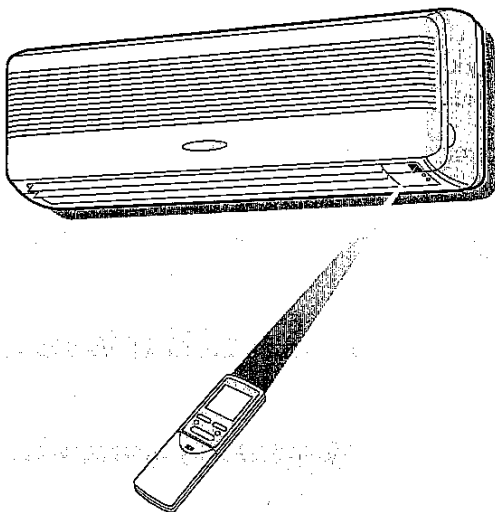


# SHARP®



## AY-X099J



**SPLIT TYPE  
ROOM AIR CONDITIONER**

**OPERATION MANUAL**

**INDOOR UNIT**

**AY-X099J**

**OUTDOOR UNIT**

**AE-X099J**

Thank you for purchasing this Sharp product. Please read this manual carefully before operating the air conditioner, and keep this manual and the Installation Manual as handy references.

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## PRECAUTIONS

### WARNING

1. Using a power circuit with improper voltage and frequency can result in damage to the unit and possibly fire.  
Use a circuit with a 230-240 volt ( $\pm 10\%$ ) rating.
2. Open a window or door periodically to ventilate the room, especially when using gas appliances.
3. Inserting objects into the unit could result in injury due to rotation of the high-speed fans.
4. Pulling the power cord might result in damage or electrical shock. Do not misuse the power cord.
5. This appliance is not intended for use by young children or infirm persons without supervision.  
Young children should be supervised to ensure that they do not play with the appliance..
6. When using the air conditioner for infants, children, elderly, bedridden, or disabled people—make sure the room temperature is suitable for those in the room.
7. Always use a fuse with the correct current rating.
8. Use only the manufacturer specified power cord (parts code; QACC-A253JBE0) for its replacement. Replacement should be conducted by a service centre approved by Sharp.



This unit is designed for human comfort. Do not use for applications such as a kennel or nursery to raise animals or plants.

For your safety, ensure that your new air conditioner is installed by a licensed electrical contractor with accordance with the SAA WIRING RULES.

### CAUTION

- To ensure that your warranty is not cancelled, both the indoor/outdoor units and supply/interconnecting cables must be installed by a licensed air conditioning contractor.

### LOCATION

- Do not locate the unit where there is excessive dust, fumes or moisture in the air.

### INSTALLATION / REMOVAL

- Do not attempt to install or remove the unit yourself. Consult a licensed air conditioning contractor.

## SPECIFICATIONS

Indoor unit	AY-X099J
Outdoor unit	AE-X099J
Rated A.C. voltage (V)	230-240
Rated frequency (Hz)	50
Cooling capacity (kw)	2.5*
Heating capacity (kw)	3.3*

\* When tested in accordance with AS/NZS3823.1.1.

## ADDITIONAL NOTES ON OPERATION

### OPERATING TEMPERATURE RANGE

		INDOOR TEMP.	OUTDOOR TEMP.
COOLING	upper limit	32°C D.B. 23°C W.B.	46°C D.B. —
	lower limit	21°C D.B. 15°C W.B.	21°C D.B. —
HEATING	upper limit	27°C D.B. —	24°C D.B. 18°C W.B.
	lower limit	20°C D.B. —	-8.5°C D.B. -9.5°C W.B.

D.B.=Dry-bulb

W.B.=Wet-bulb

- A built-in protective device might prevent the unit from operating when used out of this range.
- Condensation might form on the air outlet when the unit operates continuously in the COOL or the DRY mode when the humidity is over 80 percent.

### WHEN POWER FAILURE OCCURS

This air conditioner has a back-up function in case of power failure during operation.

After power recovery, the unit will automatically restart in the same settings which were actived before the power failure, except for timer operation settings.

If the timers are set, they will need to be reset after power recovery.

### PREHEATING FUNCTION

In the HEAT operation, the indoor fan might not start for two to five minutes after the unit is turned on to prevent the air from circulating before the unit is sufficiently warmed up.

### DE-ICING FUNCTION

- When ice forms on the heat exchanger in the outdoor unit during the HEAT operation, an automatic de-icer operates for about 5 to 10 minutes to remove the ice. During de-icing, the inside and outside fans stop operating.
- A hissing sound may be heard originating from the indoor unit during de-icing.
- After de-icing is completed, the unit automatically resumes operation in the HEAT mode.

### HEATING EFFICIENCY

- The unit employs a heat pump that draws heat from the outside air and releases it into the room. The outside air temperature therefore greatly affects the heating efficiency.
- If the outside temperature is unusually low, you may require additional heating to maintain the desired room temperature.
- On very cold days, it may take some time to heat the entire room, you may need to use the "full power" feature to speed up heating.

## TIPS ON SAVING ENERGY

Below are some simple ways to save energy when you use your air conditioner.

### SET THE CORRECT TEMPERATURE

- Setting the temperature 1°C higher in COOL mode, and 2°C lower in HEAT mode than the desired temperature can result in a 10 percent saving in electricity.
- Setting the temperature colder than necessary during cooling will result in excess power consumption.

### KEEP OUT DIRECT SUNLIGHT AND DRAFTS

- Keeping out direct sunlight when cooling will aid in reducing the power consumption.
- Close the windows and doors when heating and cooling the room.

### SET PROPER AIR FLOW DIRECTION TO OBTAIN THE BEST AIR CIRCULATION

### KEEP FILTER CLEAN TO ENSURE THE MOST EFFICIENT OPERATION

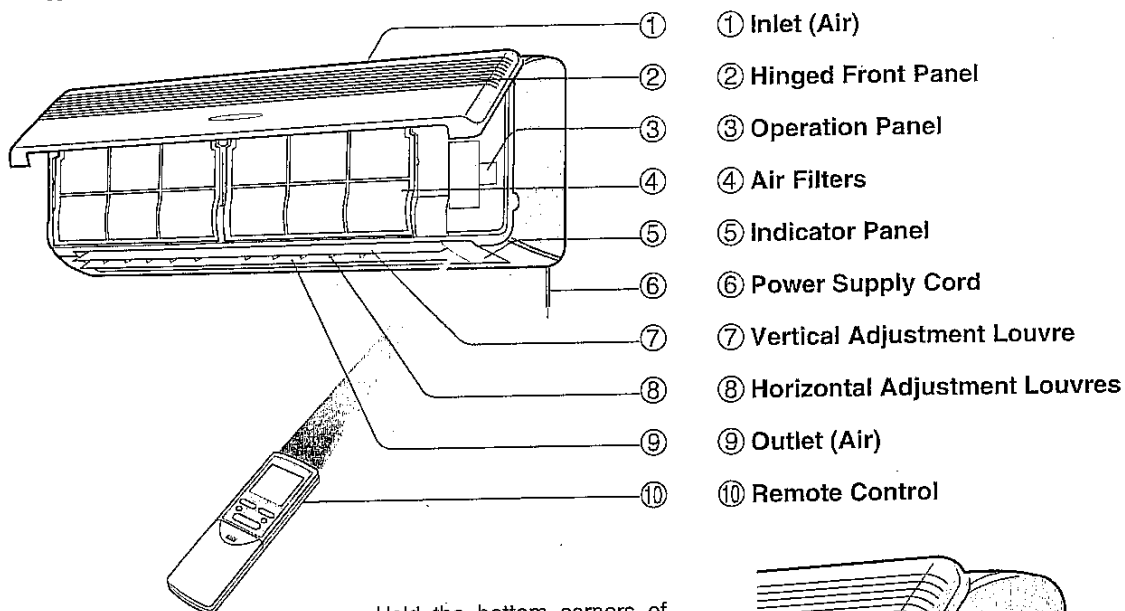
### MAKE MOST OF THE TIMER OFF FUNCTION

### UNPLUG THE POWER CORD WHEN THE UNIT IS NOT TO BE USED FOR AN EXTENDED PERIOD



- The indoor unit still consumes a small amount of power when it is not operating.

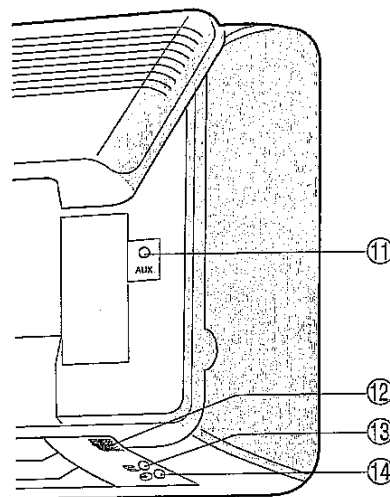
# PART NAMES

## INDOOR UNIT

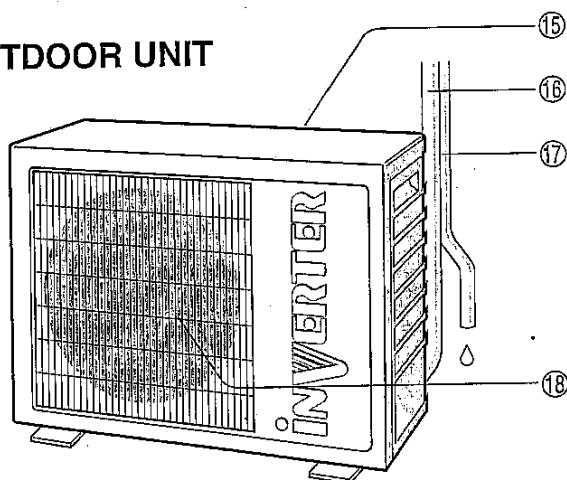


Hold the bottom corners of the open panel and gently pull outwards.

- ⑪ AUX. Button
- ⑫ Remote Control Receiver Window
- ⑬ OPERATION Lamp (red )
- ⑭ TIMER Lamp (yellow )



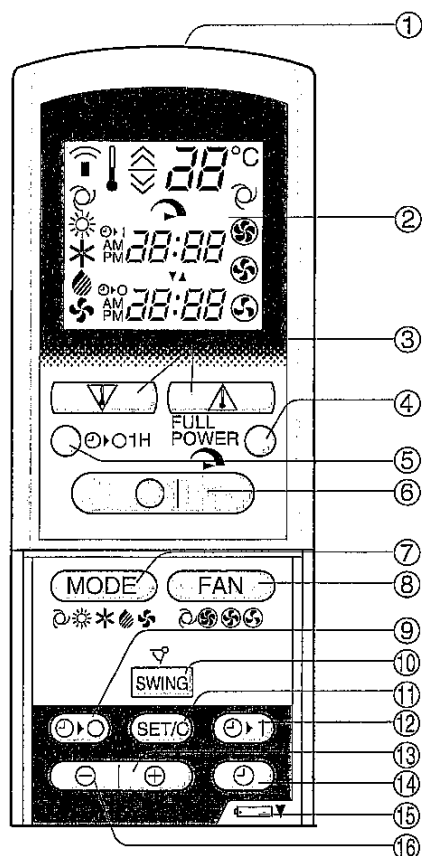
## OUTDOOR UNIT



- ⑮ Inlet (Air)
- ⑯ Refrigerant Tubes and Interconnecting Cord
- ⑰ Drainage Hose
- ⑱ Outlet (Air)

NOTE: Actual units might vary slightly from those shown above.

## REMOTE CONTROL



- ① TRANSMITTER
- ② DISPLAY (Liquid Crystal Display)
- ③ THERMO. (Thermostat) Button
- ④ FULL POWER OPERATION Button
- ⑤ ONE-HOUR OFF TIMER Button
- ⑥ ON/OFF Button
- ⑦ MODE Button
- ⑧ FAN Button
- ⑨ TIMER OFF Button (for setting the timer)
- ⑩ SWING Button
- ⑪ TIMER SET/CANCEL Button
- ⑫ TIMER ON Button (for setting the timer)
- ⑬ TIME ADVANCE Button
- ⑭ CLOCK Button
- ⑮ Indicates BATTERY COMPARTMENT is below this mark
- ⑯ TIME REVERSE Button

## L.C.D. REMOTE CONTROL DISPLAY

⑰ THERMOSTAT SETTING FOR AUTO AND DRY MODES

⑱ TEMPERATURE SYMBOL

⑲ TRANSMITTING SYMBOL

⑳ MODE SYMBOLS

☉ : AUTO

☼ : DRY

☀ : HEAT

☼ : FAN ONLY

☼ : COOL

㉑ TEMPERATURE INDICATOR

㉒ FULL POWER OPERATION MODE SYMBOL

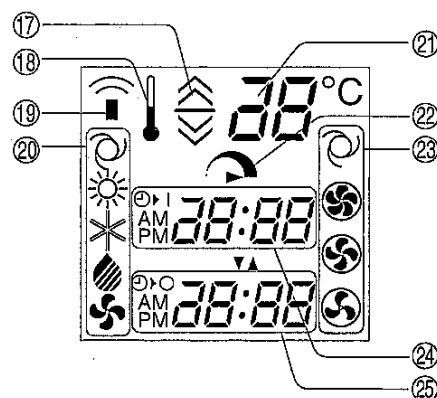
㉓ FAN SPEED SYMBOLS

☉ : AUTO

☼ : LOW

☼ : HIGH

☼ : SOFT



㉔ TIMER ON INDICATOR/CLOCK  
Indicates the on timer preset time or current time.

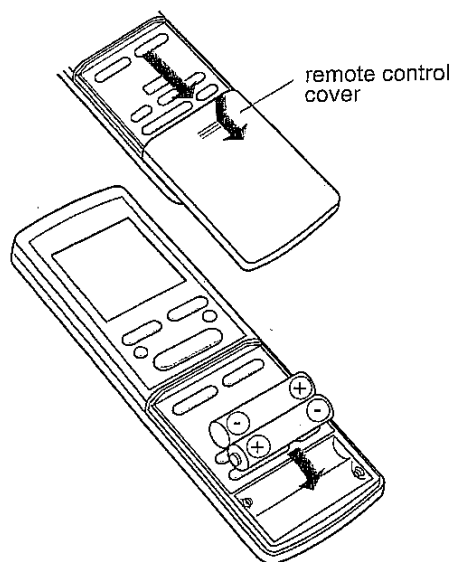
㉕ TIMER OFF INDICATOR  
Indicates the preset time for off timer or one-hour off timer.

# USING THE REMOTE CONTROL

## LOADING BATTERIES

Use two size-AAA (R03) batteries.

- 1 Slide open the remote control cover as shown. Now continue to pull the cover in the same direction to completely remove it.
- 2 Insert the batteries in the compartment, making sure the  $\oplus$  and  $\ominus$  polarities are properly aligned.
  - AM 6:00 will appear on the display when the batteries are properly loaded.
- 3 Replace the cover.



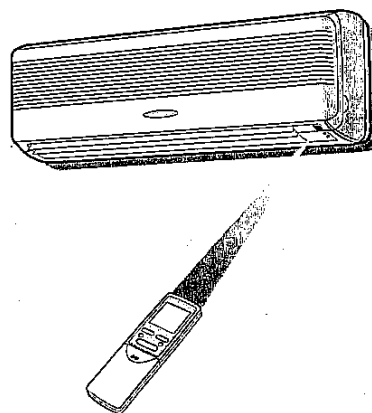
### NOTES:

- The battery life is approximately one year with normal use.
- When you replace the batteries, always use two new ones of the same type.
- If the remote control does not operate normally after replacing the batteries, take out the batteries and replace them again after 30 seconds.
- If you will not be using the unit for a long time, remove the batteries from the remote control.

## HOW TO USE THE REMOTE CONTROL

Point the remote control towards the indoor unit's receiver window and press the desired button. A beep will sound when the indoor unit receives the signal.

- Make sure no objects, such as curtains, are between the remote control and the indoor unit.
- The remote control can operate up to 7 meters away, when the batteries are in good condition.





## CAUTION

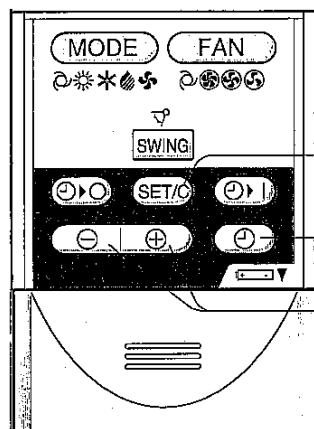
- Do not expose the receiver window on the indoor unit to strong, direct sunlight, which can adversely affect its operation. In such case, close the curtains to block the sunlight.
- Use of a fluorescent lamp with a quick starter in the same room might interfere with transmission of the signal.
- The indoor unit might be affected by signals emitted from the remote control of a television, VCR or other equipment used in the same room.
- Do not leave the remote control in direct sunlight or near a heater. Also, protect the unit and remote control from moisture and shock which can discolour or damage them.

## SETTING THE CURRENT TIME

There are two setting modes:  
12-hour-clock and 24-hour-clock.

Example: 5 o'clock in the afternoon

Clock	Display
12-hour-clock	PM 5:00
24-hour-clock	17:00

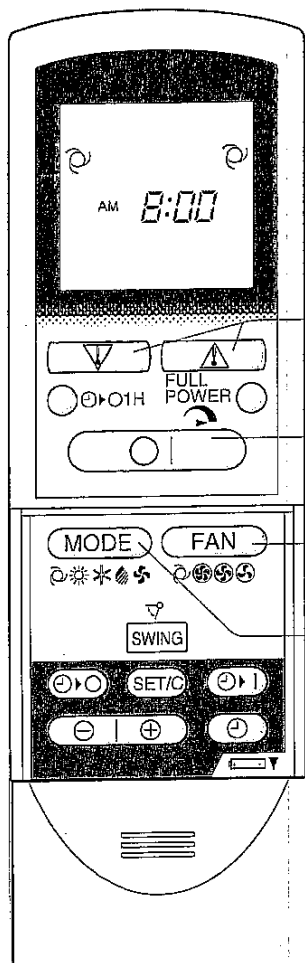


- 1** To set 12-hour-clock, press the CLOCK button once.  
To set 24-hour-clock, press the CLOCK button twice.
- 2** Press the TIME ADVANCE or REVERSE buttons to set the current clock time.
  - Hold the buttons down to fast-forward or reverse the time on the display.
- 3** Press the SET/C button.
  - The colon (:) blinks to indicate that the clock is functioning.

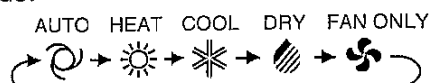
### NOTE:

- The time cannot be set, if the on or off timers have programmed.  
Please refer to "Timer Operation" on page 9 and 10.

# BASIC OPERATION



**1** Press the MODE button to select the operation mode.



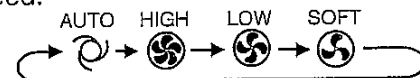
**2** Press the ON/OFF button to start operation.

- The red OPERATION lamp ( ) on the indoor unit will light up.

**3** Press the THERMO button to set the desired temperature.

- In the AUTO and DRY mode, the indicator bars represent changes in temperature.
  - 2°C higher
  - 1°C higher
  - 1°C lower
  - 2°C lower
- In the manual HEAT and COOL mode, the temperature can be set within the range of 18 to 32 °C
- In the FAN ONLY mode, the temperature cannot be set.

**4** Press the FAN button to set the desired fan speed.



- In the DRY mode, the fan speed cannot be changed.
- In the FAN ONLY mode, the fan speed AUTO cannot be set.

**5** To turn off the unit, press the ON/OFF button again.

- The red OPERATION lamp ( ) on the indoor unit will go out.

## TIPS ABOUT AUTO MODE:

In the AUTO MODE, the temperature setting and mode (HEAT, COOL or DRY) are automatically selected depending on the room temperature and outdoor temperature when the unit is turned on.

However, the previous setting and mode are used if the unit is turned on within a short time following power-off.

		Outdoor temp. (°C)				
		0	10	18	31	34
Room temp. (°C)	26				Cool (25°C)	Cool (26°C)
	21	Heat (24°C)	Heat (23°C)	Heat (22°C)	Dry (Room Temp. -2°C)	Cool (27°C)

The figures in ( ) are temperature settings.



# ADJUSTING THE AIR FLOW DIRECTION

## VERTICAL AIR FLOW

The direction of the air flow is automatically preset for the optimum effect in each mode as follows;

COOL and DRY mode	Horizontal air flow
HEAT and FAN ONLY mode	Diagonal air flow

### HOW TO ADJUST THE AIR FLOW DIRECTION

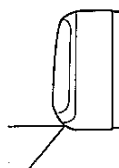
Press the SWING button of the remote control once.

- The vertical adjustment louvre will swing continuously within the range shown.

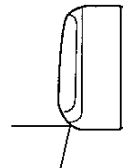
Press the SWING button again when the desired position is reached and the louvre will stop.

#### Adjustment range

COOL and DRY mode      HEAT and FAN ONLY mode



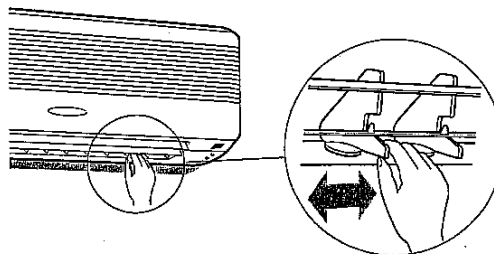
The range is narrower to prevent condensation from forming.



The range is wider for increased air circulation.

## HORIZONTAL AIR FLOW

Hold the horizontal adjustment louvres as shown and adjust the air flow direction.



### ! CAUTION

Never attempt to adjust the vertical adjustment louvres manually.

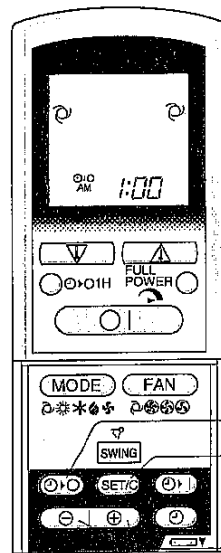
- Manual adjustment of these louvres can cause the unit to malfunction when remote-controlled later.
- When the vertical adjustment louvres are adjusted completely downward during COOL and DRY modes for an extended period of time, condensation might form.


# TIMER OPERATION

## NOTE:

Before setting the timer, ensure that current time is properly set.

## TIMER OFF



- 1 Press the TIMER OFF (  ) button.
- 2 The TIMER OFF indicator will blink; press the TIME ADVANCE or REVERSE buttons to set the desired time. (The time can be set in 10-minute increments.)
- 3 Point the remote control at the receiver window on the indoor unit and press the TIMER SET (SET/C) button.
  - The yellow TIMER lamp on the indoor unit lights up.
  - A beep will sound when the indoor unit receives the signal.

### TIPS ABOUT TIMER OFF OPERATION

When the TIMER OFF mode is set, the room temperature is automatically adjusted to prevent the room from becoming too hot or too cold while you sleep. (Auto sleep function)

### COOL/DRY MODE:

- One hour after the timer operation has begun, the temperature rises 1°C higher than the thermostat setting.

### HEAT MODE:

- One hour after the timer operation has begun, the temperature drops 3°C lower than the thermostat setting.

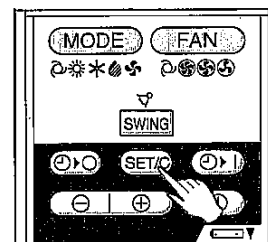
### NOTE:

Auto sleep function will not activate during the FAN ONLY mode.

### TO CANCEL TIMER MODE

Press the TIMER CANCEL (SET/C) button.

- The yellow TIMER lamp on the indoor unit will go out.
- The current time will be displayed on the remote control.



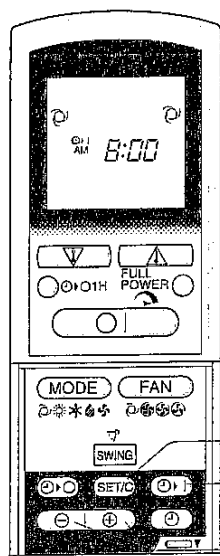
### NOTE:

- Both timers will be cancelled when the SET/C button is pressed.

### TO CHANGE A TIME SETTING

First, cancel the TIMER, then set it again.

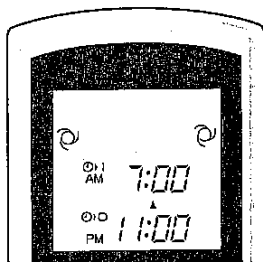
## TIMER ON



- 1 Press the TIMER ON ( ) button.
- 2 The TIMER ON indicator will blink; press the TIME ADVANCE or REVERSE buttons to set the desired time. (The time can be set in 10-minute increments.)
- 3 Point the remote control at the receiver window on the indoor unit and press the TIMER SET (SET/C) button.
  - The yellow TIMER lamp on the indoor unit lights up.
  - A beep will sound when the indoor unit receives the signal.
- 4 Select the operation condition.
  - The unit will turn on prior to the setting time to allow the room to reach the desired temperature by the programmed time. (Awaking function)

### COMBINED USE OF ON AND OFF TIMERS

You can combine the use of the ON and OFF timers.



#### Example:

Stop operation at 11:00 p.m. and resume operation (using the same settings) to obtain the desired room temperature by 7:00 a.m.

- 1 Set the TIMER OFF to 11:00 p.m. during operation.
- 2 Set the TIMER ON to 7:00 a.m.


The arrows ( or ) between the TIMER ON indicator and the TIMER OFF indicator shows which timer will activate first.

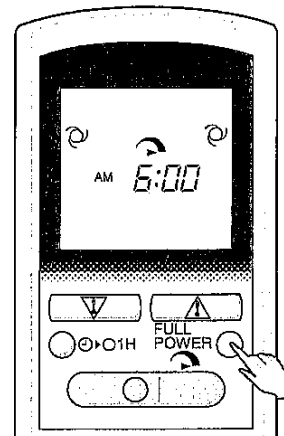
#### NOTES:

- You cannot program the ON and OFF timers to different temperatures or other settings.
  - Either timer can be programmed prior to the other.
  - The timers will only operate once.
- Although the last timer setting will be memorised, the timer must be selected each time it is required.

## FULL POWER MODE

In this mode, the air conditioner works at maximum power operation. This mode makes the room cool or warm rapidly.

- 1** To activate the FULL POWER mode, press the FULL POWER button during operation.
  - FULL POWER mode symbol (  ) is displayed on the remote control.
  - The temperature display disappears.
  - This mode will be automatically cancelled after one hour's operation.
- 2** To cancel the FULL POWER mode, press the FULL POWER button again.

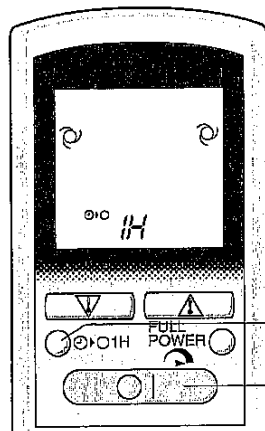



### NOTES:

- You cannot use the FULL POWER mode during the DRY or the FAN ONLY mode.
- You cannot set the temperature during the FULL POWER operation. (The fan speed is adjustable.)

## ONE-HOUR TIMER

When the ONE-HOUR TIMER is set, the unit will operate for one hour after setting.



- 1** Press the ONE-HOUR TIMER button.
  - "1 H" will be displayed on the remote control.
  - The unit will operate for one hour.
- 2** To turn off the unit within an hour, press the ON/OFF button.
  - The red OPERATION lamp (  ) on the indoor unit will go out.

If you wish to operate the unit for another hour, press the ONE-HOUR TIMER button again during operation.

### NOTE:


- The ONE-HOUR TIMER operation has priority over other timer operations, such as TIMER ON and TIMER OFF.

## AUXILIARY MODE

Use this mode when the remote control is not available.


### TO TURN ON

Lift the front panel of the indoor unit and press the AUX. button on the operation panel.

- The red OPERATION lamp (  ) on the indoor unit will light up and the unit will start operating in the AUTO mode.
- The fan speed and temperature setting will be set to AUTO.

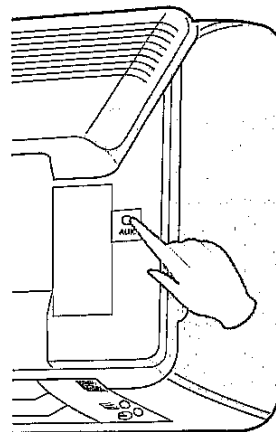
### TO TURN OFF

Press the AUX. button on the operation panel again.

- The red OPERATION lamp (  ) on the indoor unit will go out.

### NOTE:

If the AUX. button is pressed during normal operation, the unit will turn off.

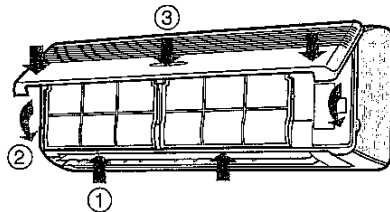
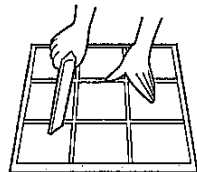
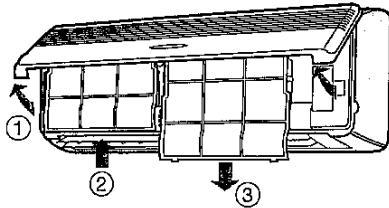


## MAINTENANCE

Be sure to unplug the power cord from the wall outlet or turn off the circuit breaker before performing any maintenance.

### CLEANING THE FILTERS

The air filters should be cleaned every two weeks.



#### 1 TURN OFF THE UNIT

#### 2 REMOVE THE FILTERS

- 1 Lift up the front panel of the indoor unit.
- 2 Push the air filters up slightly to unlock them.
- 3 Pull the air filters down to remove them.

#### 3 CLEAN THE FILTERS

Use a vacuum cleaner to remove the dust. If the filters are dirty, wash them with warm water and a mild detergent. Dry the filters in the shade before reinstalling.

#### 4 REINSTALL THE FILTERS

- 1 Reinstall the filters.
- 2 Close the front panel.
- 3 Push the centre of the front panel firmly to lock it in place.

### CLEANING THE UNIT AND THE REMOTE CONTROL

- Wipe them with a soft cloth.
- Do not directly splash or pour water on them. It could result in electrical shock or damage to them.
- Do not use hot water, thinner, abrasive powders or strong solvents.

### POST-SEASON CHECK

- 1 Operate the unit in the FAN ONLY mode for about half a day to allow the mechanism to thoroughly dry.
- 2 Stop the operation and unplug the unit. Turn off the circuit breaker, if you have one exclusively for the air conditioner.
- 3 Clean the filters, then reinstall them.

### PRE-SEASON CHECK

- 1 Make sure that the air filters are not dirty.
- 2 Make sure that nothing obstructs the air inlet or outlet.
- 3 Check the outdoor mounting rack periodically for wear and to make sure it is firmly in place.

## BEFORE CALLING FOR SERVICE

The following are normal conditions for the unit

<b>UNIT DOES NOT OPERATE</b> The unit will not operate just after being turned off, or the mode being changed. This is to protect the mechanism. Wait 3 minutes for the unit to function.	<b>LOW NOISE</b> The soft, swishing noise is the sound of the refrigerant flowing inside the unit.
<b>WARM AIR DOESN'T COME OUT</b> The unit is preheating or de-icing.	<b>WATER VAPOUR</b> <ul style="list-style-type: none"> <li>• In the COOL and DRY operation, water vapour can sometimes be seen at the air outlet due to the difference in temperature between the room air and the outlet air.</li> <li>• In the HEAT operation, water vapour might come out of the outdoor unit during de-icing.</li> </ul>
<b>ODORS</b> A peculiar odor exuded by the carpet or furniture might be emitted from the unit.	
<b>CRACKING NOISE</b> The unit may produce a cracking noise. This sound is generated by the friction of the front panel and other components expanding or connecting due to a temperature change.	<b>THE OUTDOOR UNIT DOES NOT STOP</b> <ul style="list-style-type: none"> <li>• After stopping the COOL or DRY operation, the outdoor unit will rotate its fan for about a minute to cool down the unit.</li> <li>• After stopping the HEAT operation, the outdoor unit will operate for a few minutes for de-icing.</li> </ul>

If the unit appears to be malfunctioning, check the following points before calling for service.

IF THE UNIT FAILS TO OPERATE
Check to see if the circuit breaker has tripped or the fuse has blown.

IF THE UNIT FAILS TO COOL OR HEAT THE ROOM EFFECTIVELY		
Check the filters. If they're dirty, clean them.	Check the outdoor unit to make sure nothing is blocking the air inlet or outlet.	Check that the remote control is set properly.
Make sure windows and doors are closed tightly.	A large number of people in the room can prevent the desired temperature from being reached.	Check whether any heat-generating appliances are operating in the room.

## BEFORE CALLING FOR SERVICE

### IF THE UNIT FAILS TO RECEIVE THE REMOTE CONTROL SIGNAL

Check whether the remote control batteries have become old and weak.

Try to send the signal again with the remote control pointed properly towards the unit's receiver window.

Check whether the remote control batteries are installed with the polarities properly aligned.

**SHARP CORPORATION**  
OSAKA, JAPAN

PRINTED IN THAILAND

TINSEA233JBR0 9CO (TL) ①