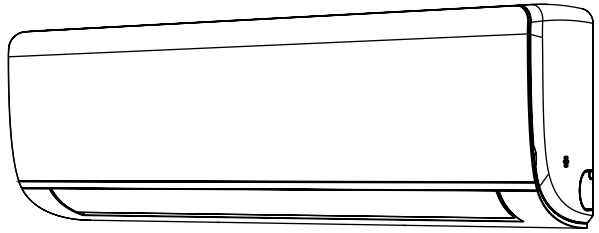


Sensei_{Pro}



USER'S MANUAL

Split Air Conditioner

ALASKA SENSEI SAC-09SKWA/I
SENSEI SAC-12SKWA/I
SENSEI SAC-18SKWA/I
SENSEI SAC-24SKWA/I

Thank you for choosing our product.

For proper operation, please read and keep this manual carefully.

Content

Operation Notices

Precautions	1
Parts name.....	6

Operation Guide

Operation guide.....	7
Remote controller	8
Buttons on remote controller.....	9
Indoor unit address inquiry.....	13

Maintenance

Clean and maintenance	13
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Malfunction

Malfunction analysis.....	15
Safety operation of flammable refrigerant.....	16

Installation Notice

Installation drawing	20
Installation prepare	21

Installation

Installation of indoor unit.....	24
Check after installation	29
Test operation.....	30

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.



This marking indicates that this product should not be disposed with other household wastes 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.

Precautions

Please read this operating manual carefully before operating the unit.



Appliance filled with flammable gas R32.



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



Before install the appliance, read the installation manual first.



Before repair the appliance, read the service manual first.

The figures in this manual may be different with the material objects, please refer to the material objects for reference.

The Refrigerant

To realize the function of the air conditioner unit, a special refrigerant circulates in the system. The used refrigerant is the fluoride R32, which is specially cleaned. The refrigerant is flammable and inodorous. Furthermore, it can lead to explosion under certain condition. 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 ozoneosphere. The influence upon the greenhouse effect is also lower. R32 has got very good thermodynamic features which lead to a really high energy efficiency. The units therefore need a less filling.

WARNING:

Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacture. Should repair be necessary, contact your nearest authorized Service Center.

Any repairs carried out by unqualified personnel may be dangerous.

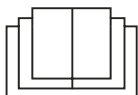
The appliance shall be stored in a room without continuously operating ignition sources. (For example: open flames, an operating gas appliance or an operating electric heater.) Do not pierce or burn.

Appliance shall be installed, operated and stored in a room with a floor area larger than "X"m² (see table 1). (only applies to appliances that are not fixed appliances)

Appliance filled with flammable gas R32. For repairs, strictly follow manufacturer's instructions only.

Be aware that refrigerants not contain odour.

Read specialist's manual.



Precautions



WARNING

Operation and Maintenance

This appliance can be used by children aged of 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.

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

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

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

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

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

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

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

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

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

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

Precautions



WARNING

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

Do not spill water on the remote controller, otherwise the remote controller may be broken.

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

- Power cord is overheating or damaged.
- There's abnormal sound during operation.
- Circuit break trips off frequently.
- Air conditioner gives off burning smell.
- Indoor unit is leaking.

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.

Attachment

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

Must follow the electric safety regulations when installing the unit.

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

Do install the circuit break. If not, it may cause malfunction.

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

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

Precautions



WARNING

Including an circuit break with suitable capacity, please note the following table. Air switch should be included magnet buckle and heating buckle function, it can protect the circuit-short and overload.

Don't use unqualified power cord.

Make sure the power supply matches with the requirement of air conditioner. Unstable power supply or incorrect wiring or malfunction. Please install proper power supply cables before using the air conditioner.

Properly connect the live wire, neutral wire and grounding wire of power socket.

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

Do not put through the power before finishing installation.

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

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

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

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

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

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

The grounding resistance should comply with national electric safety regulations.

Precautions



WARNING

The appliance must be positioned so that the plug is accessible.

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

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

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

For the air conditioner without plug, an circuit break must be installed in the line.

If you need to relocate the air conditioner to another place, only the qualified person can perform the work. Otherwise, it may cause personal injury or damage.

Select a location which is out of reach for children and far away from animals or plants. If it is unavoidable, please add the fence for safety purpose.

The indoor unit should be installed close to the wall.

Working temperature range

	Indoor side DB/WB(°C)	Outdoor side DB/WB(°C)
Maximum cooling	32/23	48/26
Maximum heating	27/-	24/18

NOTE:

The operating temperature range (from outside) for cooling is -15°C ~48°C;

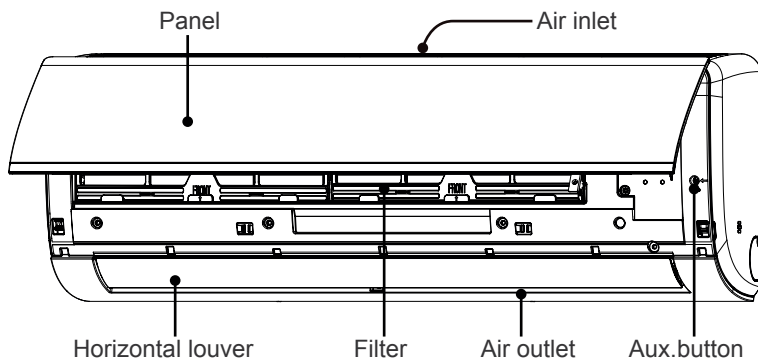
The heating operating temperature range for the electric heating belt model is -25°C ~24°C;

The heating operating temperature range for models

with an electronic expansion valve is -30°C ~24°C.

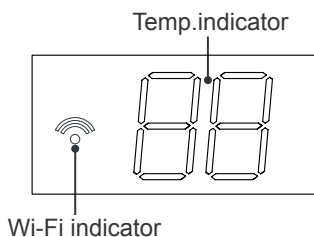
Parts name

Indoor unit

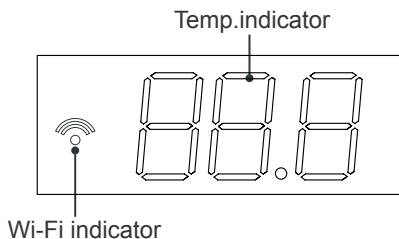


Display

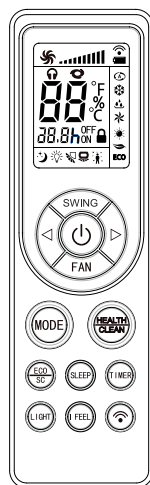
For some model:



For some model:



Remote controller



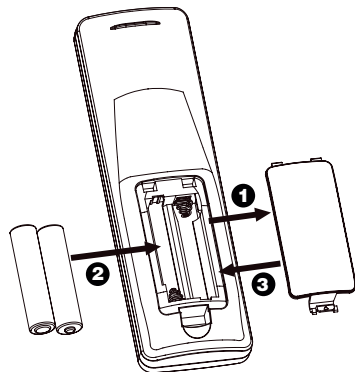
NOTE:

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

Operation guide

Installation batteries

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. Installation 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.



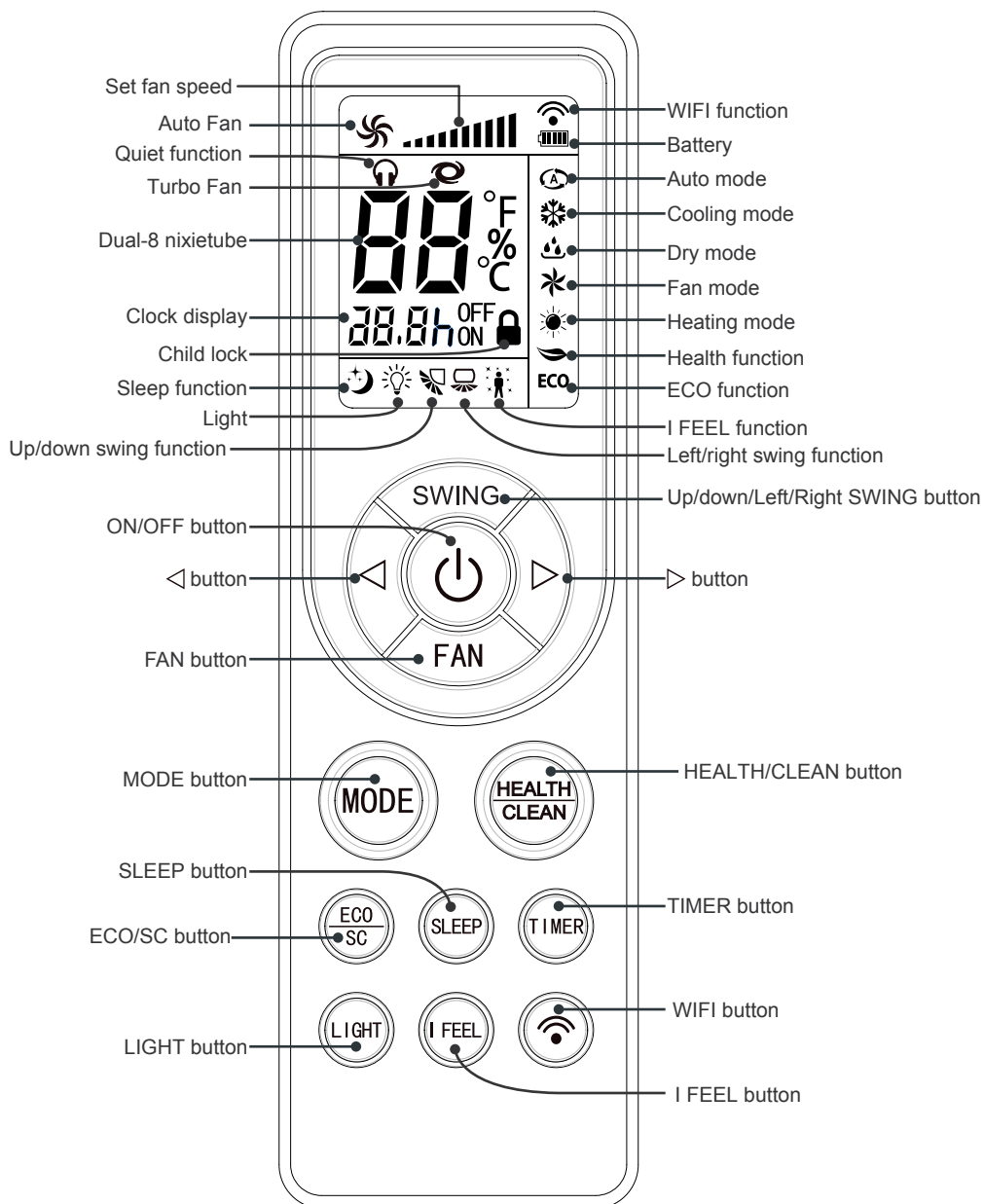
Operation guide

1. After connecting the power, press "  " button on remote controller to turn on the air conditioner.
2. Press "MODE" button to select your required mode: Auto, Cool, Dry, Fan, Heat.
3. Press "  " or "  " button to set your required temperature. (Temperature can't be adjusted under auto mode).
4. Press "FAN" button to set your required fan speed: auto , quiet , fan1, fan2 , fan3 , fan4 , fan5 , stepless speed.
5. Press "SWING" button to turn on or turn off the swing function.

NOTE:

- 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.

Remote controller



Buttons on remote controller

After connecting the power, the air conditioner will make a sound.

Power indicator is ON. After that, you can operate the air conditioner by using remote controller.

In state of turning on, pressing the button on the remote controller, the air conditioner will make a "beep" sound, which means the signal has been sent to the air conditioner. The display will show the corresponding setting function icons.

In state of turning off, light icon will be displayed on the display of remote controller (If timer on and light functions are set, the corresponding icons will be displayed on the display of remote controller at the same time).

ON/OFF button

Press this button to turn on or turn off the air conditioner.

MODE button

Press this button to select your required operation mode. You can select Auto, Cool, Dry, Fan and Heat mode.



- When selecting auto mode, air conditioner will operate automatically according to ex-factory setting. Setting temperature can't be adjusted and will not be displayed as well. Press "FAN" button can adjust fan speed. Press "SWING" button turn on or turn off the swing function.
- When selecting cool mode, air conditioner will operate under cooling mode. Press " $\triangleleft$ " or " $\triangleright$ " button to adjust setting temperature. Press "FAN" button to adjust fan speed. Press "SWING" button to turn on or turn off the swing function.
- When selecting dry mode, the air conditioner will operate in fan1, fan speed can't be adjusted. Press "SWING" button to turn on or turn off the swing function.
- When selecting fan mode, the air conditioner will only blow, no cooling and no heating. Press "FAN" button to adjust fan speed. Press "SWING" button to turn on or turn off the swing function.
- When selecting heat mode, the air conditioner will operate in heating mode. Press " $\triangleleft$ " or " $\triangleright$ " button to adjust setting temperature. Press "FAN" button to adjust fan speed. Press "SWING" button to turn on or turn off the swing function. (Cooling only unit won't receive heat mode signal. If setting heating mode with remote controller, press ON/OFF button can't start up the unit).

Note:

- To preventing cold air, after starting up heating mode, indoor unit will delay 1~5 minutes to blow air (actual delay time is depend on indoor ambient temperature).
- Setting temperature range from remote controller: 16~31°C;
Fan speed: auto, quiet, fan1, fan2, fan3, fan4, fan5, turbo, stepless speed.

Buttons on remote controller

button

- In non-auto mode, press this button to increase the set temperature;
- Press and hold down this button for more than 0.5 seconds, set the temperature to change quickly, the °C (°F) icon is displayed all the time during the process, the temperature upper limit is 31°C (88°F).

button

- In non-auto mode, press this button to decrease the set temperature;
- Press and hold down this key for more than 0.5 seconds, set the temperature to change rapidly, the °C (°F) icon is displayed all the time during the process, the default temperature limit is 16°C (61°F).

FAN button

- Press this button to set fan speed circularly: auto, quiet, fan1, fan2, fan3, fan 4, fan 5, turbo, stepless speed.
- Dry mode can only be set to low fan speed.
- No turbo fan speed under auto mode.
- No quiet fan speed under fan mode.
- Under auto fan speed, remote control display , fan speed display circularly between grid 1 to 5.

Note:

In the stepless speed mode:

- Press the  /  button to modify the fan speed setting value.
- Long press  /  key 0.5 second after the rapid change of fan speed , digital fan speed display;
- Press FAN button to switch to other fan speeds during 5s timing, press FAN button again to enter stepless speed after 5s timing.

ECO/SC button

In the state of cooling mode, press "ECO/SC" button, to select ECO function, LCD display icon "ECO".

- Switch modes cancels ECO function. Turn off remote control and start again, ECO function reserved;
- The default fan speed is auto fan speed, the fan speed and setting temperature is non-adjustable.
- Sleep and ECO function cannot start at the same time.

Note:

- Long press the "ECO/SC" button in any state, the remote control display "SC" and enter the off state. Remote control sends self-cleaning information.
- Under the SC state, turn on the machine by remote to exit SC state.

Buttons on remote controller

TIMER button

- Timing time range 0.5~24 hours, timing scale 0.5 hour.
- Press the TIMER button to set the timing on, LCD display "0.0", "h ON" flashing, After 5s, no operation default no timing. Timing time can be adjusted within 5s by pressing "◀" or "▶" button. After setting the timing time, press the TIMER button to determine the timing time. When adjusting the timing, long press for more than 0.5 seconds "◀" or "▶" button, time setting changes quickly.
- Press the TIMER button to set the timing off. The setting method refers to the timing on.

WIFI button

- Press this button to turn on or turn off WIFI function.
- Press this button more than 2s to enter WIFI configuration mode.
- For more details, please see for Smart APP user manual.

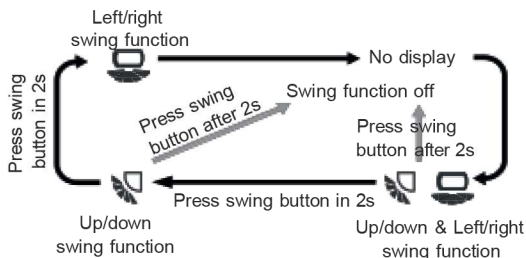
SLEEP button

- Press this button to turn on or turn off the SLEEP function under cool, heat and dry mode.
- Power on the machine, the default is sleep off; after setting sleep function, the sleep icon is displayed.
- Turn off the machine and switch modes to cancel the sleep function.
- It is no use under "FAN" mode and "AUTO" mode.

LIGHT button

- Press this button, switch between LIGHT On and LIGHT Off for indoor unit's display.
- Power on the machine, the default is light on, and light icon displays.
- When the light is on, the display board displays environment temperature for 3 seconds and then display the setting temperature.

SWING button



- Long press this button to suspend all swings, long press again the button to continue the previous state

Note:

- If there is no this function for the unit. Press this button, the unit will sound, but it runs under original state.

Buttons on remote controller

HEALTH/CLEAN button

- Press this button to turn on and turn off the HEALTH function.
 - First power on the machine, HEALTH/CLEAN default is open, use remote control to turn on the machine or switch modes, HEALTH/CLEAN function maintains the original state.
- Note: This function is not available for some models.

CLEAN Function:

- It is unable to set CLEAN function when the unit is on. If the air conditioner run in cool or dry mode before turning off, after turning off the air conditioner, long pressing this button to turn on CLEAN function, the screen displays "CL", by running for 10 mins in CLEAN function then turn off automatically, or long pressing again this button to turn off CLEAN function, "CL" disappear.
- Power on the remote control, CLEAN function default is off.
- The CLEAN function cannot be set and displayed when the air conditioner is in AUTO, FAN and HEAT mode before turning off the air conditioner.

I FEEL button

Press this button, you can select the I FEEL function on and off. The first power on, I FEEL function default is off. Press this button, I FEEL icon appear and I FEEL function is on, press this button again, close the I FEEL function and I FEEL icon disappear.

Note:

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

Introduction to the function of combination Buttons:

Child lock setting and unlocking

- In the state of turning on or turning off the machine, hold down the "◀" button and "▶" button at the same time, enter the "Child lock" function to lock or unlock the remote control buttons, after locking, the CHILD lock icon is displayed. At this time, by operating any button, the CHILD lock icon will blink three times without sending signal to the unit.
- After unlocking the buttons, the CHILD lock icon is not displayed. After powered on, the default is unlock.

F and C temperature switch

In the state of turning off, holding down the "MODE" and "◀" button, switch between °C and °F.

Low temperature heating function setting

In heating mode, press the "MODE" and "▶" button at the same time will enter/exit the low temperature heating function.

- "LA" icon is showed on the remote after entered into the low temperature heating function, fan speed is default to Auto and non-adjustable.
- When switching from one mode to another mode, low temperature heating function is cancelled. Turn off and then turn on air conditioner that will remain the low temperature heating function. After powered on, the low temperature heating mode is defaulted off state.
- In the low temperature heating mode, "SLEEP" function and "Low temperature heating" function cannot start at the same time.
- After entering the low temperature heating function, to cancel the QUIET or TURBO function, after the exit will be restored to the state before entering.

Indoor unit address inquiry

- If match with MULTI-S outdoor unit, when units has malfunction and need to inquire the address to maintainance, the step is as below:
Remote controller aims to the indoor display, press "Light" and "-" buttons at the same time for 3s , then will display the indoor unit address(1~5) for 3s.

Clean and maintenance

WARNING

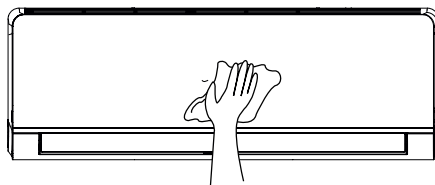
- Turn off the air conditioner and disconnect the power before cleaning the air conditioner to avoid electric shock.
- Do not wash the air conditioner with water to avoid electric shock.
- Do not use volatile liquid to clean the air conditioner.

Clean surface of indoor unit

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

Note:

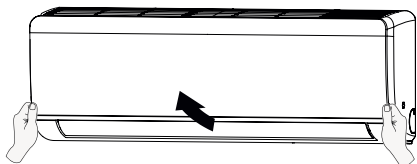
Do not remove the panel when cleaning it.



Clean filter

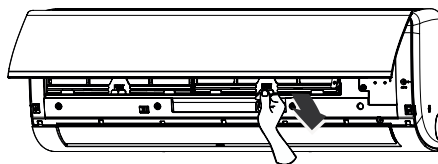
1 Open panel

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



2 Remove filter

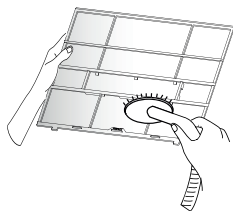
Remove the filter as indicated in the fig.



Clean and maintenance

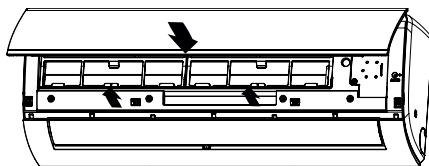
3 Clean filter

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



4 Installation filter

Installation the filter and then close the panel cover tightly.



NOTE:

- 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.

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 drainage pipe is damaged.

Checking after use-season

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

Notice for recovery

1. Most of 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.

Malfunction analysis

General phenomenon analysis

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

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

Malfunction analysis

Phenomenon	Check items	Solution
Mist is emitted from indoor unit's air outlet.	Indoor temperature and humidity is high?	Because indoor air is cooled rapidly. After a while, indoor temperature and humidity will be decrease and mist will disappear.
Set temperature can't be adjusted	Unit is operating under auto mode?	Temperature can't be adjusted under auto mode. Please switch the operation mode if you need to adjust temperature.
	Your required temperature exceeds the set temperature range?	Set temperature range: 16℃ ~31℃
Cooling (heating) effect is not good.	Voltage is too low?	Wait until the voltage resumes normal.
	Filter is dirty?	Clean the filter.
	Set temperature is in proper range?	Adjust temperature to proper range.
	Door and window are open?	Close door and window.
Odours are emitted	Whether there's odour source, such as furniture and cigarette, etc.	Clean the filter. Eliminate the odour source.
Air conditioner operates normally suddenly	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.

Contact us

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

Malfunction analysis

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.

Below listed error codes are only part error codes. Please refer to error code list in service manual for more information.

Error code	Troubleshooting	Solution
CL	Filter filter blockage alert	Power off, clean filter. If the filter is not dirty, turn off the air conditioner for 2s then restart, the code will be removed automatically.
E1	Overheat protection	Turn off, restart after 5min, if the code occurs again after a few minutes, please contact the professional person.
E2	Overcurrent protection	Turn off, restart after 5min, if the code occurs again after a few minutes, please contact the professional person.
HE	Auxiliary heat control circuit malfunction	Pull out the plug, please contact the professional person.
L0	Jumper malfunction	Pull out the plug, restart after 10s, if the code occurs again, please contact the professional person.
L1	PG motor(indoor) zero-crossing detecting circuit malfunction	Turn off, restart after a few seconds, if the code occurs again after a few minutes, please contact the professional person.
L2	No feedback signal of indoor unit fan	Turn off, restart after a few seconds, if the code occurs again after a few minutes, please contact the professional person.
L3/L6	Communication malfunction	Power off the unit, restart after 10s, if the code occurs again, please check the communication wire of indoor unit and outdoor unit is correct or not, then power on again.
U0	Short/open circuit of indoor environment sensor	Power off the unit, restart after 10s, if the code occurs again, please contact the professional person.
U1	Short/open circuit of indoor unit tube sensor	Power off the unit, restart after 10s, if the code occurs again, please contact the professional person.
U6	Liquid pipe temp. sensor malfunction	Power off the unit, restart after 10s, if the code occurs again, please contact the professional person.
U7	Gas pipe temp. sensor malfunction	Power off the unit, restart after 10s, if the code occurs again, please contact the professional person.
PC	Mode conflict	The mode of this indoor unit is conflicting with other indoor units, please turn off other indoor units or change the mode to non-conflicted mode.

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

Safety operation of flammable refrigerant

Qualification requirement for installation and maintenance man

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

Installation notes

1. The air conditioner is not allowed to use in a room that has running fire (such as fire source, working coal gas ware, operating heater).
2. It is not allowed to drill hole or burn the connection pipe.
3. 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 1.
4. Leak test is a must after installation.

Table 1: Minimum room area (m²)

Minimum room area (m ²)	Charge amount (kg)	≤1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5
	floor location	/	14.5	16.8	19.3	22.0	24.8	27.8	31.0	34.4	37.8	41.5	45.4	49.4	53.6
	window mounted	/	5.2	6.1	7.0	7.9	8.9	10.0	11.2	12.4	13.6	15	16.3	17.8	19.3
	wall mounted	/	1.6	1.9	2.1	2.4	2.8	3.1	3.4	3.8	4.2	4.6	5	5.5	6.0
	ceiling mounted	/	1.1	1.3	1.4	1.6	1.8	2.1	2.3	2.6	2.8	3.1	3.4	3.7	4.0

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.

Safety operation of flammable refrigerant

Welding

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

1. Shut down the unit and cut power supply.
 2. Eliminate the refrigerant.
 3. Vacuuming.
 4. Clean it with N2 gas.
 5. Cutting or welding.
 6. 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.

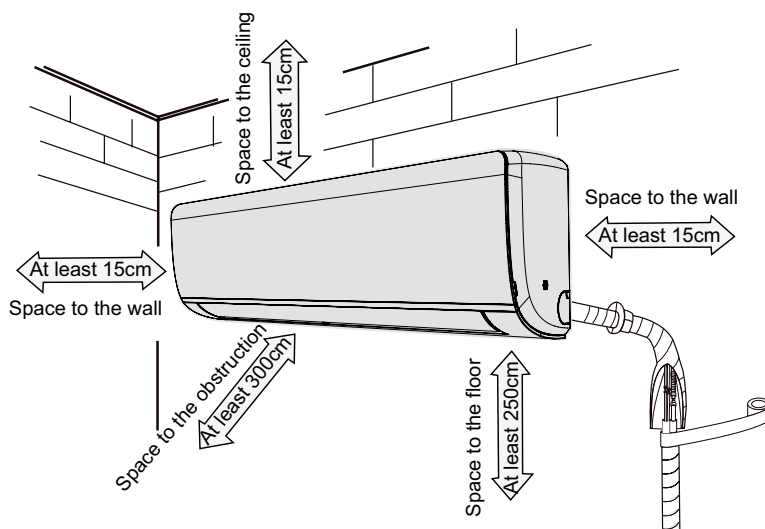
Filling the refrigerant

1. Use the refrigerant filling appliances specialized for R32. Make sure that different kinds of refrigerant won't contaminate with each other.
2. The refrigerant tank should be kept upright at the time of filling refrigerant.
3. Stick the label on the system after filling is finished (or haven't finished).
4. Don't overfilling.
5. 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

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

Installation drawing



Selection of 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 sulfured gas.
6. Other places with special circumstances.
7. The appliance shall not be installed in the laundry.

Indoor unit

1. There should be no obstruction near air inlet and air outlet.
2. Choose a place where the condensation water can be dispersed easily and won't affect other people.
3. Choose a place which is convenient to connect the outdoor unit and near the power socket.
4. Choose a place which is out of the reach of children.
5. The place 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 away from fluorescent lamp.

Installation prepare

Tools

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	

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 circuit break.
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 connect the power before finishing installation.
7. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
8. The temperature of refrigerant circuit will be high, please keep the interconnection cable away from the copper tube.
9. The appliance shall be installed in accordance with national wiring regulations.
10. Installation must be performed in accordance with the requirement of NEC and CEC by authorized personnel only.
11. Appliance shall be installed, operated and stored in a room with a floor area larger than "X"m² (see table 1).



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

Installation prepare

Grounding requirement

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

Safety precautions for installing and relocating the unit

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



WARNING

1. **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.
2. **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.
3. **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.
4. **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.

Installation prepare

- 5. 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.
- 6. 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.
- 7. 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.
- 8. 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.

Installation of indoor unit

Step 1: Choosing installation location

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

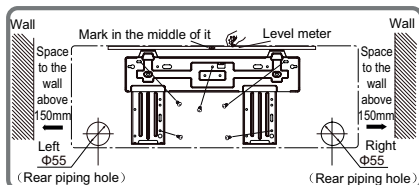
Step 2: Install wall-mounting frame

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 (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.

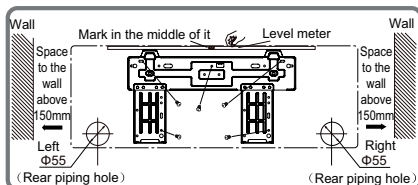
Step 3: Open piping hole

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.

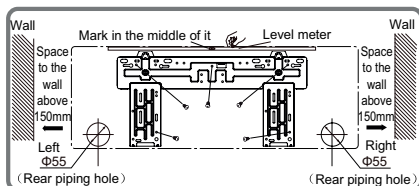
Dimension: 721x274x195



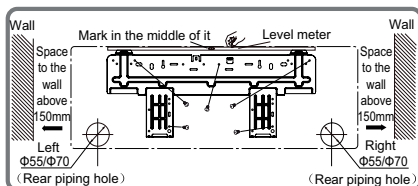
Dimension: 792x279x195、821x283x200



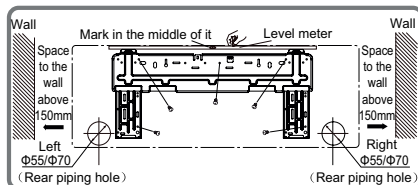
Dimension: 850x291x203



Dimension: 972x302x224



Dimension: 1081x327x248

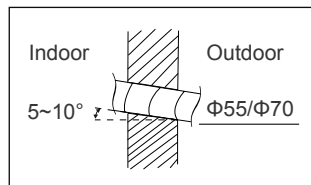


Installation of indoor unit

2. Open a piping hole with the diameter of $\Phi 55/\Phi 70$ 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 $5\sim 10^\circ$.

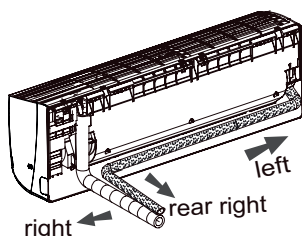
Note:

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

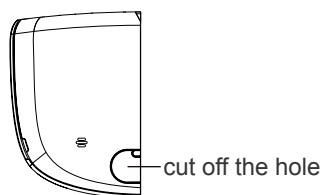


Step 4: Outlet pipe

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

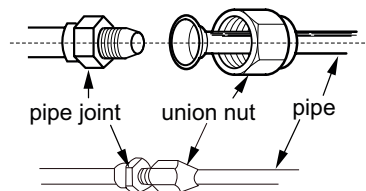
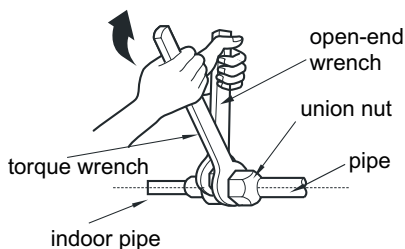


2. When select leading out the pipe from left or right, please cut off the corresponding hole on the bottom case.



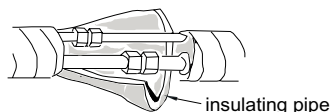
Step 5: Connect the pipe of indoor unit

1. Aim the pipe joint at the corresponding bellmouth.
2. Pretightening the union nut with hand.
3. Adjust the torque force by referring to the following sheet. Place the open-end wrench on the pipe joint and place the torque wrench on the union nut. Tighten the union nut with torque wrench.



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

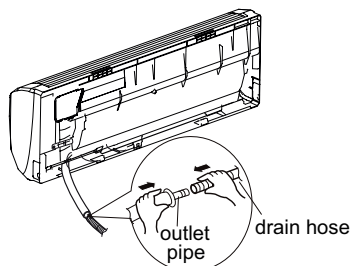
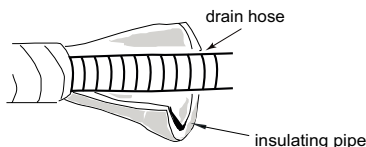
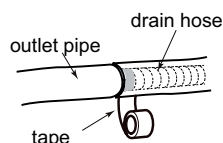
4. Wrap the indoor pipe and joint of connection pipe with insulating pipe, and then wrap it with tape.



Installation of indoor unit

Step 6: Install drain hose

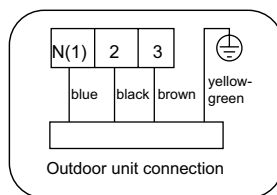
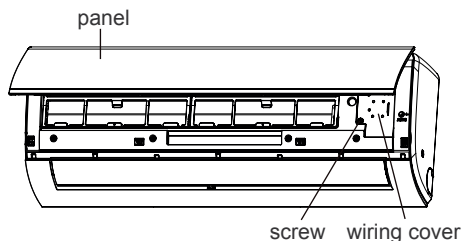
1. Connect the drain hose to the outlet pipe of indoor unit.
2. Bind the joint with tape.



- 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

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



2. Make the power connection wire go through the cable-cross hole at the back of indoor unit and then pull it out from the front side.
3. Remove the wire clip, connect the power connection wire to the wiring terminal according to the color; tighten the screw and then fix the power connection wire with wire clip.
4. Put wiring cover back and then tighten the screw.
5. Close the panel.

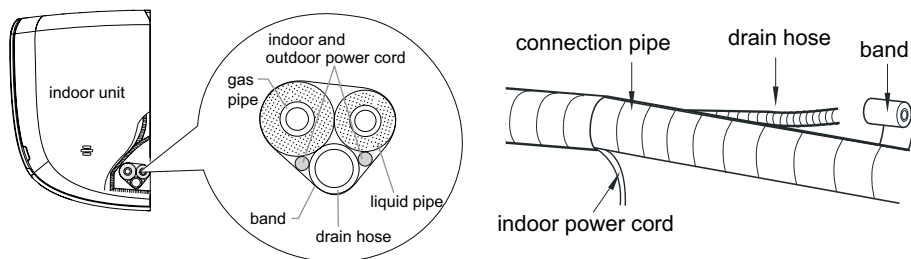
Note:

- All wires of indoor unit and outdoor unit should be connected by a professional.
- If the length of power connection wire is insufficient, please contact the supplier for a new one. Avoid extending the wire by yourself.
- For the air conditioner with plug, the plug should be reachable after finishing installation.
- For the air conditioner without plug, an air switch must be installed in the line.
The air switch should be all-pole parting and the contact parting distance should be more than 3mm.

Installation of indoor unit

Step 8: Bind up pipe

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



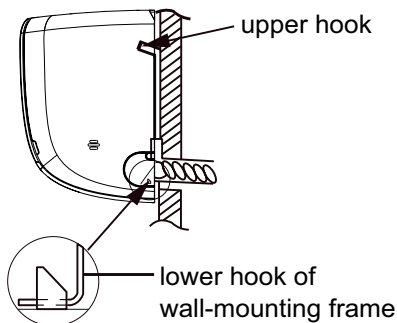
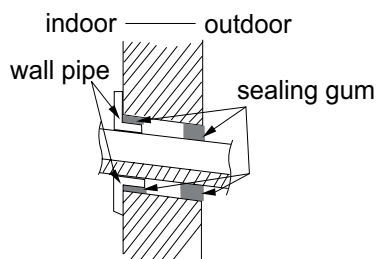
3. Bind them evenly.
4. The liquid pipe and gas pipe should be bound separately at the end.

Note:

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

Step 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.

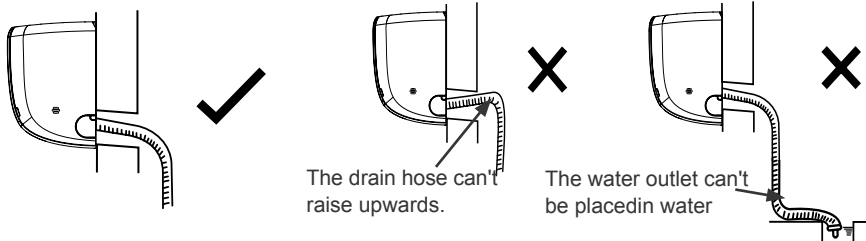


- Do not bend the drain hose too excessively in order to prevent blocking.

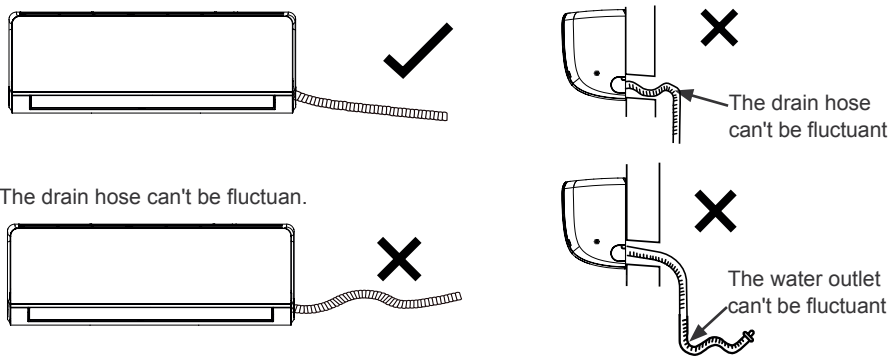
Installation of indoor unit

Note:

- The through-wall height of drain hose shouldn't be higher than the outlet pipe hole of indoor unit.
- The water outlet can't be placed in water in order to drain smoothly.



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



Check after installation

Check according to the following requirement after finishing installation.

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

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

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

3. If match with MULTI-S outdoor unit, after installing the complete units, must test operating when first power on and turn on units to ensure the correct installation.

The steps of test operation is as below:

- A: Use remote controller to select cooling mode and set the temperature in 16°C . Aim to the indoor display board, press "▷, ◁, ▷, ◁, ▷, ◁" in 5s, then the indoor display "LL" with a long whistle. This indicates the units start to test operating.
- B: The test operating is finished when indoor display change to show temperature from "LL".
- C: If the indoor display show "PA" and outdoor unit stop in test operating, indicate the installation has mistake, please check the cable connection and the pipe connection of refrigerant. Correct the mistake and start to test operating again.

Note: All the units can operating normally until pass the test operating.