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虚线框及文字仅示说明无需打印



VITASTAR INVERTER

Making Air Healthier & Cooler

Installation and Operation Manual for your Wall-Mounted Air Conditioner

This manual is for Wall-Mounted Air Conditioner

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Thank you for choosing our air conditioner!
Before using the product, please carefully read this manual and keep it safe for later reference.
Please ask for professionals to install the product.

NOTE:

1. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
2. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
3. The appliance shall be installed in accordance with national wiring regulations.
4. To fix the appliance to its support, please refer to the detailed information in the installation section.

BEFORE YOU START

- Ensure your router provides a standard 2.4Ghz connection.
- If your router is dual band ensure that both networks have different network names (SSID). The provider of your router / Internet service provider will be able to provide advice specific to your router.
- Ensure the router is as close as possible to the indoor unit during setup.
- Once the app has been installed on your phone, turn off the data connection, and ensure your phone is connected to your router via WIFI.

DOWNLOAD THE APP TO YOUR PHONE

Download the ”TUYA SMART” app, from your chosen app store, using the QR codes below, or by searching for the app in your chosen store.

Android

iOS

REGISTER THE APP

1. Press on the register button at the bottom of the screen.



2. Read the Privacy policy and press the Agree Button.



3. Enter your email address or phone number and press continue to register.



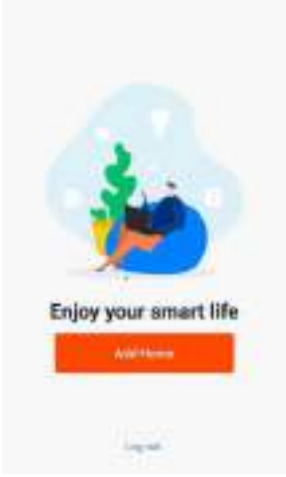
4. A verification code will be sent by the method selected in step 3. Enter the code into the app.



5. Type in the password you would like to create. This needs to be 6-20 characters, with letters and numbers.



6. The app is now registered. It will automatically log you in following registration.



SETTING UP CONNECTION TO THE APP

Before initiating the connection, make sure the unit is in standby mode, (Turn the main switch ON)
Press “Display" button on remote control 8 times in 10s to reset all existing pairing connection.
Also ensure your phone is connected to the Wi-FI network. (We advise turning mobile data off during setup)

1. Open the app and press “+” or “Add Device” to add device .



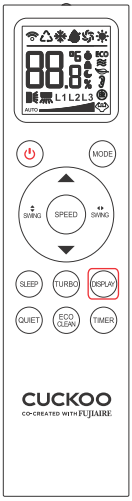
2. Select the type of device as “Air Conditioner(Wi-Fi)” within the Large Home Appliance tab.



3. Select the wifi to connnect to the air conditioner and type in the passwords, press "Next".



4. Press “Display” button on remote control 8 times in 10s to reset all existing pairing connection.
(You will hear a rapid beeping sound)



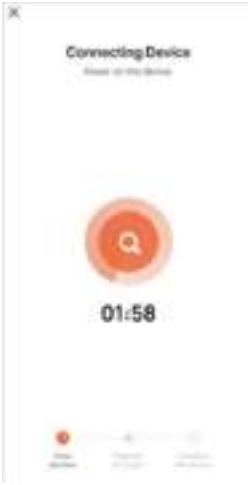
5. If below image appears, press "Blink Quickly" and make sure display light (--) is blinking.



6. Select the wifi to connect Air conditioner and type in the passwords, press “Next”.



7. This will then transfer the settings to the air conditioner. Wait for this to complete. If this fails, retry. If still unsuccessful please review the troubleshooting section for further help.



8. Once device has been successfully added as seen below, press "Done".



Refrigerant R32

■ Introduction to refrigerant R32

Refrigerant R32 is environmentally friendly, combustible and odourless. R32 can burn and explode under certain conditions. However, there will be no risk of burning and explosion if you comply with the following table to install your air conditioner in a room with an appropriate area and follow the safety precautions.
R32 contains fluorinated greenhouse gases. Its global warming potential (GWP) value is 675. From the point of view of global environment protection, do not release CFCs into atmosphere during installation work.

■ Room area for air conditioner with refrigerant R32

Refrigerants	Model	Room Area
R32	1.0HP (9k)	Above 10m²
	1.5HP (12k)	Above 13m²
	2.0HP (18k)	Above 15m²
	2.5HP (22k/24k)	Above 25m²

■ Warnings (use of refrigerant R32)

- Compliance with national gas regulations shall be observed.
- Keep ventilation openings clear of obstruction.
- The appliance shall be stored so as to prevent mechanical damage from occurring.
- Any person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accredited assessment authority, which authorises their competence to handle refrigerants safely in accordance with industry recognised assessment specifications.
- Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants.
- Ensure protection devices, refrigerating piping and fittings are well protected against adverse environmental effects (such as the danger of water collecting and freezing in relief pipes or the accumulation of dirt and debris).
- Protect the refrigerating system from accidental rupture due to moving furniture or reconstruction activities.
- Air-conditioner piping in the occupied space shall be installed in such a way to protect against accidental damage in operation and service.
- Precautions shall be taken to avoid excessive vibration or pulsation to refrigerating piping.
- Ventilate if there is refrigerant gas leakage during operation. It may cause toxic gas when the refrigerant comes in contacts with fire. Be aware that the refrigerant may not contain an odour.
- The appliances shall be stored, installed and operated in a well ventilated room with an indoor floor area larger than [refer Room area for air conditioner with refrigerant R32].
- Since the working pressure for R32/R410A is higher than that of refrigerant R22 model, replacing conventional piping and flare nuts on the outdoor unit side are recommended.
- Connect the refrigerant piping securely before running the compressor. If the refrigerant piping is NOT connected and the stop valve is open when the compressor is run, air will be sucked in. This will cause abnormal pressure in the refrigeration cycle, which may result in equipment damage and even injury.

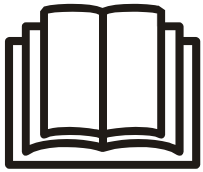
Refrigerant R32

■ Warnings (use of refrigerant R32)

- DO NOT use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- DO NOT install outdoor unit near handrail of veranda. If the air-conditioner unit is installed near the handrail of a veranda of a high rise building, a child may climb up and cross over the handrail, causing an accident.
- The mixing of different refrigerants within a system is prohibited. Only use R32 as refrigerant. Other substances may cause explosions and accidents.
- For R32/R410A model, use piping, flare nut and tools which is specified for R32/R410A refrigerant. Using of existing (R22) piping, flare nut and tools may cause abnormally high pressure in the refrigerant cycle (piping), and possibly result in explosion and injury. For R32 and R410A, the same flare nut on the outdoor unit side and pipe can be used. We strongly recommend you to use new piping.
- DO NOT use mineral oil on flared part. DO NOT re-use flares. Use new flares to prevent refrigerant gas leakage.
- DO NOT open the valves before flaring is complete. This would cause refrigerant gas leakage.
- Any part of refrigerating circuit (evaporators, air coolers, AHU, condensers or liquid receivers) or piping should not be located in the proximity of heat sources, open flames, operating gas appliance or an operating electric heater.
- The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- DO NOT pierce or burn as the appliance is pressurised.
- NEVER directly touch any accidental leaking refrigerant. This could result in severe wounds caused by frostbite.



Caution: Risk of fire/ flammable materials (Required for R32/R290 units only)



IMPORTANT NOTE: Read this manual carefully before installing or operating your new air conditioning unit. Make sure to save this manual for future reference.

Explanation of symbols displayed on the unit (For R32 only):

	WARNING	This symbol shows that this appliance uses a flammable refrigerant. If the refrigerant is leaked and exposed to an external ignition source, there is a risk of fire.
	CAUTION	This symbol shows that the operation manual should be read carefully.
	CAUTION	This symbol shows that a service personnel should be handling this equipment with reference to the installation manual.
	CAUTION	This symbol shows that information is available such as the operating manual or installation manual.

Refrigerant R32

■ Warnings (use of refrigerant R32)

1. **Transport of equipment containing flammable refrigerants, See: Transport Regulations.**
2. **Marking of equipment using signs, See: Local Regulations.**
3. **Disposal of equipment using flammable refrigerants, See: National Regulations.**
4. **Storage of equipment/appliances:**
   The storage of equipment should be in accordance with the manufacturer's instructions.
5. **Storage packed (unsold) equipment**
   Storage package protection should be constructed such that mechanical damage to the equipment inside the package will not cause a leak refrigerant charge. The maximum number of pieces of equipment permitted to be stored together will be determined by local regulations.
6. **Information on servicing**
   a. Checks the area
      - Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is minimised. For repair to the refrigerating system, the precautions shall be complied with prior to conducting work on the system.

   c. Work procedure
      - Work shall be undertaken under a controlled procedure so as to minimise the risk of flammable gas or vapour being present while the work is being performed.

   e. General work area
      - All maintenance staff and others working in the local area shall be instructed and supervised on the nature of work being carried out.
      - Avoid working in confined spaces. Always ensure away from source, at least 2 metres of safety distance, or zoning a free-space area of at least 2 metres in radius.

   h. 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 a potentially flammable atmosphere.
      - Ensure that the leak detection equipment being used is suitable for use with flammable refrigerants, i.e. non-sparking, adequately sealed or intrinsically safe.
      - In case of leakage/spillage, immediately ventilate area and stay upwind and away from the spill/release.
      - In case of leakage/spillage, do notify persons down wind of the leaking/spill, isolate immediate hazard area and keep unauthorised personnel out.

   i. Presence of fire extinguisher
      - If any hot work is to be conducted on the refrigerating equipment or any associated parts, appropriate fire extinguishing equipment must be available at hand.
      - Have a dry powder or CO2 fire extinguisher adjacent to the charging area.

   j. No ignition sources
      - No person carrying out work in relation to a refrigerating system which involves exposing any pipe work that contains or has contained flammable refrigerant shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion. He/She must not be smoking when carrying out such work.
      - All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which flammable 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 must be displayed.

■ Warnings (use of refrigerant R32)

k. Ventilated area
- 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 open space atmosphere.

l. Checks to the refrigerating 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 department for assistance.
- The following checks shall be applied to installations using flammable refrigerants.
  - The actual refrigerant charge 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.
  - Markings on the equipment continue to be visible and legible. Markings and signs that are illegible shall be corrected.
  - Refrigerating 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 properly protected against being corroded.

m. Checks to electrical devices
- Repairs and maintenance to electrical components shall include initial safety checks and component inspection procedures.
- Initial safety checks shall include but not limit to:
  - That capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking.
  - That there is no live electrical components and wiring are not exposed while charging, recovering or purging the system.
  - That there is continuity of earth bonding.
- At all times the manufacturer's maintenance and service guidelines shall be followed.
- If in doubt, consult the manufacturer's technical department for assistance.
- 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.
- The owner of the equipment must be informed or reported so all parties are advised thereinafter.

7. Repair to sealed components

During repairs to sealed components, all electrical supplies shall be disconnected from the equipment being worked upon prior to any removal of sealed covers, etc.
If it is absolutely necessary to have an electrical supply to equipment during servicing, then a permanently operating form of leak detection shall be located at the most critical point to warn of a potentially hazardous situation.
Particular attention shall be paid to the following to ensure that by working on electrical components, the casing is not altered in such a way that the level of protection is affected. This shall include damage to cables, excessive number of connections, terminals not made to original specification, damage to seals, incorrect fitting of glands, etc.

■Warnings (use of refrigerant R32)

Ensure that apparatus is mounted securely.
Ensure that seals or sealing materials have not degraded such that they no longer serve the purpose of preventing the ingress of flammable atmospheres.
Replacement parts shall be in accordance with the manufacturer's specifications.
Note: The use of silicon sealant may inhibit the effectiveness of some types of leak detection equipment. Intrinsically safe components do not have to be isolated prior to working on them.

8. Repair to intrinsically safe components
Do not apply any permanent inductive or capacitance loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use.
Intrinsically safe components are the only types that can be worked on while live in the presence of a flammable atmosphere.
The test apparatus shall be at the correct rating.
Replace components only with parts specified by the manufacturer. Unspecified parts by manufacturer may result in ignition of the refrigerant in the atmosphere from a leak.

9. Cabling
Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects.
The check shall also take into account the effects of ageing or continual vibration from sources such as compressors or fans.

10 Detection of flammable refrigerants
Under no circumstances shall potential sources of ignition be used in the searching or detection of refrigerant leaks.
A halide torch (or any other detector using a naked flame) shall not be used.
The following leak detection methods are deemed acceptable for all refrigerant systems.

- No leaks shall be detected when using detection equipment with a sensitivity of 5 grams per year of refrigerant or better under a pressure of at least 0,25 times the maximum allowable pressure (>1.04MPa, max 4.15MPa) for example, a universal sniffer.
- Electronic leak detectors may be used to detect flammable refrigerants, but the sensitivity may not be adequate, or may need recalibration. (Detection equipment shall be calibrated in a refrigerant-free area.)
- Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used.
- Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed and the appropriate percentage of gas (25 % maximum) is confirmed.
- Leak detection fluids are also suitable for use with most refrigerants, for example, bubble method and fluorescent method agents. The use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work.
- If a leak is suspected, all naked flames shall be removed/extinguished.
- If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. Oxygen free nitrogen (OFN) shall then be purged through the system both before and during the brazing process.

11. Removal and evacuation
When breaking into the refrigerant circuit to make repairs-or for any other purpose-conventional procedures shall be used. However, it is important that best practice is followed since flammability is a consideration. The following procedure shall be adhered to:

Remove Refrigerant ~> purge the circuit with inert gas~>evacuate~>purge with inert gas~>open the circuit by cutting or brazing

■ Warnings (use of refrigerant R32)

The refrigerant charge shall be recovered into the correct recovery cylinders.
The system shall be purged with OFN to render the appliance safe. (remark: OFN = oxygen free nitrogen, type of inert gas)
This process may need to be repeated several times.
Compressed air or oxygen shall not be used for this task. Purging shall be achieved by breaking the vacuum in the system with OFN and continuing to fill until the working pressure is achieved, then venting to the atmosphere, and finally pulling down to a vacuum.
This process shall be repeated until no refrigerant is within the system.
When the final OFN charge is used, the system shall be vented down to atmospheric pressure to enable work to take place.
This operation is absolutely vital if brazing operations on the pipe work are to take place.
Ensure that the outlet for the vacuum pump is not close to any potential ignition sources and there is ventilation available.

12. Charging procedures

In addition to conventional charging procedures, the following requirements shall be followed.

- Ensure that contamination of different refrigerants does not occur when using charging equipment.
- Hoses or lines shall be as short as possible to minimise the amount of refrigerant contained in them.
- Cylinders shall be kept in an appropriate position according to the instructions.
- Ensure that the refrigerating system is earthed prior to charging the system with refrigerant.
- Label the system when charging is complete (if not already).
- Extreme care shall be taken not to over fill the refrigerating system.

Prior to recharging the system it shall be pressure tested with OFN.
The system shall be leak tested on completion of charging but prior to commissioning.
A follow up leak test shall be carried out prior to leaving the site.
Electrostatic charge may accumulate and create a hazardous condition when charging and discharging the refrigerant. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before charging/discharging.

13. Decommissioning

Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its details.It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of recovered refrigerant.
It is essential that electrical power is available before the task is commenced.
1) Become familiar with the equipment and its operation.
2) Isolate system electrically.
3) Before attempting the procedure ensure that:

- mechanical handling equipment is available, if required, for handling refrigerant cylinders;
- all personal protective equipment is available and being used correctly;
- the recovery process is supervised at all times by a competent person;
- recovery equipment and cylinders conform to the appropriate standards.

4) Pump down refrigerant system, if possible.
5) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
6) Make sure that cylinder is situated on the scales before recovery takes place. g) Start the recovery machine and operate in accordance with instructions.
7) Do not overfill cylinders. (No more than 80 % volume liquid charge).
8) Do not exceed the maximum working pressure of the cylinder, even temporarily.

■ Warnings (use of refrigerant R32)

9) When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.
10) Recovered refrigerant shall not be charged into another refrigerating system unless it has been cleaned and checked.
Electrostatic charge may accumulate and create a hazardous condition when charging or discharging the refrigerant. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before charging/discharging.

14. Labelling

Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed. Ensure that there are labels on the equipment stating the equipment contains flammable refrigerant.

15. Recovery

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely.
When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed.
Ensure that the correct number of cylinders for holding the total system charge are available.
All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e. special cylinders for the recovery of refrigerant).
Cylinders shall be complete with pressure relief valve and associated shut-off valves in good working order.
Recovery cylinders are evacuated and, if possible, cooled before recovery occurs.
The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of flammable refrigerants.
In addition, a set of calibrated weighing scales shall be available and be in good working order.
Hoses shall be complete with leak-free disconnect couplings and in good condition.
Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release. Consult manufacturer if in doubt.
The recovered refrigerant shall be returned to the refrigerant supplier in the correct recovery cylinder, and the relevant Waste Transfer Note arranged.
Do not mix refrigerants in recovery units and especially not in cylinders.
If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant.
The evacuation process shall be carried out prior to returning the compressor to the suppliers.
Only electric heating to the compressor body shall be employed to accelerate this process.
When oil is drained from a system, it shall be carried out safely.

Safety Precautions

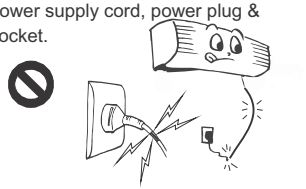
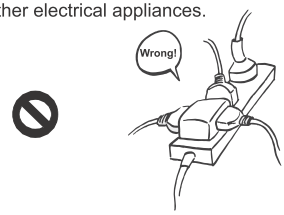
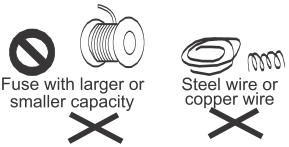
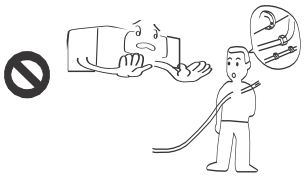
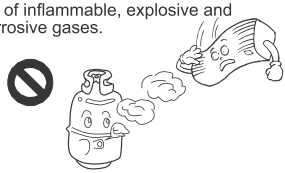
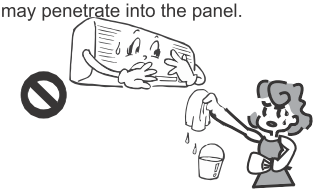
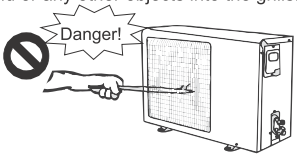
For refrigeration system work, install according to this installation instructions strictly. If installation is defective, it will cause water leakage, electric shock or fire.

- Select an installation location which is easy for maintenance. Incorrect installation, service or repair of this air conditioner may increase the risk of rupture and this may result in loss damage or injury and/or property.
- Do not install this appliance in a laundry room or other location where water may drip from the ceiling, etc.
- Tighten the flare nut with a torque wrench according to specified method. If the flare nut is over-tightened, after a long period, the flare may break and cause refrigerant gas leakage.
- Prevent liquid or vapour from entering sumps or sewers since vapour is heavier than air and may form suffocating atmospheres.
- Carry out drainage piping as mentioned in installation instructions. If drainage is not perfect, water may enter the room and damage the furniture.
- Do NOT branch the power supply for the drain pump, etc. from the terminal block. This could result in electrical shock or fire.

Keep plastic bag (packaging material) away from small children, it may cling to nose and mouth and prevent breathing.

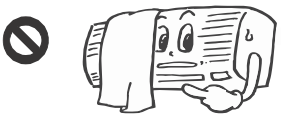
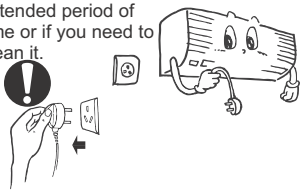
- All wiring MUST be performed by an authorised electrician and MUST comply with the applicable legislation.
- Make sure that the system is earthed properly.
- Turn OFF the power supply before servicing.
- Wire routing must be properly arranged so that control board cover is fixed properly. Install the control board cover before turning ON the power supply. If control board cover is not fixed perfectly, it will cause fire or electrical shock.
- Do not tie up the power supply cord into a bundle by band.
- Secure the electrical wiring with cable ties so that the cables do NOT come in contact with sharp edges or piping, particularly on the high-pressure side.
- For electrical work, follow the national regulation, legislation and this installation instructions. An independent circuit and single outlet must be used. If electrical circuit capacity is not enough or defect found in the electrical work, it will cause electrical shock or fire.
- This equipment is strongly recommended to be installed with Earth Leakage Circuit Breaker (ELCB) or Residual Current Device (RCD), with sensitivity of 30mA at 0.1 sec or less. Otherwise, it may cause electrical shock and fire in case of equipment breakdown or insulation breakdown.
- It is recommended that the power supply cord be connected to an Isolating Device (Double Pole Switch) at 20A MCB.
- In unavoidable situation, and if permitted by local national regulations, the power supply may be connected to the receptacle using power plug.
  Use an approved 15/16A (1.0 ~ 1.5HP) or 16A (2.0HP) power plug with earth pin for the connection to the socket.

Safety Precautions

Never use broken, unspecified cord, modified cord or extension cord for power supply cord, power plug & socket.  Otherwise it will lead to fire disaster, electric shock or short circuit.	Never use the same power socket with other electrical appliances.  Otherwise it will lead to fire disaster, electric shock or short circuit.	Never use fuse with improper capacity or other metal fuses  Otherwise it will lead to fire disaster, electric shock or short circuit.
The air conditioner must be well grounded and the grounding wire should not be connected to the gas pipe, water supply pipe and lighting.  Otherwise it will lead to accidents.	Never put air conditioner in the place where the combustible gas may be leaked. Never use it in the environment full of inflammable, explosive and corrosive gases.  Otherwise it will lead to fire disaster or explosions.	Never put chemical spray or paint near the air conditioner or spray towards the air conditioner.  Otherwise it will lead to fire disaster or explosions.
Never wash air conditioner with water or other fluid, as the water may penetrate into the panel.  Otherwise, the internal electrical parts may be damaged.	When the fan blade is running, do not touch the air outlet of the indoor unit and outdoor unit. Also, do not put your hand or any other objects into the grills.  Otherwise it will cause injury to the user or damage to the air conditioner.	Never let the air conditioner blow towards heater appliances.  Otherwise it will lead to incomplete combustion and gas poisoning.

⊘	**Do not repair the air conditioner without proper supervision** Please contact our service center so professional personnel can assist you.
⊘	**Ensure the place of installation can support the weight of the air conditioner.** If the installation bracket for the outdoor unit is broken, do not place the air conditioner on it as it may cause injury or it may damage the air conditioner.
⊘	**Do not stand on the outdoor unit or put objects on it.** It may cause injury or it may damage the air conditioner.
⊘	**Do not plug or unplug the power plugs with wet hands and do not operate the remote control with wet hands.** Otherwise, it will damage the air conditioner or it will lead to electric shock.
!	**If anything strange occurs, such as a burning smell coming from the unit, stop the air conditioner immediately and cut off the power supply.** If measures are not taken in time, the air conditioner will be damaged. It may also lead to electric shock or fire disaster. Please contact our service center.
!	**Make sure the power plug is completely inserted into the socket.** Otherwise, it will lead to a fire disaster.
!	**Regularly clean the dust from the power plug.** Regular cleaning can help avoid fire disasters.

Safety Precautions

Do not block the air inlet and outlet of indoor unit and outdoor unit  Otherwise, it will influence the condition of the air conditioner.	For your safety, unplug the power cord from the wall outlet if the air conditioner will not be used for and extended period of time or if you need to clean it.  Otherwise, it may cause injury,	Do not expose your body to the air flow for a long time. It is not good for your health. 

	Do not directly blow at children, animals and plants Direct the airflow of the air conditioner so that is does not blow directly on children, animals and plants.
	Do not put the objects, which need to avoid moisture, under the indoor unit and outdoor unit. Sometimes the moisture in the air will condense into water droplets, thus damaging the object which need to avoid moisture.
	Do not touch the aluminum parts of indoor unit or outdoor unit of air conditioner. The sharp aluminum sheet may cause injury.
	Tubing for the drain hose should ensure good drainage This is to avoid water getting into your room.
	Proper Ventilation Insufficient ventilation will cause oxygen deficiency and headaches. If the air conditioner is used simultaneously with any gas burning appliances, please remember to ensure proper ventilation.
	When the air conditioner is cooling your home, keep sun light away. Otherwise it will influence the refrigeration effect.

Temperature Conditions

In the following temperature range, the air conditioning protective equipment will run and the air conditioner will stop. As a result, to ensure the normal operation of air conditioner, the following conditions should be avoided.

Cooling	Outdoor temperature 21-43℃	Room temperature 21-32℃

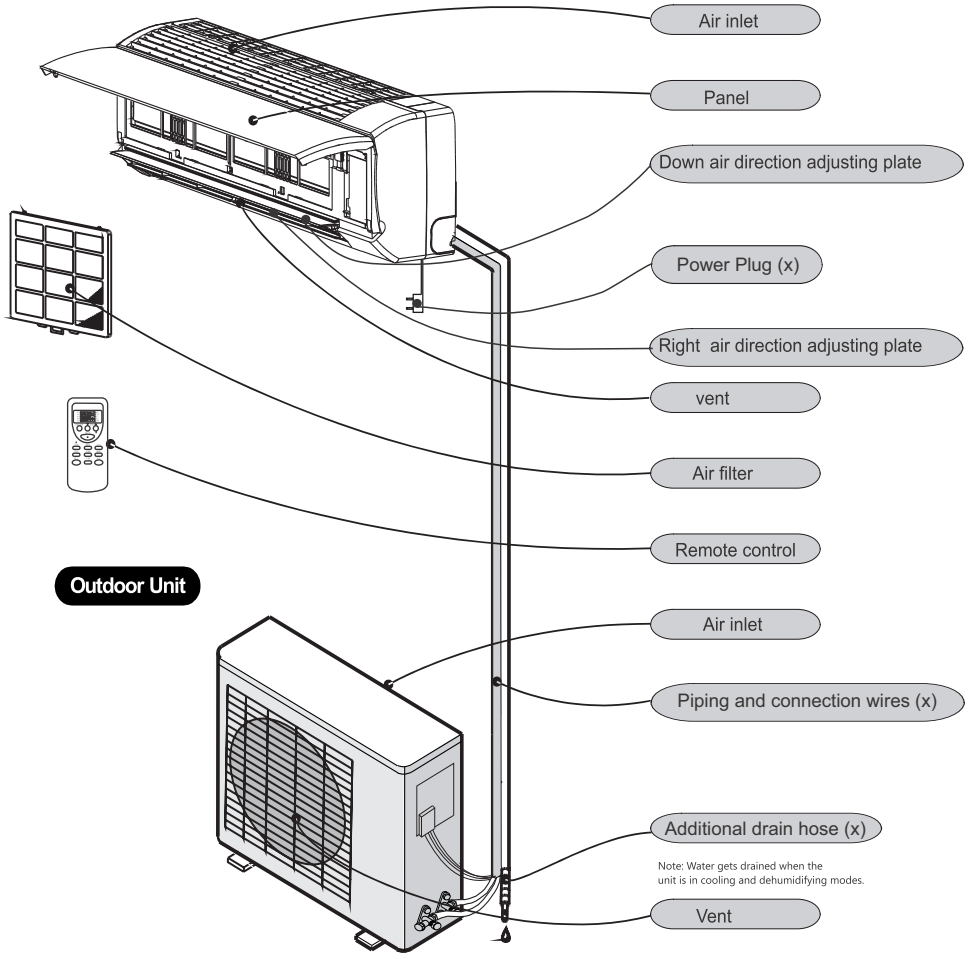
If the power is not cut off, and the machine is started immediately after stoppage or the mode is changed during operation, the protective device in the unit will work. The air conditioner's compressor will stop operating for 3 minutes to protect the compressor. After 3 minutes, the compressor will start running.

Inspection before operation

Newly installed air conditioner	1. Check if the installation is reasonable; 2. Check if the batteries are installed in the remote controller; 3. Check if the power supply is connected.

Name and Function of each Part

Indoor Unit



*Images may differ in appearance from the actual product.

Display icons

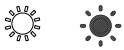
Display icon

Running indicator: 

Timer indicator: 

Sleeping indicator: 

Cooling indicator: 

Heating indicator: 

Dehumidifying indicator: 

Ventilation run icon: 

Auto indication icon: 

Low wind run icon: 

Stroke run icon: 

The high wind run icon: 

Strong run icon: 

Digital display tube icon: 

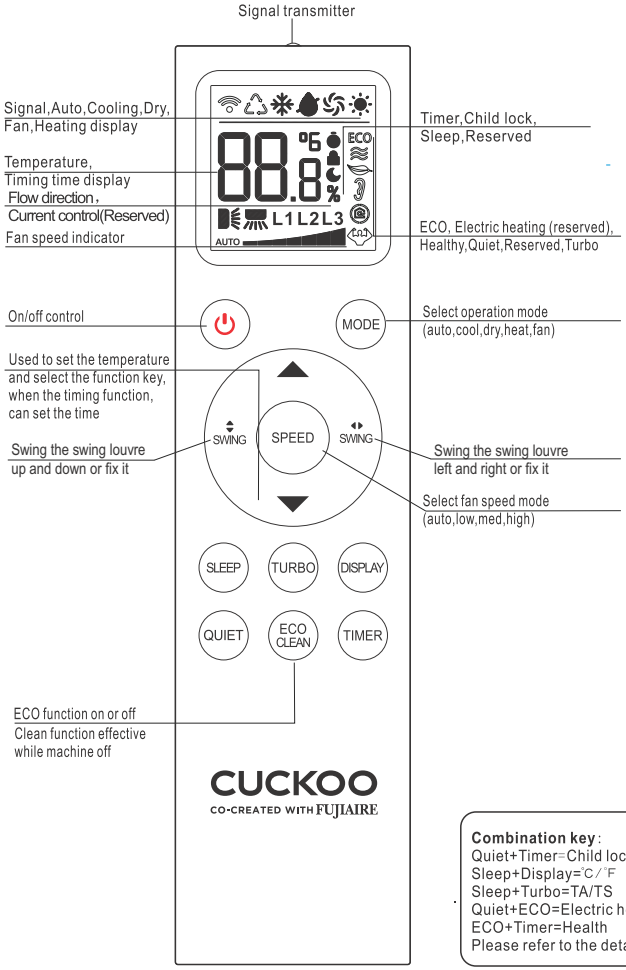
Electric heating run icon: 

Above figure shows all icons for the purpose of the explanation but practically only the pertinent parts are shown.
The icons may be changed, but it does not affect your operation.

Note: You can check product parameters from the nameplate.

Use of remote controller

- On first use, insert batteries and ensure that they are in the correct orientation.
- Ensure that the remote controller is pointed at the signal receiver without any obstruction; Do not make the remote controller fall off or throw it carelessly; Any liquid cannot flow into the remote controller; Do not put the remote controller near high temperature or on the place exposed to direct sunlight or strong light.
- If the remote controller is unable to be operated, please reinsert the batteries after removing it for 30 second. If it is still unable to be operated, please replace them with new batteries. The useless batteries should be disposed according to the relevant national regulations.
- Do not mix the use of new-and-used batteries or different type batteries, otherwise, the remote controller should be unable to be operated.
- If the remote controller is not used for a long time, please take out the batteries to prevent the remote controller from being damaged by the leakage fluid.
- Please understand that this type of remote controller is a general type, including the entire function button. The specific function is subject to the function of A/C.

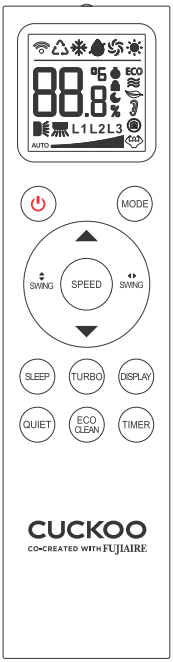


Combination key:
Quiet+Timer=Child lock
Sleep+Display=℃/℉
Sleep+Turbo=TA/TS
Quiet+ECO=Electric heating
ECO+Timer=Health
Please refer to the detailed instructions.

★ **The picture of the remote control is for reference only, please refer to the actual product.**

PS: This A/C does not have a heating function. No corresponding action will be taken if you press the 'heating' button or set mode to heating. Please do not set mode to heating.

Use of remote controller



Button Guide Louvre

* Flap guide louvre up-and-down when this button is pressed. Re-press to fix louvre.

Button Swing Louvre

* Button swing louvre (internal louvre): swing "swing louvre" left-and-right or fix louvre.

(only available for the A/C unit with this function)

Button Fan Speed

* Cycles fan speed when this button is pressed, as follows:

▬▬▬▬▬▬	**High speed**
▬▬▬▬	**Medium speed**
▬▬	**Low speed**
Auto	**Auto speed**
	TURBO
	QUIET

Button Display

* When the air conditioner is on, press "DISPLAY" to turn on the room machine display and press again to turn off the air conditioner.

Button Sleep

* A/C enters low speed mode by default under sleep mode. Fan speed is adjustable.

Button

* On/Off control, for turning the air conditioning on or off.

ECO Button

* Pressing ECO to switch cyclically according to "**ECO--STOP ECO--ECO**"

Button Mode

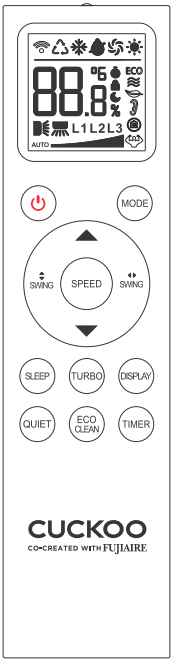
* Cycle mode when this button is pressed as follows:
  AUTO--COOL--DRY--HEAT--FAN--AUTO

▲/▼ (Temperature/Time)Button

* Press ▲ once to set the temperature to rise by 1°C, press ▼ once to decrease the temperature by 1°C.
* Temperature setting range is 16-32°C.

Note: This button is invalid in DRY/FAN mode.

Use of remote controller



Button Health (only available for the A/C with this function)

* Press the ECO and TIMER keys to enable the health function. Then press again to cancel the feature.
* Only by adding related auxiliary components (such as UV lamp or anion generator) this feature be activated. This feature is optional and is not available by default.

Button Timer

* ▲ / ▼ (temp/timer) control button, each time press "▲" to set temperature rises 1°C, press "▼" to set temperature decrease 1°C.
* Temperature setting range is 16-32°C.

PS: The button is invalid when in clean and fan mode. Button "TIMER" should be operated with "time". Specific operation is subject to button timer description.

Pressing a key other than the open key will exit the timing display, but the timing is still valid. After the timed shutdown function is enabled, press the shutdown button to exit the timed shutdown function. After the timed startup function is enabled, press the power button to exit the timed startup function.

Button Cleaning

* Only under remote controller condition of power off, can it transmit "auto clean" signal when this button is press to power on.

The remote control and indoor unit will display CL. Press CLEAN or ON/OFF again to exit the automatic cleaning function. In automatic cleaning mode, the air conditioner will run for 10 to 15 minutes and then shut down automatically.

°C / °F

* When the air conditioner is on, press the SLEEP and DISPLAY keys at the same time to switch between the °C and °F displays. The default value is Celsius.

TA/TS (only available for the A/C with this function)

* Press the indoor machine once to display TS value (TS: setting temperature value), press again to display the indoor temperature TA value (current indoor environment temperature),and switch the cycle. This function is optional, the electronic control panel does not support this function by default.

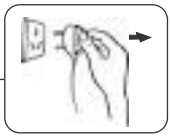
Child lock function

* Press the QUIET and TIMER keys at the same time to lock all the functions of the remote control, press again to unlock.

Cleaning and Maintenance

[Cleaning and Maintenance]

The power must be shut off before maintenance.



1. Remove the filter screen

Make sure the air conditioner is turned off.

Gently push up the panel and remove it by lifting up the filter screen towards yourself.



2. Clean the filter screen

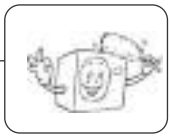
Gently pat it or clean with a vacuum cleaner. If the filter screen is too dirty, it can be washed by the solution containing a small amount of neutral detergent (example: dishwashing liquid). After washing, dry the filter screen and install it to the original location.

Note: The filter screen should not be exposed to sunlight, dried by stove fire, or washed with hot water above 40°C.



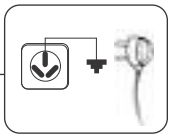
3. Clean the air conditioner

For safety purposes, the power plug must be unplugged before cleaning to avoid electric shock.
Do not wash the air conditioner with water.
Wipe the machine with soft cloth.
Do not wash the machine with volatile oil, gasoline, diluent, putty powder, etc.
For fingerprint or oil contamination, please wash with household neutral detergent.



4. If air conditioner has not been used in a long time.

Before:
Shut down the air conditioner and pull out the power plug.
Please carefully clean and maintain the air filter screen and other parts.
Cover the outdoor unit with plastic cloth to prevent dust or waste from entering into the machine.



After:
Check if the air inlet and air outlet of indoor unit and outdoor unit are blocked.
The protective cover of outdoor unit must be removed.
Check if the installation base is corrosive or rusted.
Check if the power cable and grounding wire are in normal condition.
Check if the drain hose is bent, end is lifted, or is blocked.
Before operation, check and make sure the air filter screen is well installed. If the machine is running without air filter screen, the air conditioner may be damaged by dust and foreign substances.



Notices for Installation

[Notices for Installation]

Installation environment

The air conditioner must be installed by professionals. The "Installation Instructions" is only for the reference of professional installation personnel! The installation must conform to our after-sale service regulations.

1. Requirements for installation environment of indoor unit
   1. Install on a non-vibrating and solid wall and make horizontal adjustment. Put the back of wall-hanging unit against the wall.
   2. There are no obstacles preventing the proper air circulation at air inlet and outlet.
   3. Keep away from heat source and inflammables and places where the moisture is strong.
   4. The panel of the indoor unit should avoid being exposed to sunlight. The operation location should not have strong electromagnetic interference.
   5. It should be convenient to connect the outdoor unit and draining through drain hose.
   6. It should be near to a power socket with a dedicated line.
   7. Install by following the instructions on the diagram to ensure the distance between the unit and wall, ceiling, and other obstacles, so as to ensure the normal operation and maintenance of unit.
   8. Height of the indoor unit to the floor should be higher than the eye level.
2. Requirements for installation environment of outdoor unit
   1. Installation foundation should be solid and firm.
   2. Install by following the instructions in the diagram to ensure the distance between the unit and other obstacles.
   3. It should add weather-proof and sunshade shelter to prevent the outdoor unit from being damaged by rain and sunlight. Be careful not to influence the heat dissipation.
   4. Keep away from the heat source and inflammables.
   5. It should be installed in a proper place to prevent the operation noise and circulated gas of outdoor unit from influencing the neighbours.

Notices for Installation

1. The fuse types for the series of indoor units include 50T or 50F and the rated parameter is T 3.15A 250V. No fuse is equipped on the machine. Please select proper fuses or other over-current protective equipment for power supply in accordance with the requirements on the main nameplate.
2. The series of air conditioners can be safely used under the external static pressure of 0.8-1.05 times of standard atmospheric pressure.
3. The air conditioner should be installed in accordance with national wiring rules.
4. Please check if the electric circuit connection, electric wires, electric meter, fuses, sockets, and switches for air conditioners conform to the national electrical safety standards. Make sure there is good grounding protection, Grounding wire must not be connected to the water supply pipe, gas pipe and other unreliable places. (Note: Installation and connection of electrical equipment should be performed by qualified professional technical personnel holding electrician certificate so as to avoid accidents).
5. Please check if the power supply for air conditioner conforms to the requirements of national standards.

	**When installing or handling the air conditioner, no other gases except for specified refrigerant is allowed to mix in the refrigerant pipeline system.** Otherwise the refrigerating cycle will be in abnormal high pressure and lead to pipe breaking and even personal injury.
	The unused power lines should not be tied up with bandage. Keep the lines in the piping tank in the back of the indoor unit. Otherwise it may cause heating and even fire.
	Do not process or prolong the power lines and use multiple distribution wires Otherwise it may cause problem like poor contact, poor insulation or exceeding the permissible current, which may lead to dangerous situation like electric shock, fire, etc.
	**The connecting terminals for indoor and outdoor units must be firmly connected and fixed with fixed device.** Otherwise the terminal connecting position might get overheated and catch fire.
	The air conditioner must use independent circuit and must be equipped with delay action circuit breaker or auto-circuit breaker. If the air conditioner uses a line shared with other devices, it may overheat and catch fire.
	After installation, check to make sure no refrigerant is leaked, refrigerant system is well sealed and drain hose is unobstructed. Otherwise the refrigerating effect will be influenced and the refrigerant leakage will do harm to human's health.

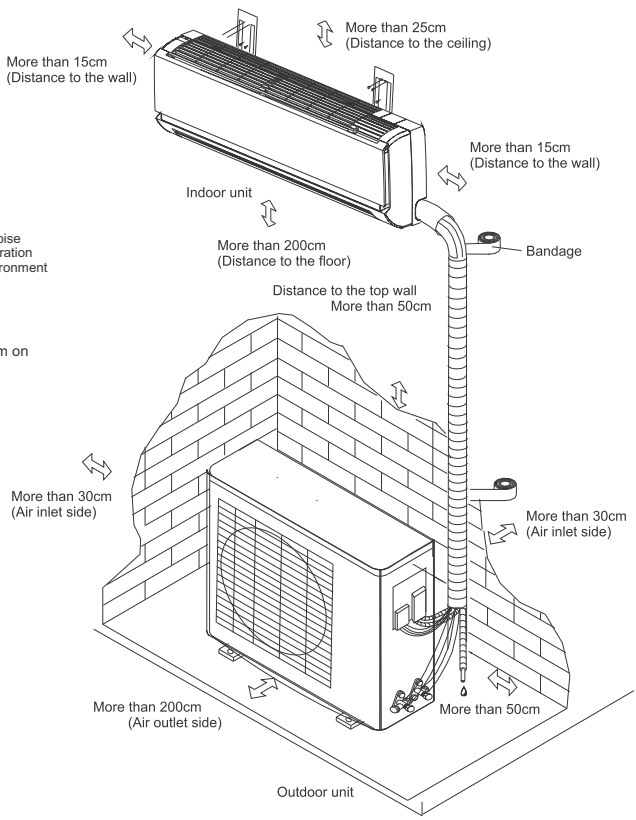
Installation instructions

[Installation Guidance]

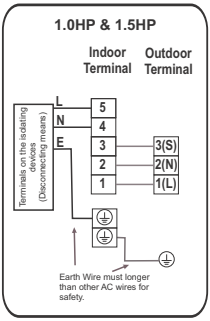
Refrigerant Piping

Model	1.0/1.5 HP	2.0/2.5 HP
Max. Piping Length (m)	10	10
Max. Height Difference (m)	5	8
Additional Refrigerant (g/m)	20	30
Piping Length for Adding of Refrigerant (m)	4	4

The suggested shortest pipe length is 3m, in order to avoid noise from the outdoor unit and vibration. (Mechanical noise and vibration may occur depending on how the unit is installed and the environment in which it is used.)



Below diagram for reference only, refer to wiring diagram on unit as actual.



Note:
Isolating Devices should have minimum 3.0mm contact gap.
Earth Wire shall be Yellow/Green (Y/G) in colour and longer than other AC wires.

Wiring (Recommend)

The figure shown in the table are for information purpose only. They should be checked and selected to comply with the local/national codes of regulations. This is also subjected to the type of installation and conductors used.

Model	1.0/1.5/2.0/2.5HP
Power Supply Cable Size	2.5mm²~4. 0mm²
Number of Conductors	3
Interconnection Cable (Indoor and outdoor)	2.5mm²~4. 0mm²
Number of Conductors	4

The power supply cord must be equivalent to H05RN-F (60245 IEC 57) which is the minimum requirement.

☑ **This is the schematic diagram and not the actual product.**

⚠Warning

- When the drainage nozzle is in the right of the indoor unit, as shown above, the left side of the indoor unit should not be 10mm lower and 20mm higher than the right side, so as to ensure the smooth draining of condensed water.
- When the drainage nozzle is in the left of the indoor unit, the right side of the indoor unit should not be 10mm lower or 20mm higher than the left side, so as to ensure the smooth draining of condensed water.

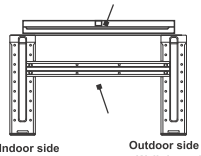
Installation instructions

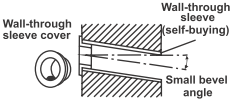
[Installation Guidance]

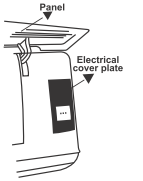
Installation of Indoor unit

● Mount the wall-hung plate and locate the wall-through hole.

1. Find proper location and adjust the mounting plate horizontally with level meter.
2. By considering the actual situation, the wall-through hole should be made a little lower than the inner part. Insert the wall-through sleeve and put on the cover.
3. Wall-hung plate should be fixed with at least 5 screws. The screws should be distributed evenly.

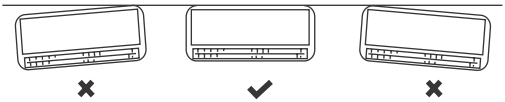






Note:
The number of cables of different air conditioning models will be different, please refer to the electrical diagram for wiring according to the actual number.

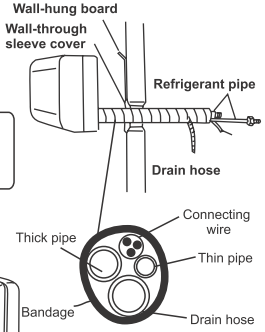
Steps:
Open the panel, remove the cover plate,and connect the cable correctly as shown in the electrical diagram.



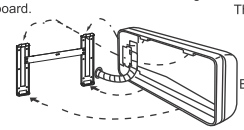
● Arrange pipeline and install the indoor unit

1. Arrange the connecting pipe, drainage pipe and electric wire at bottom to facilitate drainage. Electric wire and indoor & outdoor connecting wire should not be entangled together.

Note:
Drain hose of indoor unit can only be drawn out from its own side.

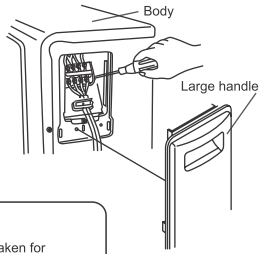


2. Fix the indoor unit on the wall-hung board.



Installation of Outdoor Unit

● Installation and fixation
Fix the mounting bracket (to be purchased additionally) on the wall and fix the outdoor unit firmly on the mounting bracket and remain level.



● Connect the electric wire of outdoor unit

1. Loosen the screws of large handle of outdoor unit.
2. Connect the connecting lines of indoor and outdoor units according to the connecting diagram for the large handle.

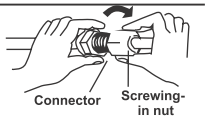
Warning

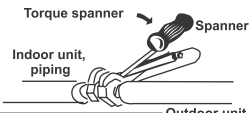
The complete measures must be taken for grounding connection. When the electric wire is suffering the external force, it should ensure the core wires (yellow/green lines) of grounding wire to be stretched after other current-conductor core wires.

Piping Connection

● Joint Connection

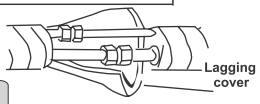
1. Align with centre of the pipe, screwing manually.
2. Screw the nut with a torque spanner and wrench. Screw according to the instructions of the torque spanner. The torques should not be too large or too small.





Diameter of connecting pipe(mm)	Tightening torque of nut (N·m)
6 or 6.35	15-20
9.52	31-35
12 or 12.7	45-50
15.88 or 16	60-65

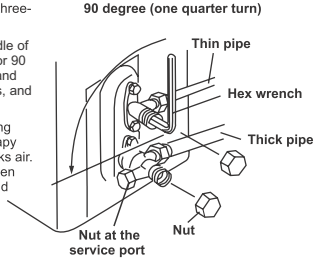
3. Wrap the connector with lagging cover



Operation Method for Exhausting Air

● Method for exhausting air

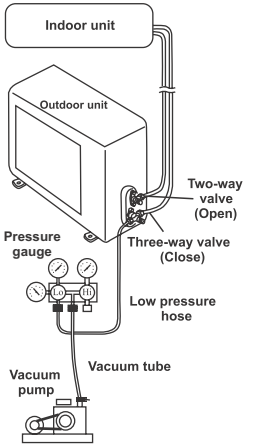
1. Remove the nuts on the two-way valve and three-way valve.
2. Turn the valve handle of the two-way valve for 90 degrees clockwise and keep for 10 seconds, and
3. Check the connecting part of pipe with soapy water to see if it leaks air. If no air leakage, open the two-way vale and then close.



4. During exhausting air, press the pin on the service port of three-way valve with hex wrench for 3 seconds and then release for 1 minute. Open the two-way valve and then close. Repeat the above procedure for 3 times to exhaust air.
5. Open the two-way valve and three-way valve with hex wrench. Screw in the nuts and finish the operation of exhausting air.

● Vacuum method (must be used for R410A refrigerant)

1. Remove the nut on the two-way valve and three-way valve and nut on service port. Connect the low-pressure hose on the dedicated pressure gauge to the service port. (The shut-off valve on two-way and three way valve are in off status)
2. Fully open the low-pressure switch on the pressure gauge and start vacuum pump.
3. Vacuumize for at least 25 minutes and make sure the pressure gauge indication is -0.1MPa. Close the low-pressure switch and then close vacuum pump. If the pressure does not increase within 5 minutes, please perform the next operation. Otherwise you should vacuumize again.
4. After vacuumizing, turn the shutoff valve counterclockwise on the two-way valve and hold for 10 seconds check the leakage (If any leakage is found, reconnect the pipe and then perform the above procedure again).
5. Quickly remove the low-pressure hose and open two-way valve and three-valve with hex wrench.
6. Fasten the nut on the valve body.



[Installation Guidance]

Inspection after installation

Inspection Items	Problems caused by improper installation
Check if installation is firm	Unit may have been dropped, vibrated or made a sound.
Check if there is any leakage	It may cause insufficiency of cooling (heating) capacity.
Check if the heat insulation of machine is sufficient	Condensation may occur.
Check if the drainage is smooth	Condensation may occur.
Check if the power voltage conforms to that on the product nameplate	The unit may not work properly.
Check if the lines and pipes are properly installed.	The unit may not work properly.
Check if the machine is safely grounded.	There might be a leakage.
Check if the electric wire type conforms to the specification.	The unit may not work properly.
The air outlet and inlet of indoor and outdoor unit are obstructed.	It may cause insufficiency of cooling (heating) capacity

Pilot run

● **Preparation for test run**

1. Power should not be turned on before completion of all installation works.
2. All lines are properly connected and all the electric wires are firmly connected.
3. Open the shut-off valve of thick and thin pipes
4. All the unnecessary materials, especially metal wire and thread, should be removed from the machine.

● **Method for test run**

1. Turn on the power, press ON/OFF button on the remote control to start the air conditioner.
2. Press the Mode Button to check whether each mode operates normally.

[Fault Analysis]

The following examples are not faults.

After shutting down, the air conditioner cannot restart immediately.	If the user restarts the air conditioner when it is just stopped, the 3 minutes protective timer will be automatically activated and the air conditioner will be restarted 3 minutes later.
If the air conditioner is shut down in cool mode, the indoor blower does not stop immediately, and the louvre does not close immediately. **(for machine type marked with *)**	It is because that the air conditioner is executing the mould-proof operation and the indoor unit is running with low wind and wind deflector will be closed after 30 seconds.
No wind is supplied in the beginning of heating	Before the heat exchanger of indoor unit is warm, wind supply is stopped to avoid blowing cold wind (for 2 to 5 minutes).
There is strange smell coming out when start-up.	It is because that the smoke and smell from cosmetics, wall or furniture is attached on the air conditioner and is dissipated by wind blowing.
Water flow sound can be heard during operation of the air conditioner	It is the flowing sound of internal refrigerant of the air conditioner
Crackle can be heard after starting or stopping the heating or refrigerating	It is caused by the thermal expansion and extraction.

Before contacting the service personnel, please check the following table that might be of help to you.

"Malfunction"	Analysis on the "Malfunction"
Air conditioner is unable to run.	① Check if power is failed. ② Check if power is connected. ③ Check if Timing ON/OFF function is set. ④ Check if the voltage is too high or too low. ⑤ Check if the residual current circuit breaker is switched off.
Cooling (heating) effect is not good.	① Check if the set temperature is OK. ② Check if the air inlet and outlet of indoor and outdoor unit are blocked. ③ Check if the air filter screen is blocked by too much dirt. ④ Check if all the doors and windows are closed. ⑤ Check if there are any heat sources.
Remote control is not functional	① When the remote control is exposed to direct sunlight or strong light, the remote signal may not be received. In this case, please block out the sunlight or dim the lighting. ② Check if it is within the reception range and if there are any obstructions blocking the remote control signal. ③ Check if the battery voltage is sufficient. Or you should replace with new batteries. ④ If the remote control display is not clear, please replace with new batteries.

In case of the following situations, please stop operation immediately, shut off power, and contact our dealers or authorised service centre.

- The fuse is always burnt out and electric switch is always disconnected.
- Electric wire is abnormally heated or the wire insulation is broken.
- Other abnormal status.