

AY-XM09BE

MULTI SPLIT TYPE ROOM AIR CONDITIONER

OPERATION MANUAL

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INDOOR UNIT

AY-XM09BE

OUTDOOR UNIT

AE-XM18BE

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

PRECAUTIONS

WARNINGS FOR USE

- 1** Do not pull or deform the power supply cable. Pulling and misuse of the power supply cable can result in damage to the unit and cause electrical shock.
- 2** Be careful not to expose your body directly to the outlet air for a long time. It may affect your physical conditions.
- 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 internal fans.
- 5** Ground the air conditioner without fail. Do not connect the grounding wire to gas pipe, water pipe, lightning rod or telephone grounding wire. Incomplete grounding may cause electric shock.
- 6** If anything is abnormal with the air conditioner (ex. a burning smell), stop the operation immediately and turn the circuit breaker OFF.
- 7** Follow local rules and regulations for power supply cabling. Improper cable connection can cause the power supply cable and the electrical outlet to overheat and cause fire.
- 8** Use only the manufacture recommended power supply cable for replacement. Replacement should be performed by a qualified technician or a service person.

WARNINGS FOR INSTALLATION / REMOVAL / REPAIR

- Do not attempt to install/remove/repair the unit by yourself. Incorrect work will cause electric shock, water leak, fire etc. Consult your dealer or other qualified service personnel for the installation/removal/repair of the unit.



This equipment complies with the requirements of Directives 89/336/EEC and 73/23/EEC as amended by 93/68/EEC.

CAUTIONS FOR USE

- 1** Open a window or door periodically to ventilate the room, especially when using gas appliances. Insufficient ventilation may cause oxygen shortage.
- 2** Do not operate the buttons with wet hand. It may cause electric shock.
- 3** For safety, turn the circuit breaker off when not using the unit for an extended period of time.
- 4** Check the outdoor unit mounting rack periodically for wear and to make sure it is firmly in place.
- 5** Do not put anything on the outdoor unit nor step on it. The object or the person may fall down or drop, causing injury.
- 6** 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.
- 7** Do not place a vessel with water on the unit. If water penetrates into the unit, electrical insulations may deteriorate and cause electric shock.
- 8** Do not block the air inlets nor outlets of the unit. It may cause insufficient performance or troubles.
- 9** Be sure to stop the operation and turn the circuit breaker off before performing any maintenance or cleaning. A fan is rotating inside the unit and you may get injured.
- 10** Do not splash or pour water directly on the unit. Water can cause electrical shock or equipment damage.
- 11** 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.

CAUTIONS FOR LOCATION / INSTALLATION

- Make sure to connect the air conditioner to power supply of the rated voltage and frequency.
Use of a power supply with improper voltage and frequency can result in equipment damage and possible fire.
- Do not install the unit in a place where inflammable gas may leak. It may cause fire.
Install the unit in a place with minimal dust, fumes and moisture in the air.
- Arrange the drain hose to ensure smooth drainage. Insufficient drainage may cause wetting of the room, furniture etc.
- Make sure a leak breaker or a circuit breaker is installed, depending on the installation location, to avoid electrical shock.

ADDITIONAL NOTES ON OPERATION

OPERATING TEMPERATURE RANGE

		INDOOR TEMP.	OUTDOOR TEMP.
COOLING	upper limit	32°C D.B. 23°C W.B.	43°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.

- 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.

D.B. = Dry-bulb W.B. = Wet-bulb

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 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.

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.

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 operation .

SET PROPER AIR FLOW DIRECTION TO OBTAIN THE BEST AIR CIRCULATION

KEEP FILTER CLEAN TO ENSURE THE MOST EFFICIENT OPERATION

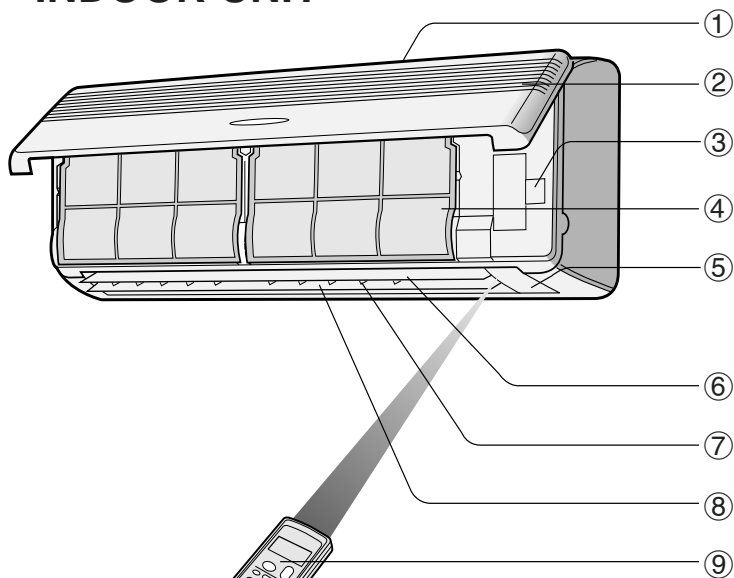
MAKE MOST OF THE TIMER OFF FUNCTION

TURN OFF 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.

PART NAMES

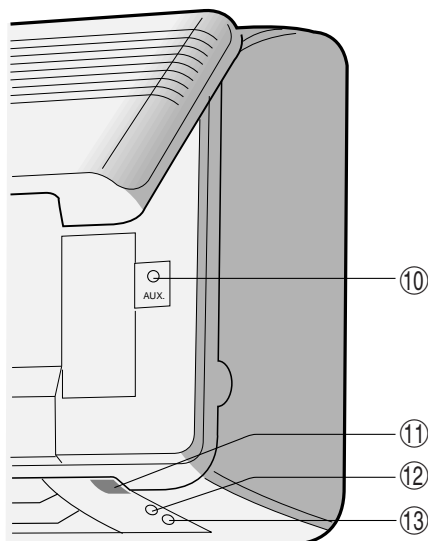
INDOOR UNIT



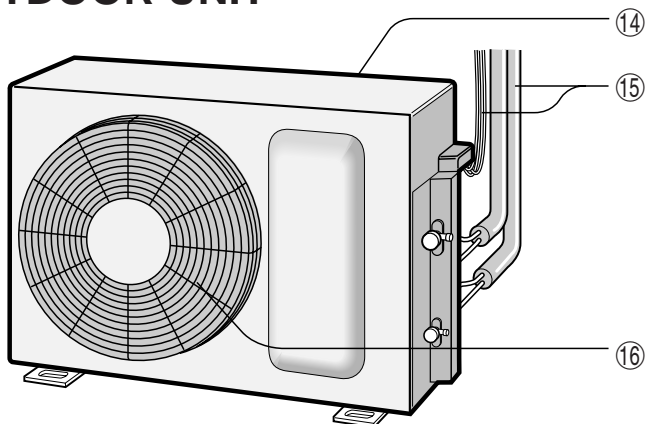
- ① Inlet (Air)
- ② Open Panel
- ③ Operation panel
- ④ Air Filters
- ⑤ Indicator Panel
- ⑥ Vertical Adjustment Louvre
- ⑦ Horizontal Adjustment Louvres
- ⑧ Outlet (Air)
- ⑨ Remote Control

To open the panel, hold the bottom corners of the open panel and gently pull outwards.

- ⑩ AUX. Button
- ⑪ SIGNAL RECEIVER Window
- ⑫ OPERATION Lamp (Red)
- ⑬ TIMER Lamp (Yellow)



OUTDOOR UNIT

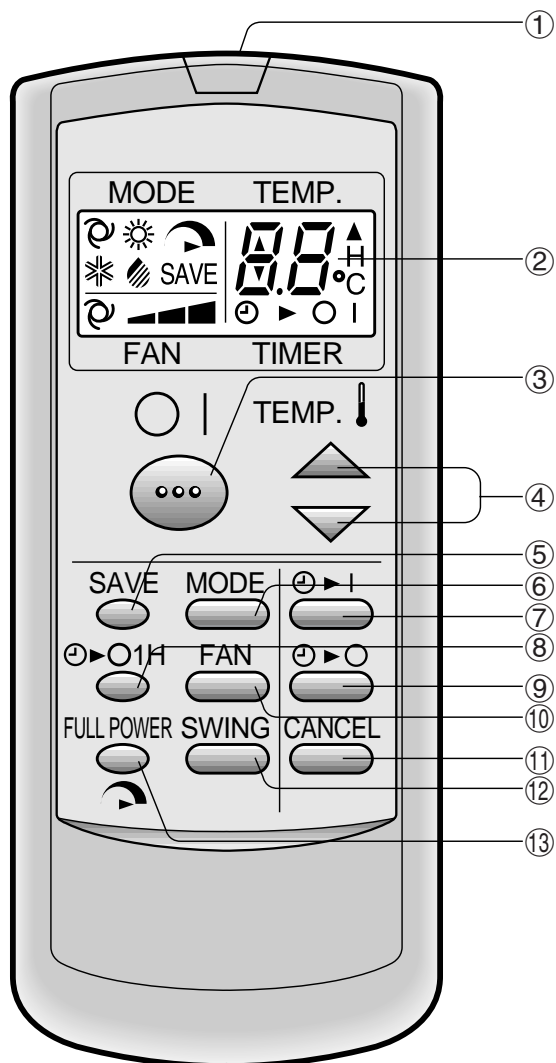


- ⑭ Inlet (Air)
- ⑮ Refrigerant Tube and Interconnecting Cord
- ⑯ Outlet (Air)

NOTES:

1. Actual units may vary slightly from those shown above.
2. AE-XM18BE is a multi-type outdoor unit and is connected to two indoor units. See the Installation Manual for detail installation instructions.

REMOTE CONTROL



- ① TRANSMITTER
- ② DISPLAY (Liquid Crystal Display)
- ③ ON/OFF Button
- ④ THERMO. (Thermostat) Button
- ⑤ SAVE Button
- ⑥ MODE Button
- ⑦ TIMER ON Button (for setting the timer)
- ⑧ ONE-HOUR OFF TIMER Button
- ⑨ TIMER OFF Button (for setting the timer)
- ⑩ FAN Button
- ⑪ TIMER CANCEL Button
- ⑫ SWING Button
- ⑬ FULL POWER Button

L.C.D. REMOTE CONTROL DISPLAY

⑭ MODE SYMBOLS



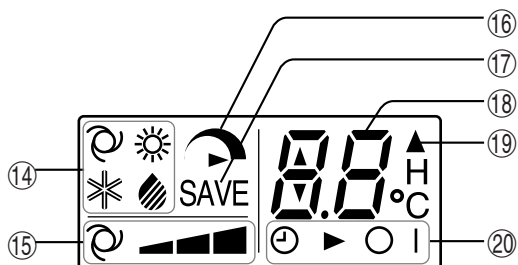
⑮ FAN SPEED SYMBOLS



⑯ FULL POWER SYMBOL

⑰ SAVE SYMBOL

⑱ TEMPERATURE AND TIMER COUNT DOWN INDICATOR



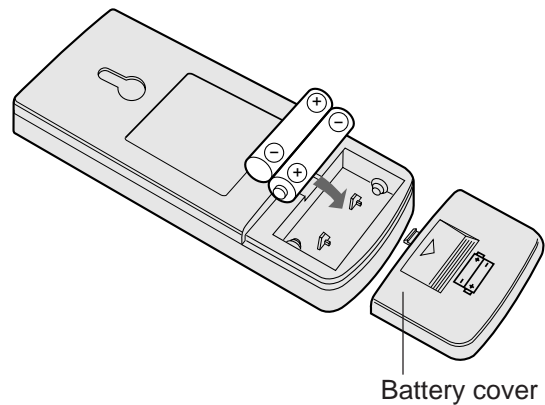
⑲ TRANSMITTING SYMBOL

⑳ TIMER ON/TIMER OFF INDICATOR Indicates when timer on or timer off is set.

USING THE REMOTE CONTROL

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

- 1** Remove the battery cover at the back of the remote control.
- 2** Insert batteries in the compartment, making sure the \oplus and \ominus polarities are correctly aligned.
 - Lines will be indicated on the display when batteries are properly installed.
- 3** Reinstall the battery cover.



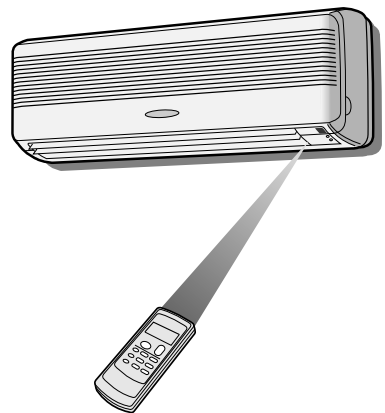
NOTES:

- 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 metres away.

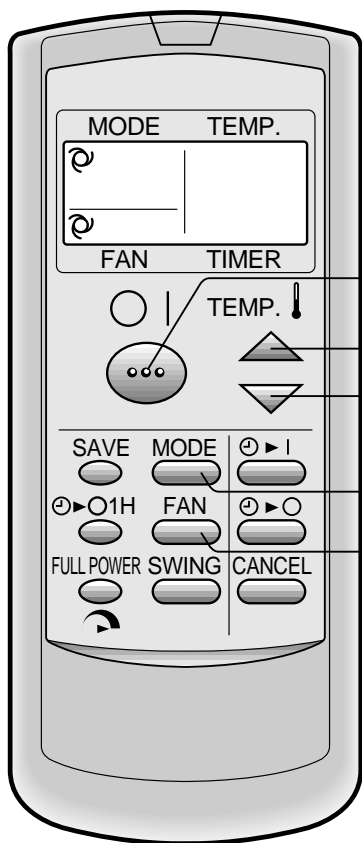




CAUTION

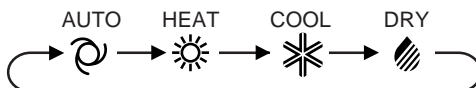
- Do not allow the signal receiver window to receive strong direct sunlight, since it can adversely affect its operation. If the signal receiver window is exposed to direct sunlight, close a curtain to block the light.
- Using a fluorescent lamp with a quick starter in the same room may interfere with 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.

BASIC OPERATION



1

Press the MODE button to select the operation mode.



2

Press the ON/OFF button to start operation.

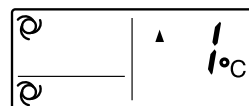
- The red OPERATION lamp on the unit will light up.

3

Press the THERMO. button to set the desired temperature.

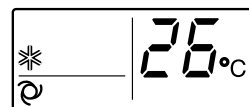
AUTO / DRY MODE

- 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.



HEAT / COOL MODE

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

NOTES:

This air conditioner is a multi-type, and two indoor units are connected to one outdoor unit.

When the setting mode of one indoor unit differs from the other, the indoor unit operated later may not work.

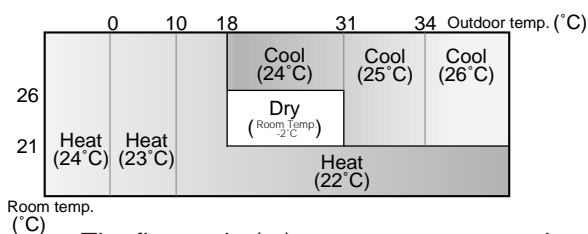
- When one indoor unit is operating in HEAT mode, the other unit can not operate in COOL or DRY mode.
- When one indoor unit is operating in COOL or DRY mode, the other unit can not operate in HEAT mode.
- When the mode of the indoor unit later operated is different from the one which is in operation, 4 seconds later, a long BEEP will be emitted, and the OPERATION lamp and TIMER lamp of the indoor unit later operated will blink alternately. This shows that the later operated unit is not working.

How to rest the Blinking lamp:

Change the remote control's mode and send same mode signal which the other indoor unit is operating in. The BEEP will be emitted twice from the indoor unit later operated, and the unit will operate.

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.



The figures in () are temperature settings

When the indoor unit later operated is set in AUTO mode, the mode is same as the one in operation regardless of room temperature.

ADJUSTING THE AIR FLOW DIRECTION

VERTICAL AIR FLOW DIRECTION

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

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

HOW TO ADJUST THE AIR FLOW DIRECTION

Press the SWING button on the remote control once.

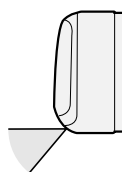
- The vertical adjustment louvre will change its angle continuously.

Press the SWING button again when the vertical adjustment louvre is at the desired position.

- The louvre will stop moving within the range shown in the diagram.
- The adjusted position will be memorized and will be automatically set to the same position when operated the next time.

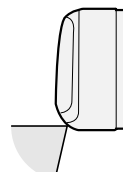
Adjustment range

COOL and DRY mode



The adjustment range is narrower than the SWING range in order to prevent condensation from dripping.

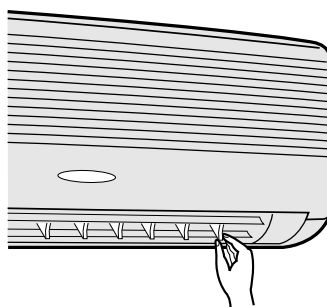
HEAT mode



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

HORIZONTAL AIR FLOW DIRECTION

Hold the horizontal adjustment louvre as shown in the diagram and adjust the air flow direction.



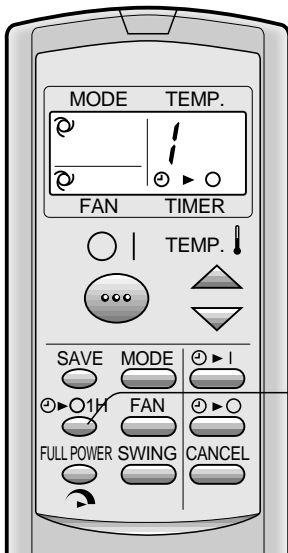
CAUTION

Never attempt to adjust the vertical adjustment louvres 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.

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 ⌚ ▶ ○".
 - The yellow TIMER lamp on the unit will light up.
 - The unit will stop operating after one hour.

TO CANCEL

Press the CANCEL button.

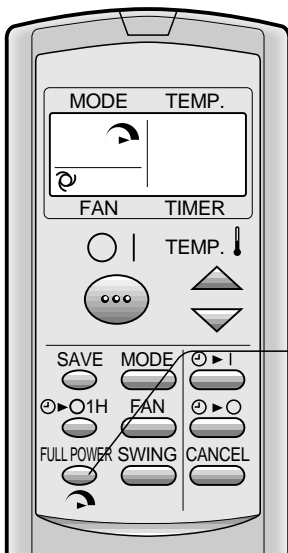
- The yellow TIMER lamp on the unit will turn off.
- Or, turn the unit off by pressing the ON/OFF button.
- The red OPERATION lamp and the yellow TIMER lamp on the unit will turn off.

NOTES:

- The ONE-HOUR OFF TIMER operation has priority over TIMER ON and TIMER OFF operations.
- When the ONE-HOUR OFF TIMER is set while the unit is not operating, the unit will operate for an hour with the formerly set condition.
- 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.

FULL POWER OPERATION

In this operation, the air conditioner works at full power to make the room cool or warm so rapidly that you can use it just after you come home.



- 1 To activate the FULL POWER operation, press the FULL POWER button during operation.
 - The remote control will display ⌚.
 - The temperature display will go off.

TO CANCEL

Press the FULL POWER button again.

- FULL POWER operation will also be cancelled when the operation mode is changed, when SAVE operation is set, or when the unit is turned off.

NOTES:

- You cannot set the temperature during the FULL POWER operation. The fan speed also can not be changed.
- Cancel the FULL POWER operation after the room is sufficiently cool or warm. Excessive cooling or heating may affect your physical conditions.

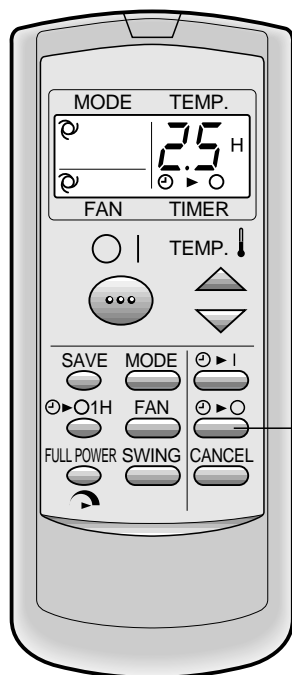
TIMER OPERATION

TIMER OFF

The unit will turn off automatically according to your setting.

Timer duration can be set from minimum 0.5 hours (30 minutes) to maximum 12 hours.

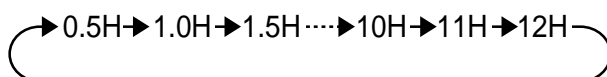
Up to 9.5 hours, you can set by 0.5 hours (30 minutes) increments and from 10 to 12 hours, by 1 hour increment.



Point the remote control at the signal receiver window on the unit.

1 Press the TIMER OFF () button and set time as desired.

- The time setting will change as you to press the button as follows,



Hold the button pressed down for fast setting.

- The yellow TIMER lamp on the unit will light up.
- The unit will generate a beep when it receives the signal.
- The time setting will count down to show remaining time.

Example : When you wish to stop the operation 2.5 hours later.

TIPS ABOUT TIMER OFF OPERATION

When the TIMER OFF 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.

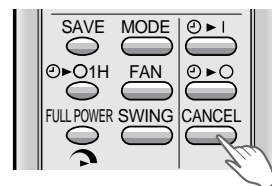
HEAT MODE:

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

TO CANCEL TIMER

Press the CANCEL button.

- The yellow TIMER lamp on the unit will turn off.



TO CHANGE TIMER SETTING

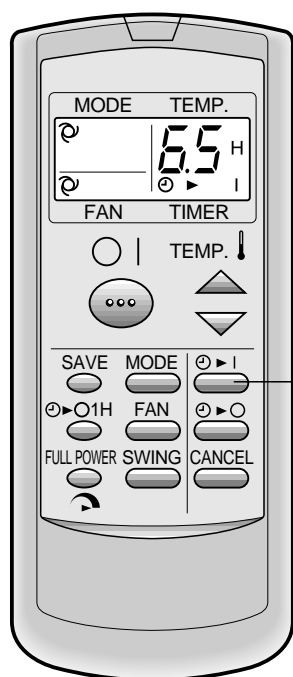
Press the TIMER button which you wish to change, (TIMER OFF or TIMER ON) and change the time setting.

TIMER ON

The unit will turn on automatically according to your setting.

Timer duration can be set from minimum 0.5 hours (30 minutes) to maximum 12 hours.

Up to 9.5 hours, you can set by 0.5 hours (30 minutes) increments and from 10 to 12 hours, by 1 hour increment.



Point the remote control at the signal receiver window on the unit.

1 Press the TIMER ON () button.

- The time setting will change as you press the button as follows.

→ 0.5H → 1.0H → 1.5H ... → 10H → 11H → 12H

Hold the button pressed down for fast setting.

- The yellow TIMER lamp on the unit will light up.
- The unit will generate a beep when it receives the signal.
- The time setting will count down to show remaining time.

Select the mode, temperature and fan speed setting as desired.

- When the temperature is set with the TIMER ON, the temperature will show in the display for 5 seconds and then return to the time display.
- If you do not change the setting, the unit will operate with the latest setting.
- 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)

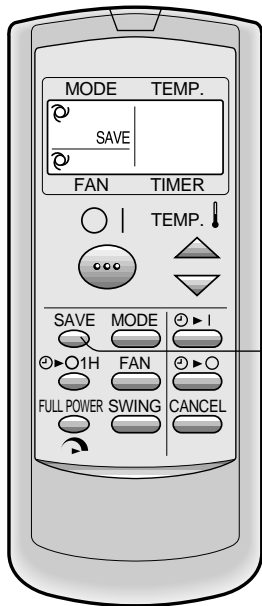
Example : When you wish the room temperature to be as desired 6.5 hours later.

NOTES FOR TIMER SETTING AND OPERATION

- The latest time setting will be memorized and will appear on the remote control display the next time you set the TIMER OFF or TIMER ON.
- TIMER OFF and TIMER ON can not be set together.
The latest set TIMER will be active.
- When ONE-HOUR OFF TIMER is set, TIMER OFF and TIMER ON will not be available.
- When ONE-HOUR OFF TIMER is set during TIMER OFF or TIMER ON duration, the TIMER ON or TIMER OFF will be cancelled.

SAVE OPERATION

With the **SAVE** operation, the air conditioner will operate with reduced power by adjusting fan speed and/or temperature settings. Excess power consumption will be avoided.



- 1 Press the **SAVE** button during operation.
 - The remote control displays "SAVE".

TO CANCEL

Press the **SAVE** button again.

- **SAVE** operation will also be cancelled when the mode is changed, when **FULL POWER** operation is set, or when the unit is turned off.

NOTE:

- **SAVE** operation cannot be set during **DRY** operation.

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**.

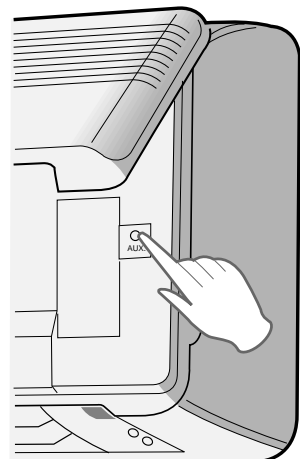
TO TURN OFF

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.



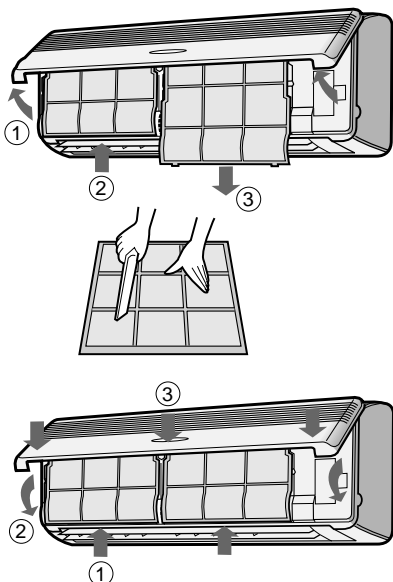
MAINTENANCE

CAUTION

Be sure to turn the air conditioner off and turn the circuit breaker off 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 open 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

CAUTION

- Do not directly splash or pour water on them. Water can cause electrical shock or equipment damage.
- Wipe them with a soft cloth.
- Do not use hot water, thinner, abrasive powders or strong solvents.

MAINTENANCE AFTER AIR CONDITIONER SEASON

- 1 Operate the unit in the COOL mode, temperature setting 32°C, for about half a day to allow the mechanism to thoroughly dry.
- 2 Stop the operation and turn off the circuit breaker, if you have one exclusively for the air conditioner.
- 3 Clean the air 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.

CAUTION

- 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

UNIT DOES NOT OPERATE <ul style="list-style-type: none">• 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 1.5~3 minutes before operating the unit.• The unit will not operate immediately after the circuit breaker is turned on. This is the safety mechanism to protect the compressor. Wait for 90 seconds.	WATER VAPOUR <ul style="list-style-type: none">• 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.
UNIT DOES NOT SEND OUT WARM AIR <p>The unit is preheating or de-icing.</p>	THE OUT DOOR UNIT DOES NOT STOP <p>After stopping the operation, the outdoor unit will rotate its' fan for about 80 seconds to cool down the unit.</p>
ODORS <p>Carpet and furniture odors that entered into the unit and the air conditioner's inner component odors at the early stage of installation may be sent out from the unit.</p>	UNIT DOES NOT OPERATE IN YOUR REQUESTED MODE <ul style="list-style-type: none">• When one indoor unit is operating in COOL or DRY mode, you can not operate the other unit in HEAT mode. (4 seconds later, a long BEEP will be emitted, and OPERATION lamp and TIMER lamp will blink alternately.)• When one indoor unit is operating in HEAT mode, you can not operate the other unit in COOL nor DRY mode. (4 seconds later, a long BEEP will be emitted, and OPERATION lamp and TIMER lamp will blink alternately.)
CRACKING NOISE <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>	
SWISHING NOISE <p>The soft, swishing noise is the sound of the refrigerant flowing inside the unit.</p>	INDOOR UNIT BECOMES WARM EVEN WHEN IDLE <p>This is because the refrigerant also flows through the idle indoor unit's pipes when the other unit operated.</p>

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 proper setting.

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.

Check if the other unit is operating at the same time.
Both units operated at the same time will reduce cooling or heating efficiency.

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.

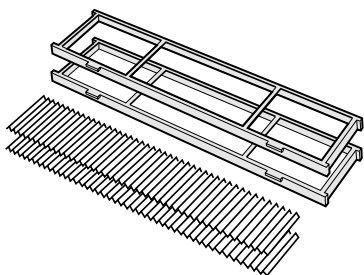
Check whether the remote control batteries are installed with the polarities properly aligned.

OPTION KIT

Air Purifying Filter Unit

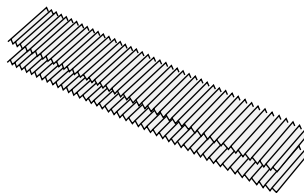
Use of the air purifying filter unit will help remove dust from the air during operation. Contact your dealer for the purchase of this option. Replacement air purifying filters are also available.

Air Purifying Filter Unit



Type AZ-F955

Replacement Filters



Type AZ-F905

SHARP CORPORATION
OSAKA, JAPAN