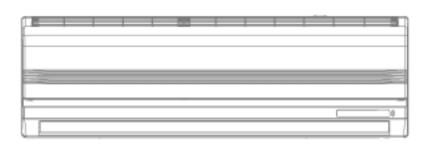
HEAT CONTROLLER, INC.

Wall Mounted Mini-Split System DMC09SB-0/DMH09SB-0, DMC12SB-0/DMH12SB-0 DMC18SB-1/DMH18SB-1, DMC24SB-1/DMH24SB-1 Single-Zone Air Conditioning/Heat Pump



Owner's Manual

Important Information

- Please read carefully and thoroughly this manual before operating this unit.
- Contact a qualified sevice technician for installation, repair and maintenance of this unit.
- The appliance is not intended for use by young children or those who require supervision.
- Young children should be supervised to ensure that they do not play with the appliance.

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FOR YOUR RECORDS

Write the model and serial numbers here:

Model

Serial

You can find them on a label on the side of each unit

Dealer's Name

Date Purchased

■ Staple your receipt to this page in the event you need it to prove date of purchase or for warranty issues.



READ THIS MANUAL

Inside you will find many helpful hints on how to use and maintain your air conditioner properly. Just a little preventive 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 our chart of

Troubleshooting Tips first, you may not need to call for service at all.



PRECAUTION

- · Contact the authorized service technician for repair or maintenance of this unit.
- Contact the installer for installation of this unit.
- . The air conditioner is not intended for use by young children or invalids without supervision.
- · Young children should be supervised to ensure that they do not play with the air conditioner.
- · When the power cord is to be replaced, replacement work shall be performed by authorized personnel only using only genuine replacement parts.
- •Installation work must be performed in accordance with the National Electric Code by qualified and authorized personnel only.



Safety Precautions

To prevent the injury of the user or other people and property damage, the following instructions must be followed.

■ Incorrect operation due to ignoring instruction will cause harm or damage. The seriousness is classified by the following indications.

A WARNING

This symbol indicates the possibility of death or serious injury.

A CAUTION

This symbol indicates the possibility of injury or damage to properties only.

■ The meanings of the symbols used in this manual are as shown below.

	Be sure not to do.
0	Be sure to follow the instruction.

A WARNING

■ Installation

For electrical work, contact the dealer, seller, a qualified electrician, or an Authorized Service Center.

There is risk of fire or electric shock.

Install the panel and the cover of control box securely.

• There is risk of fire or electric shock.

Do not install, remove, or reinstall the unit by yourself (customer).

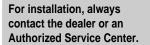
• There is risk of fire, electric shock, explosion or injury.



Be cautious when unpacking and installing the product.

 Shape edges could cause injury.
 Be especially careful of the sharp edges.





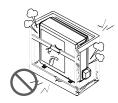
• There is risk of fire, electric shock, explosion, or injury.





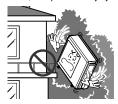
Do not install the product on a defective installation stand.

 It may cause injury, accident, or damage to the product.



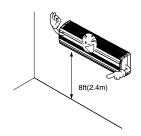
Be sure the installation area does not deteriorate with age.

 If the base collapses, the air conditioner could fall with it, causing property damage, product failure, and personal injury.



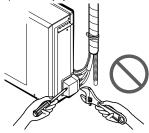
Install the indoor unit on the wall where the height from the floors more than 8ft(2.4m)

 There are sharp moving parts that could cause personal injury.



Do not handle the pipe by yourself(Costomer)

 High-Pressure refrigent may cause personal injury.



■ Operation

Do not allow water to run into electric part.

 There is risk of fire, failure of the product, and/or electric shock.



Do not use the product in a tightly closed space for a long time.

- Oxygen deficiency could occur.
- Some ventilation by opening window is necessary for the fresh air



Do not let the air conditioner run for a long time when the humidity is very high and a door or a window is left open.

 Moisture may condense and wet or damage furnishings.



When flammable gas leaks, turn off the gas and open a window for ventilation before turning the product on. Do not use the telephone or turn switches on or off.

There is risk of explosion or fire.



Do not store of use flammable gas or combustibles near the air conditioner.

 There is risk of fire or product failure.



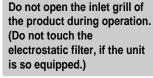
Turn off breaker to the unit if strange sounds odors or smoke comes from it.

• There is risk of fire, Product faiure, and/or electric shock.



Stop operation and close any window in storm or hurricane before the hurricane arrives.

• There is risk of property damage, failure of product, or electric shock.



 There is risk of physical injury, electric shock, or product.

When the product is soaked (flooded or submerged), contact an Authorized Service Center.

. There is risk of electrical shock.



Ventilate the product from time to time when operating it together with a stove, etc.

• There is risk of fire or electrical shock.



Turn off breaker to the appliance before performing cleaning or maintenance.

There is risk of electric shock.



When the product is not be used for a long time disconnect the power supply by turning off the breaker.

• There is risk of product damage or failure, or unintended operation.







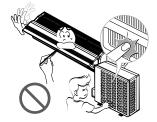
Take care to ensure that nobody could step on or fall onto the outdoor unit.

 There could result in personal injury and product damage.

Do not insert hands or other objects through the air inlet or outlet while the air conditioner is on.

• There are sharp and moving parts that could cause personal injury.





A CAUTION

■ Installation

Always check for gas(refrigerant) leakage after installation or repair of product.

 Low refrigerant levels may cause product failure.



Do not install the product where the noise or hot air from the outdoor unit could offend neighbors.

• It may cause a problem for your neighbors.



Install the drain hose to ensure that water is drained away properly.

 A bad connection may cause water leakage.



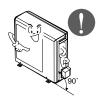
Use two or more people to lift and transport the air conditioner.

· Avoid personal injury.



Keep level even when installing the product.

 To avoid vibration or water leakage.



Do not install the product where it will be exposed to sea wind (salt spray) directly.

 It may cause corrosion in the product. Corrosion, particularly on the condenser and evaporator fins, could cause product malfunction or inefficient operation.



■ Operation

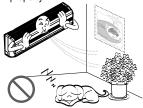
Do not direct airflow at room occupants.

• This could damage your health.



Do not use the product for special purposes, such as preserving foods, works of art, etc. It is a consumer air conditioner, not a precision refrigeration system.

 There is risk of damage or loss of property.



Do not block the inlet or outlet of air flow.

• It may cause product failure.



Use a soft cloth to clean. Do not use harsh detergents, solvents, etc.

• There is risk of fire, electric shock or damage to the plastic parts of the product.



Always insert the filter securely. Clean the filter every two weeks or more often if necessary.

 A dirty filter reduces the efficiency of the air conditioner and could cause product malfunction or damage.



Replace all the batteries in the remote.

• There is risk of fire or explosion.



Do not touch the metal parts of the product when removing the air filter. They are very sharp!

• There is risk of personal injury.



Do not drink the water drained from the unit.

• It is not sanitary and could cause serious health issues.



■ Disuse

Do not recharge or disassemble the batteries. Do not dispose of batteries in a fire.

• They may burn or explode.



Do not step on or put anything on the product. (outdoor unit)

• There is risk of personal injury and failure of product.



Use a firm stool or ladder when cleaning or maintaining the air conditioner.

Be careful and avoid personal injury.



If the liquid from the batteries gets onto your skin or clothes, wash it well with clean water. Do not use the remote if the batteries have leaked.

• The chemicals in batteries could cause burns or other health hazards.



Prior To Operation

Preparing For Operation

- 1. Contact an installation specialist for installation.
- 2. Use a dedicated circuit.

Usage

- Being exposed to direct airflow for a long time may be hazardous to your health. Do not expose occupants, pets, or plants to direct airflow for a long time.
- 2. Ventilate the room when the air conditioner is used with other heating devices. Otherwise the oxygen supply may be inadequate.
- 3. Do not use this air conditioner for non-specified special purpose (e.g. preserving precision devices, food, pets, plants, or art objects). Such use may damage your properties.

Cleaning And Maintenance

- 1. Do not touch the metal parts of the unit when removing the filter. Injury can occur.
- Do not use water to clean inside the air conditioner. Exposure to water can destroy the insulation, leading to electric shock.
- 3. When cleaning the unit, first make sure that the power and breaker are turned off. The fan rotates at a very high speed during operation. There is a possibility of injury if the unit power is accidently turned on while the interior of the unit is being cleaned.

Service

For repair and maintenance, contact your authorized service dealer.

Introduction

Symbols Used In This Manual



This symbol alerts you to the risk of electric shock.



This symbol alerts you to hazards that may cause harm to the air conditioner.

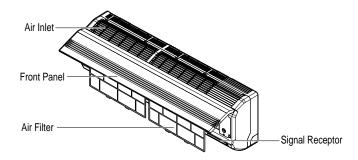
NOTICE This symbol indicates special notes.

Features

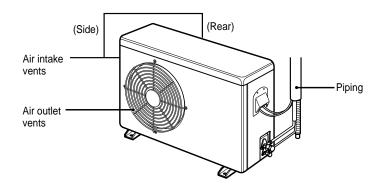
A WARNING

• This appliance should be installed in accordance with national wiring regulations. This guide acts as a guide to help to explain product features.

Indoor



Outdoor



Electrical Safety

A WARNING

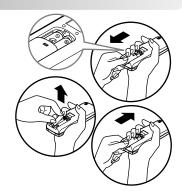
- This appliance must be properly grounded. To minimize the risk of electric shock, the ground wire must be connected
- If you have any doubt whether the air conditioner is properly grounded, have the circuit checked by a qualified electrician.

Operating Instruction

How To Insert The Batteries

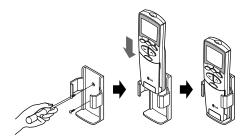
- Remove the battery cover by pulling it according to the arrow direction.
- Insert new batteries making sure that the (+) and (-) of battery are installed correctly.
 - Reattach the cover by sliding it back into position.

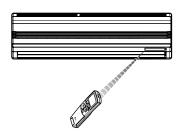
NOTICE
Use 2 AAA(1.5volt) batteries.
Do not use rechargeable batteries.
Replace both batteries at one time.



Storage And Tips For Using The Remote Controler

- The remote controller may be stored by mounting it on a wall.
- To operate the room air conditioner, aim the remote control at the signal receptor.





Signal Receptor

OUT /

88

Receives the signals from the remote control. (Signal receiving sound: two short beeps or one long beep.)

Operation Indication Lamps

On/Off : Lights up during the system operation, error

code and auto restart setting.

Sleep mode : Lights up during sleep mode auto operation.

Timer : Lights up during timer operation.

Defrost mode: Lights up during defrost mode or *hot start operation (Heat pump model only)

Outdoor unit: Lights up during outdoor unit operation.

operation (Cooling model only)

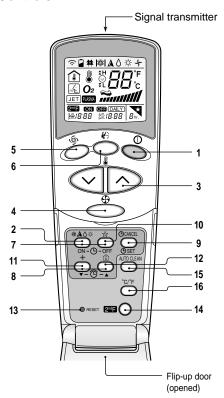
Power Display: Indicates the setting temperature and operation

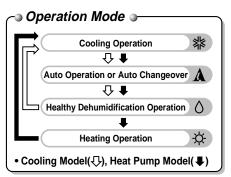
mode.



Remote Control Operations

Controls





1. START/STOP BUTTON

Operation starts when this button is pressed and stops when the button is pressed again.



3. ROOM TEMPERATURE SETTING BUTTONS

Used to select the room temperature.





5. JET COOL

Used to start or stop the speed cooling.(speed cooling operates super high fan speed in cooling mode.)



6. CHAOS SWING BUTTON

Used to stop or start louver movement and set the desired up/down airflow direction.



7. ON/OFF TIMER BUTTONS

Used to set the time of starting and stopping operation. (See page 20)

8. TIME SETTING BUTTONS

Used to adjust the time. (See page 20)

9. TIMER SET/CANCEL BUTTON

Used to set the timer when the desired time is obtained and to cancel the Timer operation. (See page 20)

10. SLEEP MODE AUTO BUTTON

Used to set Sleep Mode Auto operation. (See page 20)

11. AIR CIRCULATION BUTTON

Used to circulate the room air without cooling or heating. (See page 21)

12. ROOM TEMPERATURE CHECKING BUTTON

Used to check the room temperature.

13. RESET BUTTON

Used prior to resetting time.

14. 2nd F Button

Used prior to using modes printed in blue at the bottom of buttons. (See page 19)

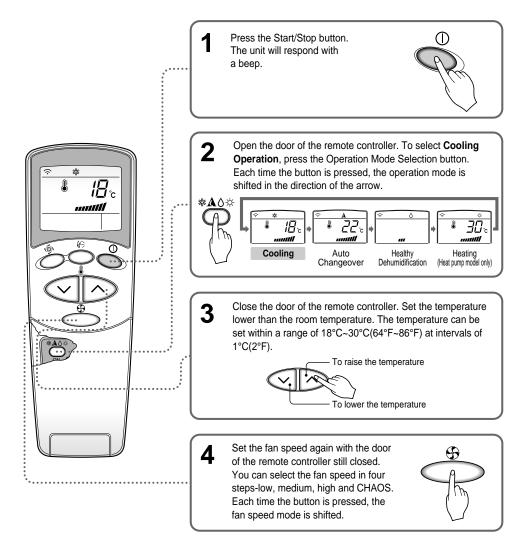
15. AUTO CLEAN (OPTIONAL)

Used to set Auto Clean mode.

16. °C TO °F SWITCHING BUTTON

Used to switch temperature reading from Centigrade to Fahrenheit.

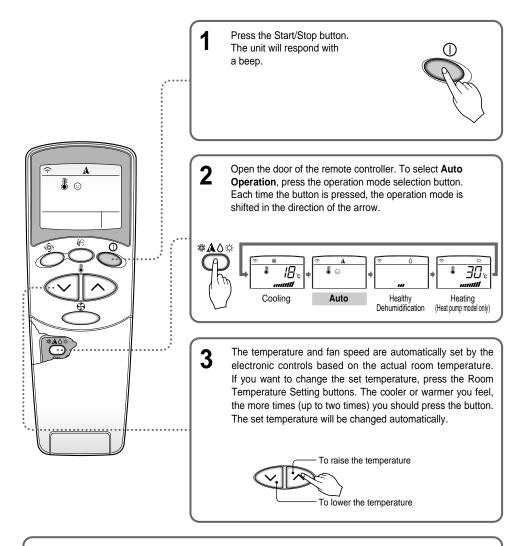
Cooling operation



Gentle Breeze by the CHAOS logic

☐ For fresher feeling, press the Indoor fan speed selector and set to CHAOS mode. In this mode, the wind blows like a natural breeze by automatically changing fan speed according to the CHAOS logic.

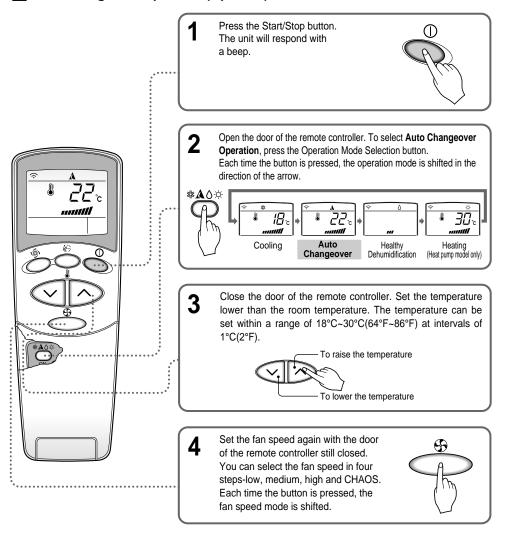
Auto operation (Optional)



During Auto Operation

- ☐ You cannot control the indoor fan speed. It has already been set by the Fuzzy rule.
- ☐ If the system is not operating as desired, manually switch to another mode. The system will not automatically switch from the cooling mode to the heating mode, or from heating mode to cooling mode, it must be done by manually resetting.
- ☐ During Auto Operation, pressing the CHAOS swing button makes the horizontal louvers swing up and down automatically. If you want to stop auto-swing, press the CHAOS swing button again.

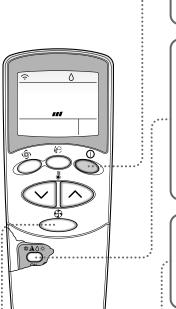
Auto changeover operation(Optional)



During Auto Changeover Operation

The air conditioner changes the operation mode automatically to keep indoor temperature. When room temperature varies over $\pm 2^{\circ}$ C from the set temperature, air conditioner keeps the room temperature within $\pm 2^{\circ}$ C of the set temperature by auto changeover mode.

M Healthy dehumidification operation

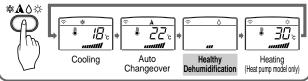


Press the Start/Stop button. The unit will respond with a beep.



Open the door of the remote controller. To select Healthy **Dehumidification Operation**, press the Operation Mode Selection button.

> Each time the button is pressed, the operation mode is shifted in the direction of the arrow.



Set the fan speed again with the door of the remote controller still closed. You can select the fan speed in four steps-low, medium, high, or CHAOS. Each time the button is pressed, the fan speed mode is shifted.



Gentle Breeze by the CHAOS logic

☐ For fresher feeling, press the Indoor Fan Speed Selector and set to CHAOS mode. In this mode, the wind blows like a natural breeze by automatically changing fan speed according to the CHAOS logic.

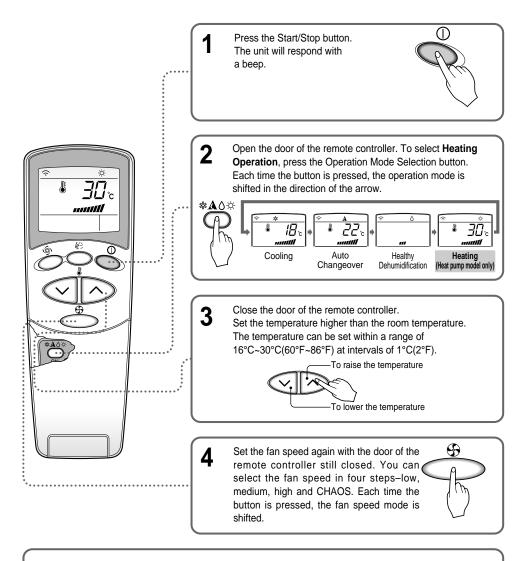
During Healthy Dehumidification Operation

☐ If you select the dehumidification mode on the operation selection button, the product starts to run the dehumidification function. It automatically sets the room temp, and airflow volume to the best condition for dehumidification, based on the sensed current room temp.

In this case, however, the setting temperature is not displayed on the remote controller and you are not able to control the room temperature either.

☐ During the healthy dehumidification function, the airflow volume is automatically set according to the optimization algorithm responding to the current room temp. status, so the room condition is kept healthy and comfortable even in the very humid season.

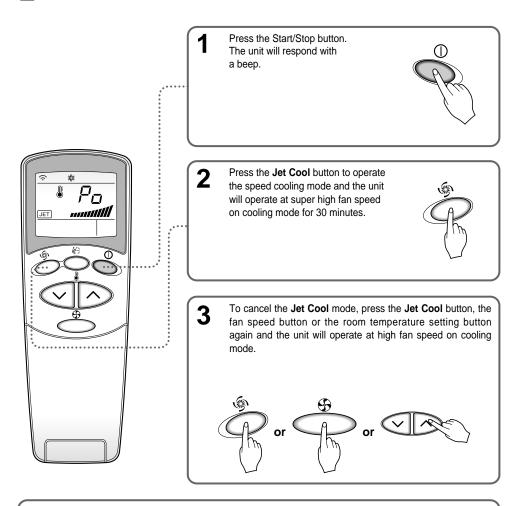
Heating operation (Heat pump model only)



Gentle Breeze by the CHAOS logic

□ For fresher feeling, press the Indoor Fan Speed Selector and set to CHAOS mode. In this mode, the wind blows like a natural breeze by automatically changing fan speed according to the CHAOS logic.

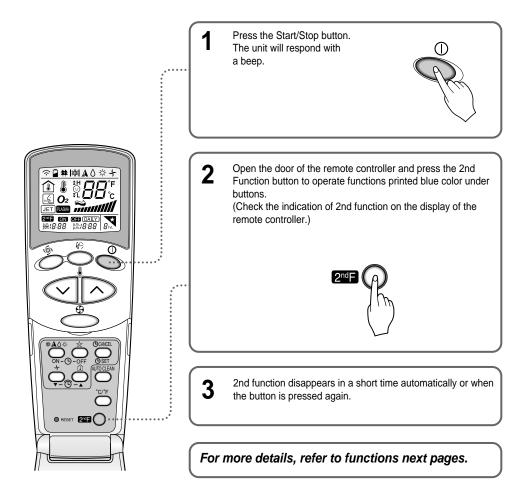
Jet cool operation



NOTICE

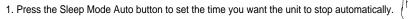
- ☐ During the JET COOL function the A/C starts to blow the cool air at extremely high speed for 30 minutes setting the room temperature automatically to 18°C(64°F). It is especially used to cool the room temperature quickly in a hot summer.
- In heat pump mode or auto changeover mode, however, the JET COOL function is not available.
- ☐ In order to return to the normal cooling mode from the JET COOL mode, just press the operation mode selection button, airflow volume selection, temperature setting button or the JET COOL button again.

2nd F operation



Additional Features

Sleep mode



- 2. The Timer is programmed in one-hour increments by pressing the Sleep Mode Auto button 1 to 7 times. The sleep mode is available for 1 to 7 times. To alter the time period in steps of 1 hour, press the Sleep Mode Button while aiming at air conditioner.
- 3. Make sure the Sleep Mode Auto LED lights up .

 To cancel the Sleep Mode, press the sleep Mode Auto button several times until the star()
 disappears from the operation display.

NOTICE

The Sleep Mode will be operated at slow fan speed (cooling) or medium fan speed (heat pump only) for a comfortable sleep.

In cooling mode or healthy dehumidification mode:

The setting temperature will automatically rise by $1^{\circ}C(2^{\circ}F)$ over the next 30 minutes and by $2^{\circ}C(4^{\circ}F)$ in 1 hour for a comfortable sleep.

Setting the time

- 1. Time can be set only when you press the Reset button. When you replace the batteries, you should press the reset buttons to reset the time. Press the Start/Stop button.
- 2. Press 2nd F button and check if 2nd F icon is on.
- 3. Press the Time Setting buttons until the desired time is set.
- 4. Press the Timer SET button.



NOTICE

Check the indicator for A.M. or P.M.

Delay start/Pre-set stop

- 1. Make sure the time is set correctly on the display of the remote controller.
- 2. Press 2nd F button.
- 3. Press the ON/OFF Timer buttons to turn Timer on or off.



- 4. Press the Time Setting buttons until the desired time is set.
- To set the selected time, press the Timer setting button aiming the remote controller at the signal receptor.



To cancel the timer setting

Check if 2nd F icon is off.

Press the Timer Cancel button aiming the remote controller at the signal receptor. (The timer lamp on the air conditioner and the display will go out.)



NOTICE

Select one of the following four types of operation.

with the unit running









Delay OFF Timer

Delay ON Timer

Delay OFF and ON Timer Delay ON and OFF Timer



Vertical Airflow Direction Control

The up/down airflow (Vertical Airflow) can be adjusted by using the remote control.



- 1. Press the Start/Stop button to start the unit.
- Open the door on the remote control. Press Chaos Swing button and the louvers will swing up and down. Press the Chaos Swing button again to set the vertical louver at the desired airflow direction.



NOTICE

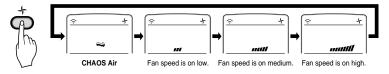
- ☐ If you press the CHAOS swing button, the vertical airflow direction is changed automatically based on the CHAOS algorithm to distribute the air in the room evenly and at the same time to make the human body feel most comfortable, as if enjoying a natural breeze.
- ☐ Always use the remote control to adjust the up/down airflow direction. Manually moving the vertical airflow direction louver by hand could damage the air conditioner.
- ☐ When the unit is shut off, the up/down airflow direction louver will close the air outlet vent of the system.



Air Circulation Mode

Circulates the room air without cooling or heating.

- 1. Press the Start/Stop button. The unit will respond with a beep.
- 2. Open the door on the remote control. Press the Air Circulation button. Close the door on the remote control. Now each time that you press the Indoor Fan Speed Selector, the fan speed is shifted from low to CHAOS and back to low again.



NOTICE

☐ CHAOS Air economizes power consumption and prevents overcooling. The fan speed is automatically changed from high to low or vice versa, depending on the ambient temperature.

Auto clean (Optional)



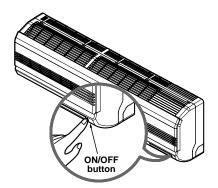
- 1. Whenever you press the AUTO CLEAN button, Auto Clean Function will be selected or cancelled.
- 2. Auto Clean function works before and after cooling or dehumidification mode. For details, refer to the below points.
- 3. When the unit is started after selecting Auto Clean ,the Cool Start function operates and indoor Fan is started after 20 seconds.
- 4. When you press Start/Stop button to turn off the unit after the you have selected Auto Clean function, the air-conditioner circulates the indoor air in the Auto Clean mode with no more Cooling or Dehumidification operation. It lasts for 30
- 5. If you press the AUTO CLEAN button again during the product operation, Auto Clean function will be cancelled.

NOTICE

- During Auto Clean function, moistures left in indoor units after Cooling Operation or Healthy Dehumidification Operation can be removed.
- ☐ During Auto Clean function, only Start/Stop button, Plasma button and AUTO CLEAN button are available

Signal Forced operation

Operation procedures when the remote control can't be used. The operation will be started if the ON/OFF button is pressed. If you want to stop operation, re-press the button.



	Cooling Model		Heat pump Model	
	Cooling Woder	Room Temp. ≥ 24°C(75.2°F)	21°C(69.8°F) ≤ Room Temp. < 24°C(75.2°F)	Room Temp. < 21°C(69.8°F)
Operating mode	Cooling	Cooling	Healthy Dehumidification	Heating
Indoor FAN Speed	High	High	High	High
Setting Temperature	22°C(71.6°F)	22°C(71.6°F)	23°C(73.4°F)	24°C(75.2°F)

Test operation

During the TEST OPERATION, the unit operates in cooling mode at high speed fan, regardless of room temperature and resets in 18 minutes.

During test operation, if remote controller signal is received, the unit operates as remote controller sets.

If you want to use this operation, Press and hold the ON/OFF button for 3~5 seconds, then the buzzer sound 1 "beep".

If you want to stop the operation, re-press the button.

Auto restart

In case the power comes on again after a power failure, Auto Restarting Operation is the function to operate procedures automatically to the previous operating conditions.

So there is no need of activating this function by pressing any key or button.

In the initial mode, the fan operates at a low speed and the compressor starts 2.5~3 minutes later.

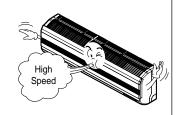
As the compressor starts, the fan speed also resumes its previous setting mode.

Helpful information

Fan speed and cooling capacity.

The cooling capacity indicated in the specification is the value when the fan speed is set to high, and the capacity will be lower at low or medium fan speed.

High fan speed is recommended when you wish to cool the room quickly.



NOTICE

Auto restart function has been set as a factory default. But customer can set up by following this instruction.

To disable function

- Press and hold the ON/OFF button for 6 seconds, then the buzzer sound 2 "beep" and the indicator lamp (1) hlinks 4 times

To enable function

- Press and hold the ON/OFF button for 6 seconds, then the buzzer sound 2 "beep" and the indicator lamp (1) brights 4 times.

Maintenance And Service

A CAUTION

Before performing any maintenance, turn off the main power to the system.

Indoor Unit

Grille, Case, and Remote Control

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

NOTICE

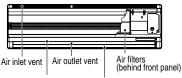
Supply power must be disconnected before cleaning the indoor unit.

The air filters behind the front grille should be checked and cleaned once every 2 weeks or more often if neccessary.

- 1. Open the front panel as shown.
- 2. Pull the filter tab slightly forward to remove the filter.
- 3. Clean the filter with a vacuum cleaner or warm, soapy water.
 - If dirt is conspicuous, wash with a solution of detergent in lukewarm water.
 - If hot water (40°C(104°F) or more) is used, it may deform the filter.
- 4. After washing with water, dry well in the shade.
- 5. Re-install the air filter.

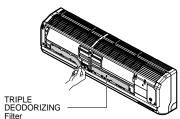
TRIPLE DEODORIZER filter (Optional)

- 1. After removing the air filters, pull slightly forward to remove the TRIPLE DEODORIZER filter.
- 2. Dry in the sunlight for two hours.
- 3. Re-install the TRIPLE DEODORIZER filter to the original position.



Vertical louver Horizontal louver





A CAUTION

Never use any of the followings:

- Water hotter than 40°C(104°F) Could cause deformation and/or discoloration.
- Volatile substances Could damage the surfaces of the air conditioner.

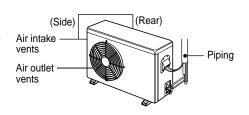


Outdoor Unit

The heat exchanger coils and panel vents of the outdoor unit should be checked regularly. If clogged with dirt or soot, the heat exchanger and panel vents may be professionally steam cleaned.

NOTICE

Dirty or clogged coils will reduce the operating efficiency of the system and cause higher operating costs.



Common Problems And Solutions

Before calling for service

If you have problems with your air conditioner, read the following information and try to solve the problem. If you cannot find a solution, turn off the air conditioner and contact your dealer.

Air conditioner does not operate

- 1. Check the fuse or circuit breaker.
- Check whether the voltage is unusually high or low.

Air does not feel cold enough on the cooling setting

- 1. Ensure that the temperature settings are correct.
- 2. Check to see if the air filter is clogged with dust. If so, replace the filter.
- 3. Ensure that the air flow from the outside is not obstructed and that there is a clearance of over 20" between the back of the air conditioner and the wall or fence behind it.
- 4. Close all doors and windows and check for any source of heat in the room.

Troubleshooting

The air conditioner may be operating abnormally when:

Problem	Possible Causes	What To Do	
Air conditioner does not start	■ The fuse is blown/circuit breaker is tripped.	 Check the house fuse/circuit breaker box and replace the fuse or reset the breaker. 	
	■ Power failure.	 If power failure occurs, turn the mode control to Off. When power is restored, wait 3 minutes to restart the air conditioner to prevent tripping of the compressor overload. 	
Air conditioner does not cool as it should	■ Airflow is restricted.	Make sure there are no curtains, blinds, or furniture blocking the front of the air conditioner.	
	■ The air filter is dirty.	Clean the filter at least every 2 weeks. See the care and Maintenance section.	
	■ The room may have been hot.	When the air conditioner is first turned on, you need to allow time for the room to cool down.	
	■ Cold air is escaping.	 Check for open furnace floor registers and cold air returns. 	

Specifications and performance data subject to change without notice.

HEAT CONTROLLER, INC.

1900 WELLWORTH AVENUE • JACKSON, MICHIGAN 49203 THE QUALITY LEADER IN CONDITIONING AIR

P/No.: 3828A20434K