

**AIR CONDITIONER
SPLIT WALL MOUNTED
PROGRAMMING
AND OPERATING**

ENGLISH

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*PLEASE READ THESE
INSTRUCTIONS **BEFORE**
OPERATING THE AIR
CONDITIONER*

INTRODUCTION

Dear customer:

The DC Inverter air conditioner you have purchased is one of advanced units of its kind. The DC Inverter air conditioner is a variable capacity air conditioner which uses high efficiency DC motor for the compressor. Unlike other models, it can adjust its capacity according to the user setting and the environmental condition, thus saving up to 30% of the seasonal power consumption, while keeping maximum comfort level. Detailed instruction as to the DC Inverter air conditioner provided in the following pages.

This Split Air Conditioner is designed for versatile application:

	• Cooling.
	• Dehumidifying.
	• Air Filtration.
	• Heating.
	• Ventilation



OPERATING TEMPERATURE RANGE:

-15°C ~ 46°C

IMPORTANT NOTICE:

- The air conditioner must be grounded to protect against electrical shock.
- Installation of the air conditioner must be performed by an experienced air conditioning installer, observing good refrigeration practice.
- Electrical connections and power cord replacement should only be made by authorized electricians and in accordance with electrical regulations and local codes.
- Failure to comply with the manufacturer's installation and operation instructions could affect the performance of the air conditioner and the validity of the warranty.

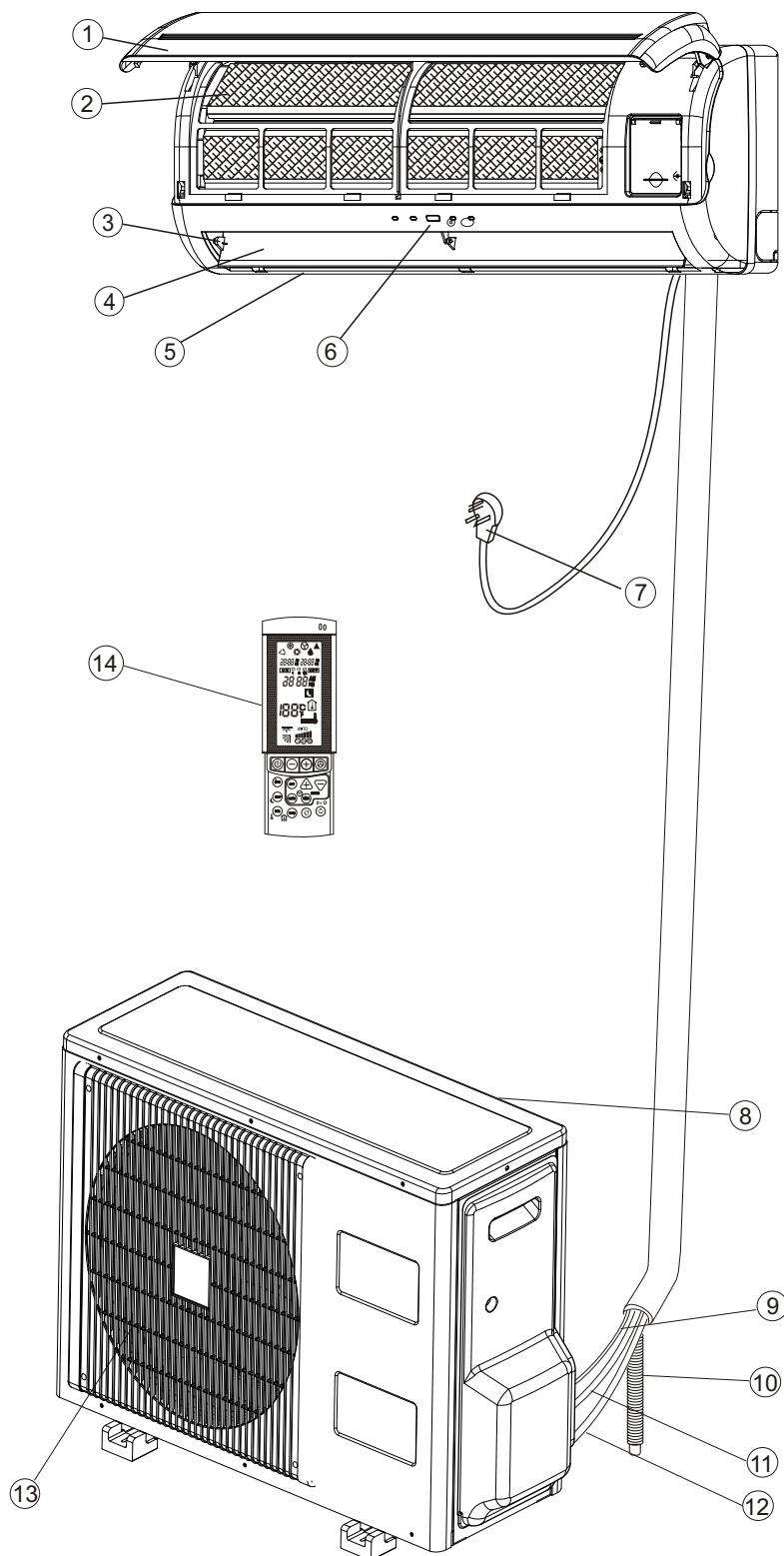
Test Mode

Test Mode is set on only for performance testing purposes, and not for user operation. Test mode can be initiated by either one of the following conditions:

- 1) Operating the unit with the following remote control settings and temperature conditions:
Cool Mode, SPT = 16°C and RAT = $27 \pm 1^\circ\text{C}$,
OAT = $35 \pm 1^\circ\text{C}$ for 30 minutes;
Heat Mode, SPT = 30°C and RAT = $20 \pm 1^\circ\text{C}$,
OAT = $7 \pm 1^\circ\text{C}$ for 30 minutes;

- 2) Entering Diagnostics with Cool/SPT = 16°C or Heat/SPT = 30°C.

SYSTEM DESCRIPTION



1. Air intake grill
2. Air filter
3. Supply air flap (louver)
4. Horizontal Air flow Deflecting louvers
5. Air outlet
6. Unit's indicator and on unit control
7. Power cord ※
8. Outdoor unit air intake
9. Power cable
10. Condensate tube
11. Liquid line
12. Suction line
13. Outdoor unit air outlet
14. Remote control

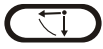
※ Not connected in multi split applications

MODES OF OPERATION, FUNCTIONS AND FEATURES

	COOL	Cools, dehumidifies and filters the room air. Maintains desired room temperature.
	HEATING	Heats and filters the room air. Maintains the desired room temperature.
	AUTO	Automatically choose COOLING or HEATING or DRY, maintaining the desired temperature according to the room conditions.
	DRY	Dehumidifies and softly cools the room In DRY Mode, the air conditioner operates at an increased dehumidifying power. This function is recommended to be used when temperature is rather low but the humidity is high.
	FAN	Recirculates and filters the room air. Maintains constant air movement in the room.
	AUTO FAN	The air conditioner automatically selects the FAN speed in accordance with the room temperature. At the start, the unit operates at high fan speed. As the room air approaches to the desired temperature, the fan switches to a lower speed for quieter operation.
	HOT KEEP	In HEATING and in AUTO FAN, the fan will be turned off when the compressor is not in operation and will not be restarted, unless the indoor coil reaches adequate temperature. This HOT KEEP feature prevents uncomfortable cold air drafts. Use of AUTO FAN is, therefore, recommended when the air conditioner is in HEATING mode.
	I FEEL	Switches the temperature sensing point to the place where the remote control is located. (For general air conditioner, the temperature sensor is only located behind the air intake grille). This function is designed to provide a personalized environment by transmitting the temperature control command from the location next to you. The communication between the Remote Control and the unit is done by infra-red signal. Therefore, in using this function, the Remote Control should always be aimed, without obstructions, at the air conditioner.
	TIMER	Real time control and display, automatically turns the air conditioner ON and OFF according to the time of day setting, ensuring comfort conditions before returning home, without wasting electricity. It turns the air conditioner off automatically when sleeping.
	SLEEP	Designed to create comfortable sleeping conditions. When in COOLING mode, the temperature rises one degree centigrade after each consecutive hour, up to three hours, from the start of the mode. The temperature rise prevents the feeling of over-cooling while sleeping (when your body is at rest). In HEATING mode the reverse occurs; the air conditioner lowers its temperature one degree every hour, up to three hours, from the start of the mode. When in SLEEP mode, the air conditioner will be automatically turned off after having operated for seven hours. The result is a more comfortable and invigorating sleep, which leaves you feeling fresh and energetic on the next morning.

AUTO FLAP

The air flap (louver) is automatically positioned for the most suitable blow-out angle, when COOL, HEAT, DRY or FAN modes are selected. When the air conditioner is turned off, the flap will close automatically for an aesthetic appearance.

**VERTICAL
AIR SWING**

Automatic swing of supply air in vertical direction. The flap moves automatically in upward and downward direction to spread the conditioned air evenly throughout the room.

**HORIZONTAL
AIR SWING**

Manual positioning of the air flap to provide desirable air flow angle.

**FILTER
INDICATION**

Filter indicator on the indoor unit display is turned on when the filter requires cleaning. After cleaning and reinstalling the filter, it should be reset.

**ROOM
TEMPERATURE**

Measures and displays room temperature.

**BUZZER**

A soft buzzer will sound from the indoor unit display to indicate that a command sent by the remote control has been accepted and stored in the unit's memory.

**ON UNIT
OPERATION**

The air conditioner can be turned ON for COOLING or HEATING or be turned OFF directly from the indoor unit display panel without the use of the remote control.

**3-MIN
DELAYED RUN**

The compressor is protected by a three-minute delayed restart.

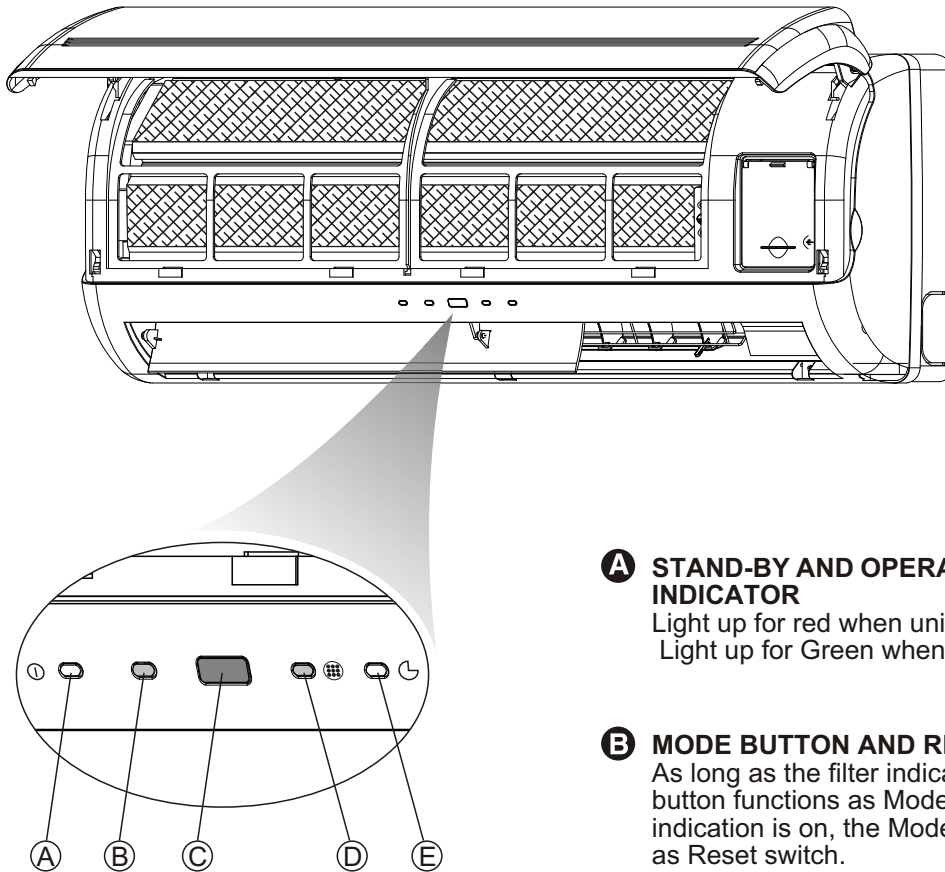
MEMORY

The microprocessor retains the last data entry whether or not the unit is plugged in. Therefore, when the unit restarts after a power disruption or failure, it will resume operating in the same mode as before the power was disrupted.

LOCK

Freezes the last operation setting on the remote control. When LOCK is activated, the remote control will not be able to control the air-conditioner.

ON-UNIT INDICATORS AND CONTROLS



A STAND-BY AND OPERATION INDICATOR

Light up for red when unit is power but not operated.
Light up for Green when unit is operating.

B MODE BUTTON AND RESET BUTTON

As long as the filter indicator is off, the Mode/Reset button functions as Mode switch, once filter indication is on, the Mode/Reset button functions as Reset switch.

- Mode Function:
Every short pressing, the next operation mode is selected, in this order: → Cool Mode → Heat Mode → Stand-By.
In long pressing system enters diagnostic mode.
- Reset Function:
When Filter indicator is on, short pressing turns off the filter indicator and reset the filter function, after the cleaned filter has been reinstalled.

If the air-conditioner can not be operated by the Remote Control unit, it can be turned on for cooling or heating, or completely turned off, by pressing MODE button (B) on the air-conditioner. The MODE button will change the operating status of the unit between-COOLING-HEATING-STAND BY positions. Every time MODE button(B) is pressed, Indicator(A) will light up in different colors, to indicate the air-conditioner operates.

C SIGNAL RECEIVER

Receive signals from the remote control

D FILTER INDICATOR

Lights up when air filter requires cleaning.

E TIMER INDICATOR

Lights up during timer and sleep operation. Blinks when the timer is invalid when power failure occurred.

PROTECTION MODES

Your air-conditioner includes several auto protection modes which enables you to use it virtually at any time and in any season regardless of the outdoor temperature. Some of the protection modes are listed below:

Mode	Operation conditions	Protection from	Controlled remedy
Cooling and Dry	Low outdoor temperature	Indoor coil freezes up	Stops outdoor fan and compressor when approaching freezing conditions. Resumes operation automatically.
	High outdoor temperature	Outdoor coil overheating	Stop compressor when approaching over heating conditions. Resumes operation automatically. Operating indicator (A) blinks.
Heating	Low outdoor temperature	Outdoor coil ice build up	Reverses operation from heating to cooling for short periods to de-ice outdoor coil. Operating indicator (A) blinks.
	High Indoor or outdoor temperature	Indoor coil overheating	Stops outdoor fan and compressor when approaching high indoor coil temperature. Resumes operation automatically.

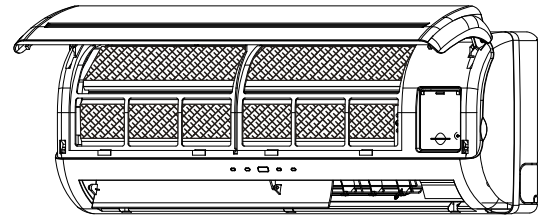
Note: When switching the unit to OFF after heating operation, the unit may perform outdoor coil deicing operation. In such a case, the compressor will continue to run for some time after the unit has switched to OFF, and the indoor unit louvers are closed. This feature is a part of the normal unit operation.

CARE AND MAINTENANCE

Before performing any maintenance procedure, make sure to disconnect the air conditioner from the power.

CLEANING THE AIR FILTER

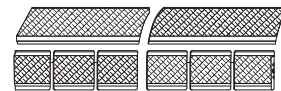
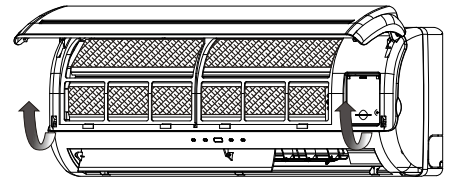
- Your air conditioner is provided with a filter cleaning indicator. When the indicator (D) lights up, the filters should be removed for cleaning.
- To remove the air filters, lift up the panel, push the air filters up slightly to unlock them, pull out the filters. Clean the filter by washing in warm soapy water and dry thoroughly, align and fit the filters in place, close the panel by pushing it in the center to lock it in place.
- Reset button (B) to turn off indicator (D).



DO NOT OPERATE THE UNIT WITHOUT FILTERS!

PURIFICATION FILTER REPLACEMENT (OPTIONAL)

- The air purifying filter should be removed from the unit and replaced once a year, show as following:
1 pulling out the filter.
2 replacing the filter in its place.



CLEANING THE AIR CONDITIONER

- Wipe the unit with a soft dry cloth or clean it using a vacuum cleaner.
 - Do not use hot water or volatile materials which could damage the surface of the air conditioner.
-

AT THE BEGINNING OF THE SEASON

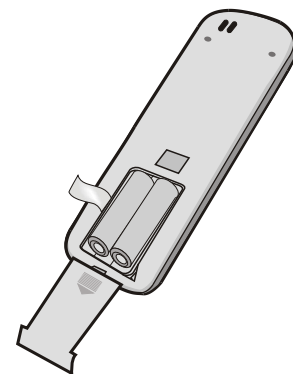
- Make sure there are no obstacles blocking the flow of inlet or outlet air, in both indoor and outdoor units.
 - Make sure the power is properly connected.
-

PROTECT THE ELECTRONIC SYSTEM

- Indoor unit and remote control must be at least 1 meter away from a TV, radio or any other home electronic appliance.
 - Protect the inner unit from direct sun or lighting.
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REMOTE CONTROL BATTERY CHANGE

- Remove the batteries from the remote control as show.
 - Use two 1.5 volt size AAA batteries.
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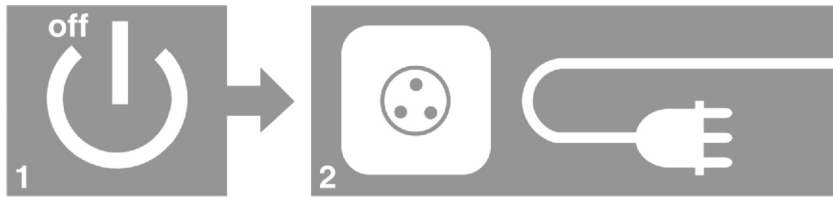


OPERATING TIPS

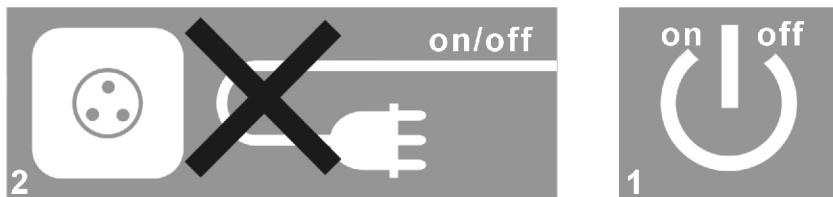
- Set a suitable room temperature; excessively low room temperature is not good for your health and wastes electricity. Avoid frequent setting of the temperature.
- During cooling, avoid direct sun. Keep curtains and blinds closed. Close doors and windows to keep the cool air in the room.
- Avoid generating heat or using of heating appliances while the air conditioner in cooling mode.
- Make sure that the air flap is positioned properly: horizontal flow in cooling and downward vertical flow for heating.
- Keep the room temperature uniform by adjusting the left/right vertical air blades.
- Position the air flap and the left/right air blades in such a manner as to prevent your body from being exposed directly to air drafts.
- During prolonged operation, ventilate the room occasionally by opening a window from time to time.
- In a power failure, the microprocessor memory is retained. When restarted, operation will be resumed in the last mode of operation. However, if the timer was used, the unit will be turned off by the timer only if the remote control is aimed at the unit. Otherwise the power failure will cause the timer data to be erased from the microprocessor memory.
- After turning on, allow more than 3 minutes for cooling, heating or dry operation to start.
- When COOL or DRY modes are used, make sure that the room's relative humidity is below 78%. If the unit is used for a prolonged periods of time in high humidity, moisture may form on the air outlet and drip down.
- Remote control signals may not be received if the indoor unit controls cover is exposed to direct sunlight or strong light. In such a case, block the sunlight or dim the lighting.
- The remote control is operative in a range of 8 meters. If you are out of range, the remote control may have difficulties in transmitting signals.

PRECAUTIONS

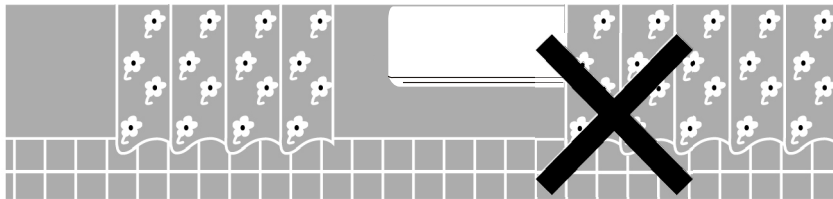
- Use the proper electrical fuse.
- Do not pull out the power cord unless the unit is turned off.



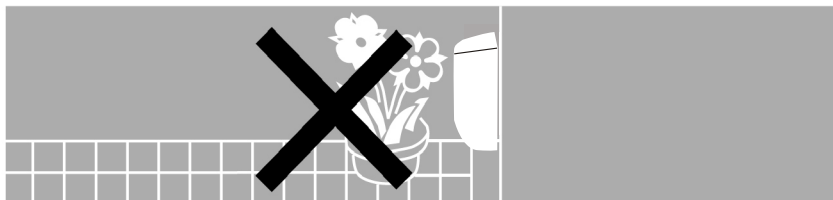
- Do not start or stop operation by disconnecting the power cord.



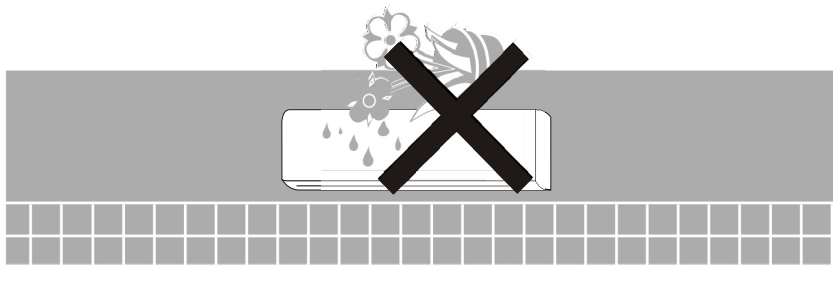
- Do not obstruct or block the air inlet or air outlet of the air conditioner.



- Do not insert any objects in the air outlet of the indoor or outdoor units.



- Do not splash water on the air conditioner.



IF NOISE IS HEARD

There may be hissing sound during operation or just after shut down.

This is caused by the refrigerant that is circulating inside the unit.

There may be a cracking sound at starting and stopping the unit's operation. This is caused by heat expansion or contraction of plastics.

BEFORE CALLING FOR SERVICE

Before calling for service, please check the following common malfunctions and correct as needed.

Problem	Cause	Remedy
• Unit does not operate. Stand-by indicator does not light up	☐ Unit does not connected to power ☐ Power failure	☒ Plug in the power cord ☒ Check main fuse
• Unit does not operate. Stand-by indicator lights.	☐ Remote control malfunctions ☐ The remote control is locked	☒ Check remote control batteries ☒ Try to operate from a closer distance ☒ Start from on-unit controls ☒ Unlock the remote control
• Unit does not respond properly to remote control command	☐ IR signal does not reach unit ☐ Distance between remote control and unit too large or aimed at from improper angle ☐ IR receiver on-unit exposed to strong light source	☒ Check for obstruction between unit and remote control. Clear if needed. ☒ Get closer to unit. ☒ Dim lights, fluorescents especially
• Air does not blow out from indoor unit	☐ De-icing protection mode is activated ☐ Unit in AUTO FAN mode ☐ Over cooling in DRY	☒ Normal operation in HEATING mode ☒ Normal operation in DRY mode
• COOLING, DRY or HEATING does not start immediately	☐ 3-min. Compressor delayed start	☒ Normal operation for these modes
• Unit functions but does not perform sufficiently	☐ Improper temperature setting ☐ Unit capacity insufficient for load or room size	☒ Reset temperature ☒ Consult your dealer
• Filter indicator lights up	☐ Air Filter needs cleaning	☒ Clean filter reinstall and reset indicator

EXCEPTION FOR MULTI-SPLIT TYPE

In multi split applications where more than a single indoor unit is connected to the same outdoor unit, it may happen that the requested operation mode can not be operated.

The reason for that is that the system is currently operating in a different mode.

The system operation mode can be either cooling or heating and is set by the outdoor unit controls, based on indoor and outdoor unit settings.

The rules for the mode settings may be different from one application to another.

In most applications the system operation mode will not be changed as long as there is an operating indoor unit requesting the active mode. The operation mode in such application will be set by the first indoor unit that is turned ON from Stand By.

The following table shows the indoor unit operation modes that can be operated per active system mode:

		System Active Mode	
		Cooling	Heating
Requested indoor unit operation mode	Cooling	v	X
	Heating	X	v
	Dry	v	X
	Auto Cool/Heat	v (cooling only)	v (heating only)
	Ventilation	v	X

(v - enabled indoor unit operation mode, X - disabled indoor unit operation mode)

Indoor unit operation when the requested mode is disabled is as following:

- Louver opens;
- Green (OPER) LED blinks once in two seconds;
- Indoor fan is forced off;