,不能用於其它目的。各極應連接在固定佈線。對於使用電源插頭型號,確保插頭在安裝後是可以通電的。
- 3. 接地電阻應符合國家電氣安全規定。
- 4. 產品必須定位,使得插頭可接電。
- 5. 固定佈線中,要安裝一個接觸點斷開距離至少有 3mm 的全極斷開開關。
- 6. 接地必須設漏電段路裝置,裝置必須設有合適的電容值,相關容量參照下表。 漏電段路裝置必須設有磁石脱扣及熱脱扣功能,為產品短路及負荷過重時作保護。

類型	型號	開關斷路器的容量要求
	ASV09000R	10A
	ASV12000R	13A
	ASV18000R	16A
分體式	ASV22000R	25A
)) h <u>m</u> = V	ASH09000R	10A
	ASH12000R	13A
	ASH18000R	16A
	ASH22000R	25A

步驟一:選擇安裝位置

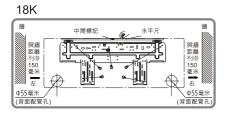
根據基本安裝要求決定室內外機的位置。

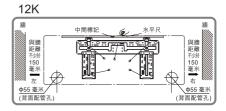
步驟二:安裝掛牆架

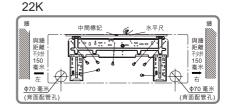
- 1. 安裝時使用水平尺或墨線,使掛牆底板保持在水平位置。在牆身鑽孔,以固定底板。
- 2. 用電鑽把螺絲固定在牆上的鑽孔(鑽頭的規格應該跟塑膠脹管對應),然後將塑膠 脹管填充於孔內。
- 3. 用自攻螺絲(ST4.2X25TA) 固定掛牆架,然後檢查框架是否安裝牢固。如果塑膠脹管鬆動,請於附近鑽另一個固定孔。

步驟三:打開管道孔

1. 根據出口管的方向選擇管道孔的位置。管道孔的位置應比掛牆架稍低,如下所示:



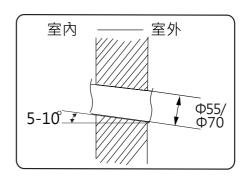




2. 在所選擇的出口管的位置打開直徑Φ55或Φ70的管道孔。為了順利地排水,偏牆壁上的鑽孔應往外略為向下斜5-10°。

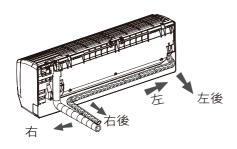
注意:

於開孔時請注意安全及避免灰塵 進入。

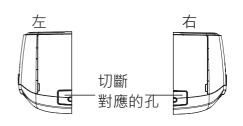


步驟四:引水管

1. 引水管道可設於右·右後·左·左 後方。

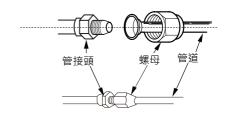


2. 若選擇從左邊或右邊的管道引水, 請切斷在底殼上對應的孔。



步驟五:連接室內機的管道

- 1. 讓管接頭連接在相應的接口。
- 2. 用手扭緊螺母。



3. 通過以下參照來調整扭力。用開口扳手扣實管接頭,並將扭矩扳手扣上螺母,鎖 緊螺母。





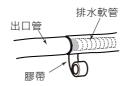
4. 用絕緣管包裹室內管和連接管的接頭,然後用膠帶包裹它。

型號	液體管長度	扭力 (kg.m)	螺帽闊度	最少厚度	氣體管長度	扭力 (kg.m)	螺帽闊度	最少厚度
ASV09000R	ф6 (1/4 吋)	1.5~2	17 毫米	0.6 毫米	φ9.52 (3/8 吋)	3.1~3.5	22 毫米	0.71 毫米
ASV12000R	ф6 (1/4 吋)	1.5~2	17 毫米	0.6 毫米	ф9.52 (3/8 吋)	3.1~3.5	22 毫米	0.71 毫米
ASV18000R	ф6 (1/4 吋)	1.5~2	17 毫米	0.6 毫米	ф16 (5/8 吋)	6.0~6.5	27 毫米	0.71 毫米
ASV22000R	ф6 (1/4 吋)	1.5~2	17 毫米	0.6 毫米	ф16 (5/8 吋)	6.0~6.5	27 毫米	0.71 毫米
ASH09000R	ф6 (1/4 吋)	1.5~2	17 毫米	0.6 毫米	ф9.52 (3/8 吋)	3.1~3.5	22 毫米	0.71 毫米
ASH12000R	ф6 (1/4 吋)	1.5~2	17 毫米	0.6 毫米	ф9.52 (3/8 吋)	3.1~3.5	22 毫米	0.71 毫米
ASH18000R	ф6 (1/4 吋)	1.5~2	17 毫米	0.6 毫米	ф16 (5/8 吋)	6.0~6.5	27 毫米	0.71 毫米
ASH22000R	ф6 (1/4 吋)	1.5~2	17 毫米	0.6 毫米	ф16 (5/8 吋)	6.0~6.5	27 毫米	0.71 毫米

步驟六:安裝排水管

1. 連接排水軟管到室內機的出口管。

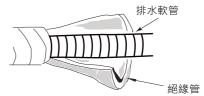
2. 用膠帶包裹接頭。





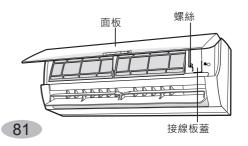
注意:

● 用絕緣管包裹排水軟管,以防止 排水軟管凝結。

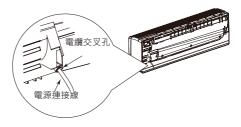


步驟七:室內機連接線

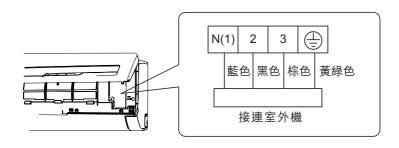
1. 打開面板,卸下接線板蓋的螺絲, 然後取下蓋板。



2. 讓電源連接線經過室內機背面的電纜交叉 孔,然後從前側拉出。



3. 取下線夾; 根據顏色將電源連接線連接到接線端; 鎖上螺絲, 然後以線夾固定電源連接線。



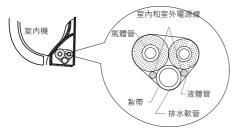
- 4. 把接線蓋回, 然後鎖上螺絲。
- 5. 關閉面板。

注意:

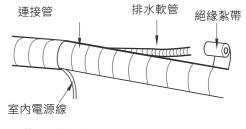
- 所有室內機和室外機的電線應由專業人員來連接。
- 如果電源連接線的長度不足,請聯絡供應商或客戶服務中心。不要自行延長接線。
- 冷氣機插頭應在安裝完成後可達電源。
- 對於無插頭的冷氣機,出風開關必須安裝一個接觸點斷開距離至少有 3mm 的全極 斷開開關。
- *請參閱第92頁的 "電線連接", 當中詳細指出電線規格及要求。

步驟八:包裹喉管

1. 以絕緣紮帶包裹連接管,電源線和排水軟管。



2. 包裹排水軟管及電源線時,排水軟管 及電源線都需要預留一定長度作安 裝使用。包裹完成後,在末端需要把 排水軟管及電源線分開。



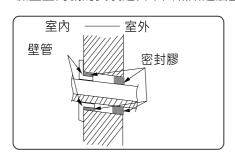
- 3. 均匀地包裹。
- 4. 液體管道和氣體管道末端需要分開包裹。

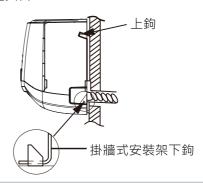
注意:

- 電源線和控制線不能交叉或纏繞。
- 把排水軟管放置在管道下面

步驟九:掛置室內機

- 1. 將包裹好的管道放入壁管內, 然後讓他們穿過牆孔。
- 2. 掛置室內機在掛牆式框架上。
- 3. 填補牆孔與密封膠之間的差距。
- 4. 固定壁管
- 5. 檢查室內機的安裝是否牢固和貼近牆壁與否。





注意:

• 不要讓排水管過分彎曲,以防止堵塞。

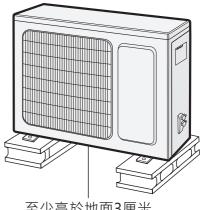
室外機的安裝

步驟一:固定室外機的支架(根據實際安裝情況而定)

- 1. 根據房屋結構選擇安裝位置。
- 2. 在已選定位置上,用膨脹螺絲固定室外機支架。

注意:

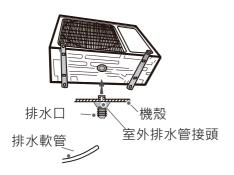
- 在安裝室外機時採取足夠的防護措施
- 確保支架可承受機身重量的至少四倍。.
- 室外機應與地面保持不少於3厘米的距 離,以便安裝排水管接頭。
- 對於機組,製冷能力為2300W-5000W 的,需要6顆膨脹螺絲;製冷能力為 6000W-8000W,需要8顆膨脹螺絲;製冷 能力為10000W-16000W能力,需要10顆 膨脹螺絲。



至少高於地面3厘米

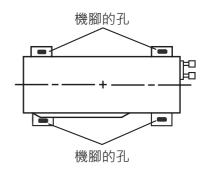
步驟二:安裝排水管接頭 (適用於冷暖型號)

- 1. 連接室外排水管接頭並插入機殼上的 孔,如下圖所示。
- 2. 排水軟管連接到排水口。



步驟三:固定室外機

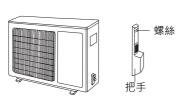
- 1. 放置室外機於支架上。
- 2. 用螺栓固定室外機腳的孔。



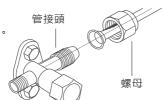
室外機的安裝

步驟四:連接室內和室外管道

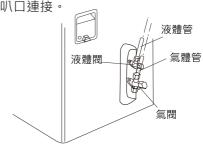
1. 卸下室外機右邊把手的螺絲,然後取下把手。



3. 鎖緊螺母。



2. 除去氣閥的螺帽,令管接頭與管的喇叭口連接。

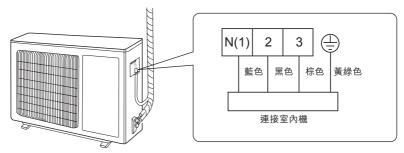


4. 參照下面表格使用扭力扳手鎖緊 螺母。

型號	液體管長度	扭力 (kg.m)	螺帽闊度	最少厚度	氣體管長度	扭力 (kg.m)	螺帽闊度	最少厚度
ASV09000R	φ6 (1/4 吋)	1.5~2	17 毫米	0.6 毫米	φ9.52 (3/8 吋)	3.1~3.5	22 毫米	0.71 毫米
ASV12000R	ф6 (1/4 吋)	1.5~2	17 毫米	0.6 毫米	ф9.52 (3/8 吋)	3.1~3.5	22 毫米	0.71 毫米
ASV18000R	ф6 (1/4 吋)	1.5~2	17 毫米	0.6 毫米	ф16 (5/8 吋)	6.0~6.5	27 毫米	0.71 毫米
ASV22000R	ф6 (1/4 吋)	1.5~2	17 毫米	0.6 毫米	ф16 (5/8 吋)	6.0~6.5	27 毫米	0.71 毫米
ASH09000R	ф6 (1/4 吋)	1.5~2	17 毫米	0.6 毫米	ф9.52 (3/8 吋)	3.1~3.5	22 毫米	0.71 毫米
ASH12000R	ф6 (1/4 吋)	1.5~2	17 毫米	0.6 毫米	ф9.52 (3/8 吋)	3.1~3.5	22 毫米	0.71 毫米
ASH18000R	ф6 (1/4 吋)	1.5~2	17 毫米	0.6 毫米	ф16 (5/8 吋)	6.0~6.5	27 毫米	0.71 毫米
ASH22000R	ф6 (1/4 吋)	1.5~2	17 毫米	0.6 毫米	ф16 (5/8 吋)	6.0~6.5	27 毫米	0.71 毫米

步驟五:連接室外電線

1. 取下線夾,根據顏色將電線分別連線到控制板的終端上(適用於冷暖型號), 並用螺絲固定。



室外機的安裝

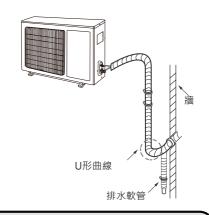
2. 使用電線夾將電源線及信號線安裝穩妥。(適用於冷暖型號)

注意:

- 鎖緊螺絲後, 稍微拉動電源線檢查是否牢固。
- 切勿切斷電源連接線去延長或縮短距離。

步驟六:放置管道

- 1. 管道應沿牆放置,適當地彎曲和儘量隱藏。 彎曲的管之半徑必須大於10厘米。
- 如果室外機比牆孔高,在管道進入房間前, 必須在管道彎曲成一個U形曲線,以防止雨 水進入室內。



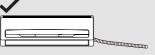
注意:

- 排水軟管的穿牆高度不宜高過室內機 的出口管孔。
- 排水軟管略微向下。排水軟管不 能彎曲、凸起和波動等等。





t排水軟管不可向上



• 出水口不能放入水中,以便順利地排出。



排水軟管不能凸起和波動





氣體排空

使用真空泵

1. 拆下液體閥和氣體閥的蓋及 製冷劑排洩管的螺母。

2. 把真空泵彈性軟管連接到入 氣閥。

3. 啟動真空泵 10-15 分鐘・以檢

查測壓儀壓力在-0.1MPa。

4. 關閉真空泵並保持這種狀態1-2分鐘以檢查測 壓儀壓力在-0.1MPa。如果壓力降低,可能 存在洩漏。

5. 卸下測壓管,打開液體閥和氣體閥的閥芯。

6. 用內六角扳手鎖緊閥門和製冷劑排洩管螺帽。

7. 重新安裝閥蓋及把手。

注意:

● 若要移除室內機的閥蓋,請先移除擁較小直徑的螺母。否則,擁較大直徑的 密封蓋會飛出。

泄漏檢測

- 1. 使用泄漏檢測儀:檢查是否有滲漏。
- 2. 用肥皂水: 若沒有泄漏檢測儀,可用肥皂水進行泄漏檢測。把肥皂水放於疑似泄漏位置, 並保持超過3分鐘,如果有氣泡冒出來代表有泄漏。

安裝後的檢查

安裝完成後,請根據如下要求檢查:

檢查項目	可能的故障
機組安裝已經牢固?	設備可能會下墜,震動或發出噪音。
是否完成了製冷劑泄漏檢測?	它可能會導致冷凍 (暖氣) 能力不足。
管道是否有足夠的隔熱?	這可能會導致冷凝和滴水。
排水是否順利?	這可能會導致冷凝和滴水。
電源是否根據銘牌上的電壓?	這可能會造成故障或損壞部件。
電線和管道安裝是否正確?	這可能會造成故障或損壞部件。
是否安全接地?	這可能會導致漏電。
電源線有否按照規範?	這可能會造成故障或損壞部件。
是否有任何障礙物於進風出入口?	它可能會導致冷凍 (暖氣) 能力不足。
是否已清除安裝過程中造成的灰塵和雜物?	這可能會造成故障或損壞部件。
連接管的氣體閥和液體閥是完全打開?	它可能會導致冷凍 (暖氣) 能力不足。
是否已覆蓋管道孔的入口和出口?	它可能會導致冷凍 (暖氣) 能力不足 及消耗能源。

運行測試

1. 測試準備

- 客戶批準的冷氣機。
- 向客戶指出冷氣機的重要注意事項。

2. 測試方法

- 通過電源,按下遙控器上的 ON/OFF 按鈕,開始運行。
- 按 MODE 鍵,選擇 AUTO(自動), COOL(冷凍), DRY(抽濕), FAN(風扇)及 HEAT(暖氣)模式,檢查操作是否正常。
- 若環境溫度低於 16℃時,冷氣機無法製冷。

連接管道的配置

- 1. 管道標準長度
 - 5 米
- 2. 最短管道長度 3 米
- 3. 最長管道的長度

冷凍能力	連接管最長長度
5000Btu/h (1465W)	15
7000Btu/h (2051W)	15
9000Btu/h (2637W)	15
12000Btu/h (3516W)	20
18000Btu/h (5274W)	25

冷凍能力	連接管最長長度
24000Btu/h (7032W)	25
28000Btu/h (8204W)	30
36000Btu/h (10548W)	30
42000Btu/h (12306W)	30
48000Btu/h (14064W)	30

- 4. 延長連接管後所需的額外冷凍機油和製冷劑填充
 - 連接管長度比標準長度延長了 10 米後,每增加 5 米,應添加 5 毫升的製冷 劑油。
 - 製冷劑的追加充量的計算方法(於液體管道的基礎上)
 - 製冷劑的追加充量 = 延長了的管道長度 X 每米所增加製冷劑的量
 - 按標準管道長度,所需增加的製冷劑量可參考下表。不同連接管道直徑所需增加的製冷劑量亦有所不同,詳細請參看下面圖表

連接管道的配置

可額外增加的製冷劑為 R410a

連接管	的直徑	室外機節流		
液體管(毫米)	氣體管(毫米)	淨冷 (g/m)	冷暖 (g/m)	
Ф6	Ф9.52 ог Ф12	15	20	
Ф6 ог Ф9.52	Ф16 ог Ф19	15	50	
Ф12	Ф19 ог Ф22.2	30	120	
Ф16	Ф25.4 ог Ф31.8	60	120	
Ф19	-	250	250	
Ф22.2	-	350	350	

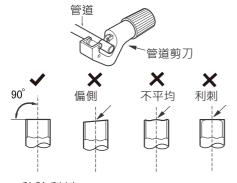
擴充管道的方法

注意:

不當擴充管道是製冷劑泄漏的主要原因。請按以下步驟擴充管道:

A: 切割管道

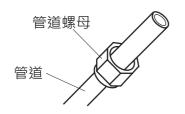
- 根據室內機和室外機的距離確定管道長度。
- 使用管道剪刀切割所需的管道。



- B: 移除利刺
- 利用磨具磨平利刺·並避免利刺進入 管道。

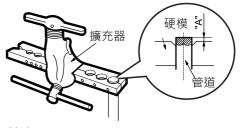


- C: 配上合適的絕緣管
- D: 套上管道螺母
- 取下室內連接管和室外的閥門螺母; 安裝螺母於管道上。



E: 擴展端口

• 使用擴充器擴展端口。



注意:

● "A" 的做法會因應外管直徑而不同,請 參照下表:

外管直徑	A(毫米)		
(毫米)	最長	最短	
Ф6 - 6.35(1/4")	1.3	0.7	
Ф9.52(3/8")	1.6	1.0	
Ф12-12.7(1/2")	1.8	1.0	
Ф15.8-16(5/8")	2.4	2.2	

F: 檢查

◆檢查擴展端口質素 如果有任何缺陷,根據上述步驟再 次擴大端口。



電線連接

注意:

- 1. 請確保室外機的電線顏色與線路號碼與室內機一樣。
- 2. 冷氣機必須具備獨立的電源。有關線路接駁方法,請參閱貼在機身內的電路圖。
- 3. 確保電線的粗幼度符合以下電線規格表上的説明。
- 4. 檢查電線,確保電線已接駁穩妥。電線需以電線鉗接駁。
- 5. 切記在潮濕的地方安裝接地漏電斷路器。

電線規格表

類型	型號	電源線	電源連接線	主電源 (注意)
分體式	ASV09000R	3G1.0	4G1.0	內機供電
	ASV12000R	3G1.0	4G1.0	內機供電
	ASV18000R	3G1.5	4G1.5	內機供電
	ASV22000R	3G2.5	4G2.5	內機供電
	ASH09000R	3G1.0	4G1.0	內機供電
	ASH12000R	3G1.0	4G1.0	內機供電
	ASH18000R	3G1.5	4G1.5	內機供電
	ASH22000R	3G2.5	4G2.5	內機供電

If there is any inconsistency or ambiguity between the English version and Chinese version, the English version shall prevail.

注意:如中文版本有任何抵觸或不相符之處,一概以英文版本為準。

 $Whirlpool {\tt `Registered trademark/TMTrademark of Whirlpool group of companies} \\ All {\tt rights reserved - http://www.whirlpool.com.hk} \\$

註冊商標/惠而浦集團的TM商標版權所有翻印必究 - http://www.whirlpool.com.hk





