

# HITACHI

Inspire the Next

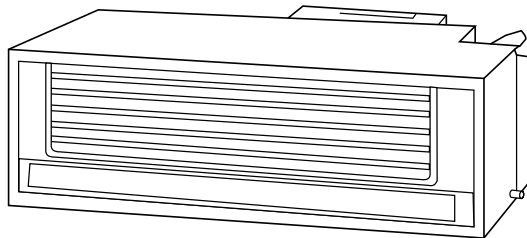
## *SPLIT TYPE AIR CONDITIONER*

# INDOOR UNIT



**MODEL**  
**RAD-18NHA1**  
**RAD-25NHA1**  
**RAD-35NHA1**  
**RAD-50NHA1**

INDOOR UNIT



RAD-18NHA1  
RAD-25NHA1  
RAD-35NHA1  
RAD-50NHA1



### **Instruction manual**




Page 1~22

To obtain the best performance and ensure years of trouble free use, please read this instruction manual completely.








# SAFETY PRECAUTION

- Please read the "Safety Precaution" carefully before operating the unit to ensure correct usage of the unit.
- Pay special attention to signs of "▲ Warning" and "▲ Caution". The "Warning" section contains matters which, if not observed strictly, may cause death or serious injury. The "Caution" section contains matters which may result in serious consequences if not observed properly. Please observe all instructions strictly to ensure safety.
- The sign indicate the following meanings.



 Make sure to connect earth line.	 The sign in the figure indicates prohibition.
 Indicates the instructions that must be followed.	

- Please keep this manual after reading.






## PRECAUTIONS DURING INSTALLATION

<div></div> <div>WARNING</div>	<div><ul style="list-style-type: none"><li>● Do not reconstruct the unit. Water leakage, fault, short circuit or fire may occur if you reconstruct the unit by yourself.</li></ul></div>	<div></div>
	<div><ul style="list-style-type: none"><li>● Please ask your sales agent or qualified technician for the installation of your unit. Water leakage, short circuit or fire may occur if you install the unit by yourself.</li></ul></div>	
	<div><ul style="list-style-type: none"><li>● Please use earth line. Do not place the earth line near water or gas pipes, lightning-conductor, or the earth line of telephone. Improper installation of earth line may cause electric shock.</li></ul></div>	<div></div>
<div></div> <div>CAUTION</div>	<div><ul style="list-style-type: none"><li>● A circuit breaker should be installed depending on the mounting site of the unit. Without a circuit breaker, the danger of electric shock exists.</li></ul></div>	<div></div>
	<div><ul style="list-style-type: none"><li>● Do not install near location where there is flammable gas. The outdoor unit may catch fire if flammable gas leaks around it.</li></ul></div>	
	<div><ul style="list-style-type: none"><li>● Please ensure smooth flow of water when installing the drain hose.</li></ul></div>	

## PRECAUTIONS DURING SHIFTING OR MAINTENANCE

 <b>W A R N I N G</b>	<ul style="list-style-type: none"><li>● Should abnormal situation arises (like burning smell), please stop operating the unit and turn off the circuit breaker. Contact your agent. Fault, short circuit or fire may occur if you continue to operate the unit under abnormal situation.</li></ul> 
	<ul style="list-style-type: none"><li>● Please contact your agent for maintenance. Improper self maintenance may cause electric shock and fire.</li></ul>
	<ul style="list-style-type: none"><li>● Please contact your agent if you need to remove and reinstall the unit. Electric shock or fire may occur if you remove and reinstall the unit yourself improperly.</li></ul>
	<ul style="list-style-type: none"><li>● If the supply cord is damaged, it must be replaced by the special cord obtainable at authorized service/parts centers.</li></ul>

## PRECAUTIONS DURING OPERATION

 <b>W A R N I N G</b>	<ul style="list-style-type: none"><li>● Avoid an extended period of direct air flow for your health.</li></ul> 
	 <ul style="list-style-type: none"><li>● Do not insert a finger, a rod or other objects into the air outlet or inlet. As the fan is rotating at a high speed, it will cause injury. Before cleaning, be sure to stop the operation and turn the breaker OFF.</li></ul>
	<ul style="list-style-type: none"><li>● Do not use any conductor as fuse wire, this could cause fatal accident.</li></ul> 
	 <ul style="list-style-type: none"><li>● During thunder storm, disconnect and turn off the circuit breaker.</li></ul>

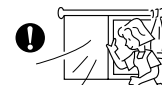
## PRECAUTIONS DURING OPERATION

- The product shall be operated under the manufacturer specification and not for any other intended use.



- Do not attempt to operate the unit with wet hands, this could cause fatal accident.

- When operating the unit with burning equipments, regularly ventilate the room to avoid oxygen insufficiency.



- Do not direct the cool air coming out from the air-conditioner panel to face household heating apparatus as this may affect the working of apparatus such as the electric kettle, oven etc.

- Please ensure that outdoor mounting frame is always stable, firm and without defect. If not, the outdoor unit may collapse and cause danger.



- Do not splash or direct water to the body of the unit when cleaning it as this may cause short circuit.

- Do not use any aerosol or hair sprays near the indoor unit. This chemical can adhere on heat exchanger fin and blocked the evaporation water flow to drain pan. The water will drop on tangential fan and cause water splashing out from indoor unit.



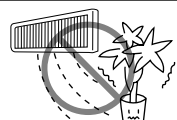
- Please switch off the unit and turn off the circuit breaker during cleaning, the high-speed fan inside the unit may cause danger.

- Turn off the circuit breaker if the unit is not to be operated for a long period.



- Do not climb on the outdoor unit or put objects on it.

- Do not put water container (like vase) on the indoor unit to avoid water dripping into the unit. Dripping water will damage the insulator inside the unit and causes short-circuit.



- Do not place plants directly under the air flow as it is bad for the plants.

- When operating the unit with the door and windows opened, (the room humidity is always above 80%) and with the air deflector facing down or moving automatically for a long period of time, water will condense on the air deflector and drips down occasionally. This will wet your furniture. Therefore, do not operate under such condition for a long time.
- If the amount of heat in the room is above the cooling or heating capability of the unit (for example: more people entering the room, using heating equipments and etc.), the preset room temperature cannot be achieved.

- This appliance is not intended for use by young children or infirm persons unless they have been adequately supervised by a responsible person to ensure that they can use the appliance safely.
- Young children should be supervised to ensure that they do not play with the appliance.

CAUTION

# MULTI-AIR CONDITIONER

With this multi-air conditioner, several indoor units can be connected to one outdoor unit to be driven. You can operate the required number of indoor units.

## Combination of Operations:

When operation mode is selected:

- You cannot operate the indoor units in the following combinations.

One unit	Other unit
Heating	Cooling
	Dehumidifying
	Circulating (fan)

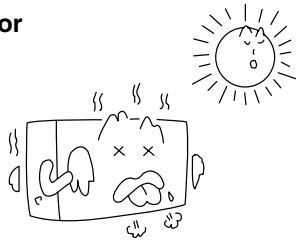
- The indoor unit which is switched on first continues to operate, but other indoor units which is switched on later does not operate while the lamp lights.
- To re-start an indoor unit which was operated later, stop the indoor unit which was operated first or later and reset the type of operation, then perform operation again.

During automatic operation:

- When heating operation is automatically selected for the first indoor unit, the next indoor unit will then start to heat. Also, if cooling or dehumidifying is automatically selected for the first indoor unit, the next indoor unit will also start to cool or dehumidify.

## Adjusting the Number of Indoor Units:

Decrease the number of indoor units to be operated especially when it is very hot or cold or when you want to reach the present temperature quickly.

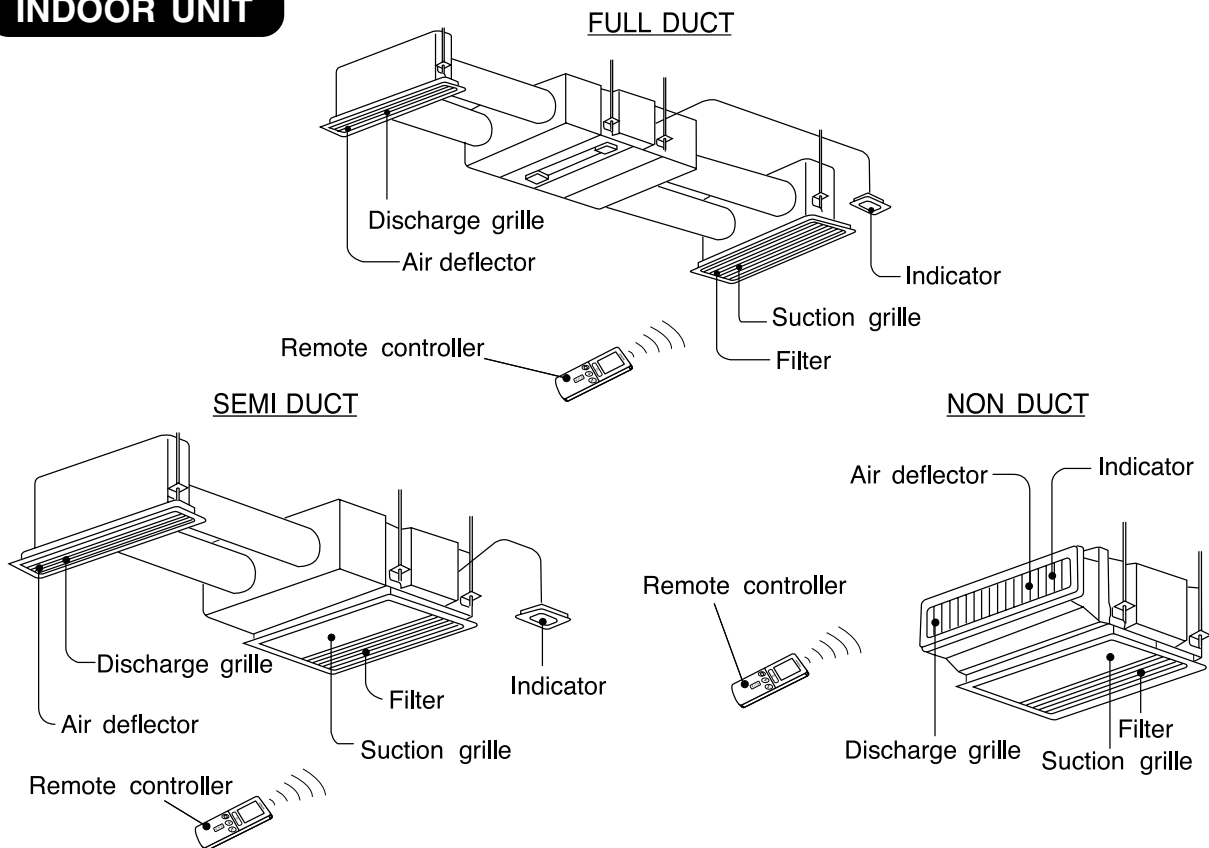


## Stopped Indoor Units:

When an indoor unit is operated in the cooling, heating or dehumidifying mode in the room, the sound of refrigerant flow may be heard from a stopped indoor unit or a stopped indoor unit may become warm. This is because the indoor unit returns refrigerant to the outdoor unit to be ready for operation.

# NAMES AND FUNCTIONS OF EACH PART

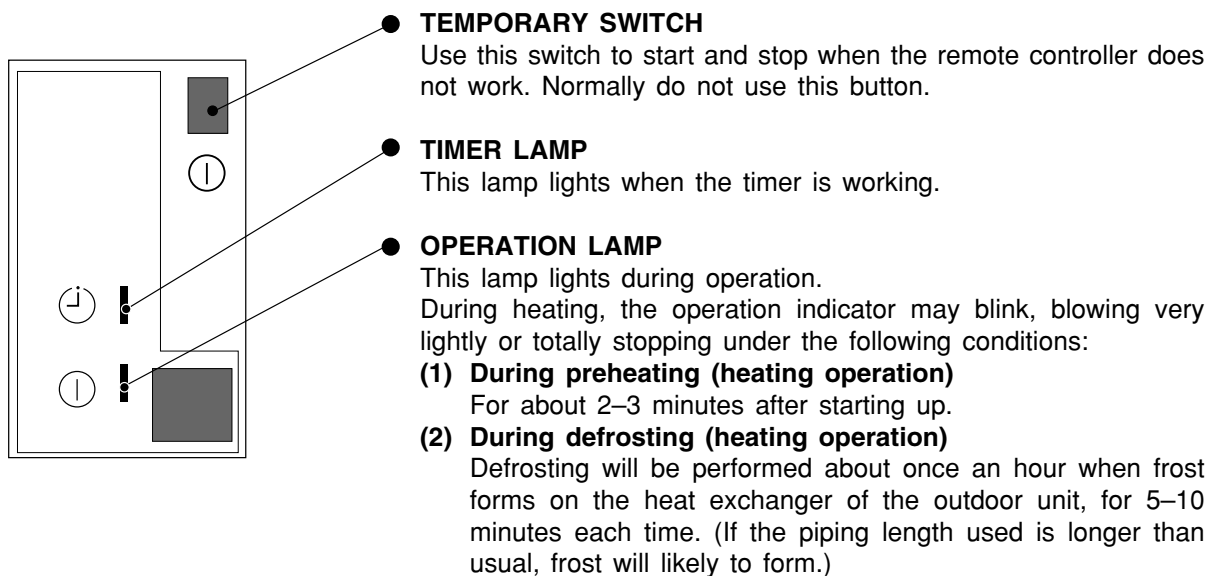
## INDOOR UNIT



## MODEL NAME AND DIMENSIONS

MODEL	WIDTH (mm)	HEIGHT (mm)	DEPTH (mm)
RAD-18NHA1/RAD-25NHA1/RAD-35NHA1/RAD-50NHA1	750	235	400

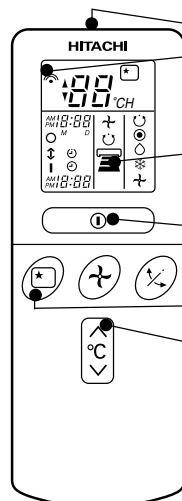
## INDOOR UNIT INDICATORS



# NAMES AND FUNCTIONS OF REMOTE CONTROL UNIT

## REMOTE CONTROLLER

- This controls the operation of the indoor unit. The range of control is about 7 meters. If indoor lighting is controlled electronically, the range of control may be shorter.  
This unit can be fixed on a wall using the fixture provided. Before fixing it, make sure the indoor unit can be controlled from the remote controller.
- Handle the remote controller with care. Dropping it or getting it wet may compromise its signal transmission capability.
- After new batteries are inserted into the remote controller, the unit will initially require approximately 10 seconds to respond to commands and operate.



### Signal emitting window/transmission sign

Point this window toward the indoor unit when controlling it.  
The transmission sign blinks when a signal is sent.

### Display

This indicates the room temperature selected, current time, timer status, function and intensity of circulation selected.

### START/STOP button

Press this button to start operation. Press it again to stop operation.

### SLEEP button

Use this button to set the sleep timer.

### TEMPERATURE buttons

Use these buttons to raise or lower the temperature setting. (Keep pressed, and the value will change more quickly.)

### TIME button

Use this button to set and check the time and date.

### RESET buttons

### FUNCTION selector

Use this button to select the operating mode. Every time you press it, the mode will change from (AUTO) to (HEAT) to (DEHUMIDIFY) to (COOL) and to (FAN) cyclically.

### FAN SPEED selector

This determines the fan speed. Every time you press this button, the intensity of circulation will change from (AUTO) to (HI) to (MED) to (LOW) (This button allows selecting the optimal or preferred fan speed for each operation mode).

### AUTO SWING button

Controls the angle of the horizontal air deflector.

### TIMER control

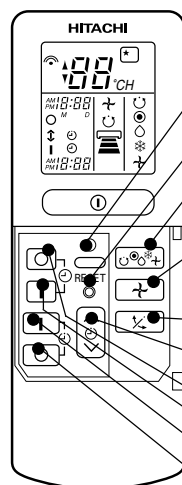
Use this button to set the timer.

● **OFF-TIMER button** Select the turn OFF time.

● **ON-TIMER button** Select the turn ON time.

● **RESERVE button** Time setting reservation.

● **CANCEL button** Cancel time reservation.



	AUTO
	HEAT
	DEHUMIDIFY
	COOL
	FAN
	FAN SPEED LOW MED HI
	SLEEPING
	STOP (CANCEL)
	START (RESERVE)
	START/STOP
	TIME
	TIMER SET
	TIMER SELECTOR ON TIMER OFF TIMER
	AUTO SWING

## Precautions for Use

- Do not put the remote controller in the following places.
  - Under direct sunlight.
  - In the vicinity of a heater.
- Handle the remote controller carefully. Do not drop it on the floor, and protect it from water.
- Once the outdoor unit stops, it will not restart for about 3 minutes (unless you turn the power switch off and on or unplug the power cord and plug it in again).  
This is to protect the device and does not indicate a failure.
- If you press the FUNCTION selector button during operation, the device may stop for about 3 minutes for protection.

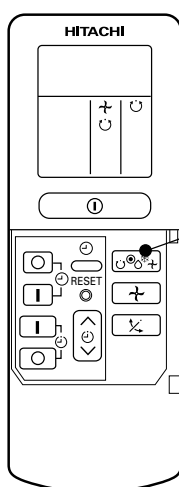
# VARIOUS FUNCTIONS

## ■ Auto Restart Control


- If there is a power failure, operation will be automatically restarted when the power is resumed with previous operation mode and airflow direction.  
(As the operation is not stopped by remote controller.)
  - If you intend not to continue the operation when the power is resumed, switch off the power supply.  
When you switch on the circuit breaker, the operation will be automatically restarted with previous operation mode and airflow direction.
- Note: 1. If you do not require Auto Restart Control, please consult your sales agent or OFF by remote control.  
2. Auto Restart Control is not available when Timer or Sleep Timer mode is set.

# AUTOMATIC OPERATION

The device will automatically determine the mode of operation, HEAT, COOL or DEHUMIDIFY depending on the current room temperature. The selected mode of operation will change when the room temperature varies. However the mode of operation will not change when indoor unit connected to multi type outdoor unit.





1

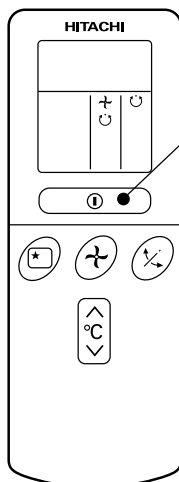
Press the FUNCTION selector so that the display indicates the  (AUTO) mode of operation.

- When AUTO has been selected, the device will automatically determine the mode of operation, HEAT, COOL or DEHUMIDIFY depending on the current room temperature. However the mode of operation will not change when indoor unit connected to multi type outdoor unit.
- If the mode automatically selected by the unit is not satisfactory, manually change the mode setting (heat, dehumidify, cool or fan).

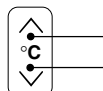
**START  
STOP**

Press the  (START/STOP) button.  
Operation starts with a beep.  
Press the button again to stop operation.

- As the settings are stored in memory in the remote controller, you only have to press the  (START/STOP) button next time.



You can raise or lower the temperature setting as necessary by maximum of 3°C.



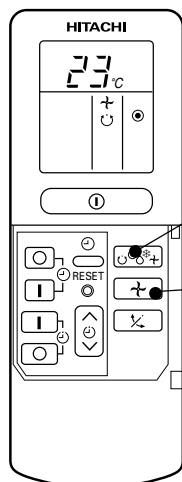
Press the temperature button and the temperature setting will change by 1°C each time.

- The preset temperature and the actual room temperature may vary somewhat depending on conditions.
- The display does not indicate the preset temperature in the AUTO mode. If you change the setting, the indoor unit will produce a beep.

Press the  (FAN SPEED) button, AUTO and LOW is available.

# HEATING OPERATION

- Use the device for heating when the outdoor temperature is under 21°C.  
When it is too warm (over 21°C), the heating function may not work in order to protect the device.
- In order to keep reliability of the device, please use this device above -15°C of the outdoor temperature.



**1**

Press the FUNCTION selector so that the display indicates ● (HEAT).

**2**

Set the desired FAN SPEED with the ↺ (FAN SPEED) button (the display indicates the setting).

⌚ (AUTO): The fan speed is HI at first and varies to MED or LOW automatically when the preset temperature has been reached.



(HI) : Economical as the room will become warm quickly.

But you may feel a chill at the beginning.



(MED) : Fan speed slow.



(LOW) : Fan speed slower.

**3**

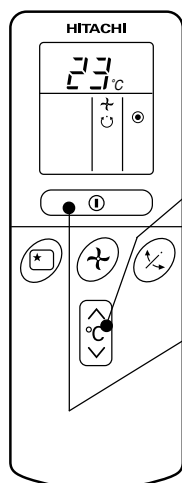
Set the desired room temperature with the TEMPERATURE buttons (the display indicates the setting).

The temperature setting and the actual room temperature may vary somewhat depending on conditions.

**START  
STOP**

Press the ① (START/STOP) button. Heating operation starts with a beep. Press the button again to stop operation.

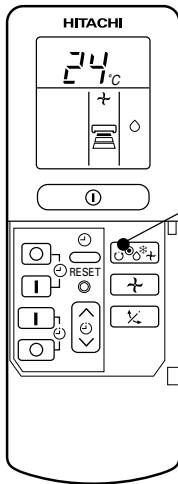
- As the settings are stored in memory in the remote controller, you only have to press the ① (START/STOP) button next time.






# DEHUMIDIFYING OPERATION

Use the device for dehumidifying when the room temperature is over 16°C.  
When it is under 15°C, the dehumidifying function will not work.

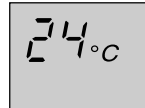


1

Press the FUNCTION selector so that the display indicates  (DEHUMIDIFY).  
The FAN SPEED is set at LOW automatically.  
The FAN SPEED button does not work.

2

Set the desired room temperature with the TEMPERATURE button (the display indicates the setting).

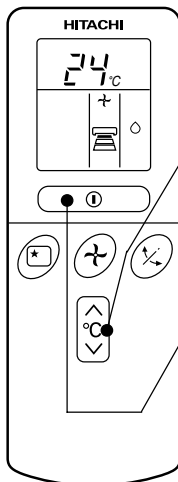


The range of 20-26°C is recommended as the room temperature for dehumidifying.

**START  
STOP**

Press the ① (START/STOP) button. Dehumidifying operation starts with a beep. Press the button again to stop operation.

- As the settings are stored in memory in the remote controller, you only have to press the ① (START/STOP) button next time.



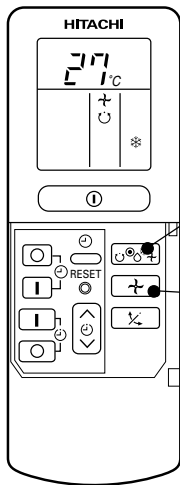
## ■ Dehumidifying Function

When the room temperature is higher than the temperature setting: The device will dehumidify the room, reducing the room temperature to the preset level.


When the room temperature is lower than the temperature setting: Dehumidifying will be performed at the temperature setting slightly lower than the current room temperature, regardless of the temperature setting. The function will stop (the indoor unit will stop emitting air) as soon as the room temperature becomes lower than the setting temperature.

## COOLING OPERATION


Use the device for cooling when the outdoor temperature is  $-10 \sim 43^{\circ}\text{C}$ .  
If in doors humidity is very high (80%), some dew may form on the air outlet grille of the indoor unit.





1

Press the FUNCTION selector so that the display indicates  (COOL).


2

Set the desired FAN SPEED with the  (FAN SPEED) button (the display indicates the setting).

 (AUTO): The FAN SPEED is HI at first and varies to MED or LOW automatically when the preset temperature has been reached.

 (HI) : Economical as the room will become cool quickly.

 (MED) : Fan speed slow.



 (LOW) : Fan speed slower.

3

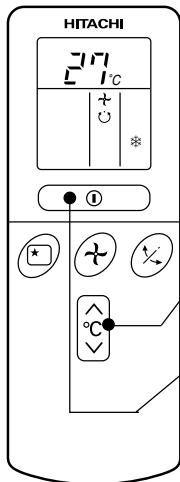
Set the desired room temperature with the TEMPERATURE button (the display indicates the setting).

The temperature setting and the actual room temperature may vary some how depending on conditions.

START  
STOP

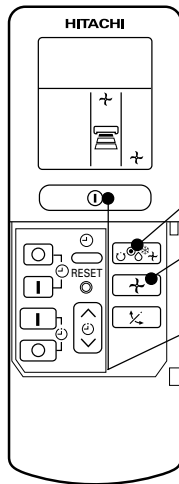
Press the  (START/STOP) button. Cooling operation starts with a beep. Press the button again to stop operation. The cooling function does not start if the temperature setting is higher than the current room temperature (even though the  (OPERATION) lamp lights). The cooling function will start as soon as you set the temperature below the current room temperature.

■ As the settings are stored in memory in the remote controller, you only have to press the  (START/STOP) button next time.



# FAN OPERATION

You can use the device simply as an air circulator. Use this function to dry the interior of the indoor unit at the end of summer.



**1**

Press the FUNCTION selector so that the display indicates (FAN).

**2**

Press the (FAN SPEED) button.

**START  
STOP**

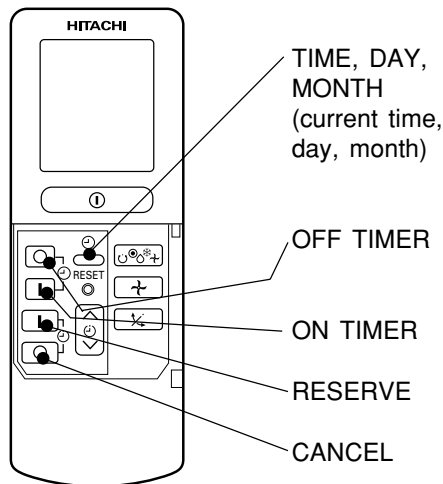
Press the (START/STOP) button. Fan operation starts with a beep. Press the button again to stop operation.

## FAN SPEED (AUTO)

..... When the AUTO fan speed mode is set in the cooling/heating operation:

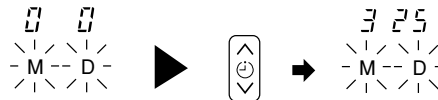
For the heating operation	<ul style="list-style-type: none"> <li>● The fan speed will automatically change according to the temperature of discharged air.</li> <li>● When the difference of room temperature and setting temperature is large, fan starts to run at HI speed.</li> <li>● When the room temperature reaches setting temperature, fan speed changes to LOW automatically.</li> </ul>
For the cooling operation	<ul style="list-style-type: none"> <li>● When the difference of room temperature and setting temperature is large, fan starts to run at HI speed.</li> <li>● After room temperature reaches the preset temperature, the cooling operation, which changes the fan speed and room temperature to obtain optimum conditions for natural healthful cooling will be performed.</li> </ul>

# HOW TO SET THE TIMER



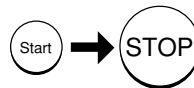
## Time, Day, Month

After you change the batteries;



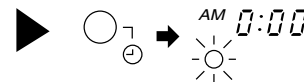
**1** Set the current month and day with the TIMER control button.

## OFF-Timer

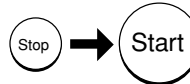


You can set the device to turn off at the present time.

**1** Press the (OFF-TIMER) button. The (OFF) mark blinks on the display.

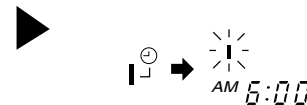


## ON-Timer

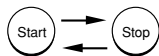


- The device will turn on at the designated times.

**1** Press the (ON-TIMER) button the (ON) mark blinks on the display.

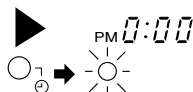


## ON/OFF-Timer

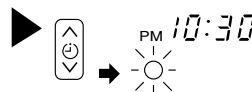


- The device will turn on (off) and off (on) at the designated times.
- The switching occurs first at the preset time that comes earlier.
- The arrow mark appearing on the display indicates the sequence of switching operations.

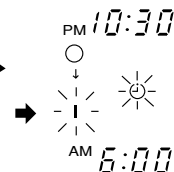
**1** Press the (ON-OFF) button so that the (OFF) mark blinks.



**2** Set the turn-off time with the TIMER control button. Press the (RESERVE) button.



**3** Press the (ON-TIMER) button so that the (OFF) mark lights and the (ON) mark blinks.




## How to Cancel Reservation

Point the signal window of the remote controller toward the indoor unit, and press the (CANCEL) button.


The (RESERVED) sign goes out with a beep and the (TIMER) lamp turns off on the indoor unit.

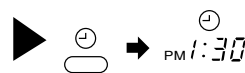
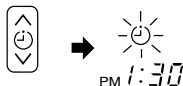
## NOTE


You can set only one of the OFF-timer, ON-timer and ON/OFF-timer.

**2** Press the  (TIME) button.

**3** Set the current time with the TIMER control button.

**4** Press the  (TIME) button again. The time indication starts lighting instead of flashing.

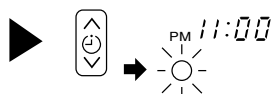






- The time indication will disappear automatically in 10 second.
- To check the current time setting, press the  (TIME) button twice.

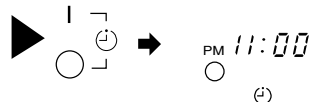
The setting of the current time is now complete.

Example: The current time is 1:30 p.m.

**2** Set the turn-off time with the TIMER control button.



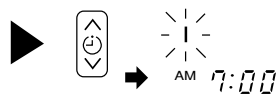
**3** Point the signal window of the remote controller toward the indoor unit, and press the  (RESERVE) button. The  (OFF) mark starts lighting instead of flashing and the sign  (RESERVED) lights. A beep occurs and the  (TIMER) lamp lights on the indoor unit.







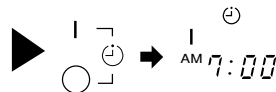
Example: The device will turn off at 11:00p.m.

The setting of turn-off time is now complete.

**2** Set the turn-on time with the TIMER control button.

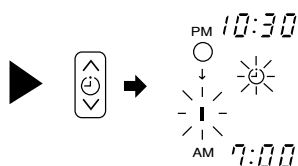






**3** Point the signal window of the remote controller toward the indoor unit, and press the  (RESERVE) button. The  (ON) mark starts lighting instead of flashing and the  (RESERVED) sign lights. A beep occurs and the  (TIMER) lamp lights on the indoor unit.

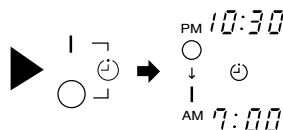


Example:  
The device will turn on at 7:00 a.m.  
The setting of the turn-on time is now complete.


**4** Set the turn-on time with the TIMER control button.




**5** Point the signal window of the remote controller toward the indoor unit, and press the  (RESERVE) button. The  (ON) mark starts lighting instead of flashing and the  (RESERVED) sign lights. A beep occurs and the  (TIMER) lamp lights on the indoor unit.

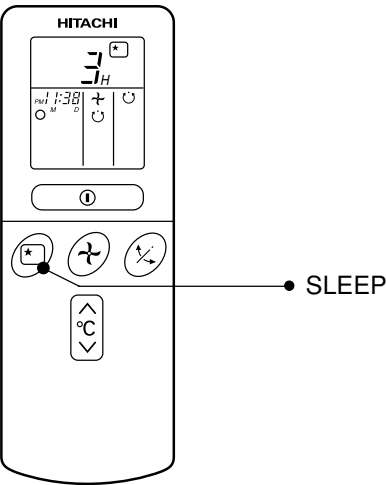


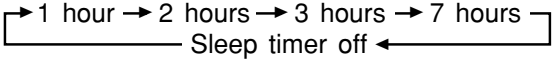
Example:  
The device will turn off at 10:30 p.m. and it will be turned on at 7:00 a.m.  
The settings of the turn-on/off times are now complete.

- The timer may be used in three ways: off-timer, on-timer, and ON/OFF (OFF/ON)-timer. Set the current time at first because it serves as a reference.
- As the time settings are stored in memory in the remote controller, you only have to press the  (RESERVE) button in order to use the same settings next time.

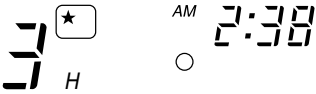
# HOW TO SET THE SLEEP TIMER

Set the current time at first if it is not set before (see the pages for setting the current time). Press the  (SLEEP) button, and the display changes as shown below.

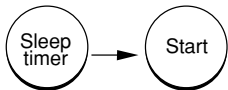


Mode	Indication
Sleep timer	 1 hour → 2 hours → 3 hours → 7 hours → Sleep timer off

**Sleep Timer:** The device will continue working for the designated number of hours and then turn off. Point the signal window of the remote controller toward the indoor unit, and press the SLEEP button. The timer information will be displayed on the remote controller. The TIMER lamp lights with a beep from the indoor unit. When the sleep timer has been set, the display indicates the turn-off time.




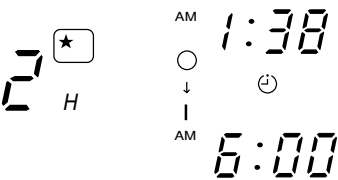
Example: If you set 3 hours sleep time at 11:38 p.m., the turn-off time is 2:38 a.m.



The device will be turned off by the sleep timer and turned on by on-timer.




**1** Set the ON-timer.

**2** Press the  (SLEEP) button and set the sleep timer.



For heating:  
In this case, the device will turn off in 2 hours (at 1:38 a.m.) and turn on early so that the preset temperature will be almost reached at 6:00 next morning.

## How to Cancel Reservation

Point the signal window of the remote controller toward the indoor unit, and press the  (CANCEL) button.  
The  (RESERVED) sign goes out with a beep and the  (TIMER) lamp turns off on the indoor unit.

## Explanation of the sleep timer

The device will control the FAN SPEED and room temperature automatically so as to be quiet and good for people's health.


### NOTE

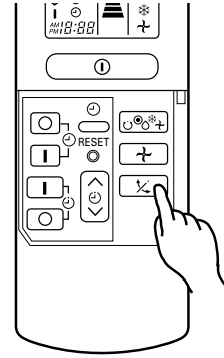
- If date or current time is not set, sleep timer can not be set.
- If you set the sleep timer after the off-, on/off- or off/on-timer has been set, the sleep timer becomes effective instead of the off-, on/off- or off/on-timer set earlier.
- You can not set other timer during sleep timer operation.
- After sleep timer time is up and when press sleep button again, the sleep timer will be set as last setting.
- Sleep timer effective only once.


# ADJUSTING THE AIR DEFLECTOR

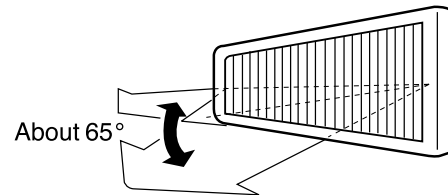
## 1. NON DUCT

Adjustment of the conditioned air in the upward and downward directions.

According to “Dehumidifying” or “Cooling” operation, the horizontal air deflector is automatically set to the proper angle suitable for each operation. The deflector can be swing up and down and also set to the desired angle using the “ (AUTO SWING)” button. (If the angle of the deflector is changed, it will not return to the auto-set position after operations start unless the operation mode is switched.)



- If the “ (AUTO SWING)” button is pressed once, the horizontal air deflector swings up and down. If the button is pressed again, the deflector stops in its current position.
- Use the horizontal air deflector within the adjusting range shown on the right.
- When the auto swing operation is performed, if the horizontal air deflector is moved manually, the swing range may drift. However, it will return to the original operation range after a short time.



## 2. FULL DUCT • SEMI DUCT



- As shown in the diagram, perform by holding the horizontal air deflector.
- When adjusting the air direction, use a stepladder, etc.
- For full duct type and semi duct type, auto air deflector is not provided.

### CAUTION

- When operating the unit in cooling operation with the air deflector facing down and moving automatically for a long period of time, water will condensed on the air deflector and drips down occasionally. This will wet your furniture.



# HOW TO EXCHANGE THE BATTERIES IN THE REMOTE CONTROLLER

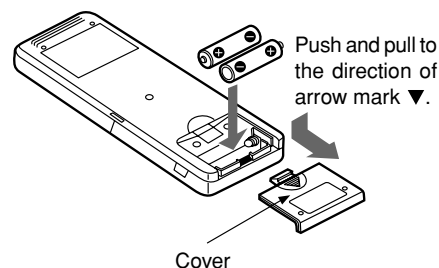
- 1 Remove the cover as shown in the figure and take out the old batteries.



- 2 Install the new batteries. The direction of the batteries should match the marks in the case.

## CAUTION

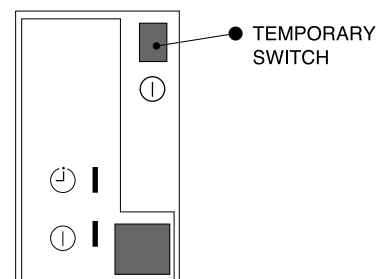
1. Do not use new and old batteries, or different kinds of batteries together.
2. Take out the batteries when you do not use the remote controller for 2 or 3 months.



# TEMPORARY SWITCH

Use the temporary switch when operation cannot be done with the remote controller.

1. By pressing the temporary switch, the operation is done in previously set operation mode.  
When the operation is done using the temporary switch after the power source is turned off and turned on again, the operation is done in automatic mode.
2. When the operation is stopped or when the operation is done with the remote controller again. Press the temporary switch once again.



# CIRCUIT BREAKER

When you do not use the room air conditioner, set the circuit breaker to "OFF".

# HOW TO USE THE AIR CONDITIONER EFFECTIVELY

1. **An average room temperature setting is probably the best for you as well as being economical.**

- Excessive cooling or heating is not recommended for health reasons. High electricity bills may also result.
- Close the curtains or blinds to prevent heat from flowing into or escaping the room as well as to make more effective use of electricity.



2. **At intervals, the doors and windows should be opened to let fresh air in.**



Make sure the room is ventilated when operating the air conditioner at the same time as other heating appliances.



3. **Using the timer is recommended before going to sleep or going out.**



4. **The following must never be used for cleaning the indoor and outdoor units.**

- Benzine, thinner and scrub can damage plastic surfaces or coating.
- Hot water above 40°C can shrink the filter and deform plastic parts.

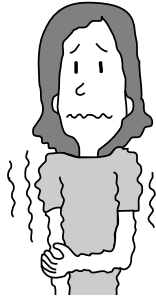


5. **Do not block the air intake and air outlet.**

- Do not block the air outlets and intakes of the indoor and outdoor units with curtains or other obstacles which could degrade air conditioner performance and cause unit failure.

# THE IDEAL WAYS OF OPERATION

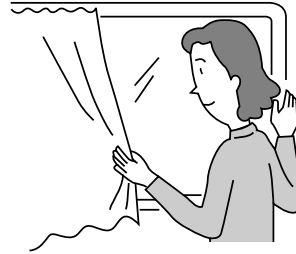
## Suitable Room Temperature



### ⚠ Warning

Freezing temperature is bad for health and a waste of electric power.

## Install curtain or blinds



It is possible to reduce heat entering the room through windows.

## Ventilation

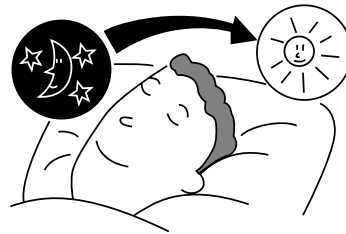
### ⚠ Caution

Do not close the room for a long period of time. Occasionally open the door and windows to allow the entrance of fresh air.



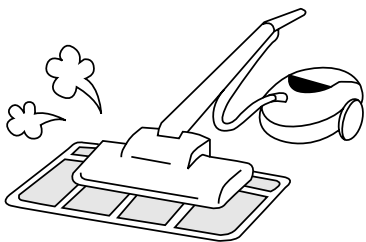
## Effective Usage Of Timer

At night, please use the "OFF or ON timer operation mode", together with your wake up time in the morning. This will enable you to enjoy a comfortable room temperature. Please use the timer effectively.



## Do Not Forget To Clean The Air Filter

Dusty air filter will reduce the air volume and the cooling efficiency. To prevent from wasting electric energy, please clean the filter every 2 weeks.



## Please Adjust Suitable Temperature For Baby And Children

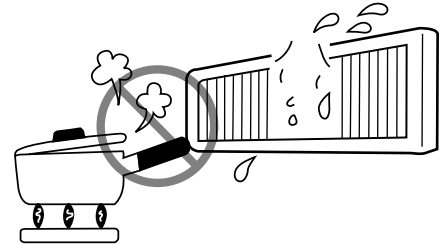
Please pay attention to the room temperature and air flow direction when operating the unit for baby, children and old folks who have difficulty in movement.



## The Air Conditioner And The Heat Source In The Room

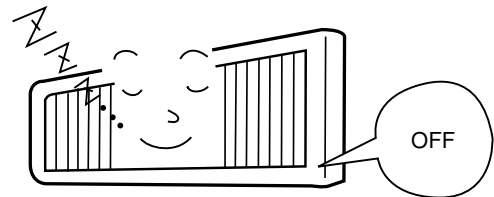
### ⚠ Caution

If the amount of heat in the room is above the cooling capability of the air conditioner (for example: more people entering the room, using heating equipments and etc.), the preset room temperature cannot be achieved.



## Not Operating For A Long Time

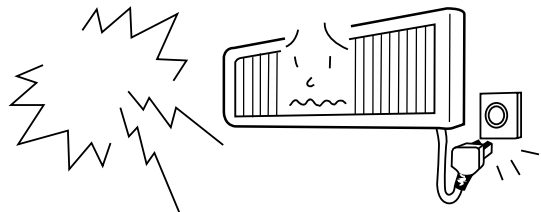
When the indoor unit is not to be used for a long period of time, please switch off the power from the mains. If the power from mains remains "ON", the indoor unit still consumes about 8W in the operation control circuit even if it is in "OFF" mode.



## When Lightning Occurs

### ⚠ Warning

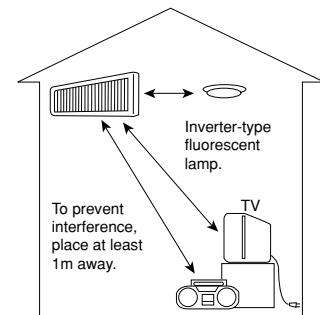
To protect the whole unit during lightning, please stop operating the unit and remove the plug from the socket.



## Interference From Electrical Products

### ⚠ Caution

To avoid noise interference, please place the indoor unit and its remote controller at least 1m away from electrical products.



# MAINTENANCE

## ⚠ WARNING

- Before cleaning, stop unit operation with the remote controller and turn off the circuit breaker.

## ⚠ CAUTION

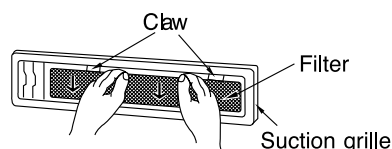
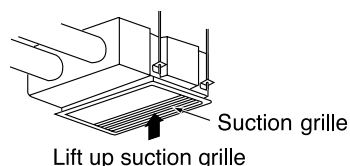
- Do not expose the unit to water as it may cause an electric shock.
- For cleaning inside the air conditioner, consult your sales agent.
- Avoid using detergent when cleaning the heat exchanger of the indoor unit. Unit failure may result.
- When cleaning the heat exchanger with a vacuum cleaner, make sure to wear gloves so as not to injure your hands on the heat exchanger fins.

## 1. AIR FILTER

Clean the air filter, as it removes dust inside the room. Be sure to clean the filter once every two weeks so as not to consume electricity unnecessarily.

### PROCEDURE

- 1** Remove suction grille before removing filter.
  - Lift up one side of suction grille and remove by inclining it (refer to diagram).
  - Press claw downward to remove filter.
- 2** Remove dust from the filter using a vacuum cleaner. If there is too much dust, use neutral detergent. After using neutral detergent, wash with clean water and dry in the shade.
- 3** Install the filters.  
Slightly lift the suction grille and close as original state.



## ⚠ CAUTION

- Do not wash with hot water at more than 40°C. The filter may shrink.
- When washing it, shake off moisture completely and dry it in the shade; do not expose it directly to the sun. The filter may shrink.
- Do not operate the air conditioner with the filter removed. Dust may enter the air conditioner and cause trouble.

## 2. CLEANING OF SUCTION GRILLE


- Wipe it with a soft dry cloth.
- When it is excessively dirty, wipe with soft cloth soaked in lukewarm water or neutral detergent. Then wipe thoroughly with a soft dry cloth.

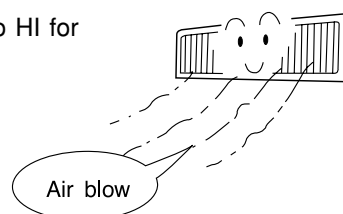
## ⚠ CAUTION

- Never clean with hot water (above 40°C), benzene, gasoline, acid, thinner or a brush, because it will damage the plastic surface and the coating.



## 3. MAINTENANCE AT BEGINNING OF LONG OFF PERIOD

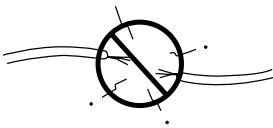
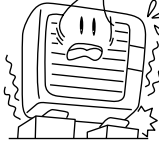
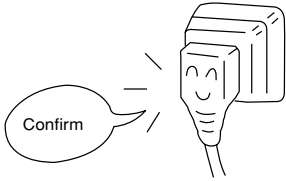
- Running the unit setting the operation mode to  (FAN) and the fan speed to HI for about half a day on a fine day, and dry the whole of the unit.
- Turn off the circuit breaker.



## REGULAR INSPECTION

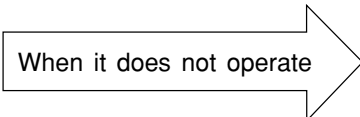
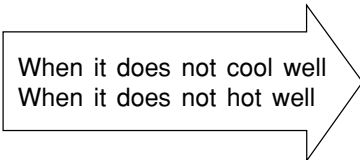
PLEASE CHECK THE FOLLOWING POINTS BY QUALIFIED SERVICE PERSONAL EITHER EVERY HALF YEARLY OR YEARLY. CONTACT YOUR SALES AGENT OR SERVICE SHOP.

ENGLISH

1		Is the earth line disconnected or broken?
2		Is the mounting frame seriously affected by rust and is the outdoor unit tilted or unstable?
3		Is the plug of power line firmly plugged into the socket? (Please ensure no loose contact between them).

## AFTER SALE SERVICE AND WARRANTY

### WHEN ASKING FOR SERVICE, CHECK THE FOLLOWING POINTS.

CONDITION	CHECK THE FOLLOWING POINTS
 <p>When it does not operate</p>	<ul style="list-style-type: none"> <li>Is the fuse all right?</li> <li>Is the voltage extremely high or low?</li> <li>Is the circuit breaker "ON"?</li> </ul>
 <p>When it does not cool well When it does not hot well</p>	<ul style="list-style-type: none"> <li>Was the air filter cleaned?</li> <li>Does sunlight fall directly on the outdoor unit?</li> <li>Is the air flow of the outdoor unit obstructed?</li> <li>Are the doors or windows opened, or is there any source of heat in the room?</li> <li>Is the set temperature suitable?</li> </ul>



### Notes

- In quiet operation or stopping the operation, the following phenomena may occasionally occur, but they are not abnormal for the operation.
  - Slight flowing noise of refrigerant in the refrigerating cycle.
  - Slight rubbing noise from the fan casing which is cooled and then gradually warmed as operation stops.
- The odor will possibly be emitted from the room air conditioner because the various odor, emitted by smoke, foodstuffs, cosmetics and so on, sticks to it. So the air filter and the evaporator regularly must be cleaned to reduce the odor.

- Please contact your sales agent immediately if the air conditioner still fails to operate normally after the above inspections. Inform your agent of the model of your unit, production number, date of installation. Please also inform him regarding the fault.
- Power supply shall be connected at the rated voltage, otherwise the unit will be broken or could not reach the specified capacity.

The conditions of the local Power Supply Companies are to be observed.

The recommended maximum and minimum operating temperatures of the hot and cold sides should be as below:

		Cooling		Heating	
		Minimum	Maximum	Minimum	Maximum
Indoor	Dry bulb °C	21	32	20	27
	Wet bulb °C	15	23	12	19
Outdoor	Dry bulb °C	21	43	2	21
	Wet bulb °C	15	26	1	15

## This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.