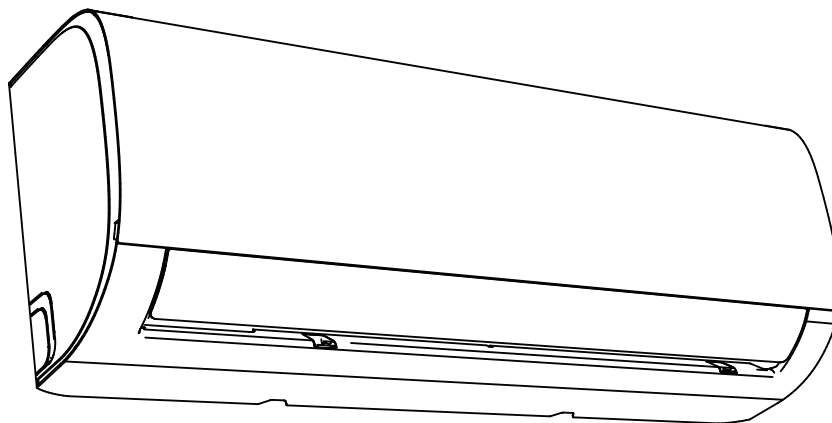


Before using your air conditioner, please read this manual carefully and keep it for future reference.

# **SPLIT AIR CONDITIONER WITH HEAT PUMP**

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# **USER MANUAL**



## **Read this manual**

Keep this manual where the operator can easily find it. Inside you will find many helpful hints on how to use and maintain your air conditioner properly. Just a little preventative care on your part can save you a great deal of time and money over the life of your air conditioner. You'll find many answers to common problems in the chart of troubleshooting tips. If you review the chart of troubleshooting tips first, you may not need to call for service.



### WARNING

#### **Operation and Maintenance**

- This appliance can be used by children ages 8 years and above and persons with reduced physical, sensory, or mental capabilities or lack of experience and knowledge. Ensure that they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children should not play with the appliance.
- Cleaning and user maintenance should not be made by children without supervision.
- Do not connect the air conditioner to a multi-purpose socket. This may cause a fire.
- Do not disconnect the power supply when cleaning the air conditioner. This may cause electric shock.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons to avoid a hazard.
- Do not wash the air conditioner with water. This may cause electric shock.
- Do not spray water on the indoor unit. This may cause electric shock or malfunction.
- To avoid injury, do not touch the fins after removing the filter.
- To avoid deformation or fire, do not use fire or a hair dryer to dry the filter.



## WARNING

- To avoid personal injury or damage, only allow qualified professionals to perform maintenance.
- Please contact your dealer when you need to repair your air conditioner; do not repair it by yourself. This may cause electric shock or damage.
- Do not extend your fingers or objects into the air inlet or air outlet. This may cause personal injury or damage.
- Do not block the air inlet or air outlet. This may cause malfunction.
- Spilling water on the remote control may ruin it.
- When below phenomena occur, please turn of the air conditioner, disconnect the power immediately, and contact the dealer or qualified professionals for service:
  - The power cord is overheating or damaged
  - An abnormal sound is heard during operation
  - The circuit break trips off frequently
  - The air conditioner produces a burning smell
  - The indoor unit is leaking
- If the air conditioner operates under abnormal conditions, malfunction, electric shock, or fire may result.
- When turning on or turning off the unit by emergency operation switch, please press this switch with an insulating object other than metal.
- Do not step on the top panel of the outdoor unit or place heavy objects on it. This may cause personal injury or damage.



## WARNING

### Attachment

- To avoid personal injury or damage, allow installation to be performed by qualified professionals.
- Qualified professionals should follow the electric safety regulations when installing the unit.
- In accordance with local safety regulations, use a qualified power supply circuit and circuit break.
- To avoid malfunction, install the circuit break.
- An all-pole disconnection switch with a contact separation of at least 1/8in (3mm) in all poles should be connected in fixed wiring.
- Include an air switch with suitable capacity. The air switch should include a magnet buckle and heating buckle function to protect the unit from circuit-short and overload.
- The air conditioner should be properly grounded. Incorrect grounding may cause electric shock.
- Don't use an unqualified power cord.
- Make sure the power supply matches the requirement of the air conditioner. Unstable power supply may cause a malfunction. Please install the proper power supply cables before using the air conditioner.
- Please connect the live wire, neutral wire, and grounding wire of the power socket.
- Be sure to cut off the power supply before performing any work related to electricity and safety.



## WARNING

- Do not add power before finishing installation.
- If the supply cord is damaged, it must be replaced by the manufacturer, the service agent, or similarly qualified persons for a hazard to be avoided.
- Because the temperature of the refrigerant circuit will be high, ensure that the interconnection cable is kept away from the copper tube.
- The appliance should be installed in accordance with national wiring regulations.
- Installation must be performed by authorized personnel only in accordance with the requirements of National Electrical Codes (NEC) and local electrical codes.
- The air conditioner is a first-class electrical appliance. It must be properly grounded by a professional with a specialized grounding device. To avoid electric shock, ensure that it is grounded effectively.
- The yellow-green wire in the air conditioner is the grounding wire and cannot be used for other purposes.
- The grounding resistance should comply with National Electric Safety regulations.
- The appliance must be positioned so that the plug is accessible.
- All wires of both the indoor unit and the outdoor unit should be connected by a professional.
- If the length of power connection wire is insufficient, please contact the supplier for a new one. Avoid extending the wire by yourself.



## WARNING

- For the air conditioner model with a plug, the plug should be reachable after installation is complete.
- For the air conditioner model without a plug, a circuit break must be installed in the line.
- Only a qualified professional should relocate the air conditioner. Personal injury or damage may result if you try to move it yourself.
- Select a location that is out of reach of children and far away from animals or plants. If this is impossible, please add a fence for safety purposes.
- The indoor unit should be installed close to a wall.  
Instructions for installation and use of this product are provided by the manufacturer.



WARNING

This symbol indicates that ignoring instructions may cause death or serious injury.



CAUTION

This symbol indicates that ignoring instructions may cause moderate injury to your person or damage to your unit or other property.

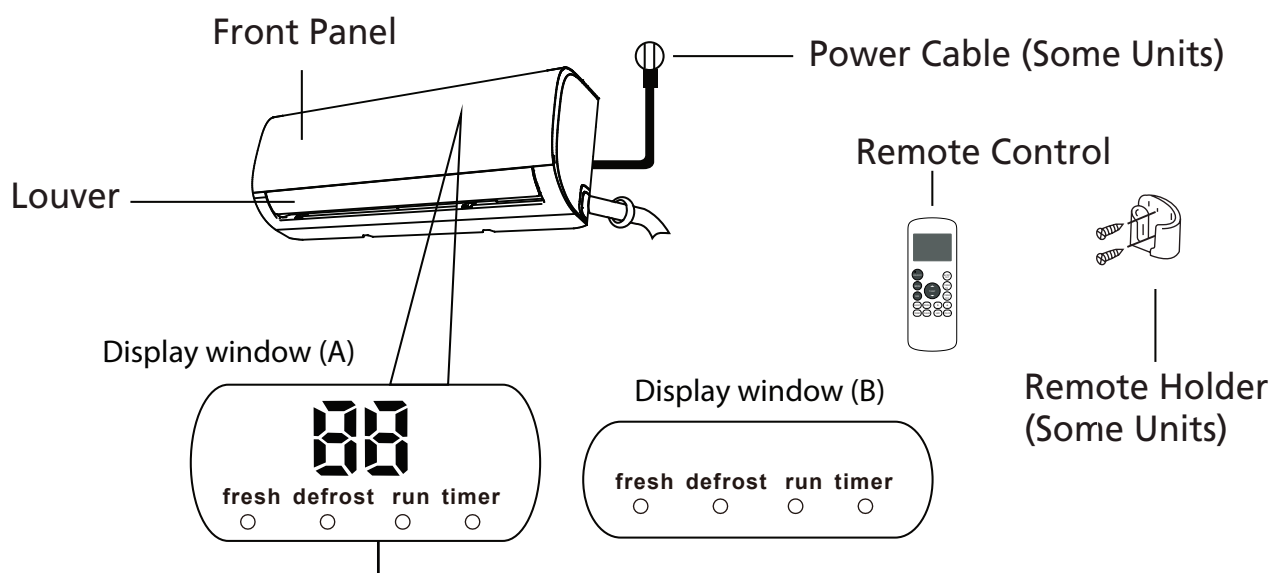


This symbol indicates that you must never perform the action indicated.

# Unit Specifications and Features

# 1

## Unit Parts



“fresh” When the fresh feature is activated (some units)

“defrost” When the defrost feature is activated.

“run” When the unit is on.

“timer” When the timer is set.

“88” Not available for all units.

When ECO function (some units) is activated, the

‘88’ illuminates gradually as -- E

E -- 0 -- set temperature -- E in one second intervals.

In other modes, the unit will display your temperature setting.

In fan mode, the unit will display the room temperature.

When an error occurs, it will display an error code.

“00” for 3 seconds when:

- TIMER ON is set
- FRESH, SWING, TURBO, or SILENCE features are turned on

“0F” for 3 seconds when:

- TIMER OFF is set
- FRESH, SWING, TURBO, or SILENCE features are turned off

“cF” when anti-cold air feature is turned on

“dF” when defrosting

“Sc” when unit is self-cleaning

“FP” when freeze protection is turned on

## Display Code Meanings

**NOTE:** A guide on using the infrared remote is not included in this literature package.

## Achieving Optimal Performance

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

### 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 - 140°F (0°C - 60°C) (For special tropical models)		32°F - 140°F (0°C - 60°C) (For special tropical models)

#### FOR OUTDOOR UNITS WITH AUXILIARY ELECTRIC HEATER

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.

### Fixed-Speed Type

	COOL mode	HEAT mode	DRY mode
Room Temperature	63° - 90°F (17° - 32°C)	32° - 86°F (0° - 30°C)	50° - 90°F (10° - 32°C)
Outdoor Temperature	64° - 109°F (18° - 43°C)	19° - 75°F (-7° - 24°C)	52° - 109°F (11° - 43°C)
	19° - 109°F (-7° - 43°C) (For models with low temp cooling systems)		64° - 109°F (18° - 43°C)
	64° - 129°F (18° - 54°C) (For special tropical models)		64° - 129°F (18° - 54°C) (For special tropical models)

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

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



For a detailed explanation of each function, refer to the **Remote Control Manual**.

## Other Features

- **Auto-Restart**  
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 to operate at very low power to dry up condensed water and prevent mildew growth.
- **Wi-Fi Control (some units)**  
Wi-Fi control allows you to control your air conditioner using your mobile phone and a Wi-Fi connection.
- **Louver Angle Memory (some units)**  
When turning on your unit, the louver will automatically resume its former angle.
- **Refrigerant Leakage Detection (some units)**  
The indoor unit will automatically display "EC"  
  
The "timer" indicator light turns off and the "run" indicator light flashes 7 times when the unit detects refrigerant leakage.

- **Air Filter Reminders (some units)**

### Air Filter Cleaning Reminder

After 240 hours of use, the "run" and "timer" indicator lamps on the indoor unit will flash simultaneously and the display window on the indoor unit will flash "CL" (if applicable). 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", "run" and "timer" indicator lamps will flash again when you restart the unit.

### Air Filter Replacement Reminder

After 2,880 hours of use, the "run" and "timer" indicator lamps will flash simultaneously 10 times, then will remain on for five seconds, and the display window on the indoor unit will flash "nF" (if applicable). This is a reminder to replace your filter. After that, 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", "run" and "timer" indicator lamps will flash again when you restart the unit.

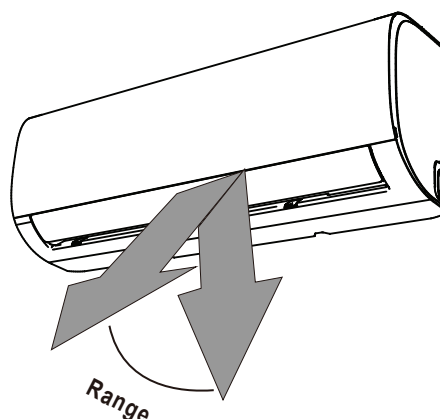
For a detailed explanation of your unit's advanced functionality (such as TURBO mode and the self-cleaning functions), refer to the **Remote Control Manual**.

## • Setting Angle of Airflow

### Setting the Vertical Angle of Airflow

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

1. Press the SWING/DIRECT button once to activate the louver. Each time you press the button, it will adjust the louver by 6°. Press the button until the direction you prefer is reached.
2. To make the louver swing up and down continuously, press and hold the SWING/DIRECT button for 3 seconds. Press it again to stop the automatic function.



**⚠ Caution:** Do not keep the louver at too vertical an angle for long periods of time. This can cause water condensation to drip on your furnishings.

Fig. A

### Setting the Horizontal Angle of Airflow

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.

#### NOTE ON LOUVER ANGLES

When using COOL or DRY mode, do not set the 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. (See Fig. A)

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

Do not move the 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.

#### ⚠ 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.

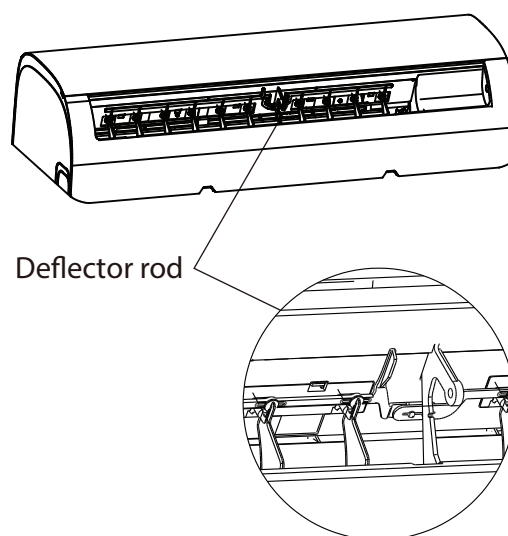


Fig. B

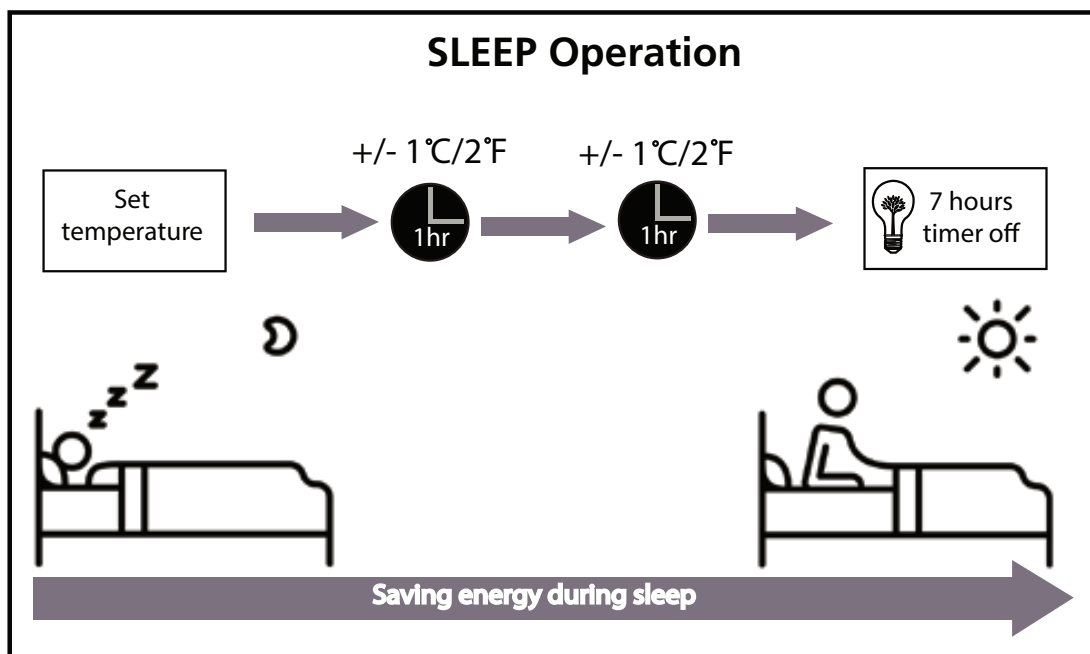
- **Sleep Operation**

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.

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.

It will hold the new temperature for 5 hours, then the unit will turn off automatically.

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



# Manual Operation (Without Remote)

## 2

### 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.

#### BEFORE MANUAL OPERATION

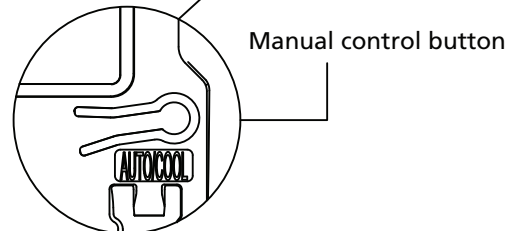
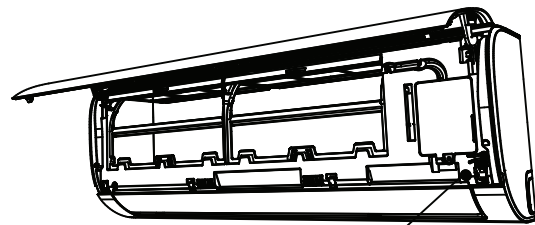
The unit must be turned off prior to manual operation.

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.

### ! CAUTION

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.



# Care and Maintenance

## 3

### Cleaning Your Indoor Unit



#### BEFORE CLEANING OR MAINTENANCE

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



#### 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.

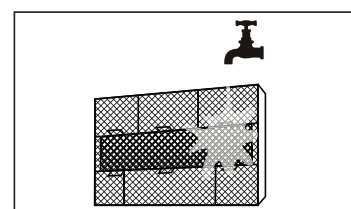
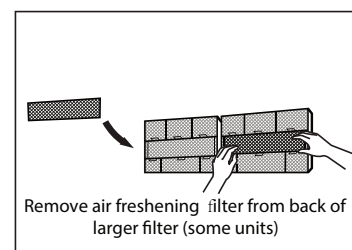
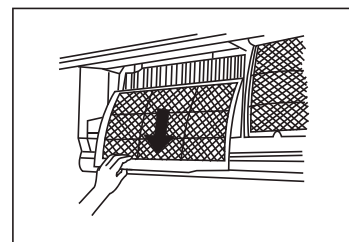
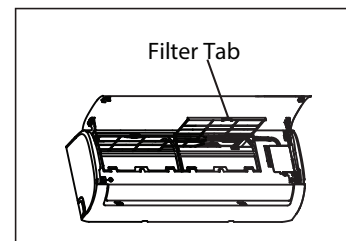
- **Do not** use chemicals or chemically treated cloths to clean the unit
- **Do not** use benzene, paint thinner, polishing powder, or other solvents to clean the unit. These can cause the plastic surface to crack or deform.
- **Do not** use water hotter than 40°C (104°F) to clean the front panel. This 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 be bad for your health. Make sure to clean the filter once every two weeks.

1. Lift the front panel of the indoor unit. The air filter is under the top air inlet grill.
2. Grip the tab on the end of the filter, lift it up, then pull it towards yourself.
3. 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 handheld 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.

## ! CAUTION

- Before changing the filter or cleaning, turn off the unit and disconnect its power supply.
- When removing the 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 the insulation and cause electrical shock.
- Do not expose the 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.

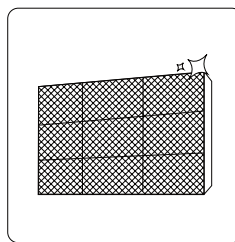
To reset the reminder, press the **LED** button on your remote control 4 times, or press the **MANUAL CONTROL** button 3 times. If you don't reset the reminder, the "nF" indicator will flash again when you restart the unit.

## ! CAUTION

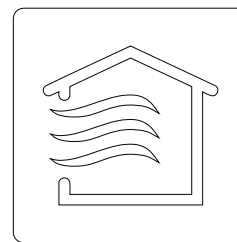
- Any maintenance and cleaning of outdoor unit should be performed by an authorized dealer or licensed service provider.
- Any unit repairs should be performed by an authorized dealer or licensed service provider.

## Maintenance – Long Periods of Non-Use

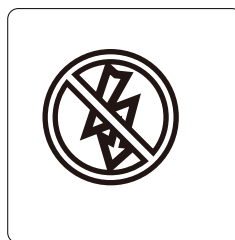
If you plan to not use your air conditioner for an extended period of time, do the following:



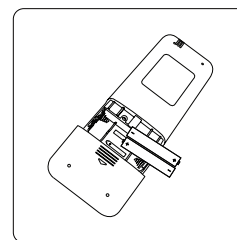
Clean all filters



Turn on the FAN function until the unit dries out completely



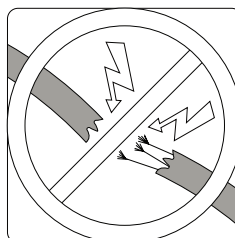
Turn off the unit and disconnect the power



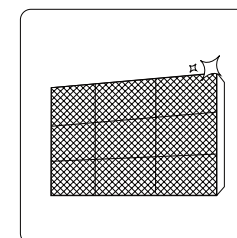
Remove the batteries from the remote control

## Maintenance – Pre-Season Inspection

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



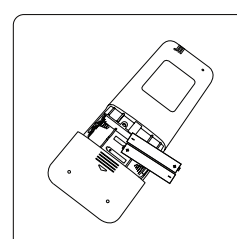
Check for damaged wires



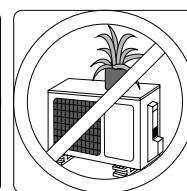
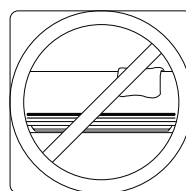
Clean all filters



Check for leaks



Replace batteries



Make sure nothing is blocking any air inlets or outlets.

# Troubleshooting

# 4

## ! SAFETY PRECAUTIONS

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
The unit does not turn on when you press the 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 unit changes from COOL/HEAT mode to FAN mode	The unit may change its setting to prevent frost from forming on the unit. Once the temperature increases, the unit will resume operating in the previously selected mode.
	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 emits a white mist	In humid regions, a large temperature difference between the room's air and the conditioned air can cause a white mist.
Both the indoor and outdoor units emit a white mist	When the unit restarts in HEAT mode after defrosting, a 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.
	Due to expansion and contraction of the unit's plastic parts, a squeaking sound may occur after the unit is run in HEAT mode.
<b>Both the indoor and outdoor units 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 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 operation.
	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 or unpredictable or the unit is unresponsive</b>	Interference from cell phone towers and remote boosters may cause the unit to malfunction.
	In this case, try the following: <ul style="list-style-type: none"> <li>• Disconnect the power, then reconnect.</li> <li>• Press the ON/OFF button on the remote control to restart operation.</li> </ul>

**NOTE:** If the 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 troubles occur, please check the following points before contacting a repair company.

Issue	Possible Causes	Solution
Poor Cooling Performance	The 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 the instructions.
	The air inlet or outlet of either unit is blocked.	Turn the unit off, remove the obstruction, and turn the unit back on.
	Doors and windows are open.	Make sure that all doors and windows are closed while the unit is operating.
	Excessive heat is generated by sunlight.	Close windows and curtains during periods of high heat or bright sunshine.
	Too many sources of heat are in the room (people, computers, electronics, etc.).	Reduce amount of heat sources.
	Refrigerant is low due to a leak or long-term use.	Check for leaks, re-seal if necessary, and top off refrigerant.
	The SILENCE function is activated (optional function).	The SILENCE function can lower product performance by reducing operating frequency. Turn off SILENCE function.

Issue	Possible Causes	Solution
<b>The unit is not working</b>	There is a 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.
	The remote control batteries are dead.	Replace the batteries.
	The Unit's 3-minute protection has been activated.	Wait three minutes after restarting the unit.
	The timer is activated.	Turn the 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 an auxiliary heating device.
	Cold air is entering through doors and windows.	Make sure that all doors and windows are closed during use.
	Refrigerant is low due to a 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.</p> <p>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>An error code appears in the window display of the 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.

The design and specifications are subject to change without prior notice for product improvement. Consult with the sales agency or manufacturer for details.