D5FSOAH

Owners Manual

Split-Type One-Way Cassette Indoor Unit Ductless System Sizes 6K - 18K

Owner's Manual

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NOTE TO EQUIPMENT OWNER:

Please read this Owner's Information Manual carefully before installing and using this appliance and keep this manual for future reference

For your convenience, please record the model and serial numbers of your new equipment in the spaces provided. This information, along with the installation data and dealer contact information, will be helpful should your system require maintenance or service.

UNIT INFORMATION	DEALERSHIP CONTACT INFORMATION
Model #	Company Name:
Serial #	Address:
INSTALLATION INFORMATION	Phone Number:
Date Installed	
	Technician Name:

A NOTE ABOUT SAFETY

This is the safety-alert symbol .

Anytime you see this symbol in manuals, instructions, and on the unit, be aware of the potential for personal injury. There are three levels of precaution:

- DANGER identifies the most serious hazards which will result in severe personal injury or death.
- WARNING signifies hazards which could result in personal injury or death.
- 3. **CAUTION** is used to identify unsafe practices which may result in minor personal injury or product and property damage.

NOTE is used to highlight suggestions which will result in enhanced installation, reliability, or operation.

A

WARNING

FOR FLAMMABLE REFRIGERANTS

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

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.

A

WARNING

PERSONAL INJURY AND PROPERTY DAMAGE HAZARD

For continued performance, reliability, and safety, the only approved accessories and replacement parts are those specified by the equipment manufacturer. The use of non-manufacturer approved parts and accessories could invalidate the equipment limited warranty and result in fire risk, equipment malfunction, and failure.

Review the manufacturer's instructions and replacement parts catalogs available from your equipment supplier.

R-454B



Refrigerant Safety Group A2L

R-454B

WARNING – Risk of Fire due to Flammable Refrigerant Used. Follow Handling Instructions Carefully in Compliance with National Regulations

A

WARNING

PERSONAL INJURY, DEATH AND / OR PROPERTY DAMAGE HAZARD

Failure to follow this warning could result in personal injury, death or property damage.

Improper installation, adjustment, alteration, service, maintenance, or use can cause explosion, fire, electrical shock, or other conditions which may cause personal injury or property damage. Consult a qualified installer, service agency, or your distributor or branch for information or assistance. The qualified installer or service agency must use factory-authorized kits or accessories when modifying this product.

Read and follow all instructions and warnings, including labels shipped with or attached to the unit before operating your new air conditioner.

NOTE: Risk of Fire. Flammable refrigerant used. To be repaired only by trained service personnel. Do not puncture refrigerant tubing.

GENERAL

The indoor unit provides quiet, maximum comfort. In addition to cooling and/or heating, the high wall fan coil unit matched with an outdoor condensing unit filters and dehumidifies the air in the room to provide maximum comfort.

IMPORTANT: The indoor unit should be installed by authorized personnel only; using approved tubing and accessories. If technical assistance, service or repair is needed, contact the installer. The indoor unit can be set up and operated from the remote control (provided). If the remote is misplaced, the system can be operated from the "Auto" setting on the unit.

1. Installation (where refrigerant pipes are allowed)

- -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 authorizes their competence to handle refrigerants safely in accordance with an industry recognized assessment specification.
- -Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants.
- -That the installation of pipe-work shall be kept to a minimum.
- -That pipe-work shall be protected from physical damage.
- -Where refrigerant pipes shall be compliance with national gas regulations.
- That mechanical connections shall be accessible for maintenance purposes.
- -Be more careful that foreign matter (oil, water, etc) does not enter the piping. Also, when storing the piping, securely seal the opening by pinching, taping, etc.
- Appliance shall be stored in a well ventilated area where the room size corresponds to the room area as specific for operation.
- –Joints shall be tested with detection equipment with a capability of 1/8 oz (5g)/year of refrigerant or better, with the equipment in standstill and under operation or under a pressure of at least these standstill or operation conditions after installation.
- In cases that require mechanical ventilation, ventilation openings shall be kept clear of obstruction.

2. When a FLAMMABLE REFRIGERANT is used

The requirements for installation space of appliance and/or ventilation requirements are determined according to:

- the mass charge amount (M) used in the appliance,
- -- the installation location,

- -- the type of ventilation of the location or of the appliance.
- —piping material, pipe routing, and installation shall include protection from physical damage in operation and service, and be in compliance with national and local codes and standards, such as ASHRAE 15, IAPMO Uniform Mechanical Code, ICC International Mechanical Code, or CSA B52. All field joints shall be accessible for inspection prior to being covered or enclosed.
- —that protection devices, piping, and fittings shall be protected as far as possible against adverse environmental effects, for example, the danger of water collecting and freezing in relief pipes or the accumulation of dirt and debris;
- --that piping in refrigeration systems shall be so designed and installed to minimize the likelihood of hydraulic shock damaging the system;
- —that steel pipes and components shall be protected against corrosion with a rustproof coating before applying any insulation;
- --that precautions shall be taken to avoid excessive vibration or pulsation;
- --the minimum floor area of the room shall be mentioned in the form of a table or a single figure without reference to a formula;
- --after completion of field piping for split systems, the field pipework shall be pressure tested with an inert gas and then vacuum tested prior to refrigerant charging, according to the following requirements:
- a. The minimum test pressure for the low side of the system shall be the low side design pressure and the minimum test pressure for the high side of the system shall be the high side design pressure, unless the high side of the system cannot be isolated from the low side of the system in which case the entire system shall be pressure tested to the low side design pressure.
- b. The test pressure after removal of pressure source shall be maintained for at least 1 hour with no decrease of pressure indicated by the test gauge, with test gauge resolution not exceeding 5% of the test pressure.
- c. During the evacuation test, after achieving a vacuum level specified in the manual or less, the refrigeration system shall be isolated from the vacuum pump and the pressure shall not rise above 1500 microns within 10 minutes. The vacuum pressure level shall be specified in the manual, and shall be the lessor of 500 microns or the value required for compliance with national and local codes and standards, which may vary between residential, commercial, and industrial buildings.
- -field-made refrigerant joints indoors shall be tightness tested according to the following requirements: The test method shall have a sensitivity of 1/8 oz (5g)/year of refrigerant or better under a pressure of at least 125% of the maximum allowable pressure. No leak shall be detected.

3. Qualification of workers

Any maintenance, service and repair operations must be required qualification of the working personnel. Every working procedure that effects safety means shall only be carried out by competent persons that joined the training and achieved competence should be documented by a certificate. The training of these procedures is carried out by national training organizations or manufacturers that are accredited to teach the relevant national competency standards that may be set in legislation. Examples for such working procedures are:

- · breaking into the refrigerating circuit;
- · opening of sealed components;
- opening of ventilated enclosures.

Information Servicing

1. Checks to the area

Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is minimized. For repair to the refrigerating system, the following precautions shall be complied with prior to conducting work on the system.

2. Work procedure

Works shall be undertaken under a controlled procedure so as to minimize the risk of a flammable gas or vapor being present while the work is being performed.

3. General work area

All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. work in confined spaces shall be avoided.

4. Checking for presence of refrigerant

The area shall be checked with an appropriate refrigerant detector prior to and during work to ensure the technician is aware of potentially flammable atmospheres. Ensure that the leak detection equipment is suitable for use with flammable refrigerants (no sparking, adequately sealed, or intrinsically safe).

5. Presence of fire extinguisher

If any hot work is to be conducted on the refrigeration equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand. Have a dry power or CO2 fire extinguisher adjacent to the charging area.

6. No ignition sources

No person carrying out work in relation to a REFRIGERATING SYSTEM which involves exposing any pipe work shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion. All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which refrigerant can possibly be released to the surrounding space. Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. "No Smoking" signs shall be displayed.

7. Ventilated area

Ensure that the area is in the open or that it adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

8. Checks to the refrigeration equipment

Where electrical components are being changed, they shall be fit for the purpose and to the correct specification. At all times the manufacturer's maintenance and service guidelines shall be followed. If in doubt consult the manufacturer's technical department for assistance. The following checks shall be applied to installations using FLAMMABLE REFRIGERANTS:

- The actual refrigerant charge is in accordance with the room size within which the refrigerant containing parts are installed;
- The ventilation machinery and outlets are operating adequately and are not obstructed:
- If an indirect refrigerating circuit is being used, the secondary circuits shall be checked for the presence of refrigerant;
- Marking to the equipment continues to be visible and legible, marking and signs that are illegible shall be corrected;

Refrigeration pipe or components are installed in a position where they
are unlikely to be exposed to any substance which may corrode
refrigerant containing components, unless the components are
constructed of materials which are inherently resistant to being
corroded or are suitably protected against being so corroded.

9. Checks to electrical devices

Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, and adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised. Initial safety checks shall include:

- That capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking
- That there no live electrical components and wiring are exposed while charging, recovering or purging the system
- That there is continuity of earth bonding
- 10. Sealed electrical components shall be replaced.
- 11. Intrinsically safe components must be replaced.

12. Cabling

Check that cabling is not subjected to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

13. Detection of flammable refrigerants

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

The following leak detection methods are deemed acceptable for refrigerant systems. Electronic leak detectors that have a sensitivity of 1/8 oz (5g) may be used to detect refrigerant leaks but, in the case of FLAMMABLE REFRIGERANTS, the sensitivity may not be adequate, or may need re-calibration. (Detection equipment shall be calibrated in a refrigerant-free area.) Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used. Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed, and the appropriate percentage of gas (25% maximum) is confirmed. Leak detection fluids are also suitable for use in external leak detection.

NOTE: Examples of leak detection fluids are as follows:

· Bubble method

· Fluorescent method agents

If a leak is suspected, all naked flames shall be removed/extinguished. If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. See the following instructions of removal of refrigerant.

14. Removal and evacuation

When breaking into the refrigerant circuit to make repairs - or for any other purpose conventional procedures shall be used. However, for flammable refrigerants it is important that best practice be followed, since flammability is a consideration.

The following procedure shall be adhered to:

- a. safely remove refrigerant following local and national regulations;
- b. evacuate;
- c. purge the circuit with nitrogen;
- d. evacuate;
- e. continuously flush or purge with nitrogen when using flame to open circuit; and open the circuit.

The refrigerant charge shall be recovered into the correct recovery cylinders. Charging must be performed by liquid charging method. For appliances containing flammable refrigerants, the system shall be purged with oxygen-free nitrogen to render the appliance safe for flammable refrigerants. This process might need to be repeated several times. Compressed air or oxygen shall not be used for purging refrigerant systems.

For appliances containing flammable refrigerants, refrigerants purging shall be achieved by breaking the vacuum in the system with oxygen-free nitrogen and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum (optional for A2L). This process shall be repeated until no refrigerant is within the system (optional for A2L). When the final oxygen-free nitrogen charge is used, the system shall be vented down to atmospheric pressure to enable work to take place.

The outlet for the vacuum pump shall not be close to any potential ignition sources, and ventilation shall be available.

15. Charging procedures

In addition to conventional charging procedures, the following requirements shall be followed:

- Works shall be undertaken with appropriate tools only. If uncertain, consult the manufacturer of the tools for use with flammable refrigerants.
- Ensure that contamination of different refrigerants does not occur
 when using charging equipment. Hoses or lines shall be as short as
 possible to minimize the amount of refrigerant contained in them.
- Charging must be performed by liquid charging method.
- Ensure that the refrigeration system is grounded prior to charging the system with refrigerant.
- Label the system when charging is complete.
- Extreme care shall be taken to avoid overfilling the refrigeration system.
- Prior to recharging the system, it shall be pressure tested with oxygen free nitrogen (OFN). The system shall be leak tested on completion of charging but before commissioning. A follow up leak test shall be carried out prior to leaving the site.

16. Decommissioning

Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of recovered refrigerant. It is essential that electrical power is available before the task is commenced.

- a. Become familiar with the equipment and its operation
- b. Isolate system electrically
- c. Before attempting the procedure, ensure the following:
 - Mechanical handling equipment is available, if required, for handling refrigerant cylinders
 - All personal protective equipment is available and being used correctly
 - The recovery process is supervised at all times by a competent person
 - Recovery equipment and cylinders conform to the appropriate standards
- d. Pump down refrigerant system, if possible.
- e. If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
- f. Ensure that cylinder is situated on the scales before recovery takes place.
- g. Start the recovery machine and operate in accordance with instructions.
- h. Do not overfill cylinders (no more than 80% volume liquid charge).
- i. Never exceed the maximum working pressure of the cylinder.

- j. When the cylinders have been filled correctly and the process complete, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.
- k. Recovered refrigerant shall not be charged into another refrigeration system unless it has been cleaned and checked.

17. Labeling

Equipment shall be labeled stating that it has been decommissioned and emptied of refrigerant. The label shall be dated and signed. For appliances containing FLAMMABLE REFRIGERANTS, ensure that there are labels on the equipment stating the equipment contains FLAMMABLE REFRIGERANT.

18. Recovery

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely.

When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge is available. All cylinders to be used are designated for the recovered refrigerant and labeled for that refrigerant (i. e. special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure-relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.

The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of the flammable refrigerant. If in doubt, the manufacturer should be consulted. In addition, a set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition.

The recovered refrigerant shall be processed according to local legislation in the correct recovery cylinder, and the relevant waste transfer note arranged. Do not mix refrigerants in recovery units and especially not in cylinders.

If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant. The compressor body shall not be heated by an open flame or other ignition sources to accelerate this process. When oil is drained from a system, it shall be carried out safely.

- 19. Transportation, marking, and storage for units
 - a. Transport of equipment containing flammable refrigerants. Compliance with the transport regulations.
 - b. Marking of equipment using signs.

Compliance with local regulations.

- c. Disposal of equipment using flammable refrigerants.
 Compliance with national regulations.
- d. Storage of equipment/appliances

The storage of equipment should be in accordance with the manufacturer's instructions.

e. Storage of packed (unsold) equipment

Storage package protection should be constructed such that mechanical damage to the equipment inside the package will not cause a leak of the refrigerant charge. The maximum number of pieces of equipment permitted to be stored together will be determined by local regulations.

Table 1 — Symbols on the indoor or outdoor unit

	- ,	
ॐ _{A2L}	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.
Ti.	CAUTION	This symbol shows that a service personnel should be handling this equipment with
	CAUTION	reference to the installation manual.
\mathbf{i}	CAUTION	This symbol shows that information is available such as the operating manual or installation manual.

Supplier's Declaration of Conformity Per FCC Part 2 Section 2.1077

Unique Identifier: (e.g., Trade Name, Model Number)

Responsible Party - U.S. Contact Information

Company name:*****
Street Address: *****
City, State: *****
Postal Code: *****
United States: *****

Telephone number or internet contact information: ***

FCC Compliance Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Operating Modes:

The indoor unit has five operating modes:

- · FAN Only
- AUTO
- HEATING (heat pumps only)
- COOLING
- DEHUMIDIFICATION

FAN Only

In the FAN Only mode, the system filters and circulates the room air without changing room air temperature.

AUTO

In the AUTO mode, the system automatically cools or heats the room according to the user-selected set point.

NOTE: AUTO mode is recommended for use on single zone applications only. Using AUTO changeover on multi-zone applications could set an indoor unit to STANDBY mode, indicated by two dashes (--) on the display, which turns the indoor unit off until all the indoor units are in the same mode: either COOLING or HEATING.

NOTE: HEATING is the system's priority mode. Simultaneous HEATING and COOLING is not allowed.

HEATING

In the HEATING mode, the system heats and filters the room air.

COOLING

In the COOLING mode, the system cools, dries and filters the room air.

DEHUMIDIFICATION (DRY)

In DEHUMIDIFICATION mode, the system dries, filters and slightly cools the room air temperature. This mode prioritizes air dehumidification but it does not take the place of a dehumidifier.

FCC

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For Class B Digital Device

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna
- · Increase the distance between the equipment and the receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for assistance.

MODIFICATION: Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate this device.

For R-454B Refrigerant Charge Amount and Minimum Room Area:

The machine you purchased may be one of the types in the table below. The indoor and outdoor units are designed to be used together. Please check the machine you purchased: The indoor unit should be installed at least 7.6 feet / 2.3 meters above the floor; the height of the room cannot be less than 7.3 feet / 2.2 meters; and the minimum room area of operating or storage should be specified in Table 1.

Table 2 — A (min)

S 3.91 (1.776) 12 (1.10)			≤ 7.2 (2.2)	7.5 (2.3)	7.9 (2.4)	8.5 (2.6)	9.2 (2.8)	9.8 (3.0)	
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A-min: Required Minimum Room Area / Square Feet (Square Meters)		11.0 (5.0)	165 (15.36)	158 (14.69)	152 (14.08)	140 (12.99)	130 (12.07)	121 (11.26	
			A-min: Require	d Minimum Roo	m Area / Square	Feet (Square Met	ers)	L	
Amin is the required minimum room area in ft² /m²					•	· ·	•		

Airflow Information

When the unit detects a refrigerant leak, the minimum airflow of the indoor unit is as follows (applicable to the units with refrigerant sensors only):

WARNING: The minimum room area or minimum room area of conditioned space is based on releasable charge or total system refrigerant charge.

Table 3 — Air Volume

MODEL	06K	09K	12K	18K
NOMINAL AIR VOLUME CFM (M³/H)	342 (580)	342 (580)	353 (600)	400 (680)

Table 4 — Model Numbers

DESCRIPTION	втин	VOLTAGE	CARRIER
0.5	06		45MCCAQ06XA3
0.75/1.00	09/12	208/230V	45MCCAQ09XA3
0.73/1.00	09/12	200/2300	45MCCAQ12XA3
1.50	18		45MCCAQ18XA3

WIRELESS REMOTE CONTROL

Before you begin using your new air conditioner, make sure to familiarize yourself with its remote control. The following is a brief introduction to the remote control. See page 9 through page 13 for more information on these controls.

Before you begin using your new air conditioner, make sure to familiarize yourself with its remote control. The following is a brief introduction to the remote control itself. For instructions on how to operate your air conditioner, refer to the **How to Use Basic Functions** section of this manual.

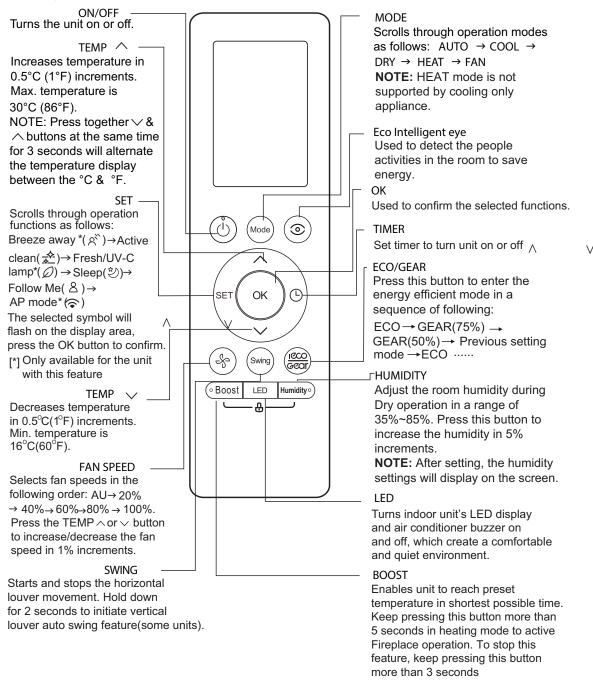


Fig. 1 —Remote Control Functions RG10L5(2HS)

NOTE: Intelligence Sensor and Vertical Swing functions are not available on this unit.

When matching with multi-zone condensers, Intelligence Sensor, Humidity Control, ECO, Active Clean, Gear, and Silent Mode will not be available.

NOTE: Hold Boost and Humidity button for five seconds to lock or unlock the wireless remote controller.

Wireless Remote Control LCD Screen Indicators

Information appears when the remote controller is powered up.

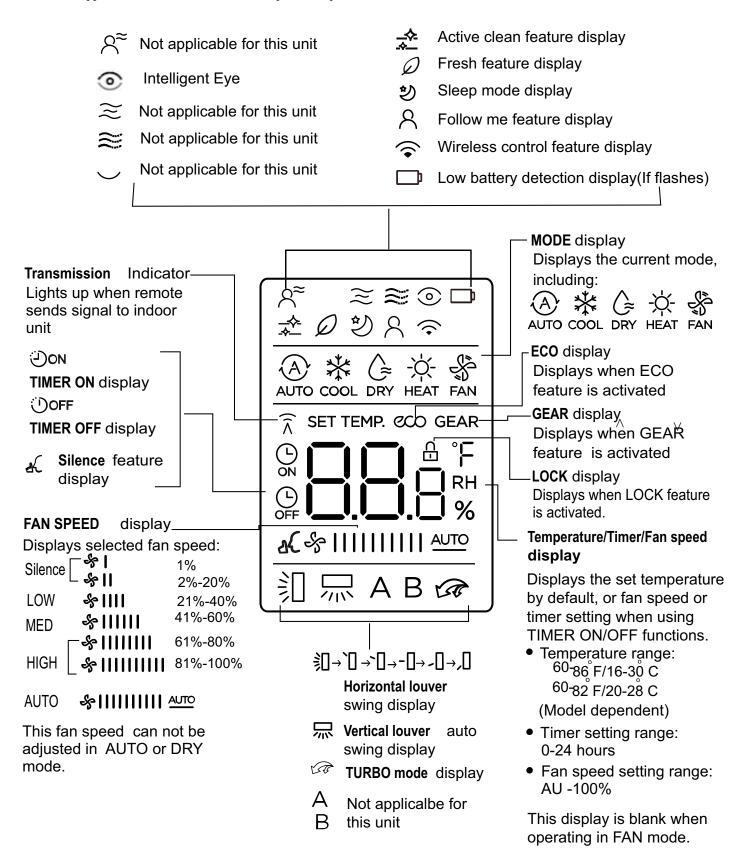


Fig. 2 —Wireless Remote Control Indicators

Remote Control

A CAUTION

EQUIPMENT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage. Handle the control with care and avoid getting the control wet.

IMPORTANT: The remote control can operate the unit from a distance of up to 26 ft. (8 m) as long as there are no obstructions. When the timer function is used, the remote control should be kept in the vicinity of the fan coil (within 26 ft. / 8 m).

The remote control can perform the following basic functions:

- · Turn the system ON and OFF
- · Select the operating mode
- · Adjust room air temperature set point and fan speed
- · Adjust right-left airflow direction

Refer to the "WIRELESS REMOTE CONTROL" on page 8 for a detailed description of all the capabilities of the remote control.

Battery Installation

Two AAA 1.5v alkaline batteries (included) are required for remote control operation.

To install or replace batteries:

- 1. Slide the back cover off the control to open the battery compartment.
- Insert the batteries. Follow the polarity markings inside the battery compartment.
- 3. Replace the battery compartment cover.

NOTES:

- When replacing batteries, do not use old batteries or a different type battery. This may cause the remote control to malfunction.
- If the remote is not going to be used for several weeks, remove the batteries. Otherwise, battery leakage may damage the remote control.
- 3. The average battery life under normal use is about 6 months.
- 4. Replace the batteries when there is no audible beep from the indoor unit or if the Transmission Indicator fails to light.

When batteries are removed, the remote control erases all presets (e.g., Follow Me). The presets must be restored after the insertion of new batteries.

BASIC REMOTE CONTROL OPERATION

Before operation, ensure the unit is plugged in and power is available.

COOL Mode

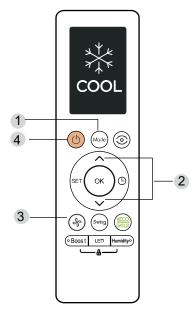


Fig. 3 —COOL Mode

- 1. Press MODE to select the COOL mode.
- 2. Set your desired temperature using TEMP UP or TEMP DOWN.
- 3. Press FAN to select the fan speed in a range of AU'100%,
- 4. Press ON/OFF to start the unit.

Setting Temperature

The operating temperature range for units is 60-86°F (16-30°C)/(68-82 °F (20-28°C) (depends on model). You can increase or decrease the set temperature in 1°F (0.5°C) increments.

HEAT Mode

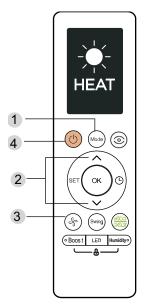


Fig. 4 —HEAT Mode

- 1. Press MODE to select the HEAT mode.
- 2. Set your desired temperature using TEMP UP or TEMP DOWN.
- 3. Press FAN to select the fan speed in the range of AU-100%.

NOTE: As the outdoor temperature drops, the performance of your unit's HEAT function may be affected. In such instances, we recommend using this air conditioner in conjunction with other heating appliances.

AUTO Mode

In AUTO mode, the unit automatically selects the COOL, FAN, or HEAT operation based on the set temperature.

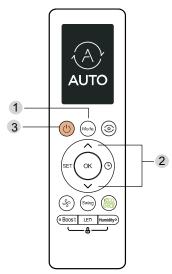


Fig. 5 —AUTO Mode

- 1. Press MODE to select AUTO.
- 2. Set your desired temperature using TEMP UP or TEMP DOWN.
- 3. Press ON/OFF to start the unit.

NOTE: FAN Speed can not be set in the AUTO mode.

DRY Mode

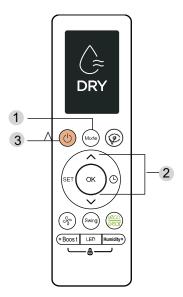


Fig. 6 — DRY Mode

- 1. Press MODE to select the DRY mode.
- 2. Set your desired temperature using TEMP UP or TEMP DOWN.
- 3. Press ON/OFF to start the unit.

FAN Mode

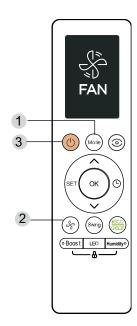


Fig. 7 —FAN Mode

- 1. Press MODE to select the FAN mode.
- 2. Press FAN to select the fan speed in the range of AU-0%.
- 3. Press ON/OFF to start the unit.

Remote Control Operation - Quick Start

NOTE: When transmitting a command from the remote control to the unit, be sure to point the control toward the right side of the unit. The unit confirms receipt of a command by sounding an audible beep. 1. Turn the unit on by pushing ON/OFF.

NOTE: If there is a preference for °C rather than °F (default), press and hold the + and - temperature set point buttons together for approximately 3 seconds.

2. Select the desired mode by pushing MODE.

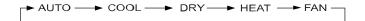


Fig. 8 - Modes

- 3. Select the temperature set point by pointing the control toward the unit and pressing the increase/decrease temperature set point buttons until the desired temperature appears on screen.
- 4. Press FAN to select the desired fan speed.

NOTE: If the unit is operating in DRY or AUTO mode, the fan speed will be automatically set and cannot be adjusted.

Set the airflow direction. When the unit is turned on, the Up-Down airflow louvers default to the cooling or heating position. The user can adjust the horizontal Up-Down airflow louver position by pushing DIRECT or have continuous louver movement by pressing SWING. When the outside temperature is below 32°F (0°C), we strongly recommend maintaining power on the unit to ensure smooth ongoing performance.

To optimize unit performance, perform 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.

Set Function



Fig. 9 —Set Function

- 1. Press SET to enter the FUNCTION setting.
- Press SET or TEMP UP or TEMP DOWN to select the desired function.
- 3. When the selected symbol flashes on the display, press OK to confirm.

To cancel the selected function, perform the same steps.

Press SET to scroll through the operation functions as follows:

Breeze away (\wedge^{∞}) \rightarrow Active clean ($\stackrel{\bullet}{\Rightarrow}$) \rightarrow Fresh*(\oslash) \rightarrow Sleep(\mathfrak{V}) \rightarrow Follow Me(\wedge^{∞}) \rightarrow AP mode*(\wedge^{∞}) \rightarrow Breeze away.... [*]: Model dependent

Fig. 10 —Functions

Breeze Away Function

This feature avoids direct air flow from blowing on the room's occupants.

NOTE: This feature is available under COOL, FAN and DRY mode only.

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. When this function is turned on, the indoor unit window displays "CL", after 20 to 45 minutes, the unit turns off automatically and cancels the CLEAN function.

SLEEP Function

The SLEEP function is used to decrease energy use while you sleep (and do not need the same temperature settings to remain comfortable). This function can only be activated via remote controller. For the detail, see SLEEP OPERATION in the User's Manual.

NOTE: The SLEEP function is not available in FAN or DRY mode.

FOLLOW ME Function:

The FOLLOW ME function enables the remote control to measure the temperature at its current location and sends this signal to the air conditioner every 3 minutes. When using the AUTO, COOL or HEAT modes, measuring the ambient temperature from the remote controller (instead from the indoor unit itself) allows the air conditioner to optimize the temperature around the occupants to ensure maximum comfort.

NOTE: Press and hold BOOST for seven seconds to start/stop the FOLLOW ME MEMORY feature.

- IF the MEMORY feature is activated, "ON" appears on the display for 3 seconds.
- If the MEMORY feature stops, "OFF" appears on the display for 3 seconds.

NOTE: When the FOLLOW ME Memory feature is activated, it will not be canceled by pressing ON/OFF, MODE or power failure to the indoor unit.

AP Function

Select the AP function to configure the wireless network. To enter the AP mode, continuously press LED seven times for 10 seconds.

FREEZE Protection

With the unit in HEAT mode and the wireless remote pointed at the indoor unit, press the down arrow until the setpoint is 60°F (16°C). Press the down arrow two times within two seconds to activate the 46°F (8°C) heating function (heating set back). The unit will now operate at a set temperature of 46°F (8°C). The indoor unit display shows FP. No icon appears on the remote control.

NOTE: This function is only available in the HEATING mode.

Under this function, the unit heats at high fan speed until the space temperature is 46°F (8°C). This mode can also be deactivated by pressing ON/OFF, SLEEP, MODE, FAN, or either TEMP arrow.

UNIT SPECIFICATIONS AND FEATURES

NOTE: Illustrations in this manual are for explanation only. The actual shape of your indoor unit may be slightly different.

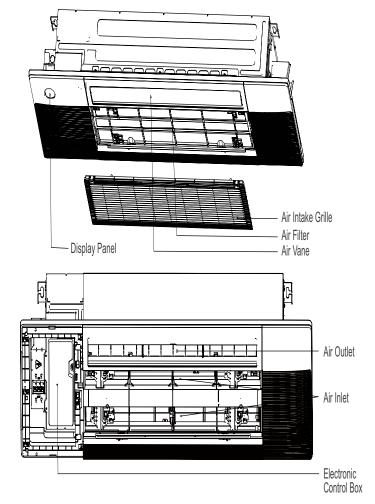


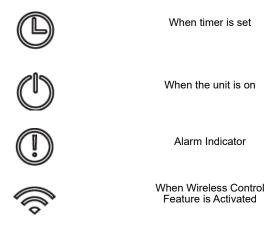
Fig. 8 —Unit Parts

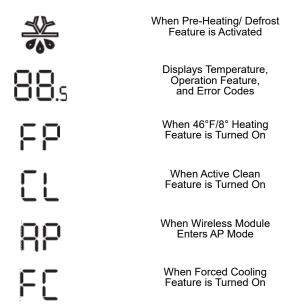
OPERATION INSTRUCTIONS

NOTE: To further optimize the performance of your unit, perform the following tasks:

- · 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.

Table 5 — Indoor Unit Display





NOTE: The display panel has one type of display, which is shown above.

Features

NOTE: Every time the unit is powered on, a buzzing sound will be heard to indicate that the product has been powered on normally. If there is no sound, it is possible that the unit is abnormal. Power on again or check the circuit. The actual functions are subject to the product you purchased. Check the indoor display and remote control of your unit. See the "Remote Controller Manual" for more features.

Default Setting

When the unit restarts after a power failure, it will default to the factory settings (AUTO mode, AUTO fan, 76°F (24°C). This may cause inconsistencies on the remote control and unit panel. Use your remote control to update the status.

Auto-Restart

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.

Three-minute protection feature

A protection feature prevents the air conditioner from being activated for approximately three minutes when it restarts immediately after operation.

Louver Angle Memory Function

Some models are designed with a louver angle memory function. When the unit restarts after a power failure, the angle of the horizontal louvers will automatically return to the previous position.

The angle of the horizontal louver should not be set too small as condensation may form and drip into the machine. To reset the louver, press the manual button, which will reset the horizontal louver settings.

Sleep Operation

The SLEEP function is used to decrease energy use while you sleep since you do not need the same temperature settings to stay comfortable. This function can only be activated through the remote control. 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°F (1°C) after 1 hour, and will increase an additional 2°F (1°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.

The sleep feature will stop after 8 hours but the system will continue running.

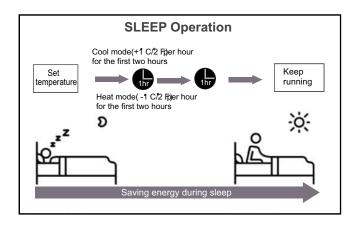


Fig. 9 —Sleep Operation

Active Clean function (not available when matched with Multi-Zone outdoor units)

The Active Clean Technology washes away dust when it adheres to the heat exchanger by automatically freezing and then rapidly thawing the frost.

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 wind wheel then keeps operating with hot air to blow-dry the evaporator, thus keeping the inside clean.

- When this function is turned on, the indoor unit display window shows "CL." After 20 to 130 minutes, the unit will turn off automatically and cancel Active Clean function.
- For some units, the system will start a high temperature cleaning process, and the temperature of air outlet becomes very high, so stay away from it. This leads to the rising of the room temperature.

Heat exchanger dust removal function

This feature helps keep the outdoor coil clean and may extend the duration between regular maintenance intervals depending on local conditions. When the unit is turned off, a 10 second delay occurs. Then the outdoor fan runs in reverse rotation for 70 seconds to blow off loose accumulated dust and debris.

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.

Breeze Away

This feature avoids direct airflow on the body.

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.
- Clean the air filter every two weeks.
- Adjust louvers properly and avoid direct airflow.
- Closing curtains during heating also helps keep the heat in.
- Doors and windows should be kept closed.

CARE AND MAINTENANCE

A WARNING

BEFORE CLEANING OR MAINTAINENCE

Remember to disconnect the power before cleaning or performing maintenance except when cleaning the filter. Turn off the indoor unit's circuit breaker.

Cleaning Your Indoor Unit

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. Ensure 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.

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

A CAUTION

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.

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 $104^{\circ}F(40^{\circ}C)$ 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.

A WARNING

Do Not Remove or Clean the Filter Yourself

Removing and cleaning the filter can be dangerous. Removal and maintenance must be performed by a certified technician.

Cleaning the Air Filter

The filter prevents dust and other particles from entering the indoor unit. Dust buildup can reduce the efficiency of the air conditioner. For optimum efficiency, clean the air filter every two weeks or more frequently if you live in a dusty area. Replace the filter with a new one if it's heavily clogged and cannot be cleaned.

NOTE: In households with animals, you will have to periodically wipe down the grille to prevent animal hair from blocking airflow.

 Press the circular position to open the two screw covers then remove the two screws.

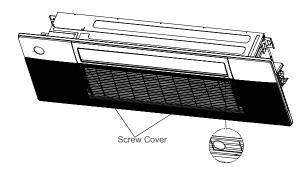


Fig. 10 —Remove the Screw Cover

2. Hold and open the air grille, then remove the air filter.

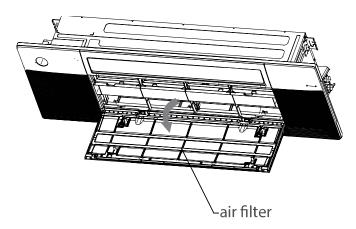


Fig. 11 —Remove the Air Filter

3. Clean the air filter.

Dust will accumulate on the filter along with the unit operation, and needs to be removed from the filter or the unit will not function effectively. Clean the filter every two weeks when if use the unit regularly. Clean the air filter with a vacuum cleaner or water.

a. The air intake side should face up when using a vacuum cleaner.

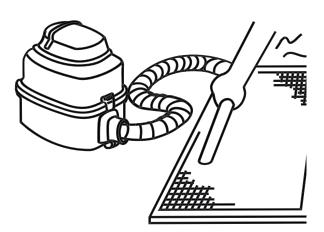


Fig. 12 —Use a Vacuum Cleaner

b. The air intake side should face down when using clean water.



Fig. 13 —Use Clean Water

For excessive dust, use a soft brush and natural detergent to clean it and dry in a cool place.

A CAUTION

DO NOT dry out the air filter under direct sunlight or with heat/fire. The air filter should be installed before the unit body installation.

- 4. Re-install the air filter.
- 5. Press UP on the remote controller to reset the air grille. (applicable to model A). Re-install the air grille by securing the two screws and close the two screw covers (applicable to model B).

A CAUTION

Before changing the filter or cleaning, turn the unit off.

When removing the filter, DO NOT touch the metal parts in the unit. The sharp metal edges can cause injury.

DO NOT use water to clean the inside of the indoor unit. This can destroy the insulation and cause an electrical shock.

DO NOT expose the filter to direct sunlight when drying. This can shrink the filter.

Any maintenance and cleaning of the outdoor unit should be performed by an authorized dealer or a licensed service provider. Any unit repairs should be performed by an authorized dealer or a licensed service provider.

When the air grille is rising, do not hinder the grille from rising with your hands or other objects.

DO NOT pull the wire rope, if necessary, contact the local customer service team.

Maintenance - Long Periods of Non-Use

If you plan not to use your unit for an extended period of time, do the following.



Fig. 14 — Maintenance - Long Periods of Non-Use

Maintenance - Pre Season Inspection

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

following.



Check for damaged wires



Clean all filters



TROUBLESHOOTING

CAUTION

If any of the following conditions occurs, turn off your unit

A power fuse blows or the circuit breaker frequently trips

DO NOT ATTEMPT TO FIX THESE YOURSELF! CONTACT AN AUTHORIZED SERVICE PROVIDER IMMEDIATELY.

The power cord is damaged or abnormally warm

Water or other objects fall into or out of the unit

The unit emits loud or abnormal sounds

immediately!

You smell a burning odor

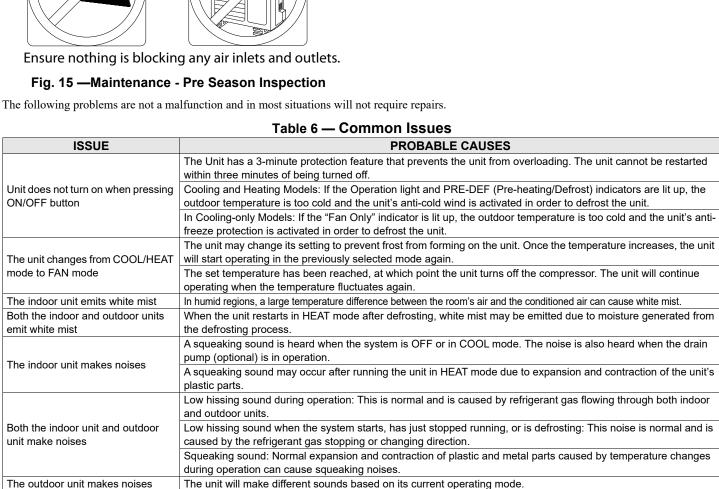
Check for leaks



Dust is emitted from either the indoor or outdoor unit

The unit emits a bad odor





The fan of the outdoor unit does not During operation, the fan speed is controlled to optimize product operation. operate Leak Detection System installed. Unit must be powered except for service. For the unit with refrigerant sensor, when the refrigerant sensor detects refrigerant leakage, the indoor unit will display a error code and emit a buzzing sound, the compressor of outdoor unit will immediately stop, and the indoor fan will start running. The Leak Detection service life of the refrigerant sensor is 15 years. When the refrigerant sensor malfunctions, the indoor unit will display the error code FHCC. The refrigerant sensor can not be repaired and can only be replaced by the

on. This can be mitigated by covering the unit during long periods of inactivity.

during operations. The unit's filters have become moldy and should be cleaned.

The unit may accumulate dust during extended periods of non-use, which will be emitted when the unit is turned

The unit may absorb odors from the environment (such as furniture, cooking, cigarettes, etc.) which will be emitted

manufacture. It shall only be replaced with the sensor specified by the manufacture. NOTE: If problem persists, contact a local dealer or your nearest customer service center. Provide them with a detailed description of the unit malfunction as well as your model number.

Troubleshooting

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

Table 7 — Troubleshooting

DDOD! FM	PROPARIE CALICES	
PROBLEM	PROBABLE CAUSES	SOLUTION
	Temperature setting may be higher than 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
Poor Cooling Performance	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
	Too many sources of heat in the room (people, computers, electronics, etc.)	Reduce amount of heat sources
	Low refrigerant due to leak or long-term use	Check for leaks, re-seal if necessary and top off refrigerant
	Power failure	Wait for the power to be restored
	The power is turned off	Turn on the power
The unit is not working	The fuse is burned out	Replace the fuse
	The Unit's 3-minute protection has been activated	Wait three minutes after restarting the unit
	Timer is activated	Turn timer off
	There's too much or too little refrigerant in the system	Check for leaks and recharge the system with refrigerant.
	Incompressible gas or moisture has entered the system	Evacuate and recharge the system with refrigerant
The unit starts and stops	System sircuit is blocked	Determine which circuit is blocked and replace the
frequently	System circuit is blocked	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
Door hooting performance	Cold air is entering through doors and windows	Make sure that all doors and windows are closed during use
Poor heating performance	Low refrigerant due to leak or long-term use	Check for leaks, re-seal if necessary and top off refrigerant

Table 8 — Error Codes

Display	Malfunction and Protection Indication
ECO7	ODU Fan Speed Out of Control
EC51	ODU EEPROM Parameter Error
EC52	ODU Coil Temperature Sensor(T3) error
EC53	ODU Ambient Temperature Sensor (T4) Error
EC54	COMP. Discharge Temperature Sensor (TP) Error
EC5L	IDU Coil Temperature Sensor (T2B) Error
ECCL	Other IDU Refrigerant Sensor Detects Leakage (Multi-zone)*
EHOO	IDU EEPROM Malfunction
EH03	IDU Fan Speed Out of Control
EHOA	IDU EEPROM Parameter Error
EHOE	Water Level Alarm Malfunction
EH75	Main Unit or Secondary Units Malfunction
ЕНЗА	External Fan DC bus voltage is too low protection
ЕНЗЬ	External Fan DC bus voltage is too high fault
EHLO	IDU Room Temperature (T1) Error
EHPJ	IDU Coil Temperature Sensor (T2) Error
EHba	Communication Error between the indoor unit and the external fan module
EHCl	Refrigerant Sensor Detects Leakage
EHC5	Refrigerant Sensor is out of range and a leak is detected
EHC3	Refrigerant Sensor is out of range*
ELOJ	IDU and ODU Communication Error
ELOC	System lacks refrigerant
EL11	Communication Malfunction between the main and secondary units
FH07	IDU lift panel communication failure/IDU opening and closing failure
FHCC	Refrigerant Sensor Error*
PC00	ODU IPM Module Protection
PC01	ODU Voltage Protection
PC02	Compressor To (or IPM Module Protection
PC03	Pressure Protection (Low or High Pressure)
PC04	Inverter Compressor Drive Error
PCOL	Low Ambient Temperate Protection
NOTE: The only.	ne digital tube will display FC in the FORCED COOLING mode. FC is NOT an error code. *Applicable to the units with refrigerant sensors

Table 9 — Refrigerant Leak Detection Error Codes

EHCl	Refrigerant Sensor detects a leak
EHCZ	Working condition of the refrigerant sensor is out of range and a leak is detected

If you receive one of the codes in Table 9, call a technician as soon as possible. No need to panic, the unit goes into TURBO mode until the error code clears. There is a "beeping" noise coming from the indoor unit, which is normal in this case. For additional diagnostic information, refer to the Service Manual.

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