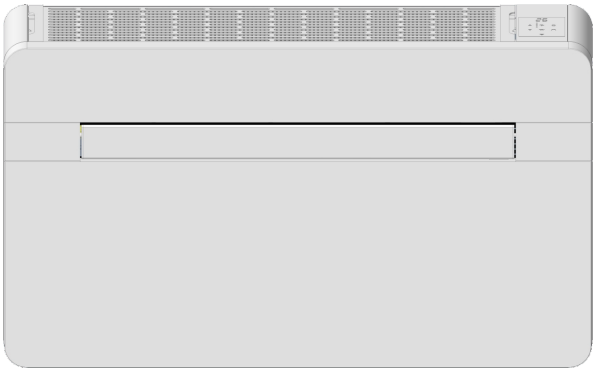


INSTALLATION AND USER MANUAL

BEFORE INSTALLING AND USING THIS AIR CONDITIONER PLEASE READ ALL INSTRUCTIONS CAREFULLY.

1. GENERAL INFORMATION

2. INSTALLATION

3. USE AND MAINTENANCE

AS A SAFETY PRECAUTION

	**WARNING**	THIS SYMBOL THAT THIS APPLIANCE USED A FLAMMABLE REFRIGERANT. IF THE REFRIGERANT IS LEAKED AND EXPOSED TO AN EXTERNAL IGNITION SOURCE, THERE IS A RISK OF FIRE.
	**CAUTION**	THIS SYMBOL THAT THE OPERATION MANUAL SHOULD BE READ CAREFULLY.
	**CAUTION**	THIS SYMBOL THAT A SERVICE PERSONNEL SHOULD BE HANDLING THIS EQUIPMENT WITH REFERENCE TO THE INSTALLATION MANUAL.
	**CAUTION**	THIS SYMBOL THAT INFORMATION IS AVAILABLE SUCH AS THE OPERATING MANUAL OR INSTALLATION MANUAL.

Before installing and using this air conditioner, please read all instructions carefully. This appliance is not intended for use by person (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.

WARNING
Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
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.
Be aware that refrigerants may not contain an odour.

The appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified for operation;
-a warning that the appliance shall be stored in a room without continuously operating open flames (for example an operating gas appliance) and ignition sources (for example an operating electric heater).
The appliance shall be stored so as to prevent mechanical damage from occurring.

The compliance with national gas regulations shall be observed;
Outdoor airinlet/outlet should be at least 15m away from other items.
Please ensure that there are no obstacles in front of the machine, keep ventilation openings clear of obstruction.
Servicing shall be performed only as recommended by the manufacturer.

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 an industry recognised assessment specification.
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.

Before servicing the appliance
Checks to 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 following precautions shall be complied with prior to conducting work on the system

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

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.

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 flammable atmospheres. Ensure that the leak detection equipment being used is suitable for use with flammable refrigerants, i.e. non-sparking, adequately sealed or intrinsically safe.

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 CO2 fire extinguisher adjacent to the charging area.

No ignition sources:
No person carrying out work in relation to a refrigeration 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. 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.

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.

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 department 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;
-- marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected;
-- 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.

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 whiule charging, recovering or purging the system;
that there is continuity of earth bonding.

Repairs 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.
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. The replacement part should be according to the listing of supplier/manufacturer
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.

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. Other parts may result in the ignition of refrigerant in the atmosphere from a leak

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.

Detection of flammable refrigerants:
Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used.

Leak detection methods:
The following leak detection methods are deemed acceptable for systems containing flammable refrigerants.
Electronic leak detectors shall be used to detect flammable refrigerants, but the sensitivity may not be adequate, or may need re-calibration. (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 suitable for use with most refrigerants but 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.

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 again with inert gas;
- open the circuit by cutting or brazing.

The refrigerant charge shall be recovered into the correct recovery cylinders. The system shall be “flushed” with OFN to render the unit safe. This process may need to be repeated several times. Compressed air or oxygen shall not be used for this task.
Flushing 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 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 pipework are to take place. Ensure that the outlet for the vacuum pump is not close to any ignition sources and there is ventilation available.

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 upright.
-- Ensure that the refrigeration 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 overfill the refrigeration 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.

Decommissioning:
Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. 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 reclaimed refrigerant. It is essential that electrical power is available before the task is commenced.

a) Become familiar with the equipment and its operation.
b) Isolate system electrically.
c) 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.

d) Pump down refrigerant system, if possible.
e) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
f) Make sure that cylinder is situated on the scales before recovery takes place.
g) Start the recovery machine and operate in accordance with manufacturer's instructions.
h) Do not overfill cylinders. (No more than 80 % volume liquid charge).
i) Do not exceed the maximum working pressure of the cylinder, even temporarily.
j) 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.
k) Recovered refrigerant shall not be charged into another refrigeration system unless it has been cleaned and checked.

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

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. Empty 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 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.

1.1 INTRODUCTION

PLEASE NOTE: Do not dispose of any packaging until the installation of the air conditioner is completed.

After having removed the packing, check that all the content is intact and complete. (See list of accessories). In the event of missing parts, contact your retailer.

This air conditioner has been designed to cool or heat the air of a room and should only be used for this purpose.

The manufacturer cannot be held liable for damage caused to property or injury to persons or animals due to incorrect installation, regulation and maintenance or improper use.

This air conditioner contains R32 refrigerant: at the end of its life, the disposal of this air conditioner must be in accordance with the strict regulation governing the recycling of this product, please operate with caution during the disposal. Please contact your local authority for regulatory advice.

Do not switch on before having totally assembled the air conditioner and before installing in its correct operating position.
Before starting the appliance, check that it is correctly earthed, according to the legislation in force in the country concerned.

1.2 IMPORTANT SAFETY INSTRUCTIONS

When using electrical appliances, basic safety precautions should always be followed:
Do not place objects on the product or allow objects to obstruct the inlet or outlet openings.
Extreme care should be taken when any product is used by, or near children and pets, and whenever the product is left operating and unattended.

Please note:
Before operating the product remove the air conditioner from its packaging and check it is in good condition.
Do not let children play with the packaging, for example plastic bags.
Do not operate any product with a damaged cord or plug, or after the air conditioner malfunctions, has been dropped, or damaged in any manner. Return the air conditioner to an authorised service center for examination and repair to avoid a hazard.

Do not attempt to repair or adjust any electrical or mechanical functions on this air conditioner as this may void warranty, contact your service engineer.

Always operate the product from a power source of the same voltage, frequency and raing as indicated on the product identification plate.
This air conditioner is not intended for use in wet or damp locations.

Do not place the air conditioner near an open flame, cooking or heating appliance, or hot surface.
Do not let the power cord hang over the edge of a table or counter. Arrange the power cord away from an area where it may be tripped over.
Never place the power cord under a carpet or rug.
Do not operate the air conditioner in areas where petrol, paint, or other flammable liquids are used or stored.
Do not carry out any cleaning or maintenance or access internal parts until the air conditioner has been disconnected from the mains electricity supply.
Do not alter the safety or regulating devices without the permission and instructions of the air conditioner manufacturer.
Do not pull, remove or twist the electric cable connected to the air conditioner, even if dis-connected from the mains electricity supply.
Avoid prolonged direct contact with the flow of the air from the air conditioner and the room being closed with no ventilation for a long period of time.

Repair or maintenance work must be carried out by a service engineer or by qualified technicians in compliance with the instructions given in this booklet. Do not alter the appliance, since hazardous situations could be created while the manufacturer of the appliance will not be liable for any damage or injury caused.

This instruction booklet is an integral part of the appliance and should therefore be carefully preserved and always accompany the appliance in the event of transfer to another owner or user or another installation engineer.

Should the booklet be damaged or lost, please request an additional.

1.3 RECEIVING THE GOODS

The air conditioner is delivered in a protective packaging and is accompanied by an instruction manual. This manual is an integral part of the air conditioner and should therefore be carefully read and preserved.
When the air conditioner is unpacked, please check that the air conditioner and the accessory pack are complete and undamaged.

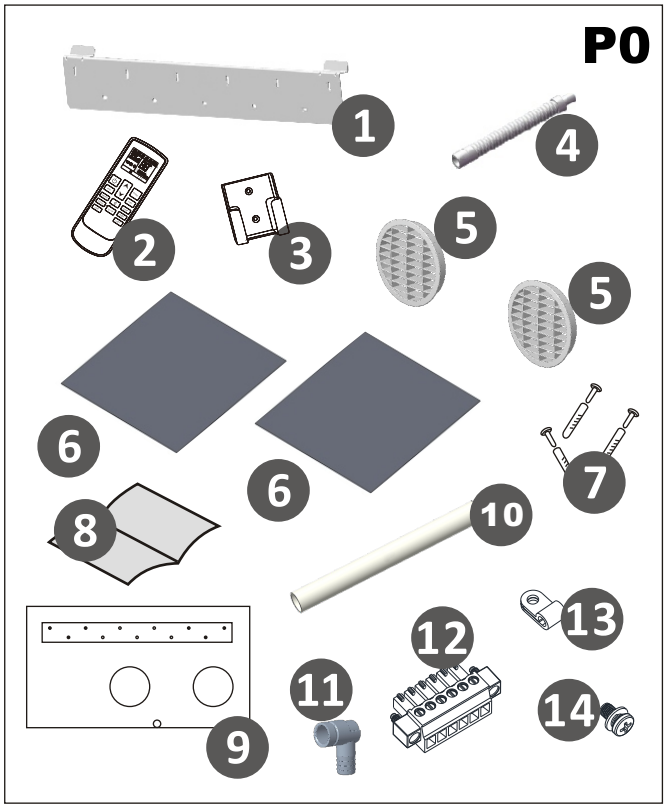
1.4 HANDLING

Be fully aware of the weight of the air conditioner before attempting to lift it. Take all necessary precautions to avoid damaging the product or causing personal injury.
It is advisable to remove the packaging only when the air conditioner has been located in the point of installation.
Carefully remove the adhesive strips positioned on the air conditioner.
Packaging components must be disposed correctly and not left within reach of children, since they are a potential source of danger.

1.5 LIST OF ACCESSORIES(P0)

1. FASTENING BRACKET
2. REMOTE CONTROL
3. REMOTE CONTROL HOLDER
4. DRAINAGE PIPE
5. EXTERNAL GRATING
6. PLASTIC SHEET AIR PIPE
7. KIT OF SCREWS
8. INSTRUCTION MANUAL
9. PAPER TEMPLATE FOR WALL DRILLING (See page)
10. FRESH AIR INTAKE PIPE(18.11inch)
11. INDOOR DRAINAGE ADAPTOR
12. TERMINAL (Male End, installed on the wire of the 24V Wall Thermostat)
13. CABLE CLIP
14. SCREW FOR CABLE CLIP

This product can be connected only to a supply with system impedance no more than 0.193 ohm. In case necessary , please consult your supply authority for system impedance information.



The product is conform to:

CONFORMS TO UL STD.60335-1 AND 60335-2-40
CERTIFIED TO CSA STD.C22.2 No.60335-1 AND 60335-2-40

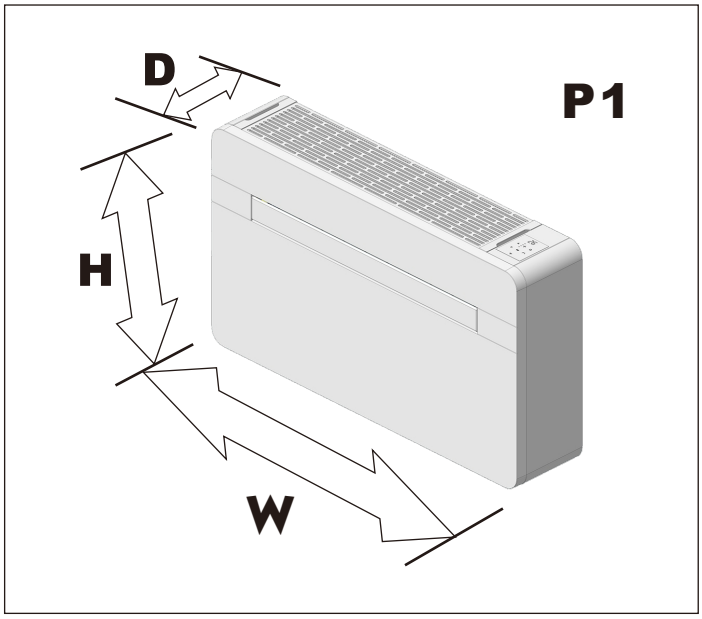
Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.

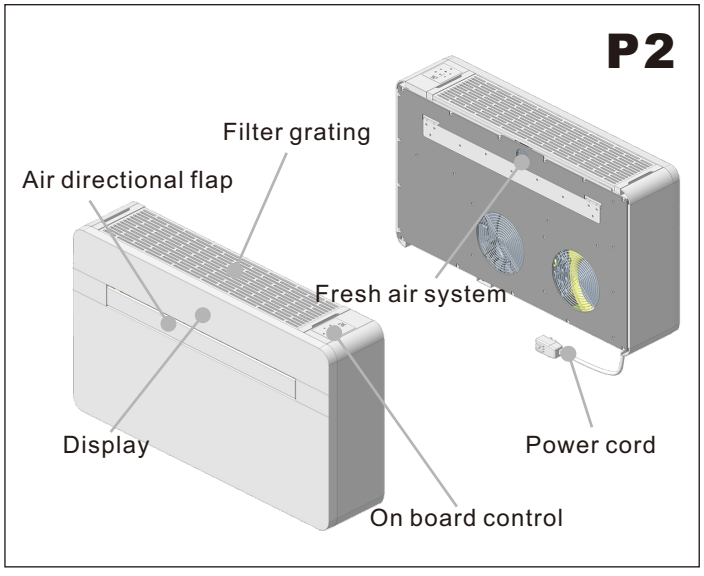
Any batteries used in the remote control contain materials, which are hazardous to the environment. They must be removed from the remote control when they reach the end of their life and disposed of responsibly.

1.6 TECHNICAL FEATURES (P1,P2)

Model	Dolphin 40 Inverter D8N30P
Cooling capacity (BTU/h)	11800
Heating capacity (BTU/h)	10900
Electrical Heat (BTU/h)	10236
Rated voltage (V/Hz)	208/230/60
Rated power for cooling (W)	1209
Rated current for cooling (A)	6.1
Rated power for heating (W)	947
Rated current for heating (A)	4.8
Rated current for electrical heater (A)	13.6
Rated current for heating+electric heater(A)	-
Air flow (CFM)	330
Noise level (dB A)	48/45/42
Optional temperature (remote control)	64-86°F
Refrigerant type and charge(oz)	R32/22.9
Global warmer potential (GWP)	675
Dimensions H/W/D (inch)	22.83/39.37/8.58
Weight (lbs)	117
PCBA internal fuse	T20A 250VAC

*The above datas could be change in order to improve the performances





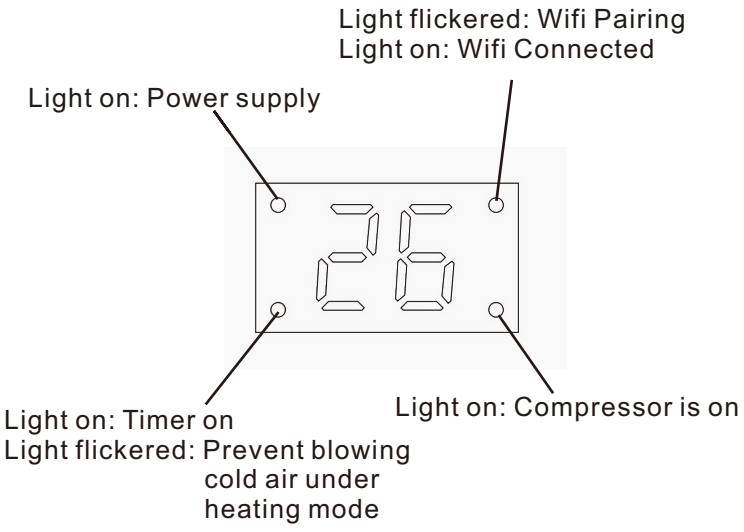
STANDARD TEST CONDITIONS -ARI 310/380-2004

OPERATING CONDITIONS IN COOLING MODE

-Inside from 63°F to 90°F
-Outside from 63°F to 109°F

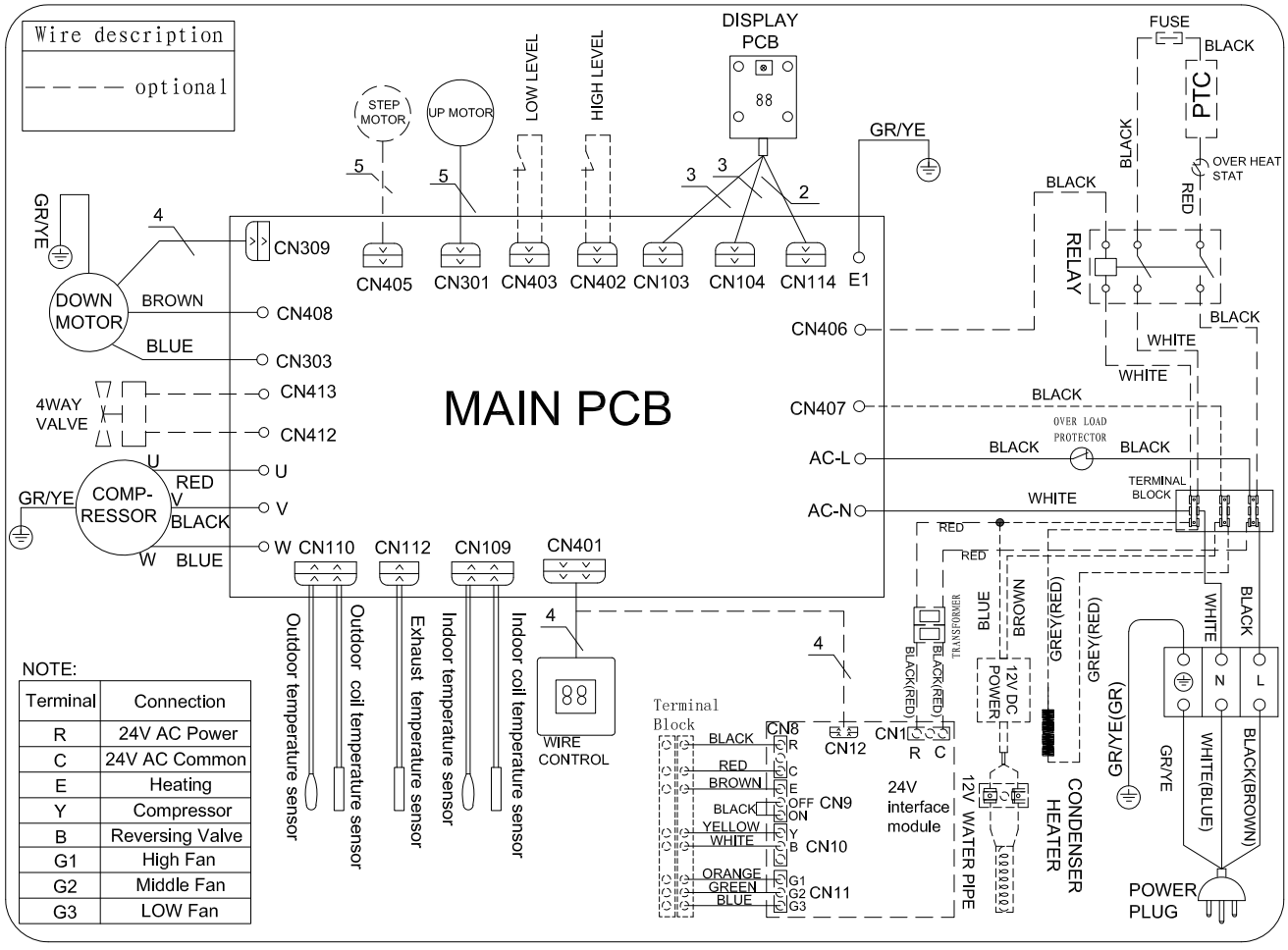
OPERATING CONDITIONS IN HEATING MODE

-Outside from 28°F to 75°F
-Inside from 28°F to 81°F



The display will show both setting temperature and ambient temperature.
After adjusting the setting temperature, the setting temperature will flash 5 seconds on the display, then the display will show the ambient temperature for 25 seconds.
After that ,the display will be off until next adjustment.

1.7 WIRING DIAGRAM

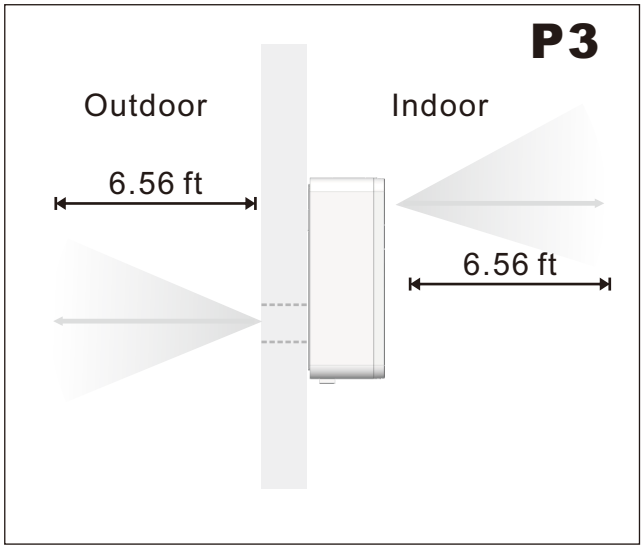


2.1 POSITIONING THE AIR CONDITIONER (P3)

To maintain the best performance from your air conditioner, prevent breakdowns or hazards, you must position it correctly. Please follow the guidelines and instruction below in full, as failure to do so could cause potential installation problems.

- The air conditioner must be installed on an exterior wall that has access to the out side with a minimum of 6.56 ft clearance to the outside. The minimum CLEARANCE from the appliance to combustible surfaces should be 6.56 ft.
- The air conditioner must be fitted leaving room all around as illustrated in the paper template
- The wall on which the air conditioner is installed must be sturdy and able to withstand the weight of the air conditioner.

After determining the best place for installation as described above, please check to ensure that the wall can be drilled in the chosen area without interfering with other structures or installations (beams, piers, pipes, wires, etc.).
Please also ensure that there are no obstacles on the outside of the wall, which may obstruct air circulation through the drilled holes, for example: plants and their leaves, slats or panelling, drain pipes, overflows and gratings, etc.). Any obstruction could interfere with the correct performances of the air conditioner.



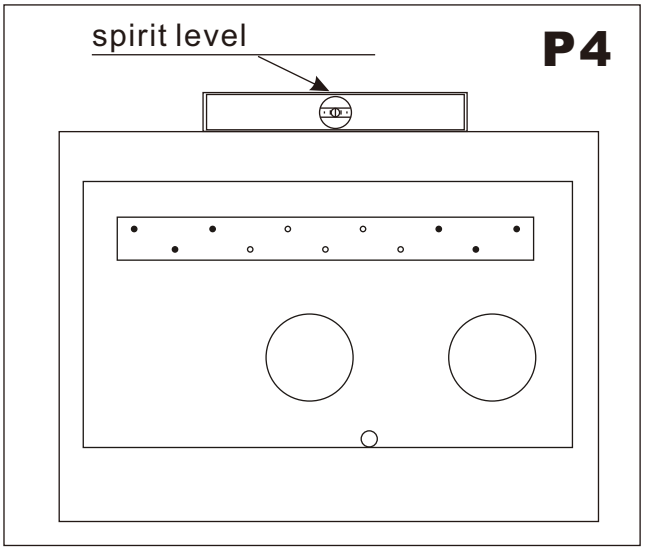
2.2 PAPER TEMPLATE (P4)

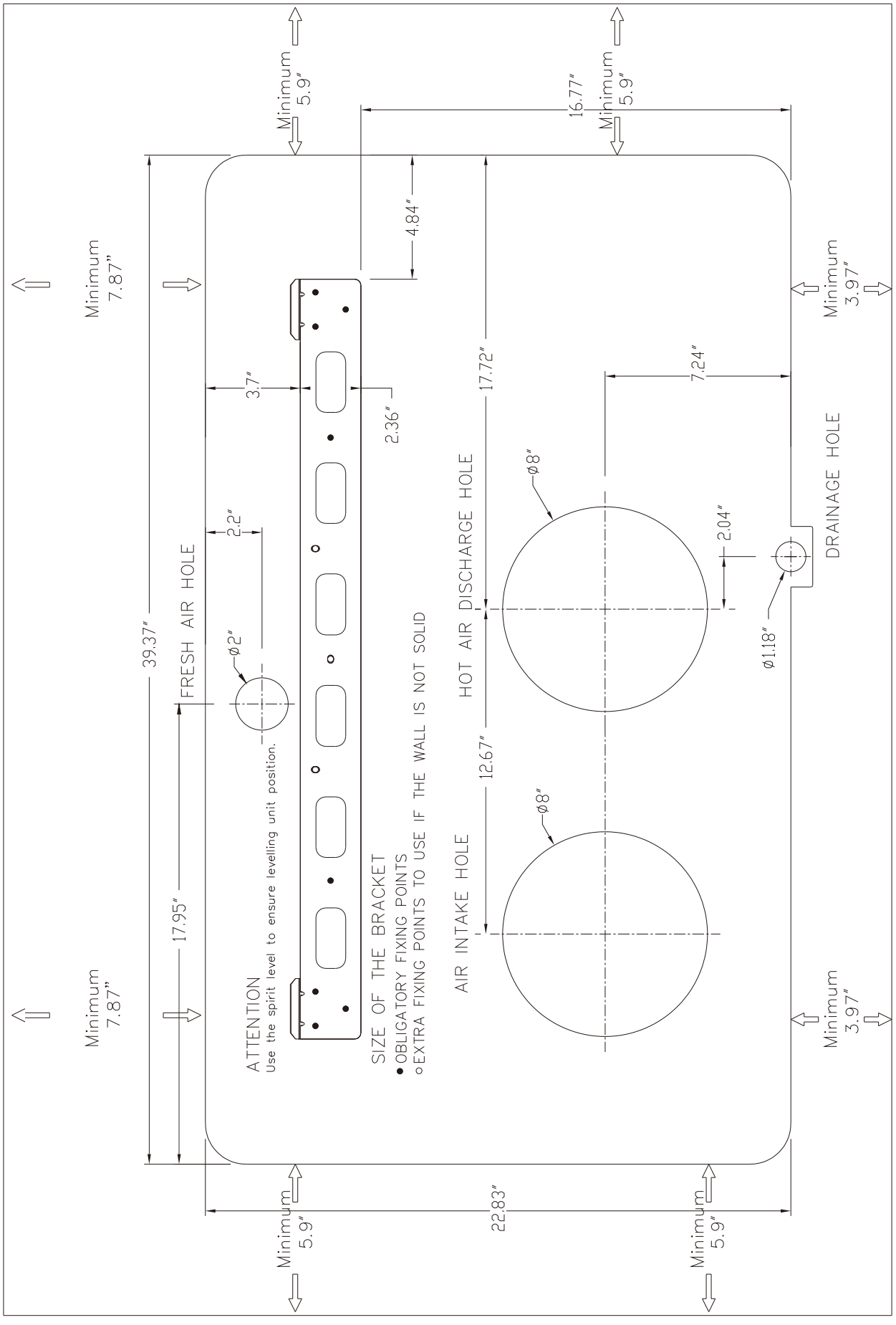
Fasten the template to the wall once the following guidelines have been thoroughly checked.

- Do not drill any holes until you are completely confident that there are no obstacles in the area you wish to drill and there are no obstructions, which could be hidden by the construction of the wall, for example:
Electrical wiring water & gas pipes or supporting lintels or beams.

- Ensure that a spirit level is used, as the air conditioner must be level.

- Follow the installation instructions in full.




Minimum 5.9"
16.77"
Minimum 5.9"
Minimum 7.87"
4.84"
Minimum 3.97"
3.7"
17.72"
7.24"
2.36"
2.2"
ø8"
2.04"
39.37"
FRESH AIR HOLE
ø2"
HOT AIR DISCHARGE HOLE
DRAINAGE HOLE
ø1.18"
ATTENTION
Use the spirit level to ensure levelling unit position.
SIZE OF THE BRACKET
● OBLIGATORY FIXING POINTS
○ EXTRA FIXING POINTS TO USE IF THE WALL IS NOT SOLID
12.67"
ø8"
AIR INTAKE HOLE
17.95"
Minimum 7.87"
Minimum 3.97"
Minimum 5.9"
22.83"
Minimum 5.9"

2.3 DRILLING THE WALL (P5)

Please note: If you are drilling the hole above ground floor level, please ensure that an area has been secured and while the holes are drilled the outside area is supervised, until drilling has been completed.

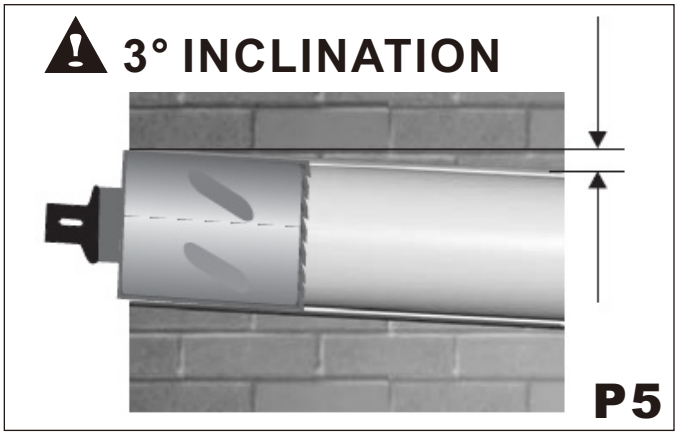
INTAKE AND OUTLET HOLES

- This operation should be carried out using the proper tools (diamond tip or core borers drills with high twisting torque and adjustable rotation speed).
- Fasten the template to the wall taking care to check the distance from the floor and or ceiling and keep it horizontal by using a spirit level.
- Use a pilot drill to mark the centre of each core hole to be drilled,

Use a core boring head having a diameter of 8 inch to drill the two holes for intake and outlet the air.

It is recommended that the holes must have a slightly downward inclination of 3-5 degrees to prevent any backflow of water from the pipes.

Warning: The wall hole must be properly sealed and waterproofed to prevent water from seeping into the room.



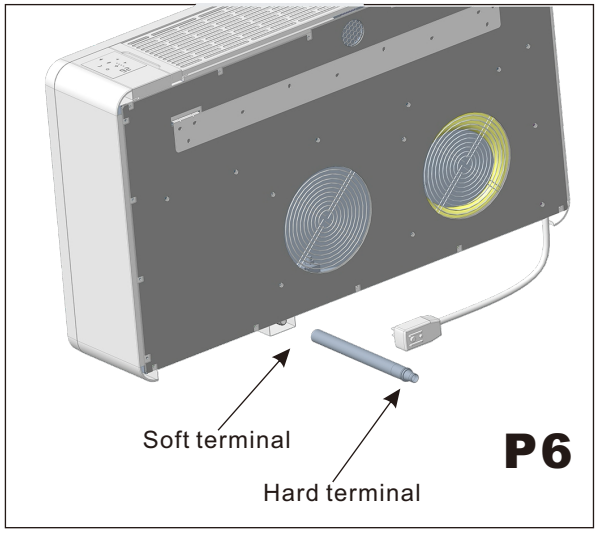
Indoor **Outdoor**

DRAINAGE HOLE (P6)

This air conditioner has a double system to drain the condensate moisture automatically. Before install the Air Conditioner choose which is the suitable system for your installation. Please read carefully the follow instructions:

Drill a hole through the wall measuring 1.18inch in diameter in the position shown in the paper template. Drainage occurs by gravity.

For this reason, it is essential for the drain line to have a minimum downward inclination at least 3 degrees through out its length: connect the drain pipe (from rubber terminal) to the air conditioner (bottom of chassis)

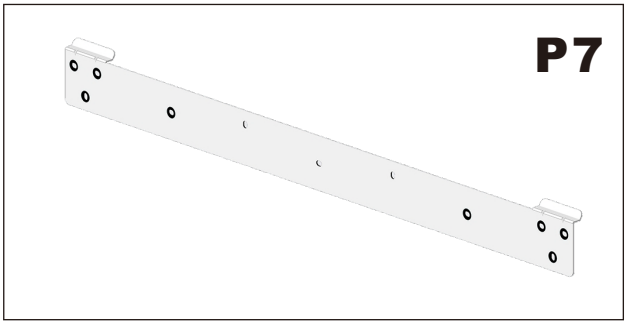


2.4 FASTENING THE BRACKET (P7)

- Drill the holes for anchoring the fastening bracket to the wall using preferably the 8 holes showed in black on the paper template.

If the wall is not sturdy enough it is advisable to use extra anchor bolts using the holes showed in grey on the paper template.

- The anchor bolts provided require a 0.31inch holes; the wall should be inspected to determine if provided bolts are useful or if it is necessary to use a different anchorage. The manufacturer is not liable in case of underestimation of the structural consistency of the anchorage made at the time of installation.

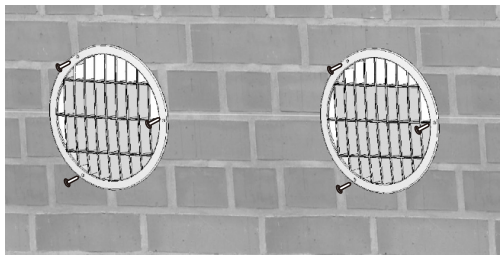


2.5 FITTING THE GRATINGS

Warning: Waterproof protection must be applied to the exterior wall in advance to prevent outdoor water from entering the indoor space!

After drilling the holes, the plastic gratings supplied with air conditioner need to be fitted on the wall.

- When gratings is easy accessibility, you could fix the gratings from outside, it is recommended to fasten it to the wall with wall plugs and screws with a diameter of 0.24inch, and keep the fins in vertical position. (See P8)



P8

- When the air conditioner is installed in the high space, and impossible to reach the gratings from outdoor side, you could fix the gratings from inside.
Put the silicon gel around of the soft grating, like Fig14. Then fold the outer grating in half, insert your arm inside the hole with the grating. Let the grating unfold and pull the grating toward you. With a little patience and manipulation, the 2 gratings will fit the end of the holes. (See P9,10,11)

P9

P10

P11

After fixing the outside grating, we could inject more gel inside the space between the grating and wall. (See P12,13)

P12

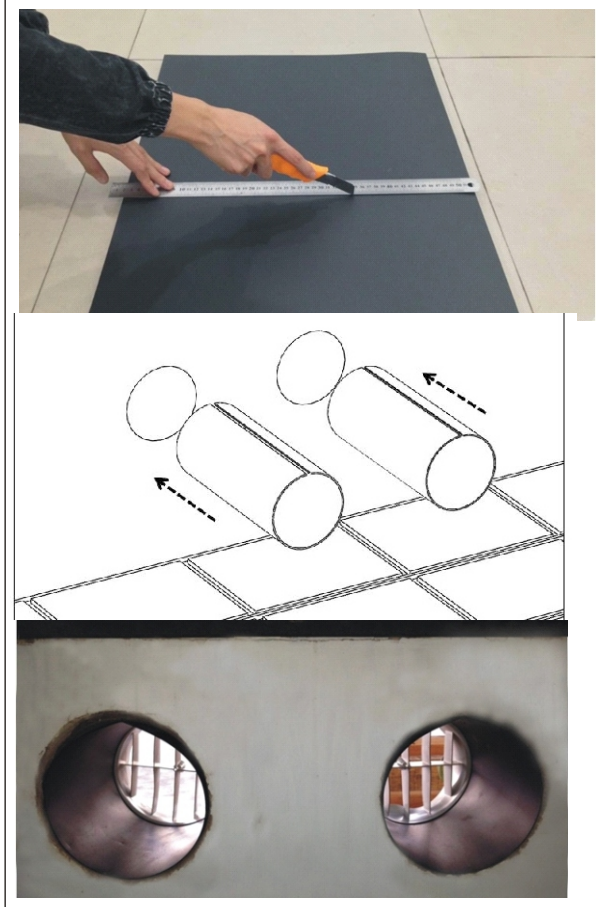
P13

The black silicon gel is just for reference, we could use white or transparent color gel to fix the outdoor grille. (See P14)

P14

2.6 INSTALLATION OF THE PIPES (P15)

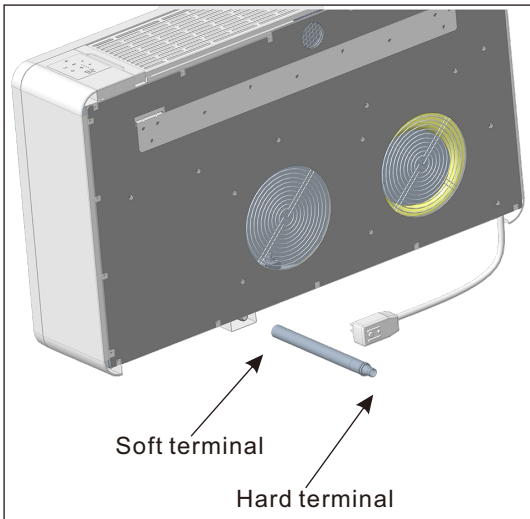
- After drilling the holes, the plastic pipes supplied with the air conditioner need to be fitted through them.
- Measure the depth of the wall and cut supplied plastic sheet.
- Roll the sheet and insert it into the hole, paying attention to the joint line, which must be always upper position. Remember that the sheet must have the same inclination of the holes(min 3°).
- Insert the rings into the holes.



P15

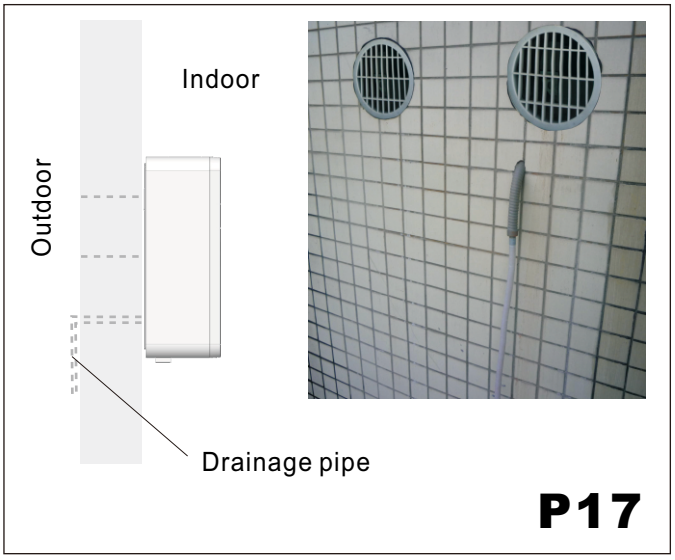
2.7 CONNECTING DRAINAGE PIPE

Connect the drain pipe (from rubber terminal) to the air conditioner (bottom of chassis)



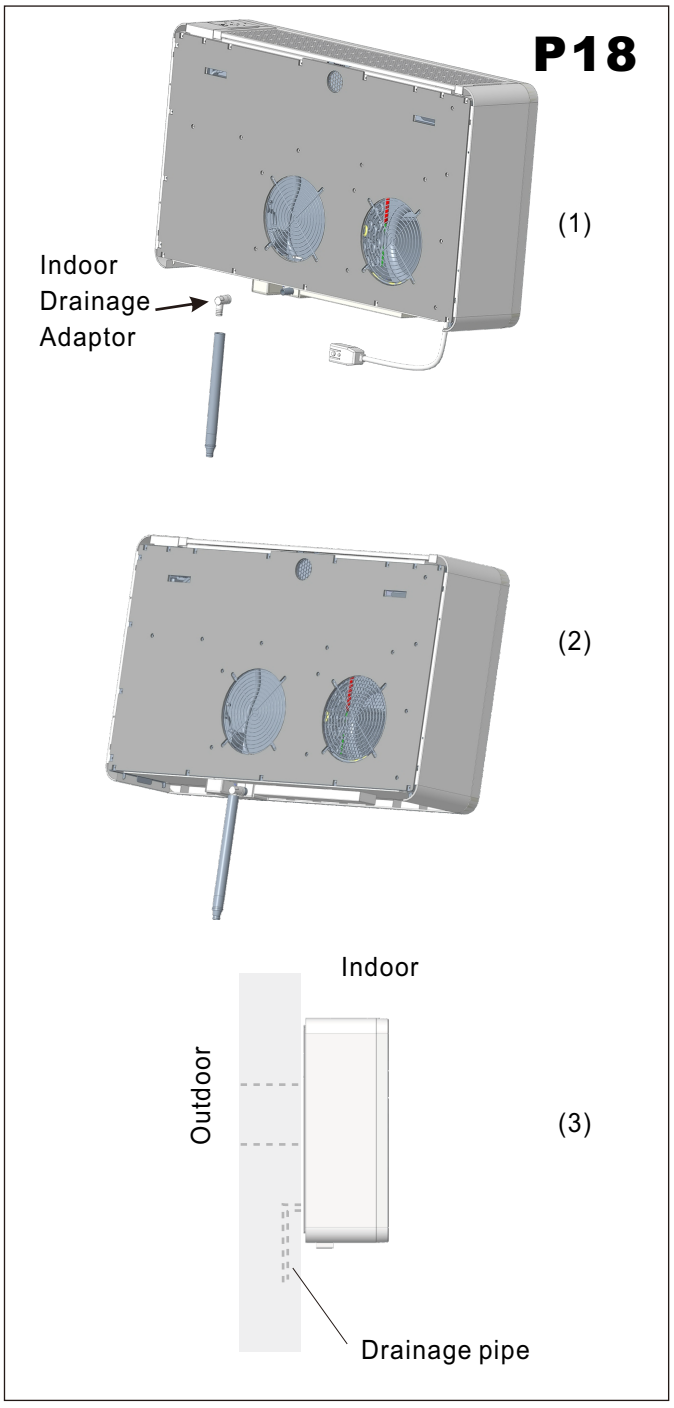
P16

- When the machine is installed in normal climate or hot area, we can connect the drainage pipe to outside, with a proper place. (See P17)



P17

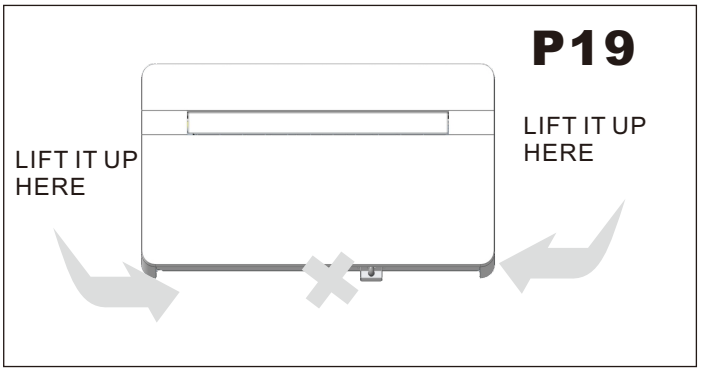
- When the machine is installed in very cold area, the water in drainage pipe is frozen easily in winter, we could connect the drainage pipe inside the wall, and connect with a proper place. (See P18)

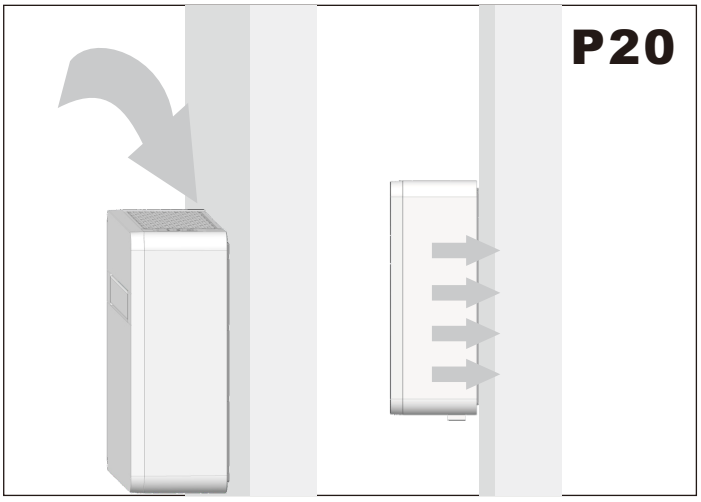


2.8 FITTING THE AIR CONDITIONER ON BRACKET (P19, P20)

After checking again that the fastening bracket is securely fastened to the wall, and that any necessary preparations for electric connection and condensate drainage (if it needs) have been made, fasten the air conditioner to its supporting bracket.

Lift it up by holding the sides at the bottom. Tilt the air conditioner slightly toward you to facilitate the operation of fastening it to the bracket. The air conditioner can now be pushed firmly against the wall. Inspect carefully the installation to make sure that the insulating back panel must fit firmly against the wall and there are no fissures at the back of the air conditioner and that the two plastic semicircle on the back side of the air conditioner are placed inside of the two plastic hoses fixed inside the wall.





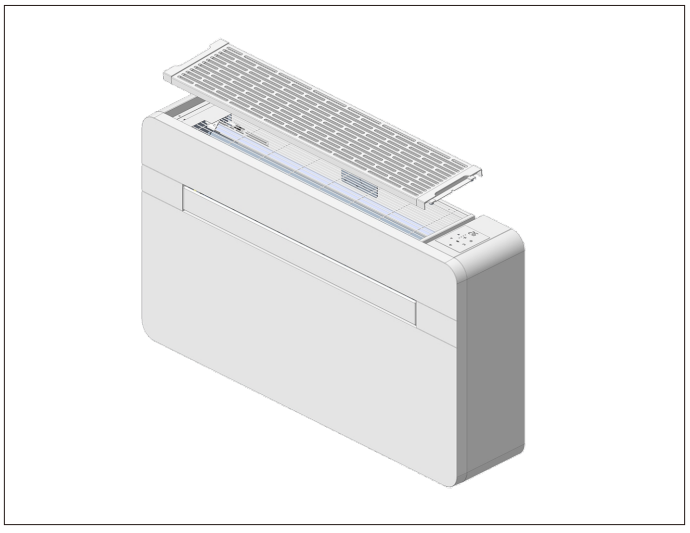
The appliance should not beinstalled in high humidity environments such as laundryrooms.

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

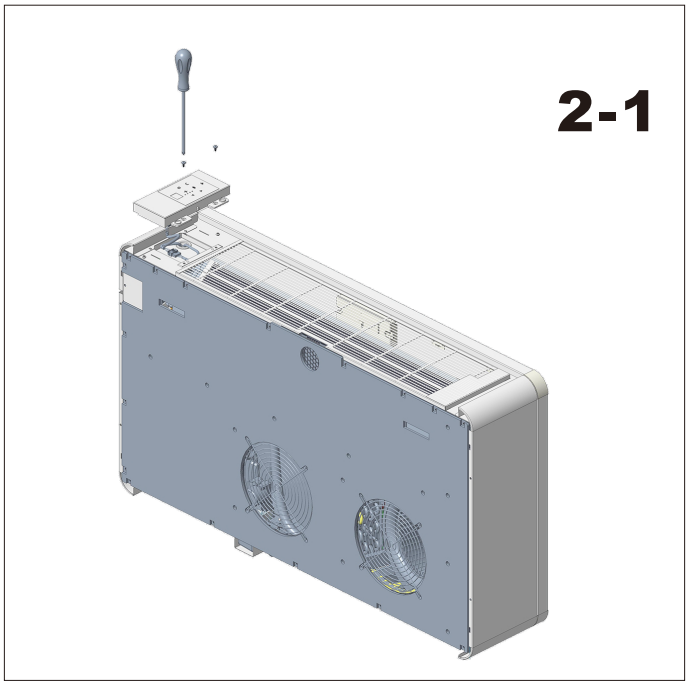
The appliance shall be installed in accordance with national wiring regulations.

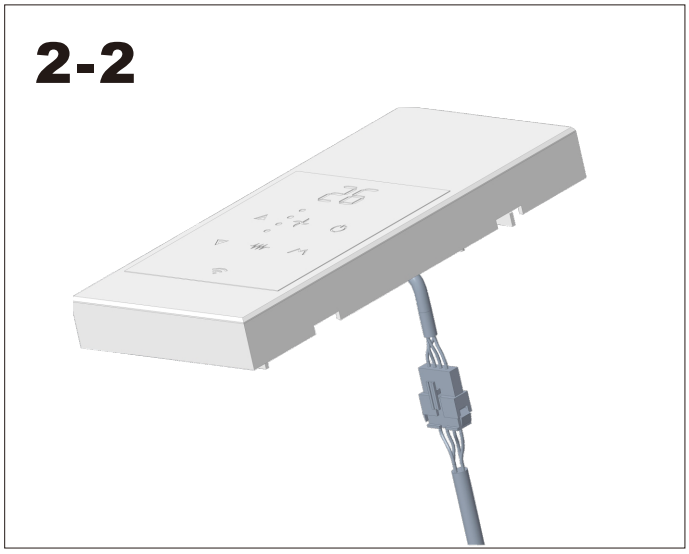
2.9 INSTRUCTIONS FOR SWITCHING TO THE EXTERNAL 24V WALL THERMOSTAT OPERATION

Step 1: Remove the top grille kit

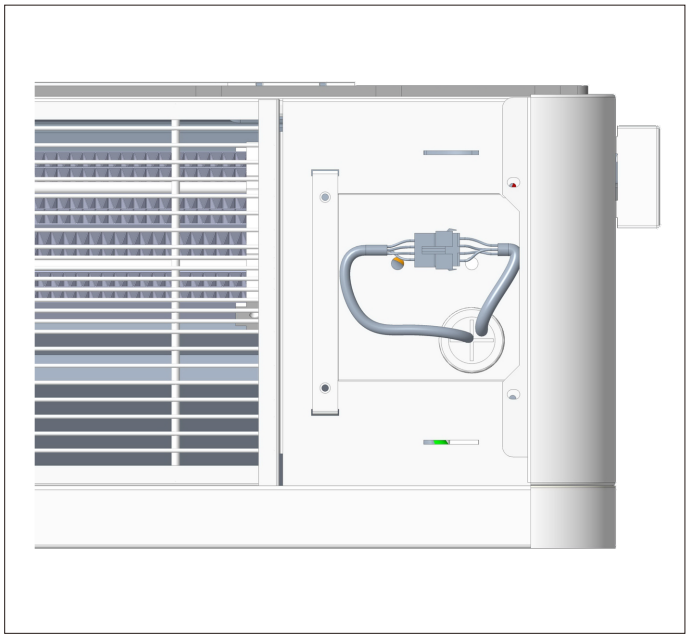


Step 2: Loosen the screws of the touchscreen control box, then remove this control box by disconnecting its wire plug (Male End) with the main PCB's wire socket (Female End). (please refer to Figure 2-1 and 2-2)

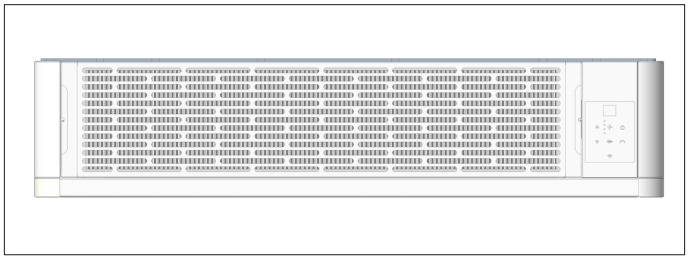




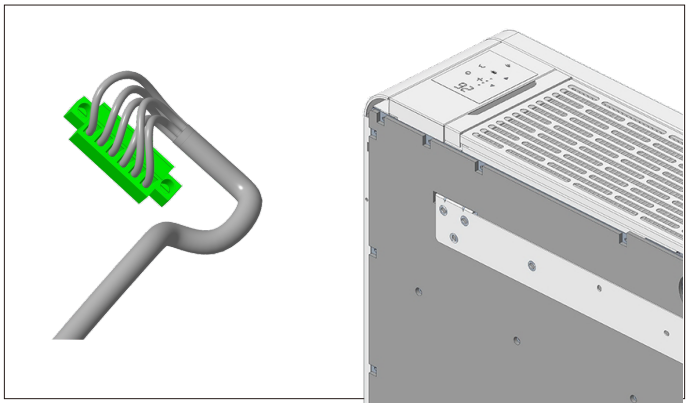
Step 3: Connect the 24V adapter board's wire plug (Male End) with the main PCB's wire socket (Female End).



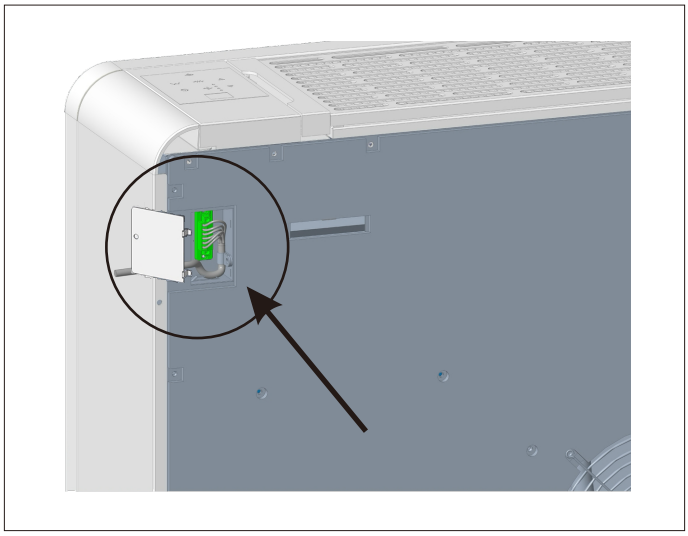
Step 4: Re-assemble the touchscreen control box and the top grille kit in the air conditioner.



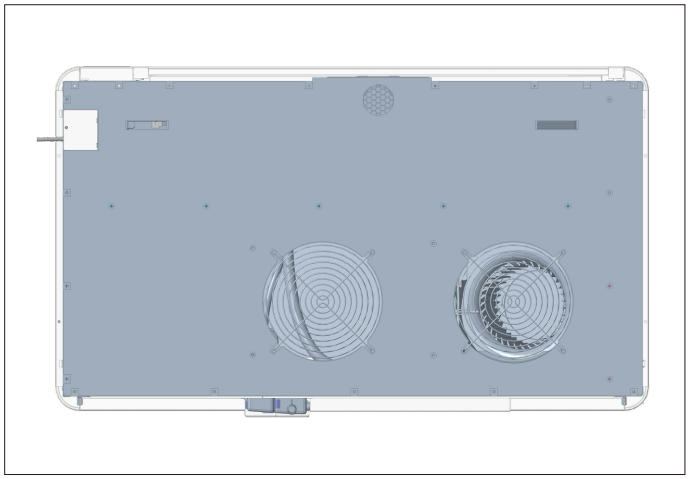
Step 5: Connect the terminal (Male End) on the 24V Wall Thermostat's wire as per the wire marking pairing and lock them in place;



Step 6: Remove the small metal cover on the upper left of the air conditioner's rear panel, insert the Wall Thermostat wire's terminal (Male End) into the terminal (Female End) on the rear panel, and fix the Wall Thermostat wire with the cable clip and the screw.



Step 7: Re-assemble the small metal cover, the switching of the external 24V wall thermostat operation is completed.

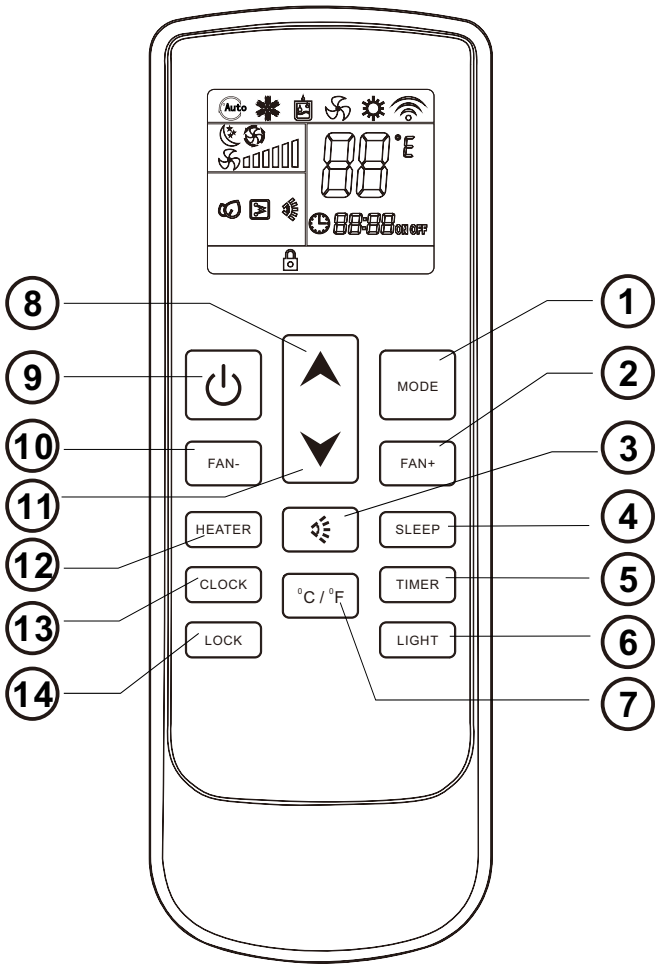


Please note the followings:

1. The Terminal (Male End, installed on the wire of the 24V Wall Thermostat), the cable clip and its screw mentioned in the above steps are all placed within the accessory bag of the Instruction Manual.
2. After completing the switching of the external 24V Wall Thermostat operation, the display and the touchscreen on the air conditioner's top side will remain off, the remote controller will also be unusable, and the display and LED lights on the front panel also keep off. If the air conditioner breaks down, the display on the front panel will show the fault code.
3. All of the above operations must be carried out under the condition that the electricity has been cut off safely.

3.1 INTRODUCTION OF LCD ICONS

Icons	Meaning	Icons	Meaning
Auto	Auto		Airflow direction
	Cooling		Fan speed
	Dry		Sleep
	Fan		Auto fan
	Heating	88°E	Temp
	Light (optional only)	88:88	Clock
	Heater (optional only)	88:88 ON OFF	Timer
	Lock		



3.2 REMOTE CONTROL FUNCTIONS

① **MODE** BUTTON: Set up the air conditioner operating mode

② **FAN SPEED** BUTTON: Set up the fan speed

③ **LOUVER SWING** BUTTON: Adjust the airflow direction

④ **SLEEP** BUTTON: Automatically adjusting the setting temperature according the circadian rule.

⑤ **TIMER** BUTTON: Set up the time the air conditioner starts;
Set up the time the air conditioner stops.

⑥ **LIGHT** BUTTON(optional only): Switch on the light or UPI , then the unit has no such function

⑦ **TEMP** BUTTON: Set temperature unit to ^{0}C or ^{0}F

⑧ **UP** BUTTON: Increase the temperature and time

⑨ **ON/OFF** BUTTON: Turn on or turn off the air conditioner

⑩ **FAN SPEED** BUTTON: Set up the fan speed down

⑪ **DOWN** BUTTON: Decrease the temperature and time

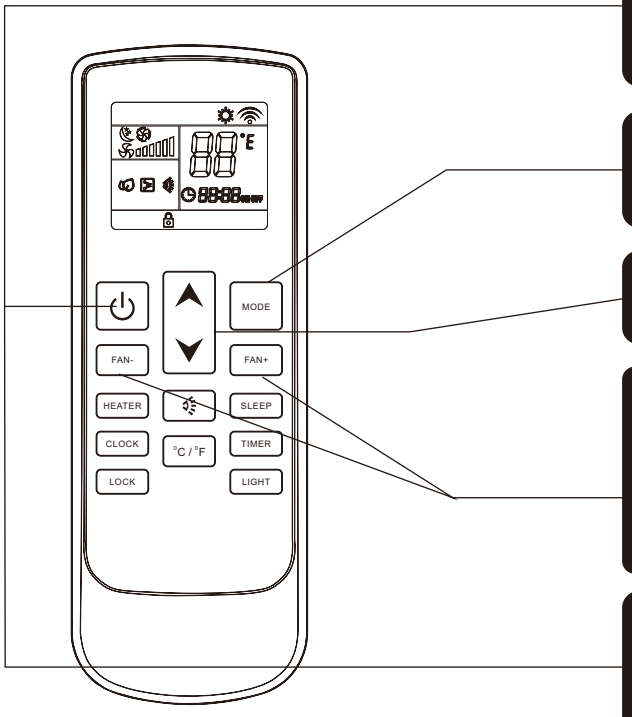
⑫ **ELECTRICAL HEATER** BUTTON: not available. If you need turn on/off the electrical heater manually, please use the button on the On-board-control panel (i.e. on the On-board-control panel, please manually press the **ELECTRICAL HEATER** BUTTON for 5 seconds and hold for 5 seconds)

⑬ **CLOCK** BUTTON: Adjust the clock

⑭ **LOCK** BUTTON: Lock the remote control set

3.3 HEATING MODE

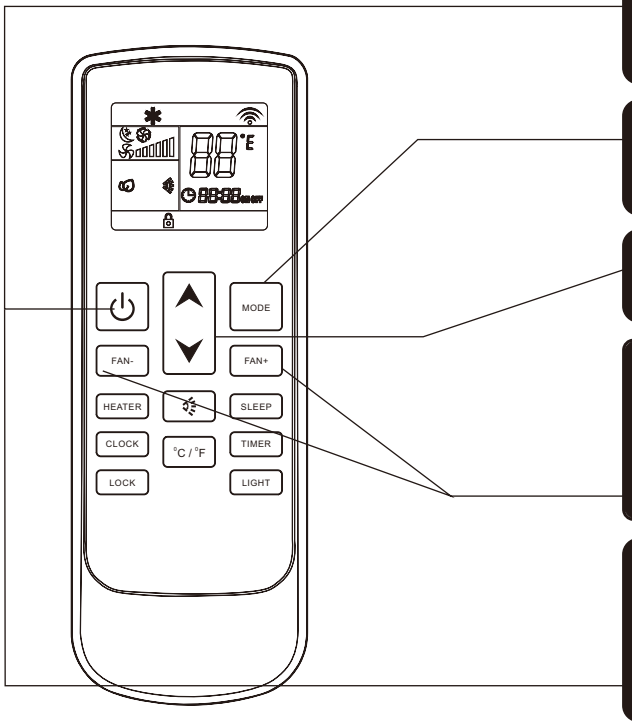
Sequence of the operations



1. Press the **ON/OFF** button " ⏻ ", switch on the air conditioner, it will run by memory mode.
2. Press the **MODE** button, set up the mode to heat " ☼ ", the air conditioner will run in heating.
3. Press **UP** " ⮝ " or **DOWN** " ⮟ " button , to adjust the setting up temperature.
4. Press the **FAN SPEED** button " **FAN+** " or " **FAN-** " , set up the fan speed, " 𝒻ₒ " is low speed, " 𝒻ₒₒ "is middle speed, " 𝒻ₒₒₒ " is high speed, " ֍ " is auto speed.
5. Press the **ON/OFF** button " ⏻ ", switch off the air conditioner.
   Next time when this button is pressed, the air conditioner will operates in this mode by memory.

3.4 COOLING MODE

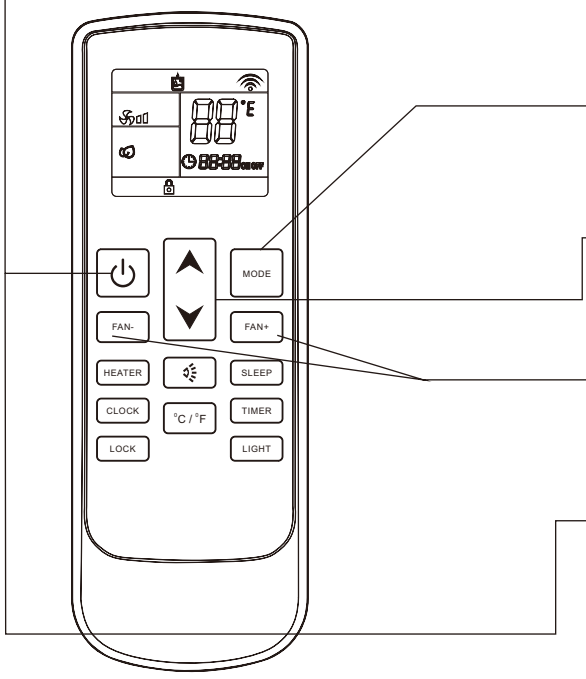
Sequence of the operations



1. Press the **ON/OFF** button " ⏻ ", switch on the air conditioner, it will run by memory mode.
2. Press the **MODE** button, set up the mode to cool " ✱ ", the air conditioner will run in cooling.
3. Press **UP** " ⮝ " or **DOWN** " ⮟ " button , to adjust the setting up temperature.
4. Press the **FAN SPEED** button " **FAN+** " or " **FAN-** " , set up the fan speed, " 𝒻ₒ " is low speed, " 𝒻ₒₒ "is middle speed, " 𝒻ₒₒₒ " is high speed, " ֍ " is auto speed.
5. Press the **ON/OFF** button " ⏻ ", switch off the air conditioner.
   Next time when this button is pressed, the air conditioner will operates in this mode by memory.

3.5 DRY MODE

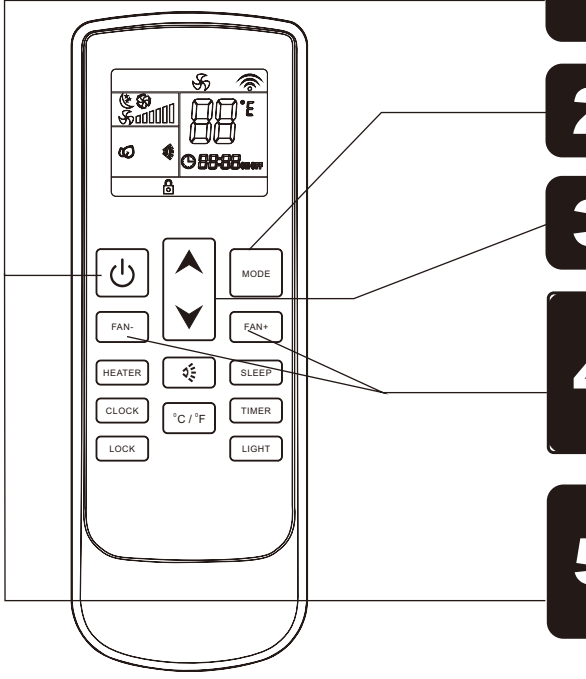
Sequence of the operations



1. Press the **ON/OFF** button " ⏻ ", switch on the air conditioner, it will run by memory mode.
2. Press the **MODE** button, set up the mode to dry " 💧 ", the air conditioner will run in dehumidifying.
3. Press **UP** " ▲ " or **DOWN** " ▼ " button , to adjust the setting up temperature.
4. **FAN SPEED** button " **FAN+** " or " **FAN-** " is disable, indoor fan speed always is low in dry mode.
5. Press the **ON/OFF** button " ⏻ ", switch off the air conditioner.
   Next time when this button is pressed, the air conditioner will operates in this mode by memory.

3.6 FAN MODE

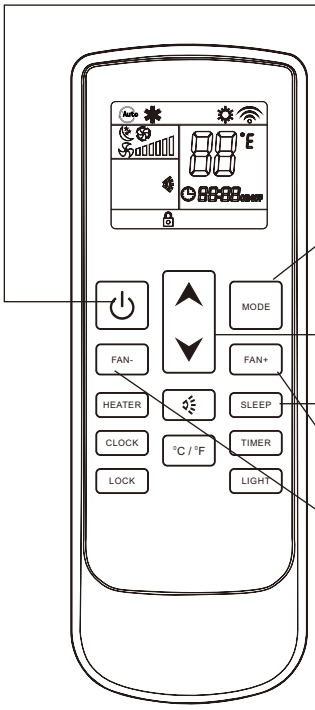
Sequence of the operations



1. Press the **ON/OFF** button " ⏻ ",switch on the air conditioner, it will run by memory mode.
2. Press the **MODE** button, set up the mode to fan " 🌀 ", the air conditioner will run in fan.
3. Press **UP** "▲" or **DOWN** "▼" button, to adjust the setting up temperature.
4. Press the **FAN SPEED** button" **FAN+** " or " **FAN-** " ,set up the fan speed, " 🌀 " is low speed, " 🌀 " is middle speed, " 🌀 " is high speed, " 🌀 " is auto speed.
5. Press the **ON/OFF** button " ⏻ ", switch off the air conditioner. Next time when this button is pressed, the air conditioner will operates in this mode by memory.

3.7 SLEEP MODE

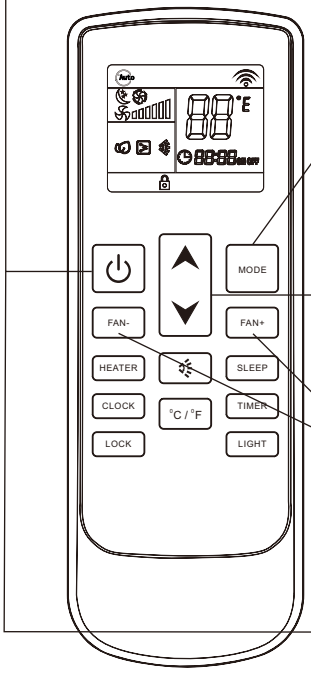
Sequence of the operations



1. Press the **ON/OFF** button " ⏻ ", switch on the air conditioner, it will run by memory mode.
2. Press the **MODE** button, set up the mode to cool " ✱ " / heat " ☼ "(heat pump) / auto " Auto ", the air conditioner will run in setting mode.
3. Press **UP** " ▲ " or **DOWN** " ▼ " button , to adjust the setting up temperature.
4. Press the **SLEEP** button , this icon will display on LCD, sleep function is set up; press it again, cancel the sleep function.
5. If the sleep function is launched, the fan speed is steady in low speed.

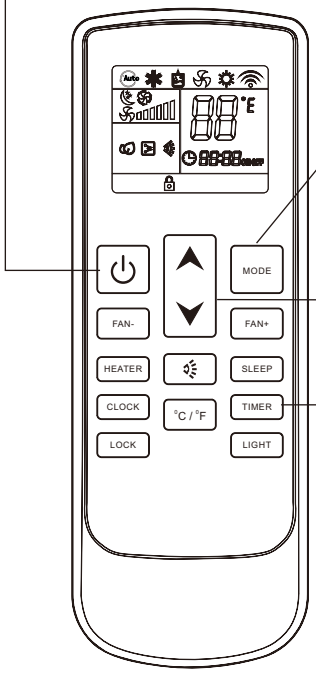
3.8 AUTO MODE

Sequence of the operations



1. Press the **ON/OFF** button " ⏻ ", switch on the air conditioner, it will run by memory mode.
2. Press the **MODE** button, set up the mode to auto " Auto ", the air conditioner will run in auto mode. (Reference to “emergency operation”)
3. According to the difference of room temperature and setting temperature automatically choose the running mode(cool, heat, fan). The temperature setting button UP “▲” and DOWN “▼” are disable.
4. Press the **FAN SPEED** button " **FAN+** " or " **FAN-**", set up the fan speed, " 🌀 " is low speed, " 🌀 " is middle speed, " 🌀 " is high speed, " 🌀 " is auto speed.
5. Press the **ON/OFF** button " ⏻ ", switch off the air conditioner. Next time when this button is pressed, the air conditioner will operates in this mode by memory.

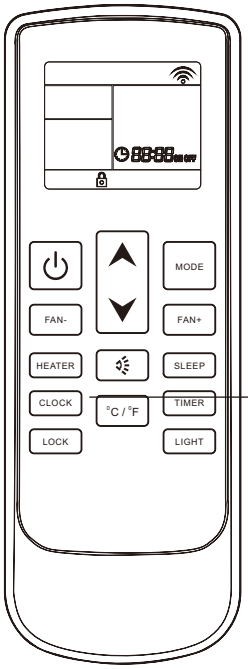
3.9 TIMER OFF FUNCTION



Sequence of the operations

1. Press the **ON/OFF** button " ⏻ ", switch on the air conditioner, it will run by memory mode.
2. Press the **MODE** button set up the mode to which you want.
3. Press **UP** " ▲ " or **DOWN** " ▼ " button, to adjust the setting up temperature.
4. Press the **TIME** button " TIMER " , set up the time air conditioner switch off.
   Press the button " ▲ "each time, adjusting up 1 hour; Press the button " ▼ " each time, adjusting up 10 minutes; press the timer button to confirm the data entered.
   When the time is over, the air conditioner will be switched off automatically.
   If press this button again before the air conditioner switch off, the timer off setting will cancelled.

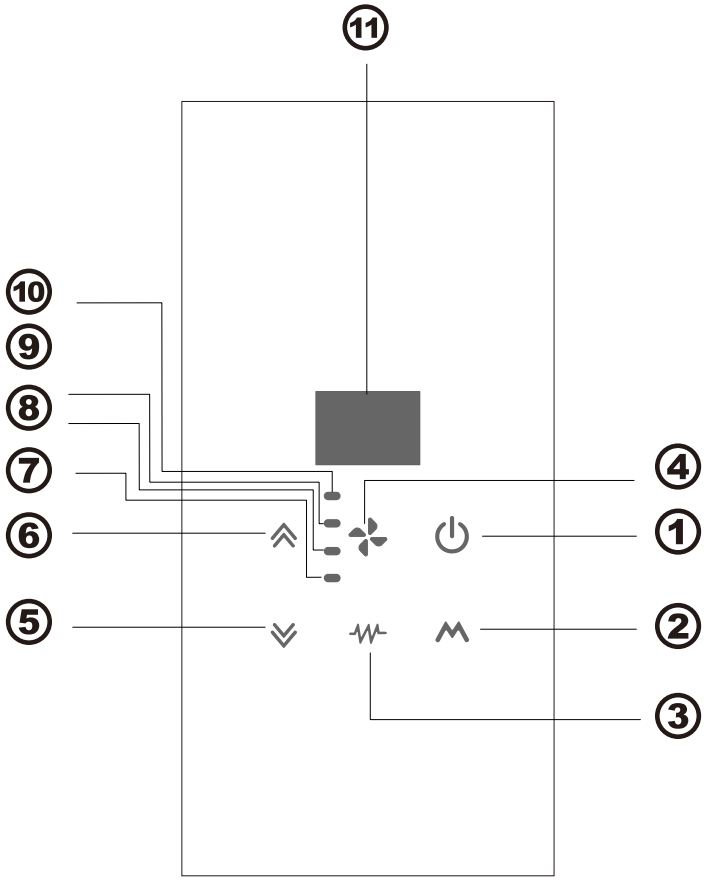
3.10 TIMER ON FUNCTION



Sequence of the operations

1. The air conditioner is switched off.
2. Press the **TIME** button " TIMER " , set up the time which the air conditioner switch on.
   Press the button " ▲ " each time, adjusting up 1 hour; Press the button " ▼ " each time , adjusting up 10 minutes. Set up the operation **MODE, TEMPERATURE, FAN SPEED** etc.,press the timer button to confirm the date entered. When the time is arrived, the air conditioner will start automatically. If the **TIMER ON** button is pressed again, the **TIMER ON** setting will be cancelled.

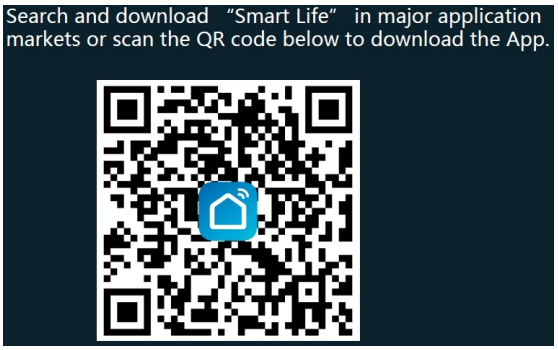
3.11 On board control function



① **ON/OFF BUTTON:** Turn on or turn off the air conditioner
② **MODE BUTTON:** Set up the air conditioner operating mode
③ **ELECTRICAL HEAT BUTTON:**
In heating mode, manually press and hold for 5 seconds to turn on the electric heater, and the heat pump will be automatically shut down. Press and hold for 5 seconds again to turn off the electric heater, and the heat pump function will be automatically turned on.
④ **FAN SPEED BUTTON:** Set up the fan speed
⑤ **DOWN BUTTON:** Decrease the temperature and time
⑥ **UP BUTTON:** Increase the temperature and time
⑦ **HIGH SPEED LED:** Signal the high speed working state
⑧ **MIDDLE SPEED LED:** Signal the middle speed working state
⑨ **LOW SPEED LED:** Signal the low speed working state
⑩ **AUTO FAN LED:** Signal the automatic fan state
⑪ **Temperature display window**
The display will show both setting temperature and ambient temperature. After adjusting the setting temperature, the setting temperature will flash 5 seconds on the display, then the display will show the ambient temperature for 25 seconds. After that, the display will be off until next adjustment.

3.12 WiFi Connection and instruction for use

- Downloading of Smart APP



- Register the APP account and log in, add equipment and set WIFI network according to the prompts;

- WIFI Intelligent remote control

- Matching:
  Press the “Louver Swing” button of the remote control five times within 5s to enter the distribution network.
  For the first time, it is slow flash distribution network.
  Press the “Louver Swing” button five times within 5s to enter the fast flash.
  After the pairing is successful, press the “ Louver Swing” button five times within 5s to clear the WIFI pairing.

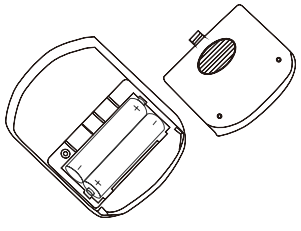
3.13 Install and change the battery

- Open the cover of battery, hold the hook and lightly pull up.

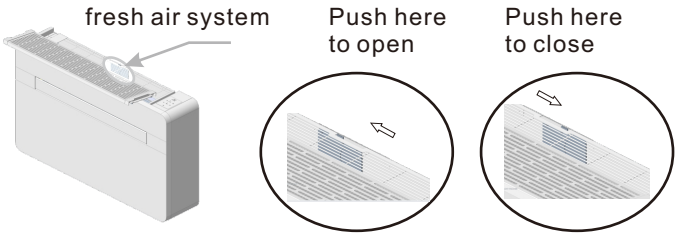
- Insert the battery(AAA,2pecs), the positive must be same with the mark on the plastic surface.

- Reinstall the cover of battery.

- Inspection: if press ON/OFF button “⏻”. no icons are displayed, please install the battery again.



3.14 Fresh air system



When the fresh air system is open the air conditioner will change the room air automatically: in this way new clean and fresh air will intake to the room. You can open or close the fresh air system any moment. If the air fresh system is close the air conditioner performances are more high so we suggest to maintain the fresh air system closed and open it just a few minutes per day.

3.15 MAINTENANCE (P21, P22,P23,P24)

FILTERS CLEANING:

The filters should be regularly cleaned to keep the air conditioner running efficiently.
Clean the filters every two weeks.
How to proceed:

- Disconnect the air conditioner from the electrical supply.

- Extract the filter grating.(P22) on the same direction of the arrow.
  Take out the filter as shown P23&P24.
  Proceed to wash them (not use hot water) and only when they are dried replace them in the same way.

ATTENTION: Do not use the air conditioner without filters as it could seriously damage the air conditioner.

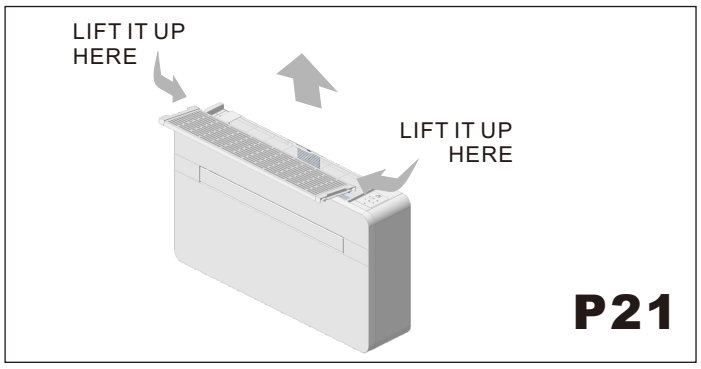
EXTERNAL CLEANING:

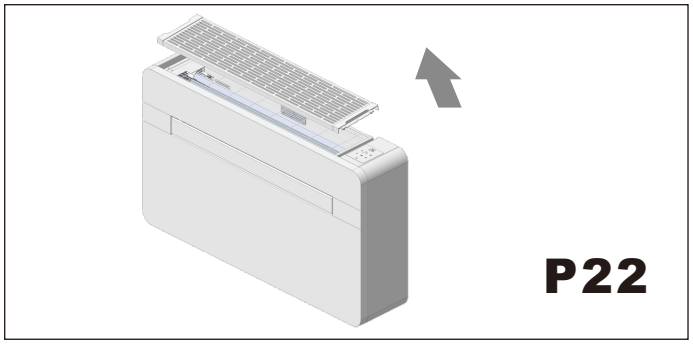
- Disconnect the air conditioner from the electrical supply.

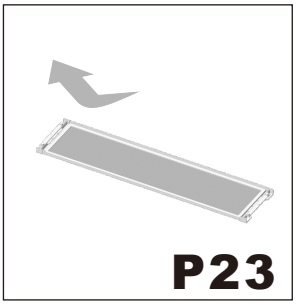
- Wipe external surfaces clean with a damp cloth only.

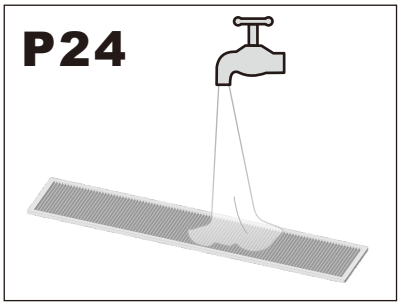
- Do not use an abrasive cloth and/ or solvents, as this may damage the surfaces.

- Do not use excessively wet cloths or sponges, as water stagnation could damage the air conditioner and compromise safety.

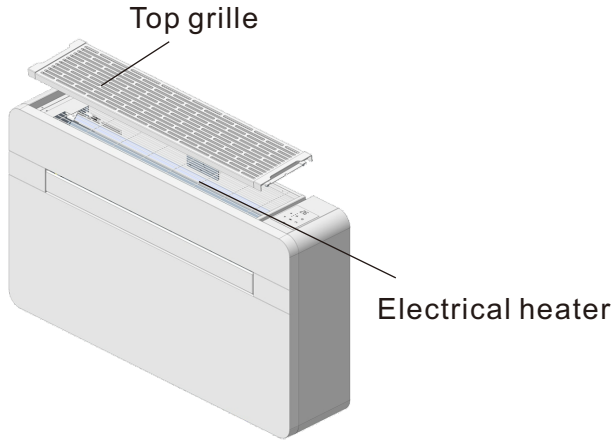








POSITION OF ELECTRICAL HEATER



Electrical heater is positioned in the top of the machine, and it is protected by the top grille.

3.16 PROBLEM SOLVING PROBLEM

POSSIBLE CAUSES

- The air conditioner does not work.
- The air conditioner does not refrigerate the room
- Strange smell in the room. Water drips from the air conditioner.
- The remote control does not work.
- The air conditioner does not work for 3 minutes when switched on.

POSSIBLE SOLUTIONS

1. Wrong setting of the timer/ Check it.
2. Problems on the power supply/ Call the service center.
3. The filter could be dirty/ Clean it.
4. The room temperature is too high/ Wait until the temperature goes down,
5. The temperature is not properly set/ Check it.
6. The grids could be obstructed/ Check and remove the eventual obstacles.

- Dampness in the room, coming from walls, carpets, furnishing or similar
- Wrong installation of the air conditioner
- Wrong connection of the drainage pipe
- Exhausted batteries
- Wrong insertion of the batteries inside the remote control
- Protection of the air conditioner. Wait for 3 minutes and the air conditioner will start to work again.

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

The max operation temperature for the air conditioner (max cooling: outdoor DB 115^{0}F/ WB 75^{0}F, indoor DB 80^{0}F/ WB 67^{0}F; min heating: outdoor DB 17^{0}F/ WB 15^{0}F, indoor DB 70^{0}F)

List of Error Codes

Codes displayed on monitor LED	Faults
A1	Indoor machine EE fault
A2	Indoor fan fault
A3	Water temperature sensor failure
A4	Indoor coil temperature sensor fault
A5	Indoor ambient temperature sensor fault
E5	Four -way valve commutation fault
E6	Fluorine deficiency fault
A8	Outdoor EE fault
b4	Compressor starting abnormal (phase failure, reverse)
b5	Compressor out-of-step fault
b6	IPM module fault
b8	Exhaust temperature sensor fault
C2	Outdoor coil temperature sensor fault
C3	Outdoor ambient temperature sensor fault
C4	Outdoor DC fan fault
FL	Water full protection shutdown
d1	Outdoor machine AC current protection shutdown
d2	Compressor phase current protection shutdowneverse)
d3	Outdoor machine AC voltage over-high/over-low protection
d4	DC busbar voltage over-high/over-low voltage protection
d5	IPM over-high temperature protection shutdown
d6	Exhaust temperature overheat protection shutdown
d7	Cooling indoor coil anti-freezing protection shutdown
d8	Cooling outdoor coil overheat protection shutdown
E1	Heating Indoor coil overheat protection shutdown
E2	Cooling outdoor ambient temperature over-low protection shutdown
E3	Heating outdoor ambient temperature over-high protection shutdown
C5	Driven busbar overvoltage protection
C6	Driven busbar undervoltage protection
C7	Driven phase current overcurrent fault
C8	Abnormal phase current sampling