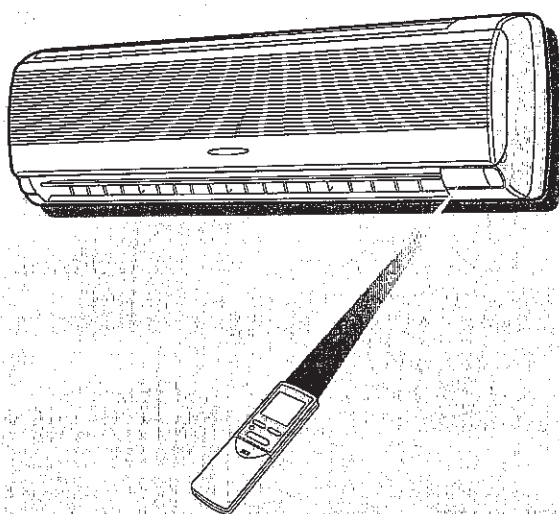


# SHARP®

**AY-A189J**  
**AY-A249J**  
**AH-A189J**  
**AH-A249J**



**SPLIT TYPE  
ROOM AIR CONDITIONER**

**OPERATION MANUAL**

**INDOOR UNIT**

**AY-A189J**  
**AY-A249J**  
**AH-A189J**  
**AH-A249J**

**OUTDOOR UNIT**

**AE-A189J**  
**AE-A249J**  
**AU-A189J**  
**AU-A249J**

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. Use a power supply with a 230-240 volt ( $\pm 10\%$ ) rating.  
Use of a power supply with improper voltage and frequency can result in equipment damage and possible fire.
2. Open a window or door periodically to ventilate the room, especially when using gas appliances.
3. Never insert objects into the unit. Inserting objects can result in injury due to the high speed rotation of internal fans.
4. Do not pull the power cord. Pulling and misuse of the power cord can result in damage to the unit and cause electrical shock.
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. Make sure a fuse with the correct current rating is installed.
8. Use only the manufacturer-specified power cord (parts code; QACC-A166JBE0 AY-A189J/AH-A189J only) for replacement. Replacement should be performed by a service centre approved by Sharp.



This unit is designed for use in residences. Do not use for other applications such as in a kennel or greenhouse to raise animals or grow 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

- Install the unit in a place with minimal dust, fumes and moisture in the air.

## INSTALLATION/REMOVAL

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

# SPECIFICATIONS

Indoor unit	AY-A189J	AY-A249J	AH-A189J	AH-A249J
Outdoor unit	AE-A189J	AE-A249J	AU-A189J	AU-A249J
Rated A.C. voltage (V)	230-240			
Rated frequency (Hz)	50			
Cooling capacity (kW)*	5.0	6.5	5.0	6.5
Heating capacity (kW)*	5.9	7.9	-	-

\*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 (AY-A189J/AY-A249J only)	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

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

### WHEN A POWER FAILURE OCCURS

This air conditioner has a memory function to store settings when a power failure occurs. After power recovery, the unit will automatically re-start in the same settings which were active before the power failure, except for timer settings. If the timers were set before a power failure, they will need to be re-set after power recovery.

### NOTES FOR MODELS AY-A189J/AY-A249J

#### PREHEATING FUNCTION

In the HEAT operation, the indoor fan may not start for two to five minutes after the unit is turned on to prevent cold air from blowing out of the unit.

#### DE-ICING FUNCTION

- When ice forms on the heat exchanger in the outdoor unit during the HEAT operation, the automatic de-icer provides heat for about 5 to 10 minutes to remove the ice. During de-icing, the inside and outside fans stop operating.
- After de-icing is completed, the unit automatically resumes operation in the HEAT mode.

#### HEATING EFFICIENCY

- The unit uses a heat pump to obtain heat from the outside air and releases it into the room. The outside air temperature therefore greatly affects the heating efficiency.
- If the heating efficiency is reduced due to low outside temperatures, use an additional heater.
- It takes time to warm up and heat the entire room because of the forced air circulation system.

## TIPS ON SAVING ENERGY

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

#### SET THE CORRECT TEMPERATURE

- Setting the thermostat 1°C higher than the desired temperature in the COOL mode (and 2°C lower in the HEAT mode with models AY-A189J/AY-A249J) will save approximately 10 percent in power consumption.
- Setting the temperature lower than necessary during cooling operation will result in increased power consumption.

#### BLOCK DIRECT SUNLIGHT AND PREVENT DRAFTS

- Blocking direct sunlight during cooling operation will reduce power consumption.
- Close the windows and doors during cooling operation (and heating operation with models AY-A189J/AY-A249J).

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

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

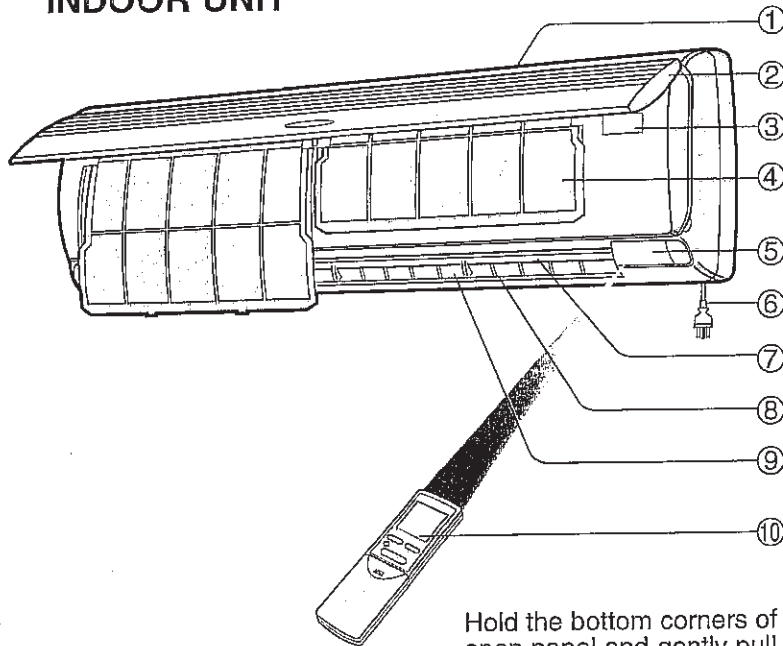
#### MAKE MOST OF THE TIMER OFF FUNCTION

#### DISCONNECT THE POWER CORD WHEN THE UNIT IS NOT USED FOR AN EXTENDED PERIOD OF TIME

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

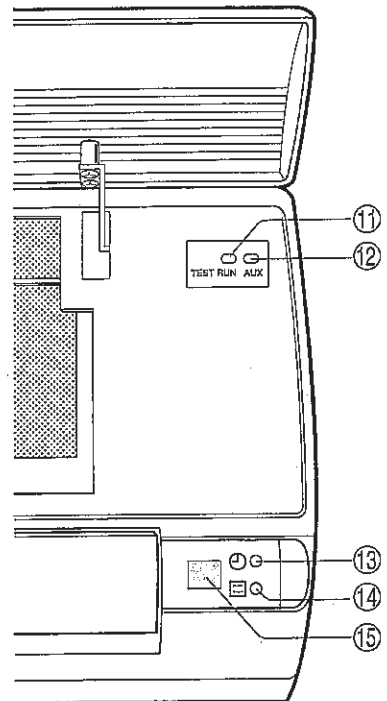
# PART NAMES

## INDOOR UNIT



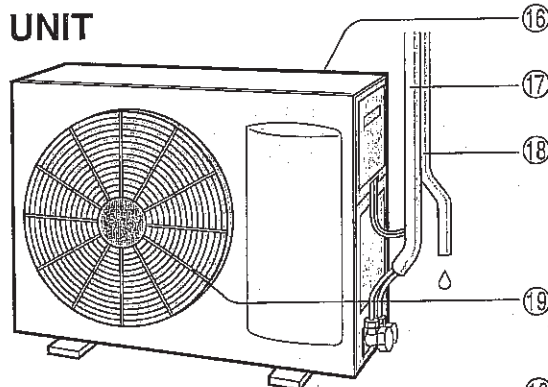
- ① Inlet (Air)
- ② Open Panel
- ③ Operation panel
- ④ Air Filters
- ⑤ Indicator Panel
- ⑥ Power Supply Cord (AY-A189J/AH-A189J only)
- ⑦ Vertical Adjustment Louvre
- ⑧ Horizontal Adjustment Louvres
- ⑨ Outlet (Air)
- ⑩ Remote Control

- ⑪ TEST RUN Button
- ⑫ AUX. Button
- ⑬ TIMER Lamp (Yellow  $\odot$ )
- ⑭ OPERATION Lamp (Red  $\square$ )
- ⑮ RECEIVER Window

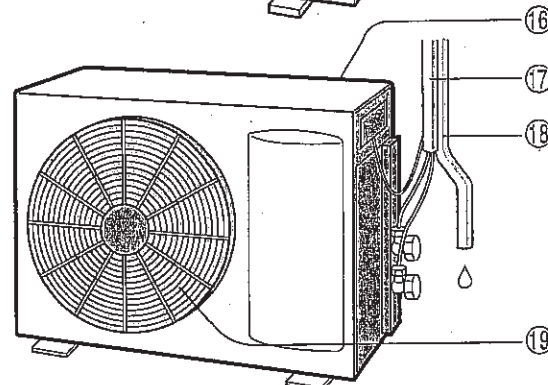


## OUTDOOR UNIT

AE-A189J  
AU-A189J



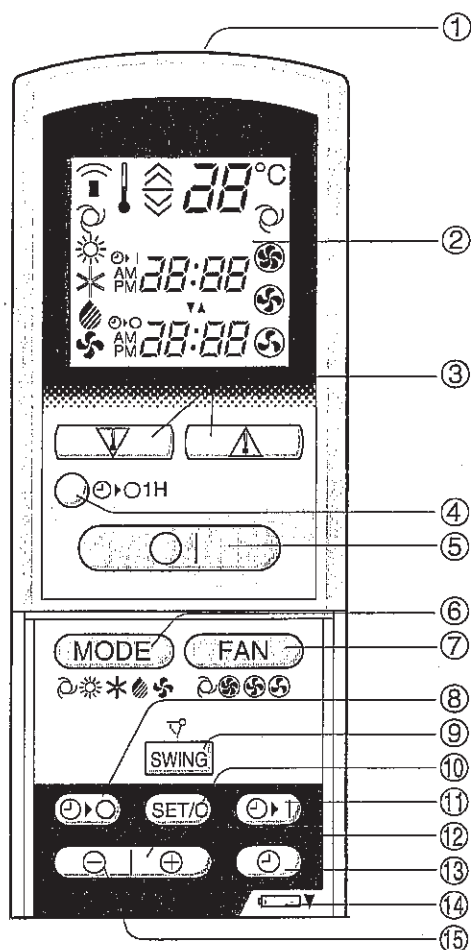
AE-A249J  
AU-A249J




- ⑬ TEST RUN Button
- ⑭ AUX. Button
- ⑮ OPERATION Lamp (Red  $\square$ )
- ⑮ RECEIVER Window
- ⑯ Inlet (Air)
- ⑰ Refrigerant Tube and Interconnecting Cord
- ⑱ Drainage Hose
- ⑲ Outlet (Air)

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










## REMOTE CONTROL

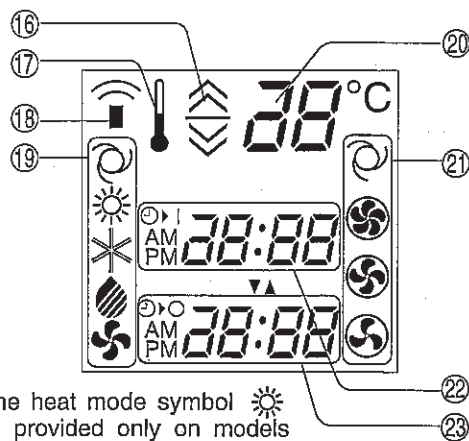



- ① TRANSMITTER
- ② DISPLAY (Liquid Crystal Display)
- ③ THERMO. (Thermostat) Button
- ④ ONE-HOUR OFF TIMER Button
- ⑤ ON/OFF Button
- ⑥ MODE Button
- ⑦ FAN Button
- ⑧ TIMER OFF Button (for setting the timer)
- ⑨ SWING Button
- ⑩ TIMER SET/CANCEL Button
- ⑪ TIMER ON Button (for setting the timer)
- ⑫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

(The heat mode symbol  is provided only on models AY-A189J/AY-A249J)

## L.C.D. REMOTE CONTROL DISPLAY

- ⑯ THERMOSTAT SETTING FOR AUTO AND DRY MODES
- ⑰ TEMPERATURE SYMBOL
- ⑱ TRANSMITTING SYMBOL
- ⑲ MODE SYMBOLS
  -  :AUTO
  -  :DRY
  -  :HEAT  
(only for AY-A189J/AY-A249J)
  -  :FAN ONLY
  -  :COOL
- ⑳ TEMPERATURE INDICATOR
- ㉑ FAN SPEED SYMBOLS
  -  :AUTO
  -  :LOW
  -  :HIGH
  -  :SOFT



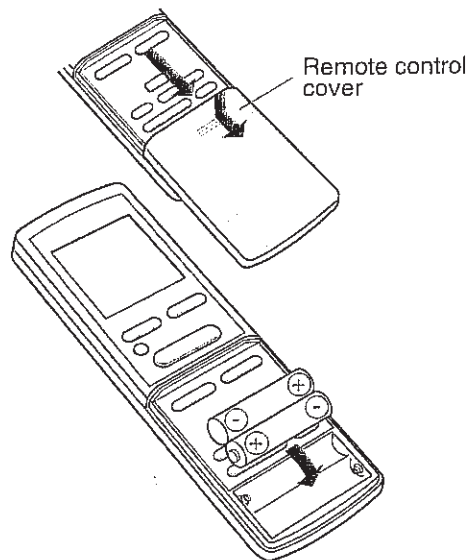
(The heat mode symbol  is provided only on models AY-A189J/AY-A249J)

- ㉒ TIMER ON INDICATOR/CLOCK  
Indicates the on timer preset time or current time.
- ㉓ TIMER OFF INDICATOR  
Indicates the preset time for off timer or one-hour off timer.

## USING THE REMOTE CONTROL

### INSTALLING BATTERIES Use two size-AAA (R03) batteries.

- 1 Remove the remote control cover.
- 2 Insert batteries in the compartment, making sure the  $\oplus$  and  $\ominus$  polarities are correctly aligned.
  - The display indicates "AM 6:00" when batteries are properly installed.
- 3 Reinstall the cover.



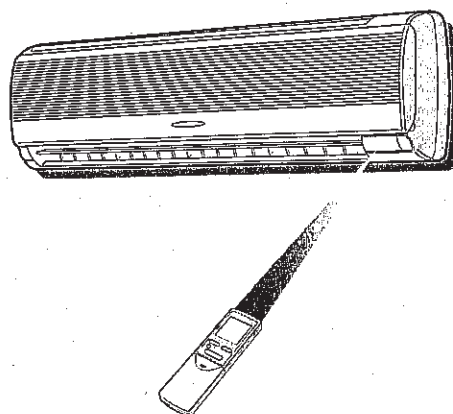
#### NOTES:

- The battery life is approximately one year in normal use.
- When you replace the batteries, always change both batteries, and make sure they are the same type.
- If the remote control does not operate properly after replacing the batteries, take out the batteries and reinstall 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 unit's signal receiver window and press the desired button. The unit generates a beep when it receives the signal.

- Make sure there is no curtain or other object between the remote control and the unit.
- The remote control can send signals from up to 7 meters away.





## CAUTION

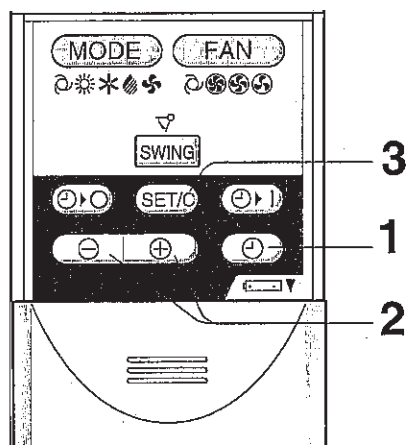
- Do not allow the signal receiver window to receive strong direct sunlight, since it can adversely affect its operation. If the signal receiver window is exposed to direct sunlight, close a curtain to block the light.
- Using a fluorescent lamp with a quick starter in the same room may interfere with transmission of the signal.
- The unit can be affected by signals transmitted 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 CLOCK TIME

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

Example: 5 o'clock in the afternoon

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



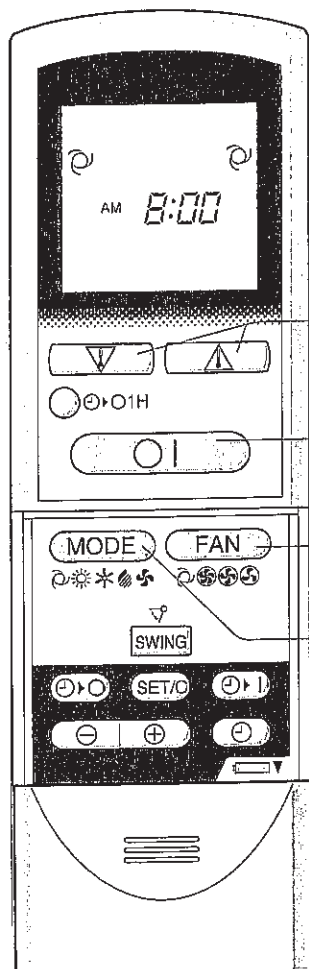
(The heat mode symbol  is provided only on models AY-A189J/AY-A249J)

- 1 To set to the 12-hour mode, press the CLOCK button once in the first step.  
To set to the 24-hour mode, press the CLOCK button twice in the first step.
- 2 Press the TIME ADVANCE or REVERSE button to set the current time.
  - Keep the button pressed to advance or reverse the time display quickly.
- 3 Press the SET/C button.
  - The colon (:) blinks to indicate that the clock is functioning.

### NOTE:

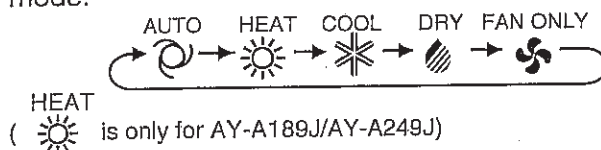
- The current time cannot be set when the timer is operating.
- Please refer to "Timer Operation" on pages 10 and 11.

# BASIC OPERATION



(The heat mode symbol is provided only on models AY-A189J/AY-A249J)

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



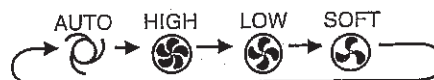
**2** Press the ON/OFF button to start operation.

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

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

- In the AUTO and DRY mode, the indicator bars represent changes in temperature.
- In the COOL (and HEAT for AY-A189J/AY-A249J) mode, the temperature can be set within the range of 18 to 32 °C.
- In the FAN ONLY mode, the temperature setting cannot be made.

**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 cannot be set to AUTO.

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

- The red OPERATION lamp ( ) on the unit will turn off.

## NOTES FOR MODELS AY-A189J/AY-A249J

- In the heating mode, the indoor fan will not rotate until the unit has preheated.
- In the heating mode, the unit will de-ice periodically. During de-icing, a soft "running water" sound may be heard from the indoor unit.



## TIPS ABOUT AUTO MODE

In the AUTO mode, the temperature setting and mode are automatically selected according to the room temperature when the unit is turned on.

### Modes and Temperature Settings for Models AH-A189J/AH-A249J

Room temp. at operation start-up	Automatic Operation	
	Mode	Thermostat Setting
Below 24°C	DRY	Room Temp. at start-up
24°C-26°C	COOL	24°C
26°C-28°C	COOL	25°C
Above 28°C	COOL	26°C

### Modes and Temperature Settings for Models AY-A189J/AY-A249J

Room temp. at operation start-up	Automatic Operation	
	Mode	Thermostat Setting
Below 21°C	HEAT	23°C
21°C-24°C	DRY	Room Temp. at start-up
24°C-26°C	COOL	24°C
26°C-28°C	COOL	25°C
Above 28°C	COOL	26°C

## ADJUSTING THE AIR FLOW DIRECTION

### VERTICAL AIR FLOW

The air flow direction is automatically preset in each mode as follows for optimum comfort:

COOL and DRY mode	Horizontal air flow
FAN ONLY (and HEAT for AY-A189J/AY-A249J) mode	Diagonal air flow

### HOW TO ADJUST THE AIR FLOW DIRECTION

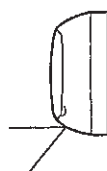
Press the SWING button on the remote control once.

- The vertical adjustment louvre will change its angle continuously.

Press the SWING button again when the vertical adjustment louvre is at the desired position. The louvre will stop moving when the button is pressed within the range shown in the diagram.

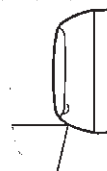
#### Adjustment range

COOL and DRY mode



The adjustment range is narrow in order to prevent condensation from dripping.

FAN ONLY (and HEAT for AY-A189J/AY-A249J) mode



The range is wide so the air flow can be directed toward the floor.



### CAUTION

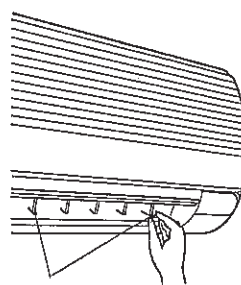
Never attempt to adjust the vertical adjustment louvre manually.

- Manual adjustment of the vertical adjustment louvre can cause the unit to malfunction when the remote control is used for the adjustment.
- When the vertical adjustment louvre is positioned at the lowest position in the COOL or DRY mode for an extended period of time, condensation may result.

## ADJUSTING THE AIR FLOW DIRECTION

### HORIZONTAL AIR FLOW

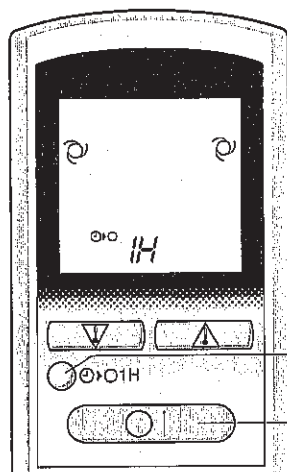
Hold the horizontal adjustment louvre levers as shown in the diagram and adjust the air flow direction. There are three louvre levers.




Louvre levers

### ONE-HOUR OFF TIMER

When the ONE-HOUR OFF TIMER is set, the unit will stop operating after one hour.



- 1** Press the ONE-HOUR OFF TIMER button.
  - The remote control displays "1 H".
  - The unit will stop operating after one hour.
- 2** To turn off the unit within an hour before the ONE-HOUR OFF-TIMER activates, press the ON/OFF button.
  - The OPERATION lamp (  ) on the unit will turn off.

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

#### NOTE:

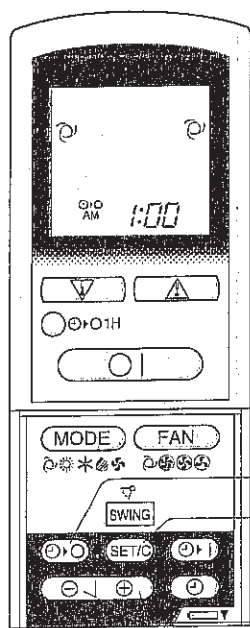
- The ONE-HOUR OFF-TIMER operation has priority over TIMER ON and TIMER OFF operations.

# TIMER OPERATION

## NOTE:

Before setting the timer, make sure the clock is properly set with the current time.

## 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 signal receiver window on the unit and press the TIMER SET (SET/C) button.
  - The yellow TIMER lamp ( ) on the unit will light.
  - The unit will generate a beep when it receives the signal.

(The heat mode symbol is provided only on models AY-A189J/AY-A249J)

## TIPS ABOUT TIMER OFF OPERATION

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

### COOL/DRY MODE:

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

**HEAT MODE:** (only for models AY-A189J/AY-A249J)

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

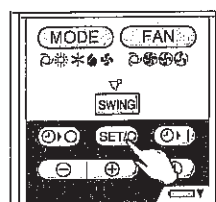
### NOTES:

- The Auto Sleep function will not activate during the FAN ONLY mode.
- The temperature setting cannot be adjusted during the FAN ONLY mode.

## TO CANCEL TIMER MODE

Press the TIMER CANCEL (SET/C) button.

- The yellow TIMER lamp ( ) on the unit will turn off.
- The current clock time will be displayed on the remote control.



(The heat mode symbol is provided only on models AY-A189J/AY-A249J)

### NOTE:

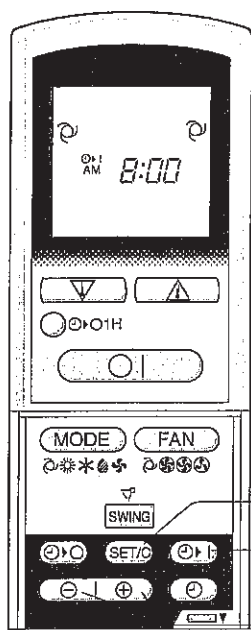
- If both TIMER ON and TIMER OFF are set, the TIMER CANCEL button cancels both settings.


## TO CHANGE TIMER SETTING



Cancel the TIMER setting first, then set it again.

# TIMER OPERATION

## TIMER ON

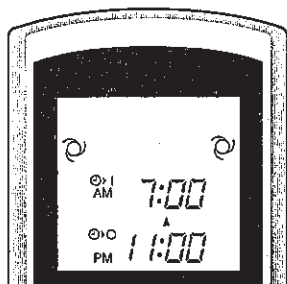


(The heat mode symbol  is provided only on models AY-A189J/AY-A249J)

- 1 Press the TIMER ON (  ) button.
- 2 The TIMER ON indicator will blink. Press the TIME ADVANCE or REVERSE button to set the desired time. (The time can be set in 10-minute increments.)
- 3 Point the remote control at the signal receiver window on the unit and press the TIMER SET (SET/C) button.
  - The yellow TIMER lamp (  ) on the unit will light.
  - The unit will generate a beep when it receives the signal.
- 4 Select the operation condition.
  - The unit will turn on prior to the set 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 use the ON and OFF timers in combination.



### Example:

To stop operation at 11:00 p.m. and resume operation (with the same mode and temperature settings) to bring the room temperature to the desired level 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 arrow (▼ or ▲) between the TIMER ON indicator and the TIMER OFF indicator shows which timer will activate first.

### NOTES:

- You cannot programme the TIMER ON and TIMER OFF to operate the unit at different temperatures or other settings.
- Either timer can be programmed to activate prior 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.

## 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 unit will light up and the unit will start operating in the AUTO mode.
- The fan speed and temperature setting are set to AUTO.

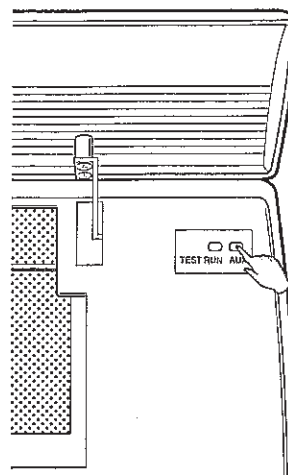
### TO TURN OFF

Press the AUX. button on the operation panel again.

- The red OPERATION lamp (  ) on the unit will turn off.

#### NOTE:

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




## TEST RUN MODE

Use the test run mode only for a test operation. Do not use the test run mode for other than operation testing since the thermostat control is inactive in this mode and the unit remains in continuous operation.

Make sure the unit is turned off before conducting a test run.


### TO TURN ON

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

- The red OPERATION lamp (  ) on the unit will blink and the unit will start operating in the COOL mode.
- The temperature setting is not set. (The compressor runs continuously.)

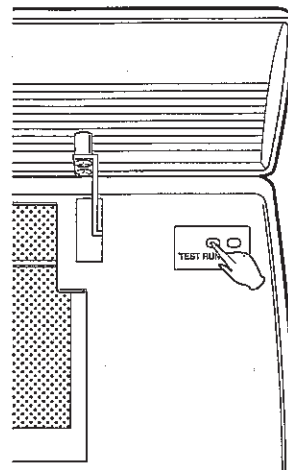
### TO TURN OFF

Press the AUX. button on the operation panel again.

- The red OPERATION lamp (  ) on the unit will turn off.

#### NOTE:

- To conduct a heat mode test run, press the MODE button on the remote controller to set the unit in the HEAT mode.  
(Only for models AY-A189J/AY-A249J)

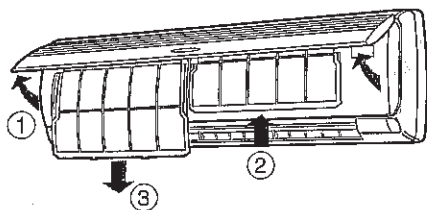


## MAINTENANCE

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

### CLEANING THE FILTERS

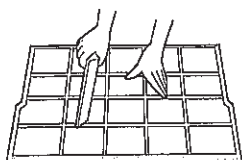
The air filters should be cleaned every two weeks.



#### 1 TURN OFF THE UNIT

#### 2 REMOVE THE FILTERS

- 1 Open the front panel.
- 2 Push the air filters up slightly to unlock them.
- 3 Pull the air filters down to remove them.

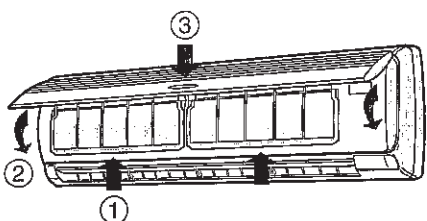


#### 3 CLEAN THE FILTERS

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

#### 4 REINSTALL THE FILTERS

- 1 Reinstall the filters in the original positions.
- 2 Close the front panel.
- 3 Push the centre part of the 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. Water can cause electrical shock or equipment damage.
- Do not use hot water, thinner, abrasive powders or strong solvents.

#### MAINTENANCE AFTER AIR CONDITIONER SEASON

- 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.

#### MAINTENANCE BEFORE AIR CONDITIONER SEASON

- 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 conditions do not denote equipment malfunctions

<p><b>UNIT DOES NOT OPERATE</b></p> <p>The unit will not operate if it is turned on immediately after it is turned off. The unit will not operate immediately after the mode is changed. This is to protect the internal mechanisms. Wait 3 minutes before operating the unit.</p>	<p><b>SWISHING NOISE</b></p> <p>The soft, swishing noise is the sound of the refrigerant flowing inside the unit.</p>
<p><b>UNIT DOES NOT SEND OUT WARM AIR</b> (Models AY-A189J/AY-A249J)</p> <p>The unit is preheating or de-icing.</p>	<p><b>WATER VAPOUR</b></p> <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 between the room air temperature and the air discharged by the unit.</li> <li>• In the HEAT operation, water vapour may flow out of the outdoor unit during de-icing. (Only in models AY-A189J/AY-A249J)</li> </ul>
<p><b>ODORS</b></p> <p>Carpet and furniture odors may enter the unit and be sent out from the unit.</p>	
<p><b>CRACKING NOISE</b></p> <p>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.</p>	

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

<p><b>IF THE UNIT FAILS TO OPERATE</b></p>
<p>Check to see if the circuit breaker has tripped or the fuse has blown.</p>

<p><b>IF THE UNIT FAILS TO COOL (OR HEAT) THE ROOM EFFECTIVELY</b></p>		
<p>Check the filters. If dirty, clean them.</p>	<p>Check the outdoor unit to make sure nothing is blocking the air inlet or outlet.</p>	<p>Check the thermostat is for proper setting.</p>
<p>Make sure windows and doors are closed tightly.</p>	<p>A large number of people in the room can prevent the unit from achieving the desired temperature.</p>	<p>Check whether any heat-generating appliances are operating in the room.</p>

## 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 signal receiver window.

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

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