BAUF

BAUF USER MANUAL

- WM MOMENTUM+
- SLIM DUCT Y
- MEDIUM DUCT
- CASSETTE Y
- CONSOLE
- CEILING & FLOOR

INDEX

Note:

All the illustrations in this manual are for explanation purpose only. Your air conditioner may be slightly different. The actual shape shall prevail. They are subject to change without notice for future improvement.

1. WARNING

Warning: This air conditioner uses R32 flammable refrigerant.

Notes:
Air conditioner with R32 refrigerant, if roughly treated, may cause serious harm to the human body or surrounding things.

• The room space for the installation, use, repair, and storage of this air conditioner should be greater than 5m^2

• Do not use any methods to speed up defrost or to clean frosty parts except for particular recommended by manufacturer.

• Not pierce or burn air conditioner, and check the refrigerant pipeline wether be damaged.

• The air conditioner should be stored in a room without lasting fire source, for example, open flame, burning gas appliance, working electric heater and so on.

• Notice that the refrigerant may be tasteless.

• The storage of alr conditioner should be able to prevent mechanical damage caused by accident.

• Maintenance or repair of air conditioners using R32 reftigerant must be carried out afer security check to minimize risk of incidents.

• The room space and refrigerant maximum charge requirements are shown below:

Series	Max. allowable refrig. charge amount, kg	Min. Floor Area For Installation (m^2)
AM2	1.7	5
AM3	2.1	5
AM4	3.5	12
AM5	3.5	12

Please read the instruction carefully before installing, using and maintaining

This symbol shows that this appliance uses a flammable refrigerant. If the refrigerant is leaked and exposed to an extemal ignition source, there is a risk of fire.

This symbol shows that the operation manual should be read carefully

This symbol shows that a service personnel should be handling this equipment with reference to the installaton manual

This symbol shows that information is available such as the operating manual or installation manual

2. SAFETY PRECAUTIONS

Incorrect operation due to ignoring instruction will cause harm or damage. The seriousness is classified by the following indications:

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

CAUTION
This symbol indicates the possibility of injury or damage to properties only.

WARNING

• 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

• The air conditioner must be grounded. Incomplete grounding may result in electric shocks. Do not connect the earth wire to the gas pipeline, water pipeline, lightning rod, or telephone earth wire.

• Don't pull out the power plug during operating or with wet hands. It can cause electric shock or fire.

• Don't pull the power cord when pull out the power plug. The damage of pulling power cord will cause serious electric shock.

• The power plug must be inserted tightly.
Otherwise, it can cause electric shock, overheating, or even fire

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

• Don't share the socket with other electric appliance, and use the broken or unstandard cord. Otherwise, it can cause electric shock or even fre.

• Clean the dust on the plug regularly. Otherwise the dust mixed with humidity will result in insulation fault or even fire.

• An earth leakage broaker with rated capacity must be installed to avoid possible electric shocks.

• Cut off the main power switch when not using the unit for a long time. Otherwise, it may cause product failure or fire.

• Stop operation and cut off the main power in storm or hurricane. Operation with windows opened may cause electric shock.

• Don't install air conditioner in a place where there is flammable gas or liquid. The distance between them should above 1m. It may cause fire.

• Don't put a finger, a rod or other object into the air outlet or inlet. As a fan is rotating at a high speed, it will cause injury.

• Don't touch the swinging wind vanes.
It may clamp your finger and damage the driving parts of the wind vanes.

• Don't attempt to repair the air conditioner by yourself. You may be hurt or cause further malfunctions.

• Take care and do not let the remote controller and the indoor unit be watered or be too wet, or there may occur short circuit caused fire.

• Don't use liquid or corrosive cleaning agent, wipe the air-conditioner and sprinkle water or other liquid ether. Otherwise the inclosure will be damaged and can even cause electric shock.

• This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilites, 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.

• It the power supply cord is damaged, it must be replaced by the manufacture or its service agent or a similar qualified person.

• Opening the electrical cover, there is a white line beside the terminal for servicing.

▪ Caution

• Don't install the indoor unit under sunshine directly.

• Don't block air inlet or air outlet, otherwise, the cooling or heating capacity will be weakened, and can cause system to stop operating.

• Don't apply the cold air to the body for a long time. It can affect your physical conditions and cause health problems.

• Close the windows and doors, otherwise, the cooling or heating capacity will be weakened.

• If the air filter is very dirty, the cooling or heating capacity will be weakened. Please clean the air fiter regularly.

• It is prohibited to stand or put things onto the top of the outdoor unit, to avoid drop or damage. In no case should children be allowed to sit on the outdoor unit.

• Set the suitable temperature, especially if there are old people, children and patients in the room. Generally, keep the temperature difference for 5°C between the inside and outside.

• In case that the unit closes down due to the severe interference from outer environments such as mobile phone, please take out the plug and plug in to restart the air conditioner after several seconds.

• It is forbidden to let the air conditioner keep precision instrumentation, artistic production for long time and make food fresh, otherwise abnormal using will cause damage and weaken.

• It is forbidden to let children and the disabled use air conditioner without other adult checking.

• Open windows frequently after using air conditioner for a long time.

• If your air conditioner is not fitted with a supply cord and a plug, small-pole switch must be installed in the fixed wiring and the distance between contacts should be no less than 3.0 mm.

• If your air conditioner is permanently connected to the fixed wiring and has a leakage current that may exceed 10 mA. Leakage protector must be installed in the fixed wiring.

• The power supply circuit should have leakage protector and air switch of which the capacity should be more than 1.5 times of the maximum current.

• When entering defrosting, indoor unit fan motor stops. The digital tube lamp. “heating” mode lamp, “electric heater” lamp which on the display board will flash 1 time every 10s during defrosting period (if there are no lamps on the display board, then other lamps will flash 1 time every 10s).

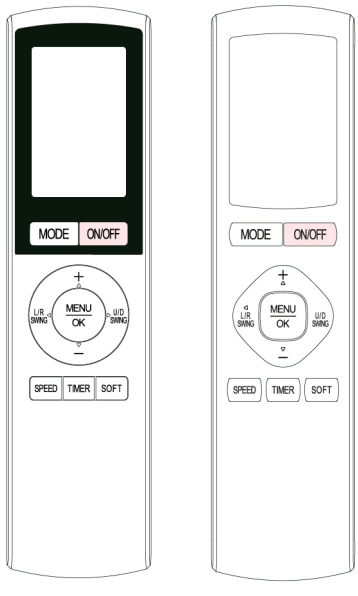
• After finishing defrosting, the display board will recovery to normal state and lamps stop flashing.

3. WEEE WARNING

Meaning of crossed out wheeled dustbin:

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact you local government for information regarding the collection systems available.
If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into TY the food chain, damaging your health and well-being.
When replacing old appliances with new ones, the retailer is legally obligated to take back your old appliance for disposals free of charge.

4. OPERATION



• Carefully read the instructions for safe and correct use of the air conditioner.

• Carefully keep the instructions as it can be referred to at any time.

▪ Precautions

• Before the first use of the remote controller, install the batteries and ensure the «+» and «-» poles are correctly positioned.

• Ensure the remote controller is pointed to the signal receiving window and that there is no obstruction between them, the distance is 8m at the maximum.

• Do not let the remote controller drop or fling it at will.

• Do not let any liquid in the remote controller.

• Do not expose the remote controller directly to the sunlight or excessive heat.

• If the remote controller does not function normally, remove the batteries for 30 seconds before reinstalling them. If that doesn't work, replace the batteries.

• When replacing the batteries, do not mix the new batteries with old ones or mix batteries of different types, which could cause failure of the remote controller.

• If the remote controller is not to be used for a long period of time, remove the batteries first, as the leakage from them may damage the remote controller.

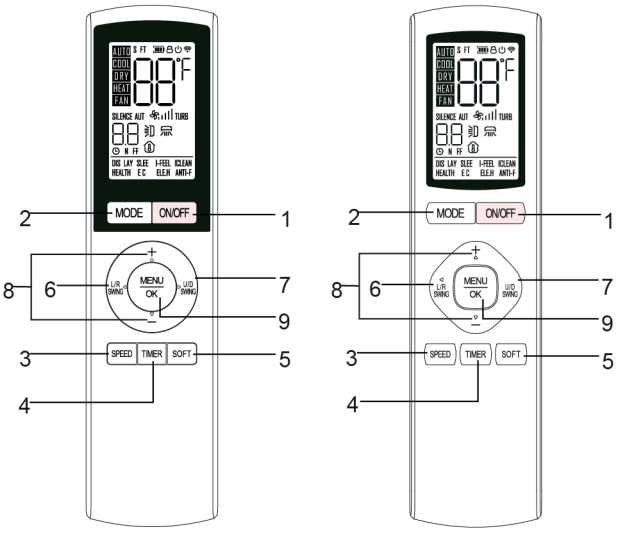
• Properly dispose the discarded batteries.

Note:

1. This is a universal remote controller which provides all the function buttons. Please understand that some of the buttons may not function, depending on the specific air conditioner you have purchased. (If a specific function is not available on the air conditioner, pressing the corresponding button will simply have no respond).

2. HEAT and ELE.H functions are not available for single cool models.

▪ Buttons Description



Type 1 Type 2

ON/OFF Button

Press this button to turn on/off the unit.

MODE Button

• Press this button, you can select operation mode as follows:

AUTO → COOL → DRY → FAN

Note: Please read the Usage for Mode for a detailed description.

SPEED Button

• Press this button, you can select fan speed as follows:

(Silence) (Turbo) (Auto)

Note:

• Auto is not available in fan mode.
• Turbo is not available in auto mode.
• The SPEED button is forced low speed in dry mode.

TIMER Button

• When the air-conditioner is turned on (off), pressing this button will enter the timer function setting. Then icon ⏲ and «OFF(ON)» character will light up, and the timer time will be displayed and flashed in the screen. Press the « ∧ (+)», « ∨ (-)» buttons to set the number of hours in which the unit will be turned on/off, and the timer range from 0.5 to 24 hours. Press the «TIMER» button again to confirm when the desired time is reached.

• After the timer power on (shutdown) setting is confirmed, the ⏲ icon and «OFF (ON)» character will stop flashing and remain lighting. And the screen will display the corresponding mode, temperature, speed, swing , and all can be set by pressing the corresponding buttons.

• After setting the timer power on (shutdown) , if the timer time is not up, press the «ON/OFF» button to directly turn on (off) the unit and cancel the timer power on (shutdown).

• If the «TIMER» button is not pressed within 10 seconds after

• If timer setting is confirmed, pressing «TIMER» button will cancel the timer function.

SOFT Button

• The soft function can prevent people from being blown directly by cold air.

• Only in the cool mode and when the unit is on, press the «SOFT» button to turn on or off the soft function, and the screen will indicate or cancel the «SOFT» character.

• After turning on soft function:

a. The up/down swing or the rated swing will turn off, and the screen will not display the swing icon.

b. Pressing any of the «SOFT» button, «OFF", «U/D SWING» or switch mode will cancel the soft function and the «SOFT» character.

L/R SWING Button

When the unit is on or the unit is shutdown but the timer is on, press this button to activate left/right swing and press it again to turn off the swing function, and the screen will indicate or cancel icon.

U/D SWING Button

When the unit is on or the unit is shutdown but the timer is on, press this button to activate up/down swing and press it again to turn off the swing function, and the screen will indicate or cancel icon.

Note:
• Press the “U/D SWING” button and hold for 3 seconds, the button will shift to be the functional button of «Rated swinging», and then press the “U/D SWING” button to select the positions of Rated swinging.

• Only by pressing the “U/D SWING” button again and holding for 3 seconds or reinstalling the battery of the remote control could exit the «Rated swinging», and the icon of the rated swinging will disappear, then the «U/D SWING» button resumes its original function.

+ & - Button

• Each time the « + » or « - » is pressed, the temperature setting will be increased or decreased by $1^{o}C$ ($1^{o}F$) .
• The temperature setting range: $16^{o}C$ ($60^{o}F$) ~ $32^{o}C$ ($90^{o}F$).

Note: The temperature can not be set in auto or fan mode.

MENU & OK Button

• Press the «MENU» button to enter the function selection mode. Then press « ∧ (+)», « ∨ (-)», (L/R SWING) and (U/D SWING) button to choose the function which you want. After, press the «OK» button, turn on this function.

• In function selection mode, press « ∧ (+)», « ∨ (-)», (L/R SWING) and (U/D SWING), the character in LCD will be flashing when the function be selected.

ECO function

• When the unit is on and in the cool mode, press the «MENU» button, then press« ∧ (+)», « ∨ (-)», (L/R SWING) and (U/D SWING) to choose the «ECO» character, and the «ECO» character will blink. Then press the «OK» button will activate (deactivate) the ECO function.

• The ECO function is not available on the fixed frequency air conditioner.

• Changing modes or turning off the air conditioner will cancel the ECO function automatically.

Note: The electricity consumption is affected by the ambient temperature and the house structure etc., and when the ambient temperature is high or the house has a large area, be cautious to use the ECO function.

SLEEP function

• When the unit is on, press the “MENU” button, then press « ∧ (+)», « ∨ (-)», (L/R SWING) and (U/D SWING) to choose the «SLEEP» character, and the «SLEEP» character will blink. Then press the «OK» button to activate (deactivate) the sleep function.

• The unit will exit function after 10 hours of continuous operation and restore to the previous status.

DISPLAY function

Press the «MENU» button, then press « ∧(+)», « ∨(-)», (L/R SWING) and (U/D SWING) to choose the «DISPLAY» character, and the «DISPLAY» character will blink. Then press the «OK» button to activate (deactivate) the function of screen display.

ICLEAN function

The unit will clean automatically the dust on the evaporator and dry or blow-dry the moisture.

• When the air-conditioner is off, press the «MENU» button, then press « ∧(+)», « ∨(-)», (L/R SWING) and (U/D SWING) to choose the «ICLEAN» character, and the «ICLEAN» character will blink.
Then press the “OK” button to activate (deactivate) the function of cleaning.

• The cleaning function will close automatically after 30 minutes.

• During the cleaning function, if the «ON/OFF» button is pressed, the unit will be turned on immediately.

HEALTH function

When the unit is on or the unit is off but the timer is on, press the «MENU» button, then press « ∧(+)», « ∨(-)», (L/R SWING) and (U/D SWING) to choose «HEALTH» character, and the «HEALTH» character will blink. Then press the «OK» button to activate (deactivate) the health function.

Note: The HEALTH function will be cancelled automatically after the air conditioner is turned off.

ELE.H function

When the unit is on and in the HEAT mode, press the «MENU» button, then press « ∧ (+)», « ∨ (-)», (L/R SWING) and (U/D SWING) to choose the «ELE.H» character, and the «ELE.H» character will blink. Then press the «OK» button to activate (deactivate) the function of auxiliary heating.

The unit will activate the auxiliary heating function automatically according to the ambient temperature, so as to accelerate the heating.

ANTI-F function

• The ANTI-F function: continue to operate for about 3 minutes to dry the moisture on the evaporator, so as to prevent the accumulation of bacteria on the evaporator, which causes fungus and strange smell and is harmful to the health.

• When the unit is off, press the “MENU” button, then press « ∧ (+)», « ∨ (-)», (L/R SWING) and (U/D SWING) character will blink. Then press the «OK» button to activate (deactivate) the Anti-F function.

I-FEEL function

• When the unit is on, press the “MENU” button, then press « (+)», « (-)», (L/R SWING) and (U/D SWING) to choose the «I-FEEL» character, and the «I-FEEL» character will blink. Then press the «OK» button to activate (deactivate) the I-FEEL function and the screen displays (disappears) the icon.

• After setting the I-FEEL function, the temperature area displays the touch temperature, which is refreshed every 5 seconds.

• Pressing the «OFF» button will cancel the I-FEEL function and the icon.

°C / °F function

• The default display unit for temperature is based on the actual product.

• Press the «+» and «-» buttons at the same time above 3 seconds, you can set the «°C » or «°F ».

Child-lock function

• Press the «SPEED» and «SOFT» buttons at the same time and hold for at least 3 seconds to activate or deactivate the child-lock function.

• When the child-lock function is activated, the remote control will indicate icon.

8°C heating function

• Only in the heating mode and in the power-on state, press the «MODE» and «+» buttons at the same time above 3 seconds to turn on or off the 8°C heating function.

• After turning on the 8°C heating function:
a. Press the «HEAT» button, or switch to mode, or select the sleep function, all can exit 8°C heating function.
b. Press any of the «SPEED», «+», «-» button is non-effective.
c. Turn off and on the unit again, 8°C heating function is still retained.
d. Press the «MENU» button, ELE.H function is not selectable.

Temperature setting function

• When the unit is off, press the «MODE» and «SOFT» buttons at the same time for more than 10 seconds to enter the maximum and minimum temperature setting function.

• The maximum and minimum temperature range is 16°C(6°F) ~ 32°C (90°F).

• After entering this function, the screen will display the maximum setting value (32°C /90°F) , and the «H» will flash, you can press the «+» or «-» button to adjust the maximum temperature range, then press the «Mode» button confirm. And now the screen is displaying the minimum temperature setting value, then the «L» will flash, you can press the «+» or «-» button to adjust the minimum temperature range, and press «Mode» to confirm, then the setting is complete

• When setting the minimum temperature, pressing the «MODE» and «SOFT» buttons at the same time for more than 10 seconds will switch to the maximum temperature.

• You need to reset it after replacing the battery.

Buzzer silence function

Press the «L/R SWING» and «MODE» buttons at the same time and hold for 3 seconds to activate or deactivate the buzzer silence function.

Power limiting function

• When the unit is on and in the cool or heat mode, press and hold the «Mode» button for 5 seconds to enter the power limiting function. The temperature area will display and flash the «C1» character, if no operation is confirmed automatically after 5 seconds.

• After entering this function, press the «Mode» button only to adjust this function, and the mode cannot be switched. The switch type of the power limitation function is «C1-C2-C3-set temperature (without limiting power)». After each adjustment of the power limitation function, the Cx (Cx is C1/C2/C3) character flashes continuously for 5 seconds and then is confirmed automatically.

• Under the power limit function, the functions of «I-FEEL», «ECO» and «8°C heating» are invalid.
When the set temperature is adjusted, the set temperature is displayed constantly for 5 seconds and then the display of Cx is restored (Cx is C1/C2/C3).

• Turn off the unit and switch the mode to exit the power limiting function.

Wall-wind function **(only for C121E)**

• Press «SOFT» button for 5 seconds to operate the wall-wind function.

• Switching between wall-wind 1 and wall-wind 2 should be within 5 seconds.

• Under the wall-wind function, I-wind, soft, up/down swing, rated swing are invalid.

• Under the I-wind function, Wall-wind and soft functions are deactivated.

I-wind function (only for C121E)

Press «SPEED» button for 5 seconds to operate the I-wind function.
After setting the I-wind function, turn on the Wall-wind or soft function, or set left/right swing wind, up/down swing wind, rated swing wind function or turn off to cancel the I-wind function.

Note:
Wall-wind and I-wind functions are only applicable to
ASW-H09B6A4/FQA800R3DI-D0
ASW-H12C5A4/ FQAR3DI-D0

▪ Usage for Mode

Auto operation mode

• Press the «ON/OFF» button, the air-conditioner starts to operate.

• Press the «MODE» button, select auto operation mode.

• By pressing the «SPEED» button, you can select fan speed from Silence, Low, Mid-Low, Mid, Mid- High, High, Auto.

• Press the «ON/OFF» button again, the air-conditioner stops.

Note: In the auto mode, the temperature setting is non-effective.

Cool/Heat operation mode

• Press the «ON/OFF» button, the air-conditioner starts to operate.

• Press the «MODE» button, select cool or heat operation mode.

• By pressing the « + » or « - » button, you can set temperature from 16°C (60°F) to 32°C (90F), the display will be changed as you press the button.

• By pressing the «SPEED» button, you can select fan speed from Silence, Low, Mid-Low, Mid, Mid- High, High, Turbo, Auto.

• Press the «ON/OFF» button again, the air-conditioner stops.

Note: The cold wind type has no heating function.

Dry operation mode

• Press the «ON/OFF» button, the air conditioner starts to operate.

• Press the «MODE» button, select auto operation mode.

• By pressing the « + » or « - » button, you can set temperature from 16°C (60°F) and the display changes as you press the button.

• Press the «ON/OFF» button again, the air-conditioner stops.

Note: In the dry mode, the speed setting is non-effective.

Fan operation mode

• Press the «ON/OFF» button, the air conditioner starts to operate.

• Press the «MODE» button, select fan operation mode.

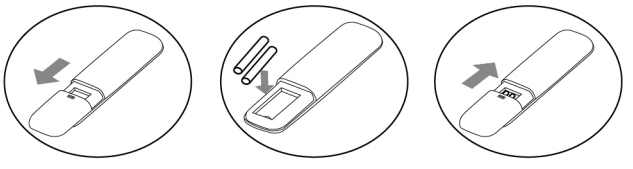
• By pressing the «SPEED» button, you can select fan speed from Low, Mid, High.

• Press the «ON/OFF» button again, the air conditioner stops.

Note: In the fan mode, the temperature settings is non-effective.

▪ Usage

Fix batteries



• Slide to open the battery cover according to the direction indicated by the arrowhead.

• Insert two brand new batteries (7#), and position the batteries to the right electric poles (+ &-).

• Put back the battery cover.

▪ INTRODUCTION TO WI-FI FUNCTIONS

This AC system is equipped with Wi-Fi® technology that allows a user to control the system remotely. In order to use this feature, the system must be connected to the internet through a local router and modem.

The correct APP must also be downloaded and installed on a mobile device.

Download and install the control software

The control software can be downloaded and installed as follows.

• For mobile devices such as smart phones and tablets, search and download «SmartLife» from Google Play or App store and install it.

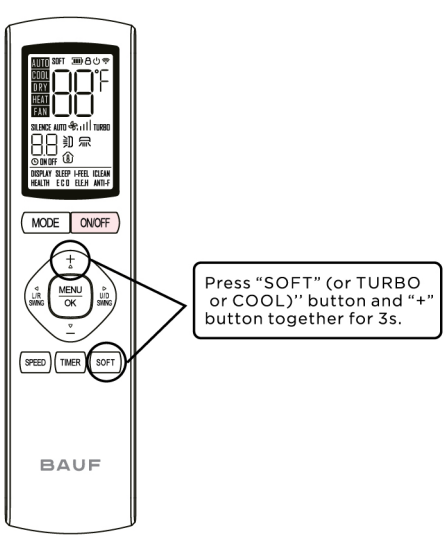
• You can also scan the «QR code» below, which will automatically direct you to the download interface for installing the software.

• Follow the instructions on the App step by step.

Reset AC WI-FI module

The Wi-Fi® must be setup if the system has never been configured. If the local router/modem are replaced then the Wi-Fi® must be reset and then reconfigured.

When the AC is running, press the «COOL» (or SOFT or TURBO) button and «+» button together for 3s. The reset is successful after 8 beep sounds, then a 2 second pause followed by 2 more beeps.



Note: If the device is still not connected successfully, please attempt another reset of the air conditioner Wi-Fi® as described above.

WI-FI Operation

After the WIFI connection is successful, please scan the QR code above in SmartLife APP for operation.

Appendix A

• Please check the Wi-Fi icon on the air conditioner panel, if the icon is not displayed, please contact customer service.

• Please make sure the mobile is connected to the local WI-FI. It maybe necessary to put the phone in airplane mode but then turn on only the Wi-Fi .

• Please check whether the module was reset successfully. For details, see Reset AC WI-FI module.

• Please check the Wi-Fi name of the router, it is recommended to avoid using spaces and other non alphanumeric characters in the name.

* Please check the Wi-Fi password, the password cannot contain more than 32 characters, it is also recommended not to use spaces or special symbols.

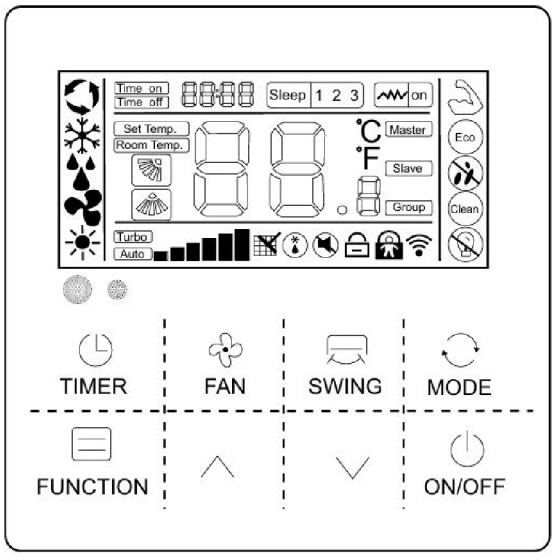
* Please check whether the Wi-Fi password is inputted correctly in the APP during configuration. You can check «Show password» to confirm the WI-FI.

5. WIRE CONTROLLER INSTRUCTIONS

• Installation should be done by professional personnel.

• For the purpose of easy operation, please read this manual carefully and follow its instructions.

• Please keep the manual carefully for reference.



Notice for use

To ensure correct use, please read and follow these notes carefully.

Warning

There is a great possibility of serious accidents such as death, serious injury, fire or property damage caused by ignoring the contents of the warning.

Note

There is a great possibility that the optimum operation result cannot be obtained due to ignoring the contents of the precautions.

• Please entrust a local dealer or local service network station to arrange professional personnel who have an air conditioner installation certificate to carry out the installation, users are strictly prohibited to carry out the installation.

• Before cleaning or maintenance, please cut off the power switch; waterwashing is prohibited, as it has the risk of electric shock.

• Wet hand operation is prohibited, as it has the risk of electric shock.

• Pesticides, disinfectants, and flammable spray materials are prohibited for direct spraying; otherwise, it may cause a fire or the deformation of devices.

• Do not peel off the display panel by hand, which has the risk of electric shock ∧ ∨ button for locking.

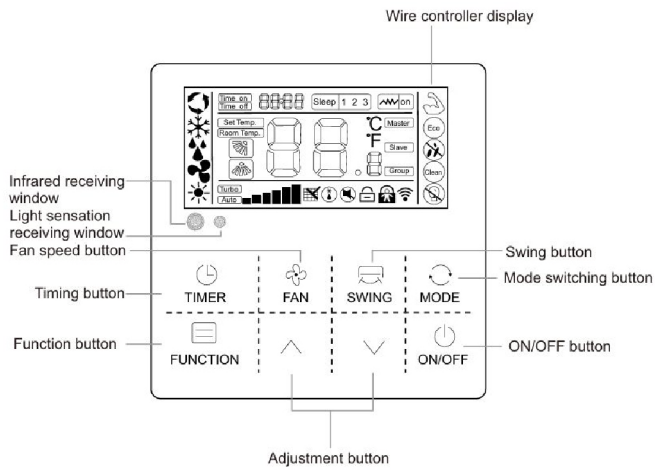
• The wire controller is low-voltage circuit, it is prohibited to directly contact with a high-voltage line or be placed together with a high-voltage line in the same wiring pipe, and interval shall be 500mm at least or more.

Technical indicators

• Power voltage range: DC 12V
• Working ambient humidity: 0^0C~50^0C
• Humidity: RH20%~RH90%
• Button: Touch button
• Dimensions(W*H*D): 120*120*20mm

Main functions

• 8-keytouch button input
• LCD+ white backlight
• Buzzer prompt tone function
• Display the failure of main controller
• Ambient temperature detection sensor
• Receive the signal of wireless remote controller



Note: The product adopts touch buttons. To ensure the validity of operation, please touch the center of each icon.

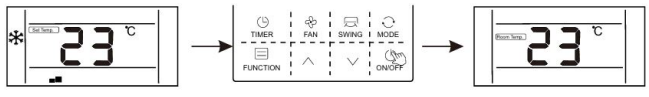
Detailed operation instructions

ON/OFF button

Pres «ON / OFF» button to start or shutdown the unit.

1. When the unit is running, users can regulate the operation mode, fan speed, setting temperature, special functions and other parameters on the wired controller.

2. When the unit is standby, the wire controller displays indoor ambient temperature (Room temp.), the other contents are not displayed.



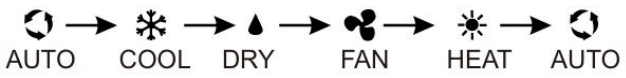
Temperature, timer setting, function selection.

When the unit is running, press ∧ or ∨ button to increase or decrease the setting temperature by 1ºC.

• Under COOL, DRY, and HEAT modes, the setting temperature range is 16ºC ~ 32ºC. The controller will display Set temp. to show the setting temperature
• Under the function selection mode, press ∧ or ∨ button to select a function
• Under the timer mode, press ∧ or ∨ button to set the time.

Mode setting

When the unit is running, press «MODE» button, the running mode will switch according to the following order:



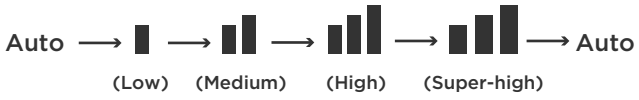
The initial setting temperature for each mode is 24°C, and there is no temperature setting and automatic wind under FAN mode.

The setting of «Wind speed»

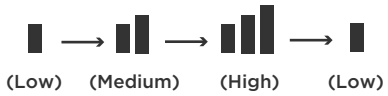
When the unit is running, press «Fan» button to switch fan speed in the following order:

3-gear of fan speed (auto and dry mode)

3-gear of fan speed (cool and heat mode)

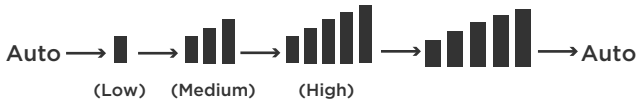


3-gear of fan speed (fan mode)

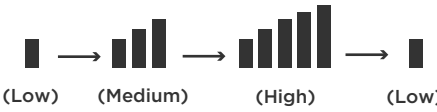


5-gear of fan speed (auto and dry mode)

5-gear of fan speed (cool and heat mode)



5-gear of fan speed (fan mode)



In turbo mode, display fan speed (turbo + highest fan speed icon).

The setting of «Swing»

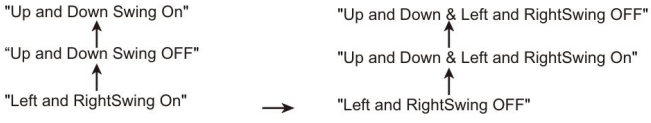
1. For the unit only has the function of up and down swing:
   When the unit is running, press «Swing» button to enter or cancel up and down swing. At the time of opening up and down swing, is lighting. At the time of closed, swing icon will disappear. If the unit has positioning swing function, press «Swing» button to regulate the swing angle in the order:

cancel up and down swing

2. For the unit only has the function of left and right swing:
   When the unit is running, press «Swing» button to enter or cancel left and right swing. At the time of opening left and right swing, is lighting. At the time of closed, swing icon will disappear. If the unit has positioning swing function, press «Swing» button to regulate the swing angle in the order:

cancel up and down swing

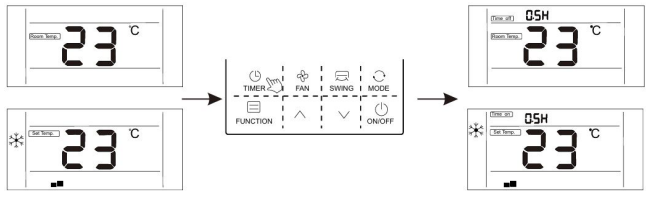
3. For the unit that has the functions of left and right swing and up and down swing:
   Press «Swing» button, the swing mode will switch in the following cycle order:



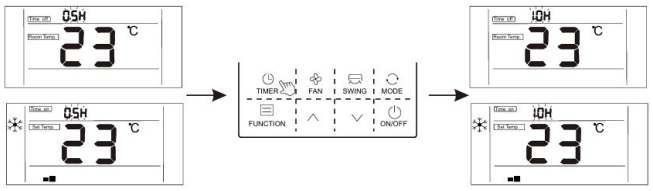
«Timer» function

Users can set shutdown time when the unit is running, and set starting-up time when the unit is in standby.

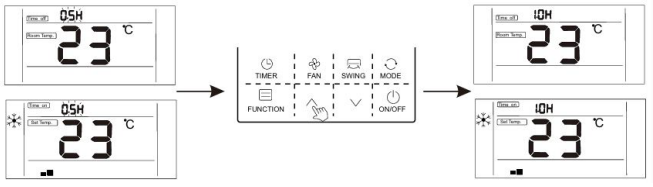
1. Press Timer button when the unit is running, the wired controller will display «Time off» and users can set the shutdown time; when the unit is in standby, the wired controller will display «Time on», and users can set the starting-up time.



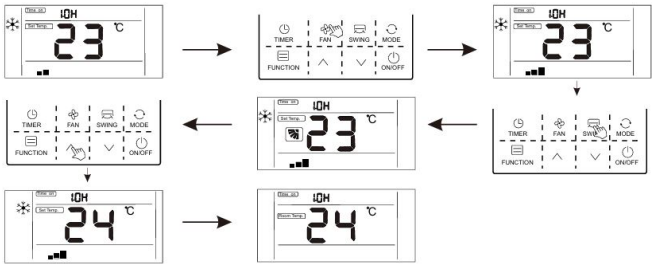
2. After entering timer setting interface, the default timer time is 0.5H, at this moment, press ∧ or ∨ button to regulate the timer time. If the button is not pressed for 10 seconds, the timer setting will be canceled, and then return to the state of non-timing.



3. After timer setting, press «Timer» button again to confirm. The time setting is successful and the time bar will stop blinking.



4. After the setting «Timer On» function, you can adjust the fan speed, running mode, set temperature, and swing angle. If there is no operation for 10 seconds, standby screen will be displayed.



5. Timing range: 0.5~24 hours. Press ∧ or ∨ button once, the timing time will increase or decrease by 0.5 hours. When the timing time is more than 10 hours, press ∧ or ∨ button once, the timer time will increase or decrease by 1 hour.

5. Press «Timer» button or «ON / OFF» button to exit TimerON or TimerOFF.

▪ Function description

The wire controller is for the general-purpose, specific functions fo the controller are subject to the functions of your air conditioning unit.

Note: In the interface of function setting, press any button such as Timer, Fan, Swing, Mode, ON/OFF, and Comfort to exit the interface and conventional operation interface will display. If there is no operation for 10S, you can exit the interface.

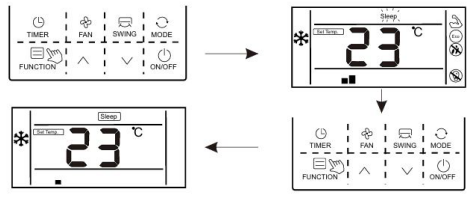
Enter function: Press function button to enter function selection interface, press ∧ or ∨ to select a function, and the corresponding icon will flash, press «function» button again to confirm the function. Cancel function: Press function button to enter function selection interface, press ∧ or ∨ to select a function and the corresponding icon will flash, press «function» button again to cancel the function.

The setting of «Sleep» function

Sleep function: Make indoor unit will run according to pre-set sleep temperature curve, which creates a comfortable sleep environment and improves sleep quality.

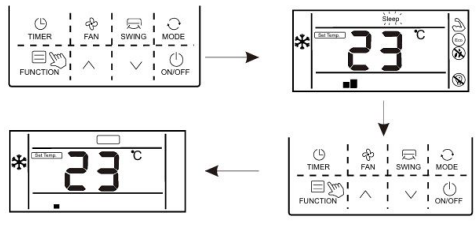
Enter «Sleep» function:

- In the state of running, press «Function» button to enter the interface of function selection.
- Press ∧ or ∨ button to switch to sleep function, «Sleep» icon is flashing at this moment.
- Press Function button to open sleep function, at this moment, icon «Sleep» is lighting.



Cancel «Sleep» function:

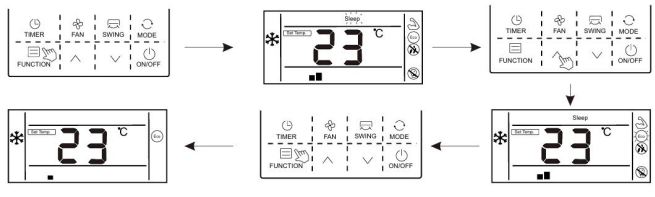
- When sleep function is opened, press «Function» button to enter the interface of function selection.
- Press ∧ or ∨ button to switch to sleep function, «Sleep» icon is flashing.
- Press «Function» button again to cancel sleep function.



The setting of «ECO» function

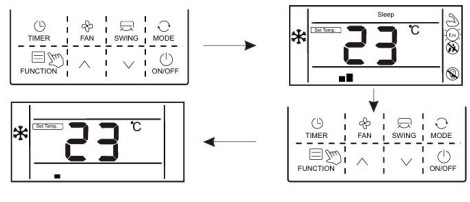
Enter ECO function:

- Press «Function» button to enter the interface of function selection.
- Press ∧ or ∨ button to switch to ECO function, at this moment, «ECO» icon is flashing.
- Press «Function» button again to confirm ECO function, at this moment, icon «ECO» is lighting.



Cancel ECO function:

- Press «Function» button to enter the interface of function selection.
- Press ∧ or ∨ button to switch to ECO function, at this moment «ECO» icon is flashing.
- Press «Function» button again to cancel ECO function.



The setting of «Mildew-proof» function

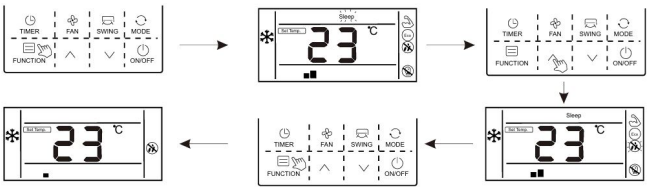
Mildew-proof function: After shutdown, the air conditioner would automatically dry the moisture in the evaporator of indoor unit, so as to avoid mildew buildup.

Enter mildew-proof function:

• Under COOL and DRY mode, press «Function» button to enter the interface of function selection.

• Press ∧ or ∨ button to switch to the mildew-proof function setting interface, at this moment, icon is flashing.

• Press «Function» button again to enter mildew-proof function, icon is lighting.

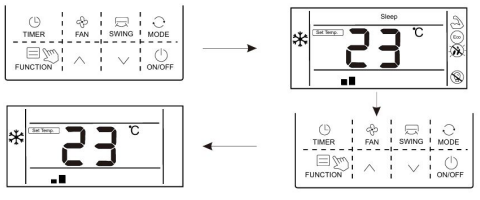


Cancel mildew-proof function:

• When mildew-proof function is ON, press «Function» button to enter the interface of function selection.

• Press ∧ or ∨ button to mildew-proof function, icon is flashing.

• Press «Function» button again to cancel mildew-proof function, icon will disappear.



The setting of «Light Sensation» function

Light sensation function: Detect the On and Off of indoor lamplight and switch to low fan speed when the lamplight is off, which can reduce the noise and create a comfortable sleep environment for users.

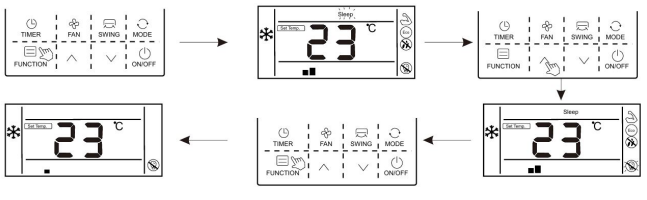
Enter light sensation function:

• In the state of running, press «Function» button to enter the interface of function selection.

• Press ∧ or ∨ to switch to light sensation function, icon is flashing.

• Press Function button again to enter light sensation function, at this moment, icon is lighting.

• When light sensation function is on, if the indoor lamplight is OFF and lasts for 20 minutes, the unit will automatically enter sleep mode. If the indoor lamplight is ON, and lasts for 20 minutes, the unit will cancel sleep mode and run according to the setting fan speed.

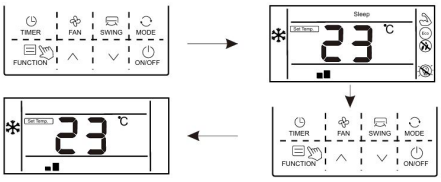


Cancel light sensation:

When light sensation function is on, press «Function» button to enter the interface of function selection.

Press ∧ or ∨ button to switch to light sensation function, icon is flashing.

Press Function button again to cancel light sensation function, icon will disappear.



The setting of «Clean» function

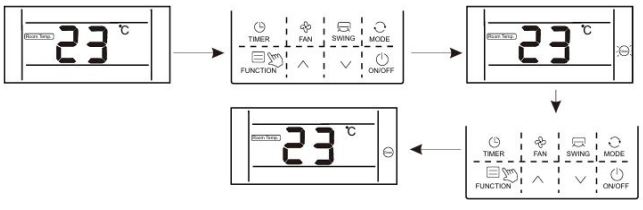
Clean function: The air conditioner can clean the evaporator automatically, which can not only keep air fresh, but also reduce the recession of cooling effect.

Enter clean function:

• In the state of standby, press «Function» button to enter the interface of function selection, icon «Clean» is flashing.

• Press «Function» button again to confirm clean function, at this moment, icon «Clean» is lighting.

• When the unit is performing clean function, the wire controller will keep displaying icon «Clean», until it is finished.



▪ Display prompt function

If the unit is equipped with a WI-FI function module, the icon is lighting on wire controller.

If the unit is not equipped with a WI-FI function module, the icon does not display.

«Shielding» function display

When unit is locked by centralized control, the wired controller will display

«Mute» function display

When the unit is in silent function, icon is displayed, when silent function is cancelled, the icon does not display.

Note: The unit without silent function can also set silent through wired controller, it shows in the way of low wind grade, but does not display.

«Oil Return / Defrost» function display

When the unit is running in the state of Oil Return or Defrost, icon is lighting on wire controller.

When the unit has finished Oil Return or Defrost process, icon does not display.

«Filter Screen Clean» function display

«Filter Screen Clean» function display Filter screen cleaning reminder function: The unit can record its running time, when reaching the time set by the user, it will remind the user to clean the filter screen, so as to avoid prolonged cleaning and filter screen blockage, which can result in poor heating/cooling effect, abnormal protection, bacterial breeding, and other problems. When the running time reaches the filter screen cleaning reminder time set by a user, the unit will give out a reminder of filter screen cleaning, wired controller displays icon, reminding the user to clean filter screen. At this moment, long press «Timer» button for 5S to cancel the reminder, then the icon does not display. A filter screen cleaning reset signal is sent to the unit.

Celsius and Fahrenheit switching display

When users set Celsius to be valid, the wired controller will display Celsius temperature. When users set Fahrenheit to be valid, the wired controller will display corresponding Fahrenheit temperature synchronously.

«Child Lock» function display

Press both ∧ and ∨ buttons for more than 5S to enter locking, the controller will display. In the state of locking, operations on the wired controller are disabled (but remote control receiving is valid). The method of unlocking: Press both ∧ and ∨ buttons for more than 5S or power off the unit to release the locking (does not display)

Remote control function

The wired controller can receive remote control commands and update the current status. Start-up the unit with remote controller, wired controller work in accordance with the state set on the remote controller and displays corresponding working mode.

Room temperature sensorequipped on the wired controller

When the wire controller is equipped with a room temperature sensor and the sensor is not damaged, it is default that the ambient temperature detected by the sensoron the controller and the temperature value will be sent to the main PCB of the unit.
If the wire controller is not equipped with a room temperature sensor or the sensor is damaged, the room temperature will be detected by the temperature sensor of the unit itself.

Fault display

When the unit has fault, the time bar will directly display the fault code and flash, the display mode is Er: MM (MM is the fault code, please read the corresponding product manual).

▪ Installation of accessories

Please confirm whether the parts are complete.

No.	Name	Quanity
1	Wire controller	1
2	Operation and installation instructions	1

The following tools shall be prepared on site.

No.	Name	Quanity	Remark
1	Electrical box 86 *86	1	General electric box, embedded in wall.
2	Electrical tape	1	To be used at the time of wiring.
3	Big cross screwdriver	1	For the installation of electrical box.
4	Small flathead screwdriver	1	For dismantling the back cover of wire controller.

▪ Installation schematic

1. Cut off the power of indoor unit.

2. As shown in Fig.1, use a flathead screw driver to pry the bottom groove of the wire controller lightly (too much force would damage circuit board), pry rotationally to open the back cover.

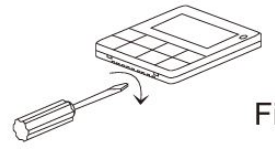


Fig.1

3. As shown in Fig.2, fix 4 * 20mm screws provided together with the back cover on 8 6 box, then pass lead wires through the back cover.

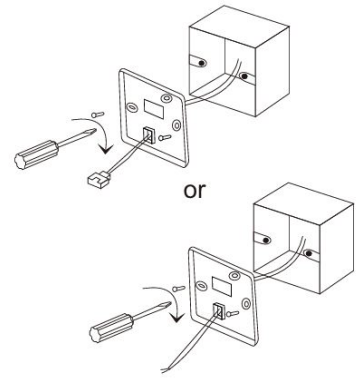


Fig.2

4. After connecting the connecting wire to the main body of the wire controller, as shown in Fig. 3, install main body part according to the following steps:
1) Push the upper part of main body into the clip.
2) Use the force of inclined top to install the lower part of main body (horizontal installation is prohibited, which is easy to damage the structural slot).

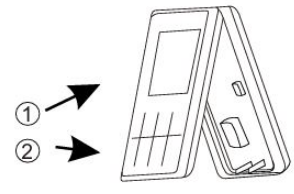


Fig.3

6. NOTICES

To prevent injury and property damage, please pay attention to the following before operating the air conditioner.

CHECKING BEFORE OPERATION

• Make sure that the earth wire is connected safely and reliably.

• Make sure the filter net is properly fixed.

• Make sure that air outlet and inlet are not blocked.

• Please clean the filter before starting the air-conditioner referring to page to 6 "Cleaning" for how to operate.

• Check to see whether the outdoor install bracket is damage. If yes, please contact our Service center locally.

SAFETY TIPS

In order to use the air conditioner properly, please refer to its working temperature range. Otherwise, indoor unit automatic protection function may be activated, cooling or heating efficiency will be weakened.

The air-conditioner may not run in normal followed under mentioned table:

Cooling	Outdoor	>52°C >-10°C
	Indoor	<18°C
Heating	Outdoor	>24°C <-15°C
	Indoor	>30°C

NOTICES FOR R32 MODELS

This product contains fluorinated greenhouse gases.

Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to [675]. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be [675] times higher than 1 kg of CO2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.

7. CARE AND MAINTENANCE

CLEANING

Cleaning the indoor unit

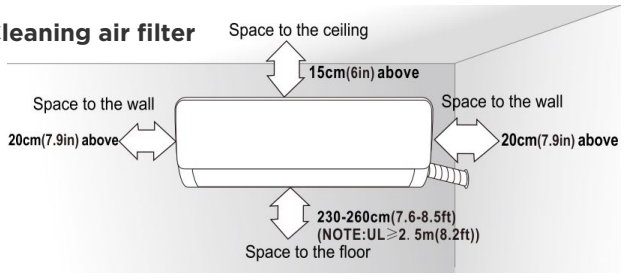
• Turn off the air-conditioner and remove the electrical plug from the outlet.

• Wipe the indoor unit with dry cloth or wet cloth which is dipped in cold water.

Note:

• Don't use water above 45°C to wash the panel, or it could cause deformation or depigmentation.
• Don't use thinner, polishing powder, benzene and other volatile chemicals.
• Don't use liquid or corrosive detergent to clean the appliance and don't splash water or other liquid onto it, otherwise it may damage the plastic components, and even cause an electric shock.

Cleaning air filter



• Raise up the front panel of indoor unit until it suddenly stops, then raise up the protruded part of air filter, and then take it out.

• Use a vacuum cleaner or wash them with water, then dry it in the shade.

• Reinsert the air filter into the indoor unit until being entirely fixed, then close the front panel.

MAINTENANCE

1. Select "FAN" operation mode, make the air conditioner run for a long time to dry.

2. Turn off the air conditioner and cut off the power supply.

3. Take out the batteries from the remote controller.

4. Clean air filters and other parts.

8. TROUBLESHOOTING

Check the following before requesting on service centre of BAUF if the malfunction occurs.

Phenomenon	Troubleshooting
The air conditioner does not operate at all	• Has the power been shut down? • Is the wiring loose? • Is the voltage higher than 1.1 times of max rated voltage or lower than 0.9 times of min rated voltage?

	• Is the fuse burnt? • Does it reach the set time for start up?
Remote controller is not available	• Is the remote controller out of effective distance to the indoor unit? • Is the battery exhausted? • Are there any obstructions between the controller and the signal receptor?
Cooling (Heating) efficiency is not good	• Is the setting temperature suitable? • Is the air inlet or outlet obstructed? • Are air filters dirty? • Is indoor fan speed set at low speed? • Is there any heat source in your room?
Indoor unit does not operate immediately when the air conditioner is restarted	Once the air conditioner is stopped, it will not operate for approximately 3 minutes to protect itself.
There is unusual smell blowing from the outlet after operation is started.	This is caused by the odour in the room permeated from building material, furniture, or smoke.
Sound of water flow can be heard during cooling operation	This is caused by the refrigerant flowing inside the unit.
Mist is emitted during cooling operation	Because the air of the room is cooled down rapidly by the cold wind and it looks like the fog.
Mist is emitted during heating operation	This generate due to moisture in defrosting process.
Alow hissing sound is caused by the refrigerant flowing	• Low noise can be heard during operation • Alow squeak sound is caused by the deformation of plastic due to temperature

Mode interfere

For the reason that all indoor units use one outdoor unit, outdoor unit can only run with same mode (cooling or heating), so when the mode you set is different from the mode, that outdoor is running with, mode interference occurs. Following shows the mode interfere scene.

	Cooling	Dry	Heating	Fan
Cooling	√	√	×	√
Dry	√	√	×	√
Heating	×	×	√	√
Fan	√	√	√	√

√ normal

× mode interfere

Outdoor unit always runs with the mode of first indoor unit that turned on. When the setting mode of following indoor unit is interfering with it, 3 beeps would be heard, and the indoor unit interfered with the normal running units would turn off automatically.

FAULT CODE

When the air conditioner fails, the LED light or digital tube on indoor display board will show the corresponding fault code according to different fault.

Note:
For the unit with digital tube, it will show the corresponding fault codes; for the unit with no digital tube only LED light, it will only show the corresponding fault codes with timer light.

Specific correspondis as follows:

Fault code	Fault description	Causes of possible failure
E1	Fault with the room temperature sensor on the N # indoor unit	• Damage of the room temperature sensor on the indoor unit • Poor contact of the room temperature sensor on the indoor unit • Damage of wiring of the room temperature sensor on the indoor unit • Damage of the main PCB on the indoor unit
E2	Fault with the Defrosting/ Condenser Temperature Sensor in Outdoor	• Damage of the temperature sensor on the outdoor unit • Poor contact of the temperature sensor on the outdoor unit • Damage of wiring of the temperature sensor on the outdoor unit • Damage of the main PCB on the outdoor unit
E3	Fault with the temperature Sensor in the Middle of N# indoor evaporator	• Damage of the temperature sensor on the indoor unit • Poor contact of the temperature sensor on the indoor unit • Damage of wiring of the temperature sensor on the indoor unit • Damage of the main PCB on the indoor unit
E4	Fault with the Fan motor of N # indoor unit	• Low voltage • Poor wiring • Damage of the main PCB on the indoor unit • Damage of the motor
E5	Communication error between the outdoor unit and the N # indoor unit	• Damage of the main PCB on the indoor unit • Damage of the main PCB on the outdoor unit • Poor wiring

E8	Communication error between the display board and main PCB of the indoor unit	• Damage of the main PCB on the indoor unit • Damage of the display board on the indoor unit • Poor wiring
F1	Module protection failure	• Compressor damage • Compressor IPM Module damage • System blockage
F0	Fault with the Fan motor of outdoor unit	• Damage of motor
F2	Compressor drive PFC protection	• Damage of the PFC circuit components • Reactor damage
F3	Compressor protection failure	• Compressor power line not connected • Compressor sequence connection error • Damage of compressor • System blockage
F4	Fault with the discharge temperature sensor	• Damage of the discharge temperature sensor on the outdoor unit • Poor contact of the discharge temperature sensor on the outdoor unit • Damage of wiring of the discharge temperature sensor on the outdoor unit • Damage of the main PCB on the outdoor unit
F5	Temperature protection of compressor top cover	• Damage of compressor top cover switch • System blockage
F6	Fault with the Enviromental temperature sensor on the outdoor unit	• Damage of the Enviromental temperature sensor on the outdoor unit • Poor contact of the Enviromental temperature sensor on the outdoor unit • Damage of wiring of the Enviromental temperature sensor on the outdoor unit • Damage of the main PCB on the outdoor unit
F7	Fault with the over-voltage or low voltage protection	• Excessive input voltage • Lower input voltage
F8	Communication error between the driver PCB and main PCB of the outdoor unit	• Damage of the driver PCB on the outdoor unit • Damage of the main PCB on the outdoor unit • Poor wiring
F9	Fault with the outdoor unit EEPROM	• Chip damage
FA	Fault with the suction temperature sensor	• Damage of the suction temperature sensor on the outdoor unit • Poor contact of the suction temperature sensor on the outdoor unit • Damage of wiring of the suction temperature sensor on the outdoor unit • Damage of the main PCB on the outdoor unit
H1	Fault with the drainage on N# Indoor unit	• Float switch disconnected or poor wiring • Error setting of model paramerers • Drain plug • Damage of the pump

H2	Communication error between the wired controler and main PCB of the N# indoor unit	• Poor wiring • Damage of the wired controler • Damage of the main PCB on the indoor unit
H3	Fault of temperature sensor at N # evaporator inlet	• Damage of temperature sensor at N # evaporator inlet • Poor contact of temperature sensor at N# evaporator inlet • Damage of wiring of temperature sensor at N# evaporator inlet • Damage of the main PCB on the outdoor unit
H4	Fault of temperature sensor at N# evaporator outlet	• Damage of temperature sensor at N# evaporator outlet • Poor contact of temperature sensor at Ni#t evaporator outlet • Damage of wiring of temperature sensor at N# evaporator outlet • Damage of the main PCB on the outdoor unit
H5	Protection lower temperature discharge	• Temperature sensor shedding • Damage of the main PCB on the outdoor unit
H6	Low pressure switch protection	• Lack of the refrigerant • Stop valve unopened • Damage of low pressure switch
H7	Low pressure protection	• Lack of the refrigerant • Heat exchanger viscera
H8	Fault of four way valve	• Damage of four-way valve • Damage to coil of four-way valve
H9	Inter-computer communication line connection fault	/
L0	Overvoltage and undervoltage protection of indoor DC motor	• Excessive input voltage • Lower input voltage
L1	Overcurrent protection of compressor	• Damage of compressor • System viscera
L2	Compressor operation failure	• Damage of compressor • System viscera
L3	Phase-absence protection of compressor	• Damage of compressor • Compressor power line not connected
L4	IPM Fault of compressor Drive module	• Compressor drive module damage
L5	Compressor drive PFC hardware protection	• Damage of the PFC circuit components • Reactor damage
L6	Compressor drive PFC software protection	• Excessive running current of the unit • Voltage drops abruptly in operation
L7	AD Abnormal protection for compressor current detection	Sensor damage of compressor IPM module
L8	Compressor superpower protection	• Sampling resistance damage • Excessive operating power of compressor

L9	IPM Temperature sensor fault	• Compressor IPM Module sensor damage • Poor contact between compressor IPM module andradiator
LA	Compressor start failure	• Compressor power line not connected
LC	PFC Current Detection AD Abnormal Protection	• Failure of PFC Module Circuit Device
LD	AD Abnormal Protection for Outdoor DC Fan Current Detection	• Failure of DC Fan Module Circuit Device
LE	Phase-lacking protection of outdoor DC fans	• DC fan line not connected • Three wires of DC fan are disconnected
LF	Outdoor DC Fan Out-of-step Protection	• DC motor failure • High Speed of DC Fan • Suetam ditty biGeing
LH	IPM Protection of Outdoor DC Fan	• The IPM Device of DC Motor is Bad
P8	AC Over-current Protection of the Whole Machine	• Excessive running current of the unit • Voltage drops abruptly during operation
P5	Protection high temperature discharge	• Lack of the refrigerant • Stop valve unopened • Damage of the main PCB on the outdoor unit
P4	High Temperature Protection for Refrigeration Outdoor	• Poor outdoor heat transfer
P6	High Temperature Protection in Heating Room	• Poor indoor heat transfer
P7	Indoor anti-freezing protection	• Dirty Blockage of Heat Exchanger in Refrigeration Indoor Unit • Blockage of Internal Fan
P2	High Pressure Switch Protection	• System dirty blocking • Damage of High Pressure Switch
P3	Protection of System Lack of Fluid	• Lack of refrigerant • Globe Valve Not Opened
5E	Communication error between the outdoor unit and the indoor unit	• Damage of the main PCB on the indoor unit • Damage of the main PCB on the outdoor unit • Poor wiring

Compact Cassette/Ceiling&Floor/Slim Duct/Console

A1	Fault with the room temperature sensor on the N# indoor unit	• Damage of the room temperature sensor on the indoor unit • Poor contact of the room temperature sensor on the indoor unit • Damage of wiring of the room temperature sensor on the indoor unit • Damage of the main PCB on the indoor unit
A2	Fault with the temperature Sensor in the Middle of N# indoor evaporator	• Damage of the room temperature sensor on the indoor unit • Poor contact of the temperature sensor on the indoor unit • Damage of wiring of the temperature sensor on the indoor unit • Damage of the main PCB on the indoor unit
A3	Fault of temperature sensor at N# evaporator inlet	• Damage of temperature sensor at N# evaporator inlet • Poor contact of temperature sensor at N # evaporator inlet • Damage of wiring of temperature sensor at N# evaporator inlet • Damage of the main PCB on the outdoor unit
A4	Fault of temperature sensor at N# evaporator outlet	• Damage of temperature sensor at N# evaporator outlet • Poor contact of temperature sensor at N# evaporator outlet • Damage of wiring of temperature sensor at N# evaporator outlet • Damage of the main PCB on the outdoor unit
A5	Fault with the drainage on N# Indoor unit	• Float switch disconnected or poor wiring • Error setting of model paramerers • Drain plug • Damage of the pump
A6	Fault with the Fan motor of N# indoor unit	• Low voltage • Poor wiring • Damage of the main PCB on the indoor unit • Damage of the motor
A9	Communication error between the outdoor unit and the N# indoor unit	• Damage of the main PCB on the indoor unit • Damage of the main PCB on the outdoor unit • Poor wiring
AA	Communication error between the wired controler and main PCB of the indoor unit	• Damage of the main PCB on the indoor unit • Damage of the display board on the indoor unit • Poor wiring
H1	High Pressure Switch Protection	• System dirty blocking • Damage of High Pressure Switch
H4	Low pressure switch protection	• Lack of the refrigerant • Stop valve unopened • Damage of low pressure switch
C1	Fault with the Enviromental temperature sensor on the outdoor unit	• Damage of the Enviromental temperature sensor on the outdoor unit • Poor contact of the Enviromental temperature sensor on the outdoor unit • Damage of wiring of the Enviromental temperature sensor on the outdoor unit • Damage of the main PCB on the outdoor unit
C2	Fault with the defrosting temperature sensor on the outdoor unit	• Damage of the defrosting temperature sensor on the outdoor unit • Poor contact of the defrosting temperature sensor on the outdoor unit • Damage of wiring of the defrosting temperature sensor on the outdoor unit • Damage of the main PCB on the outdoor unit

C3	Fault with the discharge temperature sensor	• Damage of the discharge temperature sensor on the outdoor unit • Poor contact of the discharge temperature sensor on the outdoor unit • Damage of wiring of the discharge temperature sensor on the outdoor unit • Damage of the main PCB on the outdoor unit
C6	Fault with the suction temperature sensor	• Damage of the suction temperature sensor on the outdoor unit • Poor contact of the suction temperature sensor on the outdoor unit • Damage of wiring of the suction temperature sensor on the outdoor unit • Damage of the main PCB on the outdoor unit
C8	Fault with the temperature Sensor in the Middle of outdoor condenser	• Damage of the temperature sensor on the outdoor unit • Poor contact of the temperature sensor on the outdoor unit • Damage of wiring of the temperature sensor on the outdoor unit • Damage of the main PCB on the outdoor unit
J3	Communication error between the driver PCB and main PCB of the outdoor unit	• Damage of the driver PCB on the outdoor unit • Damage of the main PCB on the outdoor unit • Poor wiring
J7	Fault with the outdoor unit EEPROM	• Chip damage
E1	Fault of four way valve	• Damage of four-way valve • Damage to coil of four-way valve
E3	Protection high temperature discharge	• Lack of the refrigerant • Stop valve unopened • Damage of the main PCB on the outdoor unit
E8	High Temperature Protection for Refrigeration Outdoor	• Poor outdoor heat transfer
F6	Low pressure protection	• Lack of the refrigerant • Heat exchanger viscera
FH	Protection lower temperature discharge	• Temperature sensor shedding • Damage of the main PCB on the outdoor unit
31	Module protection failure	• Compressor damage • Compressor IPM Module damage • System blockage
32	Fault with the outdoor unit EEPROM	• Chip damage
34	Compressor protection failure	• Compressor power line not connected • Compressor sequence connection error • Damage of compressor • System blockage
35	AC Over-current Protection of the Whole Machine	• Excessive running current of the unit • Voltage drops abruptly during operation
36	Fault with the over-voltage or low voltage protection	• Excessive input voltage • Lower input voltage
39	IPM Temperature sensor fault	• Compressor IPM Module sensor damage • Poor contact between compressor IPM module andradiator
3H	Fault with the Fan motor of outdoor unit	• Damage of motor
3C	Outdoor DC Fan Out-of-step Protection	• DC motor failure • High Speed of DC Fan • System dirty blocking
3J	AD Abnormal Protection for Outdoor DC Fan Current Detection	• Failure of DC Fan Module Circuit Device
3E	Compressor drive PFC software protection	• Damage of the PFC circuit components • Reactor damage
3F	Compressor drive PFC hardware protection	• Damage of the PFC circuit components • Reactor damage
41	IPM Protection of Outdoor DC Fan	• The IPM Device of DC Motor is Bad
AD	Indoor anti-freezing protection	• Dirty Blockage of Heat Exchanger in Refrigeration Indoor Unit Blockage of Internal Fan

9. INSTALLATION GUIDE

▪ Guide for customer

1. Please read the instructions carefully before installation of the air-conditioner.
2. The installation should be carried out by specialists.
3. Installation the air-conditioner and connecting the pipe and wires must be strict to reference the instructions.
4. The wiring must be done by qualified electrician according to the electrical safety requirements.
5. The customer should have a qualified power supply which coincides with the tag of air conditioner, the normal voltage should be in the range of 90-110% of its rated voltage.
6. The air conditioner must be well grounded, the switch of the main power of air-conditioner must be reliably grounded.

▪ Notices

1. The air conditioner must be installed on well strong supporter.
2. The appliance shall be installed in accordance with national wiring regulations.
3. Fix the machine firmly, otherwise it will produce abnormal noise and vibration.

4. Install the outdoor unit in the place where it wouldn't disturb your neighbour.

5. The method of connection of the appliance to the electrical supply and inter connection of separate somponents, please see the electric connection elements shart which stick on the machine.

6. If the power supply cord is damaged, it must be replaced by the manufacture or its service agent or a similar qualified person.

7. After installation, the power plug should be easily reached.

10. NOTICES OF INSTALLATION

Unpacking inspection

• Open the box and check air conditioner in area with good ventilation (open the door and window) and without ignition source.

Note: Operators are required to wear anti-static devices.

• It is necessary to check by professional whether there is refrigerant leakage before opening the box of outdoor machine; stop installing the air conditioner if leakage is found.

• The fire prevention equipment and anti-static precautions shall be prepared well before checking. Then check the refrigerant pipeline to see if there is any collision traces, and whether the outlook is good.

Safety Principles for Installing Air Conditioner

• Fire prevention device shall be prepared before installation.

• Keep installing site ventilated.(open the door and window)

• Ignition source,smoking and calling is not allowed to exist in area where R32 refrigerant located.

• Anti-static precautions in necessary for installing air conditioner, e.g. wear pure cotton clothes and gloves.

• Keep leak detector in working state during the installation.

• If R32 refrigerant leakage occurs during the installation, you shall immediately detect the concentration in indoor environment until it reaches a safe level. If refrigerant leakage affects the performance of the air conditioner, please immediately stop the operation, and the air conditioner must be vacuumed firstly and be returned to the maintenance station for processing.

• Keep electric appliance, power switch, plug, socket, high temperature heat source and high static away from the area underneath sidelines
of the indoor unit.

• The air conditioner shall be installed in an accessible location to installation and maintenance, without obstacles that may block air inlets or outlets of indoor/outdoor units, and shall keep away from heat source, inflammable or explosive conditions.

• When installing or repairing the air conditioner and the connecting line is not long enough, the entire connecting line shall be replaced with the connecting line of the original specification; extension is not allowed.

• Use new connection pipe, unless re-flaring the pipe.

Requirements For Installation Position

• Avoid places of inflammable or explosive gas leakage or where there are strongly aggressive gases.

• Avoid places subject to strong artificial electric / magnetic fields.

• Avoid places subject to noise and resonance.

• Avoid severe natural conditions (e.g. heavy lampblack, strong sandy wind, direct sunshine or high temperature heat sources).

• Avoid places within the reach of children.

• Shorten the connection between the indoor and outdoor units.

• Select where it is easy to perform service and repair and where the ventilation good.

• The outdoor unit shall not be installed in any way that could occupy an aisle, stairway, exit, fire escape, catwalk or any other public area.

• The outdoor unit shall be installed as far as possible from the doors and windows of the neighbors as well as the green plants.

Installation environment inspection

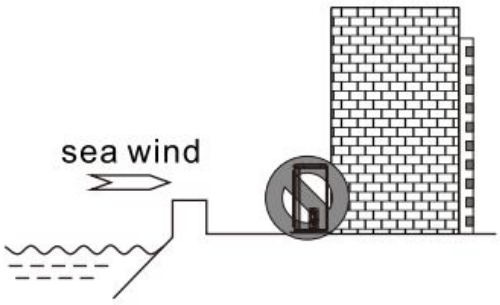
• Check nameplate of outdoor unit to make sure whether the refrigerant is R32.

• Check the floor space of the room. The space shall not be less than usable space($5m^2$) in the specification. The outdoor unit shall be installed at a well-ventilated place.

• Check the surrounding environment of installation site: R32 shall not be installed in the enclosed reserved space of a building.

• When using electric drill to make holes in the wall, check first whether there is pre-buried pipeline for water, electricity and gas. It is suggested to use the reserved hole in the roof of the wall.

Installation guide at the seaside



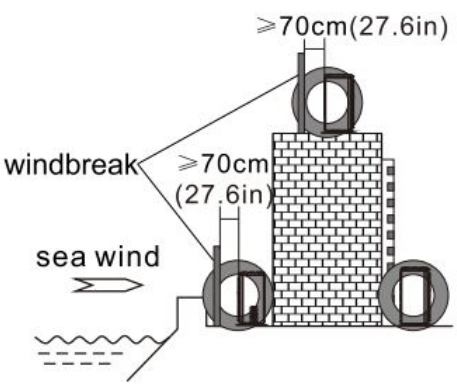
1. Air conditioners should not be installed in areas where corrosive gases, such as acid alkaline gas, are produced.

2. Do not install the product where it could be exposed to sea wind (salty wind) directly. It can result corrosion on the product.
   Corrosion, particularly on the condenser and evaporator fins, could cause product malfunction or inefficient performance.

3. If outdoor unit is installed close to the seaside, it should avoid direct exposure to the sea wind. Otherwise it needs additional anticorrosion treatment on the heat exchanger.

4. Select a well-drained place.

Selecting the location (outdoor unit)



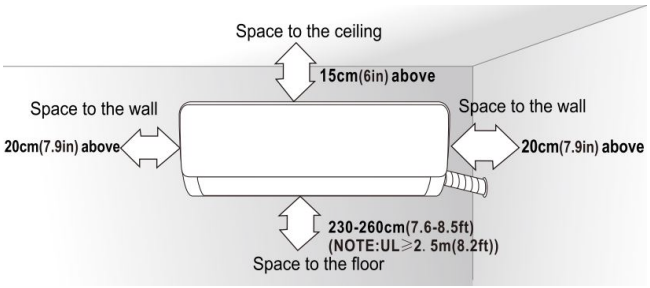
Install the outdoor unit on the opposite side of the sea wind direction, or set up a windbreak to avoid exposed to the sea wind.

The windbreak should be strong enough like concrete to prevent the sea wind from the sea. The height and width should be more than 1509 of the outdoor unit.

It should be keep more than 70cm (27.6in) of space between outdoor unit and the windbreak for easy air flow.

Periodic (more than once/year) cleaning of the dust or salt particles stuck on the heat exchanger by using water.

11. SELECTION OF THE INSTALLING POSITION

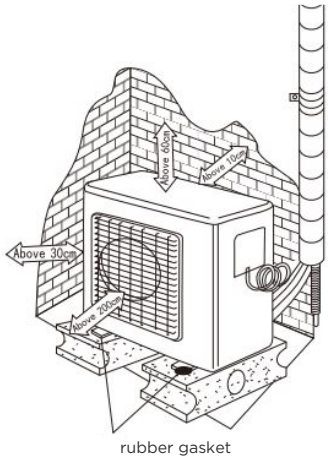


Indoor Unit

- There is no heating and steaming source nearby.
- No obstacles for installing position nearly.
- Keep good air circulation
- Convenient to adopt measures to reduce noises.
- Do not install them near the doorway.
- Make sure to have the distance between the ceiling, wall, furniture and other obstacles.
- The distance between the product and the floor should be about 2.3-2.6m

Outdoor Unit

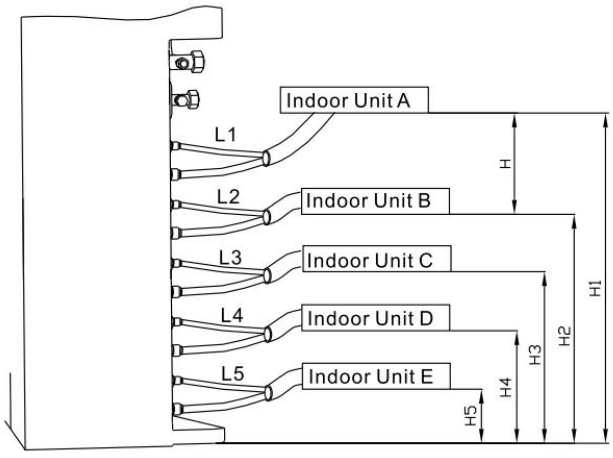
- Incase that you put up a canopy to protect it from rains and sunrays, pay attention not to cause any obstacles for the heating dispersion for the condenser.
- Do not grow animals or plants near the installation location for the cold and hot air out will affect them.



rubber gasket

- Make sure to have the distance specified in the picture between ceiling, wall, furniture and other obstacles.
- Stay away from heating source and & inflammable air.
- The installation base and supporting frame should be strong and secure. The machine should be at plane surface.
- In order to prevent the resonance between the outdoor unit and the wall from generating noise, rubber gaskets must be added under the foot of the outdoor unit during installation.

Do not install the outdoor unit in a confined space to prevent heat accumulation and affect normal use



You can adjust the vertical location of indoor and outdoor units according to the installation requirement. If the outdoor unit is installed higher than indoor units and H1, H2,H3,H4,H5>7m, please set the oil bend every 3 meterson the vertical gas pipe. In other cases don't need to install oil bend.

PIPE LENGTHAND HEIGHT DIFFERENCE

		14/18K	21/27K	36/42K	28K
Operating conditions	Cooling operation Heating operation	-10 to 50°C -15 to 24°C			
Connecting pipe length	Min.length for 1 unit (m)	5	5	5	
	Max.length for 1 unit (m)	25	30	35	
	Max.length for total unit (m)	L1+L2 ≤ 40	L1+L2+L3 ≤ 60	L1+L2+L3+L4 (+L5) ≤ 80	
	Max. height difference between indoor units (m)	10	10	10	
	Max. height difference between indoor and outdoor unit (m)	15	15	15	
Refrigerant to be added	Average liquid pipe length of indoor units less than 7.5m	No refrigerant is required			
	Average liquid pipe length of indoor units more than 7.5m	25g/m			15g/m
		25(15)g/m* (Total liquid pipe length-7.5*N) N: Number of indoor unit			

12. INSTALLATION OF THE INDOOR UNIT

▪ Ceiling & Floor & Console Air conditioner Unit

Select installation site

Ensure the following conditions are satisfied and confirm the position with the customer.

1. There are no obstacles to hinder air circulation. The air should be able to reach every part of the room.

2. The installation site should be convenient for water draining,

3. Ensure the installation position is able to take four times of the unit weight.
There should be no increase in noise and vibration

4. The indoor unit must be away from source of heat or steam. It should be some distance from the entrance to the room.

5. It should be close to the dedicated power supply designated for its use.

6. It should be as close as possible to the outdoor unit

7. It should not be exposed to direct sunlight and away from sources of moisture

8. The height of the unit above the ceiling should allow for correct drainage from the unit

9. Do not install the unit in a washing or drying room risk of electric shock

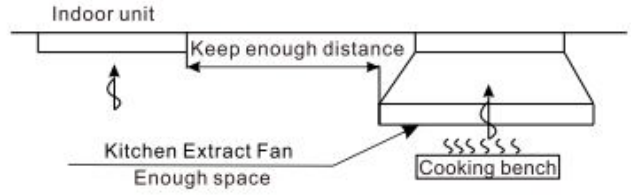
In the inlet and outlet of indoor unit, protective barriers should be installed to prevent finger from inserting or contacting the fan with high speed and metal fin.

Matters requiring attention 1

In the following places, please carry out a full inspection and take appropriate action.

1. In restaurants, kitchens and other eating places, dust, flour, grease steam and other cooking by products will easily attach to the indoor fan, heat exchanger and drain pump. This will cause the performance to reduce and cause the unit to spray water, leak and may lead to the drain pump or other components to fail.

Please consider adopting the following improvement measures.



The capacity of the kitchen extract fan and extract hood should be great enough to ensure that the oil, steam, flour and other cooking products will be exhausted through it and not attracted into the air conditioner.

The indoor unit should be far enough away from the cooking and food preparation equipment to
ensure that cooking products are not attracted into the unit.

2. When installing the unit in a factory, ensure itis situated in a place where it will not be contaminated by oil, powder, iron filings or dust.

3. Do not install near potential sources of combustible gas

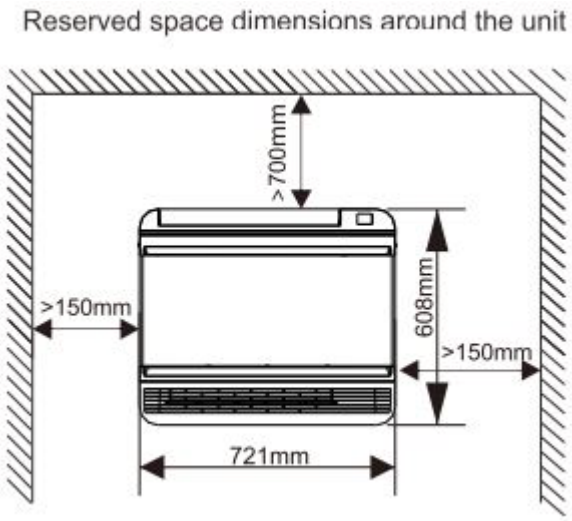
4. Do not install where acidic or corrosive gases are present

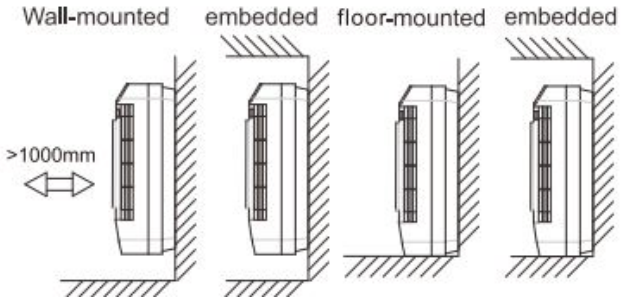
Matters requiring attention 2

Do not drop the indoor unit or allow it to fall during transport

Console Air conditioner Unit

Installation diagram of indoor unit





1. Fix the installation guide board on the wall horizontally, and mark it on the wall according to the holes on the cardboard.

2. Four hooks are fixed on the wall with screws.

3. Hang the indoor unit on the hook.

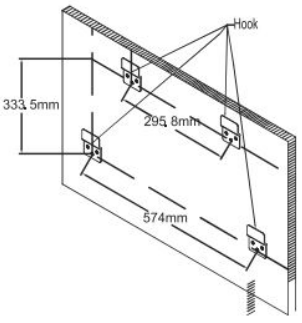
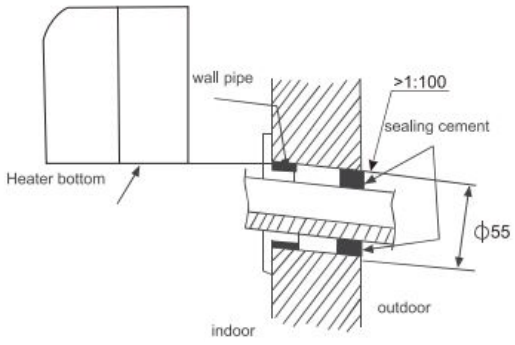


Diagram of wall pipe installation

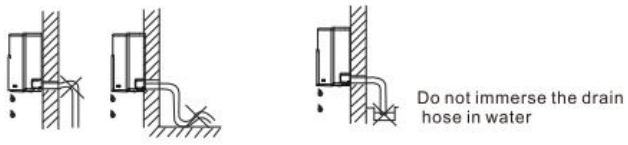


1. After determining the location of the pipe hole, drill the hole with an outward inclination.

2. In order to protect the pipe and cable from damage through the wall hole, and to avoid the existence of rats in the hollow wall, the wall pipe should be installed. Indoor/outer wall holes are sealed with sealant cement.

3. The highest position of the wall hole should not exceed the bottom of the heat pump fan. If the height of the wall hole does not meet the requirements, it must be re-opened to prevent leakage of the product.

Tilt the drain hose downward, not as shown in the figure below.



When connecting the extended drain hose, the connection part of the drain hose should be isolated from the shielding pipe, and the drain hose should not be loosened.

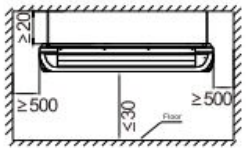
The connection of the drain hose should be completed by qualified installers to prevent water leakage.

Bundle the pipe, connecting cable and drain hose firmly and evenly with tape, as shown in the figure below.

In the indoor part of the drain pipe, heat insulation materials should be added, otherwise condensation of water may occur.

▪ Ceiling & Floor Air conditioner Unit

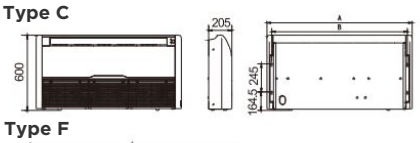
1. Ceiling Installation



2. Wall-Mounted Installation

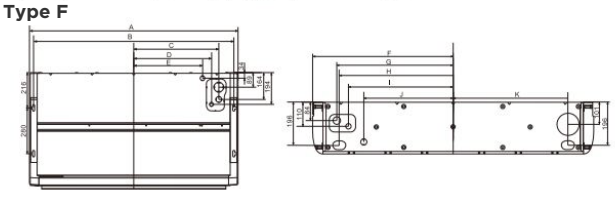
The dimension of indoor unit

Type C



Type	A	B
9000BTU 12000BTU 18000BTU	929	841

Type F



Packing Size (mm)	A	B	C	D	E	F	G	H	I	J	k
1080*770*325	1000	948	382	337	282	500	390	378	336	267	382
1360*770*325	1280	1228	522	477	422	640	530	518	476	407	522
1680*770*325	1600	1548	777	732	692	800	690	678	635	567	682

Installation

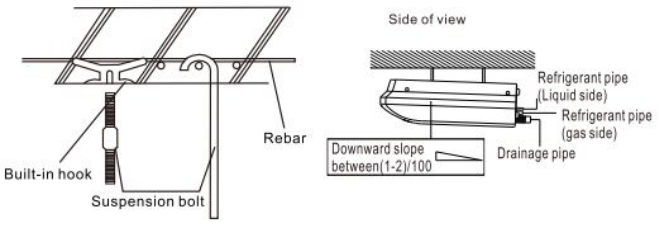
There are two ways of indoor unit installation: ceiling and Wall-Mounted Installation.

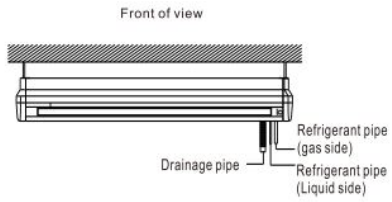
Ceiling installation

1. Select the suspension foundation.
The suspension foundation is a structure of either wooden frame or reinforced concrete. It must be firm and reliable to bear the weight of more than 200kg and capable of bearing vibration for long periods.

2. Fixing of suspension foundation.
Fix the suspension foundation bolts either as shown on the right or by a steel or wooden bracket.

3. The suspension of indoor unit
the indoor unit should be suspension as shown below:
• Adjust the relative positions of the suspension hooks .
• Tighten the nuts and ensure that the hooks are tightly connected to the nuts and shims.
• After the unit is installed ensure it is secure and does not shake or sway.





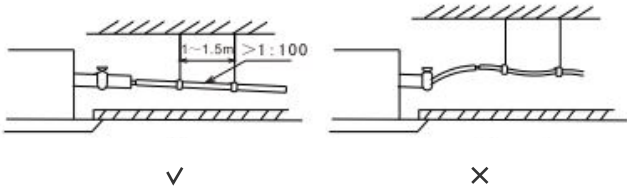
CAUTON!

In order to ensure the drainage water come out successfully, the unit must be declined to the bottom side of unit when finished installation.

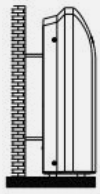
Please make sure the front side is higher, otherwise it may cause drainage to come out from the air outlet.

4. Installation of drainage pipe

• The drain pipe should be properly insulated to prevent the generation of condensation.
• Pipes it should be installed with a downward gradient to allow the water to drain away.
• The pipe should not rise at any point.



Wall mounted installation

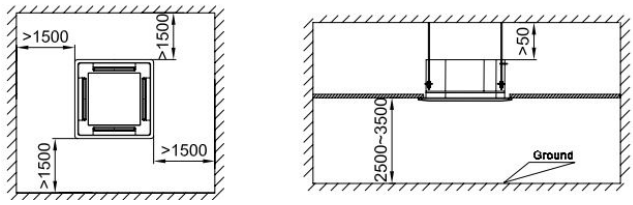


CAUTON! The unit must be horizontal or declined to drain hose when finished installation.

▪ Built In Ceiling Cassette Split Air Conditioner Unit

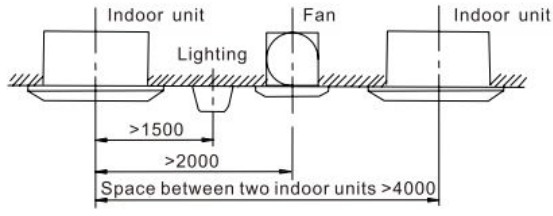
Select installation site

To ensure ease of maintenance please allow the space shown below for access to the unit.



Ensure the following conditions are satisfied and confirm the position with the customer.

1. There are no obstacles to hinder air circulation. The air should be able to reach every part of the room.
2. The distance away from the ceiling and obstacles is shown in the below drawing.



3. The installation site should be convenient for water draining (See “Installation of drainage pipe” for details.)

WARNING! **4.** Ensure the installation position is able to take four times of the unit weight. There should be no increase in noise and vibration

5. The indoor unit must be away from source of heat or steam. It should be at some distance from the entrance to the room.
6. It should be close to the dedicated power supply designated for its use.
7. It should be as close as possible to the outdoor unit
8. It should not be exposed to direct sunlight and should be away from sources of moisture.
9. The height of the unit above the ceiling should allow for correct drainage from the unit.
10. Do not install the unit in a washing or drying room as there is a risk of an electric shock.

The dimension of indoor unit

Ceiling cassette spit air conditioner unit have two kinds of shapes, Fig A and Fig B. Please choose the size according to the shape. the actual shape shall prevail.

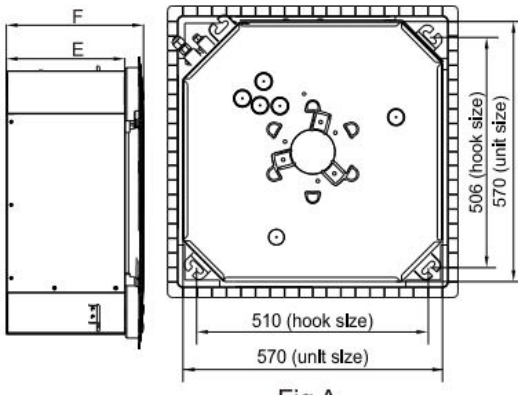


Fig A

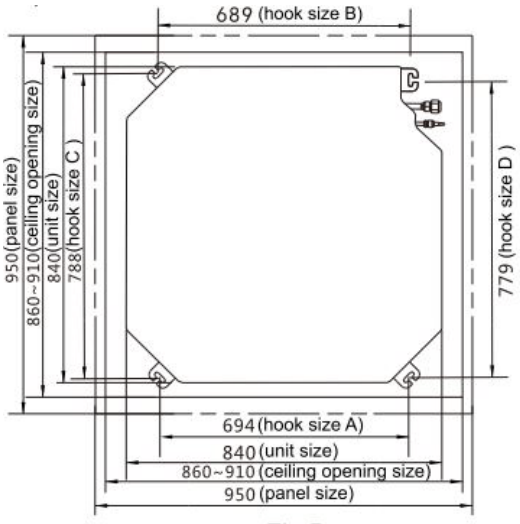


Fig B

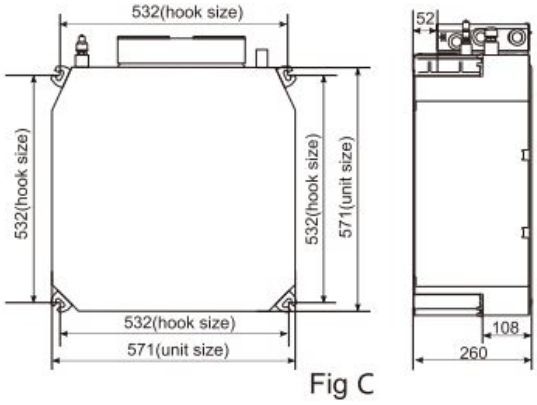
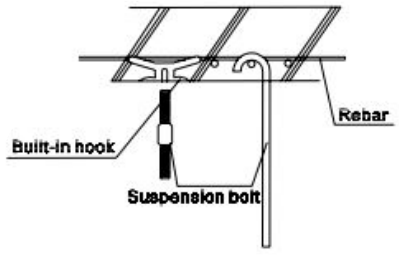


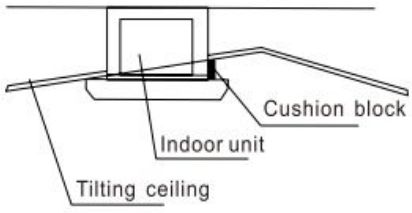
Fig C

Suspension foundation of the indoor unit

1. Select the suspension foundation. The suspension foundation is a structure of either wooden frame or reinforced conerete. It must be firm and reliable to bear the weight of more than 200kg and capable of bearing vibration for long periods.



2. Fixing of suspension foundation. Fix the suspension bolts either as shown on the right or by a steel or wooden bracket. If this unit is installed on a sloping ceiling, a cushion block should be installed between the ceiling and the air outlet panel, in order to ensure that the unit is installed on a level surface. This is as shown in the drawing on the right.



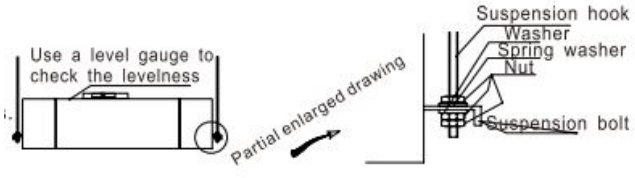
The suspension of indoor unit

The indoor unit should be suspended as shown in the below sketch:

1. Adjust the relative position of the suspension hook on the suspension bolt.

2. Tighten the bolt and ensure that four hooks are in close contact with the nuts and washers, and the unit is suspended firmly and reliably onto the hooks.
3. Ater the units installed ensure itis secure and ad does not shake or sway.

4. Ensure that the centre of the indoor units in alignment with the centre of the opening in the ceiling.

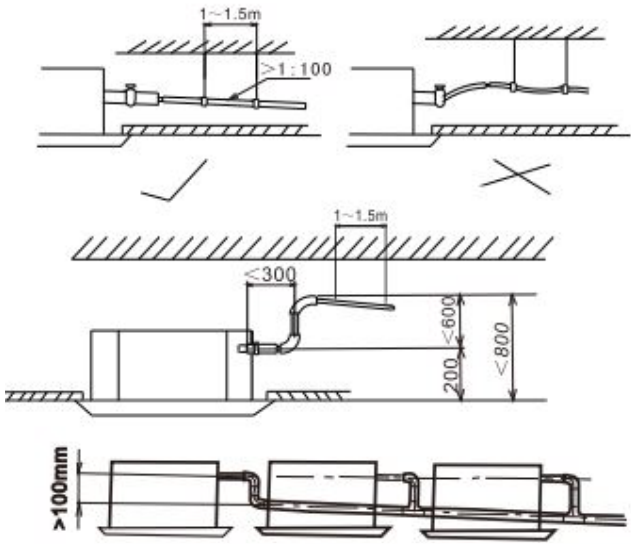


installation of drainage pipe

1. The drain pipe should be properly insulated to prevent the generation of condensation. It should be installed with a downward gradient.

2. The unit has a drain pump which will lft up to 1200mm. However after the pump stops the water still in the pipe will drain back and may overflow the drain tray causing a water leak. For this reason please install the drain pipe as shown on the right.

3. When draining multiple units into a common drain line, this common drain should be installed about 100mm below each units drain outlet, as shown in the drawing on the right.

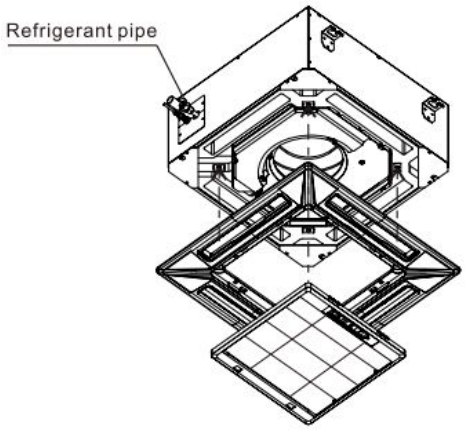


CAUTON! In order to ensure the drainage water come out successfully, the unit must be horizontal or declined to drain hose when finished installation.

Grille Installation

Please refer to the picture on the right. The grille has four clips which attach to corresponding hangers on the unit and the grille should be positioned using these first. The grille is then fixed into position by four bolts which are accessed through the four corner panels on the grille.

The four connection bolts are located Inside the inlet panel of the grille.



Note: During installation please ensure that the air vane motor in the grille corresponds to the position of the refrigerant pipe entry into the indoor unit.

▪ Low Static Pressure Ducted Air Conditioner Unit

Select installation site
The location of hoisting bolt

For convenience of maintenance, please set an inspection port.

After the installation site that meets the following conditions is selected and approved by customer, the installation can be carried on.

1. There are no obstacles which hinder the air circulation, so the cold air can be spread to all corners in the room

2. The distance away from the wall and obstacles is shown in the below drawing

3. The installation site should be convenient for water draining (See “Installation of drainage pipe” for details.)

WARNING! **4.** For ducted type indoor unit, the suspension site should be able to support the weight 4 times more than the indoor unit. There should be no increase in noise and vibration. If it needs to be reinforced, the installation should be carried on after reinforcement (if reinforcement is poor, the indoor unit will fall and cause damage).

5. There should be no heat source and steam source near the installation site.

6. The place is near the power supply (special line)

7. The place should be easy to connect to the outdoor unit.

8. The place should keep away from direct sunlight and moisture.

9. The height inside the ceiling should reach the drainage requirements to ensure the installation of indoor unit.

10. The unit can't be installed in the washhouse (it will cause electric shock).

11. In the inlet and outlet of indoor unit, protective barriers should be installed to prevent finger from inserting or contacting the fan with high speed and metal fin.

Matters requiring attention

Do not drop the indoor unit or allow it to fall during transport.

Installation

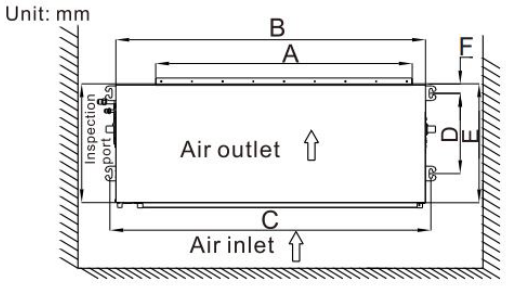
The location of hoisting bolt

Y Series

Type	A	B	C	D	E	F
7000BTU 9000BTU 12000BTU	532	700	750	412	450	31
18000BTU	832	1000	1050			
24000BTU	1142	1300	1360			

M Series

Type	A	B	C	D	E	F
12000BTU 18000BTU	512	700	739	600	700	52
24000BTU	812	1000	1039			

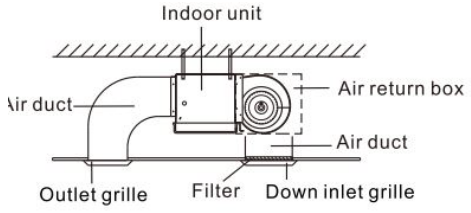


The suspension drawing of indoor unit

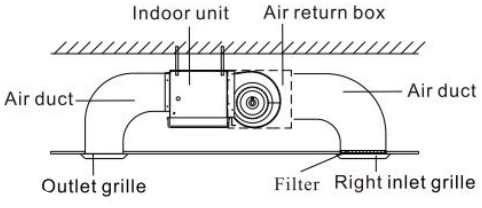
WARNING! Must seriously fasten bolts and nuts. The loosening would lead to air-conditioner falling and so on.

Duct and drain pipe installation

There are two installation methods of duct, as follows.



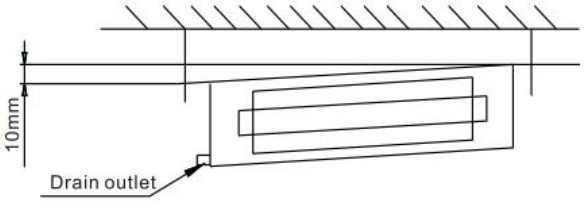
A



B

• Use canvas to connect the indoor unit and duct in order to reduce unnecessary vibration.

• As shown, the indoor unit should be leaning to the drain hole to be convenient for drainage.



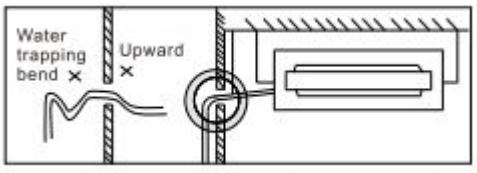
Installation of drainage pipe

1. The drain pipe must have a downward gradient (1/50 ~ 1/100). If the drain pipe is installed ups and downs or upward, it will lead to water backflow or leakage etc.

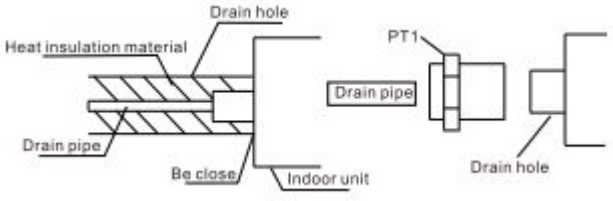
2. Dining pide connection. Go iol use too miiohs force to lie drain joint of indoor unit.

3. The jointis PT1

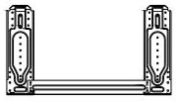
4. There is a drain hole on each side of indoor unit; unused drain pipe must be closed.



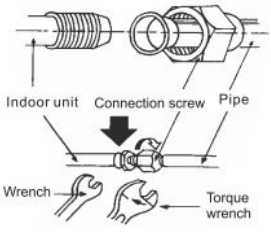
Note: The drain pipe must be wrapped heat insulation material, otherwise it will cause condensation or water drops.

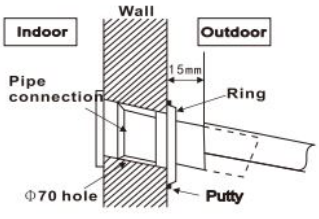


Wall-mounted Air Conditioner Unit



• First make changes to wall and make sure that is hard and secure. Using four"++" type screws to fasten the installation board onto the wall. Keep it water lever horizontal direction and perpendicular in vertical direction. Otherwise it might cause water drops when air-conditioner is running cooling operation.

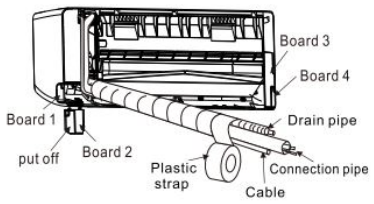




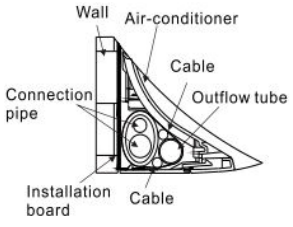
• Drilling 70mm diameter pipe hole at the left down or right down side of the installation board. The hole shall slant outward slightly.

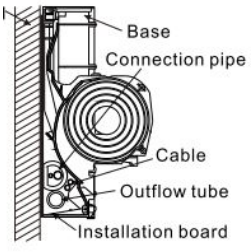
• Pull out the indoor unit pipes after detached the fixed parts on them. Connect the interconnected pipes to the indoor unit: point to the center of pipe and fasten the connection screw at first by hand and then by wrench until you hear the "Click" sound. Fastening direction is shown in the right picture. Using torque is shown in the following table.

• Before installation, confirm connection pipes direction. Remove the board 1 and board 2 on the correct connecting side. Press connection pipes to the board gap, then install board 2 to the original location. If connection pipes are on the other side, install them as above.



Note: The installed air-conditioner won't be tightly appressed to the wall if that is not arranged shown in the picture. The outflow tube must be in the bottom and the highest point of it can not exceed the position of water basin.





Check the water exhausting

1. Take off the frame the unit cover. Take off the front frame for maintenance according to the following steps:

• Turn perpendicular airflow direction handle from "|" to horizontal direction.

• As shown in the picture on the right, take off two covers from the front frame and then unfasten two fixture screws.

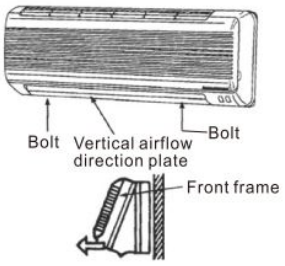
• Pull the front frame towards yourself and take it off.

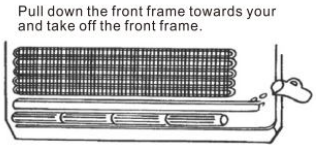
In case that put the front frame back, turn the perpendicular airflow direction handle from "I" to horizontal, then proceed according to the third and the second steps. You should check whether the front frame is firmly inside the fixture groove on the top.

1. Check the water exhausting.

• Put a cup of water into groove.

• Check whether the water flow through the water exhausting hole.





13. INSTALLATION OF THE OUTDOOR UNIT

• The outdoor unit must be firmly fixed to avoid falling in the strong wind.

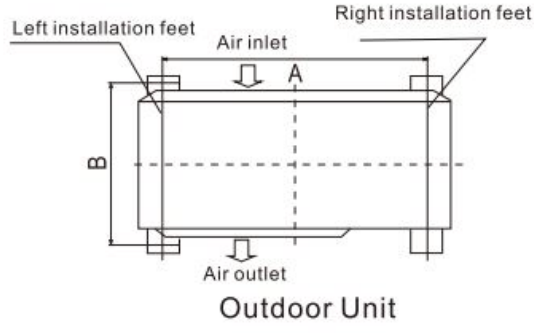
• Install on the cement base the drawing below.

• If it will be installed at seaside or at a place high above the ground and with strong wind, the AC should be installed against the wall to ensure the normal operation of the fan and the blocking plate should be used.

• If it will be installed in type, the structure of the mounting surface should be made of solid stick, cement or materials with equivalent strength, and be of enough bearing capacity. Otherwise, measures such as reinforcement, support or vibration damping should be adopted.

Installation outdoor unit bolt

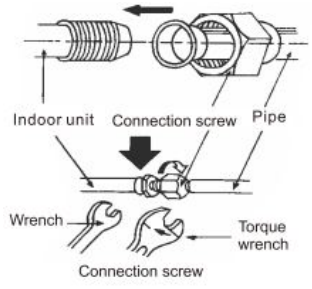
Unit Size	A(mm)	B(mm)
785x300x555	546	316
800x315x545	545	315
825x310x655	540	335
900x350x700	630	350
970x395x803	675	409



14. PIPE CONNECTION

• Connect the pipe to the unit: point to the center of pipe and fasten by wrench until it is tightly fastened, the fastening direction is in the following picture.

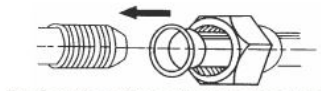
Note: Carefully check if there is any damage of joints before installation. The joints shall not be reused, unless after re-flaring the pipe.



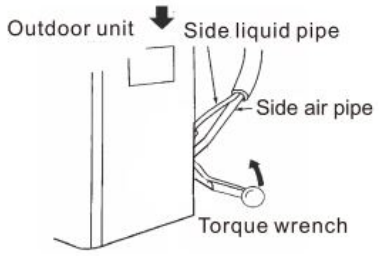
The Size of pipe	Torque
Φ6.35mm(1/4")	18N.m
Φ9.52mm(3/8")	42N.m
Φ12.7mm(1/2")	55N.m
Φ15.88mm(5/8")	75N.m

• Pointing towards the center of pipe, fasten the screw with strength.

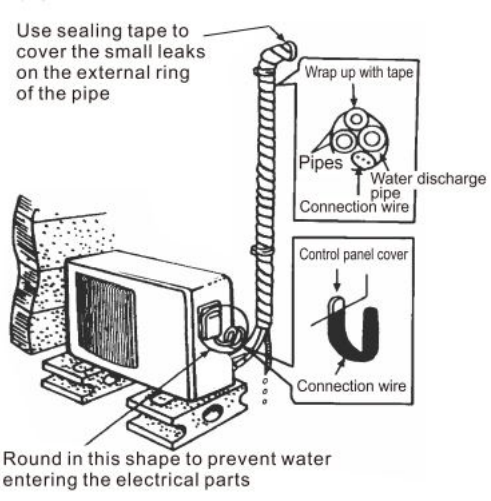
• Wrench the screw in the end until you hear the "Click" sound.



Refer the direction to the picture



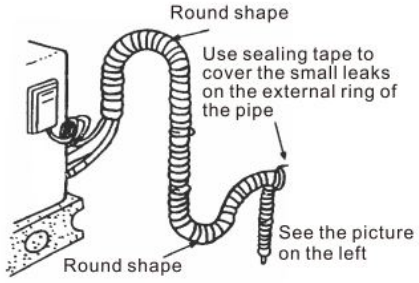
The form of pipe



• Wrap up all pipe, water discharge and connection wire from top to below.

• Cover the connection and fix them with two plastic rings.

• Wrap up the pipes with tape alongside the wall and fix them to the wall with clips. These steps are usually adopted when outdoor unit is installed below the indoor unit.



• Incase that you want to have additional water discharge pipe, the end of pipe should be within certain distance towards to surface (don't let it under the water. Fix it onto the wall so it won't be swayed by the wind).

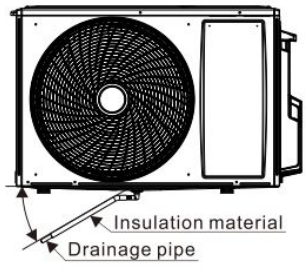
• Wrap the pipes and connection wire well from below to top.

• Wrap up the pipes that are rounded up by the wall comers in the way shown in the picture so it can prevent water entering the room.

• Use clips or other fixture to fasten the pipes to the walls.

Installation of drainage pipe

WARNING! In order to ensure the drainage water come out successfully, the unit must be declined to the bottom side of unit when finished installation.



1. The drainage pipe must be wraped by thermal insulations to properly insulated to prevent the generation of freezing.

2. The pipe should be installed with a downward gradient (>1/1.36)to allow the water to drain away.

3. The pipe should not rise at any point.

Expelling the air in the pipes and the indoor unit

Exclusive R32 refrigerant pump must be used in making R32 refrigerant vacuum. Choose Method Aor B according to the actual situation of the outdoor unit.
Method A:

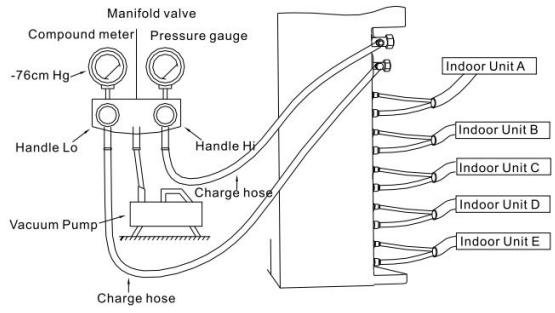
• Connect the pipes of indoor units and outdoor unit according to the figure below, and tighten all the bell coupling nuts of indoor and outdoorto prevent leakage.

• Connect the cut-off valves, charge hose, manifold valve, vacuum pump as the figure below.

• Please fully open the manifoldvalve handleLo and Hi, and do the vacuum processing, vacuum should be running more than 15 minutes, make sure the vacuum gauge indicates the pressure has reached -0.1MPa (-76cmHg);

• After completion of vacuum processing, use the hex wrench to open a little the liquid valve of unit A and unit B, and then quickly remove the hose of gas valve (remove the hose to prevent air from entering the system);

• Open all the cut-off valve and check the connecting mouth of indoor and outdoor, then cover the cut-off valves after confirm there is no leak.



Method B:

Before working on the air conditioner, remove the cover of the stop valve (gas and liquid valves) and be sure to retighten it afterward (to prevent the potential air leakage).

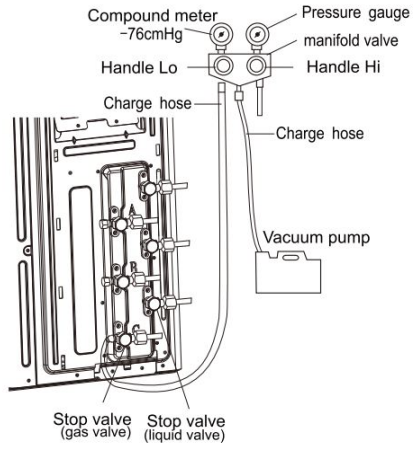
• To prevent air leakage and spilling tighten all connecting nut of all flare tubes.

• Connect the stop valve, charge hose, manifold valve, and vacuum pump.

• Fully open the handle Lo of the manifold valve and apply vacuum for at least 15 minutes and check that the compound vacuum gauge reads -0.1MPa(-76cmHg). If the gauge does not read -0.1MPa(-76cmHg) after 15 minutes, it should be pumped 5 minutes more. If the pressure can't achieve -0.1Mpa(-76cmHg) after pumping 20 minutes, please check if there are some leakage points.

• After applying vacuum, fully open the stop valve with a hex wrench.

• Leave the gauge and pump as they are for 1 or 2 minutes, then make sure that the compound vacuum gauge reading stays at -0.1MPa(-76cmHg).

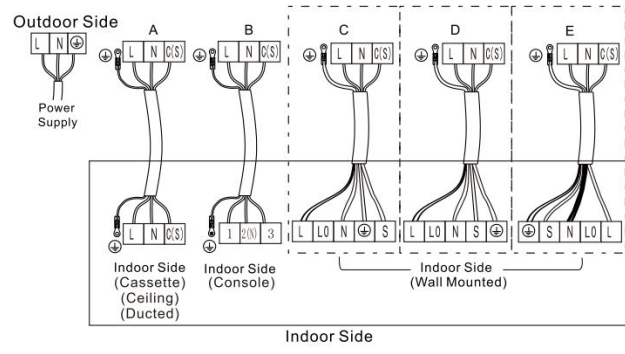


15. ELECTRICAL CONNECTION

The wiring cable specification that is needed in the installation:

Wiring Type	Cross-sectional area (mm^2)	Switch/fuse nominal value (A)
Power Line (3 core wire)	2.5 (14k/18k/21k/28k) 4(36k/42k)	30/5
Connection wire (4 core wire)	1.5	/

Connection wire between indoor and outdoor: The outdoor unit has three(AM2) /four(AM3) /five(AM4) /six(AM5) terminal boards, they are connected to power supply, the indoor unit A, the indoor unit B, the indoor unit C, the indoor unit D, the indoor unit E. Specific connection method as shown below:



Note:
• The connection wire of indoor units should be connected to the corresponding terminal board, that is the power core of A, it can't be connected to the outdoor terminal board for B, otherwise it will cause the unit failure or even damage the units.

• Connect the grounded wire correctly, otherwise it will cause the malfunction of some electrical componet and shock or fire indeed.

• Don't reverse the power polarity.

• Must fix the screw nail of the firmly wire, then drag the wire lightly, confirmation whether it's firmly.

• If there is a connector, connect it directly.

16. TEST RUNNING

• Make sure that pipes and wires are connected.
• Make sure that liquid side valve and air side valve both are completely open.

1. The connection of power source
• Connect the wire to independent power source socket.
• Preparation of remote controller.
• Run the air-conditioner in cooling operation mode for 30 minutes or longer.

2. Performance evaluation
• Test the out and in air temperature.
• Make sure whether the outlet air temperature subtract than 10°C.

17. MAINTENANCE NOTICE

Attention:
For maintenance or scrap, please contact authorized service centers. Maintenance by unqualified person may cause dangers. Feed air conditioner with R32 refrigerant, and maintain the air conditioner in strictly accordance with manufacturer's requirements. The chapter is mainly focused on special maintenance requirements for appliance with R32 refrigerant. Ask repairer to read after-sales technical service handbook for detailed information.

Qualification requirements of maintenance personnel

1. Special training additional to usual refrigerating equipment repair procedures is required when equipment with flammable refrigerants is affected. In many countries, this training is carried out by national training organisations that are accredited to teach the relevant national competency standards that may be set in legislation. The achieved competence should be documented by a certificate.

2. The maintenance and repair of the air conditioner must be conducted according to the method recommended by the manufacturer. If other professionals are needed to help maintain and repair the equipment, it should be conducted under the supervision of individuals who have the qualification to repair AC equipped with flammable refrigerant.

Inspection of the Site

Safety inspection must be taken before maintaining equipment with R32 refrigerant to make sure the risk of fire is minimized. Check whether the place is well ventilated, whether anti-static and fire prevention equipment is perfect. While maintaining the refrigeration system, observe the following precautions before operating the system.

Operating Procedures

1. General work area:
All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided. The area around the workspace shall be sectioned off. Ensure that the conditions within the area have been made safe by control of flammable material.

2. Checking for presence of refrigerant:
The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially toxic or flammable atmospheres. Ensure that the leak detection equipment being used is suitable for use with all applicable refrigerants, i.e.non-sparking, adequately sealed or intrinsically safe.

3.Presence of fire extinguisher:
If any hot work is to be conducted on the refrigeration equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand. Have a dry powder or CO: fire extinguisher adjacent to the charging area.

4. No ignition sources:
No person carrying out work in relation to a refrigeration system which involves exposing any pipe work shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion. All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which refrigerant can possibly be released to the surrounding space. Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. «No Smoking» signs shall be displayed.

5. Ventilated Area (open the door and window):
Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

6. Checks to the refrigeration equipment:
Where electrical components are being changed, they shall be fit for the purpose and to the correct specification. At all times the manufacturer's maintenance and service guidelines shall be followed. If in doubt, consult the manufacturer's technical depar- tment for assistance. The following checks shall be applied to installations using flammable refrigerants:

• The charge size is in accordance with the room size within which the refrigerant containing parts are installed.
• The ventilation machinery and outlets are operating adequately and are not obstructed.
• If an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant.
• Refrigeration pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.

7. Checks to electrical devices:
Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised.

Initial safety checks shall include:

• That capacitors are discharged: this shall be done in a safe manner to avoid possibility
of sparking.
• That no live electrical components and wiring are exposed while charging, recovering
or purging the system.
• Keep continuity of earthing.

Inspection of Cable

Check the cable for wear, corrosion, overvoltage, vibration and check if there are sharp edges and other adverse effects in the surrounding environment. During the inspection, the impact of aging or the continuous vibration of the compressor and the fan on it should be taken into consideration.

Leakage check of R32 refrigerant

Note: Check the leakage of the refrigerant in an environment where there is no potential ignition source. No halogen probe (or any other detector that uses an open flame) should be used.

Leak detection method:
For systems with refrigerant R32, electronic leak detection instrument is available to detect and leak detection should not be conducted in environment with refrigerant. Make sure the leak detector will not become a potential source of ignition, and is applicable to the measured refrigerant. Leak detector shall be set for the minimum ignitable fuel concentration (percentage) of the refrigerant. Calibrate and adjust to proper gas concentration (no more than 25%) with the used refrigerant.

The fluid used in leak detection is applicable to most refrigerants. But do not use chloride solvents to prevent the reaction between chlorine and refrigerants and the corrosion of copper pipeline.
If you suspect a leak, then remove all the fire from the scene or put out the fire.
If the location of the leak needs to be welded, then all refrigerants need to be recovered, or, isolate all refrigerants away from the leak site (using cut-off valve). Before and during the welding, use OFN to purify the entire system.

Removal and Vacuum Pumping

1. Make sure there is no ignited fire source near the outlet of the vacuum pump and the ventilation is well.

2. Allow the maintenance and other operations of the refrigeration circuit should be carried out according to the general procedure, but the following best operations that the flammability is already taken into consideration are the key. You should follow the following procedures:

• Remove the refrigerant.
• Decontaminate the pipeline by inert gases.
• Evacuation.
• Decontaminate the pipeline by inert gases again.
• Cut or weld the pipeline.

3. The refrigerant should be returned to the appropriate storage tank. The system should be blown with oxygen free nitrogen to ensure safety. This process may need to be repeated for several times. This operation shall not be carried out using compressed air or oxygen.

Through blowing process, the system is charged into the anaerobic nitrogen to reach the working pressure under the vacuum state, then the oxygen free nitrogen is emitted to the atmosphere, and in the end, vacuumize the system. Repeat this process until all refrigerants in the system is cleared. After the final charging of the anaerobic nitrogen, discharge the gas into the atmosphere pressure, and then the system can be welded. This operation is necessary for welding the pipeline.

Procedures of Charging Refrigerants

As a supplement to the general procedure, the following requirements need to be added:

• Make sure that there is no contamination among different refrigerants when using a refrigerant charging device. The pipeline for charging refrigerants should be as short as possible to reduce the residual of refrigerants in it.
• Storage tanks should remain vertically up.
• Make sure the grounding solutions are already taken before the refrigeration system is charged with refrigerants.
• After finishing the charging (or when it is not yet finished), label the mark on the system.
• Be careful not to overcharge refrigerants.

Scrap and Recovery

Scrap:
Before this procedure, the technical personnel shall be thoroughly familiar with the equipment and all its features, and make a recommended practice for refrigerant safe recovery. For recycling the refrigerant, shall analyze the refrigerant and oil samples before operation. Ensure the required power before the test.

1. Be familiar with the equipment and operation.

2. Disconnect power supply.

3. Before carrying out this process, you have to make sure:

• If necessary, mechanical equipment operation should facilitate the operation of the refrigerant tank.
• All personal protective equipment is effective and can be used correctly.
• The whole recovery process should be carried out under the guidance of qualified personnel.

• The recovering of equipment and storage tank should comply with the relevant national standards.

4. If possible, the refrigerating system should be vacuumized.

5. If the vacuum state can't be reached, you should extract the refrigerant in each part of the system from many places.

6. Before the start of the recovery, you should ensure that the capacity of the storage tank is sufficient.

7. Start and operate the recovery equipment according to the manufacturer's instruction.

8. Don't fill the tank to its full capacity (the liquid injection volume does not exceed 80% of the tank volume).

9. Even the duration is short, it must not exceed the maximum working pressure of the tank.

10. After the completion of the tank filling and the end of the operation process, you should make sure that the tanks and equipment should be removed quickly and all closing valves in the equipment are closed.

11. The recovered refrigerants are not allowed to be injected into another system before being purified and tested.

Note: The identification should be made after the appliance is scrapped and refrigerants are evacuated. The identification should contain the date and endorsement. Make sure the identification on the appliance can reflect the flammable refrigerants contained in this appliance.

Recovery:
1. The clearance of refrigerants in the system is required when repairing or scrapping the appliance. It is recommended to completely remove the refrigerant.

2. Only a special refrigerant tank can be used when loading the refrigerant into the storage tank. Make sure the capacity of the tank is appropriate to the refrigerant injection quantity in the entire system. All tanks intended to be used for the recovery of refrigerants should have a refrigerant identification (i.e. refrigerant recovery tank). Storage tanks should be equipped with pressure relief valves and globe valves and they should be in a good condition. If possible, empty tanks should be evacuated and maintained at room temperature before use.

3. The recovery equipment should be kept in a good working condition and equipped with equipment operating instructions for easy access. The equipment should be suitable for the recovery of R32 refrigerants. Besides, there should be a qualified weighting apparatus which can be normally used. The hose should be linked with detachable connection joint of zero leakage rate and be kept in a good condition.
Before using the recovery equipment, check if it is in a good condition and if it gets perfect maintenance. Check if II electrical components are sealed to prevent the leakage of the refrigerant and the fire caused by it. If you have any question, please consult the manufacturer.

4. The recovered refrigerant shall be loaded in the appropriate storage tanks, attached with a transporting instruction, and returned to the refrigerant manufacturer. Don't mix refrigerant in recovery equipment, especially a storage tank.

5. The space loading R32 refrigeration can't be enclosed in the process of transportation. Take anti electrostatic measures if necessary in transportation. In the process of transport, loading and unloading, necessary protective measures must be taken to protect the air conditioner to ensure that the air conditioner is not damaged.

6. When removing the compressor or clearing the compressor oil, make sure the compressor is pumped to an appropriate level to ensure that there is no residual R32 refrigerants in the lubricating oil. The vacuum pumping should be carried out before the compressor is returned to the supplier. Ensure the safety when discharging oil from the system.

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