DAIKIN ROOM AIR CONDITIONER

OPERATION MANUAL

MODELS
FTXS09HVJU
FTXS12HVJU
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Safety Precautions

- Keep this manual where the operator can easily find it.
- Read this manual carefully before starting the unit.
- For safety reason, the operator must read the following cautions carefully.
- This manual classifies precautions into DANGER, WARNING and CAUTION. Be sure to follow all precautions below: they are all important for ensuring safety.

<table>
<thead>
<tr>
<th>DANGER</th>
<th>WARNING</th>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.</td>
<td>If you do not follow these instructions exactly, the unit may cause property damage, personal injury or loss of life.</td>
<td>If you do not follow these instructions exactly, the unit may cause minor or moderate property damage or personal injury.</td>
</tr>
</tbody>
</table>

| Never do. | Be sure to follow the instructions. | Never touch the air conditioner (including the remote controller) with a wet hand. |

**DANGER**

- For refrigerant leakage, consult your dealer. Refrigerant gas is heavier than air and replaces oxygen. A massive leak could lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death. Refrigerant gas may produce a toxic gas if it comes in contact with fire such as from a fan heater, stove or cooking device. Exposure to this gas could cause severe injury or death. Any abnormalities in the operation of the air conditioner such as smoke or fire could result in severe injury or death. Turn off the power and contact your dealer immediately for instructions. Do not install the unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death. If equipment utilizing a burner is used in the same room as the air conditioner, there is the danger of oxygen deficiency which could lead to an asphyxiation hazard resulting in serious injury or death. Be sure to ventilate the room sufficiently to avoid this hazard. Safely dispose of the packing materials. Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries. Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of death by suffocation.

**WARNING**

- It is not good for health to expose your body to the air flow for a long time. Do not put your finger, a rod or other objects into the air outlet or inlet. As the fan is rotating at a high speed and could cause injury. Always keep small children away from the unit during operation. Do not attempt to repair, relocate, modify or reinstall the air conditioner by yourself. Incorrect work or modifications could cause electric shocks, fire or other damage. For repairs and reinstallation, consult your Daikin dealer for advice and information.

- If the air conditioner is not cooling (heating) properly, the refrigerant may be leaking, contact your authorized dealer or qualified service repairman. When making repairs which requires adding refrigerant, consult with your authorized dealer or qualified service repairman. Do not attempt to install the air conditioner by yourself. Improper installation could result in water leakage, electric shocks or fire. For installation, consult your authorized dealer or a qualified technician.
CAUTION

- The air conditioner must be grounded to the earth. Improper grounding may result in electric shocks. Do not connect the earth grounding wire to a gas pipe, water pipe, lightning rod, or a telephone ground line. Follow all local and state electrical codes.

- Do not use this unit for cooling precision instruments, food, plants, animals or works of art.
- Never expose little children, plants or animals directly to the air flow.
- Do not block air inlets nor outlets. Impaired air flow may result in poor performance or equipment problems.
- Do not stand, sit, or place objects on the outdoor unit. To avoid injury, do not remove the fan guard.
- Do not place anything under the indoor or outdoor unit that must be kept away from moisture, such as electrical or electronic equipment. In certain conditions, moisture in the air may condense and drip.
- Check the unit stand and fittings for damage annually.
- Do not touch the air inlet and aluminum fins of outdoor unit. It may cause injury and/or damage the heat transfer surface.
- Do not turn the power immediately after stopping operation. Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.

- To avoid personal injury or equipment damage be sure to stop the operation, turn the breaker off or pull out the supply cord before cleaning or servicing the unit. NOTE: More than one disconnect may be required to shut off all power.
- Do not connect the air conditioner to a power supply different from the one specified. It may cause improper operation or fire.
- Depending on the environment, state and local electrical codes, a ground fault circuit interrupter may be required. Improper grounding or lack of a ground fault circuit interrupter may result in electrical shock, injuries, or death.
- Arrange the drain hose to ensure smooth drainage. Improper drainage may cause water damage to the building, or it’s furnishing.
- Depending on the usage environment, water may leak from the air conditioner. If this happens, contact your Daikin Dealer.
- The remote controller should be installed in such away that children cannot play with it.
- Do not place objects in direct proximity of the outdoor unit and do not let leaves and other debris accumulate around the unit. Leaves are a hotbed for small animals which can enter the unit. Once in the unit, such animals can cause malfunctions, smoke or fire when making contact with electrical parts.

- Do not operate the air conditioner with wet hands.
- Do not wash the indoor unit with excessive water, only use a slightly wet cloth.
- Do not place things such as vessels containing water or anything else on top of the unit. Water may penetrate into the unit and degrade electrical insulations, resulting in an electric shock.

Installation site.
- To install the air conditioner in the following types of environments, consult the dealer.
  - Places with an oily ambient or where steam or soot occurs.
  - Salty environment such as coastal areas.
  - Places where sulfide gas occurs such as hot springs.
  - Places where snow may block the outdoor unit. The drain from the outdoor unit must be discharged to a place of good drainage.

Consider nuisance to your neighbours from noises.
- For installation, choose a place as described below.
  - A place solid enough to bear the weight of the unit which does not amplify the operation noise or vibration.
  - A place from where the air discharged from the outdoor unit or the operation noise will not annoy your neighbours.

Electrical work.
- For power supply, be sure to use a separate power circuit dedicated to the air conditioner.

System relocation.
- Relocating the air conditioner requires specialized knowledge and skills. Please consult the dealer if relocation is necessary for moving or remodeling.
**Name of Parts**

**Indoor Unit**

- **Air filter**
- **Air inlet**
- **Air outlet**
- **Front panel**
- **Panel tab**
- **Louvers (vertical blades)**
- **Flaps (horizontal blades)**
- **Air-purifying filter with photocatalytic deodorizing function**
- **INTELLIGENT EYE sensor**
  - It detects the movements of people and automatically switches between normal operation and energy saving operation.
- **Room temperature sensor**
  - It senses the air temperature around the unit.

**Control panel**

- **ON/OFF switch**
  - Push this switch once to start operation.
  - Push once again to stop it.
  - The operation mode refer to the following table.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Temperature setting</th>
<th>Airflow rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO</td>
<td>77°F (25°C)</td>
<td>AUTO</td>
</tr>
</tbody>
</table>

- **This switch is useful when the remote controller is missing.**

- **OPERATION lamp (green)**
- **TIMER lamp (yellow)**
- **HOME LEAVE lamp (red)**
  - Lights up when you use HOME LEAVE Operation.

- **Signal receiver**
  - It receives signals from the remote controller.
  - When the unit receives a signal, you will hear a short beep.
  - Operation start........ beep-beep
  - Settings changed...... beep
  - Operation stop .......... beeeep

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**Indoor Unit ON/OFF switch**

- Push this switch once to start operation.
- Push once again to stop it.
- The operation mode refer to the following table.
Open the front panel

Outdoor Unit

- Appearance of the outdoor unit may differ from some models.

- Refrigerant piping and inter-unit cable
- Air inlet: (Back and side)
- Air outlet
- Drain hose
- Earth terminal
- It is inside of this cover.

Air filter
Air-purifying filter with photocatalytic deodorizing function
Name of Parts

Remote Controller: ARC452A7

Signal transmitter
- To use the remote controller, aim the transmitter at the indoor unit. If there is anything to block signals between the unit and the remote controller, such as a curtain, the unit will not operate.
- Do not drop the remote controller. Do not get it wet.
- The maximum distance for communication is approximately 23 ft (7m).

FAN setting button
- It selects the airflow rate setting.

POWERFUL button
- POWERFUL operation

Display (LCD)
- It displays the current settings.
  (In this illustration, each section is shown with its displays ON for the purpose of explanation.)

TEMPERATURE adjustment buttons
- It changes the temperature setting.

ON/OFF button
- Press this button once to start operation. Press once again to stop it.

Front cover
- Open the front cover.
Open the front cover

- **MODE selector button**
  - It selects the operation mode.
  - (AUTO/DRY/COOL/HEAT/FAN) [Page 10]

- **HOME LEAVE button**
  - HOME LEAVE operation [Page 17]

- **SWING button**
  - Adjusting the Airflow Direction [Page 12]

- **SENSOR button**
  - INTELLIGENT EYE operation [Page 13]

- **OFF TIMER button** [Page 19]

- **ON TIMER button** [Page 20]

- **CLOCK button** [Page 9]

- **QUIET button**
  - OUTDOOR UNIT QUIET operation [Page 16]

- **SELECT button**
  - It changes the ON/OFF TIMER settings [Page 19, 20]

- **TIMER CANCEL button**
  - It cancels the timer setting [Page 19, 20]
Preparation before Operation

To set the batteries
1. Slide the front cover to take it off.
2. Set 2 dry batteries AAA.LR03 (alkaline).
3. Set the front cover as before.

To fix the remote controller holder on the wall
1. Choose a place from where the signals reach the unit.
2. Fix the holder to a wall, a pillar, etc. with the screws supplied with the holder.
3. Place the remote controller in the remote controller holder.

Celsius/Fahrenheit display switch
- The Celsius or Fahrenheit display is selectable with the following buttons.

Press \( \text{TEMP}^\circ\text{C} \) and \( \text{TEMP}^\circ\text{F} \) buttons simultaneously for 5 seconds.

- The temperature will be displayed in Fahrenheit if it is presently displayed in Celsius, and vice versa.

ATTENTION

About batteries
- When replacing the batteries, use batteries of the same type, and replace the 2 old batteries together.
- When the system is not used for a long time, take the batteries out.
- The batteries will last for approximately 1 year. If the remote controller display begins to fade and the degradation of reception performance occurs within a year, however, replace both 2 batteries with new, size AAA.LR03 (alkaline).
- The attached batteries are provided for the initial use of the system.
- The usable period of the batteries may be short depending on the manufactured date of the air conditioner.

About remote controller
- Never expose the remote controller to direct sunlight.
- Dust on the signal transmitter or receiver will reduce the sensitivity. Wipe off dust with soft cloth.
- Signal communication may be disabled if an electronic-starter-type fluorescent lamp (such as inverter-type lamps) is in the room. Consult the shop if that is the case.
- If the remote controller signals happen to operate another appliance, move that appliance to somewhere else, or consult the service shop.

Celsius/Fahrenheit display change function of remote controller
- The set temperature may increase when the display is changed to Celsius from Fahrenheit, because a fraction of 0.5°C is rounded up.
- Example: A set temperature of 64°F (equivalent to 18.5°C) will be converted into 19°C. When the display is changed to Fahrenheit again, the set temperature will be converted into 66°F (equivalent to 19°C) instead of the original set temperature (64°F) but a set temperature of 66°F (equivalent to 19°C) will be converted into 19°C with no temperature change.
- A reception sound will go off for the transmission of set temperature to the indoor unit at the time of setting the Celsius/Fahrenheit display change function.
Turn the breaker ON
• Turning ON the breaker closes the flap. (This is a normal procedure.)

To set the clock
1. Press \(\text{MON}\).
   • \(0:00\) is displayed.
   • \(\text{MON}\) and \(\text{MON}\) blink.

2. Press \(\text{MON}\) to set the current day of the week.

3. Press \(\text{MON}\).
   • \(\text{MON}\) blinks.

4. Press \(\text{MON}\) to set the clock to the present time.
   • Holding down \(\text{MON}\) button rapidly increases or decreases the time display.

5. Press \(\text{MON}\).
   • Always point the remote controller at the indoor unit when pushing the buttons when setting the indoor unit’s internal clock.
   \(\text{MON}\) blinks.

NOTE

Tips for saving energy
• Be careful not to COOL (HEAT) the room too much.
  Keeping the temperature setting at a moderate level helps save energy.
• Cover windows with a blind or a curtain.
  Blocking sunlight and air from outdoors increases the cooling (heating) effect.
• Clogged air filters cause inefficient operation and waste energy. Clean them once in about every two weeks.

Please note
• The air conditioner always consumes 50-120 btu/h (15-35 watts) of electricity even while it is not operating.
• If you are not going to use the air conditioner for a long period, for example in spring or autumn, turn the breaker OFF.
• Use the air conditioner in the following conditions.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Operating conditions</th>
<th>If operation is continued out of this range</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOL</td>
<td>Outdoor temperature: 14 to 115°F (-10 to 46°C) Indoor temperature: 64 to 90°F (18 to 32°C) Indoor humidity: 80% max.</td>
<td>• A safety device may work to stop the operation. Under 0°F and over 115°F outdoor temperature. • See Note 2 for 0°F to 14°F operation. • Condensation may occur on the indoor unit and drip.</td>
</tr>
<tr>
<td>HEAT</td>
<td>Outdoor temperature: 5 to 64°F (-15 to 18°C) Indoor temperature: 50 to 86°F (10 to 30°C)</td>
<td>• A safety device may work to stop the operation. Under 0°F or over 64°F outdoor temperature. • See the Note 3 for 0°F to 5°F.</td>
</tr>
<tr>
<td>DRY</td>
<td>Outdoor temperature: 14 to 115°F (-10 to 46°C) Indoor temperature: 64 to 90°F (18 to 32°C) Indoor humidity: 80% max.</td>
<td>• A safety device may work to stop the operation. • Condensation may occur on the indoor unit and drip.</td>
</tr>
</tbody>
</table>

• Operation outside this humidity or temperature range may cause a safety device to disable the system.

RXS99/12HVJU ONLY
• Note 1> A Breaker must be turned on for 24 hours before the operation start if the ambient is below 14 °F (–10°C), otherwise the unit will not start operation smoothly.
• Note 2> 1. Use low outdoor ambient COOL operation for equipment cooling applications only.
   This operation is not intended for human comfort cooling.
   2. Intermittent noises may be produced by the indoor unit due to the outdoor fan rotation speed change.
   3. Do not place humidifiers or other items which might raise the humidity in rooms at 0 to 14 °F (–10°C) outdoor temperature. A humidifier may cause condensation to drip from the indoor unit outlet vent.
   4. Set the indoor unit at the highest airflow rate.
• Note 3> When the outdoor temperature is 0 to 5 °F (-18 to –15°C), the system may not have sufficient cooling capacity.
AUTO · DRY · COOL · HEAT · FAN Operation

The air conditioner operates with the operation mode of your choice. From the next time on, the air conditioner will operate with the same operation mode.

■ To start operation

1. Press \[\text{MODE}\] and select a operation mode.

   - Each pressing of the button advances the mode setting in sequence.

2. Press \[\text{ON/OFF}\].

   - \[\text{ON}\] is displayed on the LCD.
   - The OPERATION lamp lights up.

■ To stop operation

   Press \[\text{ON/OFF}\] again.

   - \[\text{ON}\] disappears from the LCD.
   - Then OPERATION lamp goes off.

■ To change the temperature setting

   Press \[\text{TEMP}^\circ\text{C}\] or \[\text{TEMP}^\circ\text{C}\].

   - The displayed items on the LCD will change whenever either one of the buttons is pressed.

<table>
<thead>
<tr>
<th>DRY or FAN mode</th>
<th>COOL mode</th>
<th>HEAT mode</th>
<th>AUTO mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>The temperature setting is not variable.</td>
<td>64<del>90°F (18</del>32°C)</td>
<td>50<del>86°F (10</del>30°C)</td>
<td>64<del>86°F (18</del>30°C)</td>
</tr>
</tbody>
</table>

Press \[\text{TEMP}^\circ\text{C}\] to raise the temperature and press \[\text{TEMP}^\circ\text{C}\] to lower the temperature.
To change the airflow rate setting

Press .

<table>
<thead>
<tr>
<th>DRY mode</th>
<th>AUTO or COOL or HEAT or FAN mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>The airflow rate setting is not variable.</td>
<td>Five levels of airflow rate setting from “ ” to “ ” plus “ ” and “ ” are available.</td>
</tr>
</tbody>
</table>

- Indoor unit quiet operation
  When the airflow is set to “ ”, the noise from the indoor unit will become quieter.
  Use this when making the noise quieter.
  The unit might lose capacity when the airflow rate is set to a weak level.
- Each pressing of the button advances the airflow rate setting in sequence.

NOTE

- **Note on HEAT operation**
  - Since this air conditioner heats the room by taking heat from outdoor air to indoors, the heating capacity becomes smaller in lower outdoor temperatures. If the heating effect is insufficient, it is recommended to use another heating appliance in combination with the air conditioner.
  - The heat pump system heats the room by circulating hot air around all parts of the room. After the start of HEAT operation, it takes some time before the room gets warmer.
  - In HEAT operation, frost may occur on the outdoor unit and lower the heating capacity. In that case, the system switches into defrosting operation to take away the frost.
  - During defrosting operation, hot air does not flow out of indoor unit.
- **Note on COOL operation**
  - This air conditioner cools the room by blowing the hot air in the room outside, so if the outside temperature is high, the performance of the air conditioner drops.
- **Note on DRY operation**
  - The computer chip works to rid the room of humidity while maintaining the temperature as much as possible. It automatically controls temperature and airflow rate, so manual adjustment of these functions is unavailable.
- **Note on AUTO operation**
  - In AUTO operation, the system selects a temperature setting and an appropriate operation mode (COOL or HEAT) based on the room temperature at the start of the operation.
  - The system automatically reselects setting at a regular interval to bring the room temperature to user-setting level.
  - If you do not like AUTO operation, manually change the set temperature.
- **Note on FAN operation**
  - This is valid for fan only.
- **Note on airflow rate setting**
  - At smaller airflow rates, the cooling (heating) effect is also smaller.
Adjusting the Airflow Direction

You can adjust the airflow direction to increase your comfort.

**Adjusting the upper and lower airflow direction**

- To adjust the flaps (horizontal blades)

1. Press \[\text{button}\].
   - “\(\text{button}\)” is displayed on the LCD and the flaps will begin to swing.

2. When the flaps have reached the desired position, press \[\text{button}\] once more.
   - The flaps will stop moving.
   - “\(\text{button}\)” disappears from the LCD.

**Adjusting the right and left airflow direction**

- To adjust the louvers (vertical blades)

  - Hold the knob and move the louvers.
  - (You will find a knob on the left-side and the right-side blades.)

**NOTE**

**Notes on flaps and louvers angles**

- When “SWING button” is selected, the flaps swinging range depends on the operation mode.
  - (See the figure.)

**Three-Dimensional (3-D) Airflow**

- Using three-dimensional airflow circulates cold air, which tends to collected at the bottom of the room, and hot air, which tends to collect near the ceiling, throughout the room, preventing areas of cold and hot developing.

**ATTENTION**

- Always use a remote controller to adjust the angles of the flaps and louvers. If you attempt to move it forcibly with hand when it is swinging, the mechanism may be broken.
- Always use a remote controller to adjust the louvers angles. In side the air outlet, a fan is rotating at a high speed.
INTELLIGENT EYE Operation

"INTELLIGENT EYE" is the infrared sensor which detects the human movement.

■ To start INTELLIGENT EYE operation

1. Press .
   • • displayed on the LCD.

■ To cancel the INTELLIGENT EYE operation

2. Press again.
   • • disappears from the LCD.

[EX.]

When somebody in the room
- Normal operation
  The air conditioner is in normal operation while the sensor is detecting the movement of people.

When nobody in the room
- 20 min. after, start energy saving operation.
  The set temperature is shifted in ±3.6°F (±2°C) steps.

Somebody back in the room
- Back to normal operation.
  The air conditioner will return to normal operation when the sensor detects the movement of people again.
INTELLIGENT EYE Operation

To adjust the angle of the INTELLIGENT EYE sensor

- You can adjust the angle of the INTELLIGENT EYE sensor to increase the detection area.
  (Adjustable angle: 15° to right and left of centre)

- Gently push and slide the sensor to adjust the angle.
- After adjusting the angle, wipe the sensor gently with a clean cloth, being careful not to scratch the sensor.

“INTELLIGENT EYE” is useful for Energy Saving

- Energy saving operation
  - Change the temperature −3.6°F (−2°C) in HEAT / +3.6°F (+2°C) in COOL / +1.8°F (+1°C) in dry mode from set temperature.
  - Decrease the airflow rate slightly in FAN mode only.
  - If no presence detected in the room for 20 minutes.

NOTE

- Notes on “INTELLIGENT EYE”
  - Application range is as follows.

  Vertical angle 80°
  (Side View)

  Horizontal angle 100°
  (Top View)

  - Sensor may not detect moving objects further than 16ft (5m) away. (Check the application range)
  - Sensor detection sensitivity changes according to indoor unit location, the speed of passersby, temperature range, etc.
  - The sensor also mistakenly detects pets, sunlight, fluttering curtains and light reflected off of mirrors as passersby.
  - INTELLIGENT EYE operation will not go on during powerful operation.

CAUTION

- Do not place large objects near the sensor.
  Also keep heating units or humidifiers outside the sensor’s detection area. This sensor can detect undesirable objects.
- Do not hit or violently push the INTELLIGENT EYE sensor. This can lead to damage and malfunction.
POWERFUL Operation

POWERFUL operation quickly maximizes the cooling (heating) effect in any operation mode. You can get the maximum capacity.

■ To start POWERFUL operation
Press \ during operation.
- POWERFUL operation ends in 20 minutes. Then the system automatically operates again with the previous settings which were used before POWERFUL operation.
- “pressor” is displayed on the LCD.
- When using POWERFUL operation, there are some functions which are not available.

■ To cancel POWERFUL operation
Press \ again.
- “pressor” disappears from the LCD.

NOTE

■ Notes on POWERFUL operation
- POWERFUL Operation cannot be used together with QUIET Operation.
- Priority is given to the function of whichever button is pressed last.
- POWERFUL Operation can only be set when the unit is running. Pressing the operation stop button causes the settings to be canceled, and the “pressor” disappears from the LCD.
- In COOL and HEAT mode
  To maximize the cooling (heating) effect, the capacity of outdoor unit must be increased and the airflow rate be fixed to the maximum setting.
  The temperature and airflow settings are not variable.
- In DRY mode
  The temperature setting is lowered by 4.5°F (2.5°C) and the airflow rate is slightly increased.
- In FAN mode
  The airflow rate is fixed to the maximum setting.
- In AUTO mode
  To maximize the cooling (heating) effect, the capacity of outdoor unit must be increased and the airflow rate be fixed to the maximum setting.
  • POWERFUL Operation will not increase the capacity of the air conditioner if the air conditioner is already in operation with its maximum capacity demonstrated.
OUTDOOR UNIT QUIET Operation

OUTDOOR UNIT QUIET operation lowers the noise level of the outdoor unit by changing the frequency and fan speed on the outdoor unit. This function is convenient during night.

To start OUTDOOR UNIT QUIET operation
Press .
• “•” is displayed on the LCD.

To cancel OUTDOOR UNIT QUIET operation
Press again.
• “•” disappears from the LCD.

NOTE

Note on OUTDOOR UNIT QUIET operation
• This function is available in COOL, HEAT, and AUTO modes. (This is not available in FAN and DRY mode.)
• POWERFUL operation and OUTDOOR UNIT QUIET operation cannot be used at the same time. Priority is given to the function of whichever button is pressed last.
• If operation is stopped using the remote controller or the main unit ON/OFF switch when using OUTDOOR UNIT QUIET operation, “•” will remain on the remote controller display.
• OUTDOOR UNIT QUIET Operation will drop neither the frequency nor fan speed if the frequency and fan speed have been already dropped low enough.
HOME LEAVE Operation

HOME LEAVE operation is a function which allows you to record your preferred temperature and airflow rate settings.

■ To start HOME LEAVE operation

1. Press ★ .
   • " ★ " is displayed on the LCD.
   • The HOME LEAVE lamp lights up.

■ To cancel HOME LEAVE operation

2. Press ★ again.
   • " ★ " disappears from the LCD.
   • The HOME LEAVE lamp goes off.

Before using HOME LEAVE operation.

■ To set the temperature and airflow rate for HOME LEAVE operation

When using HOME LEAVE operation for the first time, please set the temperature and airflow rate for HOME LEAVE operation. Record your preferred temperature and airflow rate.

<table>
<thead>
<tr>
<th>Initial setting</th>
<th>Selectable range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>Temperature</td>
</tr>
<tr>
<td>COOL 77°F(25°C)</td>
<td>64-90°F(18-32°C)</td>
</tr>
<tr>
<td>HEAT 77°F(25°C)</td>
<td>50-86°F(10-30°C)</td>
</tr>
</tbody>
</table>

1. Press " ★ ". Make sure " ★ " is displayed in the remote controller display.
2. Adjust the set temperature with " ▲ " or " ▼ " as you like.
3. Adjust the airflow rate with "FAN" setting button as you like.

Home leave operation will run with these settings the next time you use the unit. To change the recorded information, repeat steps 1 – 3.
What's the HOME LEAVE operation?

Is there a set temperature and airflow rate which is most comfortable, a set temperature and airflow rate which you use the most? HOME LEAVE operation is a function that allows you to record your favorite set temperature and airflow rate. You can start your favorite operation mode simply by pressing the HOME LEAVE button on the remote controller. This function is convenient in the following situations.

Useful in these cases

1. Use as an energy-saving mode.
   Set the temperature 3-5°F(2-3°C) higher (COOL) or lower (HEAT) than normal. Setting the fan speed to the lowest setting allows the unit to be used in energy-saving mode. Also convenient for use while you are out or sleeping.

   - Every day before you leave the house...

   When you go out, push the “HOME LEAVE Operation” button, and the air conditioner will adjust capacity to reach the preset temperature for HOME LEAVE Operation.

   When you return, you will be welcomed by a comfortably air conditioned room.

   Push the “HOME LEAVE Operation” button again, and the air conditioner will adjust capacity to the set temperature for normal operation.

   - Before bed...

   Set the unit to HOME LEAVE Operation before leaving the living room when going to bed.

   The unit will maintain the temperature in the room at a comfortable level while you sleep.

   When you enter the living room in the morning, the temperature will be just right. Disengaging HOME LEAVE Operation will return the temperature to that set for normal operation. Even the coldest winters will pose no problem!

2. Use as a favorite mode.
   Once you record the temperature and airflow rate settings you most often use, you can retrieve them by pressing HOME LEAVE button. You do not have to go through troublesome remote controller operations.

NOTE

- Once the temperature and airflow rate for HOME LEAVE operation are set, those settings will be used whenever HOME LEAVE operation is used in the future. To change these settings, please refer to the “Before using HOME LEAVE operation” section above.
- HOME LEAVE operation is only available in COOL and HEAT mode. It cannot be used in AUTO, DRY, and FAN mode.
- HOME LEAVE operation runs in accordance with the previous operation mode (COOL or HEAT) before using HOME LEAVE operation.
- HOME LEAVE operation and POWERFUL operation cannot be used at the same time. Last button that was pressed has priority.
- The operation mode cannot be changed while HOME LEAVE operation is being used.
- When operation is shut off during HOME LEAVE operation, using the remote controller or the indoor unit ON/OFF switch, “■” will remain on the remote controller display.
TIMER Operation

Timer functions are useful for automatically switching the air conditioner on or off at night or in the morning. You can also use OFF TIMER and ON TIMER in combination.

To use OFF TIMER operation

• Check that the clock is correct.
  If not, set the clock to the present time.  

1. Press [OFF].
   • “OFF” is displayed.
   • “OFF” blinks.

2. Press [SELECT] until the time setting reaches the point you like.
   • Every pressing of either button increases or decreases the time setting by 10 minutes. Holding down either button changes the setting rapidly.

   • The TIMER lamp lights up.

To cancel OFF TIMER Operation

Press [CANCEL].
   • The TIMER lamp goes off.

NOTE

• When TIMER is set, the present time is not displayed.
• Once you set ON, OFF TIMER, the time setting is kept in the memory. (The memory is canceled when remote controller batteries are replaced.)
• When operating the unit via the ON/OFF Timer, the actual length of operation may vary from the time entered by the user. (Maximum approx. 10 minutes)

NIGHT SET MODE

• When the OFF TIMER is set, the air conditioner automatically adjusts the temperature setting (0.9°F(0.5°C) up in COOL, 3.6°F(2.0°C) down in HEAT) to prevent excessive COOL (HEAT) for your pleasant sleep.
To use ON TIMER operation

1. Press \textbf{ON}.

2. Press \textbf{SELECT} until the time setting reaches the point you like.
   - Every pressing of either button increases or decreases the time setting by 10 minutes. Holding down either button changes the setting rapidly.

3. Press \textbf{ON} again.
   - The TIMER lamp lights up.

To cancel ON TIMER Operation
Press \textbf{CANCEL}.
   - The TIMER lamp goes off.

To combine ON TIMER and OFF TIMER

- A sample setting for combining the two timers is shown below.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{example}
\caption{Example of timer settings.}
\end{figure}

\textbf{ATTENTION}

- In the following cases, set the timer again.
  - After a breaker has turned OFF.
  - After a power failure.
  - After replacing batteries in the remote controller.
Care and Cleaning

![CAUTION](Image) Before cleaning, be sure to stop the operation and turn the breaker OFF.

**Units**

- Indoor unit, Outdoor unit and Remote controller
  Wipe them with dry soft cloth.

**Front panel**

1. **Open the front panel.**
   - Hold the panel by the tabs on the two sides and lift it until it stops with a click.

2. **Remove the front panel.**
   - Supporting the front panel with one hand, release the lock by sliding down the knob with the other hand.
   - To remove the front panel, pull it toward yourself with both hands.

3. **Clean the front panel.**
   - Wipe it with a soft cloth soaked in water.
   - Only neutral detergent may be used.
   - In case of washing the panel with water, wipe it with dry soft cloth, dry it up in the shade after washing.

4. **Attach the front panel.**
   - Set the 3 keys of the front panel into the slots and push them in all the way.
   - Close the front panel slowly and push the panel at the 3 points.
     (1 on each side and 1 in the middle.)
   - Check to see if the rotating axis in the upper center section is moving.

**CAUTION**

- Do not touch the metal parts of the indoor unit. If you touch those parts, this may cause an injury.
- When removing or attaching the front panel, use a robust and stable stool and watch your steps carefully.
- When removing or attaching the front panel, support the panel securely with hand to prevent it from falling.
- For cleaning, do not use hot water above 104°F(40°C), benzine, gasoline, thinner, nor other volatile oils, polishing compound, scrubbing brushes, nor other hand stuff.
- After cleaning, make sure that the front panel is securely fixed.
Care and Cleaning

Filters

1. Open the front panel.  ➤Page 21

2. Pull out the air filters.
   • Push a little upwards the tab at the center of each air filter, then pull it down.

3. Take off the Air-purifying filter with photocatalytic deodorizing function.
   • Hold the recessed parts of the frame and unhook the four claws.

4. Clean or replace each filter.
   See figure.

5. Set the air filter and the Air-purifying filter with photocatalytic deodorizing function as they were and close the front panel.
   • Insert claws of the filters into slots of the front panel.
   Close the front panel slowly and push the panel at the 3 points.
   (1 on each side and 1 in the middle.)

⚠️ CAUTION
   • Do not touch the aluminum fins by bare hand at the time of dismounting or mounting the filter.
Air Filter

Wash the air filters with water or clean them with vacuum cleaner.

- If the dust does not come off easily, wash them with neutral detergent thinned with lukewarm water, then dry them up in the shade.
- It is recommended to clean the air filters every 2 weeks.

Air-purifying filter with photocatalytic deodorizing function

The Air-purifying filter with photocatalytic deodorizing function can be renewed by washing it with water once every 6 months. We recommend replacing it once every 3 years.

[ Maintenance ]

1. Vacuum dusts, and soak in warm water or water for about 10 to 15 minutes if dirt is heavy.
2. Do not remove filter from frame when washing with water.
3. After washing, shake off remaining water and dry in the shade.
4. Since the material is made out of paper, do not wring out the filter when removing water from it.

[ Replacement ]

1. Remove the tabs on the filter frame and replace with a new filter.
   • Dispose of the old filter as flammable waste.
Care and Cleaning

NOTE

• Operation with dirty filters:
  1) cannot deodorize the air.
  2) cannot clean the air.
  3) results in poor HEAT or COOL.
  4) may cause odour.

• To order Air-purifying filter with photocatalytic deodorizing function contact to the service shop there you bought the air conditioner.

• Dispose of old filters as flammable waste.

<table>
<thead>
<tr>
<th>Item</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air-purifying filter with photocatalytic deodorizing function (with frame) 1 set</td>
<td>KAF918A43</td>
</tr>
<tr>
<td>Air-purifying filter with photocatalytic deodorizing function (without frame) 1 set</td>
<td>KAF918A44</td>
</tr>
</tbody>
</table>

ATENTION

• Do not throw away the filter frame. Reuse the filter frame when replacing the Air-purifying filter with photocatalytic deodorizing function.

CHECK

■ Check that the base, stand and other fittings of the outdoor unit are not decayed or corroded.
■ Check that nothing blocks the air inlets and the outlets of the indoor unit and the outdoor unit.
■ Check that the drain comes smoothly out of the drain hose during COOL or DRY operation.
  - If no drain water is seen, water may be leaking from the indoor unit. Stop operation and consult the service shop if this is the case.

Before a long idle period

1. Operate the “FAN only” for several hours on a fine day to dry out the inside.
   - Press MODE and select “FAN” operation.
   - Press and start operation.

2. After operation stops, turn off the breaker for the room air conditioner.

3. Clean the air filters and set them again.

4. Take out batteries from the remote controller.
# Trouble Shooting

## These cases are not troubles.

The following cases are not air conditioner troubles but have some reasons. You may just continue using it.

<table>
<thead>
<tr>
<th>Case</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation does not start soon.</td>
<td>・This is to protect the air conditioner. You should wait for about 3 minutes.</td>
</tr>
<tr>
<td>・When ON/OFF button was pressed soon after operation was stopped.</td>
<td>・The air conditioner is warming up. You should wait for 1 to 4 minutes. (The system is designed to start discharging air only after it has reached a certain temperature.)</td>
</tr>
<tr>
<td>・When the mode was reselected.</td>
<td>・The system is taking away the frost on the outdoor unit. You should wait for about 4 to 12 minutes.</td>
</tr>
</tbody>
</table>
| Hot air does not flow out soon after the start of heating operation. | ・In HEAT mode
  ・The frost on the outdoor unit melts into water or steam when the air conditioner is in defrost operation. |
| The heating operation stops suddenly and a flowing sound is heard.   | ・In COOL or DRY mode
  ・Moisture in the air condenses into water on the cool surface of outdoor unit piping and drips.          |
| The outdoor unit emits water or steam.                               | ・This happens when the air in the room is cooled into mist by the cold airflow during cooling operation.                                      |
| Mist comes out of the indoor unit.                                  | ・This is because the air in the room is cooled by the heat exchanger and becomes mist during defrost operation.                          |
| The indoor unit gives out odour.                                    | ・This happens when smells of the room, furniture, or cigarettes are absorbed into the unit and discharged with the airflow. (If this happens, we recommend you to have the indoor unit washed by a technician. Consult the service shop where you bought the air conditioner.) |
| The outdoor fan rotates while the air conditioner is not in operation.| ・After operation is stopped:
  ・The outdoor fan continues rotating for another 60 seconds for system protection. |
| The operation stopped suddenly. (OPERATION lamp is on.)             | ・While the air conditioner is not in operation:
  ・When the outdoor temperature is very high, the outdoor fan starts rotating for system protection. |
| The operation stopped suddenly. (OPERATION lamp is on.)             | ・For system protection, the air conditioner may stop operating on a sudden large voltage fluctuation. It automatically resumes operation in about 3 minutes. |
| No remote controller signals are displayed.                         | ・The batteries are dying and the remote controller is malfunctioning. Replace all the batteries with new size batteries, AAA/LR03 (alkaline). For details, refer to “To set the batteries” of this manual. |
| The remote controller sensitivity is low.                           |                                                                                                                                          |
| The display is low in contrast or blacked out.                      |                                                                                                                                          |
| The display runs out of control.                                    |                                                                                                                                          |
# Trouble Shooting

**Check again.**

Please check again before calling a repair person.

<table>
<thead>
<tr>
<th>Case</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>The air conditioner does not operate.</td>
<td>• Hasn’t a breaker turned OFF or a fuse blown?</td>
</tr>
<tr>
<td>(OPERATION lamp is off.)</td>
<td>• Isn’t it a power failure?</td>
</tr>
<tr>
<td></td>
<td>• Are batteries set in the remote controller?</td>
</tr>
<tr>
<td></td>
<td>• Is the timer setting correct?</td>
</tr>
<tr>
<td>Cooling (Heating) effect is poor.</td>
<td>• Are the air filters clean?</td>
</tr>
<tr>
<td></td>
<td>• Is there anything to block the air inlet or the outlet of the indoor and the outdoor units?</td>
</tr>
<tr>
<td></td>
<td>• Is the temperature setting appropriate?</td>
</tr>
<tr>
<td></td>
<td>• Are the windows and doors closed?</td>
</tr>
<tr>
<td></td>
<td>• Are the airflow rate and the air direction set appropriately?</td>
</tr>
<tr>
<td>Operation stops suddenly.</td>
<td>• Are the air filters clean?</td>
</tr>
<tr>
<td>(OPERATION lamp flashes.)</td>
<td>• Is there anything to block the air inlet or the outlet of the indoor and the outdoor units?</td>
</tr>
<tr>
<td></td>
<td>Clean the air filters or take all obstacles away and turn the breaker OFF. Then turn it ON again and try operating the air conditioner with the remote controller. If the lamp still flashes, call the service shop where you bought the air conditioner.</td>
</tr>
<tr>
<td>An abnormal functioning happens during</td>
<td>• The air conditioner may malfunction with lightning or radio waves.</td>
</tr>
<tr>
<td>operation.</td>
<td>Turn the breaker OFF, turn it ON again and try operating the air conditioner with the remote controller.</td>
</tr>
<tr>
<td>The flap does not start swinging</td>
<td>• The air conditioner is adjusting the flap position. The flap will start moving soon.</td>
</tr>
<tr>
<td>immediately.</td>
<td></td>
</tr>
</tbody>
</table>
Call the service shop immediately.

⚠️ WARNING

- When an abnormality (such as a burning smell) occurs, stop operation and turn the breaker OFF.
  Continued operation in an abnormal condition may result in troubles, electric shocks or fire.
  Consult the service shop where you bought the air conditioner.
- Do not attempt to repair or modify the air conditioner by yourself.
  Incorrect work may result in electric shocks or fire.
  Consult the service shop where you bought the air conditioner.

If one of the following symptoms takes place, call the service shop immediately.

- The power cord is abnormally hot or damaged.
- An abnormal sound is heard during operation.
- The safety breaker, a fuse, or the earth leakage breaker cuts off the operation frequently.
- A switch or a button often fails to work properly.
- There is a burning smell.
- Water leaks from the indoor unit.

Turn the breaker OFF and call the service shop.

- After a power failure
  The air conditioner automatically resumes operation in about 3 minutes. You should just wait for a while.

- Lightning
  If lightning may strike the neighbouring area, stop operation and turn the breaker OFF for system protection.

We recommend periodical maintenance.

In certain operating conditions, the inside of the air conditioner may get foul after several seasons of use, resulting in poor performance. It is recommended to have periodical maintenance by a specialist aside from regular cleaning by the user.
For specialist maintenance, contact the service shop where you bought the air conditioner.
The maintenance cost must be born by the user.
Fault diagnosis.

**FAULT DIAGNOSIS BY REMOTE CONTROLLER**

In the ARC452A series, the temperature display sections on the main unit indicate corresponding codes.

1. When the TIMER CANCEL button is held down for 5 seconds, a " **CQ** " indication flashes on the temperature display section.

2. Press the TIMER CANCEL button repeatedly until a continuous beep is produced.

* The code indication changes as shown below, and notifies with a long beep.

<table>
<thead>
<tr>
<th>CODE</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>NORMAL</td>
</tr>
<tr>
<td>U0</td>
<td>REFRIGERANT SHORTAGE</td>
</tr>
<tr>
<td>U2</td>
<td>DROP VOLTAGE OR MAIN CIRCUIT OVERVOLTAGE</td>
</tr>
<tr>
<td>U4</td>
<td>FAILURE OF TRANSMISSION (BETWEEN INDOOR UNIT AND OUTDOOR UNIT)</td>
</tr>
<tr>
<td>A1</td>
<td>INDOOR PCB DEFECTIVENESS</td>
</tr>
<tr>
<td>A5</td>
<td>HIGH PRESSURE CONTROL OR FREEZE-UP PROTECTOR</td>
</tr>
<tr>
<td>A6</td>
<td>FAN MOTOR FAULT</td>
</tr>
<tr>
<td>C4</td>
<td>FAULTY HEAT EXCHANGER TEMPERATURE SENSOR</td>
</tr>
<tr>
<td>C9</td>
<td>FAULTY SUCTION AIR TEMPERATURE SENSOR</td>
</tr>
<tr>
<td>EA</td>
<td>COOLING-HEATING SWITCHING ERROR</td>
</tr>
<tr>
<td>E5</td>
<td>OL STARTED</td>
</tr>
<tr>
<td>E6</td>
<td>FAULTY COMPRESSOR START UP</td>
</tr>
<tr>
<td>E7</td>
<td>DC FAN MOTOR FAULT</td>
</tr>
<tr>
<td>E8</td>
<td>OPERATION HALT DUE TO DETECTION OF INPUT OVER CURRENT</td>
</tr>
<tr>
<td>F3</td>
<td>HIGH TEMPERATURE DISCHARGE PIPE CONTROL</td>
</tr>
<tr>
<td>F6</td>
<td>HIGH PRESSURE CONTROL (IN COOLING)</td>
</tr>
<tr>
<td>H8</td>
<td>OPERATION HALT DUE TO FAULTY POSITION DETECTION SENSOR</td>
</tr>
<tr>
<td>H9</td>
<td>CT ABNORMALITY</td>
</tr>
<tr>
<td>J3</td>
<td>FAULTY SUCTION AIR TEMPERATURE SENSOR</td>
</tr>
<tr>
<td>J6</td>
<td>FAULTY HEAT EXCHANGER TEMPERATURE SENSOR</td>
</tr>
<tr>
<td>L4</td>
<td>HIGH TEMPERATURE AT INVERTER CIRCUIT HEATSINK</td>
</tr>
<tr>
<td>L5</td>
<td>OUTPUT OVERCURRENT</td>
</tr>
<tr>
<td>P4</td>
<td>FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR</td>
</tr>
</tbody>
</table>

**NOTE**

1. A short beep and two consecutive beeps indicate non-corresponding codes.
2. To cancel the code display, hold the TIMER CANCEL button down for 5 seconds. The code display also cancel itself if the button is not pressed for 1 minute.
Two-dimensional bar code is a code for manufacturing.