

# INSTALLATION MANUAL

## Wall-mounted Type

DC Fan Motor Wall-mounted Air Conditioner indoor unit

### 4. INSPECTING AND HANDLING THE UNIT

1. Check the package for any damage and any damage should be reported immediately to the carrier claims agent.
2. When handling the unit, take into account the following:
  1. Frigide: handle the unit with care.
  2. Keep the unit upright in order to avoid compressor damage.
  3. Choose an open hand the path along which the unit is to be brought in.
  4. Move the unit as originally packaged as possible.
  5. When fitting the unit, always use protection to prevent belt damage and pay attention to the position of the unit's centre of gravity.

### 5. INDOOR UNIT INSTALLATION

1. Installation place  
The indoor unit should be installed in a location that meets the following requirements:
  - A. Avoid installing in a narrow space which has a high requirement to noise.
  - B. The ceiling is horizontal, and its structure can endure the weight of the indoor unit.
  - C. The outlet and the inlet are not impeded, and the influence of external air is reduced.
  - D. The air flow can reach throughout the room.
  - E. The connecting pipe and drainage could be extracted out easily.
  - F. There is no direct radiation from heaters.
  - G. Don't install in a place where air contains much dust. If this unit is avoided, choose an antismoke mode.

2. Drilling a hole.
  - A. Determine the pipe hole position using the installation board, and drill the pipehole (Ø55mm) so it starts slightly downward.
  - B. Always use a wall hole conduit when piercing metal, left, plywood or metal plate.

3. Connective Pipe and Drainage Installation  
1. Drainage
  - A. Slope the drain hose sloping downward. Do not install the drain hose as illustrated below.
  - B. Do not put the hose end into water.



### 7.4 Main board Code designation

- SW1 Definition**
- 00 means auto addressing mode (Default)
  - 01 means factory test mode
  - 02 (Reserved)
  - 03 (Reserved)
  - 04 (Reserved)
  - 05 (Reserved)
  - 06 (Reserved)
  - 07 (Reserved)
  - 08 (Reserved)
  - 09 (Reserved)
  - 10 (Reserved)
  - 11 (Reserved)

- SW2 Definition**
- 00 means when temperature is 15°C or below, fan will stop to prevent cold air (Default)
  - 01 means when temperature is 20°C or below, fan will stop to prevent cold air
  - 02 means when temperature is 24°C or below, fan will stop to prevent cold air
  - 03 means when temperature is 28°C or below, fan will stop to prevent cold air
  - 04 means in heating mode, the fan which stop for reaching the set temp., will periodically stop for 4 minutes and run for 1 minute (Default)
  - 05 means in heating mode, the fan which stop for reaching the set temp., will periodically stop for 8 minutes and run for 1 minute
  - 06 means in heating mode, the fan which stop for reaching the set temp., will periodically stop for 12 minutes and run for 1 minute
  - 07 means in heating mode, the fan which stop for reaching the set temp., will periodically stop for 16 minutes and run for 1 minute

- J1 Definition**
- Without jumper "J1" for auto restart function
  - With jumper "J1" for non-auto restart function

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1. PRECAUTIONS
  - A. Be sure to be in conformity with the local, national and international laws and regulations.
  - B. Read "PRECAUTIONS" carefully before installation.
  - C. The following precautions include important safety items. Observe them and never forget.
  - D. Keep this manual with the owner's manual in a handy place for future reference.
  - E. Installation must be performed in accordance with the requirement of NEC and CEC by authorized personnel only.

- The safety precautions listed here 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 injury or death.
- CAUTION**  
Failure to observe a caution may result in injury or damage to the equipment.
- After completing the installation, make sure that the unit operates properly during the start-up operation. Please instruct the customer on how to operate the unit and keep it maintained. Also, inform customers that they should store this installation manual along with the owner's manual for future reference.

- WARNING**  
Be sure only trained and qualified service personnel to install, repair or service the equipment. Improper installation, repair, and maintenance may result in electric shocks, short-circuits, leaks, fire or other damage to the equipment.
- Install according to this installation instructions strictly. If installation is defective, it will cause water leakage, electric shocks, fire.

### 6. REFRIGERANT PIPE INSTALLATION

- CAUTION**  
Ventilate the air if there is any refrigerant leakage during installation. Leaked refrigerant will generate poisonous gas if meeting fire.
- Make sure there is no refrigerant leakage after installation. Leaked refrigerant will generate poisonous gas if meeting fire.

- 6.1 Allowed Length and Drop of Piping  
Requirements are different when installing the Outdoor Unit. Please refer to the Outdoor Unit Installation Manual for detailed information.

- 6.2 Material and Size of the Piping  
Table 6-2

Outer diameter of copper pipe (mm)	Inner diameter of copper pipe (mm)	Weight (kg/m)
Ø12.7	11.4	0.18
Ø15.9	14.6	0.28
Ø19.1	17.8	0.42

- 6.3 Refrigerant Volume to be Added  
Refrigerant volume to be added is calculated according to Outdoor Unit installation Manual.
  - A. Be sure to add refrigerant measuring by a scale.

- CAUTION**  
If refrigerant volume added is inadequate (too much) or insufficient, the compressor malfunction will be caused. The service man should note down the piping length and refrigerant volume added on the receptacle, which is on the Electric Control Box Cover of outdoor unit for to diagnose the compressor when compressor malfunction occurs.

- 6.4 Connection of the Refrigerant Pipe  
The connection of the refrigerant pipe should be done by professionals. Double seal should be used when connecting opposed Indoor Unit.

- CAUTION**  
The temperature of refrigerant pipe will be high, please keep the interconnection cable away from the copper tube.

### 8 TEST OPERATION

- CAUTION**  
Protection function will delay the startup of compressor for 3 minutes when the remote controller's signal can reach the indoor unit smoothly.
- The test operation must be carried out after the entire installation has been completed.
  - Please confirm the following points before the test operation:
    - The indoor unit and outdoor unit are installed properly.
    - Piping and wiring are correctly completed.
    - The refrigerant gas system is leakage checked.
    - The drainage is unimpeded.
    - The heating insulation works well.
    - The ground wiring is connected correctly.
    - The length of the tubing and the added slow capacity of the refrigerant have been recorded.
    - The power voltage fits the rated voltage of the air conditioner.
    - There is no obstacle at the outlet and inlet of the outdoor and indoor and indoor units.
    - The gas-side and liquid side stop valves are both opened.
    - The air conditioner is not heated by turning on the power.
- Test operation**  
Set the air conditioner under the mode of "COOLING" with the remote controller, and check the following points per the "Owner's Manual" if there is any malfunction, please resolve it through chapter "Troubles And Causes".
- The indoor unit
    - Whether the switch on the remote controller works well.
    - Whether the buttons on the remote controller works well.
    - Whether the air flow blower moves normally.
    - Whether the room temperature is adjusted well.
    - Whether the indicator lights normally.
    - Whether the temporary buttons works well.
    - Whether the drainage is normal.
    - Whether there is a vibration or abnormal noise during operation.
  - The outdoor unit
    - Whether there is vibration or abnormal noise during operation.
    - Whether the generated wind, noise, or condensed water by the air conditioner have influenced your neighborhood.
    - Whether any of the refrigerant is leaked.

- CAUTION**  
Ground the air conditioner.  
Do not connect the ground wire to gas or water pipes. Connecting gas or a telephone ground wire to the ground wire may result in electric shock.
- CAUTION**  
Do not connect the outdoor unit wires, then connect the indoor unit wires.  
You are not allowed to connect the air conditioner with the power source until re-protecting the rig and piping the air conditioner is done.
- CAUTION**  
When installing the indoor unit or its tubing, please follow this manual as strictly as possible.  
If the air conditioner is installed on a metal part of the building, it must be electrically insulated according to the relevant standards.  
When all the installation work is finished, please turn on the power only after a thorough check.
- CAUTION**  
Regrate for no further announcement if there is any change of this manual caused by product improvement.

### 2. INSTALLATION INFORMATION

- To install properly, please read this "Installation Manual" at first.
- The air conditioner must be installed by qualified persons.
- When installing the indoor unit or its tubing, please follow this manual as strictly as possible.
- If the air conditioner is installed on a metal part of the building, it must be electrically insulated according to the relevant standards.
- When all the installation work is finished, please turn on the power only after a thorough check.
- Regrate for no further announcement if there is any change of this manual caused by product improvement.

### INSTALLATION ORDER

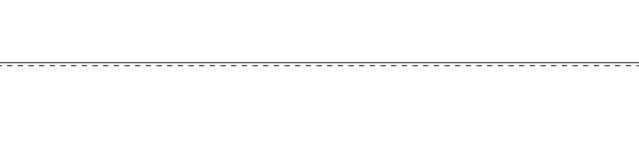
1. Select the location.
2. Install the indoor unit.
3. Install the outdoor unit.
4. Connect the connecting pipe.
5. Connect the drain pipe.
6. Wiring.
7. Test operation.

### 3. ATTACHED FITTINGS

NAME	SHAPE	QUANTITY	FUNCTION
1. Remote controller manual		1	—
2. Screw ST3.5x25 for installation board		8	Secure the installation board
3. Plastic expanded tube		8	—
4. Wrapping tape		1	—
5. Drain pipe		1	—
6. Wall conduit cover		1	—
7. Remote controller (including operation manual)		1	—
8. Frame		1	Hold the remote controller
9. Mounting screw ST2.8 x 10 (C-H)		2	Insulation Holder for remote controller
10. Alkaline dry batteries (AAA)		2	—
11. Installation manual		1	This manual
12. Network wiring set		1	The indoor unit which at the terminal of communication system should connect a PoE switch between port P and port G.
13. Copper nut		1	Connect piping

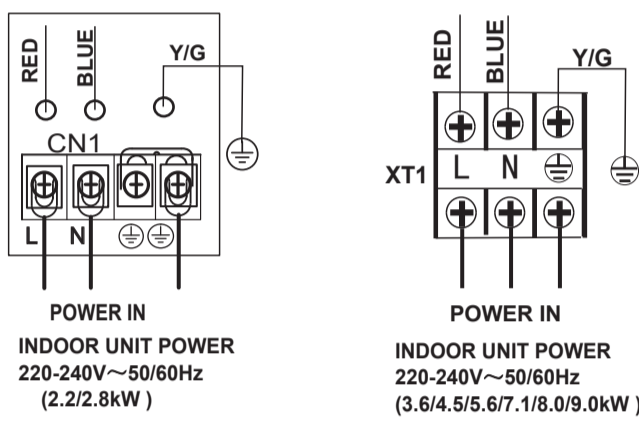
### Cautions on remote controller installation:

- Never throw or blast the controller.
- Before installation, operate the remote controller to determine its location in a reception range.
- Keep the remote controller at least 1m apart from the nearest TV set or stereo equipment. (It is necessary to prevent image disturbance or noise interference.)
- Do not install the remote controller in a place exposed to direct sunlight or close to a heating source, such as a stove.
- Note that the positive and negative poles are right positions when loading batteries.
- This manual is subject to changes due to technological improvement without further notice.



### 7.1 Terminal Board Diagram

- Please refer to the indoor unit wiring diagram for the wiring.
- NOTE**  
The air conditioners can connect with Central Control Unit (CCU). Before operation, please wiring correctly and set system address and network address of indoor units.



### 7.2 Horsepower set

ENC1	Toggle switch	For set horsepower
0	0	2000W(0.8HP)
1	1	2800W(1.0HP)
2	2	3600W(1.2HP)
3	3	4500W(1.6HP)
4	4	5600W(2.0HP)
5	5	7100W(2.6HP)
6	6	8000W(3.0HP)
7	7	9000W(3.2HP)

- CAUTION**  
The system together with the standard ENC1 everyone has only system address. If two addresses are the same in one system, the abnormal operation will occur.
- Please switch off the power before setting otherwise the unexpected error will occur.

### 7.3 Network address set

- 1) Network address is set by communication of indoor and outdoor unit. The address is the same as indoor address. There is no need to set separately.
- 2) The central control of indoor units can be done on outdoor unit. There is no need to control indoor unit separately. For details please refer to outdoor unit manual.
- 3) For previous control of indoor units, the network can be set by connecting to LAN terminals. There is no need to set network address. The network can also be set by outdoor network module and main board (CN2).



### MD151-005DW

更改说明 (此页不作译林, 供更改前后核对和检查)

- A升级为B说明:
1. 第7页表7-1 "All-pole disconnection device" 由16A改为15A.
  2. 第9页7.3(2)中 "Refer to V44 outdoor unit manual", 删除V44.
  3. 第9页 (7.1 Definition)中的network说明
  4. 第9页7.2Wire controller 更改为wired controller. 接线图按线示意图中 WIRED CONTROLLER 和 To wired controller 位置填写.
  5. 第9页7.3中, 通信接线说明中, and then ground at outdoor unit side by single point grounding, 更改为then ground at outdoor unit side by single point grounding.

- B升级为C 2017. 2.22:
- 1) 封面右下角增加 Original instructions.
  - 2) 封面图号升级, 物料编码更新

- C升级为D 2018. 6. 27:
- 1) 第2页WARNING部分增加最后两点说明.
  - 2) 封面图号升级, 物料编码更新