KINGHOME

OWNER'S MANUAL

KW09HQ3D6DI
KW12HQ3D6DI
KW18HQ3D6DI
KW24HQ3D6DI

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This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
Children should be supervised to ensure that they do not play with the appliance.

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

⚠ DANGER

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

⚠ WARNING

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

⚠ CAUTION

Indicates a hazardous situation that, if not avoided, may result in minor or moderate injury.

NOTICE

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

⚠

Indicates a hazard and it is assigned to the signal words DANGER, WARNING or CAUTION.

Precautions

⚠️ 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.

• Do not connect air conditioner to multi-purpose socket. Otherwise, it may cause fire hazard.

• Do disconnect power supply when cleaning air conditioner. Otherwise, it may cause electric shock.

• If the power supply wire is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

• Do not wash the air conditioner with water to avoid electric shock.

• Do not spray water on indoor unit. It may cause electric shock or malfunction.

• After removing the filter, do not touch fins to avoid injury.

• Do not use fire or hair dryer to dry the filter to avoid deformation or fire hazard.

Precautions

⚠ WARNING

Operation and Maintenance

• Maintenance must be performed by qualified professionals. Otherwise, it may cause personal injury or damage.

• Do not repair air conditioner by yourself. It may cause electric shock or damage. Please contact dealer when you need to repair air conditioner.

• Do not extend fingers or objects into air inlet or air outlet. It may cause personal injury or damage.

• Do not block air outlet or air inlet. It may cause malfunction.

• Do not spill water on the remote control, otherwise the remote control may no longer operate.

• When below phenomenon occurs, please turn off air conditioner and disconnect power immediately, and then contact the dealer or qualified professionals for service.

       • There's abnormal sound during operation.
       • Circuit break trips off frequently.
       • Air conditioner gives off burning 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.

• Do not step on top panel of outdoor unit, or put heavy objects. It may cause damage or personal injury.

Precautions

⚠️ WARNING

Attachment

- Installation must be performed by qualified professionals. Otherwise, it may cause personal injury or damage.

- Must follow the electric safety regulations when installing the unit.

- According to the local safety regulations, use qualified power supply circuit and circuit break.

- An all-pole disconnection switch having a contact separation of at least 3mm in all poles should be connected in fixed wiring.

- Air Conditioner should be properly grounded. Incorrect grounding may cause electric shock.

- Make sure the power supply matches with the requirement of air conditioner.Unstable power supply or incorrect wiring may cause malfunction of the unit, electric shock or fire hazard.

- Properly connect the live wire, neutral wire and grounding wire.

- Be sure to cut off the power supply before proceeding any work related to electricity and safety.

Precautions

⚠ WARNING

• Do not put through the power before finishing installation.

• If the power supply wire is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

• The temperature of refrigerant circuit will be high, please keep the interconnection cable away from the copper tube.

• The appliance shall be installed in accordance with national wiring regulations.

• Installation must be performed in accordance with the requirement of NEC and CEC by authorized personnel only.

• The air conditioner is a first class electric appliance. It must be properly grounded with specialized grounding device by a professional. Please make sure it is always grounded effectively, otherwise it may cause electric shock.

• The yellow-green wire in the the air conditioner is grounding wire, which can't be used for other purposes.

• The grounding resistance should comply with national electric safety regulations.

• 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. Do not extend the wire yourself.

Precautions

⚠️ WARNING

- If you need to relocate the air conditioner to another place, only a 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 a fence around the outdoor unit 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.
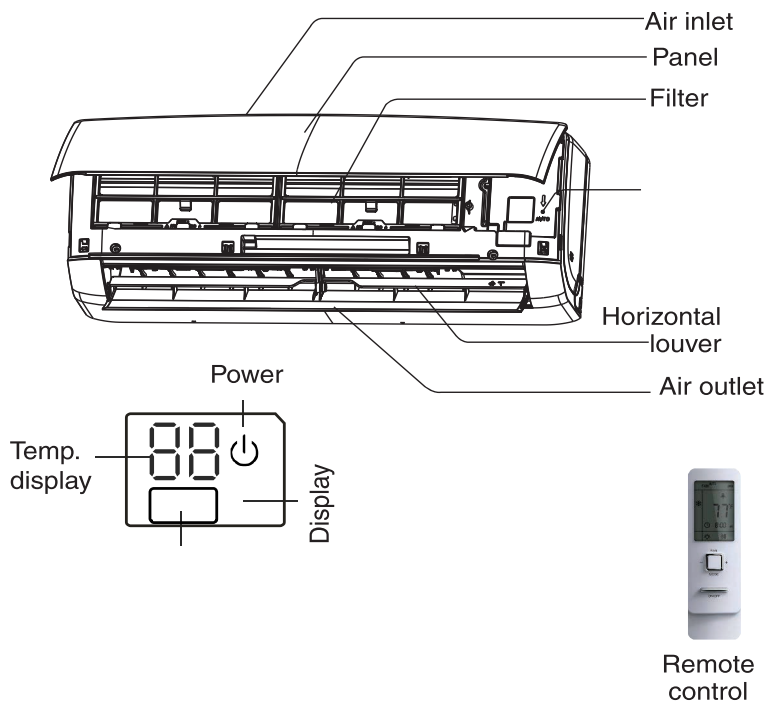
Working temperature range

	Indoor side DB/WB(°C)	Outdoor side DB/WB(°C)
Maximum cooling	26.7/19.4(80/67)	54/24(129 /75)
Maximum cooling	26.7/-(80/-)	24/18 (75/65)

NOTICE :
- The operating temperature range (outdoor temperature) for cooling only unit is -18°C(0 °F)~54 (129°F) ; for heat pump unit is
-30°C (-22°F)~24°C (75°F).

Parts name

Indoor Unit

Air inlet

Panel

Filter

Horizontal louver

Air outlet

Power

Temp. display

Display

Remote control

NOTICE :

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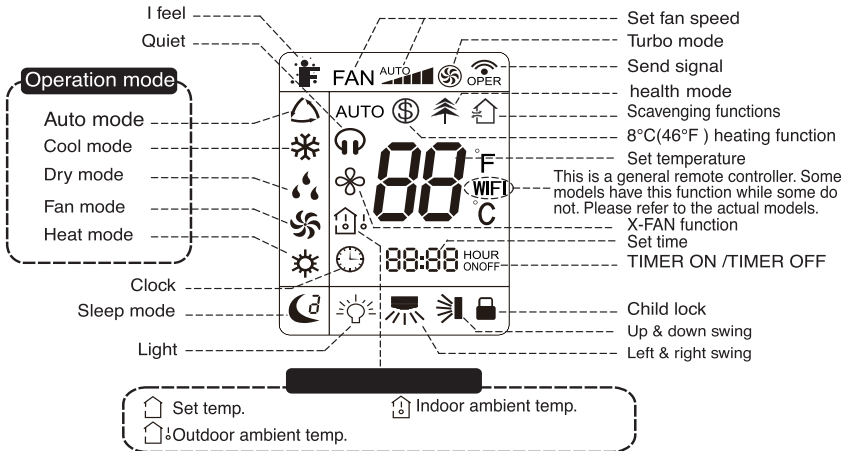
Remote control buttons

1	ON/OFF button
2	FAN button
3	MODE button
4	+/- button
5	TURBO button
6	Button
7	Button
8	CLOCK button
9	TIMER ON/ TIMER OFF button
10	TEMP button
11	
12	I FEEL button
13	LIGHT button
14	WIFI button
15	QUIET button
16	SLEEP button

1	ON/OFF button
2	FAN button
3	MODE button
4	+/- button

Remote control display screen

I feel
Quiet

Operation mode
Auto mode
Cool mode
Dry mode
Fan mode
Heat mode

Clock
Sleep mode
Light

Set fan speed
Turbo mode
Send signal
health mode
Scavenging functions
8°C(46°F) heating function
Set temperature

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

X-FAN function
Set time
TIMER ON /TIMER OFF

Child lock
Up & down swing
Left & right swing

FAN AUTO OPER
AUTO
88 F
WIFI
C
88:88 HOUR ONOFF

Set temp.   Indoor ambient temp.
Outdoor ambient temp.

Remote control buttons functions

• After putting through the power, the air conditioner will beep. The operation indicator "⏻" is ON (red indicator). After that, you can operate the air conditioner by using the remote control.

• Under ON status, pressing the button on the remote control, the signal icon 🛜 on the remote control display will blink once and the air conditioner will beep, wich means the signal has been sent to the air conditioner.

1 ON/OFF button ⏻

Press this button, the unit will be turned on, press it once more, the unit will be turned off. Sleep function will be canceled, while unit off.

2 FAN button 🌀

Press to select Auto, Low, Medium-low, Medium, Medium-high or High speed. AUTO is the default setting when the unit is first turned on. When the unit is in DRY mode, the only FAN setting available is LOW.
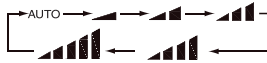
Low fan ◢◢ Medium low fan ◢◢◢ Medium high fan ◢◢◢◢ High fan

3 MODE button △

Press to select from the AUTO, COOL, DRY, FAN or HEAT modes. AUTO is the default setting when the unit is first turned on. In AUTO mode, the temperature will not be displayed. In HEAT mode, the initial value is 28°C (82°F). In other modes, the initial value is 25°C (77°F).
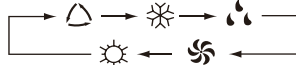
△ Auto ❄ Cool 💧 Dry 🌀 Heat ☀

4 + / - button

● Presetting temperature can be increased. Press this button, the temperature can be set up, continuously press this button and hold for two seconds, the relative contents can quickly change, until unhold this button and send the order that the ℃(℉) signal will be displayed all the time. The temperature adjustment is unavailable under the Auto mode, but the order can be sent if pressing this button. Temperature of Celsius degree setting: 16-30; for Fahrenheit degree setting: 61-86.

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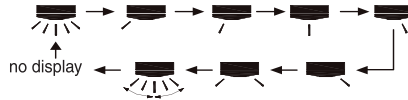
Remote control buttons functions

5 TURBO BUTTON

While running in Cool or Heat mode, press to turn the Turbo function on or off. When the Turbo function is on, the Turbo symbol will be displayed. The symbol will automatically disappear if the mode or fan speed is changed.
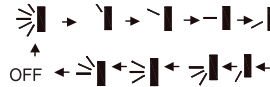
6 BUTTON

Press this button to set swing angle to left and right as shown below:

no display

7 BUTTON

Press this button to set the swing angle, which changes in the sequence below:

OFF

This remote control is universal.If it receives three of the following settings, the swing angle will remain in its original position.

If the guide louver is stopped when it is swinging up and down,it will remain its present position.

Indicates that the guide louver can be placed in the five directions,as shown in the figure.

8 CLOCK button

Press to set the ”⊙”; the display will flash. After 5 seconds, the value can be adjusted by pressing the + or – button. If the button is held for 2 seconds longer, the minutes will increase by 1 every 0.5 seconds. When the display is flashing, press the ”⊙” (clock button) again to accept the setting. When the unit is first turned on, 12:00 is the default time display, and the clock symbol will be shown. When the clock symbol is shown with a time, it is the current time. If the clock symbol is not displayed, it is the timer time.

9 TIMER ON/TIMER OFF button

Setting Timer On: “ON” the clock icon ”⊙” will flash on the display, the clock symbol will disappear, and the numerical values will become the Timer On setting. While the display is flashing (for 5 seconds), press + or – to adjust the time value, increasing or decreasing the Time On setting by 1 minute. Hold + or – down for 2 seconds and the time will change more quickly. The rate of change is: During the initial 2.5 seconds, ten numbers change in the minutes place, then remains constant. The tens place changes by ten every 2.5 seconds. While the display is flashing (5 seconds), press the Timer On button to accept the time set as the Timer setting. Pressing the button once more will cancel the setting. Before setting the Timer, please adjust the Clock to the actual current time.

10   TEMP button

Press this button to select from the setting temperature, indoor ambient temperature and outdoor ambient temperature. When the indoor unit is firstly turned on, it will display the setting temperature "⌂". When the display status shows "⌂", it is the indoor ambient temperature that is displayed. "⌂"displays the outdoor ambient temperature. After five seconds, if no other signal has been sent, the display will show the setting temperature.

Attention:the outdoor ambient temperature range is 0-99°F and 0-60°C. When it goes beyond the range, it keeps the threshold data (the smallest—0 and the largest 99°F or 60°C).
Tip: When using the buttons on the cover, make sure the cover is completely closed.

11   ✚/⌂ TEMP button

Press this button to turn on and off the Health and Outdoor Air functions. Press once to start the Outside Air function; the LCD shows "⌂". Press the button again for the Health and Outside Air functions to run together; the LCD shows "⌂" and "✚" . Press a third time to turn both functions off. Press the button a fourth time to start the Health function; the LCD shows "✚" . Press the button again to quit the Health and Outdoor Air functions.

12   I FEEL button

Press to turn on the I FEEL function. "I FEEL" will be displayed. After any other function button is pressed, every 200 ms to send I FEEL once. Once this function is activated, the remote control will send the room temperature to the main unit every 10 minutes. Press the button again to turn the function off.

13   LIGHT button

Press when the unit is on or off to set the light on or off. When the unit is first turned on, Light On is the default.

14   📶 WIFI button

Press the WiFi button to turn the WiFi function on or off. When the function is turned on, the WiFi icon will be displayed on the remote control. While the remote control is off, press the Mode and WiFi buttons simultaneously for 1 second to restore the WiFi module to factory default setting.
• This function is only available on some models.

15   🎧 QUIET button

Press to set the Quiet status to Auto Quiet mode ("🎧" and "△" symbols are displayed), Quiet mode ("🎧" symbol) or Quiet OFF (no display). When first turned on, Quiet OFF is the default setting. Note: The Quiet function cannot be used when running in the Fan or Dry mode. The fan speed is not available in Quiet mode ("🎧").

16   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, Dehumidify modes: sleep status after run for one hour, the main unit setting temperature will increase 1°C (1°For 2°F), 2 hours, setting temperature increased 2°C (3°For 4°F), 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 (1°For 2°F) , 2 hours, setting temperature will decrease 2°C, then the unit will run at this setting temperature.

Remote control buttons functions

Press this button, can select Sleep 1 (☾), Sleep 2 (☾²), Sleep 3 (☾³) and cancel the Sleep, circulate between these, after electrified, Sleep Cancel ïs defaulted.

• Sleep 1 is Sleep mode 1, in Cool, Dehumidify modes: sleep status after run for one hour, the main unit setting temperature will increase 1°C (1°For 2°F), 2 hours, setting temperature increased 2°C (3°For 4°F), 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 (1°For 2°F) , 2 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.

In Cool mode:

(1) When setting the initial temperature 16 °C-23 °C (61 °F -7 4 1') , after turned on Sleep function, the temperature will be increased 1 °C (1 °F or 2°F) in every hour, after 3°C (5°For 61°) the temperaturewill be maintained, after 7 hours, the temperature will be decreased 1°C(1°F or 2°F} , after that the unit will keep on running under this temperature;

(2) When setting the initial temperature 24°C-27°C(75°F- 81°F), after turned on Sleep function,the temperature will be increased 1°C(1°F or 2°F) in every hour, after 2°C (5°F or 6°F) the temperature will be maintained, after 7 hours, the temperature will be decreased 1°C(1°F or 2°F }, after that the unit will keep on running under this temperature;

(3) When setting the initial temperature 28°C-29°C (82°F-85°F), after turned on Sleep function.the temperature will be increased 1°C (1°F or 2°F) in every hour, after 1°C (1°F or 2°F) the temperature will be maintained, after 7 hours, the temperature will be decreased 1°C (1°F or 2°F) , after that the unit will keep on running under this temperature;

(4) When setting the initial temperature 30°C (86°F), under this temperature setting, after 7 hours, the temperature will be decreased 1°C (1°F or 2°F), after that the unit will keep on running under this temperature;

In Heat mode:

(1) Under the initial presetting tempe,rature 16°C (61°F) , it will run under this setting temperature all along.

(2) Under the initial presetting temperature17°C-20°C (62°F -68°F), after Sleep function started up, the temperature will decrease 1°C(1°F or 2°F) in every hour, after 1°C (1°F or 2°F) decreased, this"temperature will be maintained.

(3) Under the initial presetting temperature 21°C-27°C (69°F -81°F) after Sleep function started up, the temperature will decrease 1°F (1°F or 2°F) in every hour, after 2°C (3°F or 4°F) decreased, this temperature will be maintained.

(4) Under the initial presetting temperature 28°C-30°C(82°F-86°F), after Sleep function started up, the temperature will decrease 1°C (1°F or 2°F) in every hour, after 3°C (5°F or 6°F) decreased, this temperature will be maintained.

Remote control buttons functions

• 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 "1 hour", 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, 1 hour will be automatically increased at the timer position on the remote controller, (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 8hours 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 DIV 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 within10s, 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.

Introduction for special function

About X-FAN function

Hold fan speed button for 2 seconds in COOL or DRY mode. The icon "❀" will be displayed and the indoor fan will continue to operate for a few minutes in order to dry the indoor unit, even if you have turned off the unit. After energization, X-FAN is defaulted to OFF. X-FAN is not available in AUTO, FAN or HEAT mode. This function indicates that moisture on evaporator of indoor unit will be blowed after the unit is stopped to avoid mould.

1. 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 2 seconds to stop indoor fan directly.

2. Having set X-FAN function OFF: After turning off the unit by pressing ON/OFF button, the complete unit will be off directly.

About AUTO RUN

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

About TURBO function

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

About lock

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

About swing up and down

1. Press swing up and down 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 swing and present position of guide louver will be kept immediately.
2. Under swing up and down mode, when the status is switched from off to ⇗❙ , if press this button again 2s later, ⇗❙ status will switch to off status directly; If press this button again within 2s, the change of swing status will also depend on the circulation seque- nce stated above.

About swing left and right

1. Press swing left and right 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 swing and present position of guide louver will be kept immediately.
2. 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 sequ- ence stated above.

About switch between Fahrenheit and Centigrade

Under status of unit off, press MODE and - buttons simultaneously to switch °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 fun- ction. Nixie tube on the remote controller displays "SE". Repeat the operation to quit the function.

Combination of "TEMP" and "CLOCK" buttons:
About 8°C(46°F) Heating Function

Press "TEMP" and "CLOCK" simultaneously in HEAT mode to start 8°C 46°F Heating Fun- ction Nixie tube on the remote controller displays " Ⓢ " and a selected tempera- ture of "8°C". (46°F if Fahrenheit is adopted). Repeat the operation to quit the function.

About Quiet function

When quiet function is selected:
1. Under cooling mode: indoor fan operates at notch 4 speed. 10 minutes later or when indoor ambient temperature≤28°C(82°F) , indoor fan will operate at notch 2 speed or quiet mode according to the comparison between indoor ambient temperature and set temperature.
2. Under heating mode: indoor fan operates at notch 3 speed or quiet mode according to the comparison between indoor ambient temperature and set temperature.
3. Under dry, fan mode: indoor fan operates at quiet mode.
4. Under auto mode: the indoor fan operates at the auto quiet mode according to actual cooling, heating or fan mode.

About Sleep function

Under the Fan and Auto mode, the Sleep function cannot be set up, under Dehumidify mode, only Sleep 1 can be selected. Select and enter into any kind of Sleep mode, the Quiet function will be attached and stared, different Quiet status could be optional and turned off.

Operation guide

General operation

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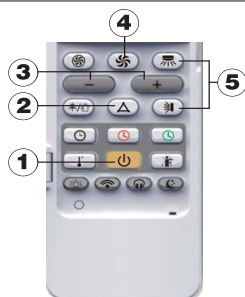
Optional operation

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

Replacement of batteries in remote control:

1. Press the back side of remote control marked with" 🗫 ", as shown in the fig; and then push out the cover of battery box along the arrow direction.
2. Replace the two batteries (AAA - 1.5V); make sure that the batteries are inserted correctly with the polars '+' and '-' in the right position.
3. Reinstall the cover of battery box.

signal sender

reinstall

remove

Cover of battery box
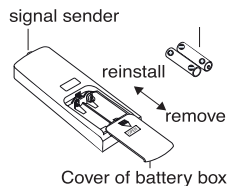
> Battery level will be displayed on the remote controller.When " ⬚ " is flickering, please replace the batteries, otherwise, remote controller can't operate normally.

- During operation, point the remote control signal sender at the receiving window on the 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 control should be close to the indoor unit during operation.
- When replacing the batteries, make sure you use two identical batteries (same brand).
- When you don't use the remote control for a long time, please take out the batteries.
- If the display on the remote control is fuzzy or there's no display, please replace the batteries.

Emergency operation

If the remote control is lost or damaged, please use auxiliary button to turn on or turn off the air conditioner. As shown in the figure, open the panel, press the auxiliary button to turn on or turn off the air conditioner. When the air conditioner is turned on, it will operate under auto mode.

PANEL

DISPLAY PANEL

AUX. BUTTON
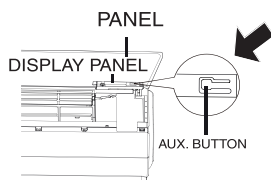
⚠ **WARNING**
Use insulated object to press the auto button

Clean and maintenance

⚠ **WARNING**

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

Clean surface of indoor unit

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

NOTICE:
• Do not remove the panel when cleaning it.

Clean and maintenance

Clean filter

Very Important : before cleaning your main filter, check if there is a special filter attached to it (rectangular shape, as illustrated on the following page – p.20); take it out and clean it separately, where applicable, and as per instructions detailed on page 20. You can then proceed to the cleaning of your main filter. Before replacing your main filter in the unit, do not forget to reinsert the special filter onto the main filter.
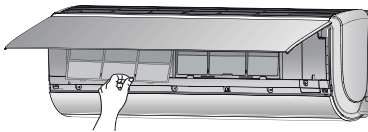
1 **Open panel**
Open the panel into a certain angle(less than 60°, do not force the panel) along the arrow direction from the two sides of panel.
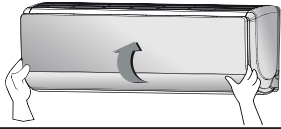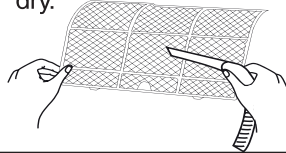
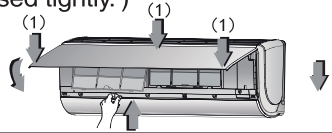**2** **Remove filter**
Remove the filter as indicated.

3 **Clean filter**
• Use a vacuum or water to clean the filter.
• When the filter is very dirty, use 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.(Press the arrow (1) position to make sure it is closed tightly.)
(1) (1)

⚠ WARNING

• The filter should be cleaned every three months. If the unit operates in a highly dusty environment, clean frequency should 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.

Some models are provided with :

(1) A Bio-Sterilization with Cold Catalyst Filter:
a new purified material with superior bio-bactericide properties; it is a high efficient bacteria sterilizer and dust collector. Filter Life Span: filter needs to be replaced every 6 to 12 months.
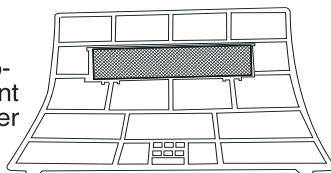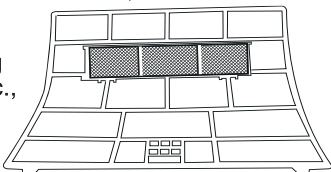
IMPORTANT: wash this filter simply by rinsing it with clear lukewarm water **(no soap, no brush)** and dry airing it (**do not wipe**, nor use an hair dryer or other heat source to dry it)

(2) A Multi-function filter (combination of Silver Ion, Catechin and Antimites properties):
this multi-function filter can
(i) sterilize 99% of bacteria by suppressing proliferation of mold, bacteria, mites, etc., inhibiting the causes of allergies and unpleasant odors;
(ii) the catechin filter, made with green tea, can eliminate up to 95% of carcinogenic exogenous (in the environ-ment) agents, harmful for health.
Filter Life Span: filter needs to be replaced when it turns black or green.
IMPORTANT: this filter is **NON WASHABLE** nor can it be cleaned; replace it when due.

Clean and maintenance

1. Check that air inlets and air outlets are not blocked.
2. Check if circuit breaker and connection, are in good condition.
3. Check that filters are clean.
4. Check that drainage pipe is not damaged.

1. Disconnect power supply.
2. Clean filters and indoor unit's panel.

Notice for recovery
1. Many packing materials are recyclable.
Please dispose of them in appropriate recycling bin.
2. If you want to get rid of the air conditioner, please contact your dealer or your local recycling service center for the correct disposal method.

Malfunction analysis

General analysis

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

Problem	Check items	Solution
Indoor unit can't receive remote control signal or remote control has no power.	Whether it's interfered severely (such as static electricity,stable voltage)?	Cut the power supply off and put the power back after about 3min, and then turn on the unit again.
	Whether remote control is within the signal receiving range?	Signal receiving range is 8m.
	Whether there are obstacles?	Remove obstacles.
	Whether remote control is pointing at the receiving window?	Select proper angle and point the remote control at the receiving window on indoor unit.
	Is the remote control display fuzzy or there is no display at all ?	Check the batteries. If the battery charge level is too low, please replace them.
	No display when operating the remote control?	Check whether remote control appears to be damaged. If yes, replace it.
	Fluorescent lamp in the room?	Bring the remote control close to the indoor unit. Turn off the fluoresent lamp and then try it again.

No air flow from indoor unit	Are air inlet or air outlet of indoor unit blocked?	Eliminate obstacles.
	Under heating mode, indoor temperature reached set temperature?	After reaching set temperature, indoor unit will stop blowing out air.
	Has the heating mode been just turned on ?	In heating mode, in order to prevent blowing out cold air, indoor unit will start several minutes after the unit has been turned on, which is normal.

Malfunction analysis

Problem	Check items	Solution
Air conditioner can't operate	Power failure?	Wait until power resumes.
	Air switch trips off ?	Ask professional to replace air switch.
	Wiring has malfunction?	Ask professional to replace it.
	Has the unit been turned on immediately after being stopped ?	Wait for 3min, and then turn on the unit again.
	Is the function setting on remote control correct ?	Reset the function.

Problem	Check items	Solution
Mist is emitted from indoor unit's air outlet	Are indoor temperature and humidity level high ?	This is because indoor air is cooled rapidly. After a while, indoor temperature and humidity level will decrease and mist will disappear.

Problem	Check items	Solution
Set temperature can't be adjusted	Unit is operating under auto mode?	Temperature can't be adjusted under auto mode. Please switch the operation mode if you need to adjust temperature.
	Your required temperature exceeds the set temperature range?	Set temperature range: 15°C -3o °C .

Problem	Check items	Solution
Air cooling (heating) is not efficient	Voltage is too low?	Wait until the voltage resumes to normal.
	Filter is dirty?	Clean the filter.
	Set temperature is in proper range?	Adjust temperature to proper range.
	Doors and windows are open?	Close doors and windows.

Malfunction analysis

Problem	Check items	Solution
Odours are emitted	Either there is an odour source in the room, such as furniture or cigarette, or the filter is dirty.	Eliminate the source of the odour. Clean the filter.
Air conditio-ner suddenly turns on and operates normally	There may be interference, such as thunder, wireless devices, etc.	Cut the power supply off and put the power back and then turn on the unit again.
Outdoor unit emits vapor	Heating mode is turned on?	During defrosting under heating mode, it may produce vapor, which is a normal.
Water flowing noise	Has the air conditioner just been turned on and off ?	The noise is the sound of refrigerant flowing inside the unit, which is a normal.
Craking noise	Has the air conditioner just been turned on and off ?	This is the sound of friction caused by expansion and/or contraction of panel or other parts due to the change of temperature.

Malfunction analysis

Error code

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

Error code	Troubleshooting
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.
F0	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.

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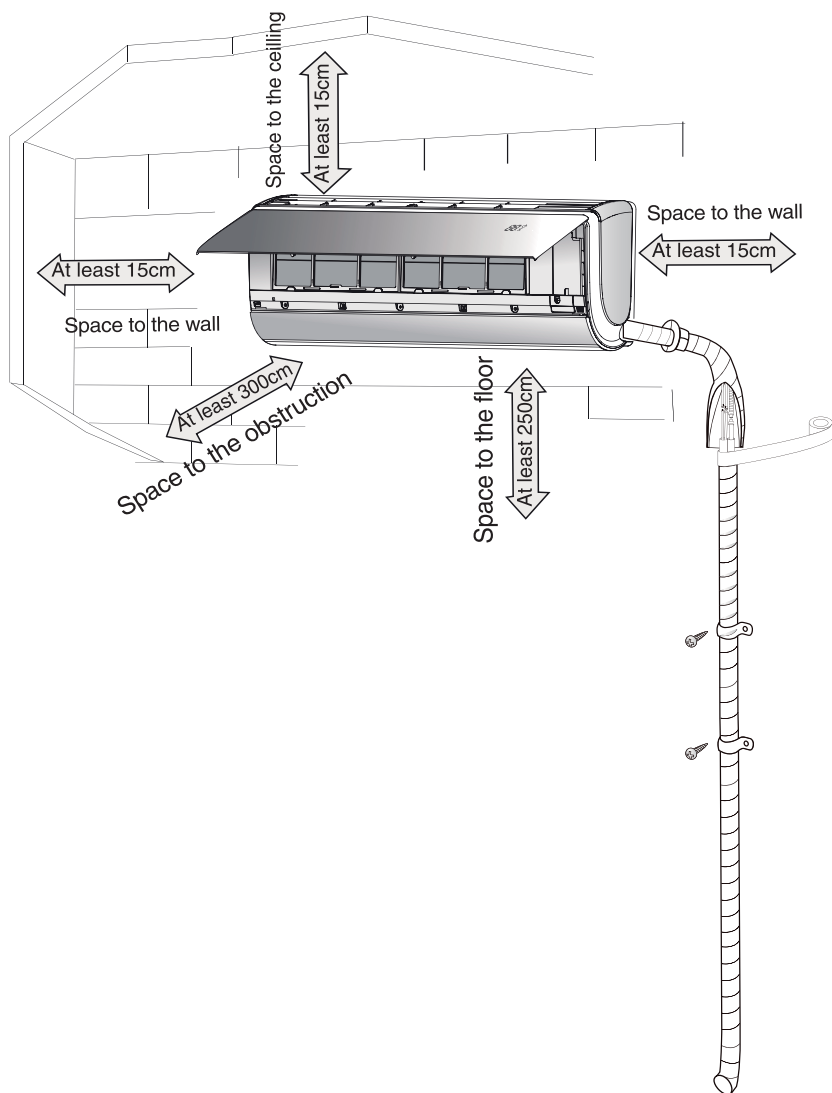
⚠ WARNING

When situations below happen, please turn off the air conditioner and disconnect power immediately, then contact the dealer or qualified professionals for service:
• There is an unusual sound during operation.
• Air switch trips off frequently.
• Air conditioner generates a burning smell.
• Indoor unit is leaking.
ATTENTION:
• Do not repair or refit the air conditioner by yourself.
• If the air conditioner operates under abnormal conditions, it may damage the unit, or cause electric shock or fire hazard.

Installation dimension diagram

Space to the ceiling

At least 15cm

Space to the wall

At least 15cm

At least 15cm

Space to the wall

At least 300cm

Space to the obstruction

Space to the floor

At least 250cm

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 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 Manometer	12 Universal meter
13 Inner hexagon spanner	14 Measuring tape	

Note:

• Contact your local agent or a certified technician for installation.

Selection of installation location

Basic requirement

Installing the unit in the following places may cause malfunction. If it is unavoidable, please consult your local dealer or a certified technician:

1. A place with strong heat sources, vapors, flammable or explosive gas, or volatile objects spread in the air.

2. A place with high-frequency devices (such as welding machine, medical equipment).

3. A place near coast area.

4. A place with oil or fumes in the air.

5. A place with sulphurous gas.

6. 0ther places with special environment.

7. The appliance cannot be installed in a laundry.

Indoor unit

1. There should be no obstruction near air inlet and air outlet.

2. Select a location where the condensation water can be dispersed easily and won't affect people.

3. Select a location which is convenient to connect the outdoor unit and the closest possible to the power supply.

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 an electric appliance.

8. Please try your best to keep the unit away from fluorescent lamps.

Installation of indoor unit

Step One: selecting installation location

Recommend the installation location to the client and then confirm it with the client.
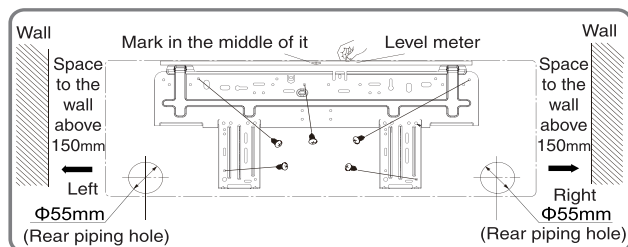
Step Two: install wall-mounting frame

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 the impact drill (the specification of drill head should be the same as the plastic expansion particle) and then fill the plastic expansion particles in the holes.

3. Fix the wall-mounting frame on the wall with tapping screws (ST4.2X25TA) and then check if the frame is firmly installed by pulling the frame. If the plastic expansion particle is loose, please drill another fixing hole nearby.
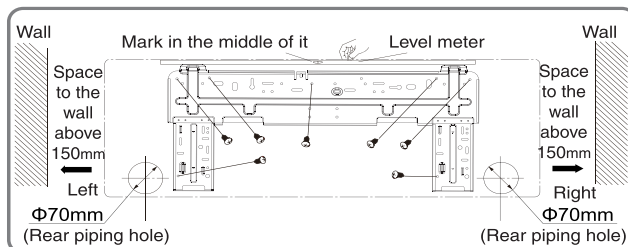
Step Three: open piping hole

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

09K、12K:

Wall — Mark in the middle of it — Level meter — Wall
Space to the wall above 150mm — Space to the wall above 150mm
Left — Right
Φ55mm (Rear piping hole) — Φ55mm (Rear piping hole)

18K、24K:

Wall — Mark in the middle of it — Level meter — Wall
Space to the wall above 150mm — Space to the wall above 150mm
Left — Right
Φ70mm (Rear piping hole) — Φ70mm (Rear piping hole)

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 the indoor unit

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

Indoor ——— Outdoor

5-10° Φ55 / Φ70
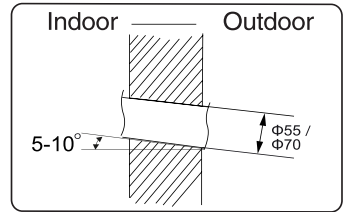
Step Four: outlet pipe

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

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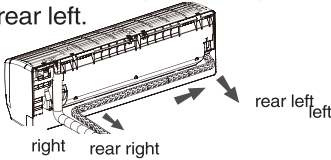
2. When select leading out the pipe from left or right, please cut off the corresponding hole on the bottom case.

left   right

cut off
the hole
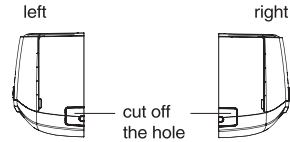
Step Five: connect the pipe of indoor unit

1. Aim the pipe joint at the corres-ponding bell mouth.
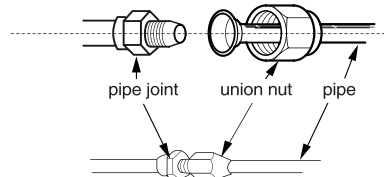
2. Pretighten the union nut with hand.

pipe joint   union nut   pipe

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

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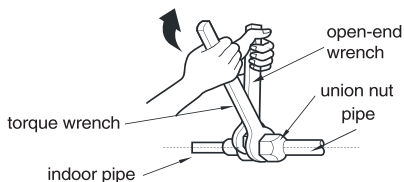
Hex nut diameter	Tightening torque (N-m)
Φ 6	15~20
Φ 9.52	30~40
Φ 12	45~55
Φ 16	60~65
Φ 19	70~75

open-end wrench

union nut
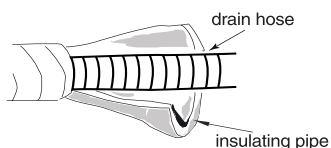
pipe

torque wrench

indoor pipe
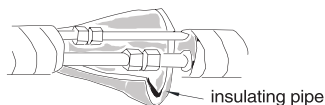
insulating pipe

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

Step Six: install drain hose

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

outlet pipe
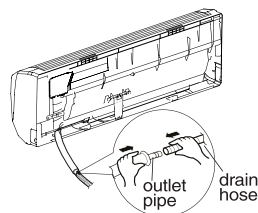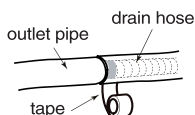
drain hose
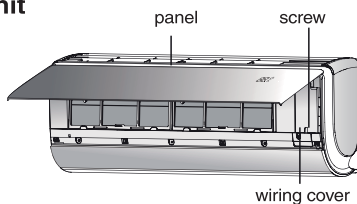
2. Bind the joint with tape.

tape

outlet pipe

drain hose

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

drain hose

insulating pipe

Step Seven: connect wire of indoor unit

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

panel   screw

wiring cover

Installation of indoor unit

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

Cable-cross hole

Power connection wire
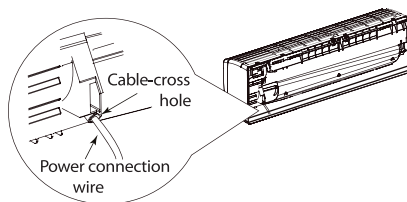
3.Remove the wire clip; connect the power connection wire to the wiring
terminal according to the color; tighten the screw and then fix the power
connection wire with wire clip.After finishing wiring , clamp the
grounding wire (yellow-green wire) into the wire-crossing groove as
shown in the following figure, in order to avoid pressing the wire when
closing the electric box cover.

N(1)	2	3	⊕
white (blue)	black	red (brown)	green (yellow-green)
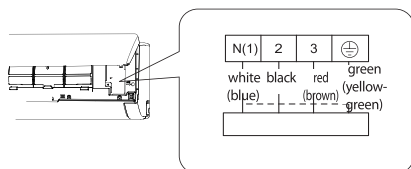
4.Put wiring cover back and then tighten the screw
5.Close the panel.

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.

• 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.

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 may cause mal function and damage the unit.
4. Properly connect the live wire, neutral wire and grounding wire
5. To work safely, be sure to cut off the power supply before proceeding any work related to electricity.
6. Do not put through the power before finishing installation.
7. The temperature of refrigerant circuit will be high, please keep the interconnection cable away from the copper tube.
8. The appliance shall be installed in accordance with national wiring regulations.
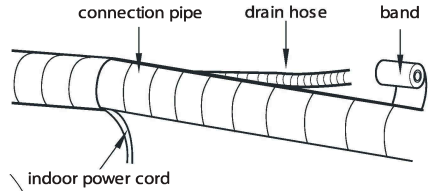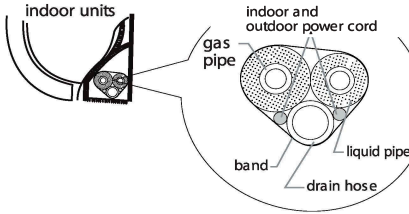
Grounding requirement

1. The air conditioner is a first class electric appliance. It must be properly grounded 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 the grounding wire, which can't be used for other purposes.
3. The grounding resistance should comply with national electric safety regulations.
4. 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 Eight: bind up pipe

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

connection pipe   drain hose   band

indoor units   indoor and outdoor power cord
gas pipe   indoor power cord
band   liquid pipe
drain hose

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

2. Reserve a certain length of drain hose and power cord for installation when binding them. When binding to a certain degree, separate the indoor power and then separate the drain hose.
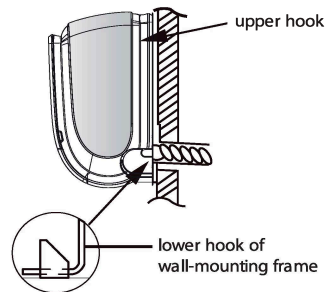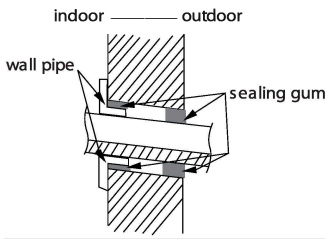
Note:
• The power cord and control wire can't be crossed or winded.
• The drain hose should be bound at the bottom.

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 close to the wall.

indoor ——— outdoor   upper hook
wall pipe
sealing gum
lower hook of wall-mounting frame

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

Check after installation

• Check the following after finishing installation.

Items to be checked	Possible malfunction
Is the unit securely fixed ?	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 damage the parts.
Is electric wiring and pipeline installed correctly?	It may cause malfunction or damage the parts.
Is the unit grounded securely?	It may cause electric leakage.
Is there any obstruction in the air inlet and outlet?	It may cause insufficient cooling (heating) capacity.
The dust and sundries caused during installation have been removed?	It may cause malfunction or damage the parts.
The gas valve and liquid valve of connection pipe are open completely?	It may cause insufficient cooling (heating) capacity.

Operation test

1. Before test operation
• The client approves the air conditioner.
• Specify the important notes on air conditioner to the client.

2. Method of test operation
• Put through the power, press ON/OFF button on the remote control 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 can't start cooling.

Refrigerant pipe and charge calculation

1. Standard length of connection pipe
   • 5m, 7.5m, 8m.
2. Min. length of connection pipe is 3m.
3. Max. length of connection pipe and max. rise difference.

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

Additional refrigerant charging amount for R410A

Diameter of connection pipe		Outdoor unit throttle	
Liquid pipe (mm)	Gas pipe (mm)	Cooling only(g/m)	Cooling and heating(g/m)
Φ6	Φ9.52 or Φ12	15	20
Φ6 or Φ9.52	Φ16 or Φ19	15	50
Φ12	Φ19 or Φ22.2	30	120
Φ16	Φ25.4 or Φ31.8	60	120
Φ19	—	250	250
Φ22.2	—	350	350

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 manometer to the refrigerant charging vent of gas valve and then connect the other charging hose to the vacuum pump.
3. Open the manometer completely and operate for 10-15min to check if the pressure of manometer remains in -0.1 MPa.
4. Close the vacuum pump and maintain this status for 1-2min to check if the pressure of manometer remains in -0.1 MPa. If the pressure decreases, there may be leakage.
5. Remove the manometer, 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.
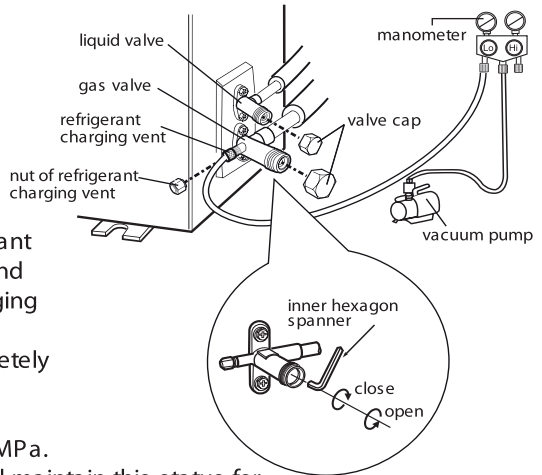
Leakage detection

1. With leakage detector; check if there is leakage.

2. If leakage detector is not available, please use soap water for leakage detection. Apply soap water at the suspected position and keep the soap water for more than 3min. If there are air bubbles coming, there's a leakage.

liquid valve
gas valve
refrigerant charging vent
nut of refrigerant charging vent
manometer
valve cap
vacuum pump
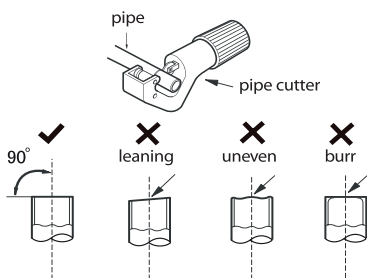inner hexagon spanner
close
open

Pipe expanding method

Note:

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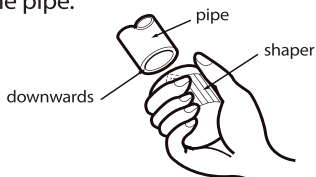Please expand the pipe according to the following steps:

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.

pipe

pipe cutter

90°   leaning   uneven   burr

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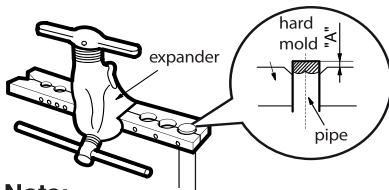
pipe

shaper

downwards

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.
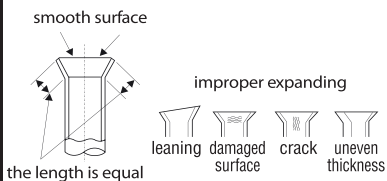
union pipe

pipe
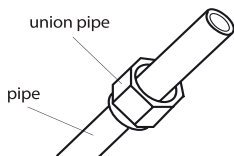
E: Expand the port
• Expand the port with expander.

hard mold

"A"

expander

pipe

Note:
• "A" varies according to the diameter, please refer to the sheet below:

Outer diameter (mm)	A (mm)	
	Max	Min
⌀6-6.35(1/4")	1.3	0.7
⌀9.52(3/8")	1.6	1.0
⌀12-12.7(1/2")	1.8	1.0
⌀15.8-16(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

improper expanding

the length is equal

leaning   damaged surface   crack   uneven thickness

KINGHOME

OWNER'S MANUAL

KW09HQ3D6DI
KW12HQ3D6DI
KW18HQ3D6DI
KW24HQ3D6DI

66139909205