Thank you very much for purchasing our air conditioner.
Before using your air conditioner, please read this manual carefully and keep it for future reference.
CONTENT

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TROUBLES AND CAUSES(CONCERNING REMOTE CONTROLLER)------------------------20
IMPORTANT SAFETY INFORMATION

⚠️ CAUTION
Do not attempt to install this unit by yourself. This unit requires installation by qualified persons.

⚠️ DANGER
Do not attempt to service the unit yourself. This unit has no user serviceable components. Opening or removing the cover will expose you to dangerous voltage. Tuning off the power supply will not prevent potential electric shock.

⚠️ DANGER
Never put hands or objects into the Air Outlet of indoor or outdoor units. These units are installed with a fan running at high speed. To touch the moving fan will cause serious injury.

⚠️ DANGER
To avoid the risk of serious electrical shock, Never sprinkle or spill water or liquids on unit.

⚠️ WARNING
Ventilate the room regularly while the air conditioner is in use, especially if there is also a gas appliance in use in this room. Failure to follow these directions may result in a loss of oxygen in the room.

⚠️ WARNING
To prevent electric shock, turn off the power or disconnect the power supply plug before beginning any cleaning or other routine maintenance. Follow the directions for cleaning in the Owner's Manual.

⚠️ WARNING
Do not use liquid cleaners or aerosol cleaners, use a soft and dry cloth for cleaning the unit. To avoid electric shock, never attempt to clean the units by sprinkling water.

⚠️ CAUTION
Do not use caustic household drain cleaners in the unit. Drain cleaners can quickly destroy the unit components (drain pan and heat exchanger coil etc).

⚠️ NOTE
For proper performance, operate the unit in temperature and humidity ranges indicated in this owner's manual. If the unit is operated beyond these conditions, it may cause malfunctions of the unit or dew dripping from the unit.
**HINTS FOR ECONOMICAL OPERATION**

The following should be noticed to ensure an economical operation. (Refer to corresponding chapter for details)

- Adjust the air flow direction properly to avoid winding toward your body.
- Adjust the room temperature properly to get a comfortable situation and to avoid supercooling and superheat.
- In cooling, close the curtains to avoid direct sunlight.
- To keep cool or warm air in the room, never open doors or windows more often than necessary.
- Set the timer for the desired operating time.
- Never put obstructions near the air outlet or the air inlet. Or it will cause lower efficiency, even a sudden stop.
- If you don't plan to use the unit for a long time, please disconnect power and remove the batteries from the remote controller. When the power switch is connected, some energy will be consumed, even if the air conditioner isn't in operation. So please disconnect the power to save energy. And please switch the power on 12 hours before you restart the unit to ensure a smooth operation.
- A clogged air filter will reduce cooling or heating efficiency, please clean it once two weeks.

**PARTS NAMES**

The air conditioner consists of the indoor unit, the outdoor unit, the connecting pipe and the remote controller.

**Cassette Type**

**NOTICE!**

This chart is based on 24000Btu/h type. So, a few differences may exist on the outlook and functions from yours.
NAMES AND FUNCTIONS

a) indoor unit  
b) outdoor unit  
c) remote controller  
d) air-in  
e) air-out  
f) air outlet  
g) air flow louver (at air outlet)  
h) connecting pipe  
i) drain hose  
j) air inlet (with air filter in it)  
k) drain pump (drain water from indoor unit)  
l) infrared signal receiver  
m) temporary button  
n) operation lamp  
o) timer indicator  
p) PRE-DEF indicator (cooling and heating type) or fan only indicator (cooling only type)  
q) alarm indicator

High-static Pressure Parvis Split Type

NOTICE!
This chart is based on 24000Btu/h type. So, a little differences may exist on the outlook and functions from yours.

NAMES AND FUNCTIONS

<table>
<thead>
<tr>
<th></th>
<th>indoor unit</th>
<th></th>
<th>outdoor unit</th>
<th></th>
<th>remote controller</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td></td>
<td>b</td>
<td></td>
<td>c</td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>air-in</td>
<td>e</td>
<td>air-out</td>
<td>f</td>
<td>air outlet</td>
</tr>
<tr>
<td>g</td>
<td>heat exchanger</td>
<td>h</td>
<td>connecting pipe</td>
<td>i</td>
<td>drain hose</td>
</tr>
<tr>
<td>j</td>
<td>E-Box</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>k</td>
<td>infrared signal receiver</td>
<td>l</td>
<td>temporary button</td>
<td>m</td>
<td>PRE-DEF indicator (cooling and heating type) or fan only indicator (cooling only type)</td>
</tr>
<tr>
<td>n</td>
<td>timer indicator</td>
<td>o</td>
<td>alarm indicator</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**NOTICE!**
This chart is based on 24000Btu/h type. So, a few differences may exist on the outlook and functions from yours.

**NAMES AND FUNCTIONS**

a) indoor unit  
b) outdoor unit  
c) remote controller  
d) air-in  
e) air-out  
f) air outlet  
g) air flow louver (at outlet)  
h) connecting pipe  
i) drain hose  
j) air inlet (with air filter in it)  
k) infrared signal receiver  
l) manual button  
m) operation lamp  
n) timer indicator  
o) PRE-DEF indicator  
p) alarm indicator  

*(NOTICE: In the case of "cooling only type", it is the "FAN ONLY" indicator.)*
**For Slim Duct Type**

**NOTICE!**

This chart is based on 24000Btu/h. type. So, a few differences may exist on the outlook and functions from yours.

### NAMES AND FUNCTIONS

<table>
<thead>
<tr>
<th></th>
<th>indoor unit</th>
<th>b</th>
<th>outdoor unit</th>
<th>c</th>
<th>remote controller</th>
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</thead>
<tbody>
<tr>
<td>a</td>
<td>air-inlet</td>
<td>d</td>
<td>air-out</td>
<td>e</td>
<td>air-outlet</td>
</tr>
<tr>
<td></td>
<td></td>
<td>h</td>
<td>connecting pipe</td>
<td>i</td>
<td>drain hose</td>
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<tr>
<td>i</td>
<td>E-Box</td>
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<tr>
<td>k</td>
<td>infrared signal receiver</td>
<td></td>
<td>temporary button</td>
<td></td>
<td></td>
</tr>
<tr>
<td>m</td>
<td>operation lamp</td>
<td></td>
<td>PRE./DEF.indicator (cooling and heating type) or fan only indicator (cooling only type)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>timer indicator</td>
<td></td>
<td>alarm indicator</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
For Slim DUCT with air inlet box Type

**Names and Functions**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>indoor unit</td>
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<tr>
<td>d</td>
<td>air-outlet</td>
<td>e</td>
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<tr>
<td>g</td>
<td>heat exchanger</td>
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<td>i</td>
<td>E-Box</td>
<td>j</td>
</tr>
<tr>
<td>k</td>
<td>infrared signal receiver</td>
<td>l</td>
</tr>
<tr>
<td>m</td>
<td>operation lamp</td>
<td>n</td>
</tr>
<tr>
<td>n</td>
<td>timer indicator</td>
<td>p</td>
</tr>
</tbody>
</table>
Four-way Cassette(slim) Type

This picture is based on the type of 18000Btu/h, So the appearance and function may be slightly different from the unit you purchased.

Parts Names:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>1</td>
<td>Indoor Unit</td>
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</tr>
<tr>
<td>2</td>
<td>Outdoor Unit</td>
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</tr>
<tr>
<td>3</td>
<td>Remote Controller</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Air outlet</td>
<td>Vertical louver</td>
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<tr>
<td>5</td>
<td></td>
<td>Connecting pipe</td>
</tr>
<tr>
<td>6</td>
<td>Drain hose</td>
<td>Air Inlet (Air filter installed inside to prevent the dust)</td>
</tr>
<tr>
<td>7</td>
<td>Drain Pump (Internal installed),water drain from indoor unit.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Infrared Signal receiver</td>
<td>Manual button</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>Run lamp</td>
</tr>
<tr>
<td>10</td>
<td>Timer indicator</td>
<td>Defrost indicator heating/cooling type or fan indicator (cooling only type)</td>
</tr>
<tr>
<td>11</td>
<td>Alarm indicator</td>
<td></td>
</tr>
</tbody>
</table>
One-way Cassette Type

INDOOR UNIT

1. Outlet louver
2. Inlet
3. Filter
4. Display panel
5. Remote controller

OUTDOOR UNIT

6. Refrigerant connecting, drain hose pipe
7. Electric wiring
8. Trap
9. Air outlet
10. Air inlet (side and rear)

DISPLAY PANEL

11. MANUAL button
12. Run lamp
13. FAN indicator (Cooling/Heating type without)
14. TIMER indicator
15. ALARM indicator
16. DEF. indicator (Cooling-only type without)

Display panel

Cooling & Heating type

Cooling-only type
Ceiling & Floor Type (for VERTICAL DISCHARGE AIR CONDITIONER)

NOTICE!
The chart based on one model of our product is for reference only, which may be different from the unit you purchased.

NAMES AND FUNCTIONS

<table>
<thead>
<tr>
<th></th>
<th>indoor unit</th>
<th></th>
<th>outdoor unit</th>
<th></th>
<th>remote controller</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td></td>
<td>b</td>
<td></td>
<td>c</td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>air-in</td>
<td>e</td>
<td>air flow louver (at air outlet)</td>
<td>f</td>
<td>connecting pipe</td>
</tr>
<tr>
<td>g</td>
<td>drain hose</td>
<td>h</td>
<td>air inlet (with air filter in it)</td>
<td>i</td>
<td></td>
</tr>
<tr>
<td>j</td>
<td>installation part</td>
<td>k</td>
<td>FAN/DEF indicator (For cooling and heating type, it’s DEF, for cooling only type, it’s FAN)</td>
<td>l</td>
<td></td>
</tr>
<tr>
<td>m</td>
<td>infrared signal receiver</td>
<td>n</td>
<td>operation lamp</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>p</td>
<td>timer indicator</td>
<td>q</td>
<td>alarm indicator</td>
<td>r</td>
<td></td>
</tr>
<tr>
<td>s</td>
<td>temporary button</td>
<td>t</td>
<td>air-out</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Ceiling & Floor Type

NOTICE!
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NAMES AND FUNCTIONS

| ① | indoor unit | ⑥ | outdoor unit | ⑤ | remote controller |
| ② | air-in | ⑦ | air flow louver (at air outlet) | ① | connecting pipe |
| ⑧ | drain hose | ⑧ | air inlet (with air filter in it) | ⑨ | FAN/DEF indicator  (For cooling and heating type, it’s DEF., for cooling only type, it’s FAN) |
| ⑩ | installation part | ⑩ | operation lamp | ⑩ |  |
| ⑩ | infrared signal receiver | ⑩ |  |
| ⑩ | timer indicator | ⑩ | AlarmIndicator |
| ⑩ | temporary button | ⑩ |  |
| ⑩ |  | ⑩ | Temperature display |  |
Ceiling & Floor Type

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NAMES AND FUNCTIONS

<p>| | | | | |</p>
<table>
<thead>
<tr>
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<tbody>
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<td>outdoor unit</td>
<td>①</td>
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<td>air-in</td>
<td>⑯</td>
<td>air flow louver (at outlet)</td>
<td>⑭</td>
</tr>
<tr>
<td>②</td>
<td>drain hose</td>
<td>⑰</td>
<td>air inlet (with air filter in it)</td>
<td>⑧</td>
</tr>
<tr>
<td>③</td>
<td>installation part</td>
<td>⑪</td>
<td>FAN/DEF indicator (For cooling and heating type, it's DEF; for cooling only type, it's FAN)</td>
<td>⑩</td>
</tr>
<tr>
<td>④</td>
<td>infrared signal receiver</td>
<td>⑫</td>
<td>operation lamp</td>
<td>⑨</td>
</tr>
<tr>
<td>⑤</td>
<td>timer indicator</td>
<td>⑬</td>
<td>Alarm Indicator</td>
<td>②</td>
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<tr>
<td>⑦</td>
<td>temporary button</td>
<td>⑭</td>
<td>air-out</td>
<td>③</td>
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</tbody>
</table>
Ceiling & Floor Type

NOTICE!
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NAMES AND FUNCTIONS

<table>
<thead>
<tr>
<th></th>
<th>indoor unit</th>
<th></th>
<th>outdoor unit</th>
<th></th>
<th>remote controller</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>air-in</td>
<td></td>
<td>air flow louver (at air outlet)</td>
<td></td>
<td>connecting pipe</td>
</tr>
<tr>
<td>4</td>
<td>drain hose</td>
<td></td>
<td>air inlet (with air filter in it)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>installation part</td>
<td></td>
<td>FAN/DEF indicator</td>
<td></td>
<td>operation lamp</td>
</tr>
<tr>
<td></td>
<td>infrared signal receiver</td>
<td></td>
<td>(For cooling and heating type, it’s DEF.; for cooling only type, it’s FAN)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>timer indicator</td>
<td></td>
<td>alarm indicator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>temporary button</td>
<td></td>
<td>air-out</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12
Ceiling & Floor Type

NOTICE!
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<table>
<thead>
<tr>
<th>NAMES AND FUNCTIONS</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
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<td>3</td>
<td>indoor unit</td>
<td>4</td>
<td>outdoor unit</td>
</tr>
<tr>
<td>5</td>
<td>air-in</td>
<td>6</td>
<td>air flow louver (at air outlet)</td>
</tr>
<tr>
<td>7</td>
<td>drain hose</td>
<td>8</td>
<td>air inlet (with air filter in it)</td>
</tr>
<tr>
<td>1</td>
<td>installation part</td>
<td>2</td>
<td>remote controller</td>
</tr>
<tr>
<td>9</td>
<td>operation lamp</td>
<td>10</td>
<td>connecting pipe</td>
</tr>
<tr>
<td>11</td>
<td>FAN/DEF indicator</td>
<td>12</td>
<td>(For cooling and heating type, it's DEF., for cooling only type, it's FAN)</td>
</tr>
<tr>
<td>13</td>
<td>manual button</td>
<td>14</td>
<td>timer indicator</td>
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<td>15</td>
<td>warning indicator</td>
<td>16</td>
<td>beep indicator</td>
</tr>
<tr>
<td>17</td>
<td>infrared signal receiver</td>
<td>18</td>
<td>air-out</td>
</tr>
<tr>
<td>19</td>
<td>temporary indicator</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MANUAL OPERATION

Ceiling & Floor

This function is used to operate the unit temporarily in case you misplace the remote controller or its batteries are exhausted. Two modes including AUTO and FORCED COOL can be selected through the TEMPORARY BUTTON on the air-in grill control box of the indoor unit. Once you push this button, the air conditioner will run in such order: AUTO, FORCED COOL, OFF, and back to AUTO.

1 AUTO
The OPERATION lamp is lit, and the air conditioner will run under AUTO mode. The remote controller operation is enabled to operate according to the received signal.

2 FORCED COOL
The OPERATION lamp flashes, the air conditioner will turn to AUTO after it is enforced to cool with a wind speed of HIGH for 30 minutes. The remote controller operation is disabled.

3 OFF
The OPERATION lamp goes off. The air conditioner is OFF while the remote controller operation is enabled.

Four-way Cassette

This function is used to operate the unit temporarily in case you misplace the remote controller or its batteries are exhausted. Two modes including AUTO and mandatory COOL can be selected through the TEMPORARY BUTTON on the air inlet grill control box of the indoor unit. Once you push this button, the air conditioner will run in such order: AUTO, mandatory COOL, OFF, and back to AUTO.

1 AUTO
The OPERATION lamp is lit, and the air conditioner will run under AUTO mode. The remote controller operation is enabled to operate according to the received signal.

2 MANDATORY COOL
The OPERATION lamp flashes, the air conditioner will turn to AUTO after it is enforced to cool with a wind speed of HIGH for 30 minutes. The remote controller operation is disabled.

3 OFF
The OPERATION lamp goes off. The air conditioner is OFF while the remote controller operation is enabled.
ADJUSTING AIR FLOW DIRECTION

★ Cassette Type

While the unit is in operation, you can adjust the air flow louver to change the flow direction and naturalize the room temperature evenly. Thus you can enjoy it more comfortably.

1. Set the desired air flow direction.
   Push the SWING button to adjust the louver to the desired position and push this button again to maintain the louver at this position.

2. Adjust the air flow direction automatically.
   Push the SWING button, the louver will swing automatically.

While this function is set, the swing fan of indoor unit runs; otherwise, the swing fan doesn't run. The swing scale of every side is 30°. When the air conditioner isn't in operation (including when "TIMER ON" is set), the SWING button will be disabled.

Duct and Ceiling Type

The following is how to adjust air flow direction when air outlet part (separately saled) is used with the indoor unit.

Cooling
To effectively cool the whole room, please set the louver so that the air can come out horizontally.

Heating
To effectively heat the bottom of the room, please set the louver so that the air can come out downwards.
MAINTENANCE

**WARNING**

Before you clean the air conditioner, be sure to disconnect the power supply plug.

**Cleaning the indoor unit and remote controller**

**CAUTIONS**
- Use a dry cloth to wipe the indoor unit and remote controller.
- A cloth dampened with cold water may be used on the indoor unit if it is very dirty.
- Never use a damp cloth on the remote controller.
- Do not use a chemically-treated duster for wiping or leave such material on the unit for long, because it may damage or fade the surface of the unit.
- Do not use benzine, thinner, polishing powder, or similar solvents for cleaning. These may cause the plastic surface to crack or deform.

If you do not plan to use the unit for at least 1 month.
(1) Operate the fan for about half a day to dry the inside of the unit.
(2) Stop the air conditioner and disconnect power.
(3) Remove the batteries from the remote controller.

**Checks before operation**

**CAUTIONS**
- Check that the wiring is not broken off or disconnected.
- Check that the air filter is installed. (Some air-conditioners haven't air filters.)
- Check that the outdoor unit air outlet or inlet is not blocked.

Before you clean the air conditioner, be sure to disconnect the power supply plug.

**Cleaning the air filter**
- The air filter can prevent the dust or other particulate from going inside. In case of blockage of the filter, the working efficiency of the air conditioner may greatly decrease. Therefore, the filter must be cleaned once every two weeks during long-time usage.
- If the air conditioner is positioned in a dusty place, the cleaning frequency of the air filter must be increased.
- If the accumulated dust is too heavy to be cleaned, please replace the filter with a new one (replaceable air filter is an optional fitting).
**Cassette Type**

1. Open the air-in grill
   Push the grill switches towards the middle simultaneously as indicated in sketch A. Then pull down the air-in grill.

   **Cautions:** The control box cables, which are originally connected with the main body electrical terminators must be pulled off before doing as indicated above.

   ![Sketch A](image1)

   ![Sketch B](image2)

2. Take out the air-in grill (together with the air filter shown in Sketch B)
   Pull the air-in grill down at 45° and lift it up to take out the grill.

3. Dismantle the air filter

4. Clean the air filter (Vacuum cleaner or pure water may be used to clean the air filter. If the dust accumulation is too heavy, please use soft brush and mild detergent to clean it and dry out in cool place).

**Duct and Ceiling Type**

1. Open the air-in grill
   Push the grill switches towards the middle simultaneously as indicated in follow figure sketch. Then pull down the air-in grill.

   **Cautions:** The control box cables, which are originally connected with the main body electrical terminators must be pulled off before doing as indicated above.

   ![Sketch A](image3)

2. Take out the air-in grill.

3. Dismantle the air filter
4. Clean the air filter (Vacuum cleaner or pure water may be used to clean the air filter. If the dust accumulation is too heavy, please use soft brush and mild detergent to clean it and dry out in cool place).

![Fig. 1](image)

![Fig. 2](image)

- The air-in side should face up when using vacuum cleaner. (See Fig. 1)
- The air-in side should face down when using water. (See Fig. 2)

Cautions: Do not dry out the air filter under direct sunshine or with fire.

5. Re-install the air filter

6. Install and close the air-in grill in the reverse order of step 1 and 2 and connect the control box cables to the corresponding terminators of the main body.

Note: High-static Pressure Parvis Split Type has no air filter.

---

### AIR CONDITIONER OPERATIONS AND PERFORMANCE

**Three-minute protection feature**

A protection feature prevents the air conditioner from being activated for approximately 3 minutes when it restarts immediately after operation.

**Power failure**

Power failure during operation will stop the unit completely.

- The OPERATION lamp on the indoor unit will start flashing when power is restored.
- To restart operation, push the ON/OFF button on the remote controller.
- Lightning or a car wireless telephone operating nearby may cause the unit to malfunction.

Disconnect the unit with the power and then connect the unit with the power again. Push the ON/OFF button on the remote controller to restart operation.

**Air conditioner operating conditions**

For proper performance, run the air conditioner under the following temperature conditions:

<table>
<thead>
<tr>
<th>Mode</th>
<th>Cooling operation</th>
<th>Heating operation</th>
<th>Drying operation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Room temperature</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17°C<del>32°C (62°F</del>80°F)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0°C<del>30°C (32°F</del>86°F)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17°C ~ 32°C/62°F~90°F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Outdoor temperature</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18°C<del>43°C (64°F</del>109°F)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7°C<del>34°C/20°F</del>94°F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(For the models with low temperature cooling system)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18°C ~ 32°C/64°F~90°F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>For special tropical models</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18°C ~ 32°C/64°F~90°F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15°C<del>34°C/64°F</del>90°F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17°C ~ 32°C/64°F~90°F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18°C ~ 32°C/64°F~90°F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(For special tropical models)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:**

1. If air conditioner is used outside of the above conditions, certain safety protection features may come into operation and cause the unit to function abnormally.
2. Room relative humidity less than 80%. If the air conditioner operates in excess of this figure, the surface of the air conditioner may attract condensation. Please sets the vertical air flow louver to its maximum angle (vertically to the floor), and set HIGH fan mode.
3. Optimum performance will be achieved within these operating temperature.
Special functions

Refrigerant Leakage Detection (optional):
With this new technology, the display area will appear EC (if applicable) and the LED indication lamps continue flashing when the outdoor unit detects refrigerant leakage.

Louver Angle Memory Function (optional):
For some models, the machine is special designed with louver angle memory function. Power failure during operation or pressing the ON/OFF button on the remote controller will stop the unit completely. When the power restores or pressing the ON/OFF button on the remote controller again, the unit restarts automatically with the previous open angle of the horizontal louver by the memory function. So we strongly recommend that the open angle of the horizontal louver should not be set too small, in case the condensed water forms and drops from the horizontal louver. Press the Manual control button and the open angle of the horizontal louver will be restored to the standard angle.

INSTALLATION

Location:
- During cooling operation, the air conditioner will dry the room air, so please fix a pipe to drain all the water away from the air conditioner.
- Please let the indoor unit more than one metre away from the TV set and the radio in order to avoid the picture and noise interference.
- Powerful radio transmitters or any other devices radiating high frequency radio waves can cause the air conditioner to malfunction. Please consult the dealer where you purchased the air conditioner before installing it.
- Don't fix the unit in the dangerous region with combustible gas or volatile matter.
- If the air conditioner operates in an atmosphere containing oils (machine oil), salt (near a coastal area), sulfide gas (near a hot spring), etc., such substances may lead to failure of the air conditioner.

Be careful of noise or vibrations
- Please fix the unit in the stable place to avoid the noise or vibrations.
- The noise near the air outlet of the outdoor unit may enter the air exit.
- Locate the outdoor unit where noise emitted by it or hot air from its air outlet will cause no nuisance to your neighbours.
- If the air conditioner sounds abnormal during operation, contact the dealer where you purchased the air conditioner.

Wire
- To avoid the electric shock, please link the air conditioner with the ground. The plug in the air conditioner has joined the ground wiring, please don't change it freely.
- The power socket is used as the air conditioner specially.
- Don't pull the power wiring hard.
- When linking the air conditioner with the ground, observe the local rulers.
- If necessary, use the power fuse or the circuit, breaker or the corresponding scale ampere.
  If you want to change the power wiring, please contact the centre service of the local MD electric appliance.

Relocation
If you move out or if it is desired to relocate the air conditioner, consult your dealer, because special skills to withdraw Freon, purge air and perform other operations are required.
Before you ask for servicing or repairs, check the following points.

### Recheck

**Inoperative**
- The power fuse is blown or the circuit breaker has been tripped.
- The batteries in the remote controller are exhausted.
- The timer is set.

**Does not cool or heat well.**
- The air inlet or outlet of the outdoor unit is blocked.
- Doors or windows are open.
- The air filter is clogged with dust.
- The louver is not at the correct position.
- The fan speed is set to low.
- The temperature setting is too high or too low.

### These are not failures

**Room air is smelly.**
A bad odor comes from the air conditioner.
- Smells impregnated in the wall, carpet, furniture, clothing, or furs, are coming out. A white mist of chilled air or water is generated from the outdoor unit.

### CAUTION

If any of the following conditions occur, stop the air conditioner immediately, set to off the power switch, and contact the dealer:
- The indicator lamps flash rapidly (five times per second), you disconnect the unit with the power and then connect the unit with the power again after two or three minutes but the lamps still flash.
- Switch operations are erratic.
- The fuse is blown frequently or the circuit breaker is tripped frequently.
- Foreign matter or water has fallen inside the air conditioner.
- Any other unusual condition is observed.

### TROUBLES AND CAUSES (CONCERNING REMOTE CONTROLLER)

Before you ask for servicing or repairs, check the following points.

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Causes</th>
<th>Reason and Disposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>The fan speed cannot be changed.</td>
<td>• Check whether the MODE indicated on the display is &quot;AUTO&quot;</td>
<td>When the automatic mode is selected, the air conditioner automatically selects the fan speed.</td>
</tr>
<tr>
<td></td>
<td>• Check whether the MODE indicated on the display is &quot;DRY&quot;</td>
<td>When dry operation is selected, the air conditioner automatically select the fan speed. The fan speed can be selected during &quot;COOL&quot; and &quot;FAN ONLY&quot;; and &quot;HEAT&quot;</td>
</tr>
</tbody>
</table>
### The Transmission Indicator "▲" Never Comes On

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Causes</th>
<th>Reason and Disposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>The remote control signal is not transmitted even when the ON/OFF button is pushed.</td>
<td>• Check whether the batteries in the remote controller are exhausted.</td>
<td>The remote control signal is not transmitted, because the power supply is off.</td>
</tr>
</tbody>
</table>

### The Display Never Comes On

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Causes</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>The TEMP. indicator does not come on.</td>
<td>• Check whether the MODE indicated on the display is &quot;FAN ONLY&quot;.</td>
<td>The temperature cannot be set during fan only operation.</td>
</tr>
</tbody>
</table>

### The Display Goes Off

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Causes</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>The indication on the display disappears after a lapse of time.</td>
<td>• Check whether the timer operation has come to an end when the OFF TIMER is indicated on the display.</td>
<td>The air conditioner operation stops since the set time elapsed.</td>
</tr>
<tr>
<td>The ON TIMER indicators go off after a lapse of certain time.</td>
<td>• Check whether the timer operation is started when the ON TIMER is indicated on the display.</td>
<td>When the time set to start the air conditioner is reached, the air conditioner will automatically start and the appropriate indicator will go off.</td>
</tr>
</tbody>
</table>

### The Signal Receiving Tone does Not Sound

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Causes</th>
<th>Disposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>No receiving tone sounds from the indoor unit even when the ON/OFF button is pushed.</td>
<td>• Check whether the signal transmitter of the remote controller is properly directed to the receiver of the indoor unit when the ON/OFF button is pushed.</td>
<td>Direct the signal transmitter of the remote controller to the receiver of the indoor unit, and then repeatedly push the ON/OFF button twice.</td>
</tr>
<tr>
<td>Buttons on the remote controller don't work.</td>
<td></td>
<td>Press Reset button.</td>
</tr>
</tbody>
</table>
The design and specifications are subject to change without prior notice for product improvement. Consult with the sales agency or manufacturer for details.
Thank you very much for purchasing our air conditioner.
Before using your air conditioner, please read this manual carefully and keep it for future reference.
NOTE

All the pictures in this manual are for explanation purpose only. They may be slightly different from the air conditioner you purchased (depend on model). The actual shape shall prevail.
1. IMPORTANT SAFETY INFORMATION

To prevent injury to the user or other people and property damage, the following instructions must be followed. Incorrect operation due to ignoring of instructions may cause harm or damage.

The safety precautions listed are divided into two categories. In either case, important safety information is listed which must be read carefully.

---

**WARNING**

Failure to observe a warning may result in death. The appliance shall be installed in accordance with national wiring regulations.

---

**CAUTION**

Failure to observe a caution may result in injury or damage to the equipment.

---

**WARNING**

Ask your dealer for installation of the air conditioner. Incomplete installation performed by yourself may result in a water leakage, electric shock, and fire.

Ask your dealer for improvement, repair, and maintenance. Incomplete improvement, repair, and maintenance may result in a water leakage, electric shock, and fire.

In order to avoid electric shock, fire or injury, or if you detect any abnormality such as smell of fire, turn off the power supply and call your dealer for instructions.

Never let the indoor unit or the remote controller get wet. It may cause an electric shock or a fire.

Never press the button of the remote controller with a hard, pointed object. The remote controller may be damaged.

Never replace a fuse with that of wrong rated current or other wires when a fuse blows out. Use of wire or copper wire may cause the unit to break down or cause a fire.

---

**CAUTION**

Do not use the air conditioner for other purposes. In order to avoid any quality deterioration, do not use the unit for cooling precision instruments, food, plants, animals or works of art.

Before cleaning, be sure to stop the operation, turn the breaker off or pull out the supply cord. Otherwise, an electric shock and injury may result.

In order to avoid electric shock or fire, make sure that an earth leak detector is installed.

Be sure the air conditioner is grounded. In order to avoid electric shock, make sure that the unit is grounded and that the earth wire is not connected to gas or water pipe, lightning conductor or telephone earth wire.

In order to avoid injury, do not remove the fan guard of the outdoor unit.
Do not operate the air conditioner with a wet hand. An electric shock may happen.

Do not touch the heat exchanger fins. These fins are sharp and could result in cutting injuries.

Do not place items which might be damaged by moisture under the unit. Condensation may form if the humidity is above 80%, the drain outlet is blocked or the filter is polluted.

After a long use, check the unit stand and fitting for damage. If damaged, the unit may fall and result in injury.

To avoid oxygen deficiency, ventilate the room sufficiently if equipment with burner is used together with the air conditioner.

Arrange the drain hose to ensure smooth drainage. Incomplete drainage may cause wetting of the building, furniture etc.

Never touch the internal parts of the controller. Do not remove the front panel. Some parts inside are dangerous to touch, and a machine trouble may happen.

Never expose little children, plants or animals directly to the air flow. Adverse influence to little children, animals and plants may result.

Do not allow a child to mount on the outdoor unit or avoid placing any object on it. Failing or tumbling may result in injury.

Do not operate the air conditioner when using a room fumigation - type insecticide. Failure to observe could cause the chemicals to become deposited in the unit, which could endanger the health of those who are hypersensitive to chemicals.

Do not place appliances which produce open fire in places exposed to the air flow from the unit or under the indoor unit. It may cause incomplete combustion or deformation of the unit due to the heat.

Do not install the air conditioner at any place where flammable gas may leak out. If the gas leaks out and stays around the air conditioner, a fire may break out.

The appliance is not intended for use by young children or infirm persons without supervision.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

Do not operate your air conditioner in a wet room such as a bathroom or laundry room.

2. PARTS NAMES

The air conditioner consists of the indoor unit, the outdoor unit, the connecting pipe and the remote controller. (See Fig. 1)

- Function indicators on indoor unit display panel

![Diagram of Function Indicators](Fig.2-1)

This function is used to operate the unit temporarily in case you misplace the remote controller or its batteries are exhausted. Two modes including AUTO and FORCED COOL can be selected through the TEMPORARY BUTTON on the air-in grill control box of the indoor unit. Once you push this button, the air conditioner will run in such order: AUTO, FORCED COOL, OFF, and back to AUTO.

1 AUTO
The OPERATION lamp is lit, and the air conditioner will run under AUTO mode. The remote controller operation is enabled to operate according to the received signal.

2 FORCED COOL
The OPERATION lamp flashes, the air conditioner will turn to AUTO after it is enforced to cool with a wind speed of HIGH for 30 minutes. The remote controller operation is disabled.

3 OFF
The OPERATION lamp goes off. The air conditioner is OFF while the remote controller operation is enabled.

NOTE
This manual does not include Remote Controller Operations, see the <Remote Controller Owner's manual>> packed with the unit for details.

3. AIR CONDITIONER OPERATIONS AND PERFORMANCE

Use the system in the following temperature for safe and effective operation. The Max operation temperature for the air conditioner (Cooling/Heating).

<table>
<thead>
<tr>
<th>Mode</th>
<th>Temperature</th>
<th>Outdoor temperature</th>
<th>Room temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling operation</td>
<td>-15°C ~ 24°C / 5°F ~ 76°F</td>
<td>17°C ~ 32°C (62°F ~ 90°F)</td>
<td></td>
</tr>
<tr>
<td>Heating operation (cooling only type without)</td>
<td>-15°C ~ 24°C / 5°F ~ 76°F</td>
<td>0°C ~ 30°C / 32°F ~ 86°F</td>
<td></td>
</tr>
<tr>
<td>Dry operation</td>
<td>0°C ~ 30°C / 32°F ~ 86°F</td>
<td>0°C ~ 30°C / 32°F ~ 86°F</td>
<td></td>
</tr>
</tbody>
</table>

Table 3-1 (for inverter type air conditioner)
1. If air conditioner is used outside the above conditions, it may cause the unit to function abnormally.

The phenomenon is normal that the surface of air conditioning may condense water when the relative larger humidity in room, please close the door and window.

### Table 3-2

<table>
<thead>
<tr>
<th>Mode</th>
<th>Temperature</th>
<th>Room temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cooling operation</strong></td>
<td>18°C ~ 43°C / 64 °F~109°F</td>
<td>17°C ~ 32°C (62 °F ~ 90°F)</td>
</tr>
<tr>
<td><strong>Heating operation</strong></td>
<td>-7°C ~ 24°C / 20 °F ~76°F</td>
<td>0°C ~ 30°C / 32 °F~86°F</td>
</tr>
<tr>
<td><strong>Dry operation</strong></td>
<td>18°C ~ 43°C / 64 °F~109°F</td>
<td>17°C ~ 32°C (62 °F ~ 90°F)</td>
</tr>
</tbody>
</table>

### NOTE

1. If air conditioner is used outside the above conditions, it may cause the unit to function abnormally.

2. The phenomenon is normal that the surface of air conditioning may condense water when the relative larger humidity in room, please close the door and window.

3. Optimum performance will be achieved within these operating temperature range.

### Three-minute protection feature

A protection feature prevents the air conditioner from being activated for approximately 3 minutes when it restarts immediately after operation.

### Power failure

Power failure during operation will stop the unit completely.

- The OPERATION lamp on the indoor unit will start flashing when power is restored.

- To restart operation, push the ON/OFF button on the remote controller.

- Lightning or a car wireless telephone operating nearby may cause the unit to malfunction. Disconnect the unit with the power and then connect the unit with the power again. Push the ON/OFF button on the remote controller to restart operation.

### Refrigerant Leakage Detection (optional):

With this new technology, the display area will appear “EC” (if applicable) and the LED indication lamps continue flashing when the outdoor unit detects refrigerant leakage.

### Louver Angle Memory Function (optional):

For some models, the machine is special designed with louver angle memory function. Power failure during operation or pressing the ON/OFF button on the remote controller will stop the unit completely. When the power restores or pressing the ON/OFF button on the remote controller again, the unit restarts automatically with the previous open angle of the horizontal louver by the memory function. So we strongly recommend that the open angle of the horizontal louver should not be set too small, in case the condensed water forms and drops from the horizontal louver. Press the Manual control button and the open angle of the horizontal louver will be restored to the standard angle.

### 4. HINTS FOR ECONOMICAL OPERATION

The following should be noticed to ensure an economical operation.

- Adjust the air flow louver properly and avoid direct air flow to room inhabitants.

- Adjust the room temperature properly for a comfortable environment. Avoid excessive heating or cooling.

- Prevent direct sunlight during cooling operation by using curtains or blinds.

- Ventilate often. Extended use requires special attention to ventilation.

- Keep doors and windows closed. If the doors and windows remain open, air will flow out of your room causing a decrease in the cooling or heating effect.

- Never place objects near the air inlet or the air outlet of the unit. It may cause deterioration in the effect or stop the operation.

- Set the timer.

- If you don’t plan to use the unit for a long time, please take the batteries from the remote controller. When the power is on, some energy will be consumed, even if the air conditioner isn’t in operation. So please disconnect the power to save energy.

- Keep the indoor unit and remote controller at least 1 m away from televisions, radios, stereos, and other similar equipment. Failing to do so may cause static or distorted pictures.

- A dirty air filter will reduce cooling or heating efficiency, please clean it once two weeks.

### 5. ADJUSTING AIR FLOW DIRECTION

While the unit is in operation, you can adjust the air flow louver to change the flow direction and naturalize the room temperature evenly. Thus you can enjoy it more comfortably.

![Adjust it up and down](Fig 5-1)

- **Set the air flow direction.**
  - Press the SWING button to adjust the louver to the desired position and press this button again to maintain the louver at this position.

- **Adjust the air flow direction automatically.**
  - Press the SWING button, the louver will swing automatically. While this function is set, the swing fan of indoor unit runs; otherwise, the swing fan doesn’t run. The swing scale of every side is 30°. When the air conditioner isn’t in operation (including when TIMER ON is set), the SWING button will be invalid.
6. MAINTENANCE

**CAUTION**

Before you clean the air conditioner, be sure the power supply is off.

Check if the wiring is not broken off or disconnected.

Use a dry cloth to wipe the indoor unit and remote controller.

A wet cloth may be used to clean the indoor unit if it is very dirty.

Never use a damp cloth on the remote controller.

Do not use a chemically-treted duster for wiping or leave such material on the unit for long.

Do not use benzine, thinner, polishing powder, or similar solvents for cleaning.

These may cause the plastic surface to crack or deform.

- **Maintenance after a long stop period**
  (eg. at the beginning of the season)

  Check and remove everything that might be blocking inlet and outlet vents of indoor units and outdoor units.

  Clean air filters and casings of indoor units.

  Refer to “Cleaning the air filter” for details on how to proceed and make sure to install cleaned air filters back in the same position.

  Turn on the power at least 12 hours before operating the unit in order to ensure smoother operation. As soon as the power is turned on, the remote controller displays appear.

- **Maintenance before a long stop period**
  (eg. at the end of the season)

  Let the indoor units run in fan only operation for about half a day in order to dry the interior of the units.

  Clean air filters and casings of indoor units. Refer to “Cleaning the air filter” for details on how to proceed and make sure to install cleaned air filters back in the same position.

- **Cleaning the air filter**

  The air filter can prevent the dust or other particulate from going inside. In case of blockage of the filter, the working efficiency of the air conditioner may greatly decrease.

  Therefore, the filter must be cleaned once two weeks during long time usage.

  If the air conditioner is installed in a dust place, clean the air filter frequent.

  If the accumulated dust is too heavy to be cleaned, please replace the filter with a new one (replaceable air filter is an optional fitting).

1. **Open the air-in grill**

   Push the grill switches towards the middle simultaneously as indicated in Fig.6-1. Then pull down the air-in grill.

   The control box cables which are originally connected with the main body electrical terminators must be pulled off before doing as indicated above.

2. **Take out the air-in grill (together with the air filter shown in Fig.6-1)**

   Pull the air-in grill down at 45° and lift it up to take out the grill.

3. **Dismantle the air filter**

4. **Clean the air filter**

   Vacuum cleaner or pure water may be used to clean the air filter. If the dust accumulation is too heavy, please use soft brush and mild detergent to clean it and dry it out in cool place.

   - The air-in side should face up when using vacuum cleaner. (See Fig. 6-3)
   - The air-in side should face down when using water. (See Fig. 6-4)

**CAUTION**

Do not dry out the air filter under direct sunshine or with fire.

5. **Re-install the air filter**

6. **Install and close the air-in grill in the reverse order of step 1 and 2 and connect the control box cables to the corresponding terminators of the main body.**
7. FOLLOWING SYMPTOMS ARE NOT AIR CONDITIONER TROUBLES

Symptom 1: The system does not operate
- The air conditioner does not start immediately after the ON/OFF button on the remote controller is pressed. If the operation lamp lights, the system is in normal condition. To prevent overloading of the compressor motor, the air conditioner starts 3 minutes after it is turned ON.
- If the operation lamp and the "PRE-DEF indicator(cooling and heating type) or fan only indicator(cooling only type)" light, it means you choose the heating model. When just starting, if the compressor has not started, the indoor unit appears "anti cold wind" protection because of its overflow outlet temperature.

Symptom 2: Change into the fan mode during cooling mode
- In order to prevent the indoor evaporator frosting, the system will change into fan mode automatically, restore to the cooling mode after soon.
- When the room temperature drops to the set temperature, the compressor goes off and the indoor unit changes to fan mode; when the temperature rises up, the compressor starts again. It is same in the heating mode.

Symptom 3: White mist comes out of a unit
Symptom 3.1: Indoor unit
When humidity is high during cooling operation if the interior of an indoor unit is extremely contaminated, the temperature distribution inside a room becomes uneven. It is necessary to clean the interior of the indoor unit. Ask your dealer for details on cleaning the unit. This operation requires a qualified service person.

Symptom 3.2: Indoor unit, outdoor unit
- When humidity is high during cooling operation if the interior of an indoor unit is extremely contaminated, the temperature distribution inside a room becomes uneven. It is necessary to clean the interior of the indoor unit. Ask your dealer for details on cleaning the unit. This operation requires a qualified service person.
- When the system is changed over to heating operation after defrost operation Moisture generated by defrost becomes steam and is exhausted.

Symptom 4: Noise of air conditioners cooling
Symptom 4.1: Indoor unit
- A continuous low "shah" sound is heard when the system is in cooling operation or at a stop. When the drain pump (optional accessories) is in operation, this noise is heard.
- A "pishi-pishi" squeaking sound is heard when the system stops after heating operation. Expansion and contraction of plastic parts caused by temperature change make this noise.

Symptom 4.2: Indoor unit, outdoor unit
- A continuous low hissing sound is heard when the system is in operation. This is the sound of refrigerant gas flowing through both indoor and outdoor units.

Symptom 4.3: Outdoor unit
- When the tone of operating noise changes. This noise is caused by the change of frequency.

Symptom 5: Dust comes out of the unit
- When the unit is used for the first time in a long time. This is because dust has gotten into the unit.

Symptom 6: The units can give off odours
- The unit can absorb the smell of rooms, furniture, cigarettes, etc., and then emit it again.

Symptom 7: The outdoor unit fan does not spin.
- During operation. The speed of the fan is controlled in order to optimize product operation.

8. TROUBLESHOOTING

8.1 Troubles and causes of air conditioner
If one of the following malfunctions occur, stop operation, shut off the power, and contact with your dealer.
- The operation lamp is flashing rapidly (5Hz). This lamp is still flashing rapidly after turn off the power and turn on again. (See in Table 8-1a and Table 8-1b)
- Remote controller receives malfunction or the button does not work well.
- A safety device such as a fuse, a breaker frequently actuates.
- Obstacles and water enter the unit.
- Water leaks from indoor unit.
- Other malfunctions.

If the system does not properly operate except the above mentioned cases or the above mentioned malfunctions is evident, investigate the system according to the following procedures. (See in Table 8-2)

8.2 Troubles and causes of remote controller
Before asking for serving or repairing, check the following points. (See in Table 8-3)
### Table 8-1a (Applicable to inverter air conditioner only)

<table>
<thead>
<tr>
<th>NO.</th>
<th>Malfunction</th>
<th>running lamp</th>
<th>timer lamp</th>
<th>defrosting lamp</th>
<th>alarm lamp</th>
<th>display (nixie tube)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Collision model malfunction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>E0</td>
</tr>
<tr>
<td>2</td>
<td>In-outdoor unit communication checking channel is abnormal</td>
<td>Quick-flash</td>
<td></td>
<td></td>
<td></td>
<td>E1</td>
</tr>
<tr>
<td>3</td>
<td>Room temperature sensor checking channel is abnormal</td>
<td>Quick-flash</td>
<td></td>
<td></td>
<td></td>
<td>E2</td>
</tr>
<tr>
<td>4</td>
<td>Pipe temperature sensor (T2) checking channel is abnormal</td>
<td>Quick-flash</td>
<td></td>
<td></td>
<td></td>
<td>E3</td>
</tr>
<tr>
<td>5</td>
<td>Pipe temperature sensor (T2B) checking channel is abnormal</td>
<td>Quick-flash</td>
<td></td>
<td></td>
<td></td>
<td>E4</td>
</tr>
<tr>
<td>6</td>
<td>EEPROM malfunction</td>
<td>Quick-flash</td>
<td></td>
<td></td>
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<td>E7</td>
</tr>
<tr>
<td>7</td>
<td>In door fan unit stall malfunction</td>
<td>Quick-flash</td>
<td></td>
<td></td>
<td></td>
<td>E8</td>
</tr>
<tr>
<td>8</td>
<td>Outdoor unit malfunction</td>
<td>Slow-flash</td>
<td></td>
<td></td>
<td></td>
<td>Ed</td>
</tr>
<tr>
<td>9</td>
<td>Water-level alarm malfunction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EE</td>
</tr>
<tr>
<td>10</td>
<td>Lifting panel communication checking channel is abnormal</td>
<td>Quick-flash</td>
<td>Quick-flash</td>
<td>Quick-flash</td>
<td></td>
<td>F0</td>
</tr>
<tr>
<td>11</td>
<td>Lifting panel malfunction</td>
<td>Quick-flash</td>
<td>Quick-flash</td>
<td>Quick-flash</td>
<td></td>
<td>F1</td>
</tr>
<tr>
<td>12</td>
<td>Lifting panel is not closed</td>
<td>On</td>
<td>Quick-flash</td>
<td>Quick-flash</td>
<td></td>
<td>F2</td>
</tr>
<tr>
<td>13</td>
<td>Indoor master/slave unit communication checking channel is abnormal</td>
<td>Quick-flash</td>
<td></td>
<td></td>
<td></td>
<td>F3</td>
</tr>
<tr>
<td>14</td>
<td>Other malfunctions of master/slave unit</td>
<td>Quick-flash</td>
<td></td>
<td></td>
<td></td>
<td>F4</td>
</tr>
<tr>
<td>15</td>
<td>Refrigerant leakage detection malfunction</td>
<td>On</td>
<td>Quick-flash</td>
<td>Quick-flash</td>
<td></td>
<td>EC</td>
</tr>
</tbody>
</table>

### Table 8-1b (Applicable to fixed-frequency air conditioner only)

<table>
<thead>
<tr>
<th>NO.</th>
<th>Malfunction</th>
<th>running lamp</th>
<th>timer lamp</th>
<th>defrosting lamp</th>
<th>alarm lamp</th>
<th>display (nixie tube)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>In-outdoor unit communication checking channel is abnormal</td>
<td>Quick-flash</td>
<td></td>
<td></td>
<td></td>
<td>E1</td>
</tr>
<tr>
<td>2</td>
<td>Room temperature sensor checking channel is abnormal</td>
<td>Quick-flash</td>
<td></td>
<td></td>
<td></td>
<td>E2</td>
</tr>
<tr>
<td>3</td>
<td>Evaporator sensor malfunction</td>
<td>Quick-flash</td>
<td></td>
<td></td>
<td></td>
<td>E3</td>
</tr>
<tr>
<td>4</td>
<td>Condenser sensor malfunction</td>
<td>Quick-flash</td>
<td></td>
<td></td>
<td></td>
<td>E4</td>
</tr>
<tr>
<td>5</td>
<td>Water pump temperature sensor</td>
<td>Quick-flash</td>
<td></td>
<td></td>
<td></td>
<td>E5</td>
</tr>
<tr>
<td>6</td>
<td>Outdoor malfunction</td>
<td>Quick-flash</td>
<td>Quick-flash</td>
<td>Quick-flash</td>
<td></td>
<td>E6</td>
</tr>
<tr>
<td>7</td>
<td>EEPROM malfunction</td>
<td>Quick-flash</td>
<td>Quick-flash</td>
<td>Quick-flash</td>
<td></td>
<td>E7</td>
</tr>
<tr>
<td>8</td>
<td>Water-level alarm malfunction</td>
<td>Quick-flash</td>
<td></td>
<td></td>
<td></td>
<td>E8</td>
</tr>
<tr>
<td>9</td>
<td>DC motor speed out of control</td>
<td>Quick-flash</td>
<td></td>
<td></td>
<td></td>
<td>Eb</td>
</tr>
<tr>
<td>10</td>
<td>Outdoor unit low pressure malfunction</td>
<td>Quick-flash</td>
<td>Quick-flash</td>
<td>Quick-flash</td>
<td></td>
<td>Ed</td>
</tr>
<tr>
<td>11</td>
<td>Lifting panel communication checking channel is abnormal</td>
<td>Quick-flash</td>
<td></td>
<td></td>
<td></td>
<td>F0</td>
</tr>
<tr>
<td>12</td>
<td>Lifting panel malfunction</td>
<td>Quick-flash</td>
<td></td>
<td></td>
<td></td>
<td>F1</td>
</tr>
<tr>
<td>13</td>
<td>Lifting panel is not closed</td>
<td>On</td>
<td>Quick-flash</td>
<td>Quick-flash</td>
<td></td>
<td>F2</td>
</tr>
<tr>
<td>14</td>
<td>Refrigerant leakage detection malfunction</td>
<td>Quick-flash</td>
<td></td>
<td></td>
<td></td>
<td>EC</td>
</tr>
</tbody>
</table>
### Table 8-2

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Causes</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit does not start</strong></td>
<td>• Power failure.</td>
<td>• Wait for the comeback of power.</td>
</tr>
<tr>
<td></td>
<td>• Power switch is off.</td>
<td>• Switch on the power.</td>
</tr>
<tr>
<td></td>
<td>• Fuse of power switch may have burned.</td>
<td>• Replace the fuse.</td>
</tr>
<tr>
<td></td>
<td>• Batteries of remote controller exhausted or other problem of controller.</td>
<td>• Replace the batteries or check the controller.</td>
</tr>
<tr>
<td><strong>Air flowing normally but completely can’t cooling</strong></td>
<td>• Temperature is not set correctly.</td>
<td>• Set the temperature properly.</td>
</tr>
<tr>
<td></td>
<td>• Be in 3 minutes protection of compressor.</td>
<td>• Wait.</td>
</tr>
<tr>
<td><strong>Units start or stop frequently</strong></td>
<td>• Refrigerant is too little or too much.</td>
<td>• Check leakage, and rightly recharge refrigerant.</td>
</tr>
<tr>
<td></td>
<td>• Air or no concreting gas in the refrigerating circuit.</td>
<td>• Vacuum and recharge refrigerant.</td>
</tr>
<tr>
<td></td>
<td>• Compressor is malfunction.</td>
<td>• Maintenance or change compressor.</td>
</tr>
<tr>
<td></td>
<td>• Voltage is too high or too low.</td>
<td>• Install manostat.</td>
</tr>
<tr>
<td></td>
<td>• System circuit is blocked.</td>
<td></td>
</tr>
<tr>
<td><strong>Low cooling effect</strong></td>
<td>• Outdoor unit and indoor unit heat exchanger is dirty.</td>
<td>• Find reasons and solution.</td>
</tr>
<tr>
<td></td>
<td>• The air filter is dirty.</td>
<td>• Clean the heat exchanger.</td>
</tr>
<tr>
<td></td>
<td>• Inlet/outlet of indoor/outdoor units is blocked.</td>
<td>• Clean the air filter.</td>
</tr>
<tr>
<td></td>
<td>• Doors and windows are open</td>
<td>• Eliminate all dirties and make air smooth.</td>
</tr>
<tr>
<td></td>
<td>• Sunlight directly shine.</td>
<td>• Close doors and windows.</td>
</tr>
<tr>
<td></td>
<td>• Too much heat resource.</td>
<td>• Make curtains in order to shelter from sunshine.</td>
</tr>
<tr>
<td></td>
<td>• Outdoor temp. is too high.</td>
<td>• Reduce heat source.</td>
</tr>
<tr>
<td></td>
<td>• Leakage of refrigerant or lack of refrigerant.</td>
<td>• AC cooling capacity reduces (normal).</td>
</tr>
<tr>
<td><strong>Low heating effect</strong></td>
<td>• Outdoor temperature is lower than 7℃.</td>
<td>• Check leakage and rightly recharge refrigerant.</td>
</tr>
<tr>
<td></td>
<td>• Doors and windows not completely closed.</td>
<td>• Use heating device.</td>
</tr>
<tr>
<td></td>
<td>• Leakage of refrigerant or lack of refrigerant.</td>
<td>• Close doors and windows.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Check leakage and rightly recharge refrigerant.</td>
</tr>
</tbody>
</table>

### Table 8-3

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Causes</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The fan speed can not be changed.</strong></td>
<td>• Check whether the MODE indicated on the display is “AUTO”</td>
<td>When the automatic mode is selected, the air conditioner will automatically change the fan speed.</td>
</tr>
<tr>
<td></td>
<td>• Check whether the MODE indicated on the display is “DRY”</td>
<td>When dry operation is selected, the air conditioner automatically change the fan speed. The fan speed can be selected during “COOL”, “FAN ONLY”, and “HEAT”.</td>
</tr>
<tr>
<td><strong>The remote controller signal is not transmitted even when the ON/OFF button is pushed.</strong></td>
<td>• Check whether the batteries in the remote controller are exhausted.</td>
<td>The power supply is off.</td>
</tr>
<tr>
<td><strong>The TEMP. indicator does not come on.</strong></td>
<td>• Check whether the MODE indicated on the display is “FAN ONLY”</td>
<td>The temperature cannot be set during FAN mode.</td>
</tr>
<tr>
<td><strong>The indication on the display disappears after a lapse of time.</strong></td>
<td>• Check whether the timer operation has come to an end when the TIMER OFF is indicated on the display.</td>
<td>The air conditioner operation will stop up to the set time.</td>
</tr>
<tr>
<td><strong>The TIMER ON indicator goes off after a lapse of certain time.</strong></td>
<td>• Check whether the timer operation is started when the TIMER ON is indicated on the display.</td>
<td>Up to the set time, the air conditioner will automatically start and the appropriate indicator will go off.</td>
</tr>
<tr>
<td><strong>No receiving tone sounds from the indoor unit even when the ON/OFF button is pressed.</strong></td>
<td>• Check whether the signal transmitter of the remote controller is properly directed to the infrared signal receiver of the indoor unit when the ON/OFF button is pressed.</td>
<td>Directly transmit the signal transmitter of the remote controller to the infrared signal receiver of the indoor unit, and then repeatly push the ON/OFF button twice.</td>
</tr>
</tbody>
</table>
The design and specifications are subject to change without prior notice for product improvement. Consult with the sales agency or manufacturer for details.