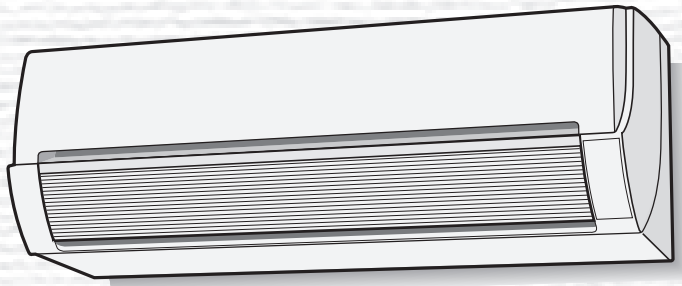




# SHARP



## SPLIT TYPE ROOM AIR CONDITIONER OPERATION MANUAL



\* Plasmacluster is a trademark of SHARP Corporation.

*Refrigerant*  
**R410A**

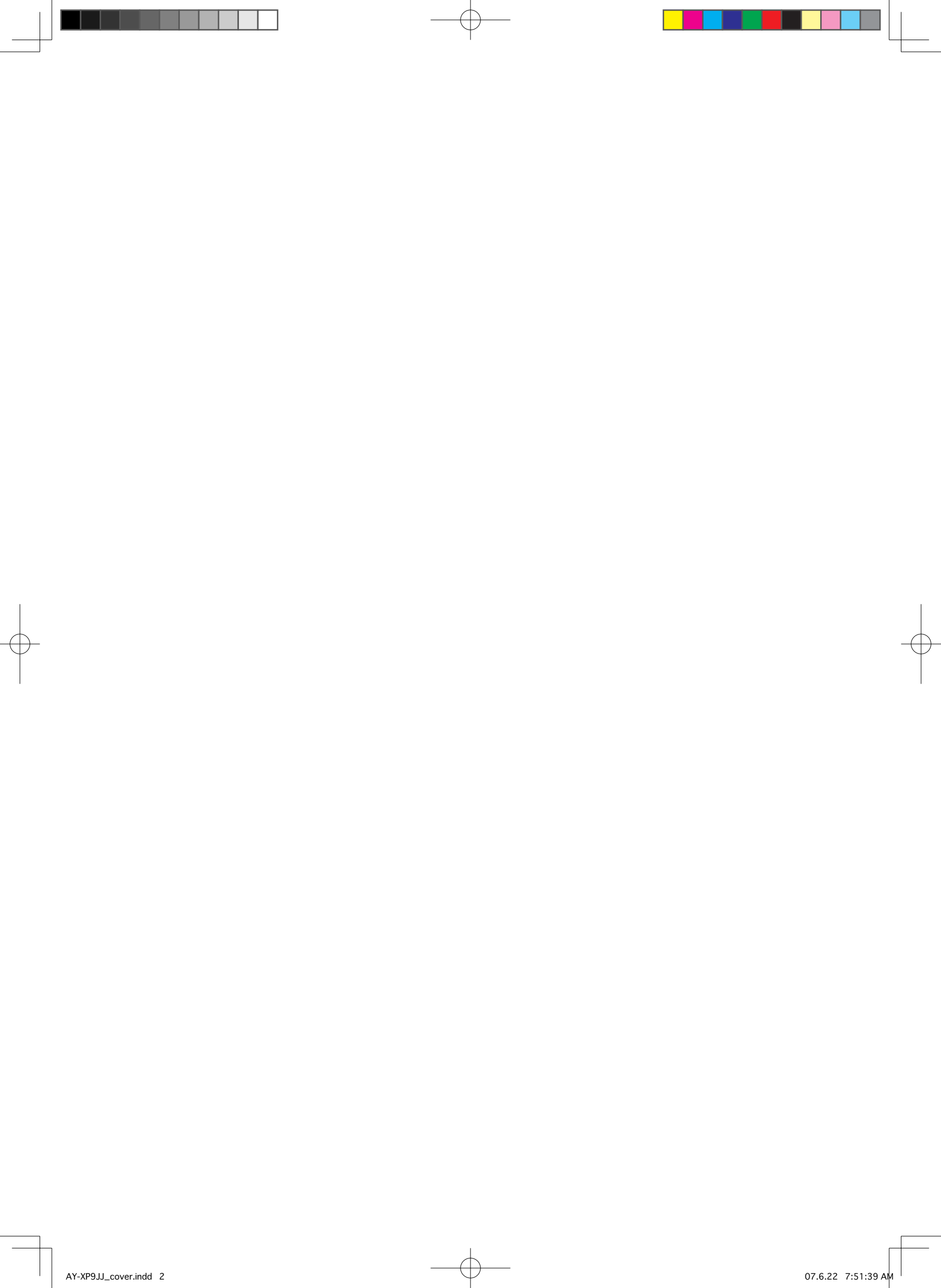
**INDOOR UNIT**

**AY-XP9JJ**  
**AY-XP12JJ**

**OUTDOOR UNIT**

**AE-X9JJ**  
**AE-X12JJ**





Thank you for purchasing a SHARP air conditioner. Please read this manual carefully before operating the product.

## CONTENTS

• IMPORTANT SAFETY INSTRUCTIONS.....	1
• SPECIFICATIONS.....	2
• PART NAMES.....	2
• USING THE REMOTE CONTROL .....	4
• SETTING AIR PURIFYING FILTER .....	5
• TIPS ON SAVING ENERGY.....	5
• AUXILIARY MODE .....	5
• BASIC OPERATION.....	6
• ADJUSTING THE AIR FLOW DIRECTION.....	7
• PROGRESSIVE AIRFLOW .....	8
• POWERFUL JET OPERATION .....	8
• PLASMACLUSTER OPERATION .....	9
• SELF CLEAN OPERATION.....	9
• ONE-HOUR OFF TIMER.....	10
• TIMER OPERATION .....	10
• MAINTENANCE .....	12
• ADDITIONAL NOTES ON OPERATION .....	13
• BEFORE CALLING FOR SERVICE .....	13

## IMPORTANT SAFETY INSTRUCTIONS

### WARNINGS FOR USE

- 1 This model should be installed with a fixed power cord to the meter box.
- 2 Be careful not to expose your body to the outlet air for prolonged periods. It may affect your physical condition.
- 3 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.
- 4 Never insert objects into the unit. Inserting objects can result in injury due to the high speed rotation of the internal fans.
- 5 If anything abnormal is noticed with the air conditioner (eg burning smell), stop the operation immediately and turn the circuit breaker off.
- 6 This air conditioner should be installed by a licensed air conditioning contractor in accordance with AS/NZS 3000 and your electricity suppliers service rules.
- 7 There are local council rules regarding maximum allowable noise levels emitted by air conditioners, your licensed air conditioning contractor will advise you on the correct location of your outdoor unit.
- 8 Use only the manufacturer-specified power cord for replacement. Replacement should be performed by a service centre approved by SHARP.

## IMPORTANT SAFETY INSTRUCTIONS

### WARNINGS FOR INSTALLATION/REMOVAL/REPAIR

For your safety, ensure that your new air conditioner is installed by a licensed air conditioning contractor in accordance with the AUSTRALIAN/NEW ZEALAND WIRING RULES.

- Do not attempt to install/remove/repair the unit by yourself. Incorrect work could cause electric shock, water leak, fire etc. Consult a licensed air conditioning contractor for the installation/removal/repair of the unit.

### CAUTIONS FOR USE

- 1 If a gas appliance is used in the same room as the air conditioner, ventilate the room periodically to prevent oxygen depletion.
- 2 For safety, do not touch the unit with wet hands, it may cause an electric shock.
- 3 For safety, turn the circuit breaker off when not using the unit for an extended period of time.
- 4 For safety, do not place anything on top of the outdoor unit or step on it.
- 5 This unit is designed for residential use. Do not use for other applications such as in a kennel or greenhouse to raise animals or grow plants.
- 6 Do not block the air inlets or outlets of the unit.
- 7 For safety, be sure to turn the unit off at the circuit breaker before performing any maintenance or cleaning.
- 8 Do not pour water directly on the unit. Water can cause electrical shock or equipment failure.
- 9 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.

### CAUTIONS FOR LOCATION/INSTALLATION

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

- The unit is designed to operate on 230-240 VAC, 50Hz
- Do not install the unit where flammable gas may leak. It may cause a fire.

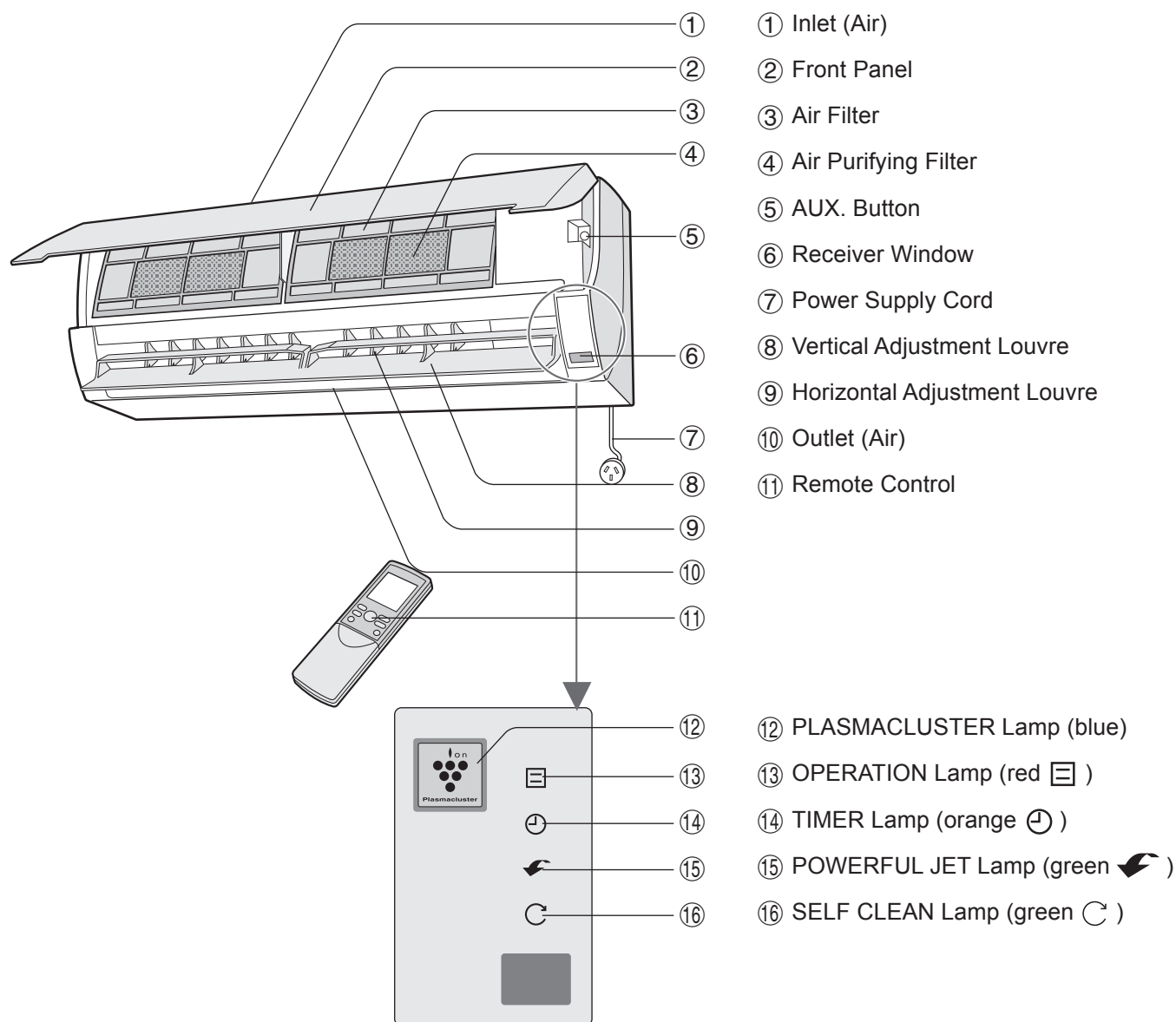
## SPECIFICATIONS

Indoor unit	AY-XP9JJ	AY-XP12JJ
Outdoor unit	AE-XP9JJ	AE-XP12JJ
Rated A.C. voltage (V)	230-240	230-240
Rated frequency (Hz)	50	50
Cooling capacity (kW)*	2.5	3.5
Heating capacity (kW)*	3.2	4.0

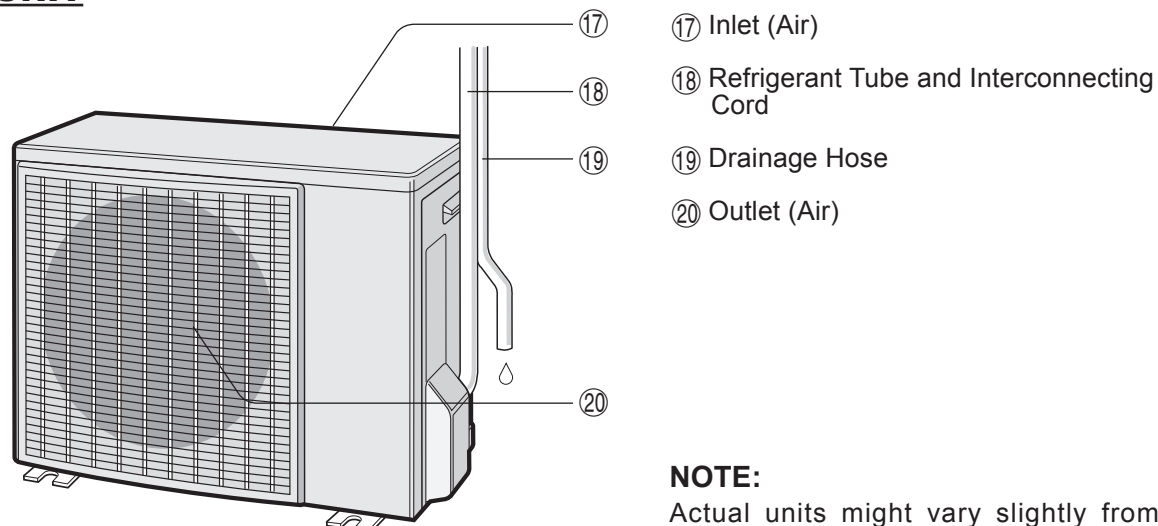
\*When tested in accordance with AS/NZS3823.1.1.

## PART NAMES

### INDOOR UNIT



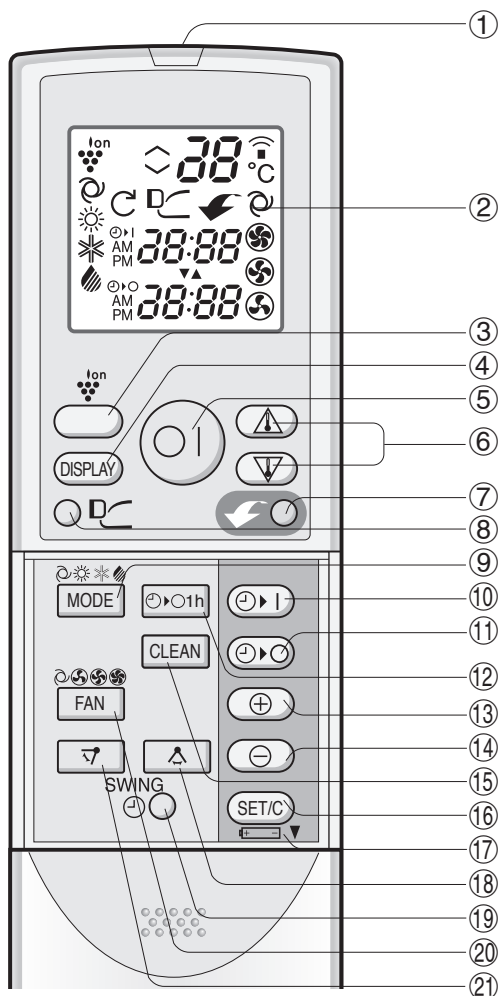
### OUTDOOR UNIT





#### NOTE:

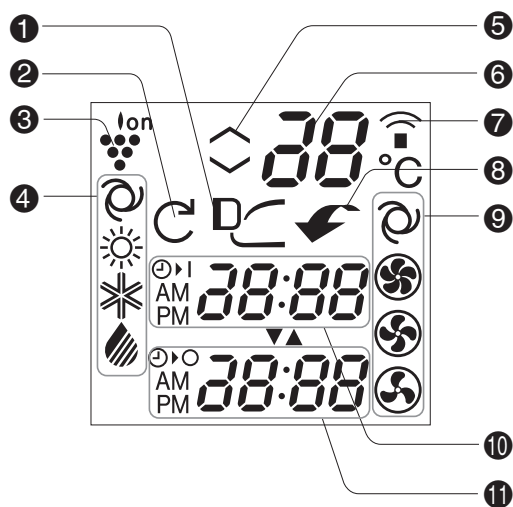
Actual units might vary slightly from those shown above.

## REMOTE CONTROL











- ① TRANSMITTER
- ② DISPLAY (Liquid Crystal Display)
- ③ PLASMACLUSTER Button
- ④ DISPLAY Button
- ⑤ ON/OFF Button
- ⑥ THERMOSTAT Button
- ⑦ POWERFUL JET Button
- ⑧ PROGRESSIVE AIRFLOW Button
- ⑨ MODE Button
- ⑩ TIMER ON Button (for setting the timer)
- ⑪ TIMER OFF Button (for setting the timer)
- ⑫ ONE-HOUR OFF TIMER Button
- ⑬ TIME ADVANCE Button
- ⑭ TIME REVERSE Button
- ⑮ SELF CLEAN Button
- ⑯ TIMER SET/CANCEL Button
- ⑰ Indicates battery compartment is below this mark
- ⑱ SWING Button (  : horizontal direction)
- ⑲ CLOCK Button
- ⑳ FAN Button
- ㉑ SWING Button (  : vertical direction)

## L.C.D. REMOTE CONTROL DISPLAY



- ① PROGRESSIVE AIRFLOW Symbol
- ② SELF CLEAN Symbol
- ③ PLASMACLUSTER Symbol
- ④ MODE Symbols
 

 : AUTO	 : COOL
 : HEAT	 : DRY
- ⑤ Thermostat setting for AUTO and DRY modes
- ⑥ TEMPERATURE Indicator
- ⑦ TRANSMITTING Symbol
- ⑧ POWERFUL JET Symbol
- ⑨ FAN SPEED Symbols
 

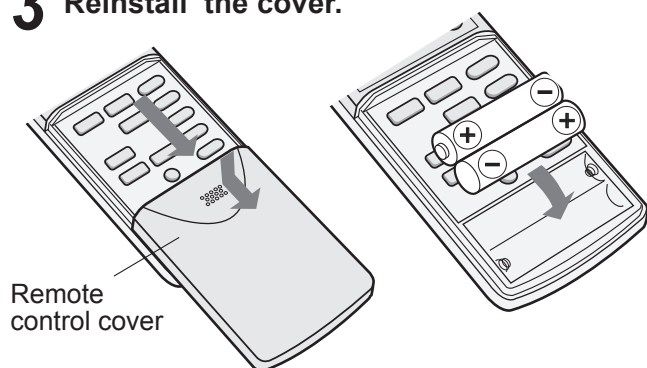
 : AUTO	 : LOW
 : HIGH	 : SOFT
- ⑩ TIMER ON Indicator/CLOCK  
Indicates the on timer preset time or current time.
- ⑪ TIMER OFF Indicator  
Indicates the preset time for off timer or one-hour off timer.

## USING THE REMOTE CONTROL

### LOADING BATTERIES

Use two size-AAA (R03) batteries.

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



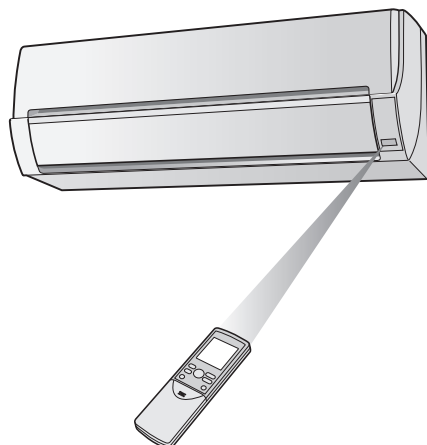
#### NOTE:

- 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 metres 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.

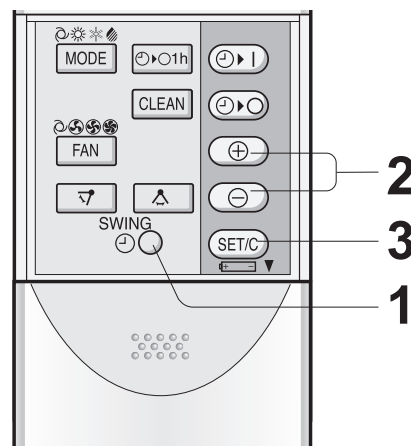
### SET CURRENT CLOCK TIME

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

- 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:

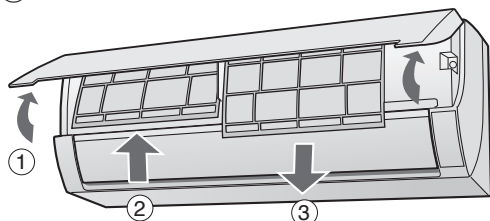
- The current time cannot be set when the timer is operating.

## SETTING AIR PURIFYING FILTER

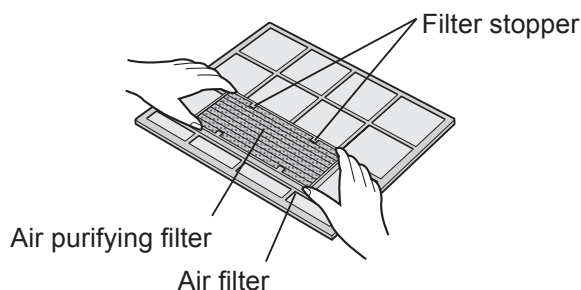
The air purifying filters are packed as accessories of this unit. During operation of the air conditioner, the filters remove dust and tobacco smoke from the air and discharge clean air.

### 1 Take out the air 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.

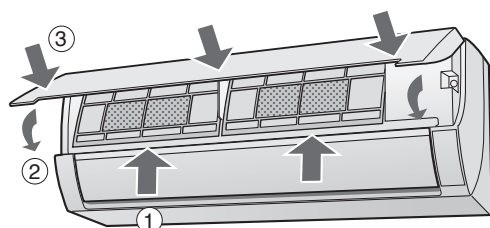


### 2 Set the air purifying filter under the filter stoppers located on the air filter.



### 3 Reinstall the air filters.

- ① Reinstall the air filters in the original positions.
- ② Close the front panel.
- ③ Push the arrow-marked areas of the panel firmly to lock it in place.



#### Precautions:

- The filters are sealed in a plastic bag to keep their dust collection effect. Do not open the bag until using the filters. (Otherwise the filter life may be reduced.)
- Do not expose the filters to direct sunlight. (Otherwise they may deteriorate.)

## 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 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 and heating operations.

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

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

### MAKE THE MOST OF THE TIMER OFF FUNCTION

**DISCONNECT THE POWER CORD, OR TURN OFF AT THE CIRCUIT BREAKER, 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.

## AUXILIARY MODE

Use this mode when the remote control is not available.


### TO TURN ON

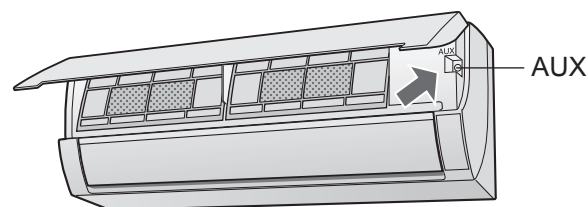
**Lift the open panel of the indoor unit and press the AUX. button.**

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

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

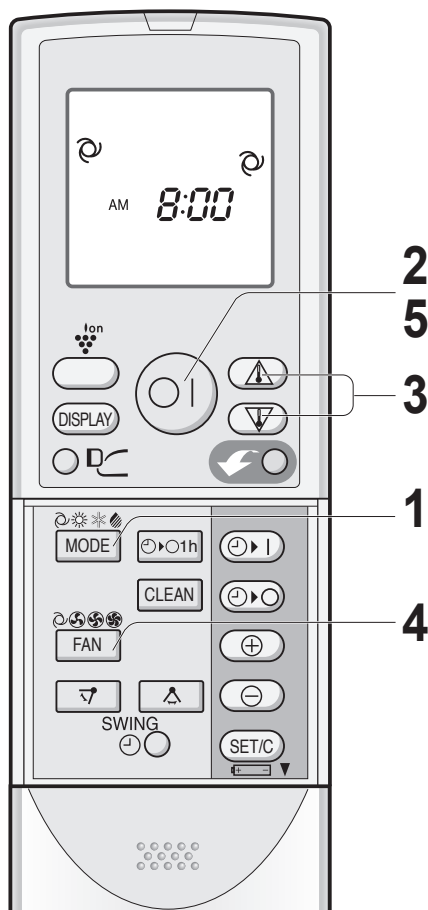


#### NOTE:

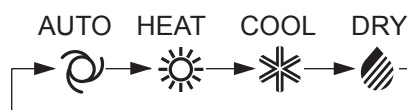
- If the AUX. button is pressed during normal operation, the unit will turn off.




# 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 unit will light.

- 3 Press the **THERMOSTAT** button to set the desired temperature.

## AUTO/DRY MODE

- The temperature can be changed in 1°C increments within the range of 2°C higher to 2°C lower from the temperature automatically determined by the air conditioner.

(Example: 1°C higher)



(Example: 2°C lower)



## TIPS ABOUT AUTO MODE

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

### Modes and Temperature Settings

		outdoor temp. (°C)			
		0	10	18	28 34
indoor temp. (°C)	29	Heat (24°C)	Heat (23°C)	Cool (24°C)	Cool (25°C) Cool (26°C)
	21			Dry (Room Temp. -2°C)	Heat (22°C)

The figures in ( ) are temperature settings

During operation, if the outdoor temperature changes, the temperature settings will automatically slide as shown in the chart.

### MODE CHANGEOVER

During seasons when you need COOLING at daytime and HEATING at night, or if the room temperature should become extremely higher than the temperature setting, due to supplementary heating equipment, the mode will automatically switch between HEAT and COOL mode to keep the room temperature comfortable.

## COOL/HEAT MODE


- The temperature can be set within the range of 18 to 32°C.

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



- In the DRY mode, the fan speed is preset to AUTO and cannot be changed.

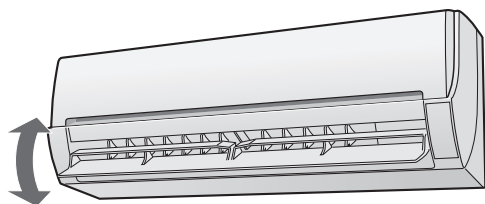
- 5 To turn off the unit, press the **ON/OFF** button again.



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



# ADJUSTING THE AIR FLOW DIRECTION

## VERTICAL AIR FLOW DIRECTION

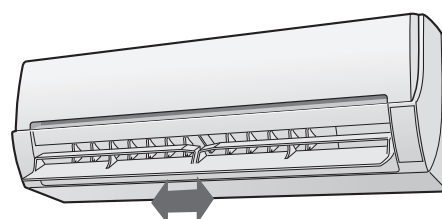




- 1** Press the **SWING** button(  ) on the remote control once.
  - The vertical adjustment louvre will swing continuously.
- 2** Press the **SWING** button(  ) again when the vertical adjustment louvre is at the desired position.
  - The louvre will stop moving within the range shown in the diagram.

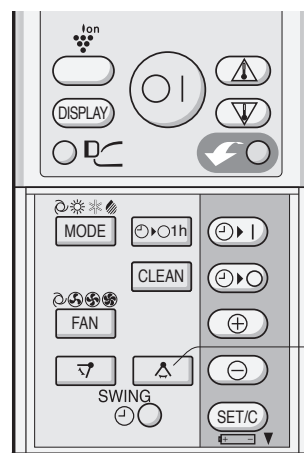


**1**  
**2**

## HORIZONTAL AIR FLOW DIRECTION



- 1** Press the **SWING** button(  ) on the remote control once.
  - The horizontal adjustment louvres will swing continuously.
- 2** Press the **SWING** button(  ) again when the horizontal adjustment louvres are at the desired position.

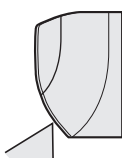
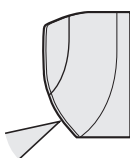


**1**  
**2**

### Adjustment range

COOL and DRY modes

HEAT mode



### NOTE:

- The adjusted position will be memorised and will be automatically set to the same position when operated the next time.
- The adjustment range is narrower than the SWING range in order to prevent condensation from dripping.


### CAUTION:

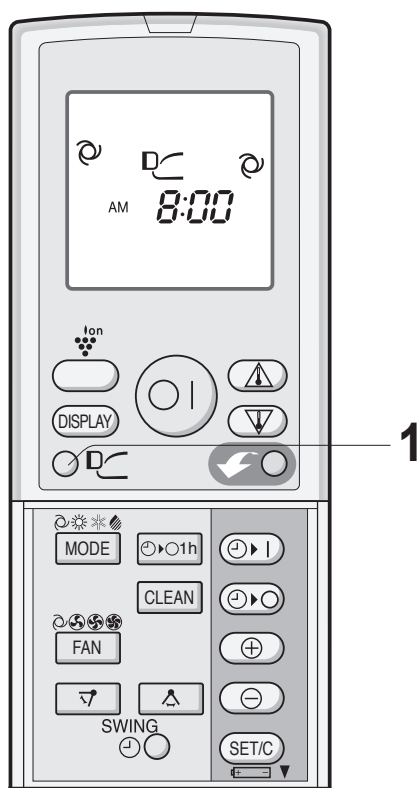
- Never attempt to adjust the louvres manually.
- Manual adjustment of the louvres can cause the unit to malfunction.
- When the vertical adjustment louvre is positioned at the lowest position in the COOL or DRY mode for an extended period of time, condensation may result.

## PROGRESSIVE AIRFLOW

Press the **PROGRESSIVE AIRFLOW** button during cooling or dry operation when you do not want to feel cold air. The vertical adjustment louvre is set obliquely upward to deliver cool air to the ceiling. Press the button during heating operation. The vertical adjustment louvre is set downward to deliver the warm air down to the floor.

### 1 During operation, press the **PROGRESSIVE AIRFLOW** button.

- The remote control will display “”.



### TO CANCEL

Press the **PROGRESSIVE AIRFLOW** button again.



#### NOTE:

- The **PROGRESSIVE AIRFLOW** setting is cancelled when you press **POWERFUL JET** button while **PROGRESSIVE AIRFLOW** is set.
- If you want **PROGRESSIVE AIRFLOW** operation in **POWERFUL JET** mode, press **PROGRESSIVE AIRFLOW** button during **POWERFUL JET** operation.

## POWERFUL JET OPERATION

In this operation, the air conditioner works at the maximum power and optimum louvre direction to make the room cool or warm rapidly.


### 1 During operation, press the **POWERFUL JET** button.

- The remote control will display “”.
- The temperature display will go off.
- The green **POWERFUL JET** lamp (  ) on the unit will light up.



### TO CANCEL

Press the **POWERFUL JET** button again.

- The **POWERFUL JET** operation will also be cancelled when the operation mode is changed, or when the unit is turned off.
- The green **POWERFUL JET** lamp (  ) on the unit will turn off.


#### NOTE:

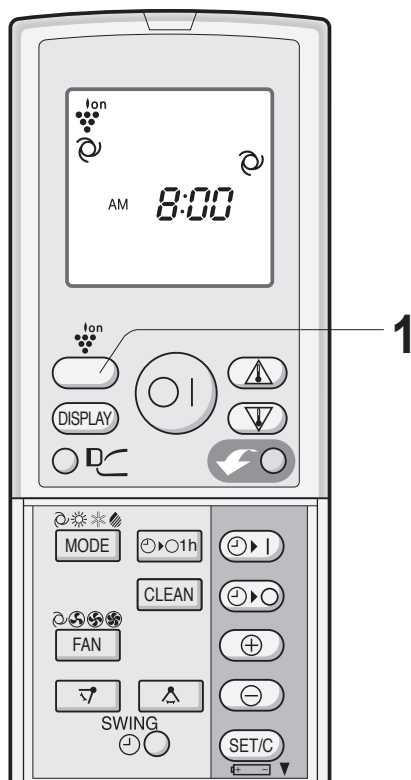
- The air conditioner will operate at “Extra HIGH” fan speed for 5 minutes, and then shift to “HIGH” fan speed. The vertical adjustment louvre will be set automatically to a diagonally lower direction, though it can be changed if necessary.
- You can not set the temperature or fan speed during the **POWERFUL JET** operation.
- To turn off the **POWERFUL JET** lamp, press the **DISPLAY** button.

## PLASMACLUSTER OPERATION

The Plasmacluster Ion generator inside the air conditioner will release positive and negative plasmacluster ions into the room. Approximately the same number of positive and negative ions released into the air will help to reduce some airborne mold.

### 1 During operation, press the PLASMACLUSTER button.

- The remote control will display “”.
- The blue PLASMACLUSTER lamp on the unit will light up.



### TO CANCEL

Press the PLASMACLUSTER button again.

- The PLASMACLUSTER lamp on the unit will turn off.

### NOTE:




- Use of the PLASMACLUSTER operation will be memorised, and it will be activated the next time you turn on the air conditioner.
- To turn off the PLASMACLUSTER lamp, press the DISPLAY button.
- To perform the PLASMACLUSTER operation without accompanying heat, cool or dry mode, press the PLASMACLUSTER button while the unit is not operating. The mode symbol of the remote control will go off and the fan speed can not be set to AUTO.

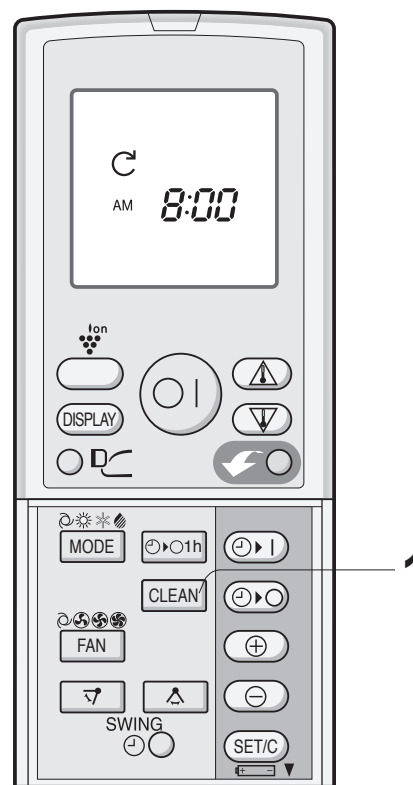
## SELF CLEAN OPERATION

SELF CLEAN operation using plasmacluster ions helps to reduce the growth of mold fungus and to dry the inside of the air conditioner unit. It is recommended to utilise the operation at seasonal change over.

Note, Mold fungus already in existence can not be eliminated by this operation.

### 1 Press the SELF CLEAN button when the unit is not operating.



- The remote control displays “”.
- The red OPERATION lamp (  ), the green SELF CLEAN lamp (  ) and the blue PLASMACLUSTER lamp on the unit will light up.
- The unit will stop operation after forty minutes.



### TO CANCEL

Press the SELF CLEAN button.

Alternatively, turn the unit off by pressing the ON/OFF button.

- The red OPERATION lamp (  ), the green SELF CLEAN lamp (  ) and the blue PLASMACLUSTER lamp on the unit will turn off.

### NOTE:

- You cannot set the temperature, fan speed, air flow direction or timer setting during the SELF CLEAN operation.

## ONE-HOUR OFF TIMER

When the ONE-HOUR OFF TIMER is set, the unit will automatically turn off after one hour.

### 1 Press the ONE-HOUR OFF TIMER button.

- The remote control displays “ 1h”.
- The orange TIMER lamp ( ) on the unit will light up.
- The unit will stop operating after one hour.



### TO CANCEL

Press the **TIMER CANCEL (SET/C)** button.

- The orange TIMER lamp ( ) on the unit will turn off.

Alternatively, turn the unit off by pressing the **ON/OFF** button.

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

### NOTE:

- The ONE-HOUR OFF TIMER operation has priority over TIMER ON and TIMER OFF operations.
- If the ONE-HOUR OFF TIMER is set while the unit is not operating, the unit will operate for an hour at the formerly set condition.
- If you wish to operate the unit for another hour before the ONE-HOUR OFF TIMER is activated, press the ONE-HOUR OFF TIMER button again during operation.
- If TIMER ON and/or TIMER OFF are set, TIMER CANCEL button cancels every setting.

## TIMER OPERATION

### TIMER OFF

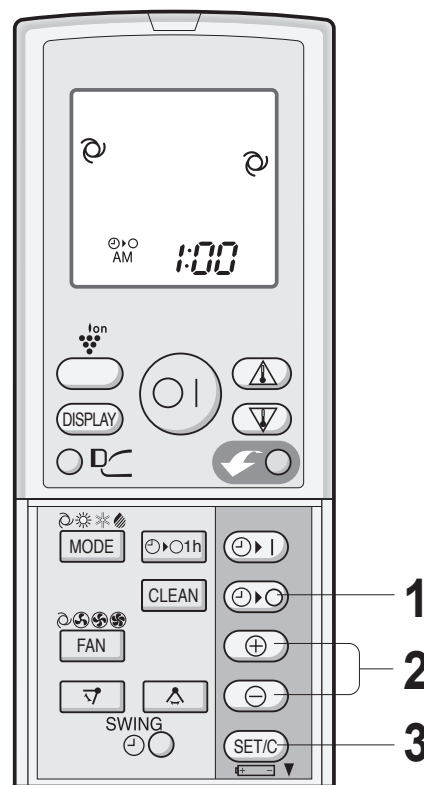
#### 1 Press the TIMER OFF ( ) button.

#### 2 The TIMER OFF 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 receiver window on the unit and press the TIMER SET (SET/C) button.

- The orange TIMER lamp ( ) on the unit will light.
- The unit will generate a beep when it receives the signal.



### 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) The Auto Sleep function will not activate during the AUTO mode.

#### COOL/DRY MODE:

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



#### HEAT MODE:

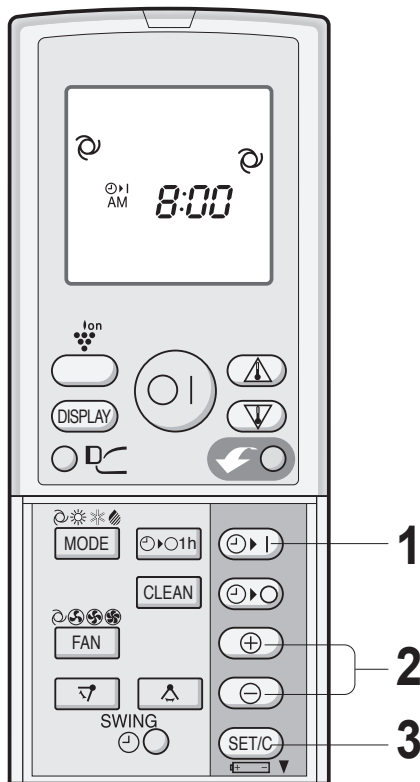
- One hour after the timer operation begins, the temperature setting drops 3°C lower than the original temperature setting.



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

## **TIMER ON**

- 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 receiver window on the unit and press the **TIMER SET (SET/C)** button.
  - The orange **TIMER** lamp (  ) on the unit will light.
  - The unit will generate a beep when it receives the signal.
- 4** Select the operation condition.




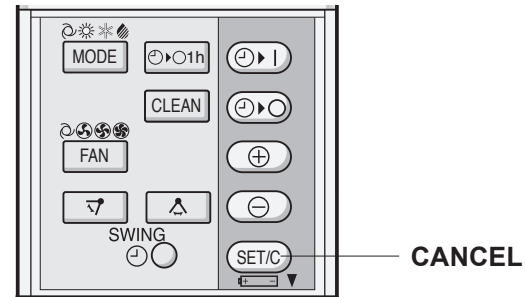
### **NOTE:**

- 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)

## **TO CANCEL TIMER MODE**

Press the **TIMER CANCEL (SET/C)** button.

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



### **NOTE:**

- If any **TIMER ON**, **TIMER OFF** and **ONE-HOUR OFF TIMER** are set, the **TIMER CANCEL** button cancels all settings.

## **TO CHANGE TIME SETTING**



Cancel the **TIMER** setting first, then set it again.

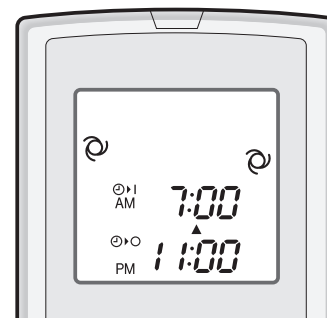
## **COMBINED USE OF ON AND OFF TIMERS**

You can use the **ON** and **OFF** timers in combination.

### **Example:**

To stop operation at 11:00 p.m. and resume operation 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.



### **NOTE:**

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

## MAINTENANCE

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

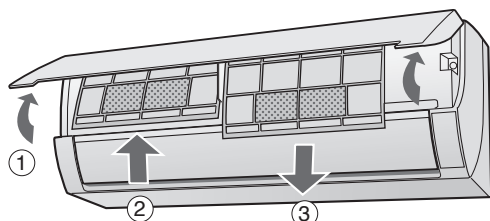
### CLEANING THE FILTERS

The air filters should be cleaned every two weeks.

#### **1** Turn off the unit.

#### **2** Remove the filters.

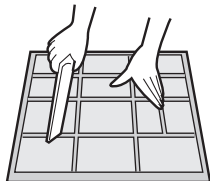
- ① Lift the front panel.
- ② Push the air filters up slightly to unlock them.
- ③ Pull the air filters down to remove them.



#### **3** Take off the air purifying filters from the air filters.

#### **4** Clean the filters.

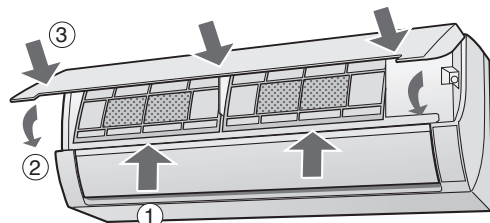
Use a vacuum cleaner to remove dust. If the filters are dirty, wash them with warm water and a mild detergent. Dry filters in the shade before reinstalling.



#### **5** Reinstall the air purifying filters.

#### **6** Reinstall the filters.

- ① Reinstall the filters in the original positions.
- ② Close the front panel.
- ③ Push the arrow-marked areas 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. It 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 SELF CLEAN mode 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.

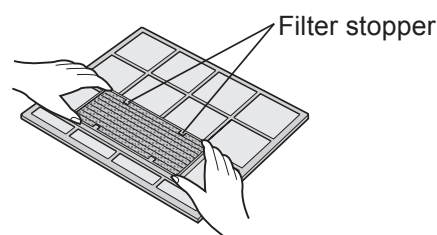
### CHANGING THE AIR PURIFYING FILTER

The filters should be changed every 3 ~ 6 months

#### **1** Remove the air filters.

#### **2** Change the air purifying filters.

- ① Take off the old air purifying filters from the air filters.
- ② Set the new air purifying filters, under the filter stoppers located on the air filters.



#### **3** Reinstall the air filters.

#### **NOTE:**

- Dirty air purifying filters are not washable for reuse. New filters are available at your nearest dealer.

Replacement filter: Type AZ-F900F

#### **Disposal of Filters**

Please dispose of replaced filters according to the local disposal laws and regulations.

AIR PURIFYING filter materials

Filter: Polypropylene

Frame: Polyester



## ADDITIONAL NOTES ON OPERATION

### OPERATING TEMPERATURE RANGE

		INDOOR TEMP.	OUTDOOR TEMP.
COOLING	upper limit	32°C	46°C
	lower limit	21°C	-10°C
HEATING	upper limit	27°C	24°C
	lower limit	-	-15°C

- 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 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 restart 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.

### 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, an 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 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 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.

## BEFORE CALLING FOR SERVICE

The following conditions do not denote equipment malfunctions

### UNIT DOES NOT OPERATE

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.

### UNIT DOES NOT SEND OUT WARM AIR

The unit is preheating or de-icing.

### ODORS

Carpet and furniture odors that enter into the unit may be recirculated.

## BEFORE CALLING FOR SERVICE

### CRACKING NOISE

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.

### A LOW BUZZING NOISE EMITTED

This is a sound emitted when the unit is generating Plasmacluster ions.

### SWISHING NOISE

The soft, swishing noise is the sound of the refrigerant flowing inside the unit.

### WATER VAPOUR

- 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.
- In the HEAT operation, water vapour may flow out of the outdoor unit during de-icing.

### THE OUTDOOR UNIT DOES NOT STOP

After stopping the operation, the outdoor unit will rotate its fan for about a minute to cool down the unit.

### ODOR EMITTED FROM THE PLASMACLUSTER AIR OUTLET

This is the smell of ozone generated from the Plasmacluster Ion generator. The ozone concentration is very small, posing no adverse effect on your health. The ozone discharged into the air rapidly decomposes, and its density in the room will not increase.

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

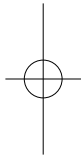
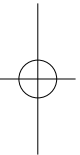
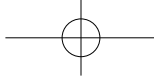
- Check the filters. If dirty, clean them.
- Check the outdoor unit to make sure nothing is blocking the air inlet or outlet.
- Check the thermostat is properly set.
- Make sure windows and doors are closed tightly.
- A large number of people in the room can prevent the unit from achieving the desired temperature.
- Check whether any heat-generating appliances are operating in the room.

### 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.

Please call for service when OPERATION lamp, TIMER lamp and/or PLASMACLUSTER lamp on the unit blink.





# SHARP

SHARP CORPORATION

Printed in Thailand  
TINSEA531JBRZ 07G- (TH) ①

