

# **Explanation of Symbols**

**↑** WARNING

This symbol indicates the possibility of death or serious injury.

**ACAUTION** 

This symbol indicates the possibility of injury or damage to property.

NOTICE

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

# **Exception Clauses**

Manufacturer will bear no responsibilities when personal injury or property loss is caused by the following reasons.

- 1.Damage the product due to improper use or misuse of the product;
- 2. Alter, change, maintain or use the product with other equipment without abiding by the instruction manual of manufacturer;
- 3. After verification, the defect of product is directly caused by corrosive gas;
- 4. After verification, the defects are due to improper operation during transportation of product;
- 5. Operate, repair, maintain the unit without abiding by instruction manual or related regulations;
- 6.After verification, the problem or dispute is caused by the quality specification or performance of parts and components that produced by other manufacturers;
- 7. The damage is caused by natural calamities, bad using environment or force majeure.

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

When refrigerant leaks or requires discharge during installation, maintenance, or disassembly, it should be handled by certified professionals or otherwise in compliance with local laws and regulations.

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.

# Fcc Warning

WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## Fcc Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions :

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

# ■ Ic Statement

This device complies with Industry Canada licenceexempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

## ■ Ic Statement

This equipment complies with FCC's and IC's RF radiation exposure limits set forth for an uncontrolled environment. The antenna(s) used for this transmitter must be installed and operated to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter. Installers must ensure that 20cm separation distance will be maintained between the device (excluding its handset) and users.

Cet appareil est conforme aux limites d'exposition au rayonnement RF stipulées par la FCC et l'IC pour une utilisation dans un environnement non contrôlé. Les antennes utilisées pour cet émetteur doivent être installées et doivent fonctionner à au moins 20 cm de distance des utilisateurs et ne doivent pas être placées près d'autres antennes ou émetteurs ou fonctionner avec ceux-ci. Les installateurs doivent s'assurer qu'une distance de 20 cm sépare l'appareil (à l'exception du combiné) des utilisateurs.



# **WARNING**

# Installation

- Installation or maintenance must be performed by qualified professionals.
- The appliance shall be installed in accordance with national wiring regulations.
- According to the local safety regulations, use qualified power supply circuit and circuit breaker.
- All wires of indoor unit and outdoor unit should be connected by a professional.
- Be sure to cut off the power supply before proceeding any work related to electricity and safety.
- Make sure the power supply matches with the requirement of air conditioner.
- Unstable power supply or incorrect wiring may result in electric shock, fire hazard or malfunction. Please install proper power supply cables before using the air conditioner.

- The grounding resistance should comply with national electric safety regulations.
- Air Conditioner should be properly grounded. Incorrect grounding may cause electric shock.
- Do not put through the power before finishing installation.
- Do install the circuit breaker. 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.
- Circuit breaker should be included magnet buckle and heating buckle function. It can protect the overload and circuit-short.

# **A** CAUTION

# Installation

- Instructions for installation and use of this product are provided by the manufacturer.
- 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.
- Don't use unqualified power cord.
- If the length of power connection wire is insufficient, please contact the supplier for a new one.
- The appliance must be positioned so that the plug is accessible.
- For the air conditioner with plug, the plug should be reachable after finishing installation.

- For the air conditioner without plug, a circuit breaker must be installed in the line.
- The yellow-green wire in air conditioner is grounding wire, which can't be used for other purposes.
- The air conditioner is the first class electric appliance. It must be properly grounder with specialized grounding device by a professional. Please make sure it is always grounded effectively, otherwise it may cause electric shock.
- The temperature of refrigerant circuit will be high, please keep the interconnection cable away from the copper tube.



# **WARNING**

# **Operation** and **Maintenance**

- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.
- 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 connect air condi-

- tioner to multi-purpose socket. Otherwise, it may cause fire hazard.
- Do disconnect power supply when cleaning air conditioner. Otherwise, it may cause electric shock.
- Do not wash the air conditioner with water to avoid electric shock.
- Do not spray water on indoor unit. It may cause electric shock or malfunction.
- Do not repair air conditioner by yourself. It may cause electric shock or damage.
   Please contact dealer when you need to repair air conditioner.
- After removing the filter, do not touch fins to avoid injury.
- Do not extend fingers or objects into air inlet or air outlet. It may cause personal injury or damage.



# **Operation** and **Maintenance**

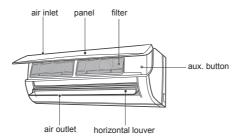
- Do not spill water on the remote controller, otherwise the remote controller may be broken.
- Do not use fire or hair dryer to dry the filter to avoid deformation or fire hazard.
- Do not block air outlet or air inlet. It may cause malfunction.
- Do not step on top panel of outdoor unit, or put heavy objects. It may cause damage or personal injury.
- 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 breaker trips off

frequently.

- Air conditioner gives off burning smell.
- Indoor unit is leaking.

#### Parts name

#### Indoor Unit



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

## Display

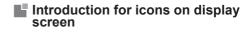
Heat mode	\$	R:red indicator R (only for heat model)		
Cool mode **		★ W:white indicator		
Dry mode	"	G:green indicator C:G O:orange indicator		
Temp. indicator	26			
Power indicator	மு			

#### NOTE

- This is the general introduction and the color of in dicator is only for reference. Please refer to the actual display.
- Display content may be different from the actual. Please refer to the actual display.

# Operation and introduction of remote controller

## **■** Buttons on remote controller





	. I feel				
FAN AUTO		Set fan speed			
	<b>®</b>	Turbo mode			
	<b>♠</b>	Send signal			
ge	Δ	Auto mode			
Operation mode	*	Cool mode			
tion	44	Dry mode			
era	YS	Fan mode			
Q	*	Heat mode			
	<b>(</b> *.	Sleep mode			
	\$	8°C heating function			
	&	X-FAN function			
	*	Health mode			
	£	Scavenging function			
	WIFI	WiFi function			
88		Set temperature			
Temp.					
		্র Indoor ambient temp.			
dis	splay type	் Outdoor ambient temp.			
	0	Clock			
	88:88	Set time			
	HOUR ONOFF	TIMER ON / TIMER OFF			
	<u>-</u> ;Ċʻ=	Light			
	 ≱I	Up & down swing			
	Ĺ	Child lock			

# Introduction for buttons on remote controller

#### NOTE

- This is a general use remote controller. It could be used for the air conditioner with multifunction. For the functions which the model doesn't have, if press the corresponding button on the remote controller, the unit will keep the original running status.
- After putting through the power, the air conditioner will give out a sound. Power indicator " () " is ON.
   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 "di" sound, which means the signal has been sent to the air conditioner.
- Under off status, set temperature and clock icon will be displayed on the display of remote controller (If timer on, timer off and light functions are set, the corresponding icons will be displayed on the display of remote controller at the same time); Under on status, the display will show the corresponding set function icons.

# ON/OFF button

Press this button to turn on the unit. Press this button again to turn off the unit.

# ▲ button

Press this button to increase set temperature. Holding it down above 2 seconds rapidly increases set temperature. In auto mode, set temperature is not adjustable.

## MODE button

Each time you press this button, a mode is selected in a sequence that goes from AUTO, COOL, DRY, FAN, and HEAT, as the following:

#### NOTE

- Heat mode: Only for models with heating function.
- Under auto mode, temperature can't be displayed;
   Under auto mode, set temperature can't be adjusted.

## SWING button

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

This remote controller is universal . If any command  $\geq 1$ ,  $\Rightarrow 1$  or  $\Rightarrow 1$  is sent out, the unit will carry out the command as  $\Rightarrow 1$ .

indicates the guide louver swings as:

# ▼ button

Press this button to decrease set temperature. Holding it down above 2 seconds rapidly decreases set temperature. In auto mode, set temperature is not adjustable.

## FAN button

This button is used for setting Fan Speed in the sequence that goes from Auto, , , , to , to , then back to Auto.



#### NOTE

- Under AUTO speed, air conditioner will select proper fan speed automatically according to ex-factory setting.
- It's low fan speed under dry mode.
- X-FAN function Hold fan speed button for 2s in cool or dry mode, the icon " or " is displayed and the indoor fan will continue operation for a few minutes in order to dry the indoor unit even though you have turned off the unit. After energization, X-FAN OFF is defaulted. X-FAN is not available in auto, fan or heat

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

- Having set X-FAN function on: After turning off the unit by pressing ON/OFF button indoor fan will continue running for a few minutes. at low speed. In this per-iod, 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.

#### TIMER OFF

button

Press this button to initiate the auto-off timer. To cancel the auto-timer program, simply press the button again.TIMER OFF setting is the same as TIMER ON.

#### CLOCK

button

Press CLOCK button, ⊕ blinking. Within 5 seconds, pressing "▲" or "▼" button adjusts the present time. Holding down either button above 2 seconds increases or decreases the time by 1 minute every 0.5 second and then by 10 minutes every 0.5 second. During blinking after setting, press CLOCK button again to confirm the setting, and then ⊕ will be constantly displayed.

#### TIMER ON

button

Press this button to initiate the auto-ON timer. To cancel the auto-timer program, simply press this button again.

After press of this button, ⊕disappears and "ON" blinks. 00:00 is displayed for ON time setting. Within 5 seconds, press "▲" or "▼" button to adjust the time value. Every press of either button changes the time setting by 1 minute. Holding down either button rapidly changes the time setting by 1 minute and then 10 minutes. Within 5 Seconds after setting, press TIMER ON button to confirm.

#### SLEEP

button

Press this button to go into the sleep operation mode. Press it again to cancel this function. This function is available in cool, heat (Only for models with heating function) to maintain the most comfortable temperature for you.

## TEMP button

Press this button, you can see indoor set temperature, indoor ambient temperature on indoor unit's display. The setting on remote controller is selected circularly as below:



When selecting " \( \) " with remote controller or no display, temperature indicator on indoor unit displays set temperature; When selecting " \( \) with remote controller, temperature indicator on indoor unit displays indoor ambient temperature; 3s later or within 3s it receives other remote controller signal that will return to display the setting temperature.

#### NOTE

- It's defaulted to display set temperature when turning on the unit.
- Only for the models with temperature indicator on indoor unit.

## TURB0

button

Press this button to activate / deactivate the turbo function which enables the unit to reach the preset temperature in the shortest time. In cool mode, the unit will blow strong cooling air at super high fan speed. In heat mode, the unit will blow strong heating air at super high fan speed.

## (X-FANI∜

button

X-FAN function: In cool or dry mode, the icon is displayed and the indoor fan will continue operation for a while in order to dry the indoor unit even though you have turned off the unit. After energization, X-FAN OFF is defaulted. X-FAN is not available in auto, fan or heat mode.

ార్ట్ function: turn on the display's light and press this button again to turn off the display's light. If the light is turned on, ప్రేక్ displayed. If the light is turned off, ప్రేక disappears.

## WiFi

button

Press "WiFi" button to turn on WiFi function, "WiFi" icon will be displayed on the remote controller;

Hold "WiFi" button for 5s to turn off WiFi function and "WiFi" icon will disappear.

Under off status, press "MODE" and "WiFi" buttons simultaneously for 1s, WiFi module will restore factory settings.

#### NOTE

• This function is only available for some models.

#### button

Press this button to turn on or turn off the health and scavenging functions in operation status. Press this button for the first time to start scavenging function; LCD displays "\(\Delta\)". Press the button for the second time to start health and scavenging functions simultaneously; LCD displays "\(\Delta\)" and "\(\Righta\)". Press this button for the third time to quit health and scavenging functions simultaneously. Press the button for the fourth time to start health function; LCD display "\(\Righta\)". Press this button again to repeat the operation above.

#### NOTE

• This function is applicable to partial of models.

# Introduction for special function

Combination of "▲" and "▼" buttons: About child lock

Press "▲" and "▼" buttons simultaneously to lock or unlock the keypad. If the remote controller is locked, 🖨 is displayed. In this case, pressing any button. 🖨 blinks three times.

Combination of "MODE" and "▼" buttons: About switch between Fahrenheit and centigrade

At unit OFF, press "MODE" and "▼" buttons simultaneously to switch between °C and °F.

Combination of "TEMP" and "CLOCK" buttons: About Energy-saving Function

Press "TEMP" and "CLOCK" simultaneously in cool mode to start energy-saving function. Nixie tube on the remote controller displays "SE". Repeat the operation to quit the function.

Combination of "TEMP" and "CLOCK" buttons: About 8°C Heating Function

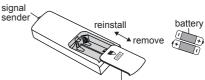
Press "TEMP" and "CLOCK" simultaneously in heat mode to start 8°C heating function. Nixie tube on the remote controller displays "\$\mathbb{\omega}" and a selected temperature of "8°C". (46°F if Fahrenheit is adopted) Repeat the operation to quit the function.

#### I FEEL function

Press "A" and "MODE" buttons simultaneously to start I FEEL function and "É" 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 two buttons simultaneously again to close I FEEL function and "É" 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.
- When I FEEL function is turned on, the remote controller should be put within the area where indoor unit can receive the signal sent by the remote controller.

# Replacement of batteries in remote controller



Cover of battery box

- 1. Press the back side of remote controller marked with ", as shown in the fig, and then push out the cover of battery box along the arrow direction.
- 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.

### Clean and maintenance

# /\text{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.
- Do not use liquid or corrosive detergent to clean the appliance and do not splash water or other liquid onto it, otherwise, it may damage the plastic components, even cause electric shock.

#### Clean surface of indoor unit

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

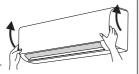
#### NOTICE

• Do not remove the panel when cleaning it.

### Clean filter

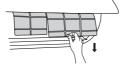
## 1. Open panel

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



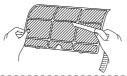
#### 2. Remove filter

Remove the filter as indicated 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.



#### 4. Install filter

Install the filter and then close the panel cover tightly.



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

#### NOTICE: Checking before use-season

- Check whether air inlets and air outlets are blocked.
- 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.
- Check whether mounting bracket for outdo or 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.

## 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
	E5, E8, E6, H6	It can be eliminated after restarting the unit. If not, please contact qualified professionals for service.
	C5, F1, F0, F2	Please contact qualified professionals for service.

#### NOTE

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

# Checked items before maintenance

### 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.

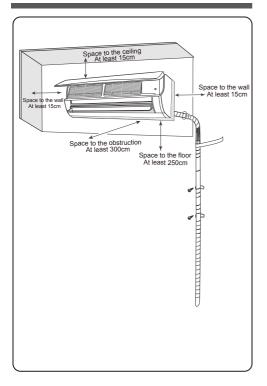
professionals.					
Phenomenon	Check items	Solution			
	Whether it's interfered severely (such as static electricity, stable voltage?)	Pull out the plug. Reinsert the plug after about 3min, and then turn on the unit again.			
	Whether remote controller is within the signal receiving range?	Signal receiving range is 8m.			
Indoor unit	Whether there are obstacles?	Remove obstacles.			
can't receive remote co- ntroller's si- gnal or remote controller has	Whether remote controller is pointing at the receiving window?	Select proper angle and point the remote controller at the rece- iving window on indoor unit.			
no action.	Is sensitivity of remote controller low; fuzzy display or no display?	Check the batteries. If the power of batteries is too low, please rep- lace them.			
	No display when operating remote controller?	Check whether remote controller appears to be damaged. If yes, replace it.			
	Fluorescent lamp in room?	Take the remote controller close to indoor unit. Turn off the fluorescent lamp and then try it again.			
	Air inlet or air outlet of indoor unit is blocked?	Eliminate obstacles.			
No air emitted	Under heating mode, indoor temperature is reached to set temperature?	After reaching to set temperature, indoor unit will stop blowing out air.			
from indoor unit	Heating mode is turned on just now?	In order to prevent blowing out cold air, indoor unit will be started after delaying for several minutes, which is a normal phenomenon.			
	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 can't operate	Wiring has malfunction?	Ask professional to replace it.			
can i operate	Unit has restarted immediately after stopping operation?	Wait for 3min, and then turn on the unit again.			
	Whether the function setting for remote controller is correct?	Reset the function.			
Mist is emi- tted from indoor unit's air outlet		Because indoor air is cooled rapidly. After a while, indoor temperature and hu- midity will be decrease and mist will disappear.			

Phenomenon	Check items	Solution	
Odours are emitted	Whether there's od- our source, such as furniture and cigare- tte, etc.	Eliminate the odour source. Clean the filter.	
Set tempe- rature 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 (61°F~86°F)	
Cooling	Voltage is too low?	Wait until the voltage resumes normal.	
(heating)	Filter is dirty?	Clean the filter.	
effect is not good.	Set temperature is in proper range?	Adjust temperature to proper range.	
	Door and window are open?	Close door and window.	
Air conditi- oner operates abnormally	Whether there's inte- rference, such as thunder, wireless devices, etc.	Disconnect power, put back power, and then turn on the unit again.	
"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.	

# ■ /!\ WARNING =

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

### Installation notice



Safety precautions for installing and relocating the unit

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

# WARNING :

When installing or relocating the unit, be sure to keep the refrigerant circuit free from air or substances other than the specified refrigerant.

Any presence of air or other foreign substance in the refrigerant circuit will cause system pressure rise or compressor rupture, resulting

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 serious safety accident.

When refrigerant needs to be recovered during relocating or repairing the unit, be

# WARNING

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 is 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
- Open-end wrench Screw driver
- 12 Universal meter

tape

- 3 Impact drill
- 8 Pipe cutter Leakage
- 13 Inner hexagon spanner 14 Measuring detector
- 4 Drill head
- Wacuum pump
- 6 Pipe expander
- 6 Torque wrench 11 Pressure meter

#### NOTICE

- Please contact the local agent for installation.
- Don't use unqualified power cold.

#### Selection of installation location

#### **Basic requirement**

Installing the unit in the following places may cause malfunction. If it is unavoidable, please consu-It 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.
- 8.It's not allowed to be installed on the unstable or motive base structure (such as truck) or in the corrosive environment (such as chemical factory).

#### Indoor unit

- There should be no obstruction near air inlet and air outlet.
- 2. Select a location where the condensation water can be dispersed easily and won't affect other people.
- 3. Select a location which is convenient to connect the outdoor unit and near the power socket.
- 4. Select a location which is out of reach for children.
- 5. The location should be able to withstand the weight of indoor unit and won't increase noise and vibration.
- 6. The appliance must be installed 2.5m above floor.
- 7.Don't install the indoor unit right above the electric appliance.
- 8. Please try your best to keep way from fluorescent lamp.

#### 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.

# Requirements for electric connection

- 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
- 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.

### Installation of indoor unit

## Step 1:

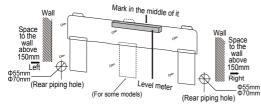
#### **Choose installation location**

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

## Step 2:

## 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.
- 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
- Fix the wall-mounting frame on the wall with tapping screws 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 3: Open piping hole

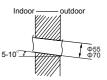
 Choose the position of piping hole according to the direction of outlet pipe. The position of piping hole should be a little lower than the wall-mounted frame, shown as below.

#### NOTE

- The wall panel is for illustrative purposes only, please refer to the actual installation.
- Please refer to the actual circumstances for the number of screws and the position of screws.
- When installation is finished, pull the mounting plate with hand to confirm whether it is fixed tightly. The force distribution for all screws should be uniform.
- 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°.

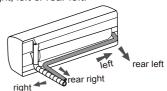
#### **NOTE**

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

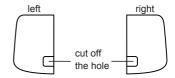


# Step 4: Outlet pipe

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



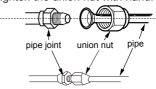
When select leading out the pipe from left or right, please cut off the corresponding hole on the bottom case.



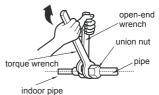
## Step 5:

# Connect the pipe of indoor unit

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

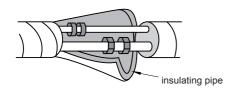


Adjust the torque force by referring to the following sheet. Place the open-end wrench on the pipe joint and place the torque wrench on the union nut. Tighten the union nut with torque wrench.



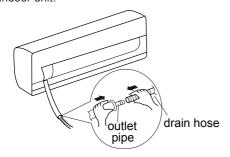
Hex nut diameter	Tightening torque (N·m)
1/4"	15~20
3/8"	30~40
1/2"	45~55
5/8"	60~65
3/4"	70~75

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

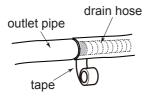


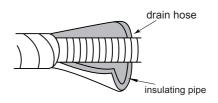
# Step 6: Install drain hose

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



2. Bind the joint with tape.





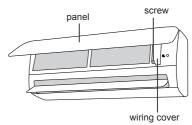
#### NOTE

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

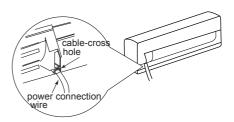
### Step 7: Connect wire of indoor unit

#### NOTICE

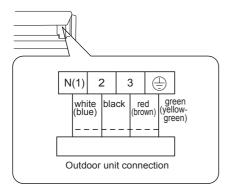
- All wires of indoor unit and outdoor unit should be connected by a professional.
- If the length of power connection wire is insufficient, please contact the supplier for a new one. Avoid extending the wire by yourself.
- For the air conditioner with plug, the plug should be reachable after finishing 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.
- 1. Open the panel, remove the screw on the wiring cover and then take down the cover.



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.



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.

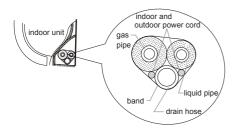


#### NOTICE

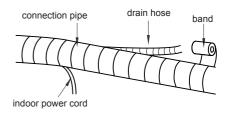
- The wiring board is for reference only, please refer to the actual one.
- 4. Put wiring cover back and then tighten the screw.
- 5. Close the panel.

## Step 8: Bind up pipe

 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.

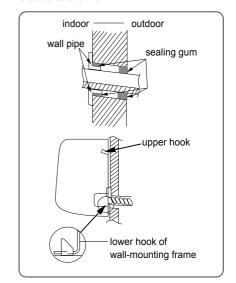
#### NOTICE

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

## Step 9:

#### Hang the indoor unit

- 1. Put the bound pipes in the wall pipe and then make them pass through the wall hole.
- 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.
- Check if the indoor unit is installed firmly and closed to the wall.



#### NOTICE

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

# **Test and operation**

## Check after installation

 Check according to the following requirement after finishing installation.

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

# Test operation

## 1. Preparation of test operation

- The client approves the air conditioner.
- Specify the important notes for air conditioner to the client.

## 2. Method of test operation

- Put through the power, press ON/OFF button on the remote controller to start operation.
- Press MODE button to select AUTO, COOL, DRY, FAN and HEAT to check whether the operation is normal or not.
- If the ambient temperature is lower than 16 °C (61°F), the air conditioner can't start cooling.

# Configuration of connection pipe

- 1. Standard length of connection pipe: 5m, 7.5m, 8m
- 2. Min. length of connection pipe is 3m.
- 3. Max. length of connection pipe is shown as below.

### Max. length of connection pipe

	r r ·
Cooling capacity	Max. length of connection pipe(m)
5000Btu/h (1465W)	15
7000Btu/h (2051W)	15
9000Btu/h (2637W)	15
12000Btu/h (3516W)	20
18000Btu/h (5274W)	25
24000Btu/h (7032W)	25
28000Btu/h (8204W)	30
36000Btu/h (10548W)	30
42000Btu/h (12306W)	30
48000Btu/h (14064W)	30

- 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.

# Additional refrigerant charging amount for R22, R407C, R410A and R134a

	Trior of trior and triora						
it throttle	Cooling and heating(g/m)	20	50	120	120	250	350
Outdoor unit throttle	Cooling only(g/m) heating(g/m)	15	15	30	09	250	350
Piping size	Gas pipe	3/8" or 1/2"	5/8" or 3/4"	3/4" or 7/8"	1" or 1 1/4"	1	ı
Piping	Liquid pipe	1/4"	1/4" or 3/8"	1/2"	2/8"	3/4"	1/8"

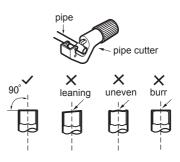
# Pipe expanding method

#### NOTICE

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.



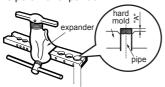
## C: Put on suitable insulating pipe

#### D: Put on the union nut

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

# E: Expand the port

• Expand the port with expander.



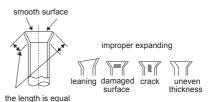
#### NOTICE

 "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 - 9.52(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.



## Working temperature range

	Indoor side DB/WB(°C /°F)		
Maximum cooling	26.7/19.4 (80/67)	46.1/23.9 (115/75)	
Maximum heating	26.7/-(80/-)	23.9/18.3 (75/65)	

#### NOTE

The operating temperature range (outdoor temperature) for cooling only unit is -18°C (0°F) ~ 46.1°C (115°F); for heat pump unit is -20 (-4°F) ~ 46.1°C (115°F).

