



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

INVERTER SPLIT-TYPE ROOM AIR CONDITIONER (HEAT PUMP)

OWNER'S MANUAL

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

**CS002U-BP9A1(UL)
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Read This Manual

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.

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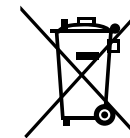
! CAUTION

- Contact an authorised service technician for repair or maintenance of this unit.
- Contact an authorised installer for installation of this unit.
- 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.
- Young children should be supervised to ensure that they do not play with the air conditioner.
- If the power cord needs to be replaced, replacement work must be performed by authorised personnel only.
- Installation work must be performed in accordance with the national electrical codes by authorised personnel only.

Conservation Alert

DISPOSAL: Do not dispose of this product as unsorted municipal waste. Collection of such waste should be separate as special treatment may be necessary. The same precautions should be taken for any old product this may be replacing.

Wild disposal of waste in forests and landscapes endangers your health. Hazardous substances can leak into the ground-water and find their way into the food chain.



SAFETY PRECAUTIONS

To prevent injury to the user and others as well as damage to property, the following instructions must be followed. Incorrect operation due to ignorance may cause serious harm or damage. The seriousness is classified by the following indications.

 WARNING	This symbol indicates the possibility of death or serious injury.
 CAUTION	This symbol indicates the possibility of injury or damage to property.

■ Meanings of symbols used in this manual are as shown below.

	Never do this.
	Always do this.

WARNING

- | | | |
|--|---|---|
| <p>① Connect with the power properly.</p> <ul style="list-style-type: none"> Otherwise, it may cause an electric shock and/or fire due to excess heat generation. | <p>② Do not operate or stop the unit by switching the power on and off.</p> <ul style="list-style-type: none"> It may cause electric shock and/or fire due to heat generation. | <p>③ Do not use a damaged or unspecified power cord.</p> <ul style="list-style-type: none"> It may cause an electric shock and/or fire. |
| <p>④ Do not modify power cord length or share the outlet with other appliances.</p> <ul style="list-style-type: none"> It may cause electric shock or fire due to heat generation. | <p>⑤ Do not operate with wet hands or in a damp environment.</p> <ul style="list-style-type: none"> It may cause electric shock. | <p>⑥ Do not position airflow directly on people.</p> <ul style="list-style-type: none"> This could damage your health. |
| <p>⑦ Always ensure effective grounding.</p> <ul style="list-style-type: none"> No grounding may cause an electric shock. | <p>⑧ Do not allow water to come into contact with electrical parts.</p> <ul style="list-style-type: none"> It may cause failure and/or electric shock. | <p>⑨ Always install circuit breaker and a dedicated power circuit.</p> <ul style="list-style-type: none"> No installation may cause a fire and/or electric shock. |
| <p>⑩ Disconnect the power if strange sounds, smell, or smoke comes from it.</p> <ul style="list-style-type: none"> It may cause fire and/or electric shock. | <p>⑪ Do not drink water drained from air conditioner (including pets).</p> <ul style="list-style-type: none"> It contains contaminants and could make you sick. | <p>⑫ Do not open the unit during operation.</p> <ul style="list-style-type: none"> It may cause an electric shock. |
| <p>⑬ Use the correctly rated circuit breaker or fuse.</p> <ul style="list-style-type: none"> There is risk of fire and/or electric shock. | <p>⑭ Do not use the power cord close to heating appliances.</p> <ul style="list-style-type: none"> It may cause a fire and/or electric shock. | <p>⑮ Do not disassemble or modify the unit.</p> <ul style="list-style-type: none"> It may cause failure and/or electric shock. |
| <p>⑯ Ventilate room before operating the air conditioner if there is a gas leakage from another appliance.</p> <ul style="list-style-type: none"> It may cause an explosion, fire, and/or burns. | <p>⑰ Do not use the power cord near flammable gas or combustibles, such as gasoline, benzene, thinner, etc.</p> <ul style="list-style-type: none"> It may cause an explosion and/or fire. | |

SAFETY PRECAUTIONS

CAUTION

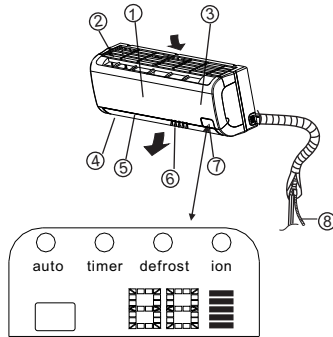
- | | | |
|--|---|--|
| <p>① When the air filter needs to be removed, do not touch the metal parts of the unit.</p> <ul style="list-style-type: none"> It may cause injury. | <p>② Do not clean the air conditioner with water.</p> <ul style="list-style-type: none"> Water may enter the unit and degrade the insulation. It may also cause an electric shock. | <p>③ Ventilate the room well when used together with a stove, etc.</p> <ul style="list-style-type: none"> An shortage of oxygen may occur. |
| <p>④ When the unit needs to be cleaned, first turn off the unit and then the circuit breaker.</p> <ul style="list-style-type: none"> Do not clean unit when power is on as it may cause fire and electric shock. It may cause an injury. | <p>⑤ Do not put a pet or house plant where it will be exposed to direct air flow.</p> <ul style="list-style-type: none"> This could injure the pet or plant. | <p>⑥ Do not use for special purposes, such as preserving precision devices, food, pets, plants, and art objects.</p> <ul style="list-style-type: none"> It may cause deterioration of quality, etc. |
| <p>⑦ Stop operation and close the windows during a storm or hurricane.</p> <ul style="list-style-type: none"> Operation with open windows may cause condensation on indoor furniture. | <p>⑧ Do not place obstacles around air-inlets or inside of air-outlet.</p> <ul style="list-style-type: none"> It may cause failure of appliance or accident. | <p>⑨ Turn off the main power switch when not using the unit for a long time.</p> <ul style="list-style-type: none"> It may cause failure of product or fire. |
| <p>⑩ Do not use strong detergent such as wax or thinner. Use a soft cloth for cleaning.</p> <ul style="list-style-type: none"> Appearance may be deteriorated due to change of product color or scratching of its surface. | <p>⑪ Ensure that the installation bracket of the outdoor appliance is not damaged due to prolonged exposure.</p> <ul style="list-style-type: none"> If bracket is damaged, there is concern of damage due to falling of unit. | <p>⑫ Always insert the filters securely. Clean filters once every two weeks.</p> <ul style="list-style-type: none"> Operation without filters may cause failure. |
| <p>⑬ Do not place heavy objects on the power cord and make sure that the cord is not compressed.</p> <ul style="list-style-type: none"> There is danger of fire and/or electric shock. | <p>⑭ Use caution when unpacking and installing.</p> <ul style="list-style-type: none"> Sharp edges could cause injury. | <p>⑮ If water enters the unit, turn the unit off and disconnect the power. Then contact a qualified service technician.</p> <ul style="list-style-type: none"> Otherwise, there may be damage to the unit and/or electrical shock. |

OPERATING INSTRUCTIONS

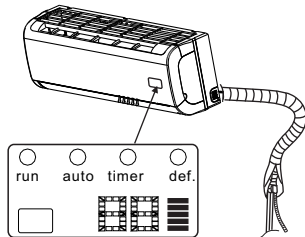
Part names

Indoor unit

NOTE: The indoor unit you purchased may look like one of the following. There may be a slight difference on the front panel and display window, but the features are the same.

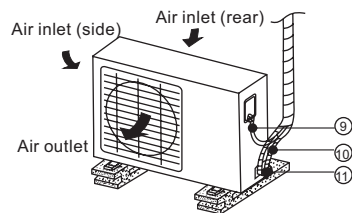


(A)



(B)

Outdoor unit



Indoor unit

1. Front panel
2. Air inlet
3. Air filter (under the panel)
4. Air outlet
5. Horizontal air flow grill
6. Vertical air flow louver (inside)
7. Display panel
8. Connecting pipe & drain hose

Outdoor unit

9. Connective cable
10. Connecting pipe
11. Stop valve

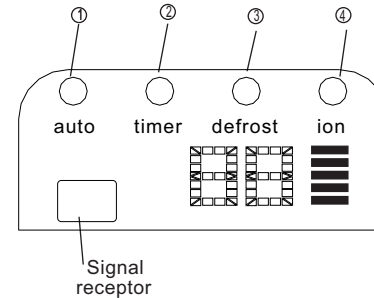
NOTE:

All the pictures in this manual are for explanation purposes only. Your air conditioner may be slightly different. The actual shape will be similar.

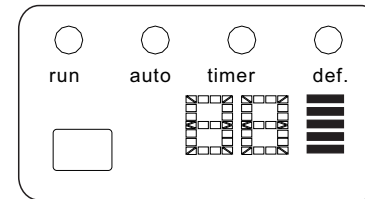
OPERATING INSTRUCTIONS

Indicator Lights on Display panel

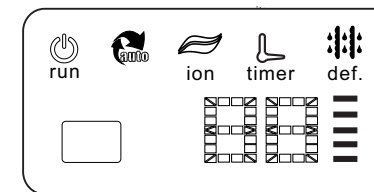
NOTE: The display panel of the indoor unit you purchased may look like one of the following:



(A)



(B)



(C)

- ① **Auto indicator:**
This indicator illuminates when the air conditioner is in AUTO operation.
- ② **Timer indicator:**
This indicator illuminates when TIMER is set ON/OFF.
- ③ **Defrost Indicator**
(For cooling & heating model only):
This indicator illuminates when the air conditioner starts defrosting automatically or when the warm air control feature is activated in heating operation.
- ④ **Ion Indicator**
This indicator illuminates when the Ionizer feature is activated. The Ionizer can generate negative ions to fill the room with refreshing and natural air.
NOTE: This function is only available for air conditioners with the Ionizer feature.



DIGITAL DISPLAY:

Displays the current setting temperature and malfunction/protection code when the air conditioner is in operation. Displays the room temperature under fan only mode.



Frequency display:

This display is separated into five zones. The zones illuminate based on the compressor current frequency. For example, higher frequency will illuminate more zones.



RUN indication lamp

Lights up when the air conditioner is in operation.



AUTO indication lamp

Lights up during the Auto operation.



Ion indication lamp (optional function)

Lights up when Clean Air feature is activated and Ionizer can generate negative ions to fill the room with refreshing and natural air.



TIMER indication lamp

Lights up during Timer operation.



DEFROST indication lamp

(For cooling & heating models only):
Lights up when the air conditioner starts defrosting automatically or when the warm air control feature is activated in heating operation.

OPERATING INSTRUCTIONS

NOTE: This manual does not include Remote Controller Operations, see the <<Remote Controller Instruction>> packed with the unit for details.

Operating temperature

Mode	Cooling operation	Heating operation	Drying operation
Room temperature	$\geq 17^{\circ}\text{C}$ (62°F)	$\leq 30^{\circ}\text{C}$ (88°F)	$> 10^{\circ}\text{C}$ (50°F)
Outdoor temperature	0°C ~ 50°C (32°F ~ 122°F)	-15°C ~ 34°C (5°F ~ 92°F)	0°C ~ 50°C (32°F ~ 122°F)
	(-15°C ~ 50°C/5°F ~ 122°F: For the models with low temperature cooling system)		

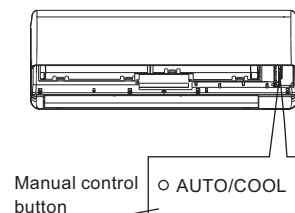
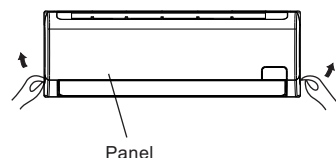
CAUTION:

1. If the air conditioner is used outside of the above conditions, certain safety protection features may come into operation and cause the unit to function abnormally.
2. If the air conditioner operates when relative indoor humidity is greater than 80%, the surface of the air conditioner may attract condensation. Please set the vertical air flow louver to its maximum angle (vertical to the floor), and set fan mode to HIGH.
3. Optimum performance will be achieved when operating within these parameters.

Suggestion: Since the outdoor unit uses an electric heater, when the outside ambient temperature falls below 0°C (32°F), we strongly recommend that the unit remain plugged in, so it can start smoothly.

Manual operation

Manual operation can be used temporarily if the remote control is disabled or if maintenance is necessary.



NOTE: The unit must be turned off before using the manual control button. If the unit is operational, hold the manual control button until the unit turns off.

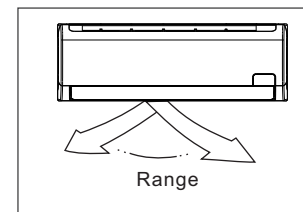
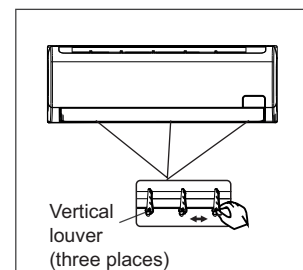
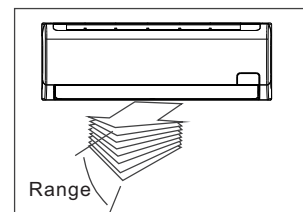
- ① Open and lift the front panel up until it clicks and remains fixed.
- ② One press of the manual control button will lead to forced AUTO operation. If the button is pressed twice within five seconds, the unit will operate under forced COOL operation.
- ③ When finished, close the panel firmly to its original position.

CAUTION:

- This button is used for troubleshooting only. Do not use this button for normal operations.
- To switch back to remote control operation, simply use the remote control again.

OPERATING INSTRUCTIONS

Airflow direction control



- Adjust the air flow direction properly, otherwise it may cause discomfort or uneven room temperatures.
- Adjust the horizontal louver using the remote control.
- Adjust the vertical louvers manually.

To set the vertical air flow direction (Up - Down) Perform this function while the unit is in operation. Use the remote control to adjust the air flow direction. The horizontal louver can be moved at a range of 6° at a time, or swing up and down automatically. Please refer to the "REMOTE CONTROLLER OPERATION MANUAL" for details.

To set the horizontal air flow direction (Left - Right)

- Move the 3 vertical louvers manually to adjust the air flow in the direction you prefer.

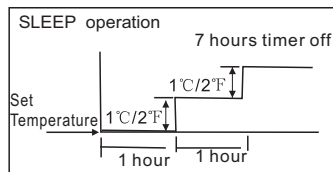
- IMPORTANT:** Before adjusting the vertical louvers, the supply power must be disconnected.
- For some models, the vertical louver can be adjusted by using the remote control. Please refer to the "REMOTE CONTROLLER OPERATION MANUAL" for details.

CAUTION

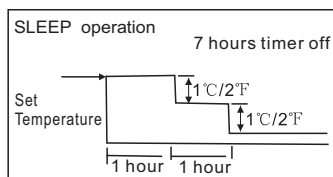
- Do not operate the air conditioner for long periods with the air flow direction set downward in cooling or dehumidifying mode. Otherwise, condensation may occur on the surface of the horizontal louver causing moisture to drop on to the floor and/or on furnishings.
- Do not move the horizontal louver manually unless it is necessary. Always use the remote control.
- When the air conditioner is started immediately after it was stopped, the horizontal louver might not move for approximately 10 seconds.
- Angle of the horizontal louver should not be set too small, as COOLING or HEATING performance may be impaired due to restricted air flow.
- Do not operate the unit with the horizontal louver in closed position.
- When the air conditioner is initially energized, the horizontal louver may generate a sound for 10 seconds. This is normal.

OPERATING INSTRUCTIONS

How the air conditioner works



Cooling



Heating

AUTO operation

- When you set the air conditioner in AUTO mode, it will automatically select cooling, heating (cooling/heating models only), or fan only operation depending on the temperature you have selected and the temperature of the room.
- The air conditioner will control room temperature automatically around the temperature set by you.
- If the AUTO mode is uncomfortable, you can select desired conditions manually.

SLEEP operation

When you push SLEEP button on remote controller during cooling, heating (cooling & heating models only), or AUTO operation, the air conditioner will automatically increase (cooling) or decrease (heating) 1°C/2°F per hour for the first 2 hours, then hold steady for the next 5 hours. After that, it will switch off. This feature maintains both energy saving and comfort for night operation.

DRYING operation

- The fan speed will be automatically controlled under dry operation.
- During the dry operation, if the room temperature is lower than 10°C (50°F), the compressor stops operating and will not restart until the room temperature is above 12°C (54°F).

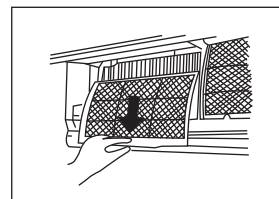
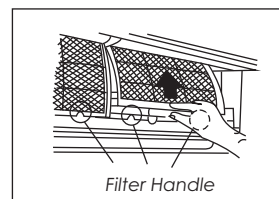
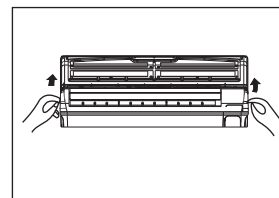
Optimal operation

To achieve optimal performance, please note the following:

- Adjust the air flow direction properly, so that it is not positioned directly on people, pets, or plants.
- Adjust the temperature to achieve the highest comfort level. Do not adjust the unit to excessive temperature levels.
- Close doors and windows during COOL or HEAT modes, or performance may be reduced.
- Use TIMER ON button on the remote control to select a time that you want your air conditioner to start.
- Do not put any objects near the air inlets or air outlets, as this may reduce the efficiency of the air conditioner or even cause it to stop running.
- Clean the air filter periodically, otherwise cooling or heating performance may be reduced.
- Do not operate unit with horizontal louver in closed position.

CARE AND MAINTENANCE

Care and maintenance



Cleaning the Grill, Case, and Remote Control

- Turn the system off before cleaning. To clean, wipe with a soft, dry cloth. Do not use bleach or abrasives.

NOTE: Supply power must be disconnected before cleaning the indoor unit.

CAUTION

- A cloth dampened with cold water may be used on the indoor unit if it is very dirty. Then wipe it with a dry cloth.
- Do not use a chemically treated cloth or duster to clean the unit.
- Do not use benzene, thinner, polishing powder, or similar solvents for cleaning. These may cause the plastic surface to crack or deform.
- Never use water hotter than 40°C/104°F to clean the front panel, it could cause deformation or discoloration.

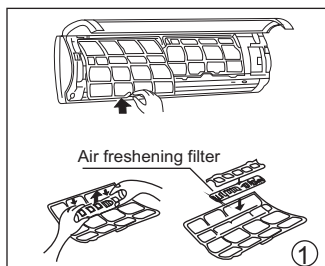
Cleaning the Air Filter

A clogged air filter reduces the cooling efficiency of this unit. Please clean the filter once every 2 weeks.

- Lift the indoor unit panel up to until it clicks and stays open.
- Using the handle of the air filter, lift it up slightly to take it out from the filter holder, then pull it downwards.
- Remove the air filter from the indoor unit.
 - Clean the air filter once every two weeks using either a vacuum cleaner or water. Then dry it in cool place.

NOTE: In rooms with pets or heavy dust filters may require more frequent cleaning.

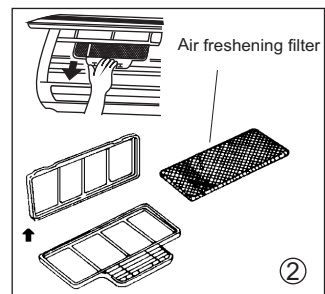
CARE AND MAINTENANCE



4. Remove the Air Freshening Filter from its support frame (on some models).
(The optional filter include :Plasma Dust Collector/ Silver Ion filter/ Bio filter/ Vitamin C filter/ 3M air purifier filter, etc. The removing and installation methods are slightly different, see the pictures marked ① and ② on the left.)
 - Clean the air freshening filter at least once a month and replace it every 4-5 months.
 - Clean it with vacuum cleaner, then dry (if necessary).

⚠ Caution Do not touch the Plasma Dust Collector Filter within 10 minutes after opening the front panel. It may cause an electric shock.

5. Install the air freshening filter back into position.
6. Insert the upper portion of air filter back into the unit, making sure that the left and right edges line up correctly, and place filter back into position.



Maintenance

If you plan to idle the unit for a long time, perform the following:

- (1) Operate the fan for about half a day to dry the inside of the unit.
- (2) Stop the air conditioner and disconnect power. Remove the batteries from the remote control.
- (3) The outdoor unit requires periodic maintenance and cleaning. Do not attempt to do this yourself. Contact your dealer or servicer.

Checks before operation

- Check that the wiring is not broken or disconnected.
- Check that the air filter is installed.
- Check that the air-outlets or air-inlets are not blocked after the air conditioner has not been used for a long time.

⚠ Caution

- Do not touch the metal parts of the unit when removing the filter. Injuries can occur when handling sharp metal edges.
- Do not use water to clean inside the air conditioner. Exposure to water can destroy the insulation, and also lead to possible electric shock.
- When cleaning the unit, first make sure that the power and circuit breaker are turned off.

OPERATION TIPS

The following events may occur during normal operation.

1. Protection of the air conditioner.

Compressor protection

- The compressor can't restart for 3 minutes after it stops.
- **Anti-cold air** (Cooling and heating models only)
 - The unit is designed not to blow cold air on HEAT mode, when the indoor heat exchanger is in one of the following three situations and the set temperature has not been reached.
 - A) When heating has just started.
 - B) Defrosting.
 - C) Low temperature heating.
- The indoor or outdoor fan will stop running when defrosting (Cooling and heating models only).
- **Defrosting** (Cooling and heating models only)
 - Frost may be generated on the outdoor unit during the heat cycle when outdoor temperature is low and humidity is high. This will result in lower heating efficiency of the air conditioner.
 - During this condition air conditioner will stop heating operation and start defrosting automatically.
 - The time to defrost may vary from 4 to 10 minutes according to the outdoor temperature and the amount of frost build up on the outdoor unit.

2. A white mist coming out from the indoor unit

- A white mist may appear due to a large temperature difference between the air-inlets and air-outlets on COOL mode when there is high relative humidity indoors.
- A white mist may appear due to moisture from the defrosting process if the air conditioner restarts in HEAT mode after defrosting.

3. Low noise of the air conditioner

- You may hear a low hissing sound when the compressor is running or has just stopped running. This sound is the refrigerant flowing or coming to a stop.
- You can also hear a low "squeak" sound when the compressor is running or has just stopped running. This is caused by the heat expansion and/or cold contraction of the plastic parts inside the unit when the temperature is changing.
- A noise may be heard due to louver restoring to its original position when power is first turned on.

4. Dust is blown out from the indoor unit.

This is a normal when the air conditioner has not been used for a long time or during first use of the unit.

5. A peculiar smell comes from the indoor unit.

This is caused by the indoor unit giving off smells permeated from building material, from furniture, or smoke.

6. The air conditioner turns to FAN only mode from COOL or HEAT (For cooling and heating models only) mode.

When indoor temperature reaches the temperature setting on the unit, the compressor will stop automatically and switch to FAN only mode. The compressor will start again when the indoor temperature rises on COOL mode or falls on HEAT mode (For cooling and heating models only).

OPERATION TIPS

7. Dripping water may appear on the surface of the indoor unit when cooling in a relatively high humidity (relative humidity higher than 80%). Adjust the horizontal louver to the maximum air outlet position and select HIGH fan speed.
8. Heating mode (For cooling and heating models only)
The unit draws in heat from the outdoor unit and releases it via the indoor unit during the heating operation. When the outdoor temperature falls, heat drawn in by the unit decreases accordingly. At the same time, heat loading of the unit increases due to larger differences between the indoor and outdoor temperatures. If a comfortable temperature can't be achieved by the air conditioner, we suggest you use a supplementary heating device.
9. Auto-restart function
Power failure during operation will completely stop the unit.
 - For units without the Auto-restart feature, when the power restores, the OPERATION indicator on the indoor unit starts flashing. To restart the operation, push the ON/OFF button on the remote control. For units with the Auto-restart feature, when the power restores, the unit restarts automatically with all the previous settings preserved by the memory function.
 - For some models, the machine is designed with an Auto-restart function for the open angle of the horizontal louver. Power failure during operation or pressing the ON/OFF button on the remote control will stop the unit completely. When the power restores or when pressing the ON/OFF button on the remote control again, the unit restarts automatically with all the previous settings, including the open angle of the horizontal louver, by the memory function. This is why we strongly suggest that the open angle of the horizontal louver not be set too small, in case condensed water forms and drops from the horizontal louver. If condensed water does form, Press the AUTO/COOL button under the front panel and the open angle of the horizontal louver will be restored to the standard angle.
10. Lightning or wireless phones operating nearby using the same frequency as the remote control (around 38kHz) may cause the unit to malfunction. If this happens, disconnect the power from the unit and then reconnect it. Push the ON/OFF button on the remote controller to restart it.

TROUBLESHOOTING TIPS

Troubleshooting Tips

Stop the air conditioner immediately if one of the following faults occur. Disconnect the power and contact the customer service center.		
Trouble	If the following code appears on the LED window: E0,E1,E2,E3,E4,E5,E6,E7,E8 or P0,P1,P2,P3,P4, P6.	
	The fuse blows frequently or the circuit breaker trips frequently.	
	Water or other objects have gotten inside the air conditioner.	
	The remote control doesn't work or works abnormally.	
	The operation indicator or other indicators flash rapidly and cannot be stopped by disconnecting the power and then reconnecting it.	
Malfunction	Cause	What should be done?
Unit does not start	Power failure	Wait for the power to be restored.
	Unit may have become unplugged.	Check that unit is securely connected, the disconnect is on, and the circuit breaker is on.
	Fuse may have blown.	Replace the fuse.
	Battery in remote control may have been died.	Replace the battery.
	The time you have set with timer is incorrect.	Wait or cancel timer setting.
Unit not cooling or heating (Cooling/ heating models only) room properly while air is flowing out from the air conditioner	Inappropriate temperature setting.	Set temperature correctly. For detailed method please refer to "Using remote control" section.
	The air filter is blocked.	Clean the air filter.
	Doors or Windows are open.	Close the doors or windows.
	Air-inlets or air-outlets of indoor or outdoor unit have been blocked.	Clear obstructions first, then restart the unit.
	The compressor 3 minute protection has been activated on a restart.	Wait.
If the trouble has not been corrected, please contact a local dealer or the customer service center. Be sure to inform them of the unit model and malfunctions in detail.		

Notes: Do not attempt to repair the unit yourself.
Always consult an authorised service provider.