MITSUBISHI ELECTRIC
Air-Conditioners
INDOOR UNIT

PEA-RP200, 250 WGA

FOR INSTALLER

INSTALLATION MANUAL
For safe and correct use, please read this operation manual thoroughly before operating the air-conditioner unit.
3.2

[Fig. 3.2.1] 

① When connecting air inlet
② When installing the suspension fixtures prior to installation of the indoor unit without inlet duct
③ When hanging the indoor unit directly without inlet duct
④ Service space
⑤ Air inlet
⑥ Air outlet

[Fig. 3.2.2]

⑦ Suspension bolt pitch
⑧ Top of the unit
⑨ Suspension bolt holes: 4-e12 holes
⑩ Control box
⑪ Drain pan
⑫ Main body

4.1

[Fig. 4.1.1] 

① Ceiling board
② Edge beam
③ Tie beam
④ Square timber for hanging the air conditioner
⑤ Pitch

[Fig. 4.1.2]

⑥ Insert: 100 to 150 kg (1 piece) (field supply)
⑦ Hanging bolt (field supply): M10
⑧ Reinforcement
7.2

[Fig.7.2.1]

Insulator
Drain pipe 18
Drain pan
≥ 70 mm
≥ 2 x 2 ≥ 70 mm
≥ 35 mm
Downward slope 30 min./hr. or more
Drain trap
The drain pipe should extend below this level.
Open drain

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[Fig.8.0.1]

Air inlet
Air outlet
Access door
Ceiling surface
Connex duct
Keep duct work length 850 or more
Connect common reference potential wire between duct-work to air conditioner

[Fig.8.0.2]

Inlet duct flange
Sensor protection plate
Inlet duct
Inlet temperature sensor
Sensor fixture

[Fig.8.0.3]

9

[Fig.9.0.1]

Power supply
Earth leakage breaker
Circuit breaker or local switch
LCD remote controller
Outdoor unit
Indoor unit
Power cable wiring
Indoor/Outdoor connection wiring
Grounding

[Fig.9.0.2]

For remote controller cables
For outdoor unit connection cables
For power supply cables
1. Safety precautions

- Before installing the unit, make sure you read all the "Safety precautions".
- The "Safety precautions" provide very important points regarding safety. Make sure you follow them.

Symbols used in the text

⚠️ Warning:
- Hexagonal precautions that should be observed to prevent danger of injury or death to the user.

💡 Caution:
- Describes precautions that should be observed to prevent damage to the unit.

After installation work has been completed, explain the "Safety Precautions", use, and maintenance of the unit to the customer according to the information in the installation manual and perform the test run to ensure normal operation. Both the installation manual and operation manual must be given to the user for keeping. These manuals must be passed on to subsequent users.

Symbols put on the unit

- Indicates an action that must be avoided.
- Indicates that important instructions must be followed.
- Indicates a part which must be grounded.
- Beware of electric shock. (This symbol is displayed on the main unit label.)
- Color: yellow

⚠️ Warning:
Carefully read the labels affixed to the main unit.

- Ask the dealer or an authorized technician to install the air conditioner. Improper installation by the user may result in water leakage, electric shock, or fire.
- Install the unit at a place that can withstand its weight.
- Inadequate strength may cause the unit to fall down, resulting in injuries.
- Use the specified cables for wiring. Make the connections securely so that the cable force of the cable is not applied to the terminals.
- Inadequate connection and fastening may generate heat and cause a fire.
- Prepare for strong winds and earthquakes and install the unit at the specified place.
- Improper installation may cause the unit to topple and result in injury.
- Always use an filter and other accessories specified by Mitsubishi Electric.
- Ask an authorized technician to install the accessories. Improper installation by the user may result in water leakage, electric shock, or fire.
- Never repair the unit. If the air conditioner must be repaired, consult the dealer.
- If the unit is repaired improperly, water leakage, electric shock, or fire may result.

- Do not touch the heat exchanger fins.
- Improper handling may result in injury.
- When handling this product, always wear protective equipment.
- EG: Gloves, full arm protection, namely boiler suit, and safety glasses.
- Improper handling may result in injury.
- If refrigerant gas leaks during installation work, ventilate the room.
- If the refrigerant gas comes into contact with a flame, poisonous gases will be released.
- Install the air conditioner according to this installation manual.
- If the unit is installed improperly, water leakage, electric shock, or fire may result.
- Have all electric work done by a licensed electrician according to "local regulations" and the instructions given in this manual.
- If the power source capacity is inadequate or electric work is performed improperly, electric shock and fire may result.
- Securely install the outdoor unit terminal cover (panel). If the terminal cover (panel) is not installed properly, dust or water may enter the outdoor unit and fire or electric shock may result.
- When installing or relocating the unit, make sure that no substance other than the specified refrigerant (R410A) enters the refrigerant circuit.
- Any presence of foreign substance such as air can cause abnormal pressure rise or explosion.
- If the air conditioner is installed in a small room, measures must be taken to prevent the refrigerant concentration in the room from exceeding the safety limit in the event of the refrigerant leakage.
- Consult the dealer regarding the appropriate measures to prevent the safety limit from being exceeded. Should the refrigerant leak and cause the safety limit to be exceeded, hazards due to lack of oxygen in the room could result.
- When moving and reinstalling the air conditioner, consult the dealer or an authorized technician.
- If the air conditioner is installed improperly, water leakage, electric shock, or fire may result.
- After completing installation work, make sure that refrigerant gas is not leaking.
- If the refrigerant gas leaks and is exposed to a fan heater, stove, oven, or other heat source, it may generate poisonous gases.
- Do not reconstruct or change the settings of the protection devices.
- If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Mitsubishi Electric are used, fire or explosion may result.
- To dispose of this product, consult your dealer.
- The installer and system specialist shall secure safety against leakage according to local regulation or standards.
- Following standards may be applicable if local regulation are not available.
- Pay a special attention to the place, such as a basement, etc. where refrigeration gas can stay, since refrigeration is heavier than the air.

1.1. Before installation

💡 Caution:
- Do not install the unit where combustible gas may leak.
- If the gas leaks and accumulates around the unit, an explosion may result.
- Do not use the air conditioner where food, pets, plants, precision instruments, or artwork are kept.
- The quality of the food, etc. may deteriorate.
1.2. Before installation (relocation)

- Do not wash the air conditioner units.
- Be careful that the installation base is not damaged by long use.
- Wash them well to prevent an electric shock.
- If the damage is left uncorrected, the unit may fall and cause personal injury or property damage.
- Install the drain piping according to this installation manual to ensure proper drainage. Wrap thermal insulation around the pipes to prevent condensation.
- Improper drain piping may cause water leakage and damage to furniture and other possessions.
- Be very careful about product transportation.
  - Only one person should carry the product if it weighs more than 20 kg.
  - Some products use PP bands for packaging. Do not use any PP bands for a means of transportation. It is dangerous.
  - Do not touch the heat exchanger fins. Doing so may harm your fingers.
- Safely dispose of the packaging materials.
  - Packing materials, such as nails and other metal or wooden parts, may cause sharpness or other injuries.
- Tear apart and throw away plastic packaging bags so that children will not play with them. It children play with a plastic bag which is not torn apart, they face the risk of suffocation.

2. Indoor unit accessories

The unit is provided with the following accessories:

![Fig. 2.01 (P2)]

<table>
<thead>
<tr>
<th>Accessory name (For field piping connection)</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small diameter</td>
<td>1</td>
</tr>
<tr>
<td>Large diameter</td>
<td>1</td>
</tr>
</tbody>
</table>

3. Selecting an installation site

- Select a site with a sturdy fixed surface sufficiently durable against the weight of the unit.
- Before installing unit, the route to carry in unit to the installation site should be determined.
- Select a site where the unit is not affected by entering air.
- Select a site where the flow of supply and return air is not blocked.
- Select a site where refrigerant piping can easily be led to the outside.
- Select a site which allows the supply air to be distributed fairly in room.
- Select a site with the supply air to be distributed fairly in room.
- Do not install unit at a site where combustible gas may generate, flow in, stagnate or leak.
- Do not install unit at a site where equipment generating high frequency waves (e.g., high frequency wave welder for example) is provided.
- Do not install unit at a site where fire detector is located at the supply air side. (If fire detector may operate erroneously due to the heated air supplied during heating operation.)
- When special chemical product may scatter around such as chemical plants and hospitals, full investigation is required before installing unit. (The plastic components may be damaged depending on the chemical product applied.)

1.3. Before electrical work

⚠️ Caution:
- Ground the unit.
  - Do not connect the ground wire to gas or water pipes, lighting rods, or telephone ground lines. Improper grounding may result in electric shock.
- Install the power cable so that tension is not applied to the cable.
  - Tension may cause the cable to break and generate heat and cause a fire.
- Install an earth leakage circuit breaker, as required.
  - If an earth leakage circuit breaker is not installed, electric shock may result.
- Use power line cables of sufficient current carrying capacity and rating.
  - Cables that are too small may leak, generate heat, and cause a fire.
- Use only a circuit breaker and fuse of the specified capacity.
  - A fuse or circuit breaker of a larger capacity or a steel or copper wire may result in a general unit failure or fire.

1.4. Before starting the test run

⚠️ Caution:
- Turn on the power at least 12 hours before starting operation.
  - Starting operation immediately after turning on the main power switch can result in severe damage to internal parts. Keep the power switch turned on during the operational season.
- Do not touch the switches with wet fingers.
  - Touching a switch with wet fingers can cause electric shock.
- Do not touch the refrigerant pipes during and immediately after operation.
  - During and immediately after operation, the refrigerant pipes are very hot and may be cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes.
- Do not operate the air conditioner with the panels and guards removed.
- Do not turn off the power immediately after stopping operation.
  - Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.
4. Fixing hanging bolts

4.1. Fixing hanging bolts

Hanging structure
- Ceiling: The ceiling structure varies from building to one another. For detailed information, consult your construction company.
  ① Reinforcing the ceiling with additional members (edge beam, etc.) must be required to keep the ceiling at level and to prevent the ceiling from vibrations.
  ② Cut and remove the ceiling members.
  ③ Reinforce the ceiling members, and add other members for fixing the ceiling boards.

For wooden construction
- Use the tie beam (for one story building) or second-floor beam (for two story building) as strength members.
- To hang the air-conditioner, use a hard square timber of more than 6 cm if the distance between beams is less than 90 cm and a hard square timber of more than 9 cm if the distance between beams is less than 180 cm.

5. Installing the unit

5.1. Hanging the unit body
- Bring the indoor unit to an installation site as it is packed.
- To hang the indoor unit, use a lifting machine to lift and pass through the hanging bolts.
- Install the indoor unit before ceiling work.
  ![Fig. 5.1.1] (P.3)
  - Unit body
  - Lifting machine

  * Two installation methods are available
  - When hanging the indoor unit directly
    1. Attach a washer and nut(s) to each suspension bolt. (The washers and nuts are to be supplied locally.)
    2. Fit the indoor unit to each suspension bolt.
    3. Make sure that the unit is positioned level, then tighten each nut.
  ![Fig. 5.1.2] (P.3)
  - Nut
  - Washer

<table>
<thead>
<tr>
<th>When using inlet duct</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 or more</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 or more</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<When installing the suspension fixture prior to installation of the indoor unit>
- Loosen each suspension fixture bolt slightly, and remove the fixture and U-shaped washers.
- Adjust each suspension fixture bolt.

3. Attach a washer, nut and suspension fixture to each suspension bolt. (The washers and nuts are to be supplied locally.)
4. Hook the indoor unit to the suspension fixtures.
5. Make sure that the unit is positioned level, then tighten each nut.
  ![Fig. 5.1.3] (P.3)
  - Be sure to attach a U-shaped washer (4 washers in total).

<table>
<thead>
<tr>
<th>When using inlet duct</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 or more</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 or more</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.2. Confirming the unit's position and fixing hanging bolts
- Use the gauge supplied with the panel to confirm that the unit body and hanging bolts are positioned in place. If they are not positioned in place, it may result in weed growth due to wind leak. Be sure to check the positional relationship.
- Use a level to check that the surface indicated by ① is at level. Ensure that the hanging bolt nuts are tightened to fix the hanging bolts.
- To ensure that drain is discharged, be sure to hang the unit at level using a level.

Caution:
Be sure to install the unit body at level.
6. Refrigerant pipe and drain pipe specifications

To avoid dew drops, provide sufficient antifreezing and insulating work to the refrigerant and drain pipes.

When using commercially available refrigerant pipes, be sure to wind commercially available insulating material (with a heat-resisting temperature of more than 100 °C and thickness given below) onto both liquid and gas pipes. It is also necessary to use pipes and insulating material that are at least 10% thicker than those specified in the table below.

Select the thickness of insulating material by pipe size.

<table>
<thead>
<tr>
<th>Pipe size</th>
<th>Insulating material thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.4 mm to 25.4 mm</td>
<td>More than 10 mm</td>
</tr>
<tr>
<td>26.6 mm to 50.1 mm</td>
<td>More than 15 mm</td>
</tr>
</tbody>
</table>

(1) If the unit is used on the highest story of a building and under conditions of high temperature and humidity, it is necessary to use more insulating material than that specified in the table.

(2) If there are any specific requirements, follow the manufacturer's specifications.

6.1. Refrigerant pipe and drain pipe specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Model</th>
<th>PEA-200</th>
<th>PEA-260</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refrigerant pipe</td>
<td>Liquid pipe</td>
<td>ø9.52</td>
<td>ø12.7</td>
</tr>
<tr>
<td>Gas pipe</td>
<td>ø25.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drain pipe</td>
<td>ø34 (19)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.2. Refrigerant pipe, drain pipe and filling port

Fig. 6.2.1 (P3)

(3) Refrigerant pipe (liquid pipe)
(4) Refrigerant pipe (gas pipe)
(5) Drain pipe

7. Connecting refrigerant pipes and drain pipes

7.1. Refrigerant piping work

This piping work must be done in accordance with the installation manuals for outdoor unit.

- The method of pipe connection is brazing connection.

Cautions on refrigerant piping:

- Be sure to use non-oxidative brazing for brazing to ensure that no foreign matter or moisture enters the tube.
- Provide a metal brace to support the refrigerant pipe so that no load is imparted to the indoor unit end pipe. This metal brace should be provided 50 cm away from the indoor unit's brazing connection.

Warning:

When installing or relocating the unit, make sure that no substance other than the specified refrigerant (R410A) enters the refrigerant circuit.

- Any presence of foreign substance such as air can cause abnormal pressure rise or explosion.

Caution:

- Install the refrigerant piping for the indoor unit in accordance with the following.

1. Remove the cap.
   - Fig. 7.1.1 (P3)
   - Remove the cap

2. Pull out the thermal insulation on the site refrigerant piping, braze the unit piping, and replace the insulation in its original position.
   - Wrap the piping with insulating tape.
   - Fig. 7.1.2 (P3)
   - Thermal insulation
   - Pull out insulation
   - Wrap with damp cloth
   - Ensure there is no gap here
   - Wrap with insulating tape
   - Pipe cover (accessory part)

Note:

- Pay strict attention when wrapping the copper piping since wrapping the piping may cause condensation instead of preventing it.
- Before brazing the refrigerant piping, always wrap the piping on the main body, and the insulation piping, with damp cloths to prevent heat shrinkage and burning the insulation tubing. Take care to ensure that the flame does not come into contact with the main body itself.

Caution:

- Use refrigerant piping made of Cu120 (Cu-OHP) phosphorus deoxidized copper as specified in the JIS H2300 "Copper and copper alloy seamless pipes and tubes". In addition, be sure that the inner and outer surfaces of the pipes are clean and free of hazardous sulphur, oxides, dust, dirt, shavings, particles, oils, moisture, or any other contaminant.
- Never use existing or old refrigerant piping.
- The large amount of chlorine in conventional refrigerant and refrigerator oil in the existing piping will cause the new refrigerant to deteriorate.
- Store the piping to be used during installation indoors and keep both ends of the piping sealed until just before brazing.
- If dust, dirt, or water gets into the refrigerant cycle, the oil will deteriorate and the compressor may fail.
- Do not use a leak detection additive.

Additional refrigerant charge:

- Take care not to allow dirt or cutting chips to enter the refrigerant pipes.
- The refrigerant pipes must be kept warm, so take particular care to insulate between refrigerant pipes and the gas pipe located inside the indoor unit, since the gas pipe causes condensation during cooling operation.
- When connecting the refrigerant pipes, make sure that the stop valve of the outdoor unit is fully closed (as it was when shipped from the factory). After connecting all the refrigerant pipes between the indoor and outdoor units, purge air from the stop valve service port of the outdoor unit and service port of each connecting pipe. Check that there is no air leakage from any pipe connection, then fully open the stop valve of the outdoor unit. This will connect the refrigerant circuit between the indoor and outdoor units.
- The refrigerant pipes must be as short as possible.
- The indoor and outdoor units must be connected with the refrigerant pipes.

Fig. 7.1.3 (P3)

- Brazing
- Liquid pipe
- Gas pipe
- Indoor unit
- Outdoor unit

7.2. Drain piping work

Fig. 7.2.1 (P4)

- Insulator
- Drain pipe
- Drain pan
- ø 70 mm
- ø 35 mm
- Downward slope 50 mm/m or more
- Drain trap
- The drain pipe should extend below this level.
- Check drain
8. Duct work

- In connecting duct, insert canvas duct between unit and duct.
- Use insulating material for duct parts.
- Provide full insulation to inlet duct flange, outlet duct flange and outlet duct to prevent condensation.
- Be sure to apply the air filter near the air inlet grille.
- Before connecting an inlet duct, remove the air filter, then install that filter in the inlet grille.

[Fig. 8.0.1] (P.4)
- Air inlet
- Air outlet
- Access door
- Ceiling surface
- Canvas duct
- Keep duct-work length 850 mm or more
- Connect common reference potential wire between duct-work to air conditioner

⚠️ Caution:

- Outlet duct is 850 mm or more necessary to construct.
- To connect the air conditioner main body and the duct for potential equalization.
- Inlet temperature sensor when an inlet duct is installed.

An inlet temperature sensor is installed on the inlet duct flange. Before connecting an inlet duct, this sensor must be removed and installed in the specified position.

9. Electrical wiring

Precautions on electrical wiring

⚠️ Warning:
Electrical work should be done by qualified electricians in accordance with "local regulations" and supplied installation manuals. Special circuits should also be used. If the power circuit lacks capacity or has an installation failure, it may cause a risk of electric shock or fire.

1. Be sure to take power from the special branch circuit.
2. Be sure to install an earth leakage breaker to the power.
3. Install the unit to prevent that any of the control circuit cables (remote controller, transmission cables) is brought in direct contact with the power cable outside the unit.
4. Ensure that there is no slack on all wire connections.
5. Some cables (power, remote controller, transmission cables) above the ceiling may be bitten by mice. Use as many metal pipes as possible to insert the cables into them for protection.
6. Never connect the power cable to leads for the transmission cables. Otherwise the cables would be broken.
7. Be sure to connect control cables to the indoor unit, remote controllers, and the outdoor unit.
8. Put the unit to the ground on the outdoor unit side.
9. Be sure to connect between the control cable terminal block of the outdoor unit and that of the indoor unit. (Cables have polarity, so make sure that they are connected according to the terminal numbers.)
10. Fix power source wiring to control box by using buffer bushing for tensile force (PG connection or the like). Connect control wiring to control terminal bed through the knockout hole of control box using ordinary bushing.
11. Do not connect the unit in the reverse phase sequence. If connected in the reverse phase sequence, the indoor unit will not be able to provide sufficient cooling air.

In case of A-control wiring there is high voltage potential on the S3 terminal caused by electrical circuit design that has no electrical insulation between power line and communication signal line. Therefore, please turn off the main power supply when servicing. And do not touch the S1, S2, S3 terminals when the power is energized. If isolator should be used between indoor unit and outdoor unit, please use 3-poles type.

⚠️ Caution:
Be sure to put the unit to the ground on the outdoor unit side. Do not connect the earth cable to any gas pipe, water pipe, lightning rod, or telephone earth cable. Incomplete grounding may cause a risk of electric shock.

[Fig. 9.0.1] (P.4)
- Power supply
- Earth leakage breaker
- Circuit breaker or local switch
- LCD remote controller
- Outdoor unit
- Indoor unit
- Power cable wiring
- Indoor/Outdoor connection wiring
- Grounding
10. System control

10.1 Grouping by using LCD remote controller

Combination of indoor/outdoor unit can be controlled up to a maximum of 16 refrigerant systems.

- Outdoor unit
- Main remote controller
- Subordinate remote controller
- Refrigerant address = 00
- Refrigerant address = 01
- Refrigerant address = 02
- Refrigerant address = 15

* Set the refrigerant address using the DIP switch of the outdoor unit.
* Refer to the outdoor unit installation manual for setting method of SW1 DIP switch.

1. Wiring from the Remote Control
   - The wire is connected to TB5 (terminal board for remote controller) of the indoor unit (non-polar).
2. When a Different Refrigerant System Grouping is Used
   - Up to 16 refrigerant systems can be controlled as one group using the LCD remote controller.

Notes:
1. In single refrigerant system, there is no need of wiring o.
2. LCD remote controller can be installed up to a maximum of 2 units for one group.

10.2 Examples of refrigerant system address setting

<table>
<thead>
<tr>
<th>Ex.</th>
<th>Indoor unit</th>
<th>Outdoor unit</th>
<th>Outdoor unit refrigerant system address</th>
<th>Remote controller power supply unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PEA-200, 250</td>
<td>-</td>
<td>00</td>
<td>C</td>
</tr>
</tbody>
</table>

* Set the refrigerant system address of one outdoor unit to 00 for the power supply to the remote controller.
(The refrigerant system address is set to 00 when shipped from the factory.)
Do not duplicate the refrigerant system address settings within the same system.
11. LCD remote controller

11.1. Installing procedures

(1) Select an installing position for the remote controller (switch box).
Be sure to observe the following precautions.

- Remote controller profile
- Required clearance around the remote controller
- Temperature sensor
- Installation pitch

(2) The temperature sensors are located on both remote controller and indoor unit. To use the temperature sensor on the remote controller, mainly use the remote controller for temperature setting or room temperature detection. Install the remote controller in such an area that can detect average room temperature, free of direct sunlight, airflow from the air conditioner, and other such heating sources.

(3) In either case when the remote controller is installed in the switch box or on the wall, provide the clearance indicated in the diagram.

Note:
Check that there is no electric wire left close to the remote controller sensor. If any electric wire is near the sensor, the remote controller may fail to detect a correct room temperature.

(4) Procure the following parts locally:
- Switch box for two pieces
- Thin copper conduit tube
- Lock nuts and bushings

(5) Seal the service entrance for the remote controller cord with putty to prevent possible invasion of dew drops, water, cockroaches or worms.

<CAUTION>
For installation in the switch box:
- When the remote controller is installed in the switch box, seal the junction between the switch box and the conduit tube with putty.

For direct installation on the wall:
- Prepare a hole through the wall to pass the remote controller cord (in order to run the remote controller cord from the back, then seal the hole with putty.

(2) To run the remote controller cord through the upper portion:
- Run the remote controller cord through the cut-out upper case, then seal the cut-out notch with putty similarly as above.

(3) Install the lower case in the switch box or on the wall.

For installation in the switch box:
- Switch box for two pieces
- Remote controller cord
- Cross-recessed pan-head screw
- Seal the remote controller cord service entrance with putty

11.4. Function selection

(Wired remote controller type)

(1) Function selection of remote controller

The setting of the following remote controller functions can be changed using the remote controller function selection mode. Change the setting when needed.

<table>
<thead>
<tr>
<th>Item 1</th>
<th>Item 2</th>
<th>Item 3 (Setting content)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Change Language (FUNCTION SELECTION)</td>
<td>Language setting to display</td>
<td>Display in multiple languages is possible.</td>
</tr>
<tr>
<td>2. Function limit (FUNCTION SELECTION)</td>
<td>(1) Operation function limit setting (operation lock) (&quot;LOCKING FUNCTION&quot;)</td>
<td>Setting the range of operation limit (operation lock)</td>
</tr>
<tr>
<td></td>
<td>(2) Use of automatic mode setting (&quot;AUTO MODE&quot;)</td>
<td>Setting the use of or non-use of &quot;automatic&quot; operation mode</td>
</tr>
<tr>
<td></td>
<td>(3) Temperature range limit setting (&quot;HEAT LIMIT TEMP FUNCTION&quot;)</td>
<td>Setting the temperature adjustable range (minimum, maximum)</td>
</tr>
<tr>
<td></td>
<td>(4) Use of automatic filter elevation panel up/down operation mode setting</td>
<td>Setting the use of or non-use of the automatic filter elevation panel up/down operation mode</td>
</tr>
<tr>
<td>3. Mode selection (MODE SELECTION)</td>
<td>(1) Remote controller main选 setting (&quot;CONTROLLER MAIN SELECT&quot;)</td>
<td>Setting the use or non-use of the fixed airflow direction mode</td>
</tr>
<tr>
<td></td>
<td>(2) Use of clock setting (&quot;CLOCK&quot;)</td>
<td>Setting the use or non-use of clock function</td>
</tr>
<tr>
<td></td>
<td>(3) Timer function setting (&quot;WEEKLY TIMER&quot;)</td>
<td>Setting the timer type</td>
</tr>
<tr>
<td></td>
<td>(4) Contact number setting for error situation (&quot;CALL&quot;)</td>
<td>Contact number display in case of error</td>
</tr>
<tr>
<td>4. Display change (DISP MODE SELECTION)</td>
<td>(1) Temperature display Gulf setting (&quot;TEMP MODE&quot; + &quot;CF&quot;)</td>
<td>Setting the temperature unit (° C or ° F) to display</td>
</tr>
<tr>
<td></td>
<td>(2) Setting of temperature display setting (&quot;ROOM TEMP DISP SELECT&quot;)</td>
<td>Setting the use or non-use of the display of indoor (suction) air temperature</td>
</tr>
<tr>
<td></td>
<td>(3) Automatic cooling/heating display setting (&quot;AUTO MODE DISP CF&quot;)</td>
<td>Setting the use or non-use of the display of &quot;cooling&quot; or &quot;heating&quot; display during operation with automatic mode</td>
</tr>
</tbody>
</table>

* This model is not equipped with this function. The setting is invalid.
**Function selection flowchart**


<table>
<thead>
<tr>
<th>Item 1</th>
<th>Change Language (CHANGE LANGUAGE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Press the @ button.</td>
<td></td>
</tr>
<tr>
<td>Press the button.</td>
<td></td>
</tr>
<tr>
<td>Press the button.</td>
<td></td>
</tr>
<tr>
<td>Press the button.</td>
<td></td>
</tr>
<tr>
<td>Press the button.</td>
<td></td>
</tr>
</tbody>
</table>

**Remote Controller Function Selection Mode**

- Operation function limit setting (LOCKING FUNCTION)
- Use of automatic mode setting (SELECT AUTO MODE)
- Temperature range limit setting (TEMP FUNCTION)
- Use of automatic timer setting (timer mode setting)
- Use of fixed airflow direction mode setting
- Mode setting (SELECT MODE)
- Display change (Disp Mode Settings)

**Item 2**

- Temperature display C/E setting (TEMP MODE C/E)
- Function limit setting (FUNCTION LIMIT SELECTION)
- Press the button.
- Press the button.
- Press the button.
- Press the button.
- Press the button.

**Item 3**

- Temperature display C/E setting (TEMP MODE C/E)
- Press the @ button.
- Press the button.
- Press the button.
- Press the button.
- Press the button.

**NOTES**

- Timer operation stops when the display for remote controller function selection is changed to the normal one.

**Dot Display**

The language that is selected in "CHANGE LANGUAGE" mode appears on this display. English is set in this manual.

**Detailed setting**

4-1. CHANGE LANGUAGE setting

The language that appears on the dot display can be selected.

- Press the [MENU] button to change the language.
  ① Japanese (JP), ② English (GB), ③ German (DE), ④ Spanish (ES), ⑤ Russian (RU), ⑥ Italian (IT), ⑦ Chinese (CH), ⑧ French (FR)

4-2. Function limit setting (operation lock)

- To switch the setting, press the [ON/OFF] button.
  ① not: Operation lock setting is made on all buttons other than the [ON/OFF] button.
  ② not: Operation lock setting is made on all buttons.
  ③ OFF: (Initial setting value).

- To make the operation lock setting valid on the normal screen, it is necessary to press buttons (Press and hold down the [FILTER] and [ON/OFF] buttons at the same time for two seconds.) on the normal screen after the above setting is made.

4-3. Use of automatic mode setting

When the remote controller is connected to the unit that has automatic operation mode, the following settings can be made.

- To set the setting, press the [ON/OFF] button.
  ① ON: (Initial setting value):
  The automatic mode is displayed when the operation mode is selected.
  ② OFF:
  The automatic mode is not displayed when the operation mode is selected.

4-4. Temperature range limit setting

After this setting is made, the temperature can be changed within the set range.

- To switch the setting, press the [ON/OFF] button.
  ① LIMIT TEMP COOL MODE:
  The temperature range can be changed on cooling mode.
  ② LIMIT TEMP HEAT MODE:
  The temperature range can be changed on heating mode.
  ③ LIMIT TEMP AUTO MODE:
  The temperature range can be changed on automatic mode.
  ④ OFF (Initial setting): The temperature range limit is not active.

- When the setting, other than OFF is made, the temperature limit setting on cooling, heating and automatic mode is made at the same time. However, the range cannot be limited when the set temperature range has not changed.

- To increase or decrease the temperature, press the [TEMP (v) or (Δ)] button.
- To switch the upper limit setting and the lower limit setting, press the [△] button. The selected setting will flash and the temperature can be set.

**Settable range**

- Cooling/Dry mode: Lower limit: 18°C ~ 30°C, Upper limit: 20°C ~ 19°C

- The settable range varies depending on the unit to connect (Mr. Slim units, Free-plan units, and intermediate temperature units)

4-5. Mode selection setting

4-5-1. Remote controller main/aux setting

- To switch the setting, press the [ON/OFF] button.
  ① Main: The controller will be the main controller.
  ② Sub: The controller will be the sub controller.

4-5-2. Use of clock setting

- To switch the setting, press the [ON/OFF] button.
  ① ON: The clock function can be used.
  ② OFF: The clock function cannot be used.

4-5-3. Timer function setting

- To switch the setting, press the [ON/OFF] button (Choose one of the followings).
  ① WEEKLY TIMER (Initial setting value):
  The weekly timer can be used.
  ② AUTO OFF TIMER: The auto off timer can be used.
  ③ SIMPLE TIMER: The simple timer can be used.
  ④ TIMER MODE OFF: The timer mode cannot be used.

- When the use of clock setting is OFF, the "WEEKLY TIMER" cannot be used.

4-5-4. Contact number setting for error indication

- To switch the setting, press the [ON/OFF] button.
  ① CALL OFF: The set contact numbers are not displayed in case of error.
  ② CALL *** ***: The set contact numbers are displayed in case of error.

- Setting the contact numbers:
  Set the contact numbers, follow the following procedures.
  Move the flashing cursor to set the numbers. Press the [TEMP (v) or (Δ)] button to move the cursor to the right (left). Press the [CLOCK (v) or (Δ)] button to set the numbers.

4-5-5. Display change setting

4-5-5-1. Temperature display C/E setting

- To switch the setting, press the [ON/OFF] button.
  ① C: The temperature unit °C is used.
  ② F: The temperature unit °F is used.

4-5-5-2. Suction air temperature display setting

- To switch the setting, press the [ON/OFF] button.
  ① ON: The suction air temperature is displayed.
  ② OFF: The suction air temperature is not displayed.

4-5-5-3. Automatic cooling/heating display setting

- To switch the setting, press the [ON/OFF] button.
  ① ON: "Automatic cooling" and "Automatic heating" is displayed under the automatic mode is running.
  ② OFF: Only "Automatic" is displayed under the automatic mode.
(2) Unit Function Selection

Set the functions of each indoor unit from the remote controller, as required. The functions of each indoor unit can be selected only from the remote controller.

Set the functions by selecting the necessary items from Table 1 and Table 2. (Default settings are also shown below)

### Table 1. Itemized functions of the entire refrigerant system (select unit number 00 to 15)

<table>
<thead>
<tr>
<th>Function</th>
<th>Settings</th>
<th>Mode no.</th>
<th>Setting no.</th>
<th>Check</th>
<th>Default settings</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power failure recovery</td>
<td>Not available</td>
<td>01</td>
<td>0</td>
<td>1</td>
<td>O</td>
<td>Approx. 4-minute wait-period after power is restored.</td>
</tr>
<tr>
<td>Indoor temperature detection</td>
<td>Unit operating average</td>
<td>02</td>
<td>1</td>
<td>2</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Set by unit's remote controller</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Remote controller's internal sensor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOSSNAV connectivity</td>
<td>Supported (unit is equipped with outdoor-air intake)</td>
<td>03</td>
<td>1</td>
<td>2</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supported (unit is not equipped with outdoor-air intake)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power voltage</td>
<td>240 V</td>
<td>04</td>
<td>1</td>
<td>2</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td></td>
<td>220 V, 230 V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 2. Itemized functions of the indoor unit (select unit numbers 01 to 04 or AL)

<table>
<thead>
<tr>
<th>Function</th>
<th>Settings</th>
<th>Mode no.</th>
<th>Setting no.</th>
<th>Check</th>
<th>Default settings</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filter sign</td>
<td>100 Hz</td>
<td>07</td>
<td>1</td>
<td>2</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2500 Hz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No filter sign indicator</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fan operation during thermo off in heating operation</td>
<td>Operation (Last set fan speed)</td>
<td>25</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fan operation during thermo off in cooling operation</td>
<td>Operation (Low speed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operation (Last set fan speed)</td>
<td>27</td>
<td>1</td>
<td></td>
<td>O</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note:

When the indoor unit functions were changed using the function selection after installation is complete, always indicate the set contents by entering O or other mark in the appropriate check field of Table 1 and Table 2.

**Function selection flow**

First grasp the function selection flow. The following describes setting of “Power voltage” of Table 1 as an example.

(For the actual setting procedure, see Setting procedure ① to ⑤.)

① Check the function selection set contents.
② Switch to the FUNCTION SELECTION mode.
   (Press ⑥ and ⑦ simultaneously in the remote controller OFF state.)
③ Refrigerant address specification → 00 (Outdoor unit specification)
④ Unit address No. specification → 00 (Indoor unit specification)
⑤ Registration (Press button ⑧.)
   (Specified indoor unit Fan operation)
⑥ Mode No. Selection → 04 (Power voltage)
⑦ Setting no. selection → 2 (220 V, 230 V)
   (Buttons ⑨ and ⑩ operation)
⑧ Register (Press button ⑪.)
⑨ Ending function display (Press buttons ⑥ and ⑦ simultaneously.)

**Procedure** (Set only when change is necessary.)

① Check the set contents of each mode. When the set contents of a mode were changed by function selection, the functions of that mode also change.
② Check the set contents as described in steps ① to ⑥ change the setting based on the entries in the Table 1 and Table 2. (Refer default settings, when change the setting)
③ Set the remote controller to Off.
   Press and hold down the ⑥ (FILTER) and ⑦ (TEST) buttons at the same time for two seconds or longer.
   "FUNCTION SELECTION" blinks a while, then the remote controller display changes to the display shown below.

Refrigerant address display

④ Set the outdoor unit refrigerant address No.
   When the ⑤ (CLOCK (↑) and (↓) buttons are pressed, the refrigerant address No. decreases and increases between 00 and 15. Set it to the refrigerant address No. whose function you want to select.
   (This step is unnecessary for single refrigerant system.)

* If the remote controller enters the OFF state after the “FUNCTION SELECTION” and room temperature displays “BB” have flashes for two seconds, communication is probably abnormal. Make sure there are no noise sources near the transmission line.

**Note:**

If you make a mistake during operation, end function selection by step ⑥ and repeat selection from step ①.
Set the indoor unit address No.
Press the \[ \text{ON/OFF} \] button. The unit address No. display "- -" flashes.

When setting mode 01 to 04, set the unit address No. to "00".
When setting modes 07, 25, 27:
- When setting for each indoor unit, set the unit address No. to "01-04".
- When batch setting for all indoor units, set the unit address No. to "AI".

Refrigerant address and unit address No. registration
Press the \[ \text{Choo-choo} \] button. The refrigerant address and unit address No.
arere registered.
After a while, the mode No. display "- -" flashes.

* When "BB" flashes at the room temperature display, the selected refrigerant address is not in the system.
When "BB" is displayed at the unit address No. display, and when it flashes together with the refrigerant address display, the selected unit address No. does not exist. Correctly set the refrigerant address and unit address No. by repeating steps ① and ②.

⑥ Mode No. selection
Select the mode No. you want to set with the \[ \text{[TEMP (V)]} \] and \[ \text{(△)} \] buttons. (Only the settable mode numbers can be selected.)

⑩ Select the setting contents of the selected mode.
When the \[ \text{[MENU]} \] button is pressed, the current setting No. flashes.
Use this to check the currently set contents.

⑪ The contents set at steps ③ to ⑦ are registered.
When the \[ \text{Choo-choo} \] button is pressed, the mode No. and setting No. flash and registration begins. The flashing mode No. and setting No. change to a steady light and setting ends.

* When "- -" appears at the mode No. and setting No. displays and "BB" flashes at the room temperature display, communication is probably abnormal.
Make sure there are no noise sources near the transmission line.

⑪ To select more functions, repeat steps ③ to ⑦.

⑫ End function selection.
Press and hold down the \[ \text{FILTER} \] and \[ \text{TEST} \] buttons at the same time for two seconds or longer.
After a while, the function selection display disappears and the remote controller returns to the air conditioner off display.

* Do not operate the air conditioner from the remote controller for 30 seconds after the end of function selection.

Note:
When the functions of an indoor unit were changed by function selection after the end of installation, always indicate the set contents by entering a C or other mark in the appropriate check field of Table 1 and Table 2.
12. Test run

12.1. Before test run

The test run can be carried out either from the outdoor unit or the indoor unit. For the test run from outdoor unit, please check the outdoor unit installation manual.

1. Checklist

- After the installation, piping setup, and wiring of the indoor and outdoor units is complete, check that refrigerant is not leaking, the power and control wires are not loose, and the poles are not reversed.
- Use a 500 V insulation resistance tester to make sure that the resistance between the power terminal and the ground is 1.0 MΩ or more, if it is less than 1.0 MΩ, do not operate the unit. Absolutely do not touch the tester to indoor/outdoor connection terminals S1, S2, and S3. An accident could occur.
- Before turning the power ON, make sure that test run switch (SW4) of outdoor controller board is OFF.
- Check the electrical power phase. If the phase is reversed, the fan may rotate in the wrong direction or stop, or unusual sounds may be produced.
- Starting at least 12 hours before the test run, send current through the crankcase heater. (If the current is running for a shorter period of time, damage to the compressor could result.)
- For specific models requiring changing of settings for higher ceilings or selection of power supply ON/OFF capability, make proper changes referring to the description for Selection of Functions through Remote Controller. After the above checks are complete, carry out the test run as indicated in the following outline.

12.2. Test run procedures

① Turn on the main power supply

While the display on the remote controller indicates “OFF”, the remote controller is disabled. Turn off the “OFF” indicator before using the remote controller.

② Press the [TEST] button twice successively within three seconds. Test run starts.

"TEST RUN" and "OPERATION MODE" are displayed alternately.

③ Press [ON/OFF] button

Cooling/drying mode: Cool air should start to blow.
Heating mode: Warm air should start to blow (after a while).

④ Check the outdoor unit fan for correct running

The outdoor unit features automatic capacity control to provide optimum fan speeds. The fan keeps running at a low speed to meet the current outside air condition unless it exceeds its available maximum power. Then, in actually, the fan may stop or run in the reverse direction depending on the outside air, which does not mean malfunction.

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Outdoor Substrate LED Display</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote controller is displaying “PLEASE WAIT”, and operation is not possible. After power is turned ON, “PLEASE WAIT” is displayed for 3 mins., then error code is displayed.</td>
<td>After “startup” display, “00” is displayed (correct operation).</td>
<td>After power is turned ON, system startup tests for about 2 mins., and “PLEASE WAIT” is displayed (correct operation).</td>
</tr>
<tr>
<td>Power is turned ON, and “EE” or “EF” are displayed after “PLEASE WAIT” is displayed.</td>
<td>After “startup” display, “00” or “EE” is displayed (EE is displayed when a test run is made).</td>
<td>Outdoor unit’s safeguard installation connector is open.</td>
</tr>
<tr>
<td>Display messages do not appear even when remote controller operation switch is turned ON (operation lamp does not light up).</td>
<td>After “startup” display, “EA” (error for number of units) or “EB” (unit number error) is displayed.</td>
<td>Wiring for the indoor unit and outdoor unit is not connected correctly. (Polarity is wrong for S1, S2, S3)</td>
</tr>
<tr>
<td>Operation display appears but soon disappears even when remote controller operations are executed.</td>
<td>After “startup” display, “00” is displayed (correct operation).</td>
<td>Remote controller transmission wire short</td>
</tr>
<tr>
<td></td>
<td>After “startup” display, “00” is displayed (correct operation).</td>
<td>Remote controller transmission wire burnt</td>
</tr>
</tbody>
</table>

⑤ Press the [ON/OFF] button to reset the test run in progress

- The test run will be automatically shut down after two hours in response to the AUTO STOP setting of two hours on the timer.
- During the test run, the room temperature display shows the indoor unit tubing temperatures.
- In the case of the test run, the OFF timer will activate, and the test run will automatically stop after two hours.
- The room temperature display section shows the control temperature for the indoor units during the test run.
- Check that all the indoor units are running properly for simultaneous twin and triple operation. Malfunctions may not be displayed even if the wiring is incorrect.

⑥ Register a telephone number

The telephone number of the repair shop, sales office, etc., to contact if an error occurs can be registered in the remote controller. The telephone number will be displayed when an error occurs.

For registration procedures, refer to 11.4 Function selection of remote controller.

(1) After turning ON the power, the system will go into startup mode, and the remote controller operation lamp (green) and the display section’s “PLEASE WAIT” will flash. Also, in the case of the Indoor substrate LEDs, LED 1 and LED 2 light up (when address is 0) or become dim (when address is not 0), and LED 3 flashes. In the case of the outdoor substrate LED display, [ ] and [ ] are displayed alternatively at 1-second intervals.

- If one of the above operations does not function correctly, the following causes should be considered, and if applicable, dealt with. (The following symptoms have been determined under test run mode. Note that "startup" in the chart means the "1 display above.)
12.3. Self-check

Retrieve the error history of each unit using the remote controller.

1. Switch to the self-check mode.
   When the [CHECK] button is pressed twice successively within three seconds, the display shown below appears.

   ![Self-check button press](image)

   **Self check address or self check refrigerant address**

   Approximately three seconds after the change operation, the self check refrigerant address changes from flashing to a steady light and self check begins.

2. Self check result display
   Error code 4 digits or error code 8 digits
   - When there is no error history

   ![Self check result display](image)

   **Address 3 digits or unit address No. 2 digits**

3. Error history reset
   The error history is displayed in (1) Self check results display.

   ![Error history reset](image)

   When the [MENU] button is pressed twice successively within three seconds, the self check address or refrigerant address flashes.

4. Error history reset
   There are the following two ways of resetting self check.
   Press the [CHECK] button twice successively within three seconds → Resets self check and returns to the state before self check.
   Press the [ON/OFF] button → Self check resets and indoor units stop.
   (When operation is prohibited, this operation is ineffective.)

12.4. Remote controller check

If operation cannot be carried out from the remote controller, use this function to diagnose the remote controller.

1. First check the power mark.
   When normal voltage (DC12V) is not applied to the remote controller, the power mark goes off.
   When the power mark is off, check the remote controller wiring and the indoor unit.

2. Switch to the remote controller check mode.
   When the [CHECK] button is held down for five seconds or longer, the display shown below appears.

   ![Remote controller check](image)

   When the [FILTER] button is pressed, remote controller check begins.
Remote controller check result

When remote controller is normal
Since there is no problem at the remote controller, check for other causes.

When there is no problem at the remote controller, check for other causes.

Remote controller switching is necessary.

When the problem is other than the checked remote controller

Error code 2) 6833, 6832, 6833, 6832: flash → Cannot send

There is noise on the transmission line, or the indoor unit or another remote controller is faulty. Check the transmission line and the other remote controllers.

Data error count is the difference between the number of bits of remote controller send data and the number of bits actually sent to the transmission line. In this case, the send data was disturbed by the noise, etc. Check the transmission line.

Remote controller send data
Send data on transmission line

13. Troubleshooting

13.1. How to handle problems with the test run

<table>
<thead>
<tr>
<th>Error code (MELANS display)</th>
<th>Error details</th>
<th>Problem location</th>
</tr>
</thead>
<tbody>
<tr>
<td>E0 6931,6934</td>
<td>Remote controller communication/reception error</td>
<td>Remote Controller</td>
</tr>
<tr>
<td>E1, E2 6931,6932</td>
<td>Remote controller board error</td>
<td>Remote Controller</td>
</tr>
<tr>
<td>E3 6832,6833</td>
<td>Remote controller communication/transmission error</td>
<td>Remote Controller</td>
</tr>
<tr>
<td>E4 6831,6934</td>
<td>Remote controller communication/reception error</td>
<td>Indoor unit</td>
</tr>
<tr>
<td>E5 6832,6835</td>
<td>Remote controller communication/transmission error</td>
<td>Indoor unit</td>
</tr>
<tr>
<td>E6 6840,6843</td>
<td>Communication between indoor and outdoor units - reception error</td>
<td>Indoor unit</td>
</tr>
<tr>
<td>E7 6841,6842</td>
<td>Communication between indoor and outdoor units - transmission error</td>
<td>Indoor unit</td>
</tr>
<tr>
<td>E9 6840,6844</td>
<td>Communication between indoor and outdoor units - transmission error</td>
<td>Indoor unit</td>
</tr>
<tr>
<td>EA 6844</td>
<td>Indoor/Outdoor connection wiring error, indoor unit overload (5 units or more)</td>
<td>Outdoor unit</td>
</tr>
<tr>
<td>EB 6845</td>
<td>Indoor/Outdoor connection wiring error (interference, loose)</td>
<td>Outdoor unit</td>
</tr>
<tr>
<td>EC 6846</td>
<td>Excessive time in use</td>
<td>Outdoor unit</td>
</tr>
<tr>
<td>ED 4003</td>
<td>Serial communication error</td>
<td>Outdoor unit</td>
</tr>
<tr>
<td>EE 4003</td>
<td>Serial communication error</td>
<td>Outdoor unit</td>
</tr>
<tr>
<td>F1 4103</td>
<td>Reverse phase, out of phase verification</td>
<td>Outdoor unit</td>
</tr>
<tr>
<td>F2 4115</td>
<td>Faulty input circuit</td>
<td>Outdoor unit</td>
</tr>
<tr>
<td>AC 6800</td>
<td>Duplicated M-NET address setting</td>
<td>M-NET board</td>
</tr>
<tr>
<td>AG 6600</td>
<td>M-NET error in PWM transmission</td>
<td>M-NET board</td>
</tr>
<tr>
<td>BS 6803</td>
<td>M-NET bus busy</td>
<td>M-NET board</td>
</tr>
<tr>
<td>AS 6605</td>
<td>M-NET communication error with P transmission</td>
<td>M-NET board</td>
</tr>
<tr>
<td>A7 6607</td>
<td>M-NET error - no ACK</td>
<td>M-NET board</td>
</tr>
<tr>
<td>A8 6608</td>
<td>M-NET error - no response</td>
<td>M-NET board</td>
</tr>
<tr>
<td>EF undefined</td>
<td>Undefined error code</td>
<td>Outdoor unit</td>
</tr>
<tr>
<td>U8 1102</td>
<td>Outlet temperature error</td>
<td>Outdoor unit</td>
</tr>
<tr>
<td>U1 1108</td>
<td>ON/OFF Short-circuit Connector Unplugged</td>
<td>Outdoor unit</td>
</tr>
<tr>
<td>U8 1504</td>
<td>Open/short in discharge temp thermostat</td>
<td>Outdoor unit</td>
</tr>
<tr>
<td>U4 5105</td>
<td>Open/short in liquid temp thermostat</td>
<td>Outdoor unit</td>
</tr>
<tr>
<td>UE 4101</td>
<td>Compressor overcurrent interruption (S1 control)</td>
<td>Outdoor unit</td>
</tr>
<tr>
<td>UL 1302</td>
<td>High pressure error (E31 operation)</td>
<td>Outdoor unit</td>
</tr>
<tr>
<td>PF 4115</td>
<td>Power synchronous base circuit error</td>
<td>Outdoor unit</td>
</tr>
<tr>
<td>P1 5101</td>
<td>Inlet sensor error</td>
<td>Indoor unit</td>
</tr>
<tr>
<td>P2 5102</td>
<td>Open/short in liquid temp thermostat</td>
<td>Indoor unit</td>
</tr>
<tr>
<td>P4 5103</td>
<td>Drain sensor error</td>
<td>Indoor unit</td>
</tr>
<tr>
<td>PS 5104</td>
<td>Drain overflow protection operation</td>
<td>Indoor unit</td>
</tr>
<tr>
<td>P5 5105</td>
<td>Water leak error (PDH only)</td>
<td>Indoor unit</td>
</tr>
<tr>
<td>P6 1503</td>
<td>Freeze prevention operation</td>
<td>Indoor unit</td>
</tr>
<tr>
<td>P7 1504</td>
<td>Surge prevention operation</td>
<td>Indoor unit</td>
</tr>
<tr>
<td>P8 1110</td>
<td>Piping temperature error</td>
<td>Indoor unit</td>
</tr>
<tr>
<td>P9 5106</td>
<td>Open/short in condenser/evaporator temp thermostat</td>
<td>Indoor unit</td>
</tr>
</tbody>
</table>
### 13.2. The following occurrences are not problems or errors

<table>
<thead>
<tr>
<th>Problem</th>
<th>Remote controller display</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>The fan setting changes during heating.</td>
<td>Ordinary display</td>
<td>During thermostat OFF mode, low speed air operation will take place. During thermostat ON mode, low speed air will switch automatically to set notch (fan speed) on the basis of time or piping temperature.</td>
</tr>
<tr>
<td>The fan stops during heating.</td>
<td>Defrosting display</td>
<td>During defrosting, the fan will stop.</td>
</tr>
<tr>
<td>When the switch is turned ON, the fan does not begin to operate.</td>
<td>Heating preparations underway</td>
<td>After the switch is turned ON, low speed air will take place, for 7 minutes (or after pipe temperature reaches 35°C, 2 minutes) before automatically switch to set notch (fan speed). (Hot adjustment)</td>
</tr>
<tr>
<td>The outdoor unit fan turns in reverse or stops, and an unusual sound is heard.</td>
<td>Ordinary display</td>
<td>There is a risk of the power to the outdoor unit being connected in reverse phase. Be sure to check that the phase is correct.</td>
</tr>
</tbody>
</table>

Note:
If the fan in the indoor unit does not operate, check the over-current relay on the fan motor to determine whether it has been tripped.
If the over-current relay has been tripped, reset it after eliminating the cause of the problem (e.g. motor lock).
To reset the over-current relay, open the control box and press the green claw on bottom-right of the relay until a click is heard. Release the claw and check that it returns to its original position.
Note that if it is pressed too hard it will not return to its original position.
Please be sure to put the contact address/telephone number on this manual before handing it to the customer.