daitsu

SPLIT PARED AGIO 1x1

Serie
3GIO 1x1

Edition
11/20

Models
DS-09KDG(WD)
DS-12KDG(WD)
DS-18KDG(WD)
DS-24KDG(WD)

■ Explanation of Symbols

⚠ WARNING	This symbol indicates the possibility of death or serious injury.
⚠ CAUTION	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.

The refrigerant

Appliance filled with flammable gas R32.	Before install the appliance, read the installation manual first.
Before use the appliance, read the owner's manual first.	Before repair the appliance, read the service manual first.

- To realize the function of the air conditioner unit, a special refrigerant circulates in the system. The used refrigerant is the fluoride R32, which is specially cleaned. The refrigerant is flammable and inodorous. Furthermore, it can lead to explosion under certain conditions. But the flammability of the refrigerant is very low. It can be ignited only by fire.
- Compared to common refrigerants, R32 is a nonpolluting refrigerant with no harm to the ozonosphere. The influence upon the greenhouse effect is also lower. R32 has got very good thermodynamic features which lead to a really high energy efficiency. The units there fore need a less filling.

WARNING

Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacture. Should repair be necessary, contact your nearest authorized Service Centre. Any repairs carried out by unqualified personnel may be dangerous. The appliance shall be stored in a room without continuously operating ignition sources. (for example: open flames, an operating gas appliance or an operating electric heater.) Do not pierce or burn. Appliance shall be installed, operated and stored in a room with a floor area larger than X m².

 (Please refer to table "a" in section of " Safety operation of flammable refrigerant " for space X.) Appliance filled with flammable gas R32. For repairs, strictly follow manufacturer's instructions only. Be aware that refrigerants may not contain an odour. Read specialist's manual.
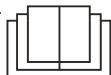
This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

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

1) Frequency band(s) in which the radio equipment operates: 2400MHz-2483.5MHz
2) Maximum radio-frequency power transmitted in the frequency band(s) in which the radio equipment operates: 20dBm
   R32: 675

 This marking indicates that this product should not be disposed with other house hold wastes. To prevent possible harm to the environment or human health from uncontrolled waste throughout the EU. To prevent possible harm to the environment or human health.

From uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

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.

Safety operation of flammable refrigerant

Qualification requirement for installation and maintenance man

- All the work men who are engaging in the refrigeration system should bear the valid certification awarded by the authoritative organization and the qualification for dealing with the refrigeration system recognized by this industry. If it needs other technician to maintain and repair the appliance, they should be supervised by the person who bears the qualification for using the flammable refrigerant.
- It can only be repaired by the method suggested by the equipment's manufacturer.

⬛ Safety operation of flammable refrigerant

Installation notes

- The air conditioner must be installed in a room that is larger than the minimum room area. The minimum room area is shown on the nameplate or following table a.
- It is not allowed to drill hole or burn the connection pipe.
- Leak test is a must after installation.

table a - Minimum room area (m^2)

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

Maintenance notes

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

Welding

- If you should cut or weld the refrigerant system pipes in the process of maintaining, please follow the steps as below:
  - a. Shut down the unit and cut power supply
  - b. Eliminate the refrigerant
  - c. Vacuuming
  - d. Clean it with N_2 gas
  - e. Cutting or welding
  - f. Carry back to the service spot for welding
- The refrigerant should be recycled into the specialized storage tank.
- Make sure that there isn't any naked flame near the outlet of the vacuum pump and it's well-ventilated.

Filling the refrigerant

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

Safety instructions for transportation and storage

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

Safety precautions

⚠ **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.

Safety precautions

⚠ **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.

Safety 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 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 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.
- 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.

Safety precautions

⚠ CAUTION

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

air inlet   panel   filter

aux. button

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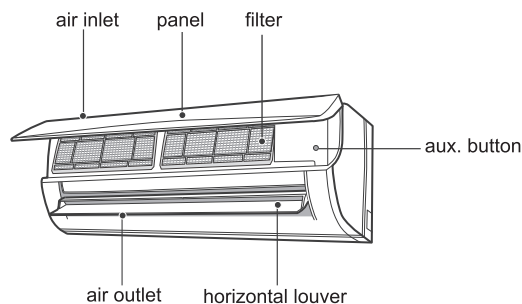
■ If remote controller is lost or damaged, please use aux. button to turn on or turn off the air conditioner. The operation in details is as below: As shown in the figure, open panel and press aux. button to turn off the air conditioner. When the air conditioner is turned on, it will operate under auto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

Display

Heat mode	☼	☼ R:red indicator (only for heat model)
Cool mode	❄	❄ W:white indicator
Dry mode	◊◊	◊ G:green indicator
		◊ O:orange indicator
Temp. indicator	26	
Power indicator	⏻	

NOTE

● This is the general introduction and the color of indicator 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

▓ Introduction for icons on display screen
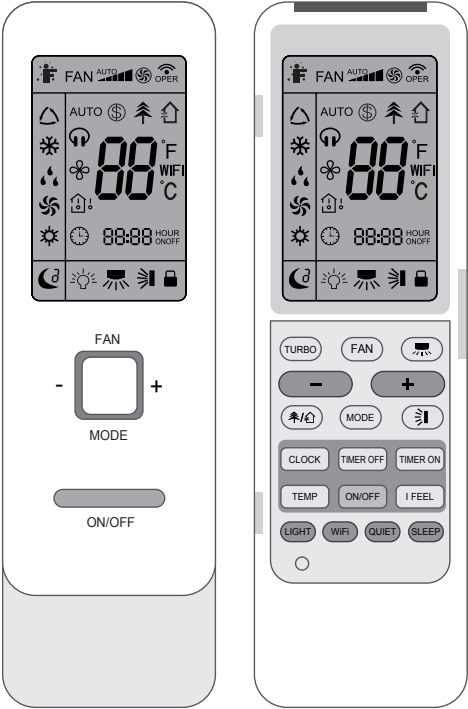
(before opening cover)   (after opening cover)

		I feel
	FAN ᴬᵁᵀᴼ▃▃▃	Set fan speed
	🌀	Turbo mode
	📡	Send signal
Operation mode	⌂	Auto mode
	❄	Cool mode
	ˌˌ	Dry mode
	Ｓ₅	Fan mode
	☼	Heat mode
	🌙	Sleep mode
	⑧	8°C heating function
	⪫	Health mode
	⌂	Scavenging function
	WIFI	WiFi function
	🎧	Quiet
	⚘	X-FAN function
Temp. display type	⌂ Set temp.	
	⌂ Indoor ambient temp.	
	⌂ Outdoor ambient temp.	
	🕐	Clock
	88	Set temperature
	88:88	Set time
	HOUR ONOFF	TIMER ON / TIMER OFF
	☼	Light
	〰	Left & right swing
	≥∎	Up & down swing
	🔒	Child lock

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⌐ Introduction for buttons on remote controller

ON/OFF button

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

FAN button

Press this button, Auto, Low, Medium-low, Medium, Medium-high, High speed can be circularly select- ed. After powered on, auto fan speed is default. Under dry mode, low fan speed only can be set up.

▲ Low fan ▲▲ Medium-low fan ▲▲▲ Medium fan

▲▲▲▲ Medium-high fan ▲▲▲▲▲ High fan

MODE button

Press this button, Auto, Cool, Dry, Fan, Heat mode can be selected circularly. Auto mode is default while power on. Under Heat mode, the initial value is 28°C(82°F) Under other modes, the initial value is 25°C(77°F).

⊖ / ⊕ button

Press " + " or " - " button once increase or decrease set temperature 1°C (°F). Holding " + " or " - " button, set temperature on remote controller will change quickly. On releasing button after setting is finished, temperature indicator on indoor unit will change accordingly.
When setting TIMER ON, TIMER OFF or CLOCK, press " + " or " - " button to adjust time. (Refer to CLOCK, TIMER ON, TIMER OFF buttons)
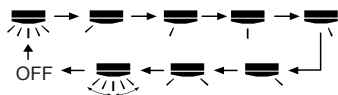
TURBO button

Under cool or heat mode, press this button can turn on or turn off the turbo function. After the turbo func- tion turned on, the signal of turbo will display. The signal will be automatically cancelled if changing the mode or fan speed.

⬛ button

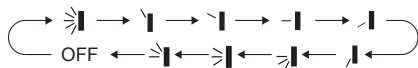Press this button to set left & right swing angle cycling as below:

OFF

NOTE

● The function is only available for some models.

分 button

Press this button to set swing angle, which circular-ly changes as below:

OFF

When selecting "分⫿", air conditioner is blowing fan automatically. Horizontal louver will automatically swing up & down at maximum angle.
When selecting " ⫿ 、ˋ⫿ 、−⫿ 、⫿ 、⫿", air condi-tioner is blowing fan at fixed position. Horizontal louver will stop at the fixed position.
When selecting "分⫿ 、分⫿ 、分⫿", air conditioner is blow-ing fan at fixed angle. Horizontal louver will send air at the fixed angle.
Hold " 分⫿ " button above 2s to set your required swing angle. When reaching your required angle, release the button.

NOTE

● " 分⫿、分⫿、分⫿ " may not be available. When air condi-tioner receives this signal, the air conditioner will blow fan automatically.

CLOCK button

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

TIMER OFF / TIMER ON button

● Timer On setting: Signal "ON" will blink and display, signal ⊕ will conceal, the numerical section will become the timer on setting status. During 5 seconds blink, by pressing + or - button to adjust the time value of numerical section, every press of that button, the value will be increased or decreased 1 minute. Hold pressing + or - button, 2 seconds later, it quickly change, the way of change is: During the initial 2.5 sec-onds, ten numbers change in the one place of minute, then the one place is constant, ten num-bers change in the tens place of minute at 2.5 seconds speed and carry. During 5s blink, press the timer on button, the timer setting succeeds. The timer on has been set up, repress the timer on button, the timer on will be canceled.Before setting the timer, please adjust the clock to the current actual time.
● One press this key to enter into TIMER OFF setup, in which case the TIMER OFF icon will blink. The method of setting is the same as for TIMER ON.

TEMP button

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

no display

When selecting " ⌂ " with remote controller or no display, temperature indicator on indoor unit dis-plays set temperature. When selecting " ⌂ " with remote controller, temperature indicator on indoor unit displays indoor ambient temperature; When selecting " ⌂ " with remote controller, temperature indicator on indoor unit displays outdoor ambient tem-perature. 3s later it will return to the setting tem-perature or it depends on the other received signal within 3s.
Attention: When displaying the outdoor ambient, the displaying range is 0-60°C（32-140℉）. When it goes beyond the range, it keeps the threshold data (The smallest — 0°C（32℉）and the largest 60°C（140℉））.
Warm tips: When operating buttons on the cover please make sure the cover is closed completely.

(☀/⛄) 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 " ⛄ ". Press the button for the second time to start health and scavenging functions simultaneously; LCD displays " ⛄ " and " ☀ ". 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 " ☀ ". Press this button again to repeat the operation above.

(I FEEL) button

Press this button once, to turn on the I FEEL function, then the figure of "I FEEL" will be displayed, after every press of other function button, every 200ms to send I FEEL once, after this function started, the remote controller will send temperature to the main unit in every 10 minutes. When repress this button, this function will be turned off. 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.

(LIGHT) button

Press this button at unit on or off status, light on and light off can be set up. After powered on, light on is defaulted.

(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.

(QUIET) button

Press this button, the quiet status is under the auto quiet mode (display " 🔇 " and "Auto" signal) and quiet mode (display " 🔇 " signal) and quiet off (there is no signal of " 🔇 " displayed), after powered on, the quiet off is defaulted.
Under the quiet mode (Display " 🔇 " signal).

(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, 2 hours, setting temperature increased 2°C, 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, 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, after turned on sleep function, the temperature will be increased 1°C in every hour, after 3°C the temperature will be maintained, after 7 hours, the temperature will be decreased 1°C, after that the unit will keep on running under this temperature;
(2) When setting the initial temperature 24°C-27°C, after turned on sleep function, the temperature will be increased 1°C in every hour, after 2°C the temperature will be maintained, after 7 hours, the temperature will be decreased 1°C, after that the unit will keep on running under this temperature;
(3) When setting the initial temperature 28°C-29°C, after turned on sleep function, the temperature will be increased 1°C in every hour, after 1°C the temperature will be maintained, after 7 hours, the temperature will be decreased 1°C, after that the unit will keep on running under this temperature;

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

In heat mode:

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

(2) Under the initial presetting temperature 17°C -20°C, after Sleep function started up, the temperature will decrease 1°C in every hour, after 1°C decreased, this temperature will be maintained.

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

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

● 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 "2 hours" or "3 hours" or "8 hours"), 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 DIY could be inquired:

The user could accord to sleep curve setting method to inquire the presetting sleep curve, enter into user individuation sleep setting status, but do not change the temperature, press "Turbo" button directly for confirmation.

NOTE

● In the above presetting or enquiry procedure, if continuously within 10s, there is no button pressed, the sleep curve setting status will be automatically quit and resume to display the original displaying. In the presetting or enquiry procedure, press "ON/OFF" button, "Mode" button or "Sleep" button, the sleep curve setting or enquiry status will quit similarly.

Introduction for special function

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 temperature approachs the preset temperature as soon as possible.

About Child 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 sequence 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 sequence 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 function. Nixie tube on the remote controller displays "SE". Repeat the operation to quit the function.

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

Press "TEMP" and "CLOCK" simultaneously in heat mode to start 8°C heating function. Nixie tube on the remote controller displays "⑤" and a selected temperature 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℃, 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.

Auto clean function

Under unit off status, hold "MODE" and "FAN" buttons simultaneously for 5s to turn on or turn off the auto clean function. When the auto clean function is turned on, indoor unit displays "CL".

During the auto clean process of evaporator, the unit will perform fast cooling or fast heating. There may be some noise, which is the sound of flowing liquid or thermal expansion or cold shrinkage. The air conditioner may blow cool or warm air, which is a normal phenomenon. During cleaning process, please make sure the room is well ventilated to avoid affecting the comfort.

NOTE

- The auto clean function can only work under normal ambient temperature. If the room is dusty, clean it once a month; if not, clean it once every three months. After the auto clean function is turned on, you can leave the room. When auto clean is finished, the air conditioner will enter standby status.
- This function is only available for some models.

Replacement of batteries in remote controller

reinstall

battery

remove

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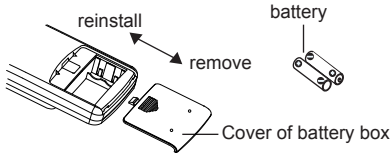
1. Press the back side of remote controller marked with "▤", as shown in the fig, and then push out the cover of battery box along the arrow direction.
2. Replace two 7# (AAA 1.5V) dry batteries, and make sure the position of "+" polar and "-" polar are correct.
3. Reinstall the cover of battery box.

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

- 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.

----
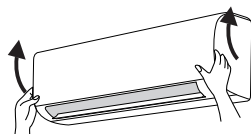
2. Remove filter

Remove the filter as indicated in the fig.

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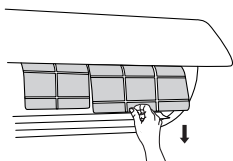
3. Clean filter
- Use dust catcher or water to clean the filter.
- When the filter is very dirty, use the water (below 45℃) to clean it, and then put it in a shady and cool place to dry.

----
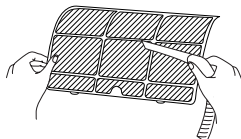
4. Install filter

Install the filter and then close the panel cover tightly.

⚠ **WARNING**

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

NOTICE: Checking before use-season

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

NOTICE: Checking after use-season

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

Notice for recovery

1. 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
E1, E5, E6, E8 H3, H6	It can be eliminated after restarting the unit. If not, please contact qualified professionals for service.
C5, F0, F1, 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.

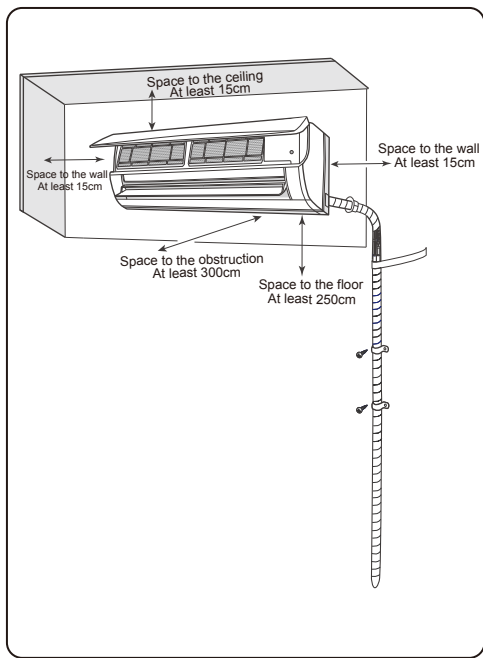| Phenomenon	Check items	Solution
Indoor unit can't receive remote controller's signal or remote controller has no action.	Whether it's interfered severely (such as static electricity, stable voltage?)	Pull out the plug. Reinsert the plug after about 3min, and then turn on the unit again.
	Whether remote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

Phenomenon	Check items	Solution
Odours are emitted	Whether there's odour source, such as furniture and cigarette, etc.	Eliminate the odour source. Clean the filter.
Set temperature can't be adjusted	Unit is operating under auto mode?	Temperature can't be adjusted under auto mode. Please switch the operation mode if you need to adjust temperature.
	Your required temperature exceeds the set temperature range?	Set temperature range: 16°C~30°C.
Cooling (heating) effect is not good.	Voltage is too low?	Wait until the voltage resumes normal.
	Filter is dirty?	Clean the filter.
	Set temperature is in proper range?	Adjust temperature to proper range.
	Door and window are open?	Close door and window.
Air conditioner operates abnormally	Whether there's interference, such as thunder, wireless devices, etc.	Disconnect power, put back power, and then turn on the unit again.
"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

Space to the ceiling
At least 15cm

Space to the wall
At least 15cm

Space to the wall
At least 15cm

Space to the obstruction
At least 300cm

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

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

15

■ Selection of installation location

Basic requirement

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

1. The place with strong heat sources, vapors, flammable or explosive gas, or volatile objects spread in the air.
2. The place with high-frequency devices (such as welding machine, medical equipment).
3. The place near coast area.
4. The place with oil or fumes in the air.
5. The place with sulfureted gas.
6. Other places with special circumstances.
7. The appliance shall not be installed in the laundry.
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

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

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 hazard.
8. The temperature of refrigerant circuit will be high, please keep the interconnection cable away from the copper tube.
9. The appliance shall be installed in accordance with national wiring regulations.

Grounding requirement

1. The air conditioner is the first class electric appliance. It must be properly grounding with specialized grounding device by a professional. Please make sure it is always grounded effectively, otherwise it may cause electric shock.
2. The yellow-green wire in air conditioner is grounding wire, which can't be used for other purposes.
3. The grounding resistance should comply with national electric safety regulations.
4. The appliance must be positioned so that the plug is accessible.
5. An all-pole disconnection switch having a contact separation of at least 3mm in all poles should be connected in fixed wiring.

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.

2. Drill the screw fixing holes on the wall with impact drill(the specification of drill head should be the same as the plastic expansion particle) and then fill the plastic expansion particles in the holes.

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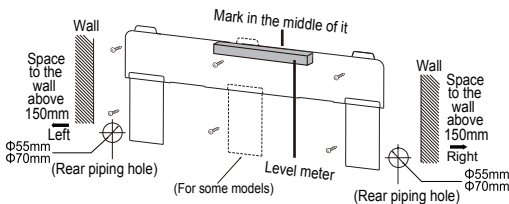
Step 3:
Open piping hole

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.

> **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.

2. 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.

3. 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°.
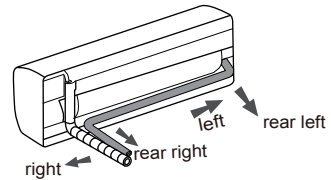
> **NOTE**
> ● Pay attention to dust prevention and take relevant safety measures when opening the hole.
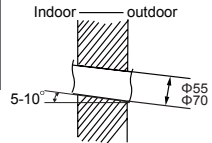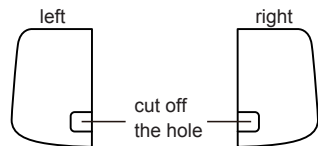

Step 4:
Outlet pipe

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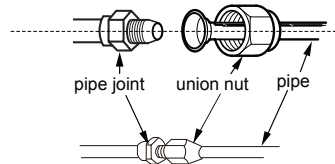

2. When select leading out the pipe from left or right, please cut off the corresponding hole on the bottom case.
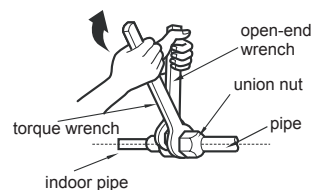

Step 5:
Connect the pipe of indoor unit

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

3. Adjust the torque force by referring to the following sheet. Place the open-end wrench on the pipe joint and place the torque wrench on the union nut. Tighten the union nut with torque wrench.
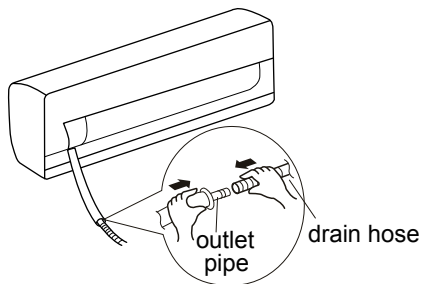
Hex nut diameter	Tightening torque (N·m)
1/4"	15~20
3/8"	30~40
1/2"	45~55
5/8"	60~65
3/4"	70~75

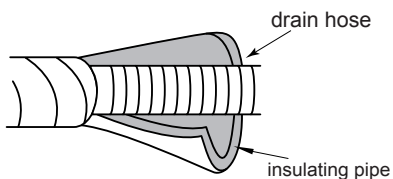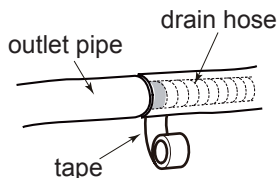4. Wrap the indoor pipe and joint of connection pipe with insulating pipe, and then wrap it with tape.
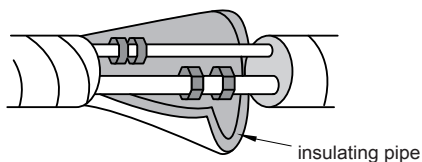
insulating pipe

Step 6:
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.

outlet pipe   drain hose

tape

drain hose

insulating pipe

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

Step 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 e-xtending 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.

panel   screw

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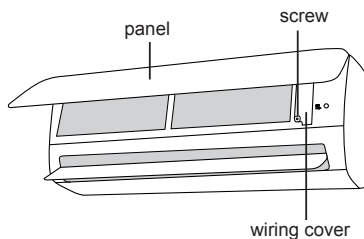
2. Make the power connection wire go through the cable-cross hole at the back of indoor unit and then pull it out from the front side.

cable-cross hole

power connection wire

18
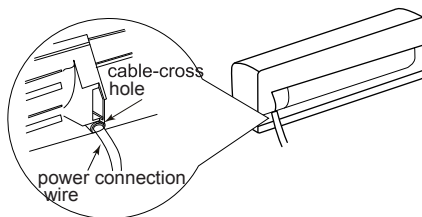
3. Remove the wire clip; connect the power connection wire to the wiring terminal according to the color; tighten the screw and then fix the power connection wire with wire clip.
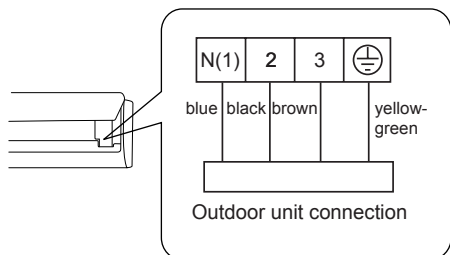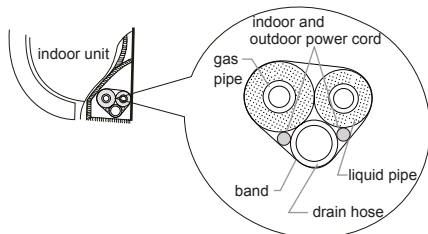
N(1)	2	3	⊕
blue	black	brown	yellow-green

Outdoor unit connection

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

- -

Step 8:
Bind up pipe
1. Bind up the connection pipe, power cord and drain hose with the band.

indoor unit

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

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

connection pipe   drain hose   band
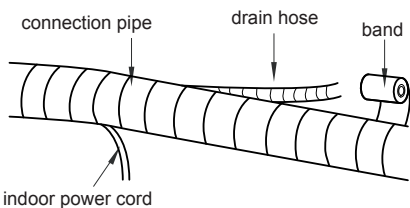
indoor power cord

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

- -

Step 9:
Hang the indoor unit
1. Put the bound pipes in the wall pipe and then make them pass through the wall hole.
2. Hang the indoor unit on the wall-mounting frame.
3. Stuff the gap between pipes and wall hole with sealing gum.
4. Fix the wall pipe.
5. Check if the indoor unit is installed firmly and closed to the wall.
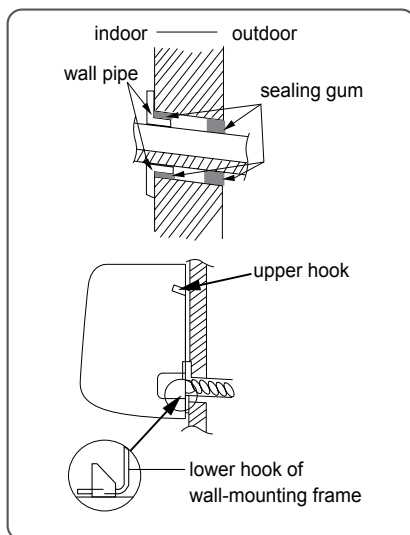
indoor —— outdoor
wall pipe
sealing gum
upper hook
lower hook of wall-mounting frame

Test and operation

Check after installation

● Check according to the following requirement after finishing installation.

Items to be checked	Possible malfunction
Has the unit been installed firmly?	The unit may drop, shake or emit noise.
Have you done the refrigerant leakage test?	It may cause insufficient cooling(heating) capacity.
Is heat insulation of 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 damage the parts.
Is electric wiring and pip-eline installed correctly?	It may cause malfunction or damage the parts.
Is the unit grounded securely?	It may cause electric leakage.
Does the power cord fol-low the specification?	It may cause malfunction or damage 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 damage the parts.
The gas valve and liquid valve of connection pipe are open completely?	It may cause insufficient cooling (heating) capacity.
Is the inlet and outlet of piping hole been covered?	It may cause insufficient cooling (heating) capacity or waste electricity.

Test operation

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

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

Configuration of connection pipe

1. Standard length of connection pipe: 5m, 7.5m, 8m.
2. Min. length of connection pipe.
   For the unit with standard connection pipe of 5m, there is no limitation for the min length of connection pipe. For the unit with standard connection pipe of 7.5m and 8m, the min length of connection pipe is 3m.
3. Max. length of connection pipe is shown as below.

Max. length of connection pipe

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

4. The calculation method of additional refrigerant oil and refrigerant charging amount 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):

   (1) Additional refrigerant charging amount= prolonged length of liquid pipe × additional refrigerant charging amount per meter

   (2) 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 Sheet .

Additional refrigerant charging amount for R32

Outdoor unit throttle	cooling and heating (g / m)	Cooling only (g / m)					
	16	12	12	24	48	200	280
	40						
	96						

|	cooling and heating (g / m)	16	40	96	96	200	280
Outdoor unit throttle	Cooling only (g / m)	12	12	24	48	200	280
Indoor unit throttle	Cooling only, cooling and heating (g / m)	16	40	80	136	200	280
Piping size	Gas pipe	3/8" or 1/2"	5/8" or 3/4"	3/4" or 7/8"	1" or 1 1/4"	—	—
	Liquid pipe	1/4"	1/4" or 3/8"	1/2"	5/8"	3/4"	7/8"

▪ Pipe expanding method

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
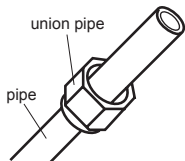
90° ✓   ✗ leaning   ✗ uneven   ✗ burr
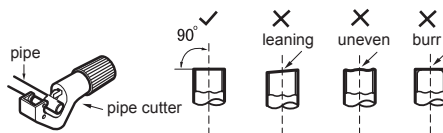
B: Remove the burrs

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

- -
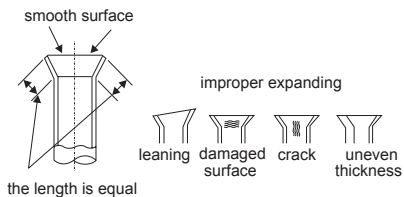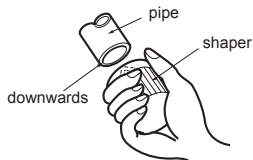
C: Put on suitable insulating pipe
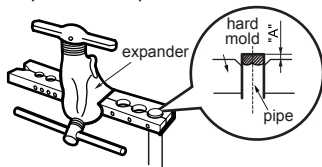
- -

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 (mm)	A(mm)	
	Max	Min
Φ6 - 6.35(1/4")	1.3	0.7
Φ9 - 9.52(3/8")	1.6	1.0
Φ12-12.7(1/2")	1.8	1.0
Φ15.8-16(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

leaning   damaged   crack   uneven
           surface   thickness

the length is equal

◤ Working temperature range

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

For some models:

NOTE

● The operating temperature range (outdoor temperature) for cooling only unit is -15°C~43°C; for heat pump unit is -15°C~43°C.

daitsu