OPERATING INSTRUCTIONS
MS-30SV

Thank you very much for purchasing this Mitsubishi room air conditioner.

- To use this unit correctly and safely, be sure to read this operating instructions before use. Keep this manual carefully for later reference.
- Be sure to receive a guarantee card from your dealer and check that the purchased data and shop name, etc. are entered correctly.
- This air conditioner should not be installed by the customer. (Safety and performance functions cannot be assured.)

For customers

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SAFETY PRECAUTIONS

- Since rotating parts and parts which could cause an electric shock are used in this product, be sure to read these "Safety Precautions" before use.
- Since the cautionary items shown here are important for safety, be sure to observe them.
  Marks and their meanings are as shown below.

| WARNING | Incorrect handling could cause a serious hazard, such as death, serious injury, etc. with a high probability. |
| WARNING | Incorrect handling could cause a serious hazard depending on the conditions. |

Meanings of symbols used in this manual are as shown below.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>⚠️</td>
<td>Be sure not to do.</td>
</tr>
<tr>
<td>🔴</td>
<td>Be sure to follow the instruction.</td>
</tr>
<tr>
<td>🔴 (Black)</td>
<td>Never Insert your finger or stick, etc.</td>
</tr>
<tr>
<td>🔴 (Black)</td>
<td>Never step onto the indoor/outdoor unit and do not put anything on them.</td>
</tr>
<tr>
<td>🟠 (Yellow)</td>
<td>Danger of electric shock, be careful.</td>
</tr>
<tr>
<td>🟡 (Blue)</td>
<td>Be sure to shut off the power.</td>
</tr>
</tbody>
</table>

- After reading this manual, keep it together with the installation manual in a handy place for easy reference.

⚠️ WARNING ⚠️

- This air conditioner is NOT intended for use by children or infirm persons without supervision.

Do not turn the breaker off/on during operation.
- This may cause a fire due to spark, etc.
- Be sure to turn off the breaker absolutely after switching the indoor unit off with the remote controller.

Do not insert your finger or a stick, etc. into the air inlet/outlet.
- Since the fan rotates at high speed, this may cause an injury.
- Young children should be supervised to ensure that they do not play with the air conditioner.

Do not expose your skin directly to cool air for a long time.
- This could damage your health.

Repair or relocation should not be done by the customer.
- If this is done incorrectly, it may cause a fire, an electric shock, or injury from the unit falling, water leaking, etc.
  Consult your dealer.

When an abnormality (burning smell, etc.) occurs, stop the air conditioner and turn off the breaker.
- If the unit continues to be operated in an abnormal condition, it may cause a fire, trouble, etc. In this case, consult your dealer.

The customer should not install this unit.
- If this is done incorrectly, it may cause a fire, an electric shock, or injury from the unit falling, water leaking, etc.
  Consult your dealer.
SAFETY PRECAUTIONS

CAUTION

When the air filter is to be removed, do not touch the metal parts of the indoor unit.
- This may cause an injury.

Do not clean the air conditioner with water.
- Water may enter the unit and degrade the insulation. This may cause an electric shock.

Ventilate well in using the unit with a stove, etc.
- An oxygen shortage may occur.

When the unit is not going to be used for a long time, turn off the breaker.
- Otherwise, dirt may collect and this may cause a fire.

Do not operate the unit for a long time in high humidity, e.g., leaving a door or window open.
- In the cooling mode, if the unit is operated in a room with high humidity (80% RH or more) for a long time, water condensed in the air conditioner may drip and wet or damage furniture, etc.

Do not charge or disassemble the batteries and do not throw them into a fire.
- This may result in leakage, fire or an explosion.

If liquid from the alkaline batteries gets onto your skin or clothes, wash it well with clean water.
- If liquid from the alkaline batteries gets into your eyes, wash them well with clean water and consult a doctor at once.

When the unit is to be cleaned, switch it off and turn off the breaker.
- Since the fan rotates at high speed during operation, this may cause an injury.

Do not put a pet or houseplant where it will be exposed to direct airflow.
- This could injure the pet or plant.

Do not use the unit for special purposes.
- Do not use this air conditioner to preserve precision devices, food, animals, plants and art objects. This may cause deterioration of quality, etc.

Do not step or put anything on the indoor/outdoor unit.
- This may cause an injury, etc. if you fall down.

Do not step onto an unstable bench when maintaining the unit, etc.
- This may cause an injury, etc. if you fall down.

Do not operate switches with wet hands.
- This may cause an electric shock.

Do not use an insecticide or flammable spray.
- This may cause a fire or deformation of the cabinet.

Do not put a stove, etc. where they are exposed to direct airflow.
- This may cause imperfect combustion.

Do not leave the unit on an installation stand which is damaged.
- The unit may fall and this may cause an injury.

Replace the 2 batteries with new ones of same type.
- Using an old battery together with a new one may result in heat generation, leakage or an explosion.
SAFETY PRECAUTIONS

For installation

⚠️ WARNING

- Consult your dealer for installation of the air conditioner.

⚠️ CAUTION

Earth the unit.
- Do not connect the earth to a gas pipe, wa-
ter pipe, lightning rod or the earth of a tel-
ephone. If the earthing is incorrect, it may
cause an electric shock.

Do not install the unit where flammable
gas could leak.
- If gas leak and collect around the unit, it may cause
an explosion.

Install an earth leakage breaker depend-
ing on the place where the air condi-
tioner is to be installed (humid places, etc.).
- If the earth leakage breaker is not installed, it may cause an electric shock.

Drain should be fully drained.
- If the drainage route is incomplete, water may drop from the unit. This may wet and damage the furniture.

Indoor unit

- Air inlet
- Remote control receiving section
- Front panel
- Air filter
- Vertical vane
- Horizontal vane
- Operation section (when the front panel is opened)
- Display section
- Operation indicator lamp
- Receiving section
- Emergency operation switch
- Air cleaning filter (white bellows type)
- Deodorizing filter (gray sponge type)

Outdoor unit

- Air inlet
- Remote controller
- Piping
- Drainage hose
- Air outlet
- Drain outlet
NAME OF EACH PART

Remote controller

Signaling transmitting section

Operation display section

ON/OFF (operate/step) button

Temperature buttons

Open the front lid.

VANE button
(Horizontal vane button)

FAN button

STOP button

Fan speed control button

OFF button

On-timer button

ECO button

ROLL button

Wide vane button
(Vertical vane button)

Reset button

MODE button

TEMP button

Ripple button

MIN button

Time set button

CLOCK button

LONG button

(This diagram shows an overall view.)
PREPARATION BEFORE OPERATION

Auto restart function

This model is equipped with the auto restart function, but this function is OFF when the units are shipped from the factory. If you want to use the auto restart function, please consult the service representative because the setting of the unit needs to be changed.

Auto restart function is...

When the indoor unit is controlled with the remote controller, the operation mode, the set temperature and the fan speed are memorized by the memory. If a power failure occurs or the main power is turned off during operation, “Auto restart function” starts automatically to start operating in the same mode as set with the remote controller right before the shut-off of main power.

Breaker for the air conditioner

Turn the breaker on.

Remote controller (How to set the current time)

1. Remove the front lid and insert batteries. Then reattach the front lid.
   Insert the minus pole of the batteries first. Check if the polarity of the batteries is correct.

2. Press the RESET button.

3. Press the CLOCK set button.

4. Press the HR and MIN button (TIME SET button) to set the current time.

5. Press the CLOCK set button again and close the front lid.

Handling of the remote controller

• The range that the signal can reach is about 6 m when pointed at the front of the indoor unit.
• When a button is pressed, one or two beeps will be heard from the indoor unit. If no sound is heard, operate again.
• Use the remote controller carefully. If it is dropped, thrown or it gets wet, the remote controller may not operate.

When installing on a wall, etc.

• Install the remote controller installation case in a position where the signal reception sound (beep) can be heard from the indoor unit when the button is pressed.

How to install/ remove the remote controller

Installing Insert the remote controller downward.
Removing Pull it up.

Dry-cell batteries

Reference for replacing batteries:

When the indoor unit does not respond to the signal from the remote controller, or the display becomes dim, replace the batteries with new ones (size AAA).
• Though both alkaline batteries and manganese batteries can be used, alkaline batteries are recommended because their service life is longer than that of manganese batteries.
• The service life of an alkaline battery is about 1 year. However, a battery which the time limit is approaching may be exhausted soon. The recommended usable time limit is indicated (month/year) on the bottom of the battery.
• Replace the 2 batteries with new ones of the same type.
• Do not use rechargeable batteries.
• To prevent liquid leakage, take out all batteries when the remote controller is not going to be used for a long time.
• Dispose of exhausted batteries in the correct manner.

When the batteries of the remote controller run out or the remote controller malfunctions, the emergency operation can be done using the EMERGENCY OPERATION switch.

1. Press the EMERGENCY OPERATION switch.
   • When the EMERGENCY OPERATION switch is pressed, the unit will operate in test run for 30 minutes at first and then the operation mode shifts to EMERGENCY COOL MODE.

Details of EMERGENCY COOL MODE are as shown below. However, the temperature control does not work for 30 minutes in test run and the unit is set to continuous operation. The fan speed is set to HI in test run and shifts to Medium after 30 minutes.

<table>
<thead>
<tr>
<th>Operation mode</th>
<th>COOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set temperature</td>
<td>24°C</td>
</tr>
<tr>
<td>Fan speed</td>
<td>Medium</td>
</tr>
<tr>
<td>Horizontal vane</td>
<td>Auto</td>
</tr>
<tr>
<td>Vertical vane</td>
<td>Front</td>
</tr>
</tbody>
</table>

The operation mode is indicated by the Operation Indicator lamp on the indoor unit as following figures.

Operation indicator lamp

EMERGENCY COOL STOP

To stop the EMERGENCY COOL MODE, press the EMERGENCY OPERATION switch again.

• Each time the switch is pressed, the operation mode alternates between the EMERGENCY COOL MODE and STOP MODE.
I FEEL... AUTO OPERATION

With the “Q (I FEEL...)” auto operation mode, the optimum room condition can be set automatically with a one-touch operation.

To start operation:
- Press the button.

When the “Q (I FEEL...)” mode is selected, the air conditioner is automatically controlled at the optimum temperature.

To stop operation:
- Press the button.

- If you feel slightly warm:
  - Press the button to lower the temperature.
  - One press lowers the temperature by about 1°C.

- If you feel slightly cool:
  - Press the button to raise the temperature.
  - One press raises the temperature by about 1°C.

When “Q (I FEEL...)” is not selected, press the mode button until it is set.
Each time the button is pressed, the operation mode is changed in sequence: Q (I FEEL...) → Q (COOL) → Q (DRY) → X (FAN).

Description of “Q (I FEEL...)” mode

Details of operation
According to the room temperature when the operation starts, the operation mode is automatically set to either COOL or DRY. However, when operation is started again within 2 hours after it is stopped, the same operation mode before operation is stopped is selected. The operation mode selected first is not changed even if the room temperature changes. If the operation mode does not match the room condition, select the appropriate operation mode by pressing the button.

Details of auto operation

<table>
<thead>
<tr>
<th>Room temperature when started</th>
<th>Operation mode</th>
<th>Target temperature (initial state)</th>
</tr>
</thead>
<tbody>
<tr>
<td>About 25°C or higher</td>
<td>COOL</td>
<td>About 24°C</td>
</tr>
<tr>
<td>About 25°C or lower</td>
<td>DRY</td>
<td></td>
</tr>
</tbody>
</table>

NOTE
COOL: When the room temperature is 2°C higher than the set temperature, the set temperature may not be changed since the air conditioner is operating to reach the target set temperature. In this case, please wait until the room temperature drops to within 2°C of the set temperature and then operate.

Details of display on the indoor unit
The operation indicator at the right side of the indoor unit indicates the operation state.

Operation indicator lamp

<table>
<thead>
<tr>
<th>Indication</th>
<th>Operation state</th>
<th>Difference between target temperature and room temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This shows that the air conditioner is operating to reach the target temperature. Please wait until the target temperature is obtained.</td>
<td>About 2°C or more</td>
</tr>
<tr>
<td></td>
<td>This shows that the room temperature is approaching the target temperature.</td>
<td>About 2°C or less</td>
</tr>
</tbody>
</table>
To select the COOL, DRY or FAN mode:

1. Press the button.

2. Select the operation mode by pressing the button.
   
   Each time this button is pressed, the operation mode is changed in sequence: (I FEEL...) → (COOL) → (DRY) → (FAN).

To stop operation:

- Press the button.

After the operation mode is set once, the operation starts in the mode set previously from the next time by simply pressing the button.

When the set temperature is to be changed:

- Press the button to lower the temperature. One press lowers the temperature by about 1°C.

- Press the button to raise the temperature. One press raises the temperature by about 1°C.

In DRY operation:

- The temperature control (temperature setting) cannot be done.
- The room temperature is slightly lowered in this operation mode.

The details of the display on the indoor unit are explained on page 7.

NOTE:

- When the ambient temperature is too high, the room temperature may not reach the set temperature since the unit operates to cool under high load.
AIR FLOW VELOCITY AND DIRECTION ADJUSTMENT

To change the AIR FLOW velocity, press the button.
Each time the button is pressed, the fan speed is changed in sequence: \( \text{(Lo)} \to \text{(Med)} \to \text{(Hi)} \to \text{AUTO} \).
- Use the \( \text{(Hi)} \) notch to cool the room more.
- If the operating sound of the air conditioner disturbs your sleep, use the \( \text{(Lo)} \) notch.

To change the AIR FLOW blowing direction vertically, press the \( \text{VANE} \) button.
Each time the button is pressed, the angle of the HORIZONTAL VANE is changed in sequence: \( 1 \to 2 \to 3 \to 4 \to 5 \) (SWING) \( \to \text{AUTO} \).

**SWING OPERATION**
Use the swing operation for the air flow to reach all corners of the room.

**Recommended HORIZONTAL VANE range**
Use the \( \text{AUTO} \) position usually.
Use position \( 1 \) or \( 2 \) in COOL or DRY mode when adjusting to your requirements.

**NOTE**
- In the cooling operation, when the air conditioner is operated with setting the HORIZONTAL VANE to \( 4 \) or \( 5 \) for 1 hour, the AIR FLOW direction is automatically set to horizontal to prevent condensed water from dropping.
- Adjust the vertical AIR FLOW direction using the remote controller. If the HORIZONTAL VANE is moved manually, it may cause trouble.

**Auto air flow direction control operation**
- When the AUTO mode is selected with the \( \text{AUTO} \) button, the position of the HORIZONTAL VANE is automatically set to correspond to the operation mode for effective operation.

(1) COOL, DRY
The air is blown out horizontally.

(2) FAN
The air is blown out downwards.

To change the AIR FLOW blowing direction horizontally, press the \( \text{HORIZ} \) button.
Each time the button is pressed, the angle of the VERTICAL VANE is changed in sequence: \( \text{AUTO} \to \text{AUTO} \to \text{AUTO} \to \text{AUTO} \) (SWING) \( \to \text{AUTO} \to \text{AUTO} \).

**SWING OPERATION**
Use the swing operation for the air flow to reach all corners of the room.

**Horizontal AIR FLOW blowing range**

**NOTE**
- Adjust the horizontal AIR FLOW direction using the remote controller. If the VERTICAL VANE is moved manually, it may cause trouble.
LONG OPERATION

Use this operation when you want the airflow to reach a long distance.

Perform the following operations while the unit is operating:

Press the \[ \text{LONG} \] button.

The fan speed increases. When the fan speed is set to \( \text{(AUTO)} \), the fan speed is higher than the fan speed determined by the room temperature and the set temperature.

In addition, the horizontal vane moves to the position for \text{LONG} mode.

**Mechanism of the \text{LONG} operation**

In the following example, the VERTICAL VANE is set to \[ \text{T} \] (front).

Fan speeds:
- Higher
- Solid arrow: When the \text{LONG} mode is used
- Dotted arrow: When the \text{LONG} mode is not used

To release the \text{LONG} mode:

Press the \[ \text{LMS} \] button again.

- \text{LONG} mode is also released in the following ways.
  - By pressing the \[ \text{HI} \] button
  - By pressing the \[ \text{ON} \] button (only during \text{COOL} mode)
- Even when the \text{LONG} mode is being used, the airflow may not reach a long distance due to the installation location of the air conditioner.
  - In this case, press the \[ \text{H} \] button to set the fan speed to \[ \text{HI} \], and then press the \[ \text{ON} \] button.
- \[ \text{LMS}, \text{H}, \text{ON} \] buttons, temperature buttons and the \text{ON/OFF} timer (page 11) are available.

ECONO COOL OPERATION

Use this operation when you want to be comfortable in \text{COOL} mode even with energy saved.

Perform the following operations while the unit is operating:

Press the \[ \text{ECONO COOL} \] button.

When the \[ \text{(ECONO COOL)} \] operation is selected in \text{COOL} mode, the air conditioner performs swing operation in various cycles according to the temperature of air conditioner. Also, \text{SET TEMPERATURE} is automatically set at \( +2 \) °C higher than in \text{COOL} mode.

To release the \text{ECONO COOL} operation:

Press the \[ \text{ECONO COOL} \] button again.

- \text{ECONO COOL} operation is available only in \text{MANUAL COOL} mode.
- \text{ECONO COOL} operation is also released in the following ways:
  - By pressing the \[ \text{LMS} \] button
  - By pressing the \[ \text{ON} \] button
  - By changing the operation mode (page 11)
- The \[ \text{H} \], \[ \text{ON} \] button and \text{ON/OFF} timer (page 11) are available.

What is "ECONO COOL"?

Swing airflow (change of airflow) makes you feel cooler than constant airflow. So, even though the set temperature is automatically set at \( +2 \) °C higher, it is possible to operate cooling operation with keeping comfort. As a result, energy can be saved.
**Timer Operation (On/Off Timer)**

- **How to set the ON timer**
  1. Press the START (ON) button during operation.
     - Each time the button is pressed, the ON timer mode alternates between ON and OFF.
  2. Set the time of the timer using the + and - buttons.
     - Each time the + button is pressed, the set time increases by 1 hour; each time the - button is pressed, the set time increases by 10 minutes.

  **To release the ON timer:**
  - Press the START (ON) button.

- **How to set the OFF timer**
  1. Press the STOP (-) button during operation.
     - Each time the button is pressed, the OFF timer mode alternates between ON and OFF.
  2. Set the time of the timer using the + and - buttons.
     - Each time the + button is pressed, the set time increases by 1 hour; each time the - button is pressed, the set time increases by 10 minutes.

  **To release the OFF timer:**
  - Press the STOP (-) button.

**Programming timer operation**

- The ON timer and the OFF timer can be used in combination. The timer of the set time that is reached first will operate first. ("." mark indicates the order of timer operations.)
- If the current time has not been set, the timer operation cannot be used.

---

**When the air conditioner is not going to be used for a long time:**

- **Perform the PAN operation for 3 or 4 hours to dry the inside of the air conditioner.**

  **To turn off the breaker:**

**When the air conditioner is to be used again:**

- Clean the air filter and install it in the indoor unit.
  (Refer to page 12 for cleaning instructions.)
- Check that the air inlet and outlet of the indoor/outdoor units are not blocked.
- Check that the earth is connected correctly.

**CAUTION**

- Turn off the breaker when the air conditioner is not going to be used for a long time. Dirt may collect and this may cause a fire.
- To prevent liquid leakage, take out all batteries when the remote controller is not going to be used for a long time.
- Earth the unit.
  Do not connect the earth to a gas pipe, water pipe, lightning rod or the earth of a telephone. If the earthing is incorrect, it may cause an electric shock.
### MAINTENANCE

#### Before starting maintenance
- Turn off the breaker.

#### Cleaning the indoor unit
- Clean the unit using a soft dry cloth.

**CAUTION**
When the unit is to be cleaned, switch it off and turn off the breaker. Since the fan rotates at high speed during operation, it may cause an injury.

- Do not use gasoline, benzine, polishing powder, detergent and insecticide. The unit may be damaged.

#### Cleaning the air filter
- **Cleaning the air filter (about once every 2 weeks)**
  
  1. Remove the air filter.

  **CAUTION**
  When the air filter is to be removed, do not touch the metal parts of the indoor unit. This may cause an injury.

  2. Remove dirt from the air filter using a vacuum cleaner or by washing the filter with water.
    - If dirt is conspicuous, wash the filter with a solution of detergent in lukewarm water.
    - If hot water (50 °C or more) is used, the filter may be deformed.

  3. After washing with water/lukewarm water, dry the air filter well in the shade.
    - Do not expose the air filter to direct sunlight or heat from a fire when drying it.

  4. Install the air filter.

#### Cleaning the deodorizing filter
- **Cleaning the deodorizing filter (about once every 2 weeks)**
  
  1. Remove the air filter, and then remove the deodorizing filter (gray sponge type).
    - The deodorizing filter is harmless to people. However, to keep its effectiveness, be sure to hold the frame and not to touch the surface of the filter with your hand.

  2. Soak the filter together with its frame in lukewarm water for about 15 minutes.
    - If the dirt is conspicuous, use a solution of detergent in lukewarm water.
    - If hot water (50 °C or more) is used, the filter may be deformed.
    - Do not use a scrubbing brush or sponge. This may damage the surface of the filter.
    - Do not use a chlorine detergent.

  3. After washing with water/lukewarm water, dry the deodorizing filter well in the shade.
    - Do not expose the deodorizing filter to direct sunlight or heat from a fire when drying it.

  4. Install the deodorizing filter, and then install the air filter.
REPLACEMENT OF THE DEODORIZING FILTER/AIR CLEANING FILTER

When the capacity is lowered because of dirt, etc., it is necessary to replace the deodorizing filter/air cleaning filter.

Deodorizing filter replacement (about once a year)

1. Remove the air filter.
2. Remove the deodorizing filter (gray sponge type).
3. Install a new deodorizing filter.
4. Install the air filter and securely close the front panel.

Air cleaning filter replacement (about once every 4 months)

1. Remove the air filter.
2. Remove the air cleaning filter (white bellows type).
3. Install a new air cleaning filter.
4. Install the air filter and securely close the front panel.

Deodorizing filter
- Cleaning is necessary about once every 2 weeks. However, if dirt is conspicuous, clean more often.
- When the color of the filter is not restored even if the filter is washed as the procedure shown on page 12 or when the filter becomes black, replace the filter with a new one.
- Standard interval for filter replacement is about 1 year.

Air cleaning filter
- If the air cleaning filter is clogged, it may lower the unit's capacity or cause condensation at the air outlet.
- The air cleaning filter is disposable. The standard usable interval is about 4 months. However, if the color of the filter turns to dark brown, replace the filter at once.

Optional parts
Optional parts are available from your local dealer.

<table>
<thead>
<tr>
<th>Name of part</th>
<th>Type name</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEODORIZING FILTER</td>
<td>MAC-2200DF</td>
</tr>
<tr>
<td>AIR CLEANING FILTER</td>
<td>MAC-1700FT</td>
</tr>
</tbody>
</table>

Even if the above items are checked, when the air conditioner does not recover from the trouble, stop using the air conditioner and consult your dealer.

In the following cases, stop operation and consult your dealer.
- The remote control signal may not be received in a room where an electronic ON/OFF type fluorescent lamp (inverter-type fluorescent lamp, etc.) is used.
- In the region where the electric wave is weak, when the air conditioner is operated, noise may be generated in radio reception.
- When thunder is heard, stop operation and turn off the breaker. Otherwise, the electrical parts may be damaged.

BEFORE CONTACTING THE SERVICE REPRESENTATIVE, CHECK THE FOLLOWING AGAIN

The air conditioner cannot be operated.
Check the following.
1. Is the breaker turned on?
2. Isn't the fuse blown?
3. Isn't the ON-timer set?

Cannot be cooled sufficiently.
Check the following.
1. Is the temperature setting correct?
2. Isn't the air filter dirty?
3. Isn't the outlet of the outdoor unit blocked?

Display of the remote controller does not appear (1, 2). The remote control signal cannot be received if the remote controller is not operated near the air conditioner (1).

Check the following.
1. Aren't the batteries exhausted?
2. Is the polarity (+, -) of the batteries correct?

When a power failure occurs.
To restart the unit, press the ON/OFF button on the remote controller again after the restoration of the power.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer (not a malfunction)</th>
<th>Question</th>
<th>Answer (not a malfunction)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The air conditioner cannot be operated for about 3 minutes when restarted.</td>
<td>■ This protects the air conditioner according to instructions from the microprocessor. Please wait.</td>
<td>Mechanical sound is heard from the indoor unit.</td>
<td>■ This is the switching sound in turning on/off the fan or the compressor.</td>
</tr>
<tr>
<td>Cracking sound is heard.</td>
<td>■ This sound is generated by the expansion/contraction of the front panel, etc., due to change in temperature.</td>
<td>Water leak from the outdoor unit.</td>
<td>■ During COOL and DRY operations, pipe or pipe connecting sections are cool and this causes water to condense.</td>
</tr>
<tr>
<td>The room smells strange.</td>
<td>■ The air conditioner sucks in an odor adhering to the wall, carpet, furniture, cloth, etc., and blows it out with the air.</td>
<td>The sound as bubbling is heard.</td>
<td>■ This sound is heard when the outside air is absorbed from the drain hose in turning on the range hood or the ventilation fan and that makes water flowing in the drain hose spout out. This sound is also heard when the outside air blows into the drain hose in case the outside wind is strong.</td>
</tr>
<tr>
<td>The fan stops during the DRY operation.</td>
<td>■ in DRY operation, the unit operates using the same refrigerant circuit as in COOL operation. DRY operation time has to be reduced in order to lower humidity without much room temperature decreasing. So the compressor sometimes stops, and at the same time the indoor fan stops. This prevents water condensed on the heat exchanger from evaporating again.</td>
<td>The room cannot be cooled sufficiently.</td>
<td>■ When a ventilation fan or a gas cooker is used in a room, the cooling load increases, resulting in an insufficient cooling effect. ■ When the outside air temperature is high, the cooling effect may not be sufficient.</td>
</tr>
<tr>
<td>The sound of water flowing is heard.</td>
<td>■ This is the sound of refrigerant flowing inside the air conditioner. ■ This is the sound of condensed water flowing in the heat exchanger. ■ This is the sound of the heat exchanger defrosting.</td>
<td>The swing operation of the vertical vane is suspended for about 15 seconds, then restarted.</td>
<td>■ This is for the swing operation of the vertical vane to be performed normally.</td>
</tr>
<tr>
<td>The air flow direction changes during operation.</td>
<td>■ When the air conditioner is operated in COOL or DRY mode, if the operation continues with air blowing down for 1 hour, the direction of the air flow is automatically set to horizontal to prevent condensed water from dropping.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Installation place

Avoid installing the air conditioner in the following places.
- Where flammable gas could leak.
- Where there is much machine oil.
- Salty places such as the seaside.
- Where sulfide gas is generated such as a hot spring.
- Where oil is splashed or where the area is filled with oily smoke.

⚠️ CAUTION
Do not install the unit where flammable gas could leak.
If gas leak and collect around the unit, it may cause an explosion.

⚠️ WARNING
- The customer should not install this unit.
  If installation is done incorrectly, it may cause a fire, an electric shock, or injury from the unit falling, water leaking, etc.

⚠️ WARNING
- Earth the unit.
  Do not connect the earth to a gas pipe, water pipe, lighting rod or the earth of a telephone.
  If the earthing is incorrect, it may cause an electric shock.
- Install an earth leakage breaker depending on the place where the air conditioner is to be installed (humid places, etc.).
  If the earth leakage breaker is not installed, it may cause an electric shock.

Electrical work

- Provide an exclusive circuit for the power supply of the air conditioner.
- Be sure to observe the breaker capacity.

⚠️ CAUTION
- The customer should not install this unit.
  If installation is done incorrectly, it may cause a fire, an electric shock, or injury from the unit falling, water leaking, etc.

Inspection and maintenance

- When the air conditioner is used for several seasons, the capacity may be lowered due to dirt inside the unit.
- Depending on the condition, an odor may be generated or dehumidified water may not drain out smoothly due to dirt, dust, etc.
- It is recommended that the unit be inspected and maintained (charged) by specialist in addition to normal maintenance. Consult your dealer.

Operating sound considerations

- Do not put an object around the air outlet of the outdoor unit. This may lower the capacity or increase the volume of the operating sound.
- If an abnormal sound is heard during operation, consult your dealer.

Relocation

- When the air conditioner is to be removed or re-installed because of rebuilding, moving, etc., special techniques and work are required.

⚠️ WARNING
Repairs or relocation should not be done by the customer.
If this is done incorrectly, it may cause a fire, an electric shock, or an injury from the unit falling, water leaking, etc. Consult your dealer.

Guaranteed operating range

<table>
<thead>
<tr>
<th></th>
<th>Indoor</th>
<th>Outdoor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling Upper</td>
<td>32 °C DB</td>
<td>43 °C DB</td>
</tr>
<tr>
<td>Cooling Lower</td>
<td>21 °C DB</td>
<td>21 °C DB</td>
</tr>
</tbody>
</table>

Disposal

To dispose of this product, consult your dealer.