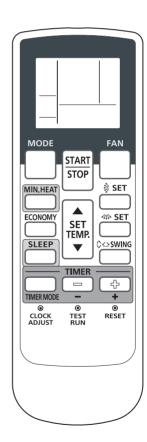
# OPERATING MANUAL MODE D'EMPLOI MANUAL DE FUNCIONAMIENTO



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# **SAFETY PRECAUTIONS**

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



This mark indicates procedures which, if improperly performed, might lead to the death or serious injury of the user.

• If a problem (burning smell, etc.) occurs, turn off the electrical breaker immediately to stop operation, and then consult authorized service personnel.

# **⚠** CAUTION

This mark indicates procedures which, if improperly performed, might possibly result in personal harm to the user, or damage to property.

- · Do not expose the controller directly to water.
- · Do not operate the controller with wet hands.
- · Do not touch the switches with sharp objects.
- Always turn off the electrical breaker whenever cleaning the controller, the air conditioner or the air filter.
- Ensure that any electronic equipment is at least 1m away from the controller.
- Avoid installing the controller near a fireplace or other heating apparatus.
- · Do not use inflammable gases near the controller.

# **FEATURES AND FUNCTIONS**

### **ECONOMY OPERATION**

Limits the maximum operation current, and performs operation with the power consumption suppressed. When economy operation mode is operated, the room temperature will be little higher than the set-temp under cooling mode and lower than set-temp under heating mode. Therefore, the economy mode is able to save more energy than other normal mode.

### **AUTO CHANGEOVER**

The operation mode (cooling, dry, heating) is switched automatically to maintain the set temperature, and the temperature is kept constant at all times.

### MINIMUM HEAT OPERATION

The room temperature can be set to go no longer than 50°F, thus ensuring that the room does not get too cold when no occupied.

### **PROGRAM TIMER**

The program timer allows you to integrate OFF timer and ON timer operations in a single sequence. The sequence can involve 1 transition from OFF timer to ON timer, or from ON timer to OFF timer, within 24 hour period.

### **SLEEP TIMER**

When the "SLEEP" button is pressed during Heating mode, the air conditioner's temperature setting is gradually lowered during the period of operation; during cooling mode, the temperature setting is gradually raised during the period of operation. When the set time is reached, the unit automatically turns off.

### WIRELESS REMOTE CONTROLLER

The Wireless Remote Controller allows convenient control of air conditioner operation.

# HORIZONTAL AIRFLOW: COOLING/ DOWNWARD AIRFLOW: HEATING

For cooling, use horizontal airflow so the cool air does not blow directly on the occupants in the room. For heating, use downward airflow to send powerful, warm air to the floor and create a comfortable environment

# OMNI-DIRECTIONAL AIR FLOW (SWING OPERATION)

3-dimensional control over air direction swing is possible through dual use of both an UP/DOWN air direction swing and RIGHT/ LEFT air direction swing. Since UP/DOWN air direction flaps operate automatically according to the operating mode of the unit, it is possible to set air direction based on the operating mode.

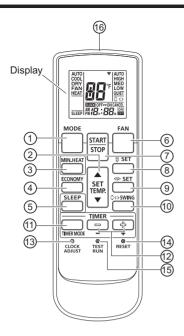
### **IMPORTANCE**

You can use both wired and wireless remote controller simultaneously. But function is limited.

[The restricted functions for wireless remote controller ones]

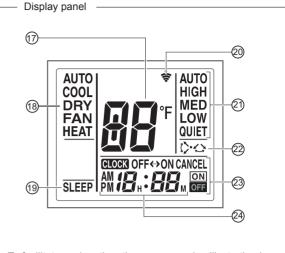
- SLEEP TIMER
- TIMER
- MINIMUM HEAT OPERATION

# NAME OF PARTS



- ① "MODE" button
- ② "SET TEMP. ( ▲ / ▼ )" button
- ③ "MIN.HEAT" button
- (4) "ECONOMY" button
- ⑤ "SLEEP" button
- 6 "FAN" button
- ⑦ "START/STOP" button
- (8) "

  § SET" button (Vertical)
- ⑨ "♠ SET" button (Horizontal)
- "◊△ SWING" button
- 11) "TIMER MODE" button
- ② "TIMER SET ( ± / □ )" button
- (3) "CLOCK ADJUST" button
- (14) "RESET" button
- (5) "TEST RUN" button
  - This button is used when installing the conditioner, and should not be used under normal conditions, as it will cause the air conditioner's temperature function to operate incorrectly.
  - If this button is pressed during normal operation, the unit will switch to test operation mode, and the Indoor Unit's OPERATION Indicator Lamp and TIMER Indicator Lamp will begin to flash simultaneously.
  - To stop the test operation mode, press the "START/STOP" button to stop the air conditioner.



To facilitate explanation, the accompanying illustration has been drawn to show all possible indicators; in actual operation, however, the display will only show those indicators appropriate to the current operation.

- (6) Signal Transmitter
- **(7)** Temperature SET Display
- **(8) Operation Mode Display**
- **(9) SLEEP Display**
- 20 Transmit Indicator
- 21 Fan Speed Display
- 22 SWING Display
- Timer Mode Display
- ② Clock Display

Some indoor units may not be equipped with the functions corresponding to all of the buttons on this remote controller. The indoor unit will beep and the OPERATION, TIMER and FILTER lamp flash when a remote controller button is pressed if the function is not available.

### **↑** CAUTION

- · Take care to prevent infants from accidentally swallowing batteries.
- When not using the Remote Controller 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 immediately and disposed of properly, either in a battery
  collection receptacle or to the appropriate authority.
- · Do not attempt to recharge dry batteries.

Never mix new and used batteries, or batteries of different types.

Batteries should last about 1 year under normal use. If the Remote Controller's operating range becomes appreciably reduced, replace the batteries and press the "RESET" button with the tip of a ballpoint pen or other small object.

### Load Batteries (R03/LR03 × 2)

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

Insert batteries.

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

3 Close the battery compartment lid.

### Set the Current time

- Press the "CLOCK ADJUST" button.
  Use the tip of a ball-point pen or other small object to press the button.
- 2 Use the "TIMER 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 1-minute increments; hold the buttons depressed to change the time quickly in 10-minutes increments.)

Press the "CLOCK ADJUST" button again.
This completes the time setting and starts the clock.

### To Use the Remote Controller

- The Remote Controller must be pointed at signal receiver to operate correctly.
- Operating Range: About 5 m.
- When a signal is properly received by the air conditioner, a beeping sound will be heard.
- If no beep is heard, press the Remote Controller button again.

### **Remote Controller Holder**







- ① Mount the Holder. ② Set the R
- ② Set the Remote Controller.
- 3 To remove the Remote Controller (when use at hand).

### **To Select Mode Operation**

♣ Press the "START/STOP" button.

The indoor unit's OPERATION Indicator Lamp (green) will light. The air conditioner will start operating.

**2** Press the "MODE" button to select the desired mode. Each time the button is pressed, the mode will change in the following order.

→ AUTO → COOL → DRY — HEAT ← FAN ←

About 3 seconds later, the entire display will reappear.

# To Set the Room temperature

### Press the "SET TEMP. ( ▲ /▼ )" button.

- ▲ button: Press to raise the temperature setting.

  ▼ button: Press to lower the temperature setting.
- ●Temperature setting range:

The temperature cannot be used to set room temperature during the FAN mode (the temperature will not appear on the Remote Controller's Display).

About 3 seconds later, the entire display will reappear.

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

# To Set the Fan Speed

### Press the "FAN" button.

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

AUTO → HIGH → MED → LOW → QUIET —

About 3 seconds later, the entire display will reappear.

### When set to AUTO:

**Heating**: Fan operates so as to optimally circulate warmed air.

However, the fan will operate at very low speed when the temperature of the air issued from the indoor unit is low.

Cooling: As the room temperature approaches that of the temperature setting, the

fan speed becomes slower.

The fan runs at the low fan speed.

The fan will operate at a very low setting during Monitor operation and at the start of the Heating mode.

### NOTES

 The QUIET is not available depending on the model. Please refer to the operating manual for the indoor unit.

### **QUIET Operation**

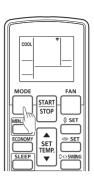
### When set to Quiet:

QUIET Operation begins. The indoor unit's airflow will be reduced for quieter operation.

- QUIET Operation cannot be used during Dry mode. (The same is true when dry mode is selected during AUTO mode operation.)
- During Quiet operation, Heating and Cooling performance will be reduced somewhat.
   If the room does not warm up/ cool down when using QUIET Operation, please adjust the air conditioner's Fan Speed.

### **I** NOTES

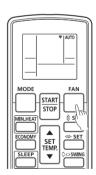
 The QUIET operation is not available depending on the model. Please refer to the operating manual for the indoor unit.



Example: When set to COOL.



Example: When set to 78°F.



Example: When set to AUTO.

### To Stop Operation

### Press the "START/STOP" button.

The OPERATION Indicator Lamp (green) will go out.

### **About AUTO CHANGEOVER Operation**

### AUTO:

When AUTO CHANGEOVER operation first selected, the fan will operate at very low speed for about 1 minute, during which time the unit detects the room conditions and selects the proper operating mode.

If the difference between temperature setting and actual room temperature is more than +4 °F

→ Cooling or dry operation

(Monitor operation may be selected if the outdoor temperature is low.) If the difference between temperature setting and actual room temperature is within ±4 °F

→ Monitor operation

If the difference between temperature setting and actual room temperature is more than -4 °F

→ Heating operation

(Monitor operation may be selected if the outdoor temperature is high.)

• When the air conditioner has adjusted your room's temperature to near the temperature setting, it will begin monitor operation. In the monitor operation mode, the fan will operate at low speed. If the room temperature subsequently changes, the air conditioner will once again select the appropriate operation (Heating, Cooling) to adjust the temperature to the value set in the temperature.

(The monitor operation range is ±4 °F relative to the temperature setting.)

• If the mode automatically selected by the unit is not what you wish, select one of the mode operation (HEAT, COOL, DRY, FAN).

### **About Mode Operation**

- **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 beginning 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 Automatic Defrosting operation, the OPERATION Indicator Lamp will flash, and the heat operation will be interrupted.
  - After the start of heating operation, it takes some time before the room gets warmer.

### Cooling: • Use to cool your room.

Dry:

- Use for gently cooling while dehumidifying your room.
- You cannot heat the room during Dry mode.
- During Dry 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 adjusting room humidity.
- The fan speed cannot be changed manually when Dry mode has been

### Fan:

Use to circulate the air throughout your room.

### **During Heating mode:**

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

### During Cooling/Dry mode:

Set the temperature to a temperature setting that is lower than the current room temperature. The Cooling and Dry modes will not operate if the temperature is set higher than the actual room temperature, the fan alone will operate.

### During Fan mode:

You can not use the unit to heat and cool your room.

# TIMER OPERATION

Before using the timer function, be sure that the Remote Controller is set to the correct current time ( P. 4). If the indoor unit is connected to a wired remote controller, the wireless remote controller cannot be used to set the timer.

### To Use the ON timer or OFF timer

Press the "START/STOP" button.
(if the unit is already operating, proceed to step 2).
The indoor unit's OPERATION Indicator Lamp (green) will light.

Press the "TIMER MODE" button to select the OFF timer or ON timer operation.

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

$$\rightarrow$$
 CANCEL  $\rightarrow$  OFF  $\rightarrow$  ON  $\rightarrow$  PROGRAM (OFF  $\rightarrow$  ON, OFF  $\leftarrow$  ON)  $\leftarrow$ 

The indoor unit's TIMER Indicator Lamp (orange) will light.

3 Use the "TIMER SET ( ⊕ / □ )" buttons to adjust the desired OFF time or ON time.

Set the time while the time display is flashing (the flashing will continue for about 5 seconds).

+ button: Press to advance the time.

**button:** Press to reverse the time.

About 5 seconds later, the entire display will reappear.

# To Use the Program timer

Press the "START/STOP" button.

(if the unit is already operating, proceed to step 2).

The indoor unit's OPERATION Indicator Lamp (green) will light.

**9** Set the desired times for OFF timer and ON timer.

See the section "To Use the ON timer or OFF timer" to set the desired mode and times.

About 3 seconds later, the entire display will reappear. The indoor unit's TIMER Indicator Lamp (orange) will light.

Press the "TIMER MODE" 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 5 seconds later, the entire display will reappear.

### 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 1 transition from OFF timer to ON timer, or from ON timer to OFF timer, within 24 hour period.
- The first timer function to operate will be the 1 set nearest to the current time. The order
  of operation is indicated by the arrow in the Remote Controller'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

Use the "TIMER MODE" button to select "CANCEL".

The air conditioner will return to normal operation.

### To Change the Timer Settings

Perform steps 2 and 3.

To Stop Air Conditioner Operation while the Timer is Operating

Press the "START/STOP" button.

#### To Change Operating Conditions

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

### To Cancel the Timer

Use the "TIMER MODE" button to select "CANCEL".

The air conditioner will return to normal operation

### To Change the Timer Settings

- Follow the instructions given in the section "To Use the ON Timer or OFF Timer" to select the timer setting you wish to change.
- 2. Press the "TIMER MODE" button to select either OFF → ON or OFF ← ON.

# To Stop Air Conditioner Operation while the Timer is Operating

Press the "START/STOP" button.

### **To Change Operating Conditions**

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

# SLEEP TIMER OPERATION

Unlike other timer functions, the SLEEP timer is used to set the length of time until air conditioner operate is stopped. If the indoor unit is connected to a wired remote controller, the wireless remote controller cannot be used to set the sleep timer.

### To Use the SLEEP Timer

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

The indoor unit's OPERATION Indicator Lamp (green) lights and the TIMER Indicator Lamp (orange) light.

#### To Cancel the Timer:

Use the "TIMER MODE" button to select

The air conditioner will return to normal opera-

# To Stop the Air Conditioner During Timer Operation:

Press the "START/STOP" button.

# To Change the Timer Settings

Press the "SLEEP" button once again and set the time using the "TIMER SET ( 🛨 / 🖃 )" buttons.

- button: Press to advance the time.
  button: Press to reverse the time.
- About 5 seconds later, the entire display will reappear.

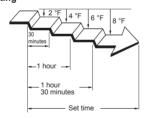
### **About the SLEEP Timer**

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

### **During Heating operation:**

When the SLEEP timer is set, the temperature setting is automatically lowered 2 °F every thirty minutes. When the temperature has been lowered a total of 8 °F, the temperature setting at that time is maintained until the set time has elapsed, at which time the air conditioner automatically turns off.

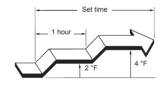
### SLEEP timer setting



### **During Cooling/Dry operation:**

When the SLEEP timer is set, the temperature setting is automatically raised 2 °F every 1 hour. When the temperature has been raised a total of 4 °F, the temperature setting at that time is maintained until the set time has elapsed, at which time the air conditioner automatically turns off.

### SLEEP timer setting



# ADJUSTING THE DIRECTION OF AIR CIRCULATION

- Adjust the up, down, left, and right AIR directions with the "

   and 
   SET" buttons on the Remote Controller.
- Use the "\$ and 45 SET" buttons after the Indoor Unit has started operating and the airflow-direction louvers have stopped moving.

### **Vertical Air Direction Adjustment**

Vertical airflow louver control may not be available depending on the model.

### Press the " SET" button (Vertical).

(The Remote Controller's display does not change.)

Each time the button is pressed, the air direction range will change as shown in MANUAL (OPERATION) which is included in INDOOR UNIT.

- Use the air direction adjustments within the ranges as shown in MANUAL (OPERA-TION) which is included in INDOOR UNIT.
- The vertical airflow direction is set automatically as shown in MANUAL (OPERA-TION) which is included in INDOOR UNIT, in accordance with the type of operation selected.
- During AUTO mode operation, for the first minute after beginning operation, airflow will be horizontal position; the air direction cannot be adjusted during this period.
- The vertical air direction adjustment operation is not available depending on the model

Please refer to the MANUAL (OPERATING) which is included in INDOOR UNIT.

### NOTES

- Always use the Remote Controller's "SET" button to adjust the vertical airflow louvers.
   Attempting to move them manually could result in improper operation; in this case, stop operation and restart. The louvers should begin to operate properly again.
- During use of the Cooling and Dry modes, do not set the Air Flow Direction Louvers in the downward position for long periods of time, since water vapor may condense near the outlet louvers and drops of water may drip from the air conditioner. During the Cooling and Dry modes, if the Air Flow Direction Louvers are left in the heating rang for more than 30 minutes, they will automatically return to Cooling and Dry mode position.
- When used in a room with infants, children, elderly or sick persons, the air direction and room temperature should be considered carefully when making settings.

### **Horizontal Air Direction Adjustment**

Horizontal airflow louver control may not be available depending on the model.

### Press the " SET" button (Horizontal).

(The remote controller's display does not change.)

Each time the button is pressed, the air direction range will change as shown in MANUAL (OPERATION) which is included in INDOOR UNIT.

 The horizontal air direction adjustment operation is not available depending on the model. Please refer to the MANUAL (OPERATING) which is included in INDOOR UNIT.

# SWING OPERATION

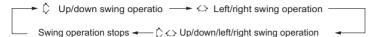
Left/right and up/down/left/right swing operation cannot be performed on models that are not equipped with horizontal airflow louvers.

Begin air conditioner operation before performing this procedure.

### To select SWING Operation

### Press the "DA SWING" button.

Each time the "OLD SWING" button is pressed, the swing operation will change in the following order.



### To stop SWING Operation

### Press the " >> SWING" button and select STOP.

Airflow direction will return to the setting before swing was begun.

### **About Swing Operation**

- Left/right swing: The airflow-direction louvers move (swing) in the left/right airflow direction.
- Up/down/left/right swing: The airflow-direction louvers move (swing) in both the up/down and left/right airflow directions.
- The SWING operation may stop temporarily when the air conditioner's fan is not operating, or when operating at very low speeds.
- If the "\$ SET" button (Vertical) is pressed during the up/down swing operation, the up/down swing operation will stop and if the "SET" button (Horizontal) is pressed during the left/right swing operation, the left/right swing operation will stop.
- The swing operation is not available depending on the model. Please refer to the MANUAL (OPERATING) which is included in INDOOR UNIT.

# ECONOMY OPERATION

Begin Air Conditioner operation before performing this procedure.

### To Use the ECONOMY Operation

### Press the "ECONOMY" button.

The ECONOMY Indicator Lamp (green) will light. Economy operation begins.

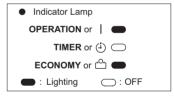
# To Stop the ECONOMY Operation

### Press the "ECONOMY" button again.

The ECONOMY Indicator Lamp (green) will go out. Normal operation begins.

### **About ECONOMY Operation**

- At the maximum output, ECONOMY Operation is approximately 70% of normal air conditioner operation for cooling and heating. (Single-Type)
- At the maximum output, ECONOMY Operation (All indoor unit) is approximately 70% of normal air conditioner operation for cooling and heating. (Multi-Type)
- During ECONOMY Operation, the temperature setting automatically changes according to the temperature to avoid Unnecessary cooling and heating for the most economical operation.
- If the room is not cooled (or heated) well during economy operation, select normal operation.
- During the monitor period in the AUTO mode, the air conditioner operation will not change to ECONOMY Operation even if ECONOMY Operation is selected by pressing the "ECONOMY" button.



# MINIMUM HEAT OPERATION

• The room temperature can be maintained at 50°F by pressing the "MIN. HEAT" button so as to prevent the room temperature from falling too far.

### To use MINIMUM HEAT Operation

### Press the "MIN. HEAT" button.

The OPERATION Indicator Lamp (green) will go out, and the ECONOMY Indicator Lamp (green) will light.

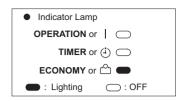
### To stop MINIMUM HEAT Operation

### Press the "START/STOP" button.

Then the OPERATION stops and the ECONOMY Indicator Lamp (green) will go out.

### **About the MINIMUM HEAT Operation**

• The MINIMUM HEAT Operation will not operate if the room temperature is high enough.



While MINIMUM HEAT Operation is in progress, only Airflow Direction Set can be used.

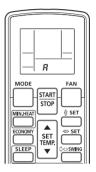
# SELECTING THE REMOTE CONTROLLER SIGNAL CODE

When two or more air conditioners are installed in a room and the remote controller is operating an air conditioner other than the one you wish to set, change the signal code of the remote controller to operate only the air conditioner you wish to set (4 selections possible). When two or more air conditioners are installed in a room, please contact your retailer to set the individual air conditioner signal codes.

## Selecting the Remote Controller Signal Code

Use the following steps to select the signal code of the remote controller. (Note that the air conditioner cannot receive a signal code if the air conditioner has not been set for the signal code.)

- Press the "START/STOP" button until only the clock is displayed on the remote controller display.
- Press the "MODE" button for at least 5 seconds to display the current signal code (initially set to H).



- 3 Press the "SET TEMP. ( ▲ / ▼ )" buttons to change the signal code between 🖁 → 🖢 → ਛ → 💆. Match the code on the display to the air conditioner signal code.
- Press the "MODE" button again to return to the clock display. The signal code will be changed.

If no buttons are pressed within 30 seconds after the signal code is displayed, the system returns to the original clock display. In this case, start again from step 1.

The air conditioner signal code is set to A prior to shipment. Contact your retailer to change the signal code.

The remote controller resets to signal code A when the batteries in the remote controller are replaced. If you use a signal code other than signal code A, reset the signal code after replacing the batteries. If you do not know the air conditioner signal code setting, try each of the signal codes ( $\mathbf{A} \rightarrow \mathbf{b} \rightarrow \mathbf{c} \rightarrow \mathbf{d}$ ) until you find the code which operates the air conditioner.

# **⚠ WARNING**

- In the event of a malfunction (burning smell, etc.), immediately stop operation, turn off the electrical breaker 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 turn off the electrical breaker to ensure that power is completely off.

Before requesting service, perform the following checks:

|                 | Symptom                                  | Problem  | See Page |
|-----------------|--|--|----------|
| NORMAL FUNCTION | Doesn't operate immediately:             | <ul> <li>If the indoor unit is stopped and then immediately started again, the<br/>compressor will not operate for about 3 minutes, in order to prevent<br/>fuse blowouts.</li> </ul>  | _        |
|                 |  | <ul> <li>Whenever the electrical breaker is turned off then on again the protection circuit will operate for about 3 minutes, preventing unit operation during that period.</li> </ul>   |          |
|                 | Noise is heard:                          | <ul> <li>During operation or immediately after stopping the unit, the sound<br/>of water flowing in the air conditioner's piping may be heard. Also,<br/>noise may be particularly noticeable for about 2 to 3 minutes after<br/>starting operation (sound of refrigerant flowing).</li> </ul> | _        |
|                 |  | <ul> <li>During operation, a slight squeaking sound may be heard. This is<br/>the result of minute expansion and contraction of the front panel due<br/>to temperature changes.</li> </ul>   |          |
|                 |  | <ul> <li>During Heating operation, a sizzling sound may be heard occasional.</li> <li>This sound is produced by the Automatic Defrosting operation.</li> </ul>   | 14       |
|                 | Smells:                                  | <ul> <li>Some smell may be emitted from the indoor unit. This smell is the<br/>result of room smells (furniture, tobacco, etc.) which have been taken<br/>into the indoor unit.</li> </ul>   | _        |
|                 | Mist or steam is emitted:                | <ul> <li>During Cooling or Dry operation, a thin mist may be seen emitted<br/>from the indoor unit. This results from the sudden Cooling of room air<br/>by the cool air emitted from the indoor unit, resulting in condensation<br/>and misting.</li> </ul>                                   | _        |
|                 |  | <ul> <li>During Heating operation, the outdoor unit's fan may stop, and steam<br/>may be seen rising from the unit. This is due to Automatic Defrosting<br/>operation.</li> </ul>  | 14       |
|                 | Airflow is weak or stops:                | <ul> <li>When Heating operation is started, fan speed is temporarily very<br/>low, to allow internal parts to warm up.</li> </ul>  |          |
|                 |  | <ul> <li>During Heating operation, if the room temperature rises above the<br/>temperature setting, the outdoor unit will stop, and the indoor unit will<br/>operate at very low fan speed. If you wish to warm the room further,<br/>set the temperature for a higher setting.</li> </ul>     | _        |
|                 |  | <ul> <li>During Heating operation, the indoor unit will temporarily stop opera-<br/>tion (between 7 and 15 minutes) as the Automatic Defrosting mode<br/>operates. During Automatic Defrosting operation, the OPERATION<br/>Indicator Lamp will flash.</li> </ul>                              | 14       |
|                 |  | <ul> <li>During Dry mode, the indoor unit will operate at low speed; in order<br/>to adjust room humidity, the indoor unit's fan may stop from time to<br/>time. Also, the fan may operate at very low speed when adjusting<br/>room humidity.</li> </ul>                                      | 6        |
|                 |  | <ul> <li>During SUPER QUIET operation, the fan will operate at very low<br/>speed.</li> </ul>  | 5        |
|                 |  | <ul> <li>In the monitor of AUTO operation, the fan will operate at very low<br/>speed.</li> </ul>  | 6        |
|                 |  | <ul> <li>In case of Multi-type unit, if multiple units are operated in different<br/>operation modes as shown below, the units operated afterward will<br/>stop and the OPERATION Indicator Lamp (green) will flash.</li> </ul>  | 15       |
|                 |  | Heating mode and cooling mode (or dry mode)  Heating mode and fan mode   |          |
|                 | Water is produced from the outdoor unit: | <ul> <li>During Heating operation, water may be produced from the outdoor<br/>unit due to Automatic Defrosting operation.</li> </ul>   | 14       |

# **TROUBLESHOOTING**

|                    | Symptom   | Problem   | See Page |
|--------------------|---|---|----------|
| CHECK ONCE<br>MORE | Doesn't operate at all:   | <ul> <li>Has the circuit breaker been turn off?</li> <li>Has there been a power failure?</li> <li>Has a fuse blown out, or a circuit breaker been tripped?</li> </ul>   | _        |
|                    |   | Is the timer operating?   | 7-8      |
|                    | Poor Cooling (or Heating) performance:                              | <ul> <li>Is the Air Filter dirty?</li> <li>Are the air conditioner's intake grille or outlet port blocked?</li> <li>Did you adjust the room temperature settings (temperature) correctly?</li> <li>Is there a window or door open?</li> <li>In the case of Cooling operation, is a window allowing bright sunlight to enter? (Close the curtains.)</li> <li>In the case of Cooling operation, are there heating apparatus and computers inside the room, or are there too many people in the room?</li> </ul> | _        |
|                    |   | Is the unit set for SUPER QUIET operation?  | 5        |
|                    | The unit operates differently from the Remote Controller's setting: | <ul> <li>Are the Remote Controller's batteries dead?</li> <li>Are the Remote Controller's batteries loaded properly?</li> </ul>   | 4        |

If the problem persists after performing these checks, or if you notice burning smells, or the OPERATION Indicator Lamp and the TIMER Indicator Lamp flashes, immediately stop operation, turn off the electrical breaker and consult authorized service personnel.

# **OPERATING TIPS**

### **Operation and Performance**

### **Heating Performance**

- This air conditioner operates on the heat-pump principle, absorbing heat from outdoor air and transferring that heat to indoor unit. As a result, the operating performance is reduced as outdoor air temperature drops. If you feel that insufficient heating performance is being produced, we recommend you use this air conditioner in conjunction with another kind of heating appliance.
- Heat-pump air conditioners heat your entire room by recirculating air throughout the room, with the result that some time may be required after first starting the air conditioner until the room is heated.

### Microcomputer-controlled Automatic Defrosting

- When using the Heating mode under conditions of low outdoor temperature and high humidity, frost may form on the outdoor unit, resulting in reduced operating performance.
  - In order to prevent this kind of reduced performance, this air conditioner is equipped with a Microcomputer-controlled Automatic Defrosting function. If frost forms, the air conditioner will temporarily stop, and the defrosting circuit will operate briefly (for about 7-15 minutes).
  - During Automatic Defrosting operation, the OPERATION Indicator Lamp (green) will flash.
- After heating operation stops, if frost forms on the outdoor unit, the unit will start Automatic Defrosting operation. At this time, the outdoor unit will automatically stop after operating for a few minutes.

(However, some type of multi-type air conditioner doesn't provide this function.)

# OPERATING TIPS

### **AUTO Restart**

### In Event of Power Interruption

- The power supply to the air conditioner is stopped by a power interruption. The air conditioner will then restart automatically in its previous mode when the power is restored.
- If a power interruption occurs during TIMER operation, the timer will be reset and the indoor unit will begin (or stop) operation at the new time setting. In the event that this kind of timer fault occurs, the TIMER Indicator Lamp will flash.
- Use of other electrical appliances (electric shaver, etc.) or nearby use of a wireless radio transmitter may cause the air conditioner to malfunction. In this event, temporarily turn off the circuit breaker, turn it on and then use the Remote Controller to resume operation.

### Simultaneous Use of Multiple Units

- When using a multi-type air conditioner, the multiple indoor units can be operated simultaneously, but when two or more indoor units of the same group are operated simultaneously, the heating and cooling efficiency will be less than when a single indoor unit is used alone. Accordingly, when you wish to use more than one indoor unit for cooling at the same time, the use should be concentrated at night and other times when less output is required. In the same way, when multiple units are used simultaneously for heating, it is recommended that they be used in conjunction with other auxiliary space heaters, as required.
- Seasonal and outdoor temperature conditions, the structure
  of the rooms and the number of persons present may also
  result in differences of operating efficiency. We recommend
  that you try various operating patterns in order to confirm the
  level of heating and cooling output provided by your units,
  and use the units in the way that best matches your family's
  lifestyle.
- If you discover that one or more units delivers a low level of cooling or heating during simultaneous operation, we recommend that you stop simultaneous operation of the multiple units
- Operation cannot be done in the following different operating modes.

If the indoor unit is instructed to do an operating mode that it cannot perform, the OPERATION Indicator Lamp (green) on the indoor unit will flash (1 second on, 1 second off) and the unit will go into the standby mode.

Heating mode and cooling mode (or dry mode)

Heating mode and fan mode

 Operation can be done in the following different operating modes.

Cooling mode and dry mode

Cooling mode and fan mode

Dry mode and fan mode

 The operating mode (heating mode or cooling (dry) mode) of the outdoor unit will be determined by the operating mode of the indoor unit that was operated first. If the indoor unit was started in fan mode, the operating mode of the outdoor unit will not be determined.

For example, if indoor unit (A) was started in fan mode and then indoor unit (B) was then operated in heating mode, indoor unit (A) would temporarily start operation in fan mode but when indoor unit (B) started operating in heating mode, the OPERATION Indicator Lamp (green) for indoor unit (A) would begin to flash (1 second on, 1 second off) and it would go into standby mode. Indoor unit (B) would continue to operate in heating mode.

### **I** NOTES

- During use of the heating mode, the outdoor unit will occasionally commence the defrost operation for brief periods. During the
  defrosting operation, if the user sets the indoor unit for heating again, the defrosting mode will continue, and the heating operation
  will begin after completion of defrosting, with the result that some time may be required before warm air is emitted.
- During use of the heating mode, the top of the indoor unit may become warm, but this is due to the fact that coolant is circulated through the indoor unit even when it is stopped: it is not a malfunction.