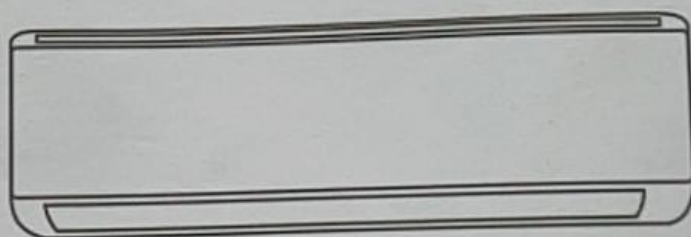




Puremind

Operating Instructions for Split Type Air Conditioner



This instruction manual contains important information and recommendations that we would like to ask you to follow to ensure high-quality and long-lasting operation of the air conditioner.

Thank you.

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In accordance with the company's product improvement policy, the external specifications, dimensions, specifications and accessories of this product are subject to change without further notice.

PRECAUTIONS AND RECOMMENDATIONS FOR INSTALLATION

1. Before installing and using the device
Please read this manual.
- 4 Keep children away from the working area when installing the indoor and outdoor units. Is it dangerous
- 4 Make sure that the base of the outdoor unit is securely fixed.
- 4 Make sure that air does not enter the refrigerant system and check for refrigerant leakage when relocating the air conditioner.
- ⚠ After installing the air conditioner, run a test run and record the operating data.
4. The power of the fuse built into the unit is 3.15 amperes / 250 V for the 220 V type and 3.15 / 125 V for the 110 V type.
4. The air conditioner can only be used with a fuse with a suitable maximum current power consumption, or with another protective device.
4. Make sure that the mains voltage corresponds to the *declared voltage in the device data sheet. The switch and power socket must be kept clean. Insert the plug correctly and completely into the outlet to avoid the risk of shock, electric shock or fire due to poor contact.
- Make sure the plug fits into the outlet if does not fit - change the socket.
- 4 The device must be equipped with devices for disconnecting from the supply electrical network when the contacts are open in all poles, which ensures complete disconnection in case of overvoltage of category 1, and these devices must be connected to the fixed wiring in accordance with the rules for installing electrical wiring.
- 4 Installation of the air conditioner must be carried out by professionals or qualified personnel.
- ⚠ Keep flammable liquids (containers and pressurized containers (for example, aerosols) at a distance of less than 50 cm from the device.
- ⚠ If the appliance is used indoors without adequate ventilation, precautions should be taken to prevent refrigerant gas from being released as it is a fire hazard.
- ⚠ The packaging material can be used - recyclable. The used air conditioner should be taken to a waste disposal center.
- 4 Use the air conditioner strictly in accordance with these instructions. The manual does not cover all operating situations and conditions. As with any electrical appliance, use common sense and be careful when using and maintaining it.
- ⚠ The appliance must be installed in accordance with relevant local codes.
4. When repairing or coming into contact with parts of the device, the air conditioner should be disconnected from the power source.
- 4 The device must be installed in accordance with national wiring regulations.
4. This device is intended for use by children * 8 years of age and older, as well as people with physical and mental abilities, strictly provided that the operation of the device is carried out under the supervision of responsible persons who are familiar with the technical safety measures. Do not allow the device to be played with. Do not allow children to carry out cleaning and maintenance on their own.

PRECAUTIONS AND RECOMMENDATIONS FOR THE USER

4. Do not attempt to install the air conditioner yourself, contact a qualified technician.

⚠ Cleaning and maintenance must be carried out by a specialist. In any case, the device should be disconnected from the mains before cleaning and maintenance.

4 Make sure that the mains voltage matches the declared voltage in the device data sheet. The switch and power socket must be kept clean. Insert the plug into the outlet correctly and completely to avoid the risk of electric shock or fire due to poor contact.

⚠ Do not remove the plug from the socket while the appliance is switched on, as this may cause sparking and therefore create a fire hazard.

⚠ This appliance is intended for air conditioning residential premises and should not be used for other purposes such as drying clothes, cooling food, etc.

And the packaging material can be recycled. The used air conditioner should be delivered to the center by waste disposal.

AND The appliance should be used with the D Use the air conditioner strictly in accordance with these instructions. This manual does not cover all possible situations and operating conditions. As with any electrical appliance, use common sense and caution when using, installing and maintaining it.

4 The user must ensure installation device by a specialist who is obliged to ground the device in accordance with current regulations standards and connect the thermomagnetic breaker chains.

4 The batteries in the remote control must be reused or disposed of properly. Disposal of used batteries Please dispose of batteries as sorted municipal waste at an accessible collection point.

4. No air left for a long time. Prolonged exposure to direct cold air can pose a health hazard. Be especially careful when using the air conditioner in rooms with children, elderly or sick people.

4. If from device A, **появился дым или запах гари**, immediately disconnect the device from the network and contact the service center.

4 Continued use of this product may result in fire or electric shock.

4. Repairs must be carried out by an authorized * service center of the manufacturer. Improperly performed repairs may pose a threat to the user's health (damage to electric shock, etc.)

⚠ Turn off the circuit breaker You do not intend to use the device for a long time. The air flow must be directed correctly.

⚠ The valves should be directed downwards in heating mode and upwards in heating mode.

with the D Use the air conditioner strictly in accordance with these instructions. This manual does not cover all possible situations and operating conditions. As with any electrical appliance, use common sense and caution when using, installing and maintaining it.

⚠ The device must be disconnected from the network when long breaks in operation, as well as during cleaning, maintenance and repair.

⚠ Choosing the optimal temperature will protect device from possible damage.

PRECAUTIONS AND RESTRICTIONS FOR USE Do

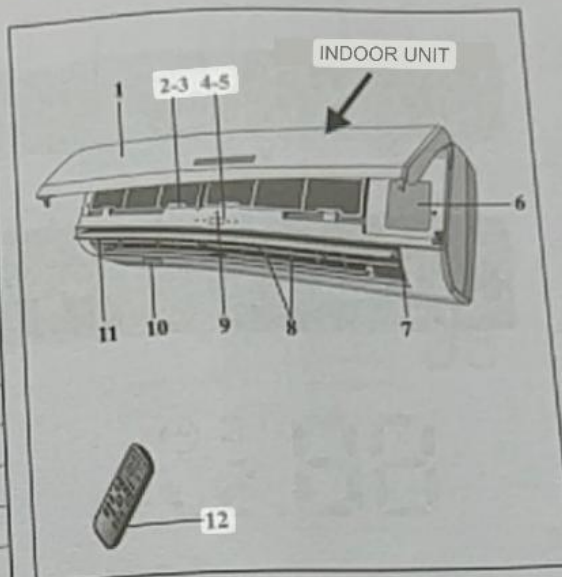
- Do not bend, pull or squeeze electrical cable, as this may cause its damage. Damaged electrical wire may cause electric shock and fire. Damaged electrical wire can be replaced only by a specialist.
- Do not use extension cords or a group of modules.
- Do not touch the device with bare feet, hands or other parts of the body are not wet.
- Do not block the air inlet or outlet ducts of the indoor and outdoor units. Blocking these channels leads to reduced performance of the air conditioner and possible breakdowns and damage.
- Modification of the device is prohibited
- Do not install or operate the device in an environment containing gas, oil, sulfur or near heat sources
- This appliance is not intended for use by persons (including children) with reduced physical, mental or sensory capabilities, or lack of experience and knowledge. Operation in such cases is possible under supervision, or independently after detailed instructions given by the person responsible for the safety of such people.
- not stand on the device or place heavy or hot surfaces on it.
- Don't leave doors open device turned on
- Do not direct air flow towards plants animals.
- Protect the device from contact. Electrical insulation may be damaged, which will result in shock.
- It is prohibited to stand on the deck of the device or place it on its surface. items.
- Do not insert sticks or objects into the device. This may lead to
- Children should not be allowed to play with the device. Damaged electrical cords should be replaced by the manufacturer, having them represented by a specialist to avoid possible

PART NAMES

INDOOR

No. UNIT. Name

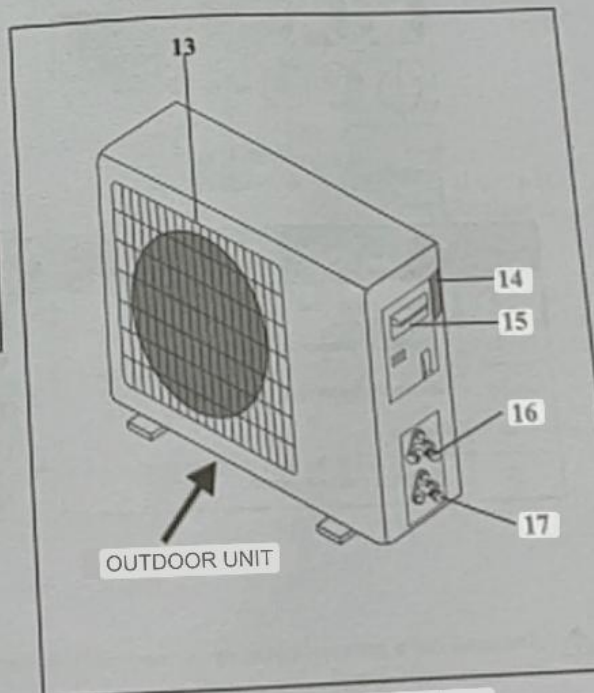
1	Front Panel
2	Filter
3	Additional filter (if installed)
4	LED display
5	Signal receiver
6	Terminal cover
7	Nonizer (if installed)
8	Deflectors
9	Danger button
10	Indoor unit nameplate
11	Air flow direction valve
12	Remote Control



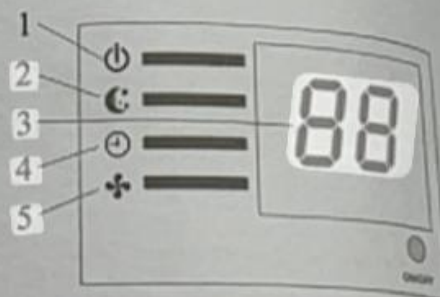
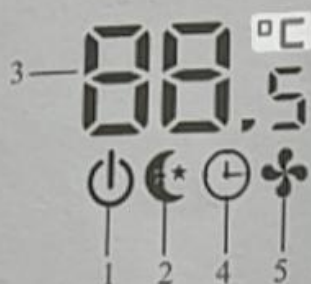
OUTDOOR UNIT

No. Designation

13	Air outlet grille
14	Outdoor unit nameplate
15	Lid
16	Gas valve
17	Liquid valve



Note: The illustrations shown here are only general approximations. The appearance of the purchased device and its parts may vary.



No.	Назначение	Панель they think
1	Indicator asks	Shows connected to a whale air conditioner
2	Mode Indicator	Indicates whether the air conditioner is in mode
3	Temperature display (with machine)	While the set temperature is Celsius or Fahrenheit
4	Timer	Timer
5	Working indicator	Indicates whether the unit is in operating mode

4 The appearance and location of switches and indicators may differ for different models, but the grinding is the same.

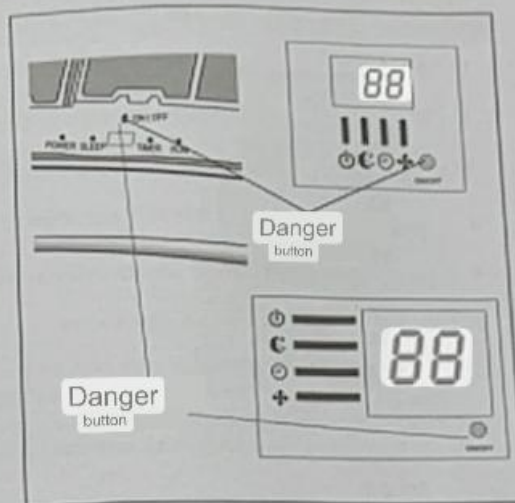
EMERGENCY OPERATION AND AUTOMATIC RESUME FUNCTION

Automatic recovery function

The manufacturer has provided a function automatic resumption of operation of the device. This function allows the air conditioner to save the current settings after a power outage or voltage drop in the network. To disable the automatic recovery function you need to:

1. Turn off the air conditioner and unplug it. 2. When connecting the device to the network, keep pressing emergency button.
3. Keep the emergency button pressed for at least 10 seconds until you hear four short beeps. This means that the automatic recovery function is disabled.

- To enable the automatic recovery function, do similar actions until you hear three short beeps



Emergency operation

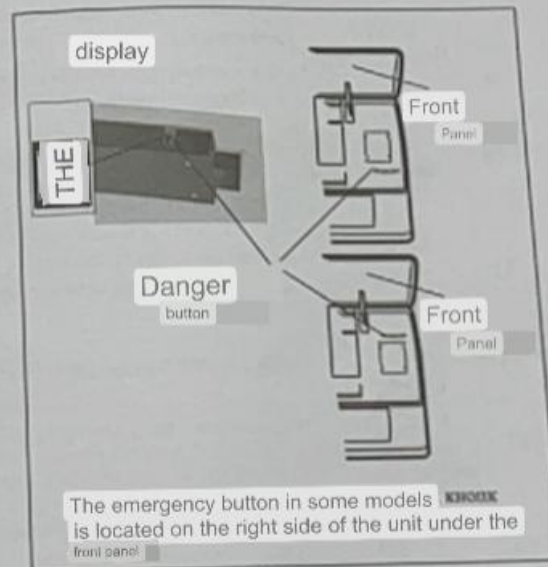
If the remote control is lost, do the following:

Lift the front panel to reach air conditioner emergency button.

1. When you press the emergency button once (one beep), the air conditioner will operate in enhanced cooling.
2. When you press the emergency button twice (two beeps) the air conditioner will operate in enhanced heating mode.
3. To turn off the unit, press the button again (one long hum). After 30 minutes of work in enhanced mode, the air conditioner goes into automatic operating mode.

Automatic mode is described on page 15.

- 4 Appearance and location of the emergency button
It may differ for different models, according to its purpose is the



The emergency button in some models is located on the right side of the unit under the front panel.

same Note: the external static pressure of heat pumps for all models is 0 Pa.

REMOTE CONTROL

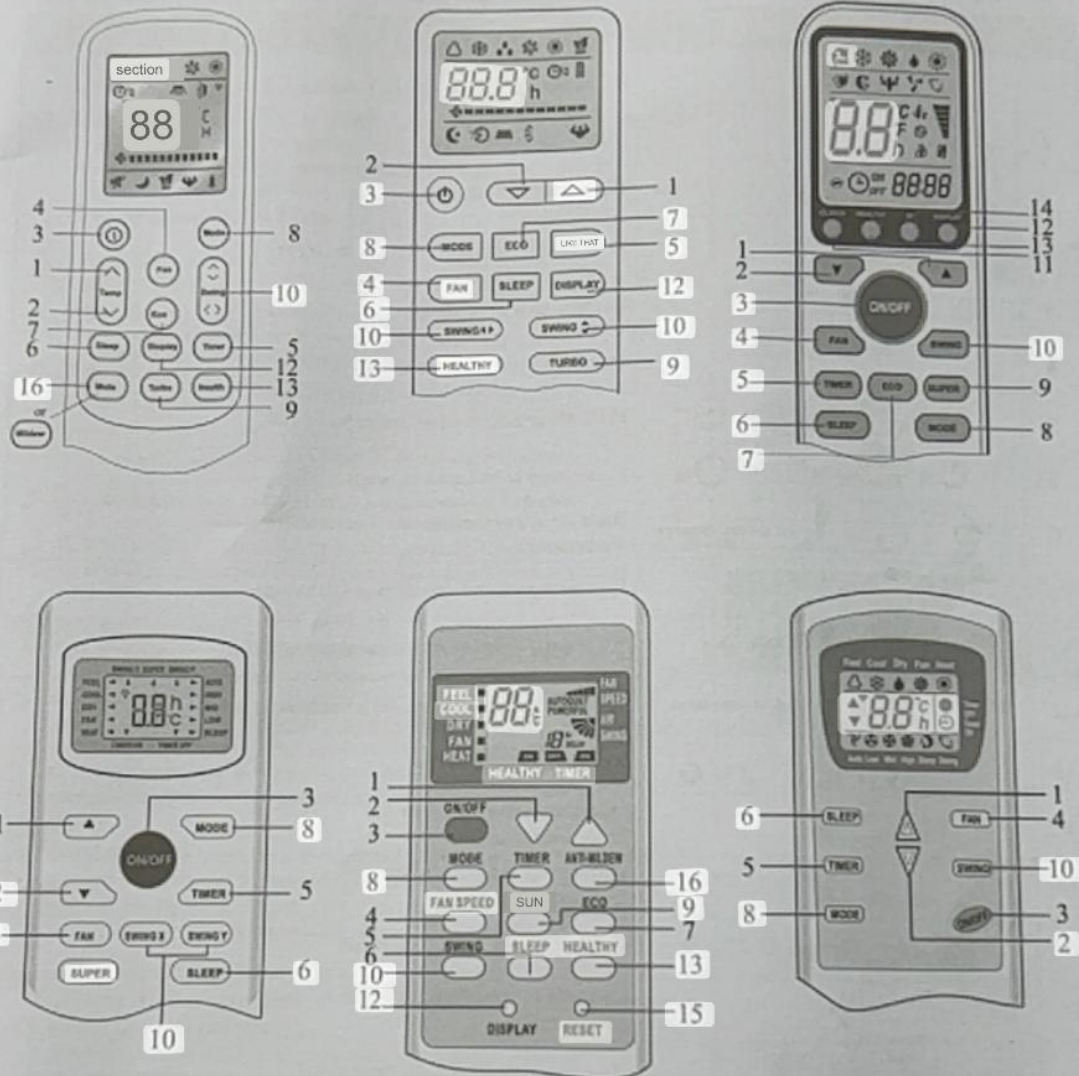
No.	Button	Purpose
1	▲ TEMP UP [Increase]	Increase temperature or time by one unit
2	▼ TEMP DN (decrease)	Decrease temperature or time by one unit
3	ON/OFF [On Off]	Turning the air conditioner on/off
4	FAN [Fan]	Fan speed selection: Auto/Low Medium HIGH
5	TIMER [Timer]	Setting Auto On/Off
6	SLEEP (sleeping mode)	Activation mode
7	ECO (Economic Mode)	When you press this button in cooling mode, the temperature will increase by decrease by 2 degrees (compared to the set temperature). When you press this button in heating mode, the temperature will increase by 2 degrees. (compared to the set temperature).
8	MODE [Mode]	Operating mode selection
9	SUPER [Maximum]	When you press this button in cooling mode, the appliance will maintain the most possible temperature of 16 degrees Celsius. When you press this button in heating mode, the appliance will maintain the highest possible temperature of 31 degrees Celsius.
10	SWING [Direction]	Turning the deflector rotation on or off
11	CLOCK [Clock]	When you press this button, the time indicator will start flashing, using the button you can use the arrows (1, 2) to set the time (one press of the button increases for 1 minute, with a long press the time changes faster). When the correct time is set, press the button again to fix it.
12	DISPLAY	Turn on/off the display (if equipped)
13	HEALTHY Health This button controls the ionizer or plasma generator (only for inverter type models)	Turn on/off health mode.
14	3D	In wall-mounted air conditioners, this button is not functional. When the button is pressed, the horizontal and vertical flaps rotate synchronously.
15	RESET	Rebooting the control panel
16	ANTI-MILDEW [Anti-mildew] or Mute [Mute]	Activating the anti-mold function or Activate silent function

4. The appearance of the remote control may vary depending on the air conditioner model.

4. In some models, the buttons and indicators may be different and located differently, but they are the same.

4. The device confirms reception of the signal from the remote control with a short beep.

REMOTE CONTROL



4. The appearance of the remote control may vary depending on the air conditioner model.

4 In some models, the buttons and indicators may be different and located differently, but their function is the same.

REMOTE CONTROL

Remote control display Meanings of LCD screen symbols

No.	Symbol	Meaning
1	 or 	Auto mode indicator
2		Cooling indicator
3	 or 	Drying indicator
4		"Fan only" indicator
5		Heating indicator
6	 or 	Signal reception indicator
7	 or  or  by n	Timer off indicator
8	 or  or  or 	Timer on indicator
9	 or  or  from fi (FLASH) GET)	Auto power indicator
10	 or  or  from fin	Low fan speed indicator
11	 or  or  From fi	Average fan speed indicator
12	 or  or  From fi	High fan speed indicator
13	 or  or  or 	Sleep mode indicator
14		Sleep comfort indicator (optional)
15		"1 feel" indicator (optional)
16	 or 	Damper rotation indicator
17		Flap rotation indicator and deflector
18	 or  or  or 	SUPER [Maximum] indicator
19	 or  or  or 	HEALTHY indicator mode]
20	 or  or  or 	ECO indicator [Economic mode]
21		ANTI-MILDEW indicator
22	 or 	Battery indicator
23		Clock indicator
24		Mute indicator

REMOTE CONTROL

Basic Instructions How to Insert Batteries

Remove the battery compartment cover by sliding it in the direction indicated by the arrow. Insert new batteries so that the (+) and (-) batteries are aligned right.

Close the battery compartment cover by sliding it back to its original location.

- ⚠ Use 2 LRO 3 AAA 1.5 V batteries ("pinky"). Do not use rechargeable batteries. Old batteries are replaced with new ones when the display brightness decreases.
Used batteries must be disposed of in accordance with regulations of the country of use.

4. Explanation for Figure 1:

1. When installing or changing the remote control batteries for the first time, pay attention to the two-row switch located under the back cover.

Double Row Position	Meaning
switch from	Display set to Celsius scale Display set to Fahrenheit
°F	The remote control is set to the COOLING mode
Cool [Cold]	
Heat [Heat]	mode The remote control is set to the heating mode

- ii. ATTENTION: After adjusting the position of the switch, remove the batteries and repeat the steps described above.

4. Explanation for Figure 2:

During initial installation or changing batteries, you should configure the remote control. It's very simple once the battery installation is finished, the symbols (Cooling) and (Heating) will flash. When you press any buttons when the cooling mode icon appears on the screen, remote control is set to "cooling only" mode. When you press any button when the heating mode icon appears on the screen, remote control adjustable to heating mode.

- 4 WARNING: When the remote control is set to cooling mode, activation of the heating function in models equipped with a heat pump will be impossible. If you need to activate the heating function, remove the batteries and repeat the steps described above.

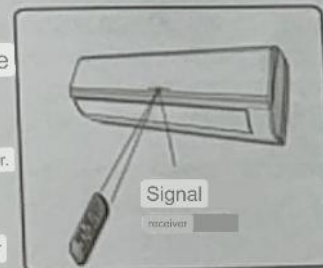
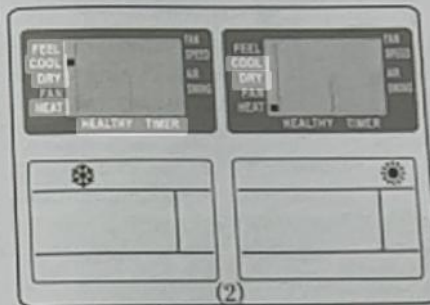
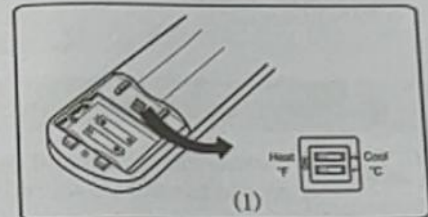
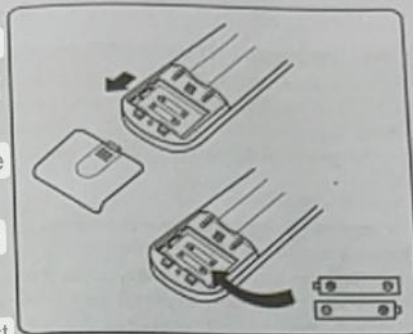
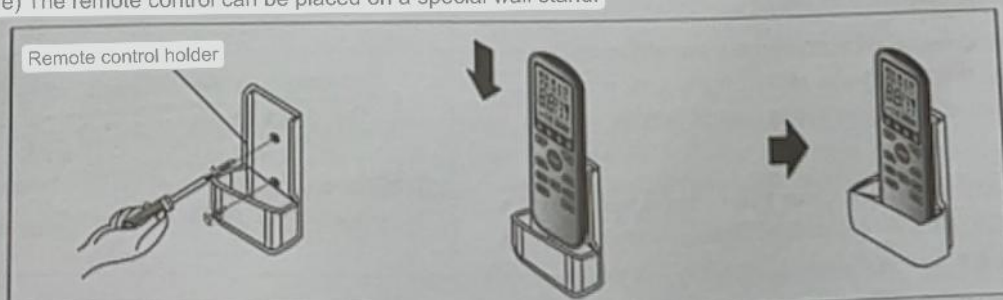
4.1. Point the remote control at the air conditioner

2. There should be no space between the remote control and the air conditioner signal receiver.
no unnecessary items.

3. Do not leave the remote control in direct sunlight

4. Keep the remote control at a distance of at least 1 m from the TV and other electrical appliances.

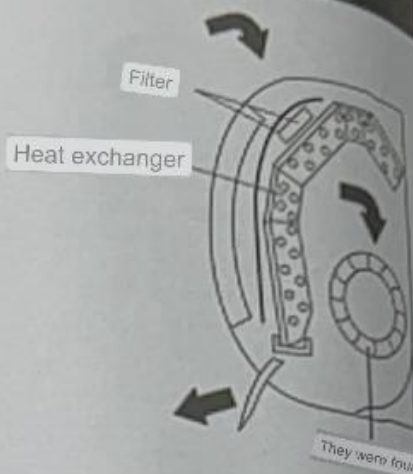
Recommendations for placement and use of the remote control (if available) The remote control can be placed on a special wall stand.



OPERATING MODES

The air enters the air conditioner with the help of a fan through the grille of the front panel and passes through the filter, being cleaned of dirt. Then the air is directed to the heat exchanger, where it is cooled and dried, or heated.

At the end of the cycle, the fan pumps air into the room, the direction of the air stream is regulated by flaps that move, which can be manually moved using vertical deflectors.



Airflow direction control



Outgoing air flow evenly distributed throughout the room. You can choose the optimal air flow direction.

The or button turns on the "DAMPER" function, the direction of the air flow alternates: up and down for uniform indoor air distribution.

The button turns on the "FLAP" function, the direction of the air flow is from right to left.

- in cooling mode, position the dampers horizontally;
- in heating mode, open the dampers upward as warm air rises. The position of the deflectors located under the dampers can be adjusted manually. Using deflectors the air can be directed to the left or right.

4. Change the position of the deflectors only when the device is turned off!

Note! Horizontal

auto-swing (from left to right) is an option.

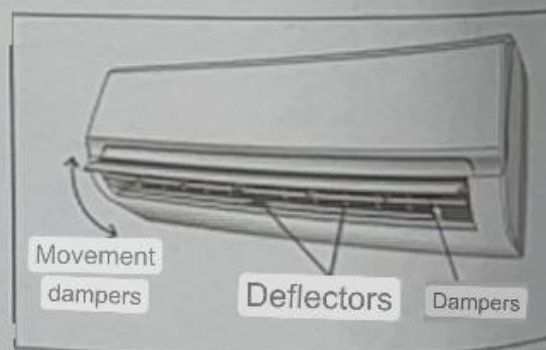
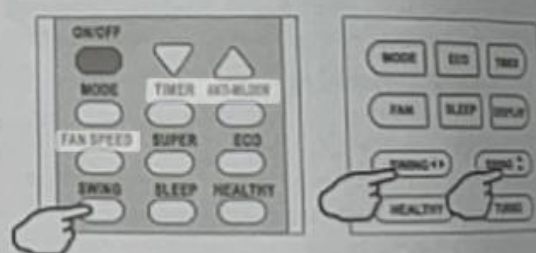
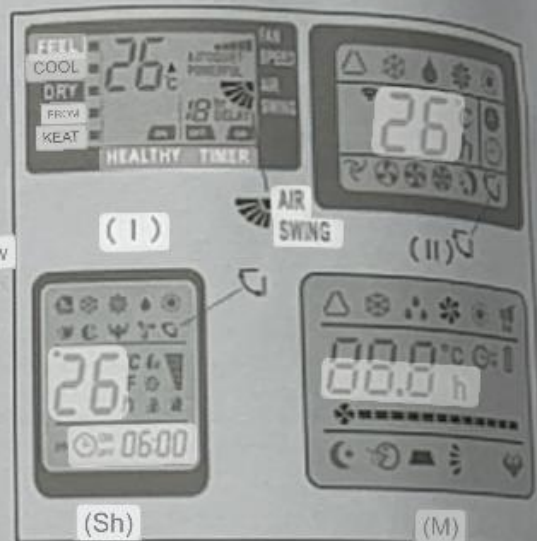
This option is intended for certain models.

CAREFULLY!

Never try to manually adjust the position of the valves, as this may damage the complex and fragile mechanism!

DANGEROUS!

Do not insert your fingers or any objects into the air outlet! Fan blades rotating at high speed can cause injury!



OPERATING MODES

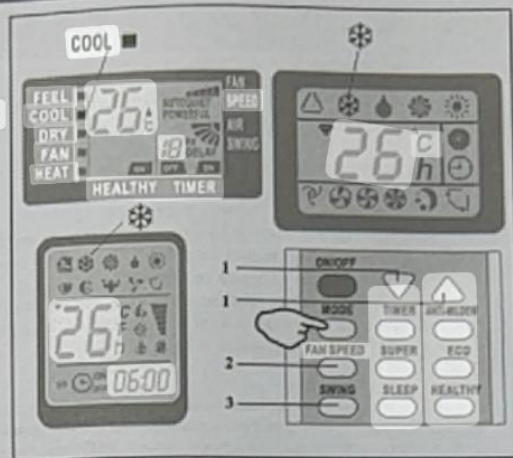
Cooling mode

C001 | The cooling function allows the air conditioner to cool the room and, at the same time, reduces air humidity.

To activate the cooling function (COOL), keep pressing the MODE button until the ** (COOL) symbol appears on the screen.

Cooling mode is activated by pressing the buttons arrows and using them to set the temperature lower than in the room.

For more successful operation of the air conditioner, adjust the temperature (1), speed (2), air flow direction (3) by pressing the corresponding buttons.



Heating mode

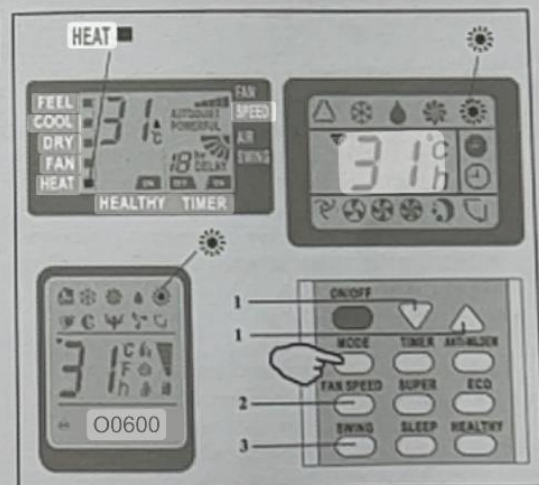
HEAT | The heating function allows the air conditioner to heat the air.

To activate the heating function (HEAT), keep the MODE button pressed until the * (HEAT) symbol appears on the screen.

The heating mode is activated by pressing the arrow buttons and using them to set the temperature higher than indoors. For more

successful operation of the air conditioner, adjust temperature (1), speed (2), direction air flow (3) by pressing the appropriate

buttons.



4. This device is equipped with the "Hot Start". When this function is turned on, the start-up is slow and after a few seconds the warm air begins to be released.

4. In heating mode, the defrosting mode may automatically turn on to remove ice from the evaporator. This procedure can last 2-10 minutes, the fans stop. After defrosting, the air conditioner automatically returns to heating mode.

OPERATING MODES

Timer mode - Timer on



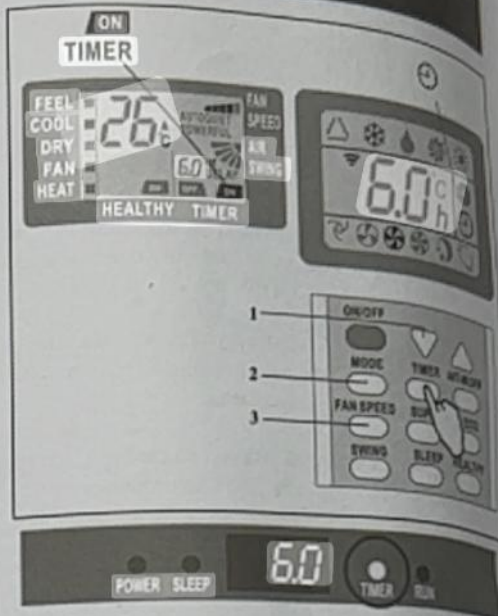
Used to automatically turn on the air conditioner.

The switch-on time can only be programmed when the device is turned off. Press **TIMER** button, set the desired temperature by pressing arrow buttons, press **TIMER** again. Press the arrow buttons until the time interval value corresponding to the time from the moment the timer is set until the moment the air conditioner starts operating appears on the screen.

IMPORTANT!

Before setting the desired turn-on time for the device, set the switching mode using the **MODE** button (mode 1 (2) and the fan speed using the **FAN** (fan) button. Turn off the air conditioner (using the **ON/OFF** button).

Note: To cancel the set function, you need to press the **TIMER** button again. Note: If there is a power outage, the timer must be reset.



indoor unit screen

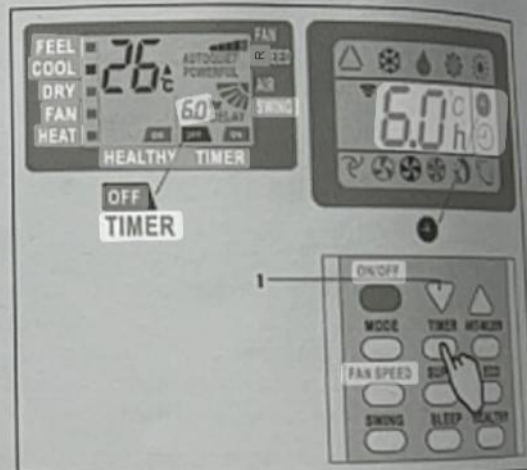
Timer mode - Timer off



Used to automatically turn off the air conditioner.

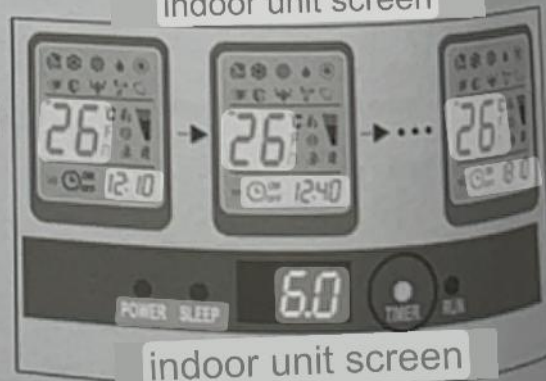
Program shutdown time only possible when the device is turned on. Press the **TIMER** button, set the required time using the arrow buttons. Press the arrow buttons until the time interval appears on the screen corresponding to the time from the time the timer is set until the desired time the air conditioner stops operating.

Note: To cancel the set function, you need to press the **TIMER** button again. Note: If there is a power outage, the timer must be reset.



indoor unit screen

4. Note: When the time is set correctly, the Timer function can be set in half hour increments.



indoor unit screen

OPERATING MODES

Fan mode



When operating in fan mode, the air conditioner simply ventilates the room.

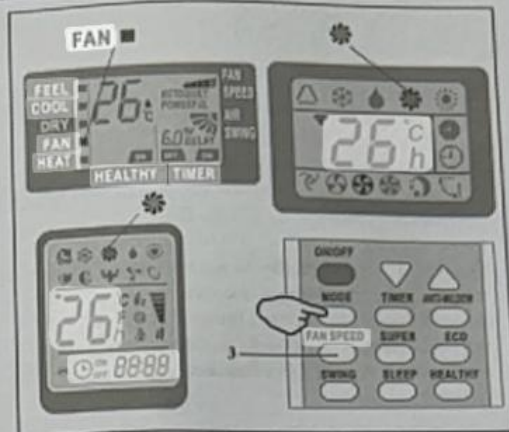
To set the fan mode FAN, press the MODE [mode] button until the icon appears on the display.

When:

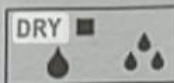
you press the FAN button, the rotation speed The fan changes in the following sequence:
low/medium/high/automatic

The air conditioner's memory stores the speed that was set in previous operating modes.

In automatic mode, the air conditioner independently selects the fan speed and operating mode (cooling or heating)

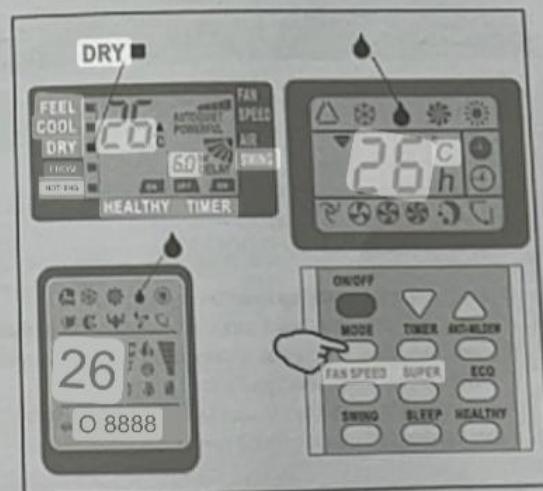


Drying mode



With this function it is reduced air humidity, and more comfortable conditions.

To set the drying mode, press the MODE button until the (DRY) symbol appears on the screen. The function automatically changes cycles cooling and ventilation.



OPERATING MODES

FEEL mode - automatic mode



Auto mode.

To turn on the automatic operating mode, hold down the MODE button on the remote control until the symbol (FEEL) appears on the display.

In this mode, the fan speed and temperature are set automatically, in accordance with the room temperature (air analysis is carried out by a sensor located in the indoor unit) to create the most comfortable conditions.

1 Wednesday	Air conditioner operating mode	Automatic
< 20°C	Heating (for veneers, осушительный режим обогрева, Вентилятор (при отсутствии режима обогрева))	23°C
20°C-26°C	Drying	18°C
> 26°C	Cooling	23°C

To optimize the operation of the air conditioner, adjust the temperature (+/-2 degrees C) (1), speed (2) and air flow direction (3) by pressing the indicated buttons.

Sleeping mode

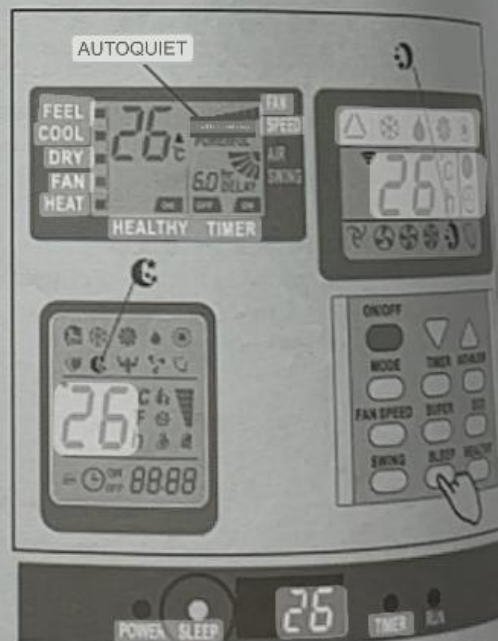
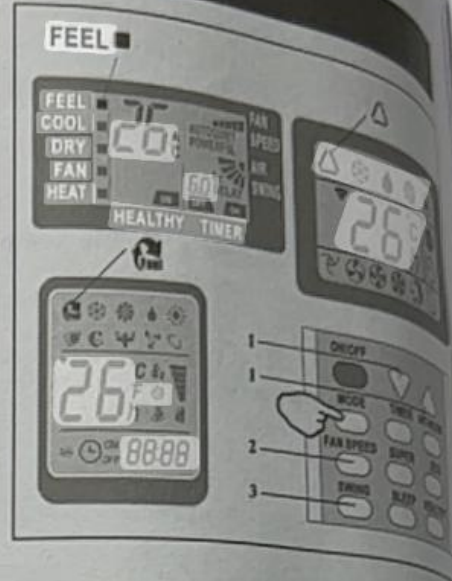


To activate sleep mode, press SLEEP button on the remote control until the symbol (AUTOQUIET)

appears on the display. The sleep mode function automatically adjusts the room temperature to create a comfortable sleeping environment. In cooling or drying mode, the set temperature will be automatically rise 1 degree C every 60 minutes. Total the temperature will rise by 2 degrees in 2 hours.

In heating mode, the set temperature will gradually decrease and decrease by 2 degrees C during the first 2 hours of operation.

After 10 hours of operation in sleep mode, the air conditioner will switch to the previous operating mode.



indoor unit screen

AUTOMATIC AIR CONDITIONING PROTECTION

The protective elements may be disabled and the device terminated listed below.

in cases for Tab. 1 Climate models:

NO.	Mode	
1	Heating	Outside temperature above 24°C
		Outside temperature below -7°C
		Room temperature higher 27°C
2	Cooling	Outside temperature above 43°C
		Room temperature below 21°C
3	Drainage	Room temperature below 18°C

For (Table 3) Tropical Climate Models:

NO.	Mode	
1	Heating	Outside temperature above 24°C
		Outside temperature below -7°C
		Room temperature above 27°C
2	Cooling	Outside temperature above 52°C
		Room temperature below 21°C
3	Drainage	Room temperature below 18°C



After stopping and restarting the air conditioner or after changing the mode during operation, the system does not reboot immediately until after 3 minutes (Protection function for compressor).

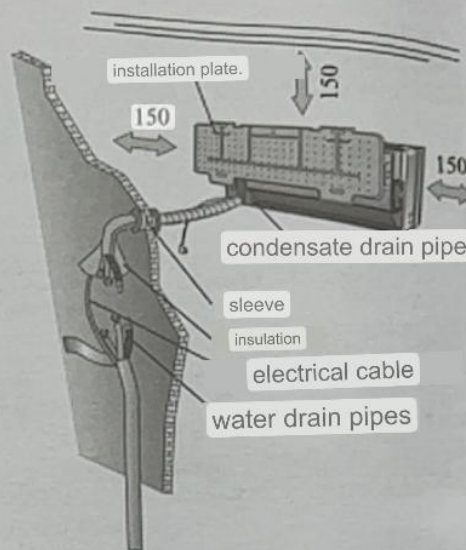
4. Power and efficiency depends on the test data that accompanies the operation completely unloaded.

- Power and efficiency were determined at the maximum speed of the indoor unit fan motor and the degree of angle of maximum air flow

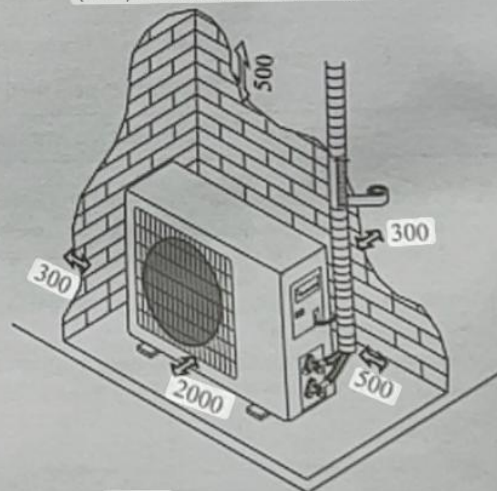
AIR CONDITIONER INSTALLATION GUIDE - Selecting the installation location

INDOOR UNIT

- Install the indoor unit of the air conditioner on a secure wall that is not subject to vibrations.
- The air inlet and outlet openings must not be obscured by something: air should flow freely throughout the room.
- Do not install the unit near a heat source, steam or flammable gas.
- Install the appliance near an electrical outlet or separate circuit
- Do not install the device in a place where it will be exposed to direct sunlight.
- Install the air conditioner in such a way that so that the distance between the indoor and outdoor units is minimal.
- Install the device so that it can be drain the water.
- Check the correct operation of the device regularly. Leave a distance between the device and the wall or ceiling, as shown in the picture.
- Install the indoor unit so that the filter was easy to reach.



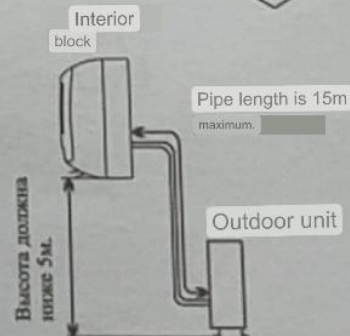
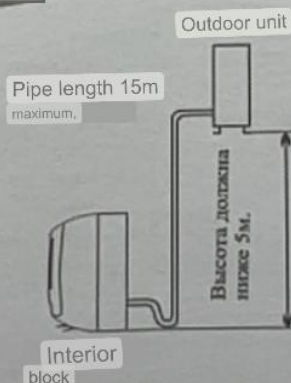
Minimum armored space (mm) is indicated in the figure



OUTDOOR UNIT

- Do not install the outdoor unit near sources of heat, steam or flammable gas.
- Do not install the unit in places that are too windy or dusty.
- Do not install the unit where people walk. Choose a location where air exhaust and noise will not disturb your neighbors.
- Avoid installing the unit where it will be under exposure to direct sunlight (otherwise use additional protection for the device, which, however, must not impede the free inlet and air release).
- Leave a distance between the device and any objects as shown in the figure to ensure free air circulation.
- Select a stable and safe place.
- If the outdoor unit vibrates during operation, place a rubber pad under it.

Installation diagram



Installation of the air conditioner can only be carried out by specialists. The purchaser must ensure that the installer or installer is suitably qualified and experienced.

AIR CONDITIONER INSTALLATION GUIDE - Installing the indoor unit

Before installation, decide where the indoor and outdoor units, also taking into account the distances, the latter should be left between the air conditioner and the wall, ceiling and any objects

4. The indoor unit is installed directly in the desired room. Avoid installing the indoor unit in corridors and walk-through areas.

internal one is set at a height not less than 2.5 meters from p

To install you need:

Attaching the mounting plate

1. Using a level, ensure accurate horizontal position and verticality of the axes of the mounting plate
2. Drill holes with a diameter of 32 mm in the wall.
3. Insert plate anchors into the holes.
4. Using cross-shaped screws (self-tapping screws), secure the installation plate to the wall.
5. Check that the installation plate is securely fastened.

Note. the shape of the mounting plate can differ from that shown in the figure, according to installation is carried out in the same way.

Drilling a hole in the wall for a pipe

1. Select a location in the wall to drill a hole for the pipe (if necessary), taking into account the location of the mounting plate.
2. Insert the flexible flange into the hole in the wall to maintaining its cleanliness and safety.
4. The hole should have a slight outward slope

Note: The drain pipe must also have tilt outward to avoid leakage.

Electrical connections indoor unit

1. Lift the front panel
2. Remove the cover as shown in the picture (by unscrewing the screw or breaking the hooks).
3. The electrical connection diagram is given on the right side of the unit under the front panel.
4. Connect the cables to the screw terminal according to the numbers, following the rules safety precautions.

4 Cable connecting indoor and outdoor

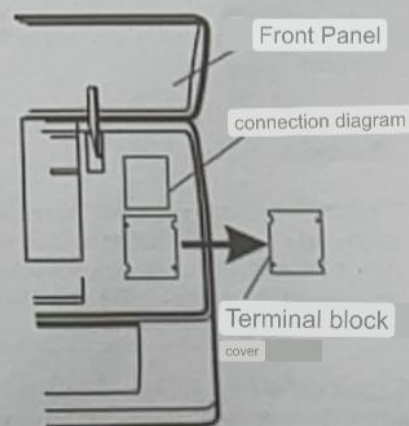
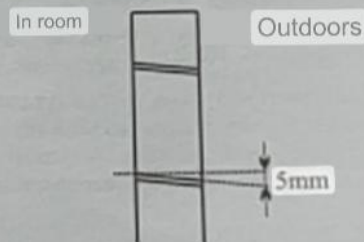
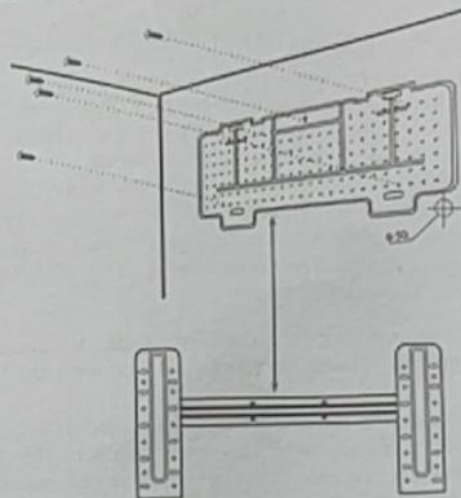
blocks, must be for outdoor use 4

The socket must be within reach, so that, if necessary, the device can be Δ Reliable from the network.

grounding must be ensured. disconnect

- 4 If the power cable is damaged, contact your service center to provide a replacement.

Note: The cables are connected to the main circuit board of the indoor unit by the manufacturer, in according to air conditioner model without terminal pads

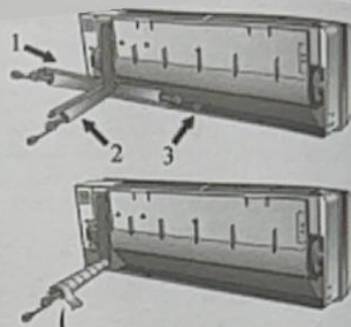


AIR CONDITIONER INSTALLATION GUIDE Installing the indoor unit

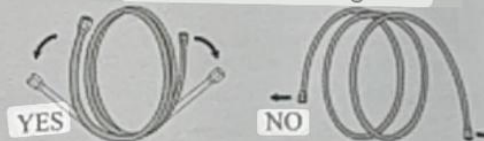
Installation of pipes for refrigerant circulation

The pipes can go in one of the directions indicated by the numbers in the figure. If it is rough in direction 1 or 3, use a cutter to cut a groove on the side of the indoor unit. Run the pipes towards the hole in the wall and use electrical tape to tie the copper pipes, drain pipe and electrical cable together. The drain pipe should be located at the bottom so that the water can flow freely.

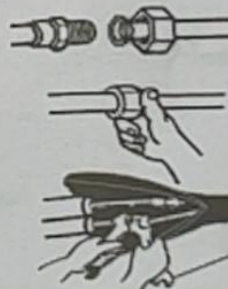
- Do not remove the cap from the pipe before installation to avoid moisture or pollution.
- If the pipe is subjected to frequent bending or growth, it will lose its flexibility. Do not bend the pipe more than three times in one place. Unroll the rolled pipe, carefully straightening it, as shown in the figure.



Form a connecting wire



Extend the wrapped wire



Connection to indoor unit

1. Remove the cap from the pipe of the indoor unit (check that dirt does not get inside).
2. Insert the flare nut and install the flange on most connecting pipe.
3. Secure the connection using two nuts keys, working in opposite directions.

Condensate drainage of the indoor unit

Condensate drainage of the indoor unit is necessary for successful installation.

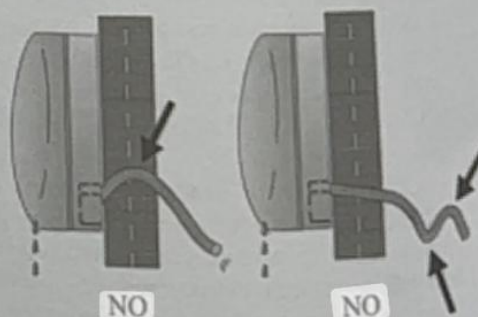
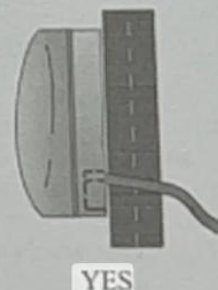
1. Install the drain hose under the pipe, being careful not to create a siphon.

2. The drain hose must be sloped to ensure drainage.

3. Do not bend the drain hose, leave it hanging, roll it up, or place its end in water. If an extension is added to the drain hose, make sure the connection is covered with insulation.

4. If the pipes go to the right, the electrical cable and drain pipe should be wrapped with insulation and attached to the back of the unit to the pipes.

- 1) Insert the pipe connection into the corresponding hole 2) Press to attach the pipes to the base.



AIR CONDITIONER INSTALLATION GUIDE - Installing the indoor unit

Installation of the indoor unit

After installing the pipes according to the instructions, install the connecting cables. Then install the drain pipe. Then wrap the pipe, cables and drain pipe with insulating material.

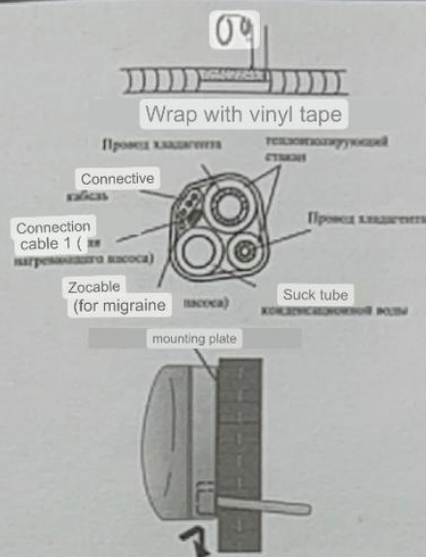
material. 1.

Prepare pipes, cables and drain hose. 2. Wrap the connecting parts of the pipes with insulation, protecting them with vinyl film on top.

3. Pass the associated pipes, cables and drain pipe through the hole in the wall and securely fix the indoor unit on the top of the installation

slabs

4. Press the bottom of the indoor unit firmly onto the installation plate



AIR CONDITIONER INSTALLATION GUIDE - Outdoor Unit Installation

- The outdoor unit must be installed on a strong and a secure wall and secured.

- Before connecting pipes and cables: choose the optimal location on the wall, providing space for convenience Maintenance.

- Screw the bracket to the wall using anchors, the selection of which depends on the type of wall.

- Use more anchors than would normally be required for the weight to avoid vibration during operation and to ensure reliable fastening of the air conditioner for a long

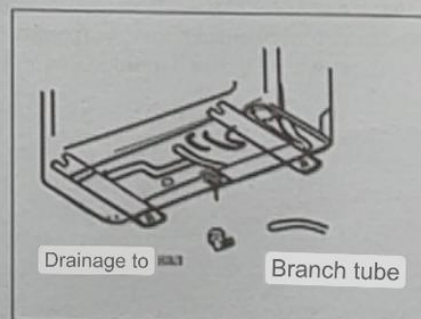
time. • The unit must be installed in accordance with restrictions and regulations of your country.

Outdoor unit condensate drainage (only for models with heat pump)

Condensation and ice formed in the outdoor unit can be removed through the drain pipe. 1. The drainage hole should be in the 25mm hole of the block, as shown in the figure.

2. Connect the drain pipe and drain hole. Make sure that the water is drained

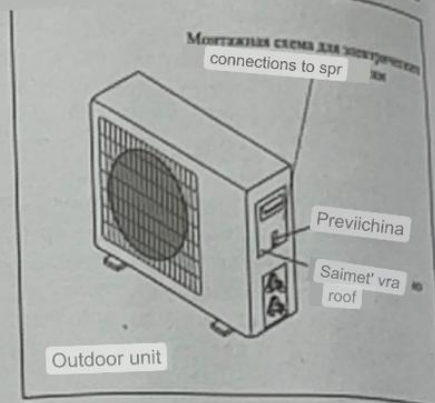
to a suitable location.



AIR CONDITIONER INSTALLATION GUIDE Installation of the outdoor unit

Electrical connections

1. Remove the cover.
2. Connect the cable wires to the terminal plate using the same numbering as in the internal block.
3. To make electrical connections, study electrical diagram on the back of the cover.
4. Secure the cables with a cable clamp.
5. Provide good grounding
6. Close the lid.

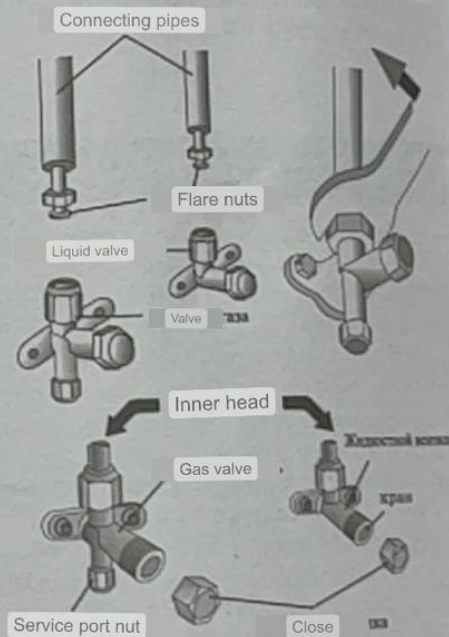


Pipe connections

Screw the flare nuts into the outdoor unit using the same sequence as for indoor unit.

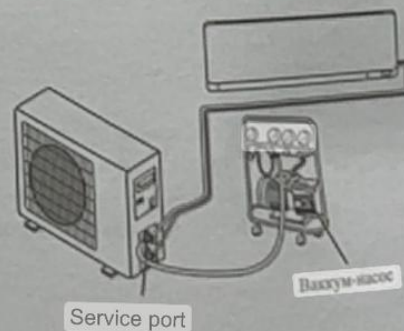
To avoid leakage, pay attention to following points: 1.

1. Tighten the flare nuts using two wrenches. Be careful not to damage the pipes.
2. If the rotating torque is not tight enough, a leak may occur. If the torque is over-tightened, leakage is also likely because the flange may be damaged.
3. The most secure fastening is achieved by using a torque wrench and a fixed wrench: Please check the torque wrench chart.



Draining air and moisture

Accumulation of air and moisture in the refrigerant circuit causes compressor problems. After connecting the indoor and outdoor units, remove air and moisture from the refrigerant circuit using a vacuum pump.

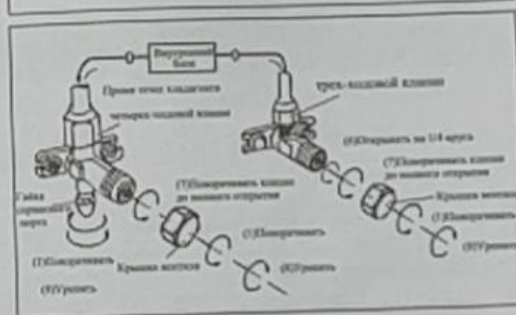
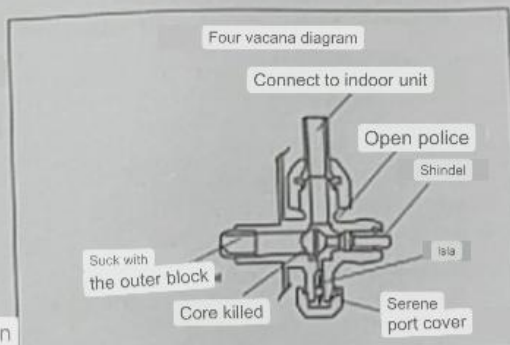


AIR CONDITIONER INSTALLATION GUIDE - Installing the indoor unit

Draining air and moisture

Air and water inside the refrigerant cycle may cause After connecting the indoor and outdoor units, release the air and water from the refrigerant cycle using a vacuum pump.

- (1) Unscrew and remove the caps from the two-way and three-way
- styles. (2) Unscrew and remove the service port caps.
- (3) Connect the vacuum pump hose to the service hole.
- (4) Operate the vacuum pump for 10-15 minutes until an absolute vacuum (10mmHg) is achieved,
- (5) While continuing to operate the vacuum pump, tighten the connection point of the low pressure vacuum pump handle. Stop the vacuum
- pump (6) Open the two-way valve 1/4 turn and close it after 10 seconds.
- Check all parts connections for leaks using liquid soap or an electronic leak detection device.
- (7) Turn the two-way and three-way valves. Disconnect the vacuum pump hose.
- (8) Place and screw on the caps



AIR CONDITIONER INSTALLATION GUIDE - Final Steps

1. Wrap all connections of the indoor unit with insulating material and secure with electrical tape. 2. Secure the excess signal cable, attaching it to the pipes or external unit 3. Fix the pipes on the wall (after wrapping them with electrical tape) using a lock plastic fasteners.

4. Cover the hole in the wall through which the pipes pass so as to prevent penetration of moisture and air through it.

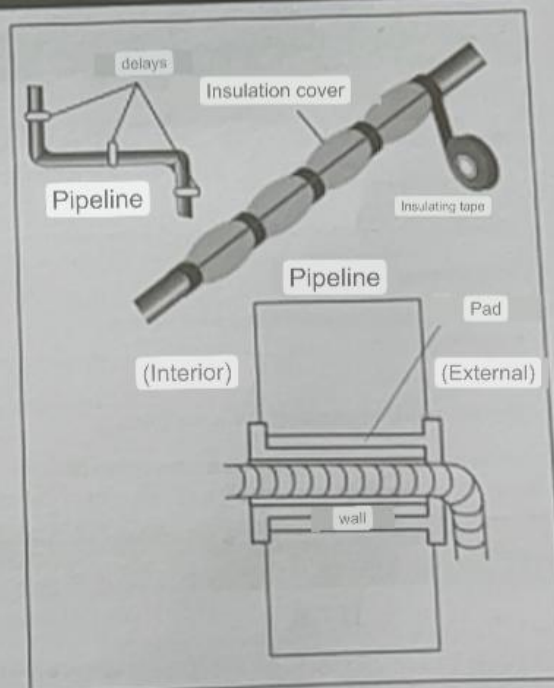
Testing the indoor unit

- Is this happening normally?
- turning on/off the device, turning on the fan?
- Are the modes functioning properly?
- Does the timer work and are the settings saved?
- Are the indicator lights on?
- Are the air flow directions functioning properly?
- Is condensate drained regularly?

Outdoor unit testing

- Is there abnormal noise or vibration during operation of the appliance?
- Can noise, air flow cause inconvenience to neighbors?
- Is there a coolant leak?

Note: The electrical controller allows the compressor start working only three minutes after voltage entering the system.



AIR CONDITIONER INSTALLATION GUIDE Information for the installer

Performance model with fixed	5k	7k	9k	12k	15/18k	22/24k	28/30/36k
Liquid pipe diameter	1/4" (φ6)	1/4" (φ6)	1/4" (φ6)	1/4" (φ6)	1/4" (φ6)	1/4" (φ6) 3/8" (φ9.52)	1/4" (φ6) 3/8" (φ9.52)
Gas pipe diameter	3/8" (φ9.52)	3/8" (φ9.52)	3/8" (φ9.52)	1/2" (φ12)	1/2" (φ12)	5/8" (φ15.88)	5/8" (φ15.88)
Denestre gas pipe	Ep	3m	Ep	3m	4m	4m	4m
Pipe length as supplied	15m	15m	15m	15m	15m	15m	15m
Maximum distance between internal and external basques	20g/m	20g/m	20g/m	20g/m	30g/m	30g/m	30g/m
Additional gas load	5m	5m	5m	5m	5m	5m	5m
The maximum difference between the external and indoor unit	R22	R22	R22	R22	R22	R22	R22
Refrigerant type (1)							

Performance of the fixed model turnover (W / °C)	7k	9k	12k	15/18k	22/24k	28/30/36k
Liquid pipe diameter	1/4" (φ6)	1/4" (φ6)	1/4" (φ6)	1/4" (φ6)	1/4" (φ6) 3/8" (φ9.52)	1/4" (φ6) 3/8" (φ9.52)
Gas pipe diameter	3/8" (φ9.52)	3/8" (φ9.52)	3/8" (φ9.52) 1/2" (φ12)	1/2" (φ12)	5/8" (φ15.88)	5/8" (φ15.88)
Standard pipe length	3m	3m	Ep	4m	4m	4m
Maximum distance between internal outdoor unit	15m	15m	15m	15m	15m	15m
Additional gas load	20g/m	20g/m	20g/m	30g/m	30g/m	30g/m
The maximum difference between the external level indoor unit	5m	5m	5m	5m	5m	5m
Refrigerant	R410A	R410A	R410A	R410A	R410A	R410A

Performance of the inverter ti model (W / °C)	9k	12k	15/18k	22/24k
Liquid pipe diameter	1/4" (φ6)	1/4" (φ6)	1/4" (φ6)	1/4" (φ6) 3/8" (φ9.52)
Gas pipe diameter	3/8" (φ9.52)	3/8" (φ9.52) 1/2" (φ12)	1/2" (φ12)	5/8" (φ15.88)
Standard pipe length	3m	3m	4m	4m
Maximum distance between indoor and outdoor units	15m	15m	15m	15m
Additional gas load	20g/m	20g/m	20g/m	30g/m
The maximum difference between the external and indoor unit	5m	5m	5m	Its
Refrigerant type (1)	R410A	R410A	R410A	R410A

• For details, please refer to the technical specification

(1) According to the outdoor unit data sticker

Torque tightening for protective caps and flange connections

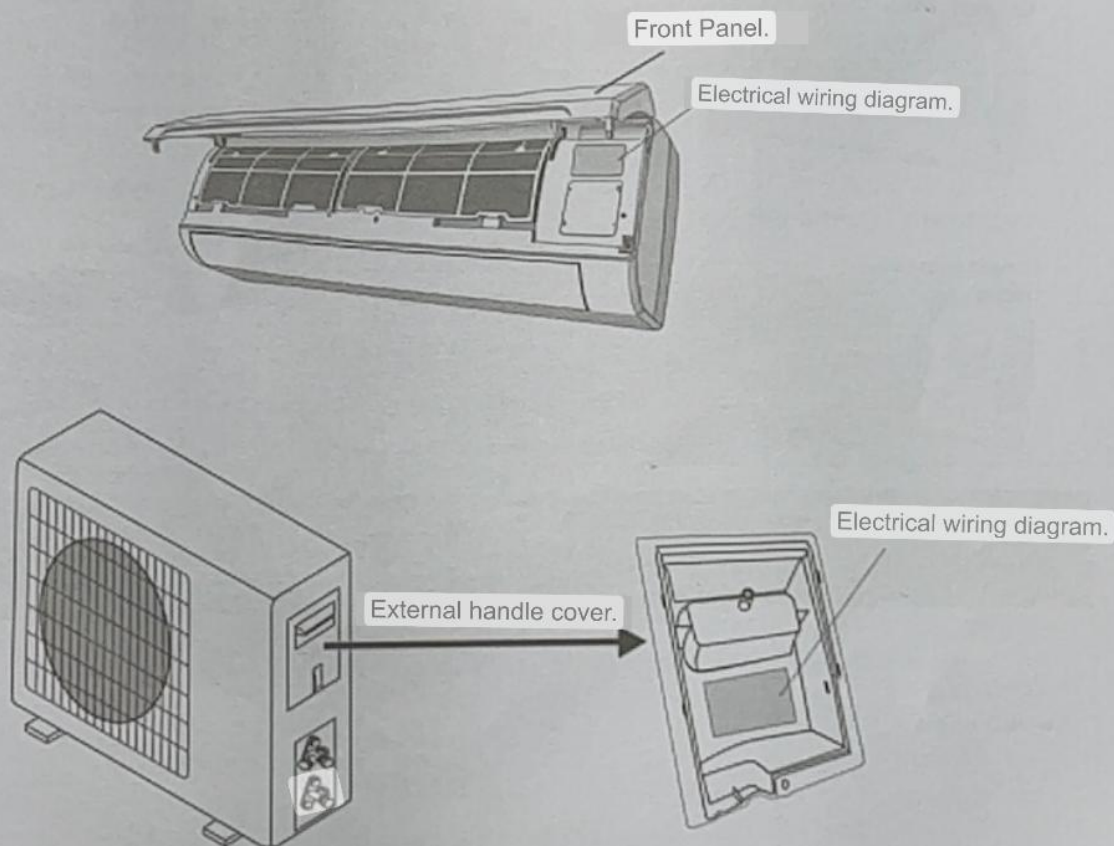
Tube	Torque twist [x m.]	Suitable (when used. Accurately keys at 20 cm)	Spin the rotating moment [x m.]
1/4" (φ6)	15 - 20	system	7-9
3/8" (φ9.52)	31 - 35	system	25 - 30
1/2" (φ12)	35 - 45	wrist force	
5/8" (φ15.88)	75 - 80	stuck	

AIR CONDITIONING INSTALLATION GUIDE - Information for the installer

Assembly scheme

For different models, wiring diagrams may be different.
Please refer to the electrical diagrams pasted on the inside
outdoor block accordingly.

On the internal unit, the wiring diagram is pasted under the front panel;
On the outdoor unit, the wiring diagram is pasted on the back of the outdoor
handle covers.



Please note: for some models, the wires are connected to the control board of the unit internal
by the manufacturer without a terminal block.

AIR CONDITIONER INSTALLATION GUIDE Installation

information

Cable Wire Specification

Model performance (Btu/c) Btu		5k	7k	9k	12k	15/18k	22/24k	28/30k
		Sectional department						
Power cable	N	1.0mm ² AWG18	1.0mm ² AWG18	1.0mm ² AWG18	1.0mm ² (1.5mm) AWG18 (AWG16)	1.5mm ² AWG16	2.5mm ² AWG14	4.0mm ² AWG12
	L	1.0mm ² AWG18	1.0mm ² AWG18	1.0mm ² AWG18	1.0mm ² (1.5mm) AWG18 (AWG16)	1.5mm ² AWG16	2.5mm ² AWG14	4.0mm ² THE
	AND	1.0mm ² AWG18	1.0mm ² AWG18	1.0mm ² AWG18	1.0mm ² (1.5mm) AWG18 (AWG16)	1.5mm ² AWG16	2.5mm ² AWG14	4.0mm ² THE
Connection cable	N	1.0mm ²	1.0mm ²	1.0mm ²	1.0mm ² (1.5mm)	1.5mm ²	0.75mm 8.75	
	L	1.0mm ²	1.0mm ²	1.0mm ²	1.0mm ² (1.5mm)	1.5mm ²	0.75mm 8.75	
	1	1.0mm ²	1.0mm ²	1.0mm ²	1.0mm ² (1.5mm)	1.5mm ²	0.75m 7	
	2	0.75mm	0.75mm	0.75mm	0.75mm	0.75mm	0.7567	
	3	0.75mm	0.75mm	0.75mm	0.75mm	0.75mm	0.75mm 0.75	
	⊕	0.75mm	0.75mm	0.75mm	0.75mm	0.75mm	0.75 0.75	

Inverter type model performance (Btu/hour)			9k	12k	18/22k	24k
		Sectional department				
Power cable	N		1.0mm ² (1.5mm) AWG18 (AWG16)	1.0mm ² (1.5mm) AWG18 (AWG16)	1.5mm ² AWG16	2.5mm ² AWG14
	L		1.0mm ² (1.5mm) AWG18 (AWG16)	1.0mm ² (1.5mm) AWG18 (AWG16)	1.5mm ² AWG16	2.5mm ² AWG14
	AND		1.0mm ² (1.5mm) AWG18 (AWG16)	1.0mm ² (1.5mm) AWG18 (AWG16)	1.5mm ² AWG16	2.5mm ² AWG14
Connective cable	N		1.0mm ² (1.5mm)	1.0mm ² (1.5mm)	1.5mm ²	0.75mm
	L		1.0mm ² (1.5mm)	1.0mm ² (1.5mm)	1.5mm ²	0.75mm
	1		1.0mm ² (1.5mm)	1.0mm ² (1.5mm)	1.5mm ²	0.75mm
	⊕		1.0mm ² (1.5mm)	1.0mm ² (1.5mm)	1.5mm ²	0.75mm

Type of 220 V fuse used in the outdoor unit controller for models 7, 9, 12, 15, 16 30K 501 with a power of 3.15 A, 250 V. Type of 110 V fuse used in the outdoor controller for 7, 9, 12 501 at a power of 3.15 A, 125 V. Type of fuse used in the inverter controller 23

MAINTENANCE AND MAINTENANCE

Regular maintenance is an important point in ensuring reliable operation of the air conditioner.

Before performing maintenance, turn off the device and unplug it.

Indoor unit

Dust filters 1.

Open the front panel in the direction indicated by the arrow.

2. Hold the front panel with one hand and pull out the air filter with the other hand. 3.

Rinse the filter with water. If contamination filters are oily in nature, rinse the filter with warm water (temperature no higher than 45 degrees C). Dry the filter in a cool dry place. 4.

While holding the front panel with one hand, insert the filter with your other

hand. 5. Close the panel.

The electrostatic and deodorizing filter (if equipped) are not washed or cleaned, but are replaced every 6 months.

Cleaning the heat exchanger

1. Open the front panel of the unit, lift it up and then remove it from the mounting to make it easier cleaning process.

2. Wipe the indoor unit with a cloth soaked in water and neutral soap. Do not use for cleaning solvents and aggressive detergents.

3. If the outdoor unit battery is clogged, clean it, removing leaves and dirt with a stream of air and a small amount of water.

End of season maintenance

1. Disconnect the device from the network.

2. Clean and replace filters.

3. On a warm and dry day, turn on the fan in ventilation mode and leave for several hours so that the unit is completely dry from the inside.

Changing batteries

If: • The indoor unit does not respond

• The LCD does not turn on

How to: • Remove the cover at the back of

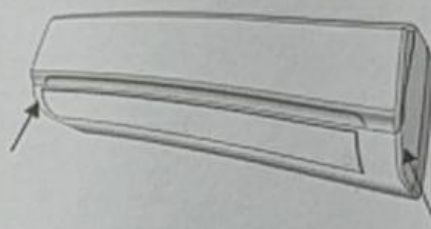
the unit • Install new batteries, observing the polarity (+)-).

Note: • Use only new batteries. • Remove the batteries

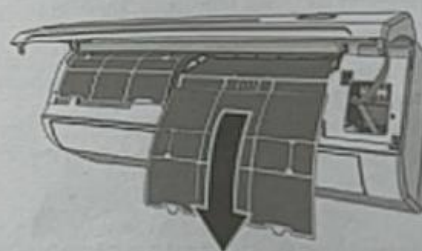
from the remote control when the air conditioner is not in use.

ATTENTION

! Do not throw batteries into regular trash bins; they should be disposed of in special bins at waste collection points.



Dust filter



TROUBLESHOOTING

Problem	Probable Cause
The device does not work	Power cut / plug is not plugged into the socket Damage to the external or internal fan Compressor thermomagnetic circuit breaker damaged Fuse or fuse damaged The contacts are damaged or the plug is not plugged into the socket. Sometimes work is stopped to protect the device. The voltage in the network is lower or higher than the permissible voltage for the device. Timer function active Electronic control damaged Dirty filter
Strange smell	Sound of running coolant
The sound of flowing water	This occurs when the air in the room becomes very cold, e.g. "Cooling" and "Drying" modes. The sound occurs due to the expansion and contraction of the front grille from the change temperatures and does not indicate a problem
From the air outlet fog coming from the holes	Incorrect temperature setting
Strange sound	The air inlet or outlet openings are blocked by something.
Insufficient flow of warm or cold air	The air filter is dirty.
	Fan set to minimum speed Other heat sources in the room
	No refrigerant
The device does not respond to teams	The remote control is too far from the indoor unit The remote control batteries are dead
	There are obstacles between the remote control and the indoor unit
Display is off	"LIGHT" function active
	Power outage

Immediately turn off the air conditioner and unplug the power supply if

The device is making strange noises

Electronic control panel damaged

Damaged fuses or switches

Water or objects have entered the appliance

The cables or outlet are overheated

The appliance emits a strong odor

Error messages on the display

When an error occurs, the indoor unit display shows the following error codes:

	Operating mode indicator	Description of the error
He	Flashes once	The room temperature sensor is damaged
Eg	Flashes 2 times	The sensor for measuring the temperature of the pipe in the room is damaged
E6	Flashes 6 times	The indoor fan motor is damaged

SERVICE INSTRUCTIONS (for R32 refrigerant) 1.

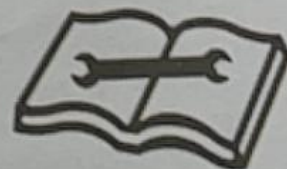
- Read the information in this manual to determine the correct installation clearance around the air conditioner, including ensuring there is sufficient clearance around the air conditioner.
2. The air conditioner must be installed and operated in a room with an area of less than 10 m².
 3. The length of the freon route should be as short as possible.
 4. Pipelines must be protected from physical impact and should not be installed in an unventilated area.
 5. Follow local gas codes when handling refrigerant.
 6. Pipeline connections must be accessible for maintenance.
 7. Follow the instructions in this manual for operating, installing, cleaning, maintaining the air conditioner, and refrigerant disposal.
 8. Make sure the vents are not clogged.
 9. Note: Maintenance should only be performed in accordance with the manufacturer's recommendations.
 10. Warning: The air conditioner should be stored in a well in a ventilated area, the dimensions of which correspond to the size of the area specified for work.
 11. The air conditioner should be stored in a room without constant open fire (for example, a running gas appliance) and sources of ignition (for example, a running electric heater).
 12. The air conditioner should be stored in such a way as to prevent the possibility of mechanical damage.
 13. It is advisable that the specialist working with the refrigerant circuit have a valid * and a current certificate from an industry accredited company confirming its competence in handling refrigerants, in accordance with an assessment specification recognized in the relevant industrial sector. All maintenance operations should only be carried out in accordance with the equipment manufacturer's recommendations. Maintenance and repair operations requiring the assistance of other qualified personnel must be carried out under the supervision of a person competent in the use of flammable refrigerants.
 14. Any operating procedure affecting safety features must be followed only by competent persons.
 15. Warning:
 - Do not use products to speed up the defrosting or cleaning process other than recommended by the manufacturer.
 - The air conditioner should be stored in a room where there are no constantly running sources of ignition (for example: an open fire, a running gas appliance or a running electric appliance).
- *Do not pierce or burn.
- Remember that refrigerants must be odorless.



Caution: Fire Danger



User manual



Read the technical manual

SERVICE INSTRUCTIONS (for R32 refrigerant)

16. Maintenance Information:

1) Before working on systems containing flammable refrigerants, safety checks should be performed to minimize the risk of fire. When repairing a refrigeration system, the following precautions must be observed before working on the system.

2) The order of work.

Work must be carried out in accordance with a controlled procedure so that minimize the risk of the presence of flammable gas or steam during work, 3) General work area.

All maintenance personnel and other persons working on the premises must be instructed in the nature of the work being performed. Avoid working in confined spaces. The area around the workplace should be separated. Ensure that conditions on site are safe by monitoring flammable materials. 4) Checking

the presence of refrigerant.

The area should be checked with an appropriate refrigerant detector before and during operation so that the technician is aware of the potentially flammable atmosphere. Make sure the leak detection equipment you use is suitable for use with flammable refrigerants, i.e. sealed or intrinsically safe.

5) Availability of a fire

extinguisher. If the refrigeration equipment or any associated parts must

any hot work is carried out, there must be appropriate

fire extinguishing equipment. Have a dry powder near the charging area

fire extinguisher or carbon dioxide fire extinguisher.

6) There are no sources of ignition.

No person performing work on the refrigeration circuit that involves opening any piping should use any ignition source in a manner that would create a risk of fire or explosion. All possible sources

of ignition, including cigarette smoking, should be kept far enough

away from the installation, repair, removal and disposal site that

could release refrigerant into the surrounding area. Before starting

work, the area around the equipment must be inspected to ensure that

there are no flammable substances or fire hazards. No smoking

signs must be posted.

7) Ventilated room.

Before opening the circuit or performing any hot work, ensure that

the area is outdoors or that it is well ventilated. Mechanical ventilation

must be provided during the entire period of work. Ventilation

must safely dissipate any released refrigerant and

preferably release it to the atmosphere.

8) Checks of refrigeration equipment.

When replacing electrical components, they must be fit for purpose and to the correct specification. The manufacturer's instructions for maintenance and repair should always be followed.

If in doubt, contact the manufacturer's technical department for assistance.

SERVICE INSTRUCTIONS (for R32 refrigerant)

The following checks should apply to installations using flammable refrigerants are installed:

- The charge volume corresponds to the size of the room in which the parts containing refrigerant;
- Ventilation equipment is correct and the outlets are functioning properly - If and not clogged;
- an indirect refrigeration circuit is used, the secondary circuit must be checked for the presence of refrigerant;
- Equipment markings remain visible and legible. Unclear marks and signs must be corrected;
- Refrigeration pipes or its components are installed in a place where

they are unlikely to be exposed to any substances that may cause corrosion of components containing refrigerant other than cases where components are made of materials that are inherently resistant to corrosion or are adequately protected against such

9) Checking electrical devices

corrosion. Repair and maintenance of electrical components should include initial safety checks and component inspection procedures. If exists fault that could jeopardize safety, the circuit must not be connect the power supply until it is corrected properly way. If the fault cannot be corrected immediately, but it is necessary continue, an appropriate workaround should be used. About this should be communicated to the owner of the equipment to inform everyone sides.

Initial safety checks should include: - Capacitors should be discharged: this should be done in a safe manner to eliminate the possibility of sparking;

- No exposed electrical components or wiring during charging, restoring or purging the system; - Continuity of grounding.

17. Repair of sealed components

- 1) When repairing sealed components, all power sources must be be disconnected from the equipment being worked on until removal hermetic lids, etc. If it is absolutely necessary to provide electrical power to the equipment during maintenance, then a permanent form of leakage detection should be located at the most critical point to warn of a potentially dangerous situation.
- 2) Particular attention should be paid to the following: to ensure that when working on electrical components, the enclosure is not modified in such a way as to affect the level of protection. This should include damaged cables, excessive connections, terminals not manufactured to original specifications, damaged seals, improperly installed glands, etc. Make sure the device is installed securely. Ensure that seals or sealing materials have not deteriorated to the point that they no longer serve the purpose of preventing the entry of flammable atmospheres. Replacement parts must comply with the manufacturer's specifications.

SERVICE INSTRUCTIONS (for refrigerant 3

NOTE: The use of silicone sealant may reduce the effectiveness of some types of leak detection equipment. Intrinsically safe components are not need to be isolated before working with

18. Repairing intrinsically safe

them. Do not connect any DC inductive or capacitive loads to the circuit without components, making sure that they will not exceed the voltage and current ratings permitted for the equipment being used. Intrinsically safe components are the only types that can be handled while operating in a flammable atmosphere. The test equipment must have the correct specifications. Replace components only with parts specified by the manufacturer. Other parts may cause the refrigerant in the atmosphere to ignite due to leakage.

19. Cable laying.

Ensure that cables are not subject to wear, corrosion, excessive pressure, vibration, sharp edges or other adverse environmental conditions. The inspection must also take into account the effects of aging or constant vibration from sources such as compressors or fans.

20. Detection of flammable refrigerants.

Under no circumstances should potential ignition sources be used to search for or detect refrigerant leaks. Do not use a halide torch (or any other detector that uses an open flame).

21. Leak detection methods.

The following leak detection methods are considered acceptable for systems containing flammable refrigerants.

Electronic leak detectors should be used to detect flammable refrigerants, but their sensitivity may not be sufficient or may require recalibration. (Detection equipment must be calibrated in a refrigerant-free area.) Ensure that the detector is not a potential ignition source and is suitable for the refrigerant being used. Leak detection equipment must be set to the LFL percentage of the refrigerant and must be calibrated for the refrigerant being used and the appropriate percentage of gas (maximum 25%) must be verified. Liquids for Leak detectors are suitable for use with most refrigerants, but detergents containing chlorine should be avoided as chlorine may react with the refrigerant and cause corrosion of copper piping. If a leak is suspected, all open flames must be removed/extinguished. If a refrigerant leak requiring brazing is discovered, all refrigerant must be removed from the system or isolated (using shut-off valves) in a portion of the system away from the leak. The system should then be purged with oxygen-free nitrogen (OFN) both before and during the soldering process.

SERVICE INSTRUCTIONS (for R32 refrigerant)

22. Removal and vacuuming.

When opening the refrigerant circuit for repair or any other purpose, standard procedures should be followed. However, it is important to follow best practices since flammability must be taken into account. Observe the following practice:

procedure: -

Removing the refrigerant;

- Purging the circuit with inert gas;

- Vacuuming;

- Repeated purging of the circuit with inert gas; -

Opening the circuit by cutting or soldering.

Charged refrigerant should be returned to appropriate collection cylinders refrigerant. The system should be purged with OFN nitrogen to ensure installation safety. The process may need to be repeated several times. Compressed air or oxygen should absolutely not be used for this task.

Flushing is achieved by removing the vacuum in the system using OFN nitrogen and continuing filling until operating pressure is reached, then venting to atmosphere, and finally venting to vacuum. This process should be repeated until there is no refrigerant left in the system. When the last OFN nitrogen charge is used, the circuit must be depressurized to atmospheric pressure before operation can continue. This operation is absolutely necessary for soldering pipelines. Make sure the vacuum pump outlet is not close to sources

fire and ventilation is available.

23. Decommissioning Before

performing this procedure, it is important that the technician is fully familiar with equipment and all its parts. Safe disposal of all refrigerants is recommended. An oil and refrigerant sample must be taken before performing the task in case analysis is required before reusing the recovered refrigerant. It is important that power is available before work begins. a) Familiarize

yourself with the equipment and its operation.

b) Isolate the system electrically.

c) Before commencing the procedure, ensure that: - mechanical handling equipment is available if necessary for working with refrigerant cylinders, all personal protective equipment

is available and used correctly;

- the restoration process is constantly monitored by a competent person;

- refrigerant recovery equipment and cylinders comply with relevant standards.

d) If possible, recover the refrigerant from the circuit.

e) If evacuation is not possible, construct a manifold so that the refrigerant can be removed from various parts of the system. 5)

Before collecting the refrigerant, make sure the cylinder is on the scale.

8) Start the refrigerant recovery machine and operate according to the manufacturer's instructions.

h) Do not overfill refrigerant recovery cylinders (no more than 80% of the volume can be filled with liquid).

SERVICE INSTRUCTIONS (for R32 refrigerant) 1) Do not

exceed the maximum operating pressure of the cylinder, even temporarily.

3) Once the cylinders have been properly filled and the collection process is completed, ensure that the cylinders and equipment are promptly removed from the site and all shut-off valves on the equipment are closed. K)

The collected refrigerant cannot be charged into another refrigeration circuit if it has been cleaned and tested.

24. Marking.

The equipment must be marked to indicate that it has been taken out of service and that there is no refrigerant remaining. The label must be dated and signed. Make sure that equipment is labeled to indicate that it contains flammable refrigerant.

25. Refrigerant collection.

When removing refrigerant from a circuit for maintenance or decommissioning, it is recommended that all refrigerants be removed safely. When transferring refrigerant into cylinders, ensure that only suitable refrigerant recovery cylinders are used. Ensure that the correct number of cylinders are available to collect the full volume of refrigerant from the circuit.

All cylinders that will be used are designed to hold recovered refrigerant and must be labeled with the type of refrigerant (for example, special recovery cylinders). Cylinders must be equipped with a safety valve and

appropriate shut-off valves in good working order. Empty cylinders for disposal are evacuated and, if possible, cooled before recovery occurs. Refrigerant recovery equipment must be in good working order with a set of instructions specific to the equipment available and must be suitable for the recovery of all relevant refrigerants, including, if applicable, flammable refrigerants. In addition, a set of calibrated scales must be available and in good condition. Hoses must be equipped with sealed disconnectors and in good condition.

Before using the recovery machine, ensure that it is in satisfactory operating condition, properly maintained, and that all associated electrical components are sealed to prevent fire if refrigerant is released.

If in doubt, consult the manufacturer. The collected refrigerant must be returned to the refrigerant supplier in an appropriate return cylinder and an appropriate waste transfer note must be issued. Do not mix refrigerants in recovery units, especially in cylinders.

If compressors or compressor oils must be removed, ensure they are evacuated to an acceptable level to ensure that no flammable refrigerant remains in the lubricant. Before returning the compressor to suppliers, an evacuation process must be completed. To speed up this process, only electrical heating of the compressor housing should be used. Draining oil from the system must be done safely.

Important Notes

1. The air conditioner must be installed by a professional, and the installation manual is for professional installer use only! Installation specifications must comply with our after-sales service guidelines. 2. Any rough operation when charging flammable refrigerant may cause serious injury or damage to the human body and objects. 3. After installation is completed, a leak test must be carried out.

SERVICE INSTRUCTIONS (for R32 refrigerant)

of 4. Before servicing or repairing an air conditioner using flammable refrigerant, 5. All operations must be managed according to a controlled procedure, fires will be minimized. It is imperative that a safety inspection be carried out to ensure that the risk

refrigerant, 5. All operations must be managed according to a controlled procedure, fires will be minimized. It is imperative that a safety inspection be carried out to ensure that the risk

to ensure that any risk associated with flammable gases or vapors during operation is minimized. 6. Requirements for the total weight of the refrigerant charged and the area of the room in which the air conditioner will be installed (indicated in the following tables 66.1 and 66.2).

Maximum refrigerant charge and required minimum $m = (4 \text{ room area.}$

$$m^3) \times \text{LFL}, m_2 = (26 \text{ m}^3) \times \text{LFL}, m, = (130 \text{ m}^3) \times \text{LFL}$$

Where LFL is the lower flammability limit kg/m^3 , R32 LFL = 0.038 kg/m^3 ,

For air conditioners with filling $t, <$

$M = m$ The maximum filling size for a given room must correspond to the following:

$$m = 2.5 \times (\text{LFL}) \times h, \times (4)$$

The required minimum room area A_{min} for installing an air conditioner with refrigerant charge M (kg) must correspond to the following: $A = (M / (2.5 \times (\text{LFL})$

$(\text{LFL} \times h_0))^2$

Where:

Table 66.1 - Maximum refrigerant charge (kg)

Тип	LFL (kg/m³)	h_0 (м)	Area (m²)						
			4	7	10	15	20	30	50
R32	0,306	1	1,14	1,51	1,8	2,2	2,54	3,12	4,02
		1,8	2,05	2,71	3,24	3,97	4,58	5,61	7,254
		2,2	2,5	3,31	3,96	4,85	5,6	6,86	8,85

Table 66.2 - Minimum room area (m²)

Тип	LFL (kg/m³)	h_0 (м)	Total refrigerant charge (M) (kg Minimum room area (m²))						
			1,224 kg	1,836 kg	2,448 kg	3,672 kg	4,896 kg	6,12 kg	7,956 kg
R32	0,306								
		0,6		29	51	116	206	321	543
		1		10	19	42	74	116	196
		1,8		3	6	13	23	36	60
		2,2		2	4	9	15	24	40

Principles of safe installation work

1. Safety on site



Open fire is prohibited



Ventilation required

2. Operational safety



Avoid static electricity



Protective clothing and antistatic gloves must be worn.



Don't use a mobile phone

SERVICE INSTRUCTIONS (for refrigerant 932)

3. Installation safety
 - Refrigerant leak detector •
- Suitable installation location



The image on the left shows a refrigerant leak detector.

Please note: 1.

The installation site must be well ventilated.

2. Areas for installation and maintenance of air conditioners using 932 refrigerant must be protected from open flames or welding, hammering, drying ovens or any other heat source above +548 °C that could easily cause open flames. 3.

When installing the air conditioner, you must take appropriate antistatic measures, such as wearing antistatic clothing and/or gloves.

4. It is necessary to select a place convenient for installation or maintenance in which The air intake grilles and outlets of the indoor and outdoor units should not be surrounded by obstructions or close to any heat sources or flammable and/or explosive atmosphere.

5. If a refrigerant leak occurs in the indoor unit during installation, the outdoor unit valve must be closed immediately and all personnel must leave until the refrigerant leaks completely within 15 minutes. If the air conditioner is damaged, it must be taken to a service center for repairs. Do not solder refrigerant piping or other operations at the user's site.

6. It is necessary to select a place where the air entering and exiting the indoor unit will be uniform.

7. Places where there are other electrical products, plugs and sockets should be avoided switch, kitchen cabinet, bed, sofa and other valuables directly under the lines with two sides of the indoor unit.

Recommended Tools

Picture	Tool	Picture	Tool	Picture	Tool
	Standard wrench		Pipe cutter		Vacuum Pump
	adjustable wrench		Phillips screwdriver		Protective glasses
	Torque wrench		Gauge manifold		Work gloves
	Hex keys		Building level		Refrigerant scales
	Drill and bits		flarer		Electronic vacuum gauge
	Hole puncher		Avometer and current clamps		