

FUJI ELECTRIC

ROOM AIR CONDITIONER

SPLIT TYPE

HEAT & COOL MODEL
(REVERSE CYCLE)

Indoor Unit

RSW-147

RSW-147R

Outdoor Unit

ROW-147

ROW-147R

OPERATING MANUAL
BEDIENUNGSANLEITUNG

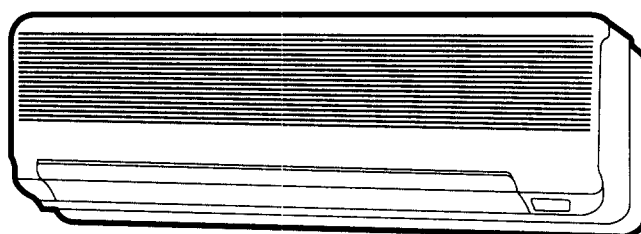
MODE D'EMPLOI

MANUAL DE FUNCIONAMIENTO

MANUALE DI ISTRUZIONI

ΕΓΧΕΙΡΙΔΙΟ ΛΕΙΤΟΥΡΓΙΑΣ

使用説明書



English

Deutsch

Français

Español

Italiano

Ελληνικά

中國語

KEEP THIS OPERATION MANUAL
FOR FUTURE REFERENCE

P/N9359035015

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PRECAUTIONS

- Before using the appliance, read these "PRECAUTIONS" thoroughly and operate in the correct way.
- The instructions in this section all relate to safety; be sure to maintain safe operating conditions.
- "CAUTION" and "WARNING" have the following meanings in these instructions:

 WARNING!	This mark indicates procedures which, if improperly performed, might lead to the death or serious injury of the user.
 CAUTION!	This mark indicates procedures which, if improperly performed, might possibly result in personal harm to the user, or damage to property.

Safety Symbols



△ The triangular symbol indicates WARNING and CAUTION items.



⊘ This symbol indicates prohibited operations. The prohibited action is indicated both within the symbol, and in nearby explanations.



● This symbol indicates instructions regarding operations which are to be performed by the user.



DANGER

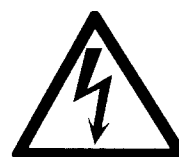
Do not attempt to install this air conditioner by yourself.

- Consult authorized service personnel for all installations.



Consult authorized service personnel for any repairs.

- Do not attempt to remove parts, or service the unit yourself, since you may be exposed to dangerous electrical shock. This appliance contains no user-serviceable parts.



When moving, consult authorized service personnel for disconnection and installation of the unit.

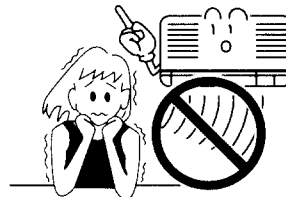




DANGER

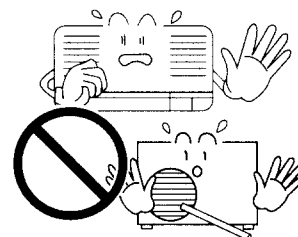
Do not stay in direct cooling airflow for long periods.

- Excessive direct exposure to chilled air could be bad for your health.
- Be especially careful when going to bed, and in rooms where infants, aged, or sick people are staying.

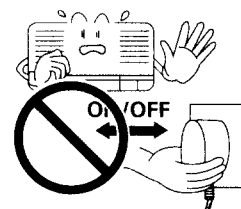


Do not insert fingers or objects into the outlet port or intake grilles.

- A fan operates at high speed inside the unit, and personal injury could result.
- Be particularly careful regarding small children.



Do not start and stop air conditioner operation by disconnecting the power cord and so on.



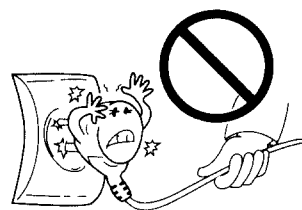
Take care not to damage the power cord.

- Do not stand heavy items on the power cord, or allow it to be pulled. Such treatment could damage the insulation, resulting in fire hazard and electrical shock.



WARNING

If the power supply cord of this air conditioner is damaged, it must be replaced by the manufacturer or its authorized service personnel only in order to avoid a safety hazard.



In the event of a malfunction (burning smell, etc.), immediately stop operation, disconnect the power plug, and consult authorized service personnel.

- Continuing to operate the unit under such conditions could lead to hazard of fire or electrical shock.



- If the power supply cord of this appliance is damaged, it should only be replaced by the authorized service personnel, since special purpose tools and specified cord are required.



PRECAUTIONS

Instructions relating to heating (*) are applicable only to "HEAT & COOL MODEL" (Reverse Cycle).



CAUTION

Provide occasional ventilation during use.

- Be careful to provide adequate ventilation particularly when using the unit in combination with other heating apparatus.
- Insufficient ventilation could lead to oxygen starvation.

Do not direct air flow at fireplaces or heating apparatuses.

- Direct air blowing on fires could result in improper combustion or fire.

Do not climb on, or place objects on, the air conditioner.

- Personal injury could result from a falling object, or if the unit tips over.
- Do not hang on or cover the air conditioner.

Do not set flower vases or water containers on top of air conditioners.

- Water leaking inside the unit could damage electrical insulation, leading to danger of electrical shock.

Do not expose the air conditioner directly to water.

- Electrical insulation could be damaged, resulting in electrical shock.

Do not operate the air conditioner with wet hands.

- Electrical shock could result.

Do not pull power cord

- Pulling on the cord to disconnect the plug could damage the wires inside the cord, resulting in heat or fire.

Always turn off power and disconnect the power plug whenever cleaning the air conditioner or changing the air filter.

- A fan operates at high speed inside the unit, and personal injury could result.

Turn off power source when not using the unit for extended periods.

Check the condition of the installation for damage.

- After lengthy use, arrange for visit by authorized service personnel to check installation condition.

Take precautions to prevent infants from accidentally swallowing batteries.

- A battery can be very harmful if swallowed. If an infant accidentally swallows a battery, make the infant eject it, and consult your physician.

Do not place animals or plants in the direct path of the air flow.

- Lengthy exposure to direct Heating or Cooling airflow could have adverse influence on plants or animals.



CAUTION

Do not drink the water drained from the air conditioner.

Do not use in applications involving the storage of foods, plants or animals, precision equipment, or art works.

- The quality of the stored items may deteriorate.

Take out the batteries from the remote control unit when not using for a long time.

- Take out the batteries to prevent troubles caused by battery liquid leakage.
- If leaking battery fluid comes in contact with your skin, eyes, or mouth, immediately wash with copious amounts of water, and consult your physician.

***Connection valves become hot during Heating; handle with care.**

- Touching the connection valves could result in burns.

Always operate with the air filter installed.

- Operating the unit without the air filter could cause excessive dirt to collect on internal parts, leading to malfunction.

Do not touch the heat exchanger radiator fins.

- Personal injury could result
- Be particularly careful when cleaning.
- Bending or damage to the fins will affect the efficiency of the unit.

Install the indoor unit and remote control unit at least one meter from any television sets or radio.

- Signal radiation could be induced into the system to give erroneous operation.

Do not block or cover the intake grille and outlet port.

- Obstructing the ports will reduce operating efficiency, leading to improper operation and possible damage.

When installing the indoor unit and outdoor unit, take precautions to prevent access by infants.

- Unexpected accidents could occur.

Avoid installing the air conditioner near a fireplace or other heating apparatus.

- Exposure to excessive heat could result in deformation of the outer case.

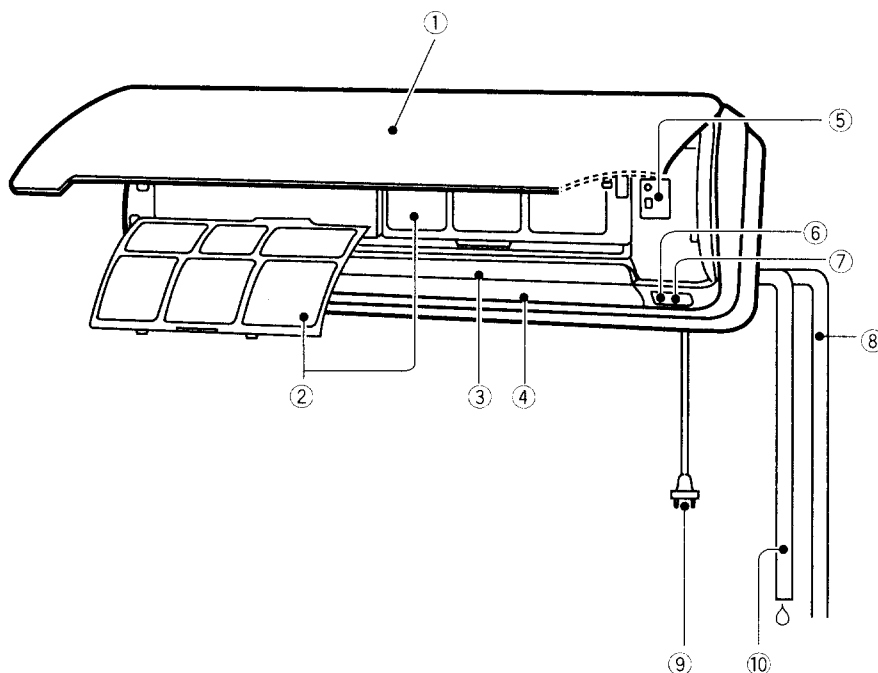
Do not use inflammable gases near the air conditioner.

Be sure to attach the intake grille securely.

NAME AND FUNCTION OF PARTS

Instructions relating to heating (*) are applicable only to "HEAT & COOL MODEL" (Reverse Cycle).
For details of operation, see the pages indicated by the ⓘ mark.

Indoor Unit



① Air Intake Grille

Air is taken in here.

② Air Filter (ⓘ P. 23)

Removes all dirt and dust from the air.

③ Air flow-direction Louvers (ⓘ P. 16)

Control airflow in the vertical (up-down) direction.

④ Right-left Louvers (ⓘ P. 17) (behind Air flow-direction Louvers)

Control airflow in the horizontal (right-left) direction.

⑤ Operating Control Panel (ⓘ P. 7)

⑥ Remote Control Signal Receiver (ⓘ P. 11)

Signals from the remote control unit are received here.

⑦ Indicator Lamps (ⓘ P. 7)

These indicator lamps show the current operating status.

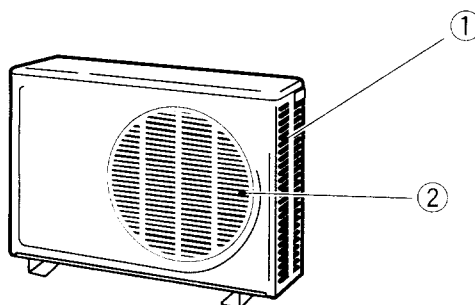
⑧ Pipe Unit

⑨ Power Plug

⑩ Drain Hose

Moisture condensed from the air during Cooling and Drying operations is drained here.

Outdoor Unit



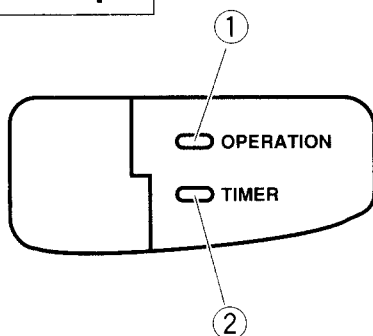
① Air inlet

(Rear and side panels)

② Air outlet

Warm or cool air is blown out.

Indicator Lamps



① OPERATION Indicator (Red)

- Lights when unit is operating.
- Flashes quickly for about one second when a signal is received from the remote control unit.
- *● Flashes slowly during defrosting operation (see P. 26).

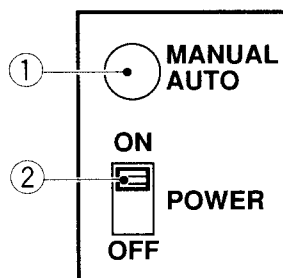
② TIMER Indicator (Green)

Lights during timer operation (see P. 18 to 21).

OPERATION and TIMER Indicator Lamps:

- If the TIMER indicator flashes when the timer is operating, it indicates that a fault has occurred with the timer setting (see P. 26 Auto Restart).

Operating Control Panel



① MANUAL AUTO button

This button can be used for temporary operation in the AUTOMATIC mode in the event the remote control unit is unavailable.

Press the MANUAL AUTO button

- Fan speed will be set to "AUTO" and the thermostat will be set for "normal".
- To stop operation, either press the MANUAL AUTO button once again, or set the POWER switch to OFF.

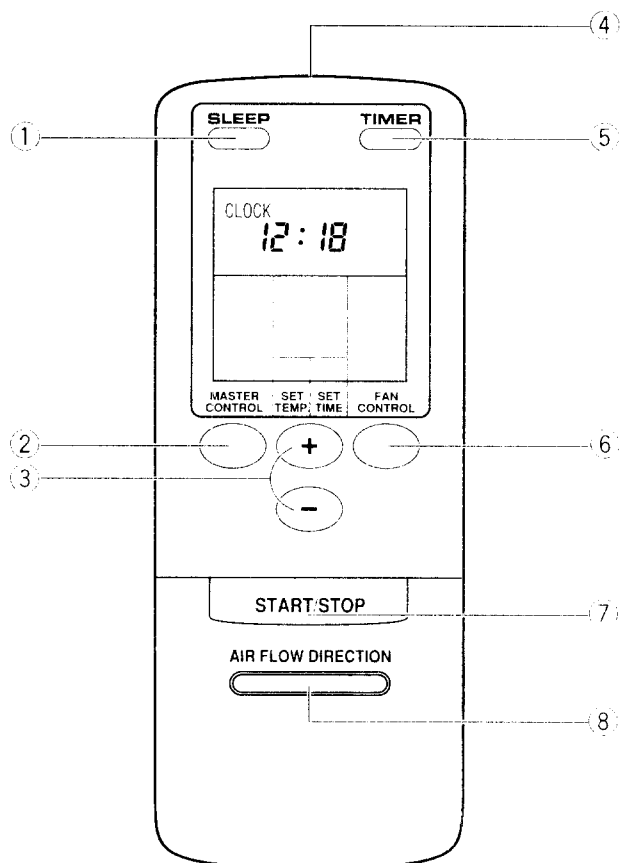
② POWER switch

- ON:** Set to this position when using the unit.
- OFF:** Set to this position when not using the unit for an extended period of time.

NAME AND FUNCTION OF PARTS

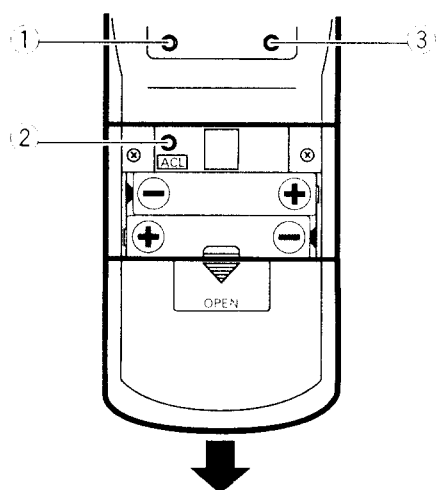
Instructions relating to heating (*) are applicable only to "HEAT & COOL MODEL" (Reverse Cycle).

Remote Control Unit



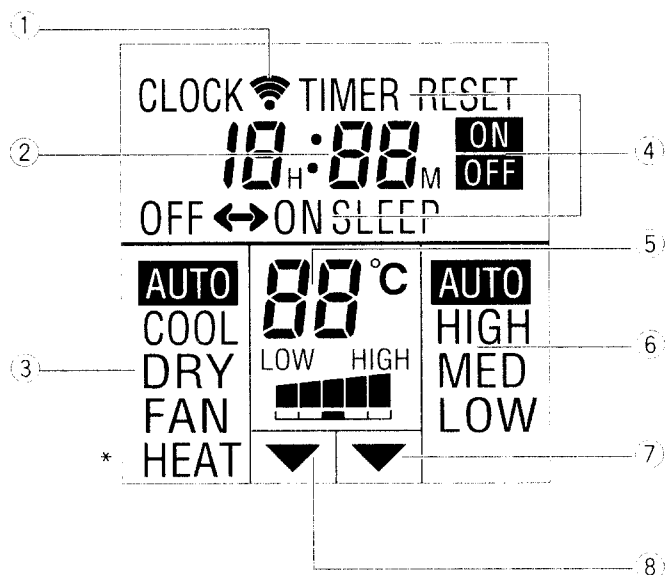
- ① **SLEEP button** (P. 21)
Press to select SLEEP timer.
- ② **MASTER CONTROL button**
Press to select operating mode.
- ③ **SET TEMP./SET TIME buttons** (+ / -)
Press to set the unit's thermostat and clock.
- ④ **Signal Transmitter**
Control signals are sent to the air conditioner from here.
- ⑤ **TIMER button** (P. 18 to 21)
Press to select the timer mode (OFF TIMER, ON TIMER, PROGRAM TIMER, RESET).
- ⑥ **FAN CONTROL button**
Press to select fan speed. (AUTO, HIGH, MED, LOW)
- ⑦ **START/STOP button**
Press to start and stop operation.
- ⑧ **AIR FLOW DIRECTION button** (P. 16)
Use to set the desired airflow direction.

Remote Control Unit (Rear Side)



- ① **TIME ADJUST button** (P. 11)
- ② **ACL button (located inside battery compartment)** (P. 10)
This button is used when replacing batteries.
- ③ **TEST RUN button**
This button is used when testing the air conditioner after installation. Do not use under normal conditions.

Remote Control Unit Display



The accompanying illustration depicts the control display with all indicators lighted; in actual use, however, only those indicators currently required are displayed.

① Transmit Indicator

This indicator is displayed when a signal is sent to the air conditioner.

② Clock Display

- When CLOCK is displayed, the current time is shown in 24-hour format (0:00 to 23:59).
- When TIMER is displayed, the timer setting is shown in 24-hour format (0:00 to 23:59).
- When SLEEP timer has been selected, the display shows the remaining time until the unit turns off (0H:05M to 9H:55M).

③ Operation Mode Display

Displays the operation mode (COOL, etc.).

④ Timer Mode Display

Displays the timer mode (OFF TIMER, ON TIMER, PROGRAM TIMER, SLEEP, RESET).

⑤ Set Temperature Display

Displays the thermostat setting.

⑥ Fan Speed Display

Displays the current fan speed.

⑦ Set Time Indicator

When this indicator is flashing, the $\leftarrow/\rightarrow$ buttons can be used to set the time (TIME set mode).

⑧ Set Temperature Indicator

When this indicator is flashing, the $\leftarrow/\rightarrow$ buttons can be used to set the thermostat (TEMPERATURE set mode).

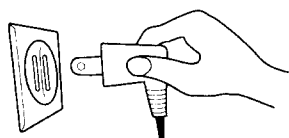
- Signals will not be transmitted properly if a wall, curtain, or other object is between the air conditioner and the remote control unit.
- The air conditioner may fail to operate properly if strong direct light is allowed to strike the signal receiver. Use a curtain to shade strong sunlight from windows, and place strong lamps at a distance away from the signal receiver.
- If another electric appliance is operated by the remote control unit move the appliance away or consult with authorized service personnel.

- Do not place the remote control unit in locations where it may be subjected to heat from direct sunlight or from heating apparatus.
- Do not subject the remote control unit to strong impacts, and do not allow water or other liquids to splash on it.
- When the remote control unit is used in rooms furnished with instant-lighting type fluorescent lamps, the air conditioner may fail to receive control signals correctly. Consult with authorized service personnel when purchasing a new fluorescent lamp.

PREPARATION

Turn on the Power

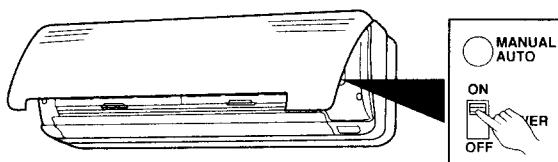
- 1 Connect the power plug to an electrical point.



Connect securely,
without looseness.

- 2 Open the Intake Grille.

- 3 Set the POWER switch to ON.

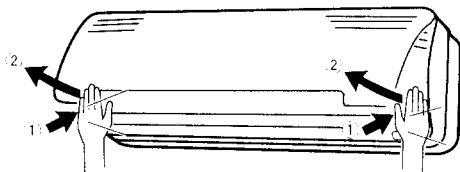


- 4 Close the Intake Grille.

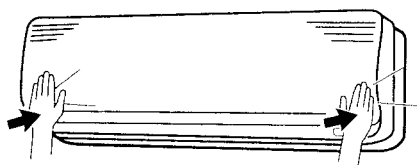
Opening/closing the Intake Grille

- ① Press both lower sides of the intake grille until you hear a clicking sound.
- ② Release your hands and the intake grille will open toward the front.

Do not operate the unit with the intake grille open, since malfunctions may result.



Press the both lower sides of the intake grille until you hear a clicking sound and the grille locks into place.

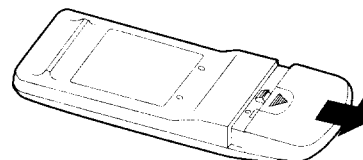


Prepare the Remote Control Unit

Load batteries in the remote control unit and set the clock to the current time.

Load Batteries (R03/LR03 x 2)

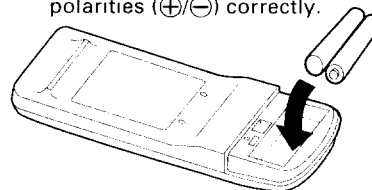
- 1 Press and slide the battery compartment lid on the reverse side to open it.



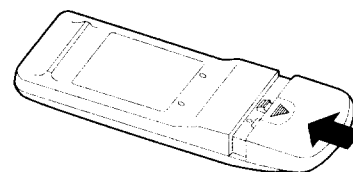
Slide in the direction of the arrow while pressing the mark.

- 2 Insert batteries.

Be sure to align the battery polarities (+/-) correctly.



- 3 Close the battery compartment lid.



CAUTION!

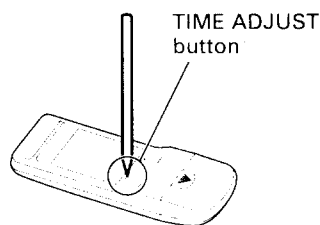
- Take precautions to prevent infants from accidentally swallowing batteries.
- When not using the remote control unit for an extended period, remove the batteries to avoid possible leakage and damage to the unit.
- # If leaking battery fluid comes in contact with your skin, eyes, or mouth, immediately wash with copious amounts of water, and consult your physician.
- Dead batteries should be removed quickly and disposed of properly, either by placing in a public battery collection receptacle, or by returning to a properly equipped dealer.
- Do not attempt to recharge dry batteries.

NOTE:

- Never mix new and used batteries, or batteries of different types.
- Batteries should last about one year under normal use. If the remote control unit's operating range becomes appreciably reduced, replace the batteries and press the ACL button with the tip of a ball-point pen or other small object.

Set the Current Time

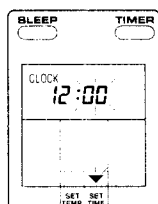
1 Press the TIME ADJUST button.



(Rear Side)

Use the tip of a ball-point pen or other small object to press the button.

<Remote Control Unit Display>



The time display and time set mark ▼ will flash.

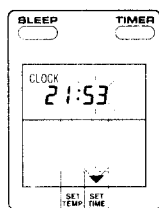
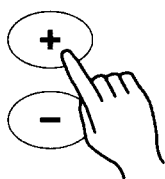
2 Use the +/− TIME SET buttons to adjust the clock to the current time.

- + button: Press to advance the time.
- − button: Press to reverse the time.

(Each time the buttons are pressed, the time will be advanced/reversed in one-minute increments; hold the buttons depressed to change the time quickly in ten-minute increments).

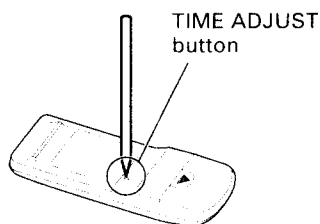
Example:

When the clock is set to 21:53 (9:53 P.M.).

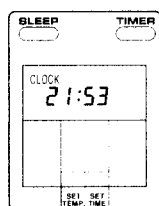


3 Press the TIME ADJUST button again.

This completes the time setting and starts the clock.



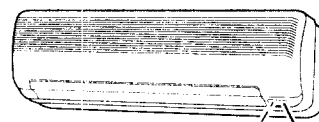
(Rear Side)



The time display stops flashing and lights steadily.
The time set mark ▼ will disappear.

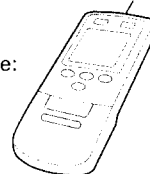
To Use the Remote Control Unit

- The remote control unit must be pointed at signal receiver to operate correctly.
- When a signal is properly received by the air conditioner, a beeping sound will be heard.
- If no beep is heard, press the remote control unit button again.



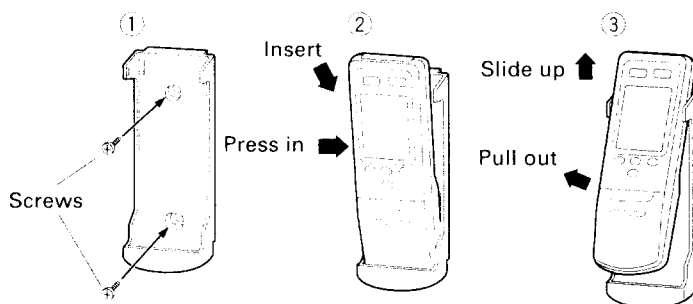
Signal Receiver

Operating Range:
Within about 7 meters



Remote Control Unit Holder

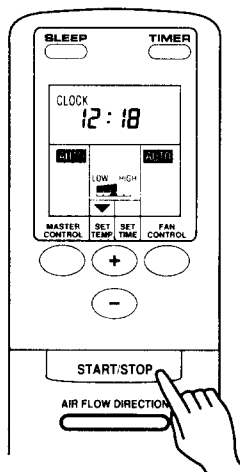
- This holder can be mounted on a wall or in a convenient position to allow operation.
- If the holder is installed in a location allowing signals to be received by the air conditioner, the remote control unit can be used without removing it from the holder.



- ① Mount the Holder.
- ② Set the remote control unit.
- ③ To remove the remote control unit (for hand use).

AUTOMATIC OPERATION

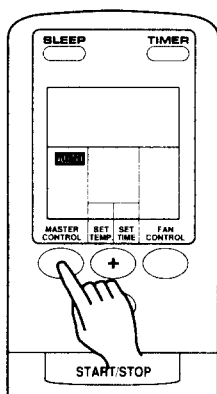
Instructions relating to heating (*) are applicable only to "HEAT & COOL MODEL" (Reverse Cycle).



To Select AUTOMATIC Operation

1 Press the START/STOP button.

The air conditioner will start operation.



2 Press the MASTER CONTROL button to select AUTO.

The operating mode "AUTO" will appear alone in the display. The transmit indicator will flash to indicate the command has been sent, and about three seconds later the entire display panel will reappear.

About Automatic Operation [COOLING MODEL]

- Depending on the room temperature at the time operation begins, the operating mode will be switched automatically as shown in the accompanying table. Also, depending on the operating mode, the room temperature setting will cause the "normal" temperature to be set as shown.
- Once the operating mode has been set, the mode will not change even if the room temperature changes.
- In the dry mode, the fan will operate slowly to prevent room humidity from rising, and the room fan may stop.

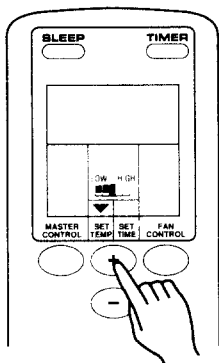
Room Temperature	Operating Mode	Temperature Setting ("normal" setting)
30°C or more	⇒ Cooling	⇒ 27°C
27°C to 30°C	⇒ Cooling	⇒ 26°C
25°C to 27°C	⇒ Dry	⇒ 24°C
23°C to 25°C	⇒ Dry	⇒ 22°C
Less than 23°C	⇒ Dry	⇒ 20°C

About Automatic Operation [HEAT & COOL MODEL (Reverse Cycle)]

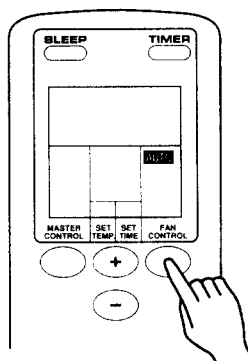
- Depending on the room temperature at the time operation begins, the operating mode will be switched automatically as shown in the accompanying table. Also, depending on the operating mode, the room temperature setting will cause the "normal" temperature to be set as shown.

Room Temperature	Operating Mode	Temperature Setting ("normal" setting)
30°C or more	⇒ Cooling	⇒ 27°C
27°C to 30°C	⇒ Cooling	⇒ 26°C
24°C to 27°C	⇒ Drying	⇒ 24°C
22°C to 24°C	⇒ Monitor	
Less than 22°C	⇒ Heating	⇒ 23°C

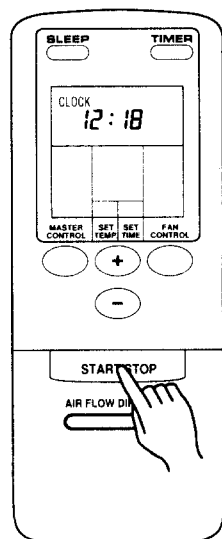
- Once the operating mode has been set, the mode will not change even if the room temperature changes. However, during the monitor operation mode, if the room temperature changes to below 22°C, the mode will automatically switch to heating, and when it rises above 24°C the mode will automatically switch to drying.
- When in the monitor mode, the fan will operate very slowly.
- In the dry mode, the fan will operate slowly to prevent room humidity from rising, and the room fan may stop.
- During defrosting operation in the heating mode (see P. 26), the OPERATION indicator lamp will flash slowly and the heating mode will stop temporarily.



Example: When set to "normal"

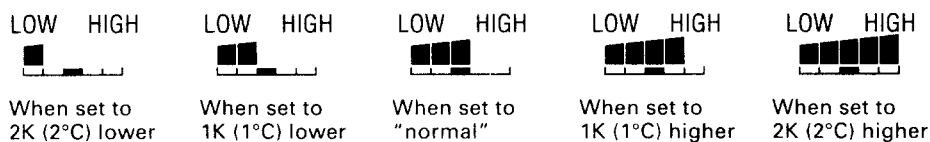


Example: When set to AUTO



To Set the Thermostat

Press the TEMPERATURE set button.



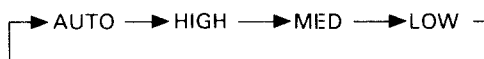
About three seconds later, the entire display will reappear.

NOTE: The thermostat setting should be considered a standard value, and may differ somewhat from the actual room temperature.

To Change the Fan Speed

Press the FAN CONTROL button.

Each time the button is pressed, the fan speed changes in the following order:



About three seconds later, the entire display will reappear.

When the FAN CONTROL is set to AUTO:

COOL : Operation begins and as the room temperature approaches that of the thermostat setting, the fan speed switches to the low setting.

***HEAT:** The fan operates at low speed at the beginning of operation or otherwise when the temperature of the emitted air is relatively low; the fan speed increases as the temperature of the emitted air rises.

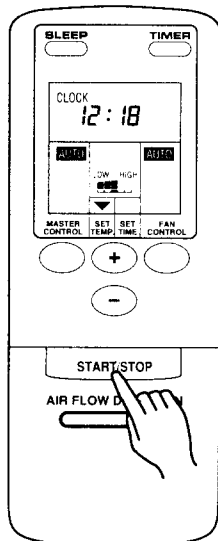
As the difference between the thermostat setting and actual room temperature is reduced, the fan speed becomes slower.

To Stop Operation

Press the START/STOP button.

MODE OPERATION (COOL, DRY, FAN, *HEAT)

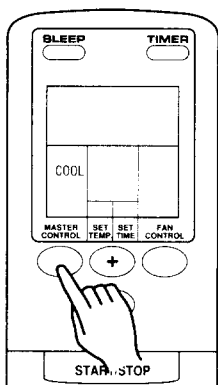
Instructions relating to heating (*) are applicable only to "HEAT & COOL MODEL" (Reverse Cycle).



To Select Mode Operation

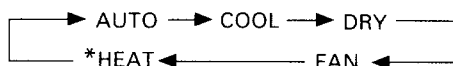
1 Press the START/STOP button

The air conditioner will start operation.



2 Press the MASTER CONTROL button to select the desired mode.

Each time the button is pressed, the mode will change in the following order.



About three seconds later, the entire display will reappear.

Example: When set to COOL

About Mode Operation

Cooling

- Use to cool your room.

Drying

- Use for gently cooling while dehumidifying your room.
- You cannot heat the room during Drying mode.
- During Drying mode, the unit will operate at low speed; in order to adjust room humidity, the indoor unit's fan may stop from time to time. Also, the fan may operate at very low speed when detecting room humidity.
- The fan speed cannot be changed manually when Drying mode has been selected.

Fan [COOLING MODEL]

- When using a space heater to heat the room, using the air conditioner's Fan setting will help prevent warm air from collecting near the ceiling, and thus assist in distributing warm air evenly throughout the room.
- Fan operation will begin automatically when the room temperature rises above the set temperature, and stop when the temperature falls below the set temperature.
- If the air emitted from the unit feels too cold, increase the temperature setting.

Fan [HEAT & COOL MODEL (Reverse Cycle)]

- Use to circulate air through your room without changing its temperature.

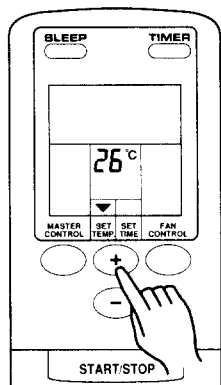
*Heating

- Use to warm your room.
- When Heating mode is selected, the air conditioner will operate at very low fan speed for about 3 to 5 minutes, after which it will switch to the selected fan setting. This period of time is provided to allow the indoor unit to warm up before begin full operation.
- When the room temperature is very low, frost may form on the outside unit, and its performance may be reduced. In order to remove such frost, the unit will automatically enter the defrost cycle from time to time. During defrost cycle, the red OPERATION indicator will flash, and the heat operation will be interrupted.

To Set the Thermostat

Press the TEMPERATURE set button.

- **button:** Press to increase the thermostat setting.
- **button:** Press to lower the thermostat setting.



Example: When set to 26°C.

Thermostat setting range:

COOLING MODEL	Cooling/Drying	18 to 30°C
	Fan	17 to 30°C
HEAT & COOL MODEL	Heating	16 to 30°C
	Cooling/Drying	18 to 30°C

About three seconds later, the entire display will reappear.

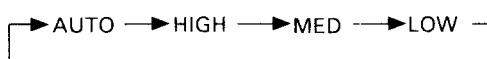
NOTE:

- The thermostat setting should be considered a standard value, and may differ somewhat from the actual room temperature.
- During Fan mode, set the unit to “-” for continuous fan operation regardless of room temperature. [COOLING MODEL ONLY]
- The thermostat cannot be used to set room temperature during the FAN mode (the temperature will not appear on the remote control unit's display). [HEAT & COOL MODEL (Reverse Cycle) ONLY]

To Set the Fan Speed

Press the FAN CONTROL button.

Each time the button is pressed, the fan speed changes in the following order:



About three seconds later, the entire display will reappear.

When set to AUTO:

Cooling: Operation begins and as the room temperature approaches that of the thermostat setting, the fan speed switches to the low setting.

Fan: [COOLING MODEL]

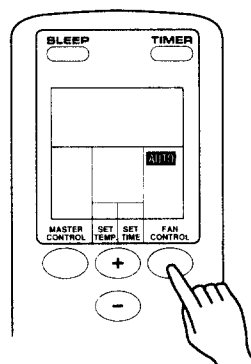
Fan speed is selected automatically in accordance with nearby room temperature.

Fan: [HEAT & COOL MODEL (Reverse Cycle)]

Fan operation will alternate between low speed and off.

***Heating:** The fan operates at low speed at the beginning of operation or otherwise when the temperature of the emitted air is relatively low; the fan speed increases as the temperature of the emitted air rises.

However, the fan will operate at very low speed when the air issued from the indoor unit is low (see P. 14).



Example: When set to AUTO.

To Stop Operation

Press the START/STOP button.

● During Cooling/Drying mode:

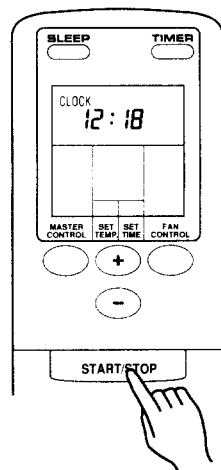
Set the thermostat to a temperature setting that is lower than the current room temperature. The Cooling and Drying modes will not operate if the thermostat is set higher than the actual room temperature (in Cooling mode, the fan alone will operate).

● During Fan mode:

You cannot use the unit to heat and cool your room.

* ● During Heating mode:

Set the thermostat to a temperature setting that is higher than the current room temperature. The Heating mode will not operate if the thermostat is set lower than the actual room temperature.



AIR DIRECTION ADJUSTMENT

Instructions relating to heating (*) are applicable only to "HEAT & COOL MODEL" (Reverse Cycle).

- Use the remote control unit's AIR FLOW DIRECTION button to adjust the up-down direction of airflow. (Left-right air direction is changed by manually moving the air louvers).
- Begin unit operation and confirm that the airflow-direction louvers are stopped before setting the airflow-direction.

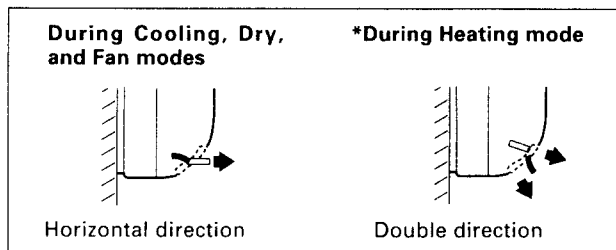


WARNING!

- Do not put fingers or other objects into the air louvers; an internal fan operates at high speed and could result in personal injury or damage.
- Do not operate the air conditioner with the airflow louvers blocked, since malfunction could result.

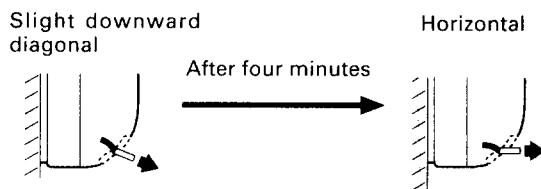
Automatic Airflow-Direction Adjustment

- The airflow-direction louvers is set automatically in accordance with the operating mode (cooling, etc.).



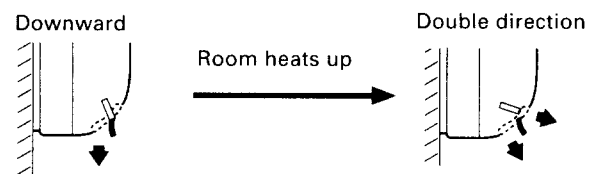
- During automatic operation mode (P.12), the airflow-direction louvers will switch automatically in the following way:

Cooling: For four minutes after operation begins, the louver's direction is at a slight downward diagonal; thereafter, the direction switches to horizontal.



Dry, Monitor mode: Horizontal direction.

***Heating:** At the beginning of operation the louvers will direct the airflow downward to the floor area; as the room is gradually warmed, the flaps will change to permit double direction heating.



- If you wish to select a different airflow direction, you may use the remote control unit's airflow-direction button to choose a different setting.

NOTE:

- Always use the remote control unit's airflow-direction button to change the position of the up-down airflow-direction louvers. Do not attempt to set the louvers by hand, since it may result in improper operation. In this case, stop the air conditioner temporarily and then restart to return the louvers to proper operation.
- Never operate the air conditioner when the up-down airflow-direction louvers are closed.



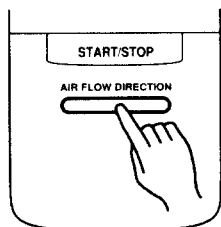
Do not operate when closed!

- When the operating mode is changed, the up-down airflow-direction louvers will automatically change to their standard direction.
- In the cooling and drying modes, dew may condense around and drop from the air outlet ports when the louvers are set to the other cooling range. As a result, we recommend that this position be used only for brief periods.
- A certain time interval may be required after pressing the remote control unit's airflow-direction button until the louvers are set to the desired position. During that interval, the airflow-direction button will not respond, even if pressed.
- When the air conditioner operation is stopped, the up-down airflow direction louvers automatically move to close the outlet vent.

Adjusting the Airflow-Direction

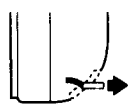
Press the AIR FLOW DIRECTION button.

- This control allows you to select a desired airflow direction.



Types of airflow:

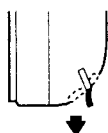
Horizontal



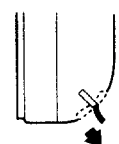
Slight downward diagonal



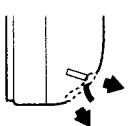
Downward



Downward diagonal



Double direction



In order to heighten the efficiency of cooling and drying modes, the airflow-direction louvers should be set within the following ranges:

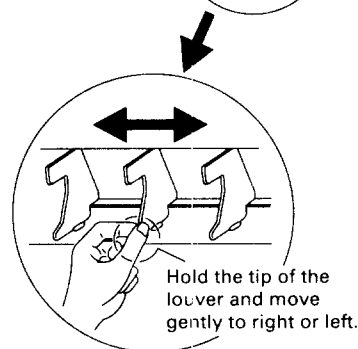
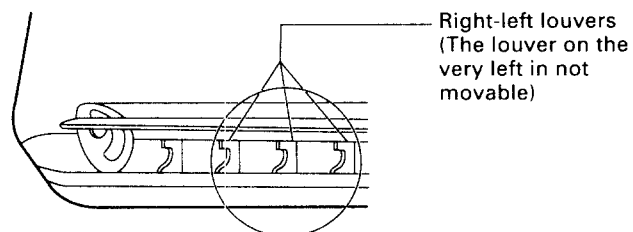
For Cooling: Horizontal, slight downward diagonal.

***For Heating:** Double direction, downward diagonal, downward.

Adjusting the Right-Left Direction

Adjust with the right-left louvers

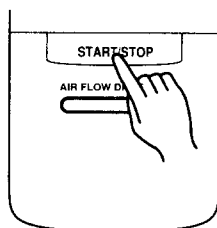
- Manually adjust the right-left louvers to the desired direction.



TIMER OPERATION

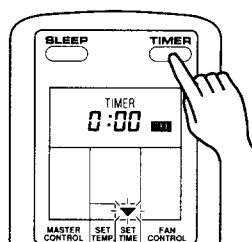
Before using the timer function, be sure that the remote control unit is set to the correct current time (P. 11).

OFF TIMER (Stops the air conditioner operation at the set time)



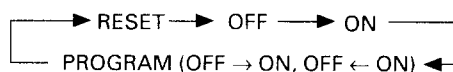
- 1 Press the START/STOP button**
(if the unit is already operating, proceed to step 2).

The indoor unit's red OPERATION lamp will light.

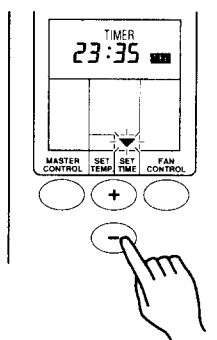


- 2 Press the TIMER button to select the OFF timer operation.**

Each time the button is pressed the timer function changes in the following order:



The indoor unit's green TIMER lamp will light.



- 3 Use the SET TIME buttons to adjust the desired OFF time.**

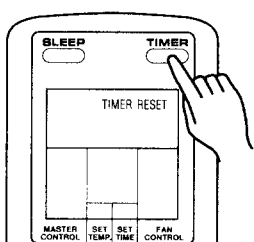
Set the time while the time display is flashing (the flashing will continue about five seconds).

- + button:** Press to advance the time.
- button:** Press to reverse the time.

About three seconds later, the entire display will reappear.

Example: When set to turn off at 23:35 (11:35 P.M.).

To Cancel the Timer

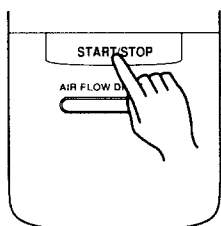


Use the TIMER button to select "RE-SET."
The air conditioner will return to normal operation.

To Change the Timer Setting

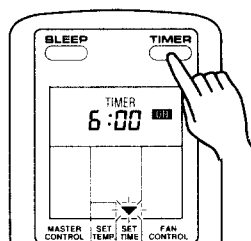
Perform steps 2 and 3.

ON TIMER (Begins air conditioner operation at the set time)



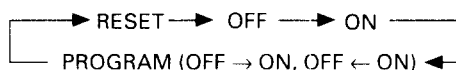
1 Press the START/STOP button (if the unit is already operating, proceed to step 2).

The indoor unit's red OPERATION lamp will light.

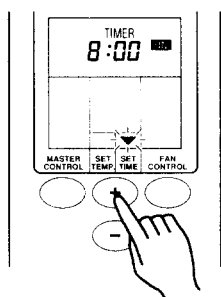


2 Press the TIMER button to select the ON timer operation.

Each time the button is pressed the timer function changes in the following order:



The indoor unit's green TIMER lamp will light.



3 Use the SET TIME buttons to adjust the desired ON time.

Set the time while the time display is flashing (the flashing will continue about five seconds).

+ button: Press to advance the time.

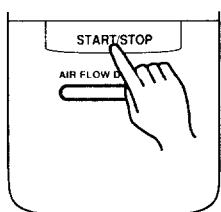
- button: Press to reverse the time.

About three seconds later, the entire display will reappear.

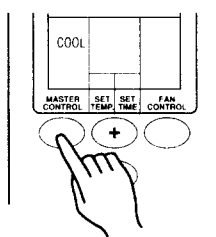
Example: When set to turn on at 8:00 A.M.

To Stop Air Conditioner Operation while the Timer is Operating

Press the START/STOP button.



To Change Operating Conditions

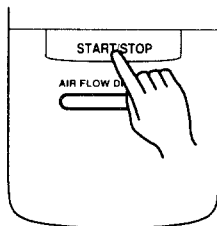


Example: To select COOL mode.

If you wish to change operating conditions (Mode, Fan Speed, Thermostat Setting, Air flow direction), after making the timer setting wait until the entire display reappears, then press the appropriate buttons to change the operating condition desired.

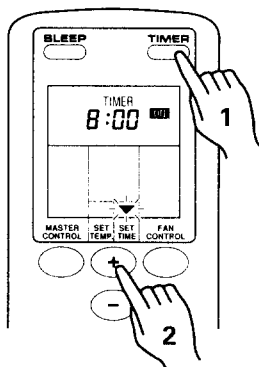
PROGRAM TIMER

To Use the Program Timer



- 1 Press the START/STOP button.**
(if the unit is already operating, proceed to step 2).

The indoor unit's red OPERATION lamp will light.



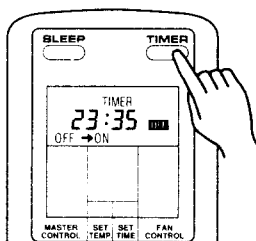
- 2 Set the desired times for OFF timer and ON timer.**

See steps 2 and 3 on pages 18 and 19 to set the desired mode and times.

About three seconds later, the entire display will reappear.

The indoor unit's green TIMER lamp will light.

Example: When ON timer is set for 8:00 A.M.



- 3 Press the TIMER button to select the PROGRAM Timer operation (OFF → ON or OFF ← ON will display).**

The display will alternately show "OFF timer" and "ON timer", then change to show the time setting for the operation to occur first.

- The program timer will begin operation. (If the ON timer has been selected to operate first, the unit will stop operating at this point).

About three seconds later, the entire display will reappear.

Example: When set to turn off at 23:35 P.M. and turn on at 8:00 A.M.

About the Program Timer

- The program timer allows you to integrate OFF timer and ON timer operations in a single sequence. The sequence can involve one transition from OFF timer to ON timer, or from ON timer to OFF timer, within a twenty-four hour period.
- The first timer function to operate will be the one set nearest to the current time. The order of operation is indicated by the arrow in the remote control unit's display (OFF → ON, or OFF ← ON).
- One example of program timer use might be to have the air conditioner automatically stop (OFF timer) after you go to sleep, then start (ON timer) automatically in the morning before you arise.

To Cancel the Timer

See page 18.

To Change the Timer Settings

- 1. Follow steps 2 and 3 on page 18 to select the timer setting you wish to change.**
- 2. Press the TIMER button to select either OFF → ON or OFF ← ON.**

To Stop Air Conditioner Operation while the Timer is Operating

See page 19.

To Change Operating Conditions

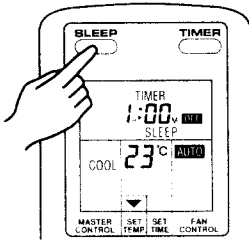
See page 19.

SLEEP TIMER OPERATION

Instructions relating to heating (*) are applicable only to "HEAT & COOL MODEL" (Reverse Cycle).

Unlike other timer functions, the SLEEP timer is used to set the length of time until air conditioner operation is stopped (for example, 2:00 hours).

To Use the SLEEP Timer



Example: When button is pressed during stop.

(The unit is set to COOL.)

While the air conditioner is operating or stopped, press the SLEEP button.

The indoor unit's red OPERATION lamp lights and the green TIMER lamp light.

To Change the Time Settings

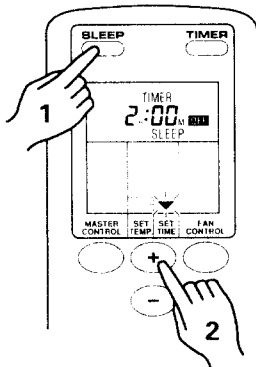
Press the SLEEP button once again and set the time using the time set buttons.

Set the time while the time display is flashing (the flashing will continue about five seconds).

+ button: Press to advance the time.

- button: Press to reverse the time.

About three seconds later, the entire display will reappear.



Example: When set to turn off two hours from the present time.

To Cancel the Timer:

See page 18.

To Stop the Air Conditioner During Timer Operation:

See page 19.

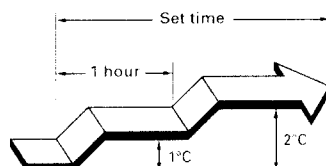
About the SLEEP Timer

To prevent excessive cooling during sleep, the SLEEP timer function automatically modifies the thermostat setting in accordance with the time setting. When the set time has elapsed, the air conditioner completely stops.

During Cooling/Drying operation:

When the SLEEP timer is set, the thermostat setting is automatically raised 1°C every sixty minutes. When the thermostat has been raised a total of 2°C, the thermostat setting at that time is maintained until the set time has elapsed, at which time the air conditioner automatically turns off.

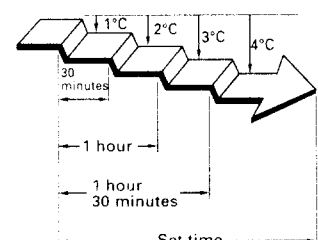
SLEEP timer setting



*During Heating operation:

When the SLEEP timer is set, the thermostat setting is automatically lowered 1°C every thirty minutes. When the thermostat has been lowered a total of 4°C, the thermostat setting at that time is maintained until the set time has elapsed, at which time the air conditioner automatically turns off.

SLEEP timer setting



CARE AND MAINTENANCE



CAUTION!

Before cleaning the unit, be sure to stop the unit and disconnect the power supply.

1. Disconnect the power plug.
 2. Turn off the electrical breaker.
- A fan operates at high speed inside the unit, and personal injury could result.

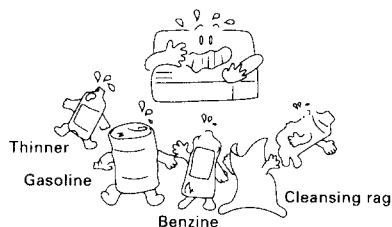
When cleaning the air conditioner, disconnect the power plug or turn off the electrical breaker.



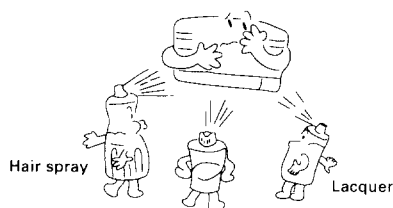
Never use water that is hotter than 40°C. The body may warp or change colour.



The unit can be damaged by gasoline, benzene, thinners, insecticides and other chemical agents.

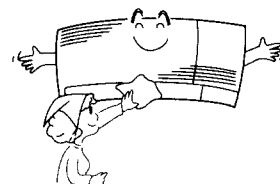


Do not use inflammable sprays such as lacquer or hair spray near the air conditioner.



Cleaning the Indoor Unit

Clean the indoor unit by wiping with a cloth dipped in cool or warm water, then wipe with another soft, clean, dry cloth.



When Not Using the Unit for Extended Periods (One Month or More)

Operate the unit on fan mode for about one-half day on a day with clear weather, to assure that the internal parts are dry (see p. 14).



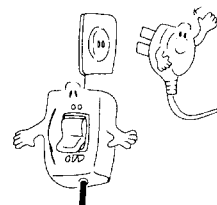
CAUTION!

When not using the unit for extended periods, disconnect the power plug for safety.

- When a plug is left connected, dust may collect on the blades, leading to smoke and fire hazard.

Check the Power Cord

Check the power cord occasionally to confirm that it is not damaged by cuts or abrasions. If you discover damage to the cord, consult authorized service personnel.



Inspections and Repairs

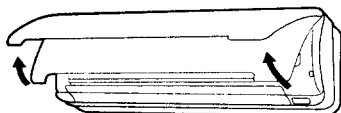
Depending on the conditions of use, the internal parts of an air conditioner will become dirty after about two or three seasons of use, and performance may be affected. For this reason, regular professional maintenance is recommended. Consult authorized service personnel.

Cleaning the Intake Grille

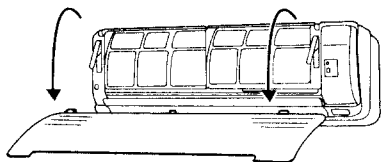
Removing the Intake Grille

1. Press in both lower edges of the intake grille until you hear a clicking sound and open the grille.

2. Open the grille farther.



3. Lift up the intake grille until it can be removed (the grille cannot be removed unless it is raised sufficiently).

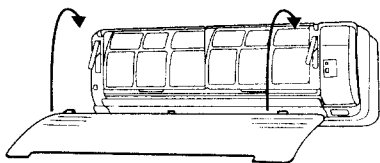


Cleaning the Intake Grille

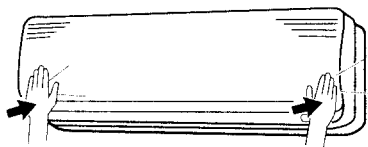
Use a vacuum cleaner to remove dust accumulations, then wipe the grille with a clean cloth dipped in warm water; wipe with a clean dry cloth to remove any water.

Installing the Intake Grille

1. Hold the intake grille horizontally and fasten the two hooks on the front panel.



2. Press the both lower sides of the intake grille until you hear a clicking sound and the grille locks into place.

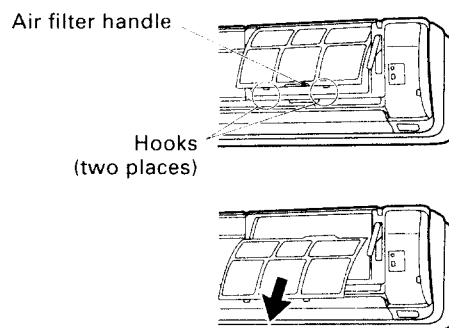


Cleaning the Air Filter

If dirt is allowed to collect in the air filter, the airflow will be reduced, leading to reduced performance, and increased operating noise. Be sure to clean the filters at the beginning of the operating season, and about every two weeks during periods of frequent operation.

Removing the Air Filter

1. Remove the intake grille.
2. Hold on to the air filter handles and pull up slightly to release the two lower hooks. Then pull the air filter down and out.

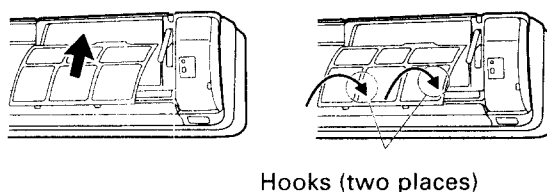


Cleaning the Air Filter

Either use a vacuum cleaner to remove accumulated dust, or wash in a neutral detergent solution. When washing the filter, allow it to dry well in a shaded location before reinstalling it in the air conditioner.

Installing the Air Filter

1. Align the air filter with the ditch of the panel and press in until it stops.
2. Insert the air filter's two hooks in the holes in the front panel and press in.
3. Close the intake grille.



TROUBLESHOOTING

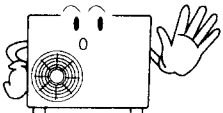
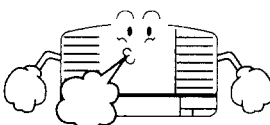
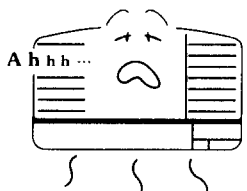
Instructions relating to heating (*) are applicable only to "HEAT & COOL MODEL" (Reverse Cycle).



WARNING!

In the event of a malfunction (burning smell, etc.), immediately stop operation, disconnect the power plug, and consult authorized service personnel.
Merely turning off the unit's power switch will not completely disconnect the unit from the power source. Always be sure to disconnect the power plug or turn off your circuit breaker to ensure that power is completely off.

Before requesting service, perform the following checks:

	Symptom	Problem	See Page
NORMAL FUNCTIONS	Doesn't operate immediately: 	● If the unit is stopped and then immediately started again, the compressor will not operate for about 3 minutes, in order to prevent fuse blowouts. ● Whenever the power plug is disconnected and then re-connected to a power outlet, the protection circuit will operate for about 3 minutes, preventing unit operation during that period.	—
	Noise is heard: 	● During operation and immediately after stopping the unit, the sound of water flowing in the air conditioner's piping may be heard. Also, noise may be particularly noticeable for about 2 to 3 minutes after starting operation (sound of coolant flowing). ● During operation, a slight squeaking sound may be heard. This is the result of minute expansion and contraction of the front cover due to temperature changes.	—
		*● During Heating mode, a sizzling sound may be heard occasional. This sound is produced by the automatic defrosting operation.	—
	Smells:	● Some smell may be emitted from the indoor unit. This smell is the result of room smells (furniture, tobacco, etc.) which have been taken into the air conditioner.	—
	Mist or steam are emitted: 	● During Cooling or Drying operation, a thin mist may be seen emitted from the indoor unit. This results from the sudden Cooling of room air by the air emitted from the air conditioner, resulting in condensation and misting. *● During Heating operation, the outdoor unit's fan may stop, and steam may be seen rising from the unit. This is due to operation of the defrosting mode.	—
	Airflow is weak or stops. 	● The fan may operate at very low speed during Drying mode or when the unit is monitoring the room's temperature.	14
		● In the monitor AUTO operation, the fan will operate at very low speed.	12
		*● When Heating mode is started, fan speed is temporarily very low, to allow internal parts to warm up. *● During Heating mode, if the room temperature rises above the thermostat setting, the outdoor unit will stop, and the indoor unit will operate at very low fan speed. If you wish to warm the room further, set the thermostat for a higher setting.	—
		*● During Heating mode, the unit will temporarily stop operation (between 6 and 12 minutes) as the automatic defrosting mode operates. During defrosting operation, the OPERATION indicator lamp will flash slowly.	26
	Water is produced from the outdoor unit.	*● During Heating mode, water may be produced from the outdoor unit due to automatic defrosting operation.	—

**WARNING!**

Consult authorized service personnel for any repairs.

	Symptom	Items to Check	See Page
CHECK ONCE MORE	Doesn't operate at all: 	● Is the power plug disconnected from its outlet? ● Has there been a power failure? ● Has a fuse blown out, or a circuit breaker been tripped?	—
		● Is the main power switch set to the OFF position?	10
		● Is the timer operating?	18 to 21
	Poor Cooling (or Heating) performance: 	● Is the air filter dirty? ● Are the air conditioner's intake grille or outlet port blocked? ● Did you adjust the room temperature settings (thermostat) correctly? ● Is there a window or door open? ● In the case of cooling operation, is a window allowing bright sunlight to enter? (Close the curtains.) ● In the case of Cooling operation, are there heating apparatus or computers inside the room, or are there too many people in the room?	—

OPERATION DETAILS

Instructions relating to heating (*) are applicable only to "HEAT & COOL MODEL" (Reverse Cycle).

Please read and understand the following details regarding this air conditioner.

Malfunction

Nearby lightning or use of a mobile radio (short wave, etc.) may result in malfunction. In this case, disconnect the power plug from its outlet and connect it again, then use the remote control unit to resume operation.

Auto Restart

- The air conditioner power has been interrupted by a power failure. The air conditioner will then restart automatically in its previous mode when the power is restored.
- Operated by settings before the power failure. Then, the airflow-direction louvers will automatically change to their standard direction.
- If a power failure occurs during timer operation, the timer will be reset and the unit will begin (or stop) operation at the new time setting. In the event that this kind of timer fault occurs, the TIMER indicator will flash (see P. 7).

Operation and Performance

*Heating Performance

- This air conditioner uses a heat pump which absorbs heat from outside air and brings it indoors. As a result, its heating performance is reduced as the temperature of outside air drops. If you find that insufficient room heat is produced, we recommend that you use the air conditioner together with other heating appliances.
- Heat-pump type air conditioners use warm-air recirculation to warm your entire room. As a result, some time will be required after starting operation until your entire room becomes warm.

*Microcomputer-controlled Automatic Defrosting

When outside air temperatures are low and humidity is high, using the Heating mode may result in the creation of frost inside the outdoor unit, lowering its heating performance. A built-in microcomputer is used to monitor this condition and when necessary, the defrosting mode operates, resulting in a temporary interruption of the Heating mode (both indoor and outside fans will stop). About 6 to 12 minutes will be required for normal operation to be resumed. During the defrosting mode, the OPERATION indicator lamp will flash.

Temperature and Humidity Range

Permissible ranges of temperature and humidity are as follows:

Cooling Operation	Outdoor temperature: About 18°C to 46°C
	Indoor temperature: About 18°C to 32°C
	Indoor humidity: About 80% or less. If the unit is used for long periods under conditions of high humidity, water may condense on and drip from the surface of the unit.
Drying Operation	Outdoor temperature: About 18°C to 46°C
	Indoor temperature: About 18°C to 32°C
	Indoor humidity: If the unit is used for long periods under conditions of high humidity, water may condense on and drip from the surface of the unit.
*Heating Operation	Outdoor temperature: About 0°C to 21°C
	Indoor temperature: About 30°C or less

If the unit is used under higher temperature conditions than those noted here, the automatic protection circuit may operate, interrupting the operation. If the unit is used under lower temperature conditions than those noted here, the heat exchanger may freeze, causing water leakage or other malfunction.

- Do not use the air conditioner for any purpose other than room cooling, room heating, room drying or fan.

SPECIFICATIONS

MODEL		
INDOOR UNIT	RSW-147	RSW-147R
OUTDOOR UNIT	ROW-147	ROW-147R
TYPE	COOLING MODEL	HEAT & COOL MODEL (REVERSE CYCLE)
POWER	220-240V~50Hz	220-240V~50Hz
COOLING		
CAPACITY	3.85~4.00 kW	3.85~4.00 kW
INPUT POWER	1.62~1.72 kW	1.65~1.75 kW
CURRENT	7.6~7.8 A	7.6~7.8 A
ENERGY EFFICIENCY RATIO	2.38~2.33	2.33~2.29
HEATING		
CAPACITY	—	4.65~4.80 kW
INPUT POWER	—	1.71~1.83 kW
CURRENT	—	7.8~8.2 A
MAX. PRESSURE	2,700 kPa	2,700 kPa
REFRIGERANT R22	1,000 g	1,050g
DIMENSIONS & WEIGHT (NET)		
INDOOR UNIT		
Height	285 mm	285 mm
Width	900 mm	900 mm
Depth	172 mm	172 mm
Weight	10 kg	10 kg
OUTDOOR UNIT		
Height	530 mm	530 mm
Width	750 mm	750 mm
Depth	250 mm	250 mm
Weight	37 kg	38 kg

- Acoustic Noise Information : The maximum sound pressure level is less than 70 dB (A) for both indoor unit and outdoor unit.
According to IEC 704-1 and ISO 3744.

