Model names are indicated in 1-3. This installation manual describes only for the indoor unit. Refer to the MXZ type manual for outdoor unit set up.

1. BEFORE INSTALLATION

1-1. THE FOLLOWING SHOULD ALWAYS BE OBSERVED FOR SAFETY

- Be sure to read "THE FOLLOWING SHOULD ALWAYS BE OBSERVED FOR SAFETY" before installing the air conditioner.
- Be sure to observe the warnings and cautions specified here as they include important items related to safety.
- After reading this manual, be sure to keep it together with the OPERATING INSTRUCTIONS for future reference.

**WARNING** (Could lead to death, serious injury, etc.)

- Do not install the unit by yourself (user). Installation work must be performed by a qualified technician. Improper installation could cause fire or electric shock, injury due to the unit falling, or leakage of water.
- Consult the dealer from whom you purchased the unit. Improper installation could cause fire or electric shock.
- Perform the installation securely referring to the installation manual. Incomplete installation could cause fire, electric shock, or injury due to the unit falling, or leakage of water.
- Where it is exposed to direct sunshine:
  - Where it is not exposed to strong wind.
  - Where it is at least 3 m away from the antenna of TV set or radio.
  - Where there is no risk of combustible gas leakage.
- When operating the air conditioner in low outside temperature, be sure to follow the instructions described below.
- Never install the outdoor unit in a place where its air inlet/outlet side may be exposed directly to wind.
- To prevent exposure to wind, install the outdoor unit in a place where its air inlet/outlet side may be exposed directly to wind.
- To prevent exposure to wind, it is recommended to install a baffle board on the air outlet side of the outdoor unit.

**CAUTION** (Could lead to serious injury in particular environments when operated incorrectly)

- Install an earth leakage breaker depending on the installation place.
- If an earth leakage breaker is not installed, it could cause fire or electric shock.
- Damage wires could cause fire or electric shock.
- Do not connect the earth to a gas pipe, water pipe, lightning rod or telephone earth. Defective earthing could cause electrical shock or electric shock. If gas leaks and accumulates in the area around the installation could cause the pipes to burst or injury.
- Incomplete installation could cause fire, electric shock, or a qualified installer.
- Refer to the installation manual of the multi-type outdoor unit and insufficient thickness may cause dew drippage.
- If the installation location cannot bear the weight of the unit, it could cause an explosion.
- Complete electrical work by a qualified, experienced electrician, according to the installation manual. Be sure to use an exclusive circuit. Do not connect other electrical appliances to the circuit. If the electrical load of the circuit is insufficient or there is incomplete electrical work, it could result in a fire or electric shock.
- Do not connect the earth to a gas pipe, water pipe, lightning rod or telephone earth. Defective earthing could cause electrical shock or electric shock. If gas leaks and accumulates in the area around the installation could cause the pipes to burst or injury.
- In the indoor unit, a pedestal and/or some baffle boards.
- Use the specified wires to connect the indoor and outdoor units securely and attach the wires firmly to the terminal block connecting sections so the stress of the wires is not applied to the sections. Do not extend the wires, or use intermediate connection. Incomplete connecting and securing could cause fire.
- Never use pipes with thickness less than specified. The pressure resistance will be insufficient.
- Use a copper pipe or a copper-riveted seamless pipe.

1-2. SELECTING THE INSTALLATION LOCATION

**INDOOR UNIT**

- Where airflow is not blocked.
- Where airflow is not exposed to direct sunshine.
- Where it is not exposed to rain or direct sunlight.
- Where it is not exposed to direct sunshine.
- When the indoor unit is installed, it is suggested to use where the indoor unit and the service panel to the outdoor unit securely.
- The use of defective parts could cause an injury or leakage of water due to a fire, an electric shock, the unit falling, etc.
- Do not use the specified wires to connect the indoor and outdoor units.
2. INDOOR UNIT INSTALLATION

1. CAUTION

Protective film covers the front panel of some indoor units. When installing those indoor units, leave the film on it to prevent scratching until installation completes.

2-1. FIXING OF INSTALLATION PLATE

- Find a structural material (such as a stud) in the wall and fix installation plate (1) horizontally with fixing screws (2).
- To prevent installation plate (1) from vibrating, be sure to install the fixing screws in the holes indicated in the illustration. For added support, fixing screws may also be installed in other holes.
- When the knockout is removed, apply vinyl tape to the knockout edges to prevent damaging the wires.
- When bolts recessed in the concrete wall are to be utilized, secure installation plate (1) using 11 × 20 · 11 × 26 oval hole (450 mm pitch).

2-2. WALL HOLE DRILLING

1) Determine the wall hole position.
2) Drill a ø65 mm hole. The outdoor side should be 7 to 5 mm lower than the indoor side.
3) Insert wall hole sleeve (C).

2-3. CONNECTING WIRES FOR INDOOR UNIT

You can connect indoor/outdoor lead wire without removing the front panel.

1) Open the front panel.
2) Remove VA clamp.
3) Pass indoor/outdoor unit connecting wire (A) from the back of the indoor unit and process the end of the wire.
4) Loosen terminal screw, and connect first the earth wire, then indoor/outdoor unit connecting wire (A) to the terminal block. Be careful not to make mis-wiring. Fix the wire to the terminal block securely so that no part of its core is appeared, and no external force is conveyed to the connecting section of the terminal block.
5) Firmly tighten the terminal screws to prevent them from loosening. After tightening, pull the wires lightly to confirm that they do not move.
6) Secure indoor/outdoor unit connecting wire (A) and the earth wire with the VA clamp. Never fail to hook the left claw of the VA clamp. Attach the VA clamp securely.

2-4. PIPE FORMING AND DRAIN PIPING

Pipe Forming
- Place the drain hose below the refrigerant piping.
- Make sure that the drain hose is not heaved or snaked.
- Do not pull the hose when applying the tape.
- When the drain hose passes the room, be sure to wrap insulation material (obtainable at a store) around it.

For future servicing, give extra length to the connecting wires.
- Make earth wire a little longer than others. (More than 60 mm)
- Do not fold the excess wire, or cram it into small space. Take caution not to damage the wires.
- Be sure to attach each screw to its corresponding terminal when securing the cord and/or the wire to the terminal block.

Note: Do not place the wires between the indoor unit and the installation plate (1). Damaged wire could cause heat generation or fire.

IMPORTANT NOTES

To comply with the requirements of Australian standard AS/NZS 3000 electrical installations (wiring rules), the electrical wiring required between the indoor and outdoor units must be installed by a licenced electrical contractor.

2. INDOOR UNIT INSTALLATION

1-4. INSTALLATION DIAGRAM

ACCESSORIES

Check the following parts before installation.

<Indoor unit>

(1) Installation plate 1
(2) Installation plate fixing screw 4 × 25 mm 5
(3) Remote controller holder 1
(4) Fixing screw for (3) 3.5 × 16 mm (Black) 2
(5) Battery (AAA) for (6) 2
(6) Wireless remote controller 1
(7) Felt tape (For left or left-rear piping) 1
(8) Soft dry cloth (VAB type only) 1

PARTS TO BE PROVIDED

AT YOUR SITE

(A) Indoor/outdoor unit connecting wire* 1
(B) Extension pipe 1
(C) Wall hole sleeve 1
(D) Wall hole cover 1
(E) Pipe fixing band 2 to 5
(F) Fixing screw for (E) 4 × 20 mm 2 to 5
(G) Piping tape 1
(H) Putty 1
(I) Drain hose (or soft PVC hose, 15 mm inner diameter or hard PVC pipe VP16) 1 or 2
(J) Refrigeration oil 1
(K) Power supply cord* 1

* Note:
- Place indoor/outdoor unit connecting wire (A) and power supply cord (K) at least 1 m away from the TV antenna wire.
- Parts should be installed by licensed contractors according to local code requirements.
2) Completely remove all burrs from the cut cross section, then firmly apply piping tape (G) from the end.

2-5. FLARING WORK

1) Cut the copper pipe correctly with pipe cutter. (Fig. 1, 2)
2) Completely remove all burrs from the cut cross section of pipe. (Fig. 3)
   • Put the end of the copper pipe to downward direction as you remove burrs in order to avoid letting burrs drop in the piping.
3) Remove flare nuts attached to indoor and outdoor units, then put them on pipe having completed burr removal. (Not possible to put them on after flaring work.)
4) Flaring work (Fig. 4, 5). Firmly hold copper pipe in the dimension shown in the table. Select A mm from the table according to the tool you use.
5) Check
   • Compare the flared work with Fig. 6.
   • If flare is noted to be defective, cut off the flared section and do flaring work again.

Drain Piping

• If the extension drain hose has to pass through a room, be sure to wrap it with commercially sold insulation.
• The drain hose should point downward for easy drain flow. (Fig. 1)
• If the drain hose provided with the indoor unit is too short, connect it with drain hose (I) that should be provided at your site. (Fig. 2)
• When connecting the drain hose to the hard vinyl chloride pipe, be sure to insert it securely into the pipe. (Fig. 3)
• If flare is noted to be defective, cut off the flared work and compare it with Fig. 6.
• When fastened too tight, flare nut may break after a long period and cause refrigerant leakage.
• Be sure to wrap insulation around the piping. Direct contact with the bare piping may result in burns or frostbite.

2-6. PIPE CONNECTION

• Fasten flare nut with a torque wrench as specified in the table.
• When fastened too tight, flare nut may break after a long period and cause refrigerant leakage.

Indoor unit connection
Connect both liquid and gas pipings to indoor unit.
• Apply a thin coat of refrigeration oil (J) on the seat surface of pipe.
• Use tightening torque table above as a guideline for indoor unit side union joint section, and tighten using two wrenches. Excessive tightening damages the flare section.

Outdoor unit connection
Connect pipes to stop valve pipe joint of the outdoor unit in the same manner applied for indoor unit.
• For tightening, use a torque wrench or spanner and use the same tightening torque applied for indoor unit.

Left or left-rear piping

Note:
Be sure to reattach the drain hose and the drain cap in case of left or left-rear piping. Otherwise, it could cause drops of water to drip from the drain hose.

2-7. INSULATION AND TAPING

1) Cover piping joints with pipe cover.
2) For outdoor unit side, surely insulate every piping including valves.
3) Using piping tape (G), apply tapping starting from the entry of outdoor unit.
   • Stop the end of piping tape (G) with tape (with adhesive agent attached).
   • When piping have to be arranged through above ceiling, closet or where the temperature and humidity are high, wind additional commercially sold insulation to prevent condensation.
3-1. PURGING PROCEDURES AND LEAK TEST
Refer to the procedures indicated in the installation manual of the outdoor unit.

3-2. TEST RUN
1) Insert power supply plug into the power outlet and/or turn on the breaker.
2) Press the E.O. SW once for COOL, and twice for HEAT operation. Test run will be performed for 30 minutes. If the left lamp of the operation indicator blinks every 0.5 seconds, inspect the indoor/outdoor unit connecting wire (A) for mis-wiring. After the test run, emergency mode (set temperature 24°C) will start.
3) To stop operation, press the E.O. SW several times until all LED lamps turn off. Refer to operating instructions for details.

Checking the remote (infrared) signal reception
Press the ON/OFF button on the remote controller (6) and check that an electronic sound is heard from the indoor unit. Press the ON/OFF button again to turn the air conditioner off.
- Once the compressor stops, the restart preventive device operates so the compressor will not operate for 3 minutes to protect the air conditioner.

3-3. AUTO RESTART FUNCTION
This product is equipped with an auto restart function. When the power supply is stopped during operation, such as during blackouts, the function automatically starts operation in the previous setting once the power supply is resumed. (Refer to the operating instructions for details.)

Caution:
- After test run or remote signal reception check, turn off the unit with the E.O. SW or the remote controller before turning off the power supply. Not doing so will cause the unit to start operation automatically when power supply is resumed.
- To the user:
  - After installing the unit, make sure to explain the user about auto restart function.
  - If auto restart function is unnecessary, it can be deactivated. Consult the service representative to deactivate the function. Refer to the service manual for details.

3-4. EXPLANATION TO THE USER
- Using the OPERATING INSTRUCTIONS, explain to the user how to use the air conditioner (how to use the remote controller, how to remove the air filters, how to remove or put the remote controller in the remote controller holder, how to clean, precautions for operation, etc.).
- Recommend the user to read the OPERATING INSTRUCTIONS carefully.

4. RELOCATION AND MAINTENANCE

4-1. REMOVING AND INSTALLING THE PANEL ASSEMBLY

Removal procedure
1) Unlock the upper and lower vanes as shown in (a) and (b) using a thin instrument. Then, remove the horizontal vanes.
2) Remove the 2 screws which fix the panel assembly.
3) Remove the panel assembly. Be sure to remove its bottom right end first.

Installation procedure
1) Install the panel assembly following the removal procedure in reverse.
2) Be sure to press the positions as indicated by the arrows in order to attach the assembly completely to the unit.
3) Install the horizontal vanes.

4-2. REMOVING THE INDOOR UNIT
Remove the bottom of the indoor unit from the installation plate.
When releasing the corner part, release both left and right bottom corner part of indoor unit and pull it downward and forward as shown in the figure on the right.

4-3. PUMPING DOWN
When relocating or disposing of the air conditioner, pump down the system following the procedure below so that no refrigerant is released into the atmosphere.
1) Connect the gauge manifold valve to the service port of the stop valve on the gas pipe side of the outdoor unit.
2) Fully close the stop valve on the liquid pipe side of the outdoor unit.
3) Close the stop valve on the gas pipe side of the outdoor unit almost completely so that it can be easily closed fully when the pressure gauge shows 0 MPa [Gauge] (0 kgf/cm²).
4) Start the emergency COOL operation. To start the emergency operation in COOL mode, disconnect the power supply plug and/or turn off the breaker. After 15 seconds, connect the power supply plug and/or turn on the breaker, and then press the E.O. SW once. (The emergency COOL operation can be performed continuously for up to 30 minutes.)
5) Fully close the stop valve on the gas pipe side of the outdoor unit when the pressure gauge shows 0.05 to 0 MPa [Gauge] (approx. 0.5 to 0 kgf/cm²).
6) Stop the emergency COOL operation.
Press the E.O. SW several times until all LED lamps turn off. Refer to operating instructions for details.

WARNING
When pumping down the refrigerant, stop the compressor before disconnecting the refrigerant pipes. The compressor may burst if air etc. get into it.