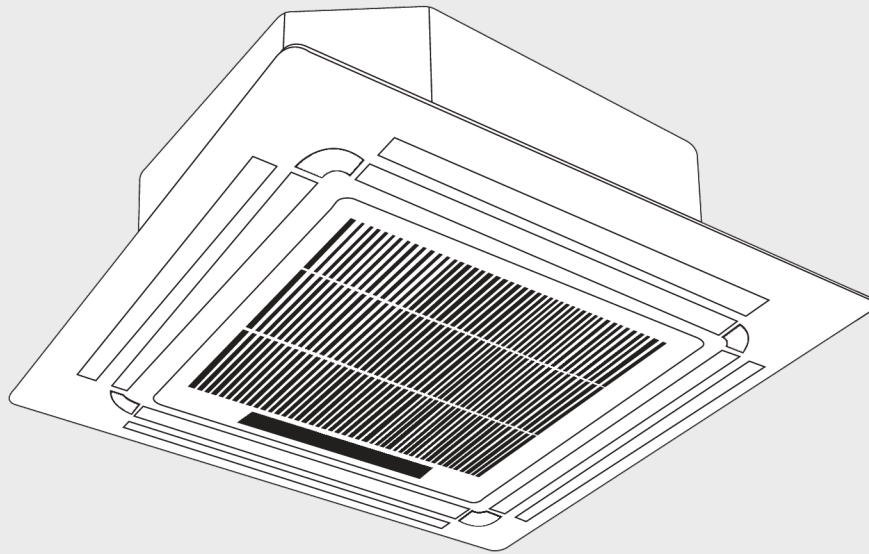




User Manual

Four Way Cassette Ductless Split Air Conditioner/Heat Pump **Climate 5000 Series** - Gen 4



BTC 769203307 B / 11.2024



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1 Key to Symbols and Safety Instructions

1.1 Key to Symbols

Warnings

In warnings, signal words at the beginning of a warning are used to indicate the type and seriousness of the ensuing risk if measures for minimizing danger are not taken.

The following keywords are defined and can be used in this document:

DANGER
DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING
WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION
CAUTION indicates a hazardous situation which, if not avoided, could result in minor to moderate injury.

NOTICE
NOTICE is used to address practices not related to personal injury.

Important information

The info symbol indicates important information where there is no risk to people or property.

1.2 Explanation of Symbols Displayed on the Indoor Unit / Outdoor Unit

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

Table 1

1.3 Safety

Please read safety precautions

WARNING
Improper or dangerous operation!
 Only contact a licensed contractor for repair or maintenance of this unit.

WARNING
Electrical hazard!
 Do not modify the length of the power supply cord or use an extension cord to power the unit.
 Do not share the electrical outlet with other appliances. Improper or insufficient power supply can cause fire or electrical shock.

WARNING
Personal injury, product damage!
 This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

WARNING
Contains lead!
 This product can expose you to chemicals including Lead and Lead components, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.


WARNING
Fire, electrical shock, property damage, personal injury, or death!

Turn off the air conditioner and disconnect the power before performing any cleaning, installation or repairing. Failure to do so can cause electric shock.

If an abnormal situation arises (like a burning smell), immediately turn off the unit and disconnect the power. Call your dealer for instructions to avoid electric shock, fire or injury.

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 flammable sprays such as hair spray, lacquer or paint near the unit. This may cause fire or combustion.

Do not operate the air conditioner in places near or around combustible gases. Emitted gas may collect around the unit and cause explosion.

Do not operate your air conditioner in a wet room such as a bathroom or laundry room. Too much exposure to water can cause electrical components to short circuit.

Do not expose your body directly to cool air for a prolonged period of time.

Do not allow children to play with the air conditioner. Children must be supervised around the unit at all times.

If the air conditioner is used together with burners or other heating devices, thoroughly ventilate the room to avoid oxygen deficiency.

In certain functional environments, such as kitchens, server rooms, etc., the use of specially designed air-conditioning units is highly recommended.


WARNING
Electrical hazard!

In certain functional environments, such as kitchens, server rooms, etc., the use of specially designed air-conditioning units is highly recommended.

If the power supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons such as a licensed electrician in order to avoid a hazard.


CAUTION
Burn hazard!

Do not operate your air conditioner in a wet room such as a bathroom or laundry room. Too much exposure to water can cause electrical components to short circuit.


CAUTION
Contains refrigerant!

This air-conditioning unit contains fluorinated gases. For specific information on the type of gas and the amount, please refer to the relevant label on the outdoor unit itself.

Installation, service, maintenance and repair of this unit must be performed by a certified technician.

Product removal and recycling must be performed by a certified technician.

If the system has a leak-detection system installed, it must be checked for leaks at least every 12 months.

When the unit is checked for leaks, proper record-keeping of all checks is strongly recommended.


WARNING
Flammable refrigerant!

Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.

The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).

Do not pierce or burn.

Be aware that refrigerants may not contain an odor.


WARNING
Fire, electrical shock, property damage, personal injury, or death!

Turn off the device and disconnect the power before cleaning. Failure to do so can cause electric shock.

Do not clean the air conditioner with excessive amounts of water.

Do not clean the air conditioner with combustible cleaning agents. Combustible cleaning agents can cause fire or deformation.


CAUTION
Fire, personal injury, property damage!

Turn off the air conditioner and disconnect the power if you are not going to use it for a long time.

Turn off and unplug the unit during storms.

Make sure that water condensation can drain unhindered from the unit.

Do not operate the air conditioner with wet hands. This may cause electric shock.

Do not use device for any other purpose than its intended use.

Do not climb onto or place objects on top of the outdoor unit.

Do not allow the air conditioner to operate for long periods of time with doors or windows open, or if the humidity is very high.


CAUTION
Fire, personal injury, product damage!

Remove all static electricity before touching units.

NOTICE
Improper operation, product damage!

Generation 4 Mini-Split products use R454B refrigerant and cannot be combined with models from previous Mini-Split generations (R410A refrigerant).

In addition, you must ONLY use R454B if additional refrigerant needs to be added into the system. Do NOT use any other refrigerant type.

2 Unit Specifications and Features

2.1 Unit Parts

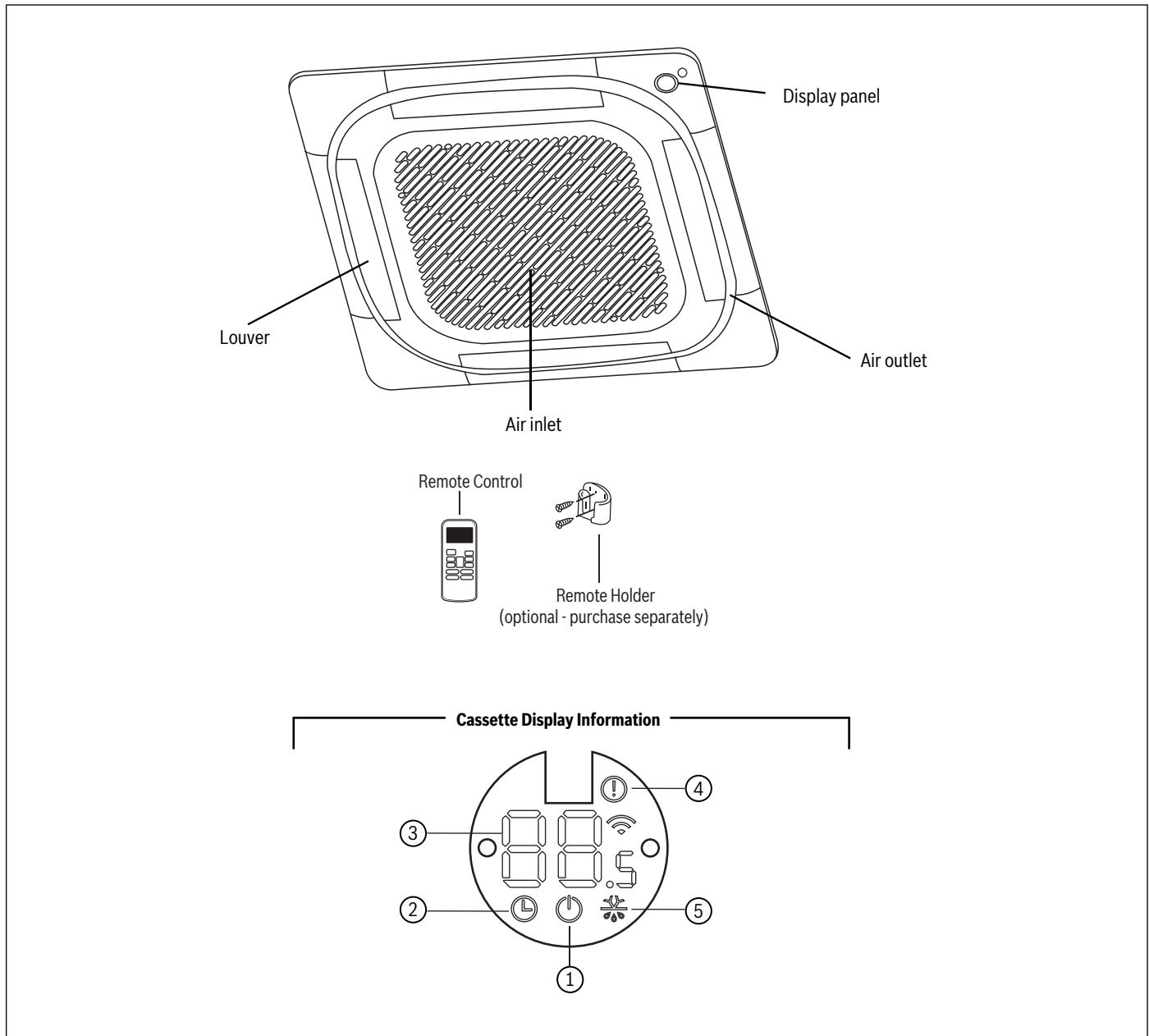


Figure 1

Item #	Description
1	When the unit is on
2	When the timer is set
3	Displays temperature, operation feature and error codes
4	Alarm indicator
5	Pre-heating/defrost

Table 2 Display Information

2.2 Achieving Optimal Performance

Optimal performance for the COOL, HEAT, and DRY modes can be achieved in the following temperature ranges. When your air conditioner is used outside of these ranges, certain safety protection features will activate and cause the unit to perform less than optimally.

Optimal performance temperature ranges

		COOL mode	HEAT mode	DRY mode
Room Temperature		17°C - 32°C	0°C - 30°C	10°C - 32°C
		63°F - 90°F	32°F - 86°F	50°F - 90°F
Outdoor Temperature	Regular (9K ~ 24K)	-25°C - 50°C	-25°C - 30°C	0°C - 50°C
		-13°F - 122°F	-13°F - 86°F	32°F - 122°F
	Max Performance (9K ~ 24K)	-30°C - 50°C	-30°C - 30°C	0°C - 50°C
		-22°F - 122°F	-22°F - 86°F	32°F - 122°F
	LCAC (36K ~ 48K)	-15°C - 50°C	-15°C - 30°C	0°C - 50°C
		5°F - 122°F	5°F - 86°F	32°F - 122°F

Table 3



When the outside temperature is below 32°F (0°C), we strongly recommend keeping the unit powered on at all times to ensure smooth ongoing performance. A base pan heater is used in the outdoor unit to prevent ice build-up. Ice may build up if the unit is powered off.

Energy Saving Tips

- DO NOT expose the unit to excessive temperature levels.
- Keep curtains closed during heating and cooling operation.
- 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 louvers properly and avoid direct airflow.

2.3 Other Features

- **Auto-Restart**
If the unit loses power, it will automatically restart with the prior settings once power has been restored.
 - **Louver Angle Memory**
When turning on your unit, the louver will automatically resume its former angle.
 - **Refrigerant Leakage Detection**
When the system detects a malfunction of the refrigerant, the indoor unit will automatically display the following error codes:
 - ELOC (System lacks refrigerant)
 - EHC1 (Refrigerant sensor detects leakage)
 - EHC2 (Working condition of the refrigerant sensor is out of range and leakage is detected)
 - EHC3 (Working condition of the refrigerant sensor is out of range)
 - ECC1 (Other indoor unit refrigerant sensor detects leakage (Multi-zone))
- When “EHC1” or “EHC2” error occurs, the buzzer will continue to beep for 5 to 6} minutes before stopping. You can also press any button on the remote controller to stop the buzzer.
- **Three-Minute Protection Feature**
A protection feature that prevents the air conditioner from being activated for approximately 3 minutes when it restarts immediately after operation.



For a detailed explanation of your unit’s advanced functionality, refer to the Remote Control Manual.

2.4 Setting Angle of Air Flow

Setting vertical angle of air flow

While the unit is on, use the SWING /DIRECT button on the remote controller to set the direction (vertical angle) of airflow.

1. Press the SWING /DIRECT button once to activate the louver. Each time you press the button, it will adjust the louver. Press the button until the direction you prefer is reached.
2. To make the louver swing up and down continuously, press and hold the SWING/DIRECT button for 3 seconds. Press it again to stop the automatic function.



When Timer On is set, the SWING function will be disabled.

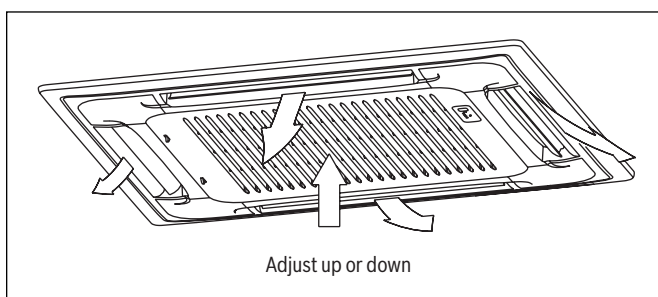


Figure 2

Setting horizontal angle of air flow



CAUTION

Personal injury!

Do not put your fingers in or near the blower and suction side of the unit. The high-speed fan inside the unit may cause injury.

3 Care and Maintenance

3.1 Cleaning Precautions



WARNING

Fire, electric shock, personal injury, product damage!

REMEMBER TO DISCONNECT THE POWER BEFORE CLEANING OR MAINTENANCE, EXCEPT FOR CLEANING AIR FILTER. TURN THE CURCUIT BREAKER OF THE INDOOR UNIT TO OFF IS NOT A KIND OF POWER DISCONNECTION.

Contact an authorized service technician for repair or maintenance. Improper repair and maintenance may cause water leakage, electrical shock, or fire, and may void your warranty.

DO NOT substitute a blown fuse with a higher or lower amperage rating fuse, as this may cause circuit damage or an electrical fire.

Make sure the drain hose is set up according to the instructions. Failure to do so could cause leakage and result in personal property damage, fire and electric shock.

Make sure that all wires are connected properly. Failure to connect wires according to instructions can result in electrical shock or fire.



CAUTION

Personal injury, property damage!

Only use a soft, dry cloth to wipe the unit clean. If the unit is especially dirty, you can use a clothsoaked in warm water to wipe it clean.

Do not use chemicals or chemically treated cloths to clean the unit.

Do not use benzene, paint thinner, polishing powder or other solvents to clean the unit. They can cause the plastic surface to crack or deform.

Do not use water hotter than 104°F (40°C) to clean the front panel. This can cause the panel to deform or become discolored.

DO NOT wash the unit under running water. Doing so creates an electrical hazard. Clean the unit using a damp, lint-free cloth and neutral detergent. Dry the unit with a dry, lint-free cloth.



WARNING

Personal injury!

DO NOT REMOVE OR CLEAN THE FILTER BY YOURSELF. Removing and cleaning the filter can be dangerous. Removal and maintenance must be performed by a certified technician.

3.2 Cleaning Your Air Filter

Step 1: Remove the air filter

1. Open the screw cover and twist out the screw (pos. 1).
2. Press the buttons on both sides to pull out the air inlet frame (pos. 2).

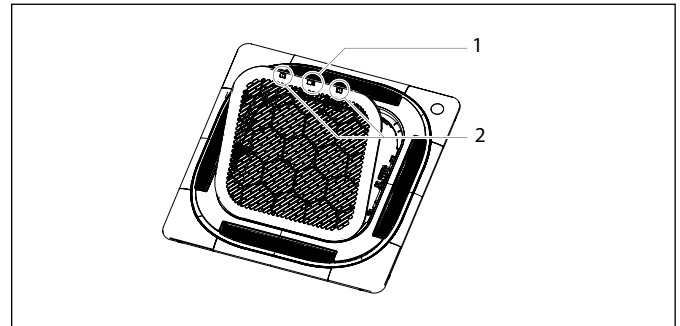


Figure 3

3. Separate the frame from the filter assembly.

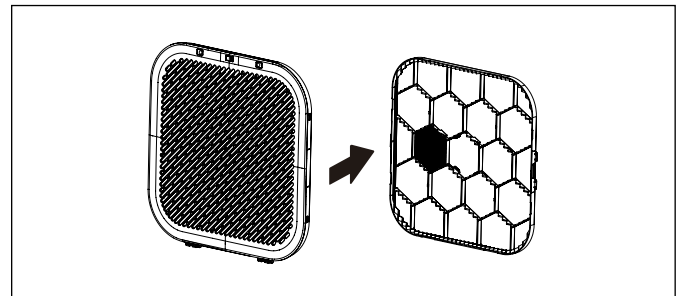


Figure 4

4. Take out the fresh air filter. (Optional) Please note that the fresh air filter cannot be cleaned with water. It is recommended to replace it regularly.

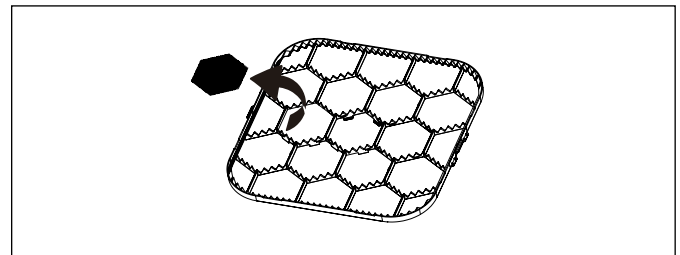


Figure 5

Step 2: Clean filter assembly

1. Clean the air filter by vacuuming the surface or washing it in warm water with mild detergent.
 - If using water, the inlet side should face down and away from the water stream.

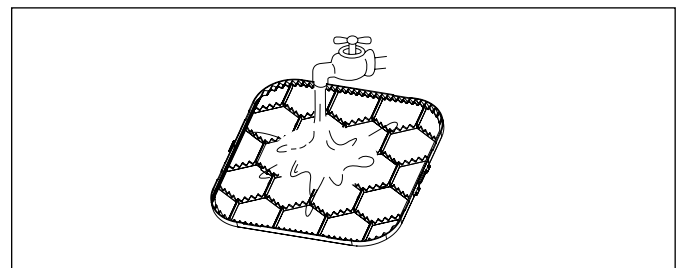


Figure 6

- If using a vacuum cleaner, the inlet side should face the vacuum.

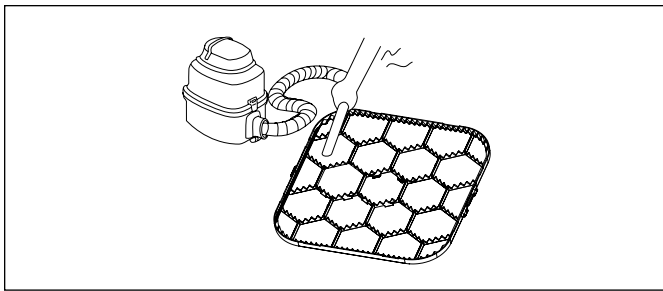


Figure 7

Step 2: Rinse and Dry

1. Rinse the filter with clean water and allow it to air-dry. DO NOT let the filter dry in direct sunlight.
2. Reinstall the filter.

3.3 Maintenance – Long Periods of Non-Use

If you plan not to use your air conditioner for an extended period of time, do the following:

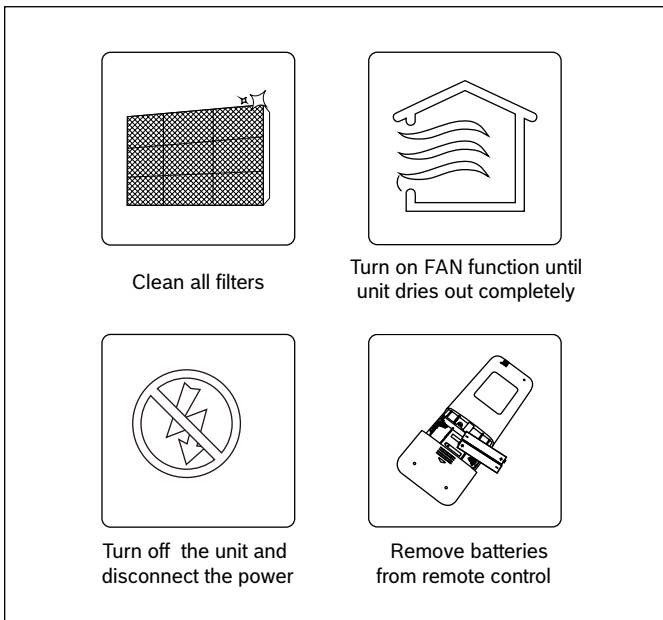


Figure 8

3.4 Maintenance - Pre-Season Inspection

After long periods of non-use, or before periods of frequent use, do the following:

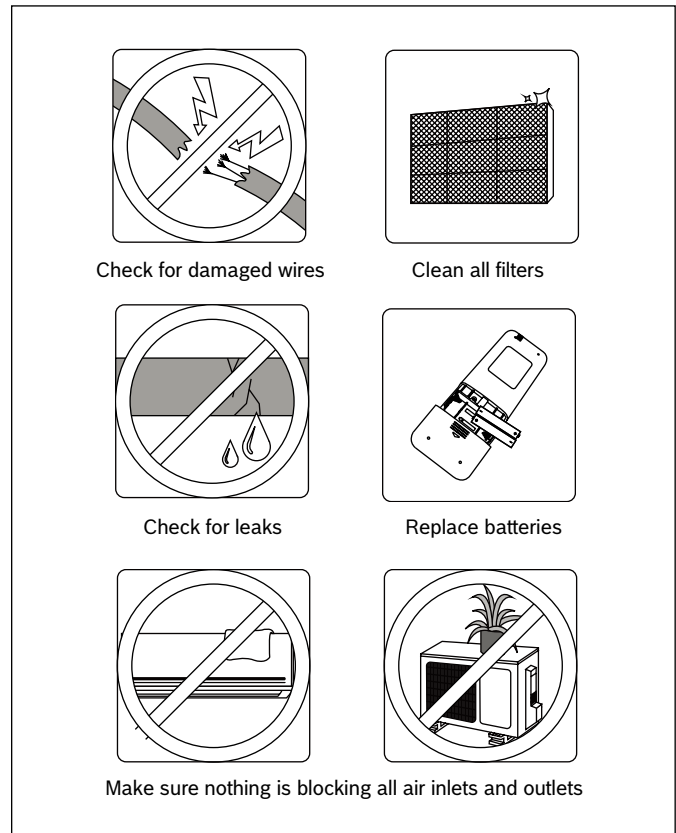


Figure 9

4 Troubleshooting



CAUTION

Personal injury, product damage, property damage!

If ANY of the following conditions occurs, turn off unit immediately!

- The power wiring is damaged or abnormally warm
- You smell a burning odor
- The unit emits loud or abnormal sounds
- A power fuse blows or the circuit breaker frequently trips
- Water or other objects fall into or out of the unit

DO NOT ATTEMPT TO FIX THESE YOURSELF! CONTACT A QUALIFIED SERVICE PERSON IMMEDIATELY.



If a problem persists, contact a local dealer or a qualified service provider. Provide them with a detailed description of the unit malfunction as well as your model number and unit serial number.

4.1 Common Issues

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

Issue	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 indoor unit emits white mist	In humid regions, a large temperature difference between the room's air and the conditioned air can cause white mist.
The unit changes from COOL/HEAT mode to FAN mode	The unit may change its setting to prevent frost from forming on the unit. Once the temperature increases, the unit will start operating in the previously selected mode again.
	The set temperature has been reached, at which point the unit turns off the compressor. The unit will continue operating when the temperature fluctuates again.
The indoor unit makes noises	A rushing air sound may occur when the louver resets its position.
	A squeaking sound may occur after running the unit in HEAT mode due to expansion & contraction of the unit's plastic parts.
	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.
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.
Both the indoor unit and outdoor unit make noises	Low hissing sound during operation: This is normal and is caused by refrigerant gas flowing through both indoor and outdoor units.
	Low hissing sound 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.
	Squeaking sound: Normal expansion and contraction of plastic and metal parts caused by temperature changes during operation can cause squeaking noises.
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 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 fan of the outdoor unit does not operate	During operation, the fan speed is controlled to optimize product operation.
Operation is erratic, unpredictable, or unit is unresponsive	Interference from cell phone towers and remote boosters may cause the unit to malfunction. In this case, try the following: <ul style="list-style-type: none"> • Disconnect the power, then reconnect. • Press ON/OFF button on remote control to restart operation.
The unit emits a bad odor	The unit may absorb odors from the environment (such as furniture, cooking, cigarettes, etc.) which will be emitted during operations.
	The unit's filters have become moldy and should be cleaned.

Table 4

4.2 Troubleshooting Tips

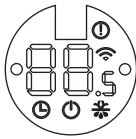
When trouble occurs, please check the following points before contacting a contractor.

Issue	Possible Causes
The unit is not working	Power failure
	The power is turned off or circuit breaker is off
	The fuse is burned out
	Remote control batteries are dead
	The unit's 3-minute protection has been activated
The unit starts and stops frequently	There's too much or too little refrigerant in the system
	Incompressible gas or moisture has entered the system.
	System circuit is blocked
	The compressor is broken
	The voltage is too high or too low
Poor cooling performance	Temperature setting may be higher than the ambient room temperature
	The heat exchanger on the indoor or outdoor unit is dirty
	The air filter is dirty
	The air inlet or outlet of either unit is blocked
	Doors and windows are open
	Excessive heat is generated by sunlight
	Too many sources of heat in the room (people, Computers, electronics, etc.)
	Low refrigerant due to leak or long-term use.
Poor heating performance	Cold air is entering through doors and windows
	The outdoor temperature is extremely low.
	Low refrigerant due to leak or long-term use.
Indicator lamps continue flashing	Low refrigerant due to leak or long-term use.
Error code appears and begins with the letters as the following in the window display of indoor unit: E(x), P(x), F(x) EH(xx), EL(xx), EC(xx) PH(xx), PL(xx), PC(xx)	

Table 5

4.3 Error Codes (Indoor Unit)

When the indoor unit encounters a recognized error, then an error code will be displayed on the HMI screen with letters first, then numbers. These error codes are described in the following table:



Number	Display	Error Information
1	EC 07	The outdoor fan speed is operating outside of the normal range
2	EC 51	Outdoor EEPROM malfunction
3	EC 52	Condenser coil temperature sensor T3 is in open circuit or short circuit
4	EC 53	Outdoor room temperature sensor T4 is in open circuit or short circuit
5	EC 54	Compressor discharge temperature sensor TP is in open circuit or short circuit
6	EC C1	Other indoor unit refrigerant leakage detection (Multi-zone)
7	EH 00	Indoor EEPROM malfunction
8	EH 03	The indoor fan speed is operating outside of the normal range
9	EH 0A	Indoor EEPROM parameter error
10	EH 0E	Water-level alarm malfunction
11	EH 12	Main unit or secondary units malfunction
12	EH 3A	External fan DC bus voltage is too low protection
13	EH 3	External fan DC bus voltage is too high fault
14	EH 60	Indoor room temperature sensor T1 is in open circuit or short circuit
15	EH 61	Evaporator coil temperature sensor T2 is in open circuit or short circuit
16	EH A	Communication malfunction between indoor unit and external fan module
17	EHC1	Refrigerant sensor detects leakage
18	EHC2	Working condition of the refrigerant sensor is out of range and leakage is detected
19	EHC3	Working condition of the refrigerant sensor is out of range
20	EL 01	Communication malfunction between indoor and outdoor units
21	EL 0C	System lacks refrigerant
22	EL 11	Communication malfunction between main unit and secondary units
23	FH CC	Refrigerant sensor error
24	EC 56	Evaporator coil outlet temperature sensor T2B is in open circuit or short circuit(Multi- zone)
25	PC 00	IPM malfunction or IGBT over-strong current protection
26	PC 01	Outdoor unit voltage protection (low or high voltage)
27	PC 02	High temperature protection of compressor top or IPM
28	PC 03	Pressure protection(low or high pressure) (for some models)
29	PC 04	Inverter compressor drive error
30	PC 0L	Low ambient temperature protection(for some models)
31	--	Indoor units mode conflict(Multi-zone)

Table 6



The error code will remain displayed until the cause has been determined and resolved. Once resolved, power the unit off, wait ten seconds, and power back on to clear the error code.

4.4 Online Help Resources

Alternatively, please visit our Service & Support webpage to find FAQs, videos, service bulletins, and more; www.boschheatingcooling.com/service or use your cellphone to scan the code below.

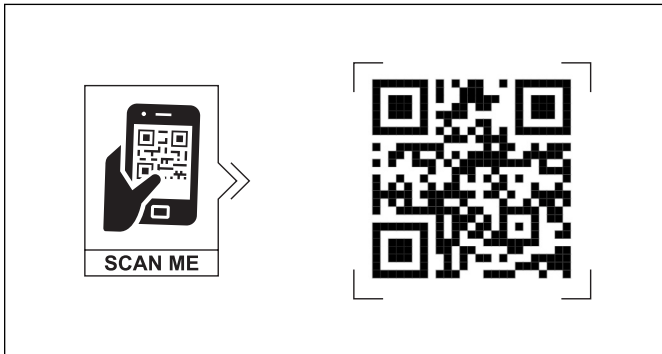


Figure 10

5 Disposal Guidelines

Components

Many parts in the Air Conditioner can be fully recycled in the end of the product life. Contact your city authorities for information about the disposal of recyclable products.

Refrigerant

At the end of the service life of this appliance and prior to its environmental disposal, a person qualified to work with refrigerant circuits must recover the refrigerant from within the sealed system.



CAUTION

Personal injury, product damage!

Improper disposal of this appliance endangers your health and is bad for the environment. Hazardous substances may leak into the ground water and enter the food chain.

Disposing of this product correctly will help ensure that the waste undergoes the necessary treatment, recovery and recycling.

NOTES:

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www.bosch-homecomfort.us

BTC 769203307 B / 11.2024

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