



**PRESENTS**

# Deluxe heat

## **WALL AIR HANDLER DUCTLESS SPLIT SYSTEM** User Manual

### **MODELS**

*DHWAL09DA 9 k*

*DHWAL12DA 12 k*

*DHWAL18DA 18 k*

*DHWAL24DA 24 k*



### **IMPORTANT NOTE:**

Read this manual carefully before installing or operating your new air conditioning unit. Make sure to save this manual for future reference.



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### Disposal Guidelines

*This marking shown on the product or its literature, indicates that waste electrical and eletrical equipment should not be mixed with general household waste.*



#### Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

This appliance contains refrigerant and other potentially hazardous materials. When disposing of this appliance, the law requires special collection and treatment. **Do not** dispose of this product as household waste or unsorted municipal waste.

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

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

# Safety Precautions

1

## Read Safety Precautions Before Operation and Installation

**Incorrect installation due to not following instructions can cause serious injury or damage.** The seriousness of potential damage or injuries is classified as either a **WARNING** or **CAUTION**.



### 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 OR MODERATE INJURY.**



### WARNING

- If there is a burning smell immediately 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, 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 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 with burners or other heating devices, thoroughly ventilate the room to avoid oxygen deficiency.
- In certain environments, such as kitchens, server rooms, etc., the use of specially designed air-conditioning units is highly recommended.

## CLEANING AND MAINTENANCE WARNINGS



### WARNING

- **Electric Shock Hazard!** Turn off the unit and disconnect the power before cleaning. Failure to do so can cause electrical 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

- 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.
- How to install the appliance to its support, please refer to the "INSTALLATION MANUAL" for details in "indoor unit installation" and "outdoor unit installation" sections.

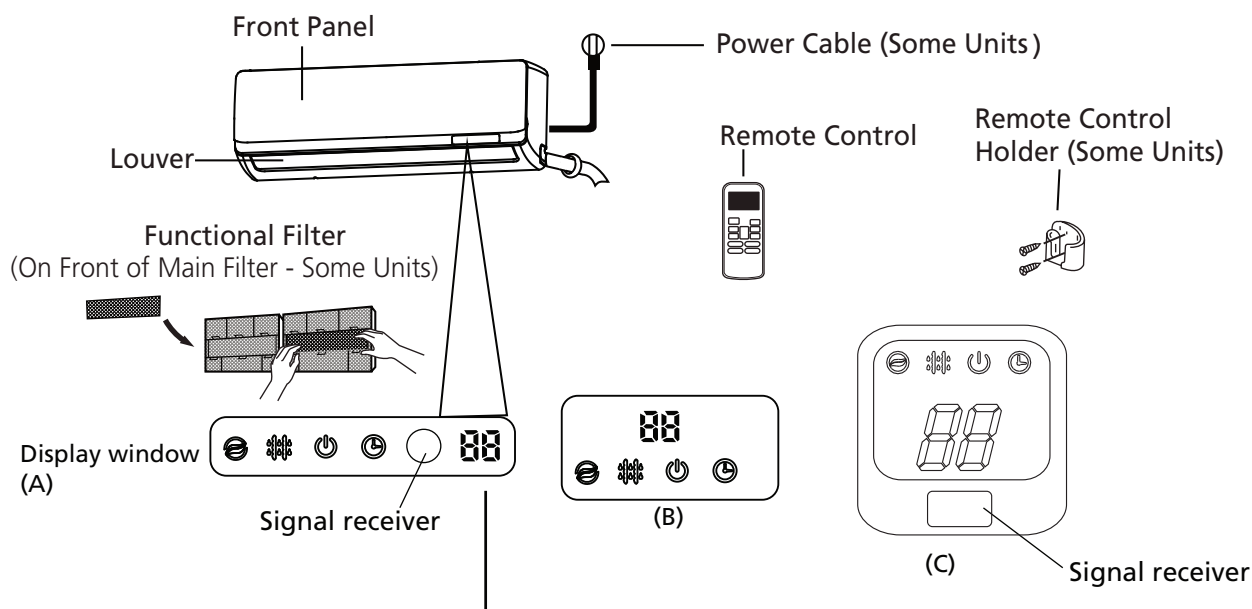
### Note about Fluorinated Gasses





1. This air-conditioning unit contains fluorinated greenhouse gasses. For specific information on the type of gas and the amount, please refer to the relevant label on the unit.
2. Installation, service, maintenance and repair of this unit **shall** be performed by a certified technician.
3. Product **removal** and recycling **shall** be performed by a certified technician.
4. When the unit is checked for leaks, proper record-keeping of all checks is recommended.

# Unit Specifications and Features

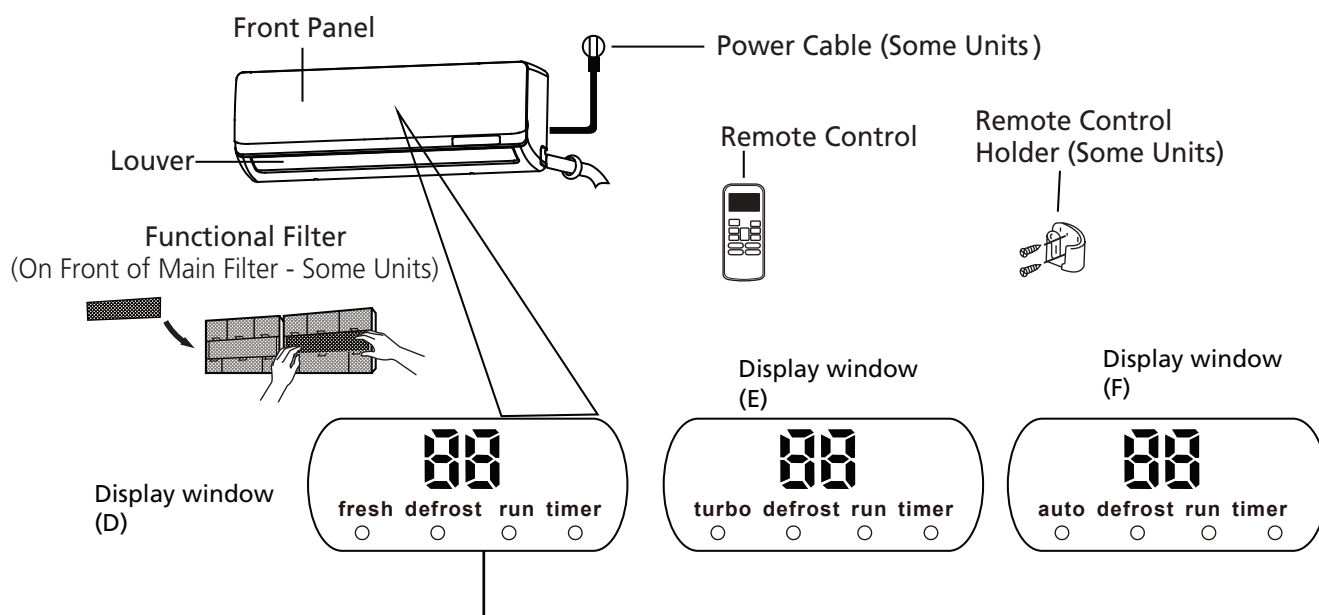
# 2

## Indoor unit display



- "  " when FRESH feature is turned on
- "  " when defrosting(cooling & heating units).
- "  " when the unit is operational.
- "  " when Timer is set.
- " **88** " display the temperature setting or room temperature. When error occurs, it displays error code. **Some units can display the following functions:**
  - " **01** " for 3 seconds when:
    - TIMER ON is set
    - FRESH, SWING, TURBO, SILENCE or SOLAR PV ECO feature is turned on
  - " **0F** " for 3 seconds when:
    - TIMER OFF is set
    - FRESH, SWING, TURBO, SILENCE or SOLAR PV ECO feature is turned off
  - " **cF** " when anti-cold air feature is turned on
  - " **dF** " when defrosting(cooling & heating units)
  - " **SC** " when unit is self-cleaning
  - " **FP** " when 4.5°F (8°C) heating feature is turned on

### Display Code Meanings



" fresh " when FRESH feature is turned on

" defrost " when defrosting(cooling & heating units).

" run " when the unit is operational.

" timer " when Timer is set.

" turbo " when Turbo feature is turned on

" auto " when Auto mode is activated

" 88 " display the temperature setting or room temperature. When error occurs, it displays error code. For some units, it can display the following functions:

" 01 " for 3 seconds when:

- TIMER ON is set
- FRESH, SWING, TURBO, SILENCE or SOLAR PV ECO feature is turned on

" 0F " for 3 seconds when:

- TIMER OFF is set
- FRESH, SWING, TURBO, SILENCE or SOLAR PV ECO feature is turned off

" cF " when anti-cold air feature is turned on

" dF " when defrosting(cooling & heating units)

" SC " when unit is self-cleaning

" FP " when 8°C heating feature is turned on

### Display Code Meanings

**NOTE:** Different models have different front panel and display window. Not all the indicators described are available for your air conditioner. Please check the indoor display window of the unit you purchased.

Illustrations in this manual are for explanatory purposes. The actual shape of your indoor unit may be slightly different. The actual shape shall prevail.

A guide on using the infrared remote is not included in this literature package. Not all the functions are available for the air conditioner, please check the indoor display and remote control of the unit you purchased.

## Other Features

- **Auto-Restart(some units)**  
If the unit loses power, it will automatically restart with the prior settings once power has been restored.
- **Anti-mildew (some units)**  
When turning off the unit from COOL, AUTO (COOL), or DRY modes, the air conditioner will continue operate at very low power to dry up condensed water and prevent mildew growth.
- **Wireless Control (some units)**  
Wireless control allows you to control your air conditioner using your mobile phone and a wireless connection.  
For the USB device access, replacement, maintenance operations must be carried out by professional staff.
- **Refrigerant Leakage Detection (some units)**  
The indoor unit will automatically display "EC" when it detects refrigerant leakage.
- **Louver Angle Memory(some units)**  
When turning on your unit, the louver will automatically resume its former angle.

### NOTE:

Best working conditions(the energy efficiency can be affected if not set under these conditions):

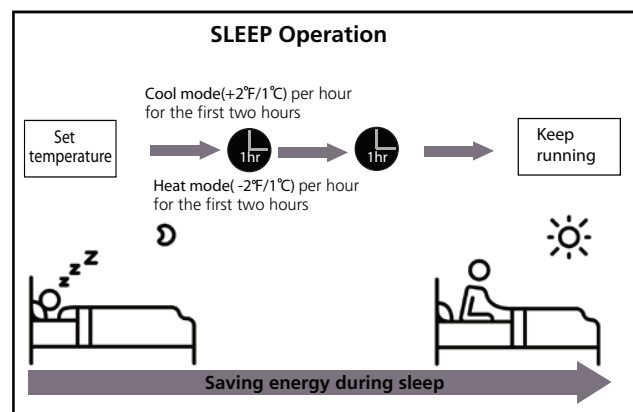
- The best angle of louvers is the default angle of cooling mode.
- The best way of setting the angle of louvers at heating mode is: run the unit for 5 minutes and then use the remote controller to set the louvers at the default angle of cooling mode.

## • Sleep Operation

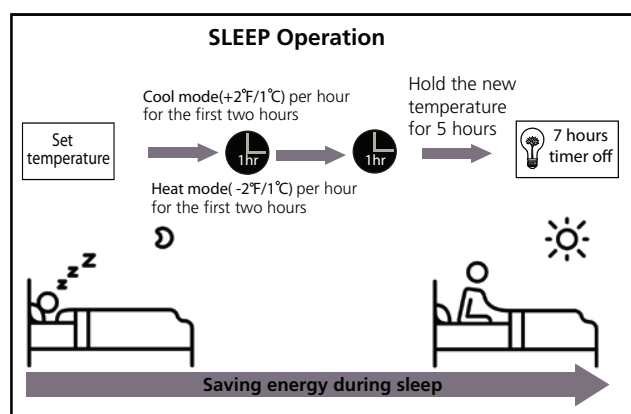
The SLEEP function is used to decrease energy use while you sleep (and don't need the same temperature settings to stay comfortable). This function can only be activated via remote control. And the Sleep function is not available in FAN or DRY mode.

Press the **SLEEP** button when you are ready to go to sleep. When in COOL mode, the unit will increase the temperature by 2°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°F (1°C) after 1 hour, and will decrease an additional 2°F (1°C) after another hour.

For some units, the sleep feature will stop after 8 hours and the system will keep running with final situation.



For some units, the unit will turn off after 7 hours.



## Normal Operating temperature

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

### Inverter Split Type

	COOL mode	HEAT mode	DRY mode
Room Temperature	63°F - 90°F (17°C - 32°C)	32°F - 86°F (0°C - 30°C)	50°F - 90°F (10°C - 32°C)
Outdoor Temperature	32°F - 122°F (0°C - 50°C)	5°F - 86°F (-15°C - 30°C)	32°F - 122°F (0°C - 50°C)
	5°F - 122°F (-15°C - 50°C) (For models with low temp. cooling systems.)		
	32°F - 126°F (0°C - 52°C) (For special tropical models)		32°F - 126°F (0°C - 52°C) (For special tropical models)

#### FOR OUTDOOR UNITS WITH AUXILIARY ELECTRIC HEATER

When outside temperature is below 0°C (32°F), we strongly recommend keeping the unit plugged in at all time to ensure smooth ongoing performance.

**NOTE:** Room relative humidity less than 80%. If the air conditioner operates in excess of this figure, the surface of the air conditioner may attract condensation. Please sets the vertical air flow louver to its maximum angle (vertically to the floor), and set HIGH fan mode.

#### 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.



## • Setting Angle of Air Flow

### Setting vertical angle of air flow

While the unit is on, use the **SWING/DIRECT** button on remote control to set the direction (vertical angle) of airflow. Please refer to the Remote Control Manual for details.

#### NOTE ON 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 drop on your floor or furnishings.

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.

### Setting horizontal angle of air flow

The horizontal angle of the airflow must be set manually. Grip the deflector rod (See **Fig.B**) and manually adjust it to your preferred direction.

**For some units,** the horizontal angle of the airflow can be set by remote control. please refer to the Remote Control Manual.

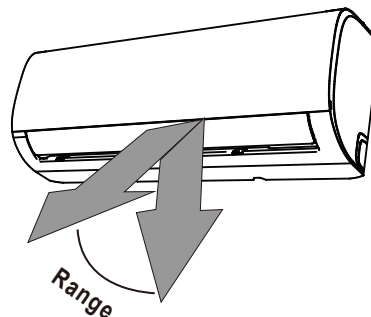
## Manual Operation(without remote)

### IMPORTANT!

The manual button is intended for testing purposes and emergency operation only. Please do not use this function unless the remote control is lost and it is absolutely necessary. To restore regular operation, use the remote control to activate the unit. 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.
3. Press the **MANUAL CONTROL button** one time to activate FORCED AUTO mode.
4. Press the **MANUAL CONTROL button** again to activate FORCED COOLING mode.
5. Press the **MANUAL CONTROL button** a third time to turn the unit off.
6. Close the front panel.



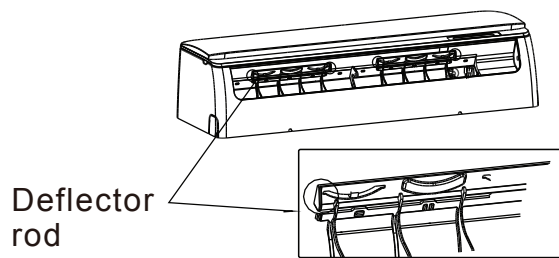
**NOTE:** Do not move louver by hand. This will cause the louver to become out of sync. If this occurs, turn off the unit and unplug it for a few seconds, then restart the unit. This will reset the louver.

Fig. A



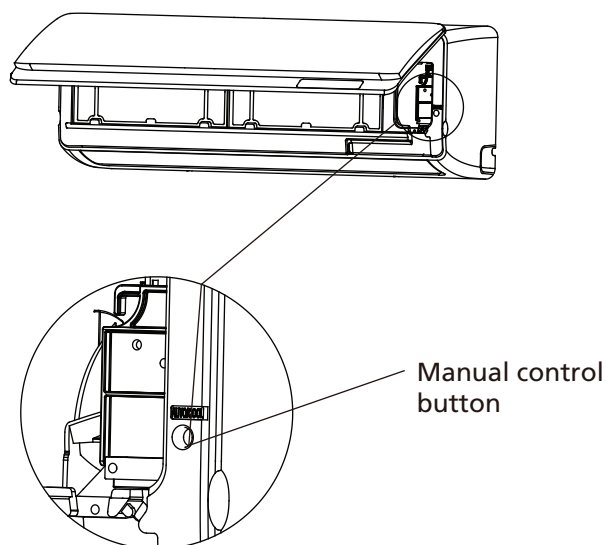
## CAUTION

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.



Deflector rod

Fig. B



Manual control button

# Care and Maintenance

## 3

### Cleaning Your Indoor Unit



#### WARNING

**ALWAYS TURN OFF YOUR AIR CONDITIONER SYSTEM AND DISCONNECT ITS POWER SUPPLY BEFORE CLEANING OR MAINTENANCE.**

#### IMPORTANT

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.

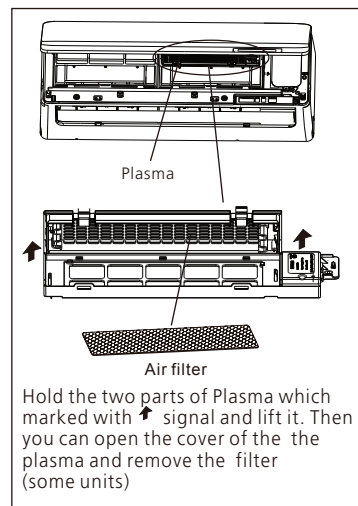
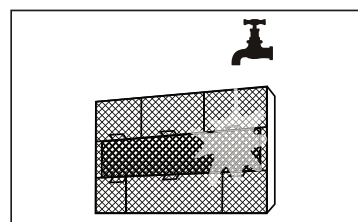
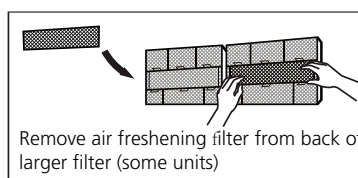
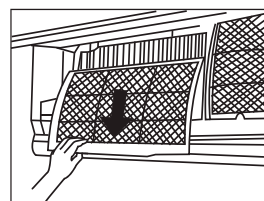
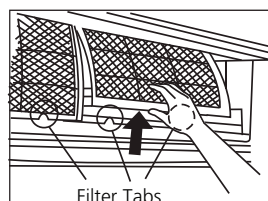
- **Do not** use chemicals or chemically treated cloths to clean the unit
- **Do not** use benzene, paint thinner, polishing powder or other solvents to clean the unit. They can cause the plastic surface to crack or deform.
- **Do not** use water hotter than 104°F (40°C) to clean the front panel. This can cause the panel to deform or become discolored.

### Cleaning Your Air Filter

A clogged air conditioner can reduce the cooling efficiency of your unit, and can also be bad for your health. Make sure to clean the filter once every two weeks.

1. Lift the front panel of the indoor unit.
2. Grip the tab on the end of the filter, lift it up, then pull it towards yourself.
3. Now pull the filter out.
4. If your filter has a small air freshening filter, unclip it from the larger filter. Clean this air freshening filter with a hand-held vacuum.
5. Clean the large air filter with warm, soapy water. Be sure to use a mild detergent.
6. Rinse the filter with fresh water, then shake off excess water.
7. Dry it in a cool, dry place, and refrain from exposing it to direct sunlight.

8. When dry, re-clip the air freshening filter to the larger filter, then slide it back into the indoor unit.
9. Close the front panel of the indoor unit.



#### CAUTION

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

## ⚠ WARNING

- 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 unit. This can destroy insulation and cause electrical shock.
- Do not expose filter to direct sunlight when drying. This can shrink the filter.

### 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.

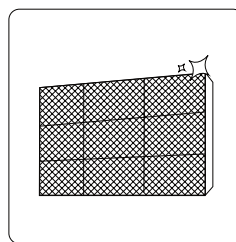
To reset the reminder, press the **LED** button on your remote control 4 times, or press the **MANUAL CONTROL** button 3 times. If you don't reset the reminder, the "nF" indicator will flash again when you restart the unit.

### IMPORTANT

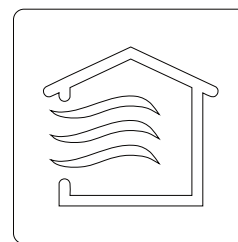
- Any maintenance and cleaning of outdoor unit should be performed by an authorized dealer or a licensed service provider.
- Any unit repairs should be performed by an authorized dealer or a licensed service provider.

### Maintenance – Long Periods of Non-Use

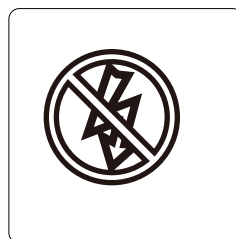
If you plan not to use your air conditioner for an extended period of time, do the following:



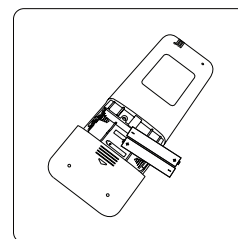
Clean all filters



Turn on FAN function until unit dries out completely



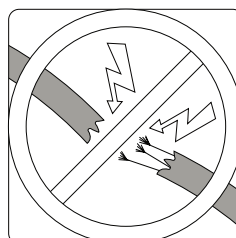
Turn off the unit and disconnect the power



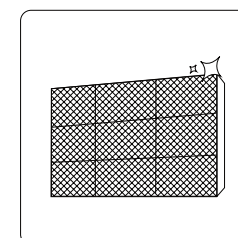
Remove batteries from remote control

### Maintenance – Pre-Season Inspection

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



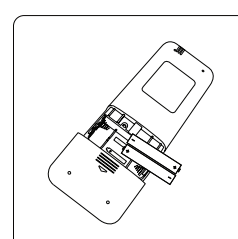
Check for damaged wires



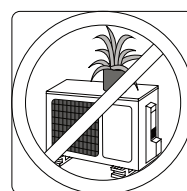
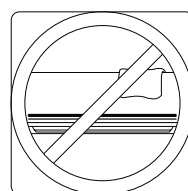
Clean all filters



Check for leaks



Replace batteries



Make sure nothing is blocking all air inlets and outlets

# Troubleshooting

## 4



### WARNING

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

- 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
- Water or other objects fall into or out of the unit

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

### Common Issues

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

Issue	Possible Causes
<b>Unit does not turn on when pressing ON/OFF button</b>	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.
<b>The unit changes from COOL/HEAT mode to FAN mode</b>	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.
<b>The indoor unit emits white mist</b>	In humid regions, a large temperature difference between the room's air and the conditioned air can cause white mist.
<b>Both the indoor and outdoor units emit white mist</b>	When the unit restarts in HEAT mode after defrosting, white mist may be emitted due to moisture generated from the defrosting process.

Issue	Possible Causes
<b>The indoor unit makes noises</b>	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 and contraction of the unit's plastic parts.
<b>Both the indoor unit and outdoor unit make noises</b>	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.
<b>The outdoor unit makes noises</b>	The unit will make different sounds based on its current operating mode.
<b>Dust is emitted from either the indoor or outdoor unit</b>	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.
<b>The unit emits a bad odor</b>	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.
<b>The fan of the outdoor unit does not operate</b>	During operation, the fan speed is controlled to optimize product operation.
<b>Operation is erratic, unpredictable, or unit is unresponsive</b>	<p>Interference from cell phone towers and remote boosters may cause the unit to malfunction.</p> <p>In this case, try the following:</p> <ul style="list-style-type: none"> <li>• Disconnect the power, then reconnect.</li> <li>• Press ON/OFF button on remote control to restart operation.</li> </ul>
<p><b>NOTE:</b> 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.</p>	

## Troubleshooting

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

Problem	Possible Causes	Solution
<b>Poor Cooling Performance</b>	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
	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
	SILENCE function is activated(optional function)	SILENCE function can lower product performance by reducing operating frequency. Turn off SILENCE function.

Problem	Possible Causes	Solution
<b>The unit is not working</b>	Power failure	Wait for the power to be restored
	The power is turned off	Turn on the power
	The fuse is burned out	Replace the fuse
	Remote control batteries are dead	Replace batteries
	The Unit's 3-minute protection has been activated	Wait three minutes after restarting the unit
	Timer is activated	Turn timer off
<b>The unit starts and stops frequently</b>	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 compressor is broken	Replace the compressor
	The voltage is too high or too low	Install a manostat to regulate the voltage
<b>Poor heating performance</b>	The outdoor temperature is extremely low	Use auxiliary heating device
	Cold air is entering through doors and windows	Make sure that all doors and windows are closed during use
	Low refrigerant due to leak or long-term use	Check for leaks, re-seal if necessary and top off refrigerant
<b>Indicator lamps continue flashing</b>	<p>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.</p> <p>If the problem persists, disconnect the power and contact your nearest customer service center.</p>	
<b>Error code appears in the window display of indoor unit:</b> <ul style="list-style-type: none"> <li>• E0, E1, E2...</li> <li>• P1, P2, P3...</li> <li>• F1, F2, F3...</li> </ul>		

**NOTE:** If your problem persists after performing the checks and diagnostics above, turn off your unit immediately and contact an authorized service center.



2201 Dwyer Avenue, Utica, NY 13501  
Tel. 800 253 7900  
[www.ecrinternational.com](http://www.ecrinternational.com)

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