












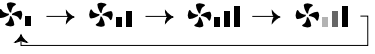









3. Operating Instructions and Installation

3-1 Operating Instructions

3-1-1 The Feature of Key in remote controller

NO	NAMED OF KEY	FUNCTION OF KEY
1		Power On/Off button to start and stop airconditioner or timer set up.
2	 (UP)	Temp. up button. To increase the temperatute by the pressing the temperature button.
	 (DOWN)	Temp. down button. To decrease the temperature by the pressing the temperature button.
3		Each time you press this button Mode is changed in the following order   : Auto Mode  : Fan Only  : Cool Mode  : Heat Mode  : Dry Mode
4		Press TURBO until the appearance. the air condition cools or heats the room as quickly as possible. after 30minutes, the air, the airconditioner is reset automatically to the previous mode.
		Press  until the appearance. the sleep timer can be used when you are cooling or heating your room to switch the air conditioner off automatically after a perriod of six hours.
5		Each time you press this button, FAN SPEED is changed in the following order. 
6		Adjust air flow vertically.
7		The ON Timer enables you to switch on the air conditioner automatically after a given period of time that is from 30 minutes to 24 hours. To cancel, press the  (Set/Cancel) button.
8		The Off Timer enables you to switch off the air conditioner automatically after a given period of time that is from 30 minutes to 24 hours. To cancel, press the  (Set/Cancel) button.
9		To select the 5 way function with the remote control, press the 5 way button one or more times until the desired mode is selected. Each time you press the 5 way button  Each 5 way indicator on the indoor unit comes on in order.

3-1-2 Name & Function of Key in remote controller

1. **AUTO MODE** : In this mode, operation mode(COOL, HEAT) is selected automatically by the room temperature of initial operation.

Room Temp	Operation Type
$Tr \geq 21^{\circ}\text{C} + \Delta T$	Cool Operation (Set Temp : $24^{\circ}\text{C} + \Delta T$)
$21^{\circ}\text{C} + \Delta T > Tr$	Heat Operation (Set Temp : $22^{\circ}\text{C} + \Delta T$)

$\Delta T = -1^{\circ}\text{C}, -2^{\circ}\text{C}, 0^{\circ}\text{C} + 1^{\circ}\text{C} + 2^{\circ}\text{C}$

ΔT is controlled by setting temperature up/down key of remote controller

2. **COOL MODE** : The unit operates according to the difference between the setting and room temperature. ($18^{\circ}\text{C} \sim 30^{\circ}\text{C}$)

3. **HEAT MODE** : The unit operates according to the difference between the setting and room temperature. ($16^{\circ}\text{C} \sim 30^{\circ}\text{C}$)

*Prevention against cold wind : For about 3~5 minutes after initial operation, thermo control or "de-ice", the indoor fan will either not operate or operate very slowly, then switch to the selected fan speed. This period is to allow the indoor unit's heat-exchanger to prewarm before emitting warm air.

*High temperature release function : The outdoor unit for and compressor ON/OFF control for safety operation, when the over-heat is heat exchanger of indoor unit.

*De-ice : Deicing operation is controlled by indoor unit's heat exchanger temperature and accumulating time of compressor's operation.

De-ice end by sensing of the processing time by de-ice Condition.

4. **DRY MODE** : Has 3 states, each determined by room temperature.

The unit operates in DRY mode.

*Compressor ON/OFF Time is controlled compulsorily (can not set up the fan speed, always breeze).

*Protective function : Low temperature release. (Prevention against freeze)

5. **TURBO MODE** : This mode is available in AUTO, COOL, HEAT, DRY, FAN MODE. When this button is pressed at first, the air conditioner is operated "powerful" state for 30 minutes regardless of the set temperature, room temperature.

When this button is pressed again, or when the operating time is 30 minutes, turbo operation mode is canceled and returned to the previous mode.

*But, if you press the TURBO button in DRY or FAN mode that is changed with AUTO mode automatically.

6. **SLEEP MODE** : Sleep mode is available only in COOL or HEAT mode.

The operation will stop after 6 hours.

*In COOL mode : The setting temperature is automatically raised by 1°C each 1hour. When the temperature has been raised by total of 2°C , that temperature is maintained.


*In HEAT mode : The setting temperature is automatically dropped by 1°C each 1hour. When the temperature has been dropped by total of 2°C , that temperature is maintained.


7. **FAN SPEED** : Manual (3 step), Auto (4 step) Fan speed automatically varies depending on both the difference between setting and the room temperature.


8. COMPULSORY OPERATION :


For operating the air conditioner without the remote controller.


*AUTO : The operating is the same function that AUTO MODE in the remote controller. And each time you press the button the 5WAY function is changed as follow.
 STD → NATURE → POWER → SAVING → SILENCE → POWER OFF

* STD(standard) () : General operation Mode

* NATURE () : The unit is operated according to health pattern control




* POWER () : The unit is operated in powerful state


* SAVING () : The unit is operated in power saving state


* SILENCE () : The unit is operated quietly

Each mode has Auto, Cool and SLEEP operation designed in advance.

9. SWING : BLADE-H is rotated vertically by the stepping motor.

*Swing Set : Press the  button under the remote control is displayed on LCD the  and the blades move up and down. If the one more time press the  button, blades location is stop.







10. 24-Hour ON/OFF Real Setting Timer. : The air conditioner is turned ON at a specified time using .

OFF TIMER : The air Conditioner is turned OFF at a specified time using .

*ON TIMER : Only timer LED lights on.

*OFF TIMER : Both timer and operation LED lights on.

11. SELF Diagnosis

Check Point	LED DISPLAY					
	TIMER	STD	NATURE	POWER	SAVING	SILENCE
						
Indoor unit room temperature sensor error(open or short)	●	○	○	○	○	○
Indoor unit heat exchanger temperature sensor error(open or short)	●	●	○	○	○	○
Indoor fan mal function	○	○	●	○	○	○
EEPROM error	●	●	●	○	○	○
Option error(option wasn't set up or option data error)	●	●	●	●	●	●

● : LED blinking ○ : LED off

12. BUZZER SOUND : Whenever the ON/OFF button is pressed or whenever change occurs to the condition which is set up or select, the compulsory operation mode, buzzer is sounded "beep".

3-2 Installation

3-2-1 Selecting Area for Installation

Select an area for installation that is suitable to the customer's needs.

3-2-1(a) Indoor Unit

1. Make sure that you install the indoor unit in an area providing good ventilation. It must not be blocked by an obstacle affecting the airflow near the air inlet and the air outlet.
2. Make sure that you install the indoor unit in an area allowing good air handling and endurance of vibration of the indoor unit.
3. Make sure that you install the indoor unit in an area where there is no source of heat or vapor nearby.
4. Make sure that you install the indoor unit in an area from which hot or cool air is spread evenly in a room.
5. Make sure that you install the indoor unit in an area away from TVs, audio units, cordless phones, fluorescent lighting fixtures and other electrical appliances (at least 1 meter).
6. Make sure that you install the indoor unit in an area which provides easy pipe connection with the outdoor unit, and easy drainage for condensed water.
7. Make sure that you install the indoor unit in an area which is large enough to accommodate the measurements shown in figure on the next page.

3-2-1(b) Outdoor Unit

1. Make sure that you install the outdoor unit in area not exposed to the rain or direct sun light.
(Install a separate sunblind if exposed to direct sun light.)
2. Make sure that you install the outdoor unit in area allowing good air moment, not amplifying noise or vibration, especially to avoid disturbing neighbours.
(Fix the unit firmly if it is mounted in a high place.)

3. Make sure that you install the outdoor unit in area providing good ventilation and which is not dusty. It must not be blocked by any obstacle affecting the airflow near the air inlet and the air outlet.
4. Make sure that you install the outdoor unit in area free from animals or plants.
5. Make sure that you install the outdoor unit in area not blocking the traffic.
6. Make sure that you install the outdoor unit in area easy to drain condensed water from the indoor unit.
7. Make sure that you install the outdoor unit in area which provides easy connection within the maximum allowable length of a coolant pipe(18***: 15meters, 24***: 20meters).

Note

1. Add (18***:30g, 24***:40g) of refrigerant (R-22) for every 1 meter if the pipe length exceeds the standard pipe length of 5 meters.
2. Maintain a height between the indoor and outdoor units of less than 8 meters.

8. Make sure that you install the outdoor unit in an area which is large enough to accommodate the measurements shown in figure on the next page.

3-2-1(c) Remote Control Unit

1. Make sure that you install the remote control unit in an area free from obstacles such as curtains etc, which may block signals from the remote control unit.
2. Make sure that you install the remote control unit in an area not exposed to direct sunlight, and where there is no source of heat.
3. Make sure that you install the remote control unit in an area away from TVs, audio units, cordless phones, fluorescent lighting fixtures and other electrical appliances (at least 1 meter).

Caution :

It is harmful to the air conditioner if it is used in the following environments: greasy areas (including areas near machines), salty areas such as coast areas, areas where sulfuric gas is present such as hot spring areas. Contact your dealer for advice.