

User Manual

Wall Mounted Ductless Split Air Conditioner/Heat Pump Climate 5000 Series - Gen 4

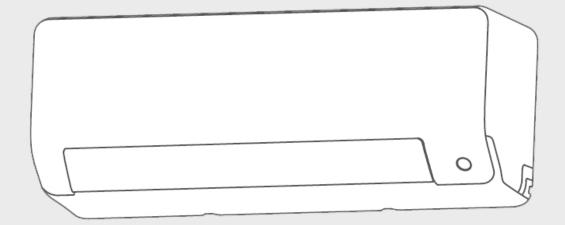






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1 Key to Symbols and Safety Instructions

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

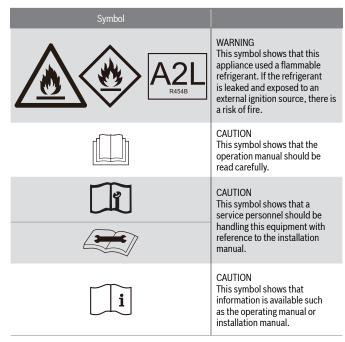


Table 1

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 condtioner 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

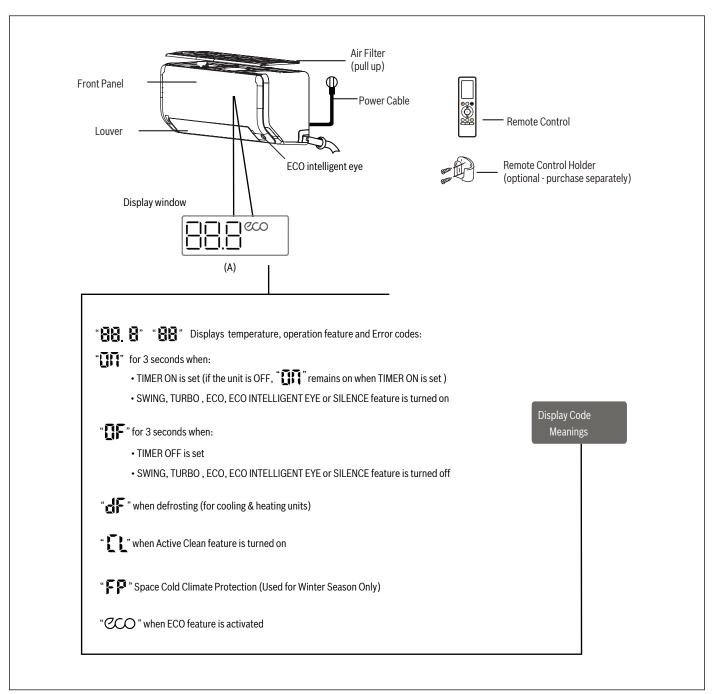


Figure 1



2.2 Achieving Optimal Performance



When your air conditioner is used outside of the following temperature ranges, certain safety protection features may activate and cause the unit to disable.

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
D	Room Temperature		0°C - 30°C	10°C - 32°C
Koom I			32ºF - 86ºF	50°F - 90°F
	Regular (9K~24K)	-25°C - 50°C	-25°C - 30°C	0°C - 50°C
		-13ºF - 122ºF	-13ºF - 86ºF	32ºF - 122ºF
Outdoor	Max Performance (9K~24K)	-30°C - 50°C	-30°C - 30°C	0°C - 50°C
Temperature		-22ºF - 122ºF	-22ºF - 86ºF	32ºF - 122ºF
	LCAC (30K, 36K)	-15°C - 50°C	-15°C - 30°C	0°C - 50°C
		5ºF - 122ºF	5ºF - 86ºF	32ºF - 122ºF

Table 2



When the outside temperature is below 32°F (0°C), we strongly recommend keeping the unit plugged in 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 unplugged.

To further optimize the performance of your unit, do the following:

- · Keep doors and windows closed.
- Limit energy usage by using TIMER ON and TIMER OFF functions.
- · Do not block air inlets or outlets.
- · Regularly inspect and clean air filters.

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 refrigerant leakage, the indoor unit will automatically display "ELOC(Refrigerant detection failure)", "EHC1,EHC2(Refrigerant sensor detects leakage)" or "ECC1 (Other indoor unit refrigerant sensor detects leakage(Multi zone)".

When the refrigerant sensor detects that the refrigerant density exceeds the upper limit of its measurement range, temperature or humidity exceeds the upper or is below the lower limit of its measurement range, the indoor unit will automatically display "EHC2".

When the refrigerant sensor detects that the refrigerant density is below the lower limit of its measurement range, the indoor unit will automatically display "EHC3".

When "EHC1" or "EHC2" error occurs, the buzzer will continue to beep for 5 minutes before stopping. You can also press any button on the remote controller to stop the buzzer.

· Active Clean Function

The Active Clean Technology washes away dust, mold, and grease that may cause odors when it adheres to the heat exchanger by automatically freezing and then rapidly thawing the frost. A two "beep" sound will be heard. The Active clean operation is used to produce more condensed water to improve the cleaning effect, and the cold air will blow out. After cleaning, the internal blower wheel then keeps operating with hot air to blow-dry the evaporator, thus preventing the growth of mold and keeping the inside clean. -- When this function is turned on, the indoor unit display window appears "CL", after 20 to 45 minutes, the unit will turn off automatically and cancel Active Clean function.

ECO Intelligent (Single Zone Only)

The system is controlled intelligently under Intelligent eye mode. It can detect the people's activities in the room. In cooling/Heating/Auto mode, when you are away for 30 minutes, the unit will automatically lower the frequency to save energy. And the unit will automatically start and resume operation if sensing human activity again.

Humidity Control (Single Zone Only)

The unit is able to increase the comfortable level by lowering humidity in your home. The unit offers a better temperature and humidity control solution in the dry mode, the room temperature can be maintained accurately as set temperature while the moisture is being removed.

Breeze Away

This feature allows for a gentler airflow into the room by closing the main louver, reducing the potential for high volume air blowing directly onto the user.



The Intelligent Eye and Humidity Control feature may not be available in all configurations.



· Sleep Operation

The SLEEP function is used to decrease energy use while you sleep (and don't need the same temperature settings to stay comfortable). This function can only be activated via remote control. And the Sleep function is not available in FAN or DRY mode.

Press the SLEEP button when you are ready to go to sleep. When in COOL mode, the unit will increase the temperature by $2^{\circ}F$ ($1^{\circ}C$) after 1 hour, and will increase an additional $2^{\circ}F$ ($1^{\circ}C$) after another hour. When in HEAT mode, the unit will decrease the temperature by $2^{\circ}F$ ($1^{\circ}C$) after 1 hour, and will decrease an additional $2^{\circ}F$ ($1^{\circ}C$) after another hour.

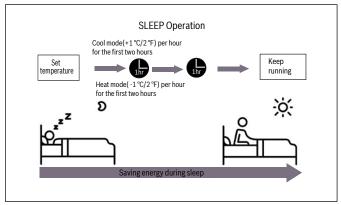


Figure 2



For a detailed explanation of your unit's advanced functionality (such as TURBO mode and its self-cleaning functions), refer to the Remote Control Manual.



For multi-split air conditioners, the following functions are not available: Active clean function, Silence feature, Refrigerant leakage detection function and Eco feature.

2.4 Setting Angle of Air Flow

Setting vertical angle of air flow

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

- The horizontal louver will swing up and down automatically when pressing Swing button. Press again to make it stop.
- Keep pressing this button more than 2 seconds, the vertical louver swing function is activated. Press it again to stop the automatic function.
- 3. If continue to press the SWING button, five different airflow directions can be set. The louver can be move at a certain range each time you press the button. Press the button until the direction you prefer is reached.

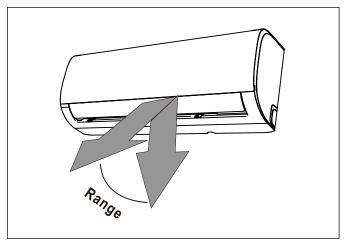


Figure 3

NOTICE

Property damage!

Do not keep louver at too vertical an angle for long periods of time. This
can cause water condensation to drip from the unit

Setting horizontal angle of air flow

While the unit is on, use the SWING button to set the direction (horizontal angle) of airflow

- The horizontal louver will swing up and down automatically when pressing Swing button.
- 2. Press again to make it stop.

Louver angles

When using COOL or DRY mode, do not set louver at too vertical an angle for long periods of time. This can cause water to condense on the louver blade, which will drip from the unit.

When using COOL or HEAT mode, setting the louver at too vertical an angle can reduce the performance of the unit due to restricted air flow.

Do not move louver by hand. This will cause the louver to become out of sync. If this occurs, turn off the unit and unplug it for a few seconds, then restart the unit. This will reset the louver.



3 Manual Operation (Without Remote)

3.1 How to Operate Your Unit Without the Remote Control

In the event that your remote control fails to work, your unit can be operated manually with the MANUAL CONTROL button located on the indoor unit. Note that manual operation is not a long-term solution, and that operating the unit with your remote control is strongly recommended.



Unit must be turned off before manual operation.

To operate your unit manually:

- 1. Open the front panel of the indoor unit.
- 2. Locate the MANUAL CONTROL button on the right-hand side of the unit.
- Press the MANUAL CONTROL button one time to activate FORCED AUTO mode. In this mode, the unit will keep running with the temperature set point fixed at 75°F (24°C).
- Press the MANUAL CONTROL button again to activate FORCED COOLING mode. In this mode, the unit will stay at the forced cooling mode for 30 minutes and change to the force auto mode.
- 5. Press the MANUAL CONTROL button a third time to turn the unit off.
- 6. Close the front panel.

NOTICE

Improper operation!

 The manual button is intended for testing purposes and emergency operation only. Please do not use this function unless the remote is lost and it is absolutely necessary. To restore regular operation, use the remote control to activate the unit.

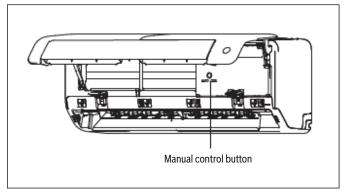


Figure 4



4 Care and Maintenance

4.1 Cleaning Precautions



CAUTION

Product damage!

- Any maintenance and cleaning of outdoor unit must be performed by qualified service personnel only.
- Any unit repairs must be performed by qualified service personnel only.
- Only use a soft, dry cloth to wipe the unit clean. If the unit is especially dirty, you can use a cloth soaked in warm water to wipe it clean.



CAUTION

Electrical hazard!

- Always turn off your air conditioner system and disconnect its power supply before cleaning or maintenance.
 - o 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.

4.2 Cleaning Your Air Filter

NOTICE

Product damage!

 Do not touch air freshening filter for at least 10 minutes after turning off the unit.



CAUTION

Electrical hazard!

- Before changing the filter or cleaning, turn off the unit and disconnect its power supply.
- When removing filter, do not touch metal parts in the unit. The sharp metal edges can cut you.
- Do not use water to clean the inside of the indoor or outdoor unit. This can destroy insulation and cause electrical shock.
- Do not expose filter to direct sunlight when drying. This can shrink the filter.

A clogged air filter can reduce the cooling efficiency of your unit, can also make the air flow irregular and too much noisy, so please clean the air filter as often as necessary. Once the abnormal noise of air flow is heard, please clean the air filter immediately.

- 1. The air filter is on the top of the air conditioner.
- Hold both side of the top filter in the place marked with "PULL", then pull it upwards.

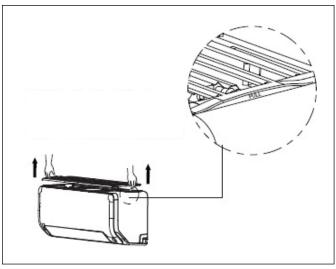


Figure 5

If your filter has small air freshening filters, unclip them from the larger filter.
 Clean these air freshening filters with a hand-held vacuum.

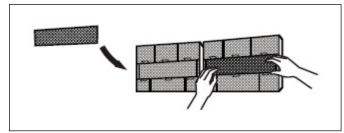


Figure 6

- Clean the large air filter with warm, soapy water. Be sure to use a mild detergent.
- 5. Rinse the filter with fresh water, then shake off excess water.

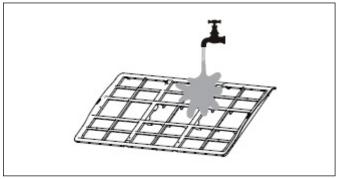


Figure 7

- 6. Dry it in a cool, dry place, and refrain from exposing it to direct sunlight.
- 7. Slide the air filter back into the indoor unit.
- 8. Close the front panel of the indoor unit.



4.3 Air Filter Reminders (Optional)

Air Filter Cleaning Reminder

- After 240 hours of use, the display window on the indoor unit will flash "CL." This is a reminder to clean your filter. After 15 seconds, the unit will revert to its previous display.
- To reset the reminder, press the LED button on your remote control 4 times, or press the MANUAL CONTROL button 3 times. If you don't reset the reminder, the "CL" indicator will flash again when you restart the unit.

Air Filter Replacement Reminder

- After 2,880 hours of use, the display window on the indoor unit will flash "nF." This is a reminder to replace your filter. After 15 seconds, the unit will revert to its previous display.
- To reset the reminder, press the LED button on your remote control 4 times, or press the MANUAL CONTROL button 3 times. If you don't reset the reminder, the "nF" indicator will flash again when you restart the unit.

Consult your local dealer for replacement filters.

4.4 Maintenance - Long Periods of Non-Use

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

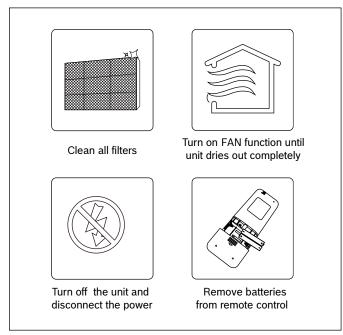


Figure 8

4.5 Maintenance - Pre-Season Inspection

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

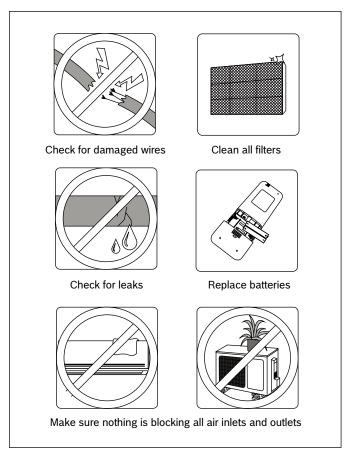


Figure 9



5 Troubleshooting



CAUTION

System malfunction!

- · If ANY of the following conditions occurs, turn off unit immediately!
 - o The power cord 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
 - o 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.

5.1 Common Issues

The following problems are not a malfunction and in most situations will not require repairs. Please check the following points before contacting a repair company.

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.
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.
he unit changes from COOL/HEAT mode to FAN node	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.
THE INDUOL DIRECTIONSES	A squeaking sound may occur after running the unit in HEAT mode due to expansion & contraction of the unit's plastic parts.
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.
	Low hissing sound during operation: This is normal and is caused by refrigerant gas flowing through both indoor and outdoor units.
Both the indoor unit and outdoor unit make noises	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: 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 3



Problem	Possible Causes
	Temperature setting may be higher than 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.
Poor Cooling Performance	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.
	SILENCE function is activated (optional function).
	Power failure.
	The power is turned of.
The west is not would be	The fuse is burned out.
The unit is not working	Remote control batteries are dead.
	The Unit's 3-minute protection has been activated.
	Timer is activated.
	There's too much or too little refrigerant in the system.
The unit starts and stops frequently	Incompressible gas or moisture has entered the system.
The unit starts and stops frequently	The compressor is broken.
	The voltage is too high or too low.
	The outdoor temperature is extremely low.
Poor heating performance	Cold air is entering through doors and windows.
	Low refrigerant due to leak or long-term use.
Indicator lamps continue flashing	
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)	The unit may stop operation or continue to run safely. If the indicator lamps continue to flash or error codes appear, wait for about 10 minutes. The problem may resolve itself. If not, disconnect the power, then connect it again. Turn the unit on. If the problem persists, disconnect the power and contact your nearest customer service center.



5.2 Display Codes (Indoor Unit)

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

Display	Information
dF	Defrost
CL	Filter cleaning reminder (power on display for 15 seconds)
CL	Active clean
nF	Filter replacement reminder (power on display for 15 seconds)
FP	Heating in room temperature under 46°F (8°C)
FC	Forced cooling
RP	AP mode of WiFi connection (not available in the US market)
CP	Remote switched off
EH00/EH0A	Indoor unit EEPROM parameter error
EL01	Indoor/outdoor unit communication error
EH02	Zero-crossing signal detection error
EH03	The indoor fan speed is operating outside of the normal range
EC51	Outdoor unit EEPROM parameter error
EC52	Condenser coil temperature sensor T3 is in open circuit or has short circuited
EC53	Outdoor room temperature sensor T4 is in open circuit or has short circuited
EC54	Compressor discharge temperature sensor TP is in open circuit or has short circuited
EC56	Evaporator coil outlet temperature sensor T2B is in open circuit or has short circuited(for free-match indoor units)
EH60	Indoor room temperature sensor T1 is in open circuit or has short circuited
EH61	Evaporator coil middle temperature sensor T2 is in open circuit or has short circuited
EC07	The outdoor fan speed is operating outside of the normal range
EH06	Indoor PCB/Display board communication error
ELOC	Refrigerant leakage detection
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 leakage detection (Multi-zone)
PC00	IPM malfunction or IGBT over-strong current protection
PC01	Outdoor unit voltage protection (low or high voltage)
PC02	High temperature protection of IPM module
PC03	Pressure protection (low or high pressure) (for some models)
PC04	Inverter compressor drive error
FHOP	AP Mode is active but there is no WIFI Kit Installed
	Indoor units mode conflict (Multi-zone)
Table 1	

Table 4



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.



5.3 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.

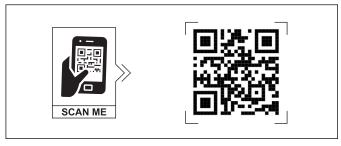


Figure 10

6 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 it's environmental disposal, a person qualified to work with refrigerant circuits must recover the refrigerant from within the sealed system.



CAUTION

Contains refrigerant!

- 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.

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