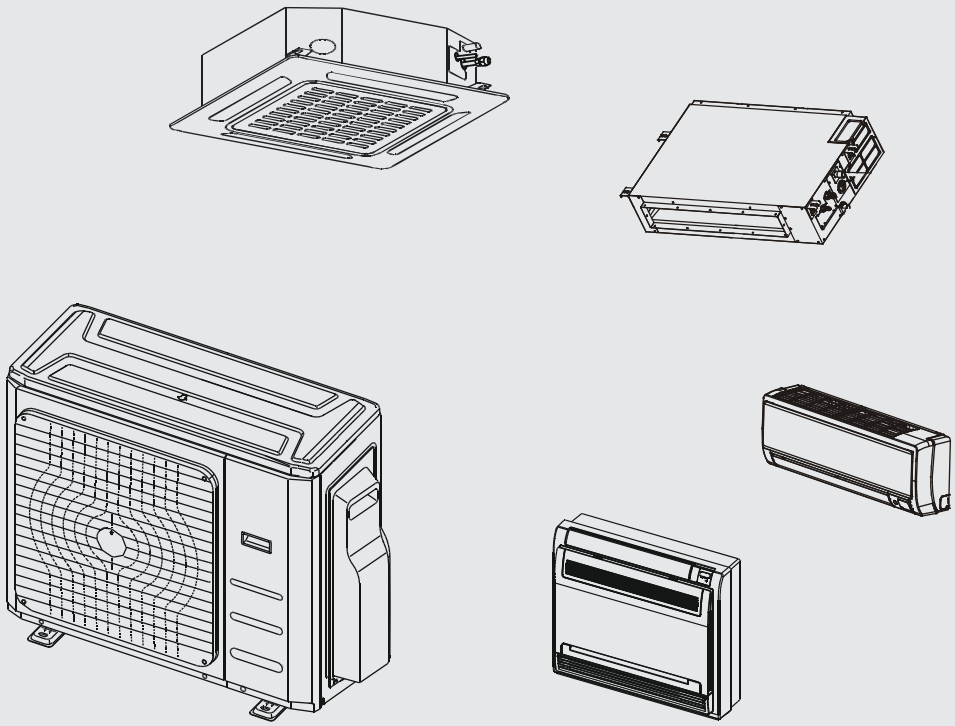
BOSCH

Owner's Manual

INVERTER ONE-TWIN/ONE-THREE/ONE-FOUR/ONE-FIVE SPLIT-TYPE AIR CONDITIONER

Climate 5000 MS

18/27/36/42 OU- OUE



IMPORTANT NOTE:

- Read this manual carefully before installing or operating your new air conditioning unit. Make sure to save this manual for future reference.
- This manual only describes outdoor units. When using an indoor unit, refer to the user's manual of the indoor unit.

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⚠ CAUTION

Risk of fire (for R32 refrigerant only).

⚠ WARNING

Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other qualified personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants. For more details, please refer to the **Information on servicing** in the INSTALLATION MANUAL. (This is only required for units adopting R32 Refrigerant.)

1 Safety Precautions

Thank you for purchasing this air conditioner. This manual will provide you with information on how to operate, maintain and troubleshoot your air conditioner. Following the instructions will ensure the proper function and extended lifespan of your unit.

Please pay attention to the following signs:

⚠ WARNING

Failure to observe a warning may result in serious injury. The appliance must be installed in accordance with national regulations.

⚠ CAUTION

Failure to observe a caution may result in injury or equipment damage.

⚠ WARNING

- Only Qualified Personnel to install this air conditioner. Inappropriate installation may cause water leakage, electric shock or fire.
- The warranty will be voided if the unit is not installed by Qualified Personnel.
- If an abnormal situation arises (like smell of burning), isolate the power supply and call qualified personnel for instructions to avoid electric shock, fire or injury.
- **DO NOT** let the indoor unit or the remote control get wet. This may cause electric shock or fire.
- **DO NOT** insert fingers, rods or other objects into the air inlet or outlet. This may cause injury, since the fan may be rotating at high speeds.
- **DO NOT** use a flammable spray such as hair spray, lacquer or paint near the unit. This may cause fire or combustion.
- Do not use means to accelerate the defrosting process or for cleaning, other than those recommended by the manufacturer.
- The appliance shall be stored so as to prevent mechanical damage from occurring.
- Be aware that the refrigerants may not contain an odour.
- Compliance with F-gas regulations shall be observed.
- Keep ventilation openings clear of obstruction.
- **DO NOT** pierce or burn.
- The appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified for operation.
- 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 by Qualified Personnel. Maintenance and repair requiring the assistance of other Qualified personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants.

CAUTION

- **DO NOT** touch the air outlet while the swing flap is in motion. Fingers might get caught or the unit may break down.
- **DO NOT** inspect the unit by yourself. Ask qualified personnel to perform the inspection.
- To prevent product deterioration, do not use the air conditioner for preservation purposes (storage of food, plants, animals, works of art, etc.).
- **DO NOT** touch the evaporator coils inside the indoor unit. The evaporator coils are sharp and may cause injury.
- **DO NOT** operate the air conditioner with wet hands. It may cause electric shock.
- **DO NOT** place items that might be affected by moisture damage under the indoor unit. Condensation can occur at a relative humidity of 80%.
- **DO NOT** expose heat-producing appliances to cold air or place them under the indoor unit. This may cause incomplete combustion or deformation of the unit due to the heat.
- After long periods of usage, check the indoor unit to see if anything is damaged. If the indoor unit is damaged, it may fall and cause injury.
- If the air conditioner is used together with other heating devices, thoroughly ventilate the room to avoid oxygen deficiency.
- **DO NOT** climb onto or place objects on top of the outdoor unit.
- **DO NOT** operate the air conditioner when using fumigant insecticides. The chemicals may become layered with the unit and endanger those who are hypersensitive to chemicals.
- **DO NOT** let children play with the air conditioner.
- **DO NOT** operate the air conditioner in a wet room (e.g. bathroom or laundry room). This can cause electrical shock and cause the product to deteriorate.

2 Unit Parts and Major Functions

2.1 Unit Parts

Wall-mounted type

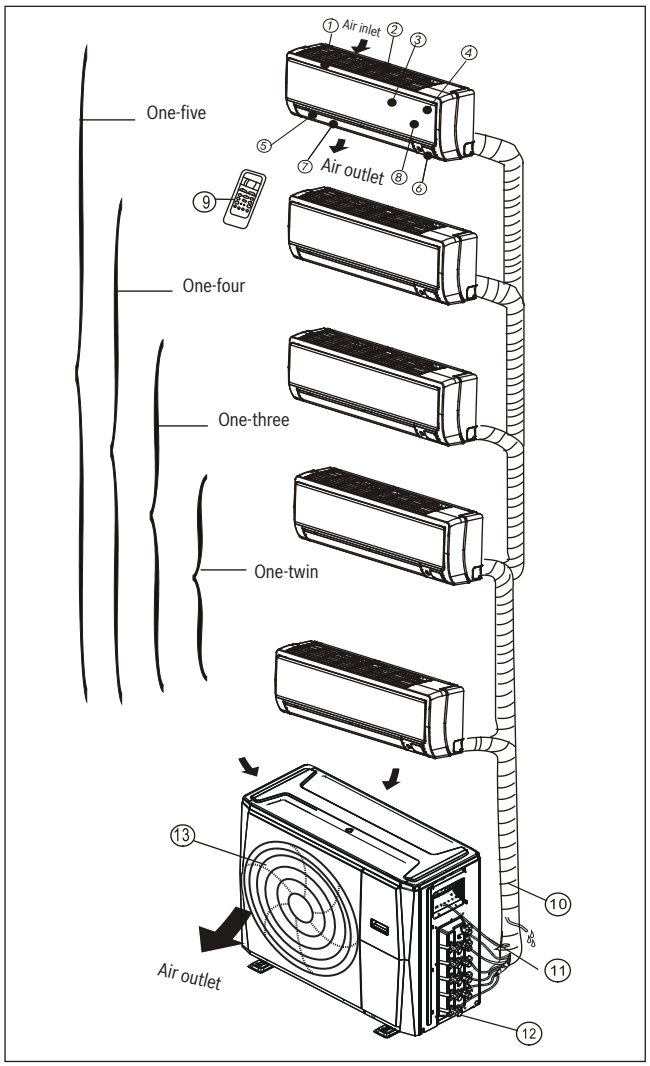


Fig. 1.

Indoor unit

1. Panel frame
2. Rear air intake grille
3. Front panel
4. Air purifying filter & Air filter (rear)
5. Horizontal louvre
6. LCD display window
7. Vertical louvre
8. Manual control button (rear)
9. Remote controller holder

Outdoor unit

10. Drain hose, refrigerant connecting pipe
11. Connective cable
12. Stop valve
13. Fan hood

Duct / Ceiling type

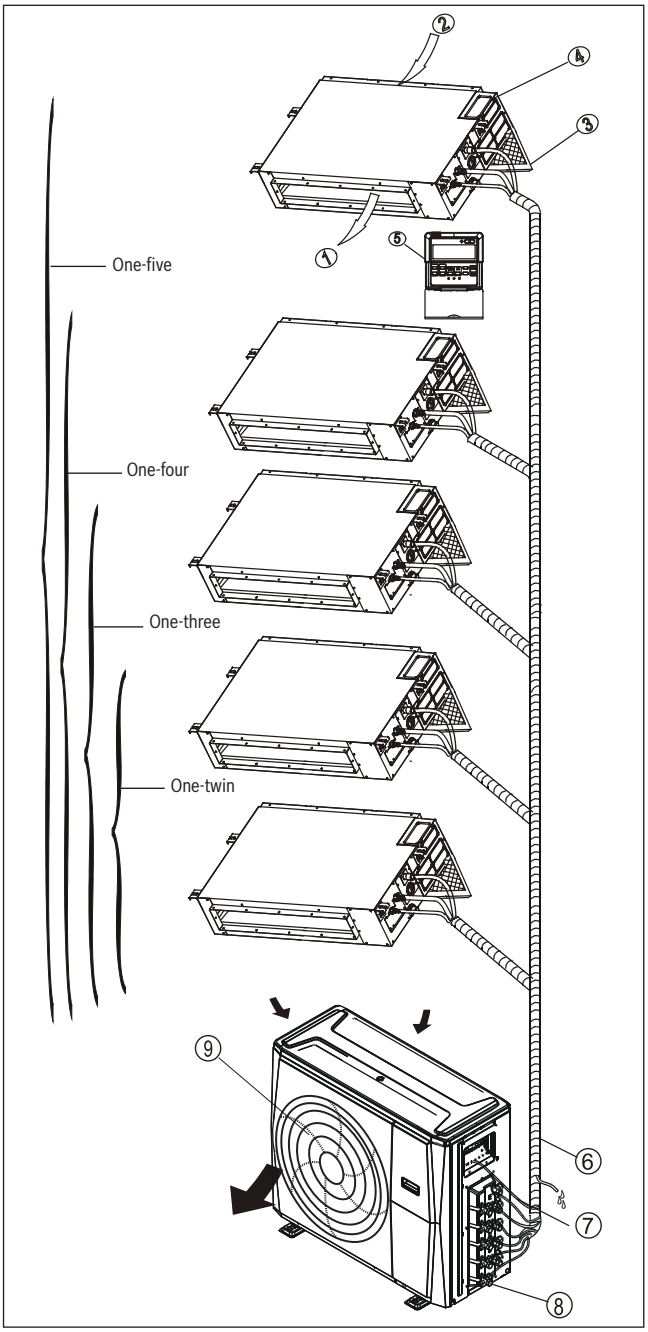


Fig. 2.

Indoor unit

1. Air outlet
2. Air inlet
3. Air filter
4. Electric control cabinet
5. Wire controller

Outdoor unit

6. Drain hose, refrigerant connecting pipe
7. Connective cable
8. Stop valve
9. Fan hood

Floor and standing type (console)

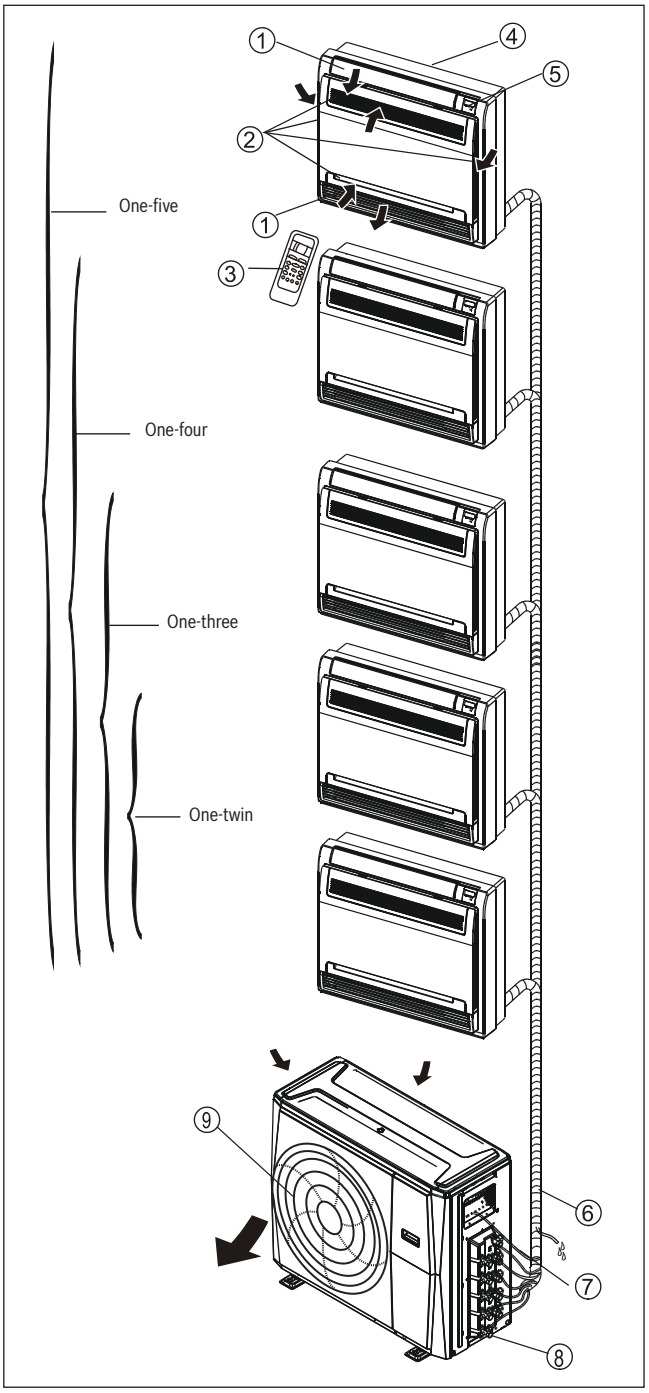


Fig. 3.

Indoor unit

1. Air flow louvre (at air outlet)
2. Air inlet (containing air filter)
3. Remote controller
4. Installation part
5. Display panel

Outdoor unit

6. Drain hose, refrigerant connecting pipe
7. Connective cable
8. Stop valve
9. Fan hood

Compact four-way cassette type

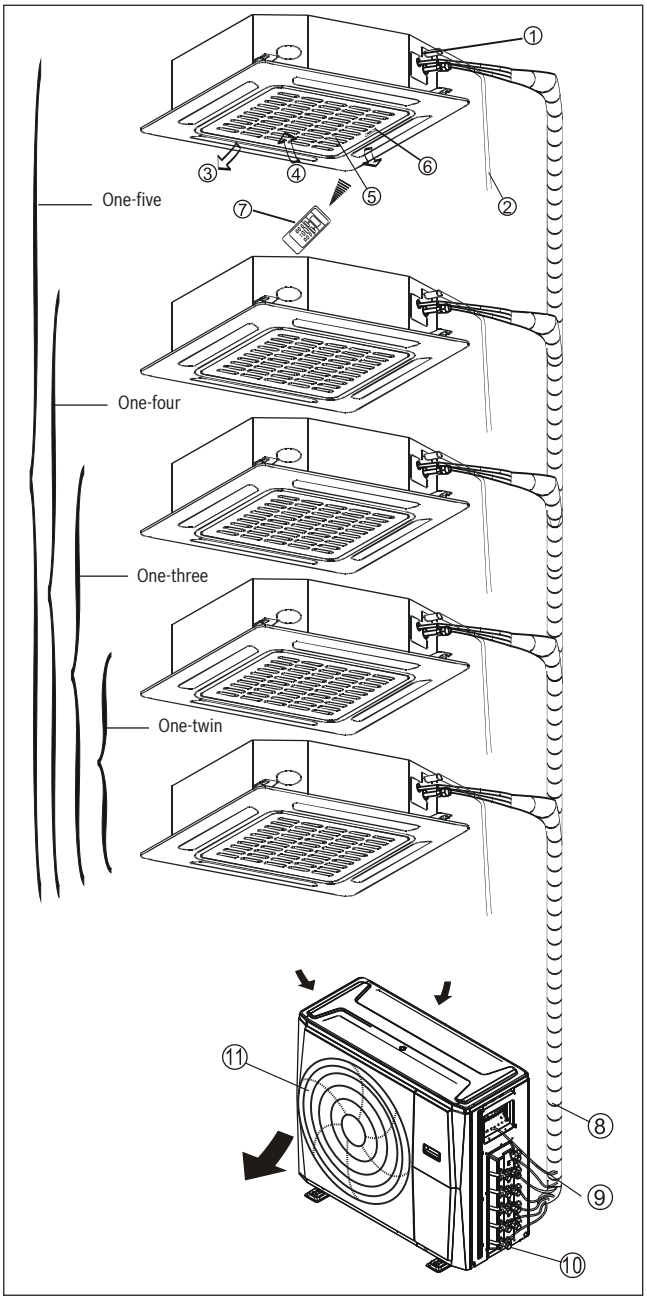


Fig. 4.

Indoor unit

1. Drain pump (drain water from indoor unit)
2. Drain hose
3. Air outlet
4. Air inlet
5. Air intake grille
6. Display panel
7. Remote controller

Outdoor unit

8. Refrigerant connecting pipe
9. Connective cable
10. Stop valve
11. Fan hood

NOTE:

For multi-split type air conditioners, one outdoor unit can be matched to different types of indoor units. All of the pictures in this manual are for demonstration purposes only. Your air conditioner may be slightly different, even if similar in shape. The following pages introduce several kinds of indoor units that can be matched with the outdoor units.

Operating Conditions

Use the system under the following temperatures for safe and effective operation. If the air conditioner is used under different conditions, it may malfunction or become less effi cient.

	COOL mode	HEAT mode	DRY mode
Room Temperature	17°C - 32°C	0°C - 30°C	10°C - 32°C
Outdoor Temperature	0°C - 50°C	-15°C - 30°C	0°C - 50°C
	-15-50°C (For models with low-temp. cooling systems)		
	0°C - 60°C (For special tropical models)		0°C - 60°C (For special tropical models)

Table 1.

Features

Protection of the air conditioner

Compressor protection

- The compressor cannot restart for 3 minutes after it stops.

Anti-cold air (Cooling and heating models only)

- The unit is designed not to blow cold air in HEAT mode, when the indoor heat exchanger is in one of the following three situations and the set temperature has not been reached:
  a. When heating has just started.
  b. During defrosting.
  c. During low temperature heating.
- The indoor or outdoor fans stop running when defrosting (cooling and heating models only).

Defrosting (cooling and heating models only)

- Frost may be generated on the outdoor unit during a heat cycle when outdoor temperature is low and humidity is high resulting in lower heating effi ciency in the air conditioner.
- Under these conditions, the air conditioner will stop heating operation and start defrosting automatically.
- The time to defrost may vary from 4 to 10 minutes, depending the outdoor temperature and the amount of frost buildup on the outdoor unit.

Auto-Restart (some models)

In case of power failure, the system will immediately stop. When power returns, the operation light on the indoor unit will flash. To restart the unit, press the **ON/OFF** button on the remote control. If the system has an auto restart function, the unit will restart using the same settings.

White mist emerging from the indoor unit

- In COOL mode, a white mist may be generated due to a large temperature difference between air inlet and air outlet in places with high relative humidity.
- In HEAT mode, a white mist may be generated due to moisture created in the defrosting process when the air conditioner restarts after defrosting.

Noise coming from the air conditioner

- You may hear a low hissing sound when the compressor is running or has just stopped running. This sound is the sound of the refrigerant flowing or coming to a stop.
- You may also hear a low "squeaking" sound when the compressor is running or has just stopped running. This is caused by temporary heat expansion and cold contraction of the plastic parts in the unit when the temperature is changing.
- A noise may be heard due to the louvre restoring itself to its original position when power is first turned on.

Dust blowing out from the indoor unit

This is happens when the air conditioner has not been used for a long time or during its first use.

Smell emitted by the indoor unit

This caused by the indoor unit giving off smells from building materials, furniture or smoke.

The air conditioner turns to FAN ONLY mode from COOL or HEAT mode (for cooling and heating models only).

When the indoor temperature reaches the set temperature setting, the compressor will stop automatically, and the air conditioner turns to FAN only mode. The compressor will start again when the indoor temperature rises in COOL mode or falls in HEAT mode to the set point.

Droplets of water may form on the surface of the indoor unit when cooling occurs in relatively high humidity (defined as higher than 80%). Adjust the horizontal louvre to the maximum air outlet position and select HIGH fan speed.

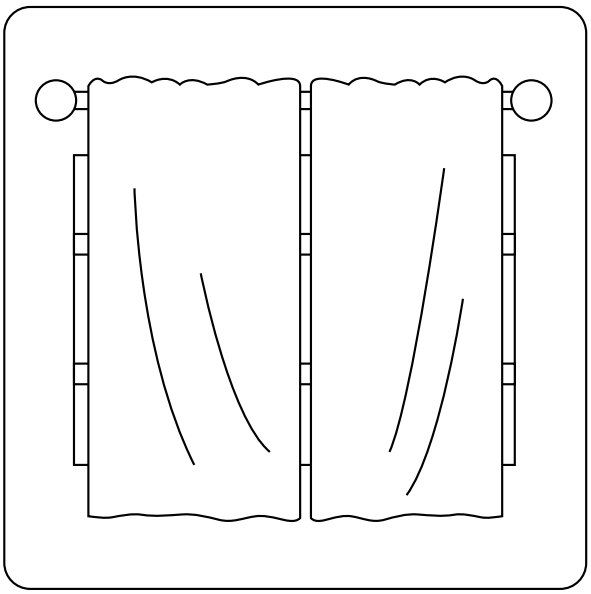
Heating mode (for cooling and heating models only)

The air conditioner draws in heat from the outdoor unit and releases it via the indoor unit during heating. When the outdoor temperature falls, heat drawn in by the air conditioner decreases accordingly. At the same time, the heat load of the air conditioner increases due to a larger difference between indoor and outdoor temperature. If a comfortable temperature cannot be achieved with the air conditioner alone, it is recommended that you use a supplementary heating device.

Lightning or a wireless car telephone operating nearby may cause the unit to malfunction. Disconnect the unit from its power source and then re-connect the unit with the power source again. Push the ON/OFF button on the remote controller to restart operation.

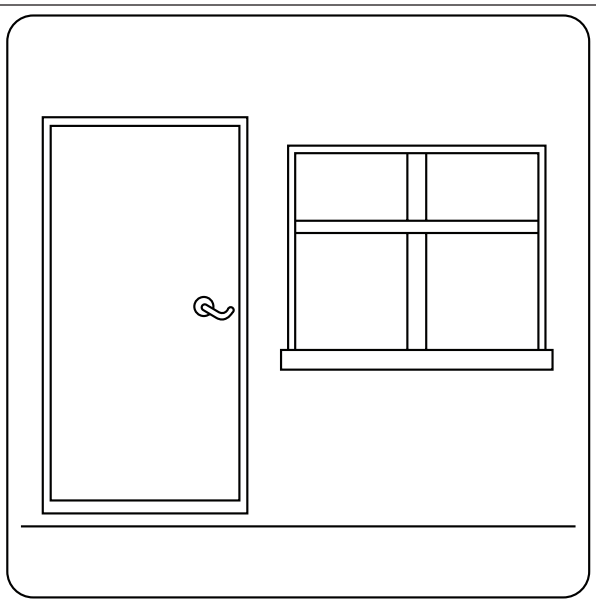
Energy Saving Tips

- **DO NOT** set the unit to excessive temperature levels.
- While cooling, close the curtains to avoid direct sunlight.
- Doors and windows should be kept closed to keep cool or warm air in the room.
- **DO NOT** place objects near the air inlet and outlet of the unit. This will reduce the efficiency of the unit.
- Set a timer and use the built-in SLEEP/ECONOMY mode if applicable.
- If you don't plan to use the unit for a long time, remove the batteries from the remote control.
- Clean the air filter every two weeks. A dirty filter can reduce cooling or heating efficiency.
- Adjust louvres properly and avoid direct airflow.



Closing curtains during heating also helps keep the heat in

Fig. 5.



Doors and windows should be kept closed

Fig. 6.

3 Manual Operations and Maintenance

Operation Mode Selection

When two or more indoor units are operating simultaneously, make sure the modes do not conflict with each other. The heat mode claims precedence over all other modes. If the unit intially started to operate in HEAT mode, the other units can operate in HEAT mode only. For example: If the unit intially started operating in COOL (or FAN) mode, the other units can operate in any mode except HEAT mode. If one of the units selects HEAT mode, the other operating units will:

- stop operation and display "--" (for units with display window only)

or

- the auto and operation indication light will flash rapidly
- the defrost indication light will turn on
- the timer indication light will remain on (for units without a display window).

Alternatively, the defrost and alarm indication light (if applicable) will light up, or the operation indication light will flash rapidly, and the timer indication light will turn off (for the floor and standing type).

Maintenance

If you plan to leave the unit idle for a long time, perform the following tasks:

1. Clean the indoor unit and air filter.
2. Select FAN ONLY mode and let the indoor fan run for a time to dry the inside of the unit.
3. Disconnect the power supply and remove the battery from the remote control.
4. Check components of the outdoor unit periodically. Contact a local dealer or a customer service centre if the unit requires servicing.

NOTE:

Before you clean the air conditioner, be sure to switch off the unit and isolate the power supply.

Optimal Operation

To achieve optimal performance, please note the following:

- Adjust the direction of the air flow so that it is not blowing directly on people.
- Adjust the temperature to achieve the highest possible level of comfort. Do not adjust the unit to excessive temperature levels.
- Close doors and windows in COOL or HEAT mode.
- Use the TIMER ON button on the remote controller to select a time at which you want to start your air conditioner.
- Do not place any object near the air inlet or air outlet, as the effi ciency of the air conditioner may be reduced and the air conditioner may stop running.
- Clean the air filter periodically, otherwise cooling or heating performance may be reduced.
- Do not operate the unit with horizontal louvre in closed position.

Suggestion: For units that feature an electric heater, it is strongly recommended that you keep the machine plugged in so as to ensure smooth operation, when the outside ambient temperature is below 0°C.

When the air conditioner is to be used again:

- Use a dry cloth to wipe off the dust accumulated on the rear air intake grille in order to avoid the dust being dispersed from the indoor unit.
- Check that the wiring is not broken or disconnected.
- Check that the air filter is installed.
- Check if the air outlet or inlet is blocked after the air conditioner has not been used for a long time.

4 Troubleshooting

CAUTION

If one of the following conditions occurs, isolate the power supply immediately and contact qualified personnel for further assistance.

- The operation light continues to flash rapidly after the unit has been restarted.
- The remote control buttons do not work.
- The unit continually trips fuses or circuit breakers.
- A foreign object or water enters the air conditioner.
- Other abnormal situations.

4.1 Common Problems

The following symptoms are not a malfunction and in most situations will not require repairs.

Problem	Possible Causes
Unit does not turn on when pressing ON/ OFF button	The unit has a 3-minute protection feature that prevents the unit from overloading. The unit cannot be restarted within three minutes of being turned off.
	Cooling and heating models: If the operation light and PRE-DEF (Pre-heating/ Defrost) indicators are lit up, the outdoor temperature is too cold and the unit's anti-cold wind is activated in order to defrost the unit.
	In cooling-only models: If the "Fan Only" indicator is lit up, the outdoor temperature is too cold and the unit's anti-freeze protection is activated in order to defrost the unit.
The unit changes from COOL mode to FAN mode	The unit changes its setting to prevent frost from forming on the unit. Once the temperature increases, the unit will start operating again.
	The set temperature has been reached, at which point the unit turns off the compressor. The unit will resume operation when the temperature fluctuates again.
The indoor unit emits white mist	In humid regions, a large temperature difference between the room air and the conditioned air can cause white mist.
Both the indoor and outdoor units emit white mist	When the unit restarts in HEAT mode after defrosting, white mist may be emitted due to moisture generated from the defrosting process.
The indoor unit makes noises	A squeaking sound is heard when the system is OFF or in COOL mode. The noise is also heard when the drain pump (optional) is in operation.
	A squeaking sound may occur after running the unit in HEAT mode due to expansion and contraction of the unit's plastic parts.
Both the indoor unit and outdoor unit make noises	A low hissing sound may occur during operation. This is normal and is caused by refrigerant gas flowing through both the indoor and outdoor units.
	A low hissing sound may be heard when the system starts, has just stopped running or is defrosting. This noise is normal and is caused by the refrigerant gas stopping or changing direction.
The outdoor unit makes noises	The unit will make different sounds based on its current operating mode.
Dust is emitted from either the indoor or the outdoor unit	The unit may accumulate dust during extended periods of non-use, which will be emitted when the unit is turned on. This can be mitigated by covering the unit during long periods of inactivity.
The unit emits a bad odour	The unit may absorb odors from the environment (such as furniture, cooking, cigarettes, etc.) which will be emitted during operation.
	The unit's filters have become moldy and should be cleaned.
The fan of the outdoor unit does not operate	During operation, the fan speed is controlled to optimise product operation.

Table 2.

4.2 Troubleshooting Tips

When troubles occur, please check the following points before contacting a repair company.

Problem	Possible Causes	Solution
The unit is not working	Power failure	Wait for the power to be restored
	The power switch is off	Turn on the power
	The fuse is blown	Replace the fuse
	Remote control batteries are dead	Replace the remote control batteries
	The unit's 3-minute protection has been activated	Wait three minutes after restarting the unit

Problem	Possible Causes	Solution
Poor cooling performance	Temperature setting may be higher than the ambient room temperature	Lower the temperature setting
	The heat exchanger on the indoor or outdoor unit is dirty	Clean the affected heat exchanger
	The air filter is dirty	Remove the filter and clean it according to instructions
	The air inlet or outlet of either unit is blocked	Turn the unit off, remove the obstruction and turn it back on
	Doors and windows are open	Make sure that all doors and windows are closed while operating the unit
	Excessive heat is generated by sunlight	Close windows and curtains during periods of high heat or bright sunshine
	Low refrigerant charge due to leak or long-term use	Check for leaks, re-seal if necessary and top off refrigerant
The unit starts and stops frequently	There's too much or too little refrigerant in the system	Check for leaks and recharge the system with refrigerant
	There is air, incompressible gas or foreign material in the refrigeration system.	Evacuate and recharge the system with refrigerant
	System circuit is blocked	Determine which circuit is blocked and replace the malfunctioning piece of equipment
	The compressor is broken	Replace the compressor
	The voltage is too high or too low	Install a manostat to regulate the voltage
Poor heating performance	The outdoor temperature is lower than 7 °C	Check for leaks and recharge the system with refrigerant
	Cold air is entering through doors and windows	Make sure that all doors and windows are closed during use
	Low refrigerant due to leak or long-term use	Check for leaks, re-seal if necessary and top off refrigerant

Table 3.

5 European Disposal Guidelines

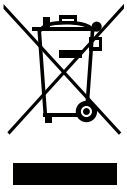
Users in European Countries may be required to properly dispose of this unit. This appliance contains refrigerant and other potentially hazardous materials. When disposing of this appliance, the law requires special collection and treatment. **DO NOT** dispose of this product as household waste or unsorted municipal waste.

When disposing of this appliance, you have the following options:

- Dispose of the appliance at a designated municipal electronic waste collection facility.

NOTE:

Disposing of this appliance in the forest or other natural surroundings endangers your health and is bad for the environment. Hazardous substances may leak into the ground water and enter the food chain.



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