

EcoManager Installation Manual

Document Rev. 1

Model : CL-MC07 Series

FOR INSTALLER

Before using the device, carefully read this installation/instruction manual to ensure proper operation. Keep this manual for future reference and give it to the technician when the device is reinstalled or repaired.

Contents

1. Supplied Parts
2. Safety Precautions
3. System Configuration before installing Thermostat Adapter
4. How to Install

1. Confirming the supplied parts

Check that the box includes the following part(s) in addition to this installation manual:
CL-MC07X EcoManager.

2. Safety Precautions

- Thoroughly read the following safety precautions before use.
- Hazards that can occur from incorrect handling are classified by the symbols below:

Warning	Indicate a potentially hazardous situation which, if not avoided, could result in death or serious injury.
Caution	Indicate a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. It could also be used to alert against unsafe practices.
Notice	Indicates a situation that could result in equipment or property damage only accidents.

- After reading this manual, keep this manual for future reference. When the device is reinstalled or repaired, give this manual to those who provide these services. When the user changes, make sure that the new user receives this manual.

Warning

- Only a dealer or qualified technician should install, relocate, reinstall, or repair the device.**
Improper installation or repair may result in electrical shock or fire.
- Properly install the device on a stable, load-bearing surface.**
Device installed on an unstable surface may fall and cause injury.
- Only use the specified cables; securely connect each so that the terminals do not bear any cable weight.**
Improperly connected or short-circuited cables may produce heat and cause a fire.
- All electrical work should be performed by an authorized electrician according to local regulations and instructions outlined in this manual.**
Capacity shortage to the power supply circuit or improper installation may result in electrical shock or fire.

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- Do not make any modifications or alterations to the device.**
Modifications or improper repair may result in electric shock or fire. Consult your dealer for repair.
- Properly install the device according to the instructions in this Installation/Instruction Manual.**
Improper installation may result in electric shock or fire.

Caution

- Do not install the device in a location where a flammable gas leak may occur.**
Gas main leak, collect around the device, ignite, and/or explode.
- Do not install the device in environments where large amounts of oil (including machine), sulfidizing gas, or acidic, alkaline, chemical sprays are present.**
These types of substances may damage internal parts, cause device performance to be reduced, and cause electrical shock.
- Do not install the device in a bathroom, kitchen, or any room where steam could form.**
Condensation may develop and cause electrical shock and/or the device to malfunction.
- Do not install the device in a location where there is direct sunlight or where the temperature may become greater than 40°C (104°F) or less than 0°C (32°F).**
If the device is installed in such place, it may result in deformities or malfunctions.
- When installing the device in a hospital, communication facility, etc., provide sufficient protection against frequency noise.**
Power generators and inverters, high-frequency medical, or radio communication equipment may interfere with the normal operation of this device. Subsequently, the device may also affect medical treatment, image broadcasting, etc., by creating frequency noise.
- Include some slack in the power supply wires.**
Tension on the wires may cause them to excessive heat up and/or break, resulting in a fire.
- Use standard wires with the proper current capacity**
to avoid the possibility of current leak, excessive heat, and/or fire.
- Do not touch the main circuit board; also, make sure that dust does not accumulate on the circuit board.**
- Do not immerse the device in water.**
Doing so may lead to electric shock or malfunctions.

3. System Configuration before installing EcoManager

- [Notice] - In case of connected SAMSUNG AC F1/F2,
- Change the option code of SAMSUNG AC to enable central control.
 - AR models can use the D2 05 10 method must AQN models require the full 020010 -100000-200000-300000 method.
 - Refer to indoor unit installation manual and/or <https://dvmdownload.com/Controls/> for more information.

Device Configuration

Initial settings can be configured via the three banks of dip switches and 1 rotary switches on the circuit board. The circuit board can be accessed by unfastening the four screws on the back of the case.

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3.1. Deep Switch Definitions



Option1 :
Adjusts the initial setting according to the AC connection type.
Option3 :
Adjusts the initial setting according to attached dust sensor.

[IMPORTANT] If you set this SW wrong, until will not work or respond.

■ Connection setting to control AC

Option1 DIP SW : Adjusts the initial setting according to the AC connection type.

DIP SW4	Type of SAMSUNG Air Conditioners
BANK 1,2: ON BANK 3,4: OFF	SAMSUNG F1/F2 or Midea X/Y Connection
BANK 1,2: OFF BANK 3,4: ON	SAMSUNG F3/F4 Connection

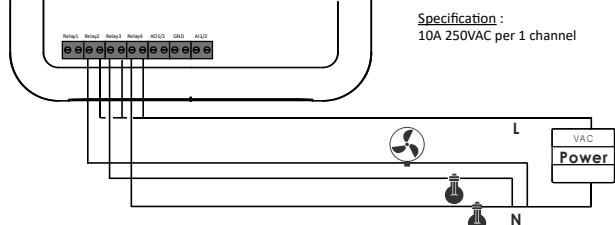
■ Installation setting to monitor dust measure (PM1.0, PM2.5, PM10)

Option3 DIP SW : Adjusts the initial setting according to attached dust sensor.

DIP SW4	Type of SAMSUNG Air Conditioners
BANK 1,2: ON BANK 3,4: OFF	Device debugging mode
BANK 1,2: OFF BANK 3,4: ON	Operation setting by attaching dust sensor

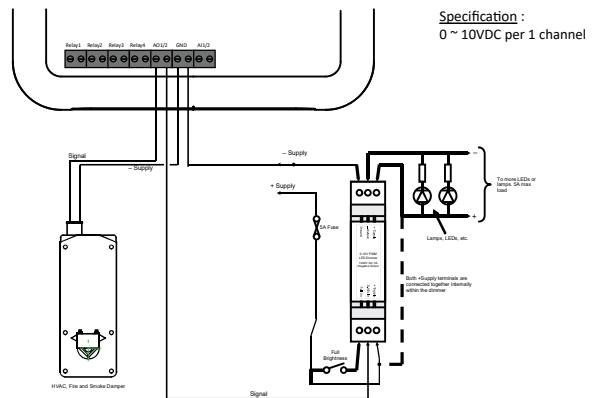
4. Installation Configuration for peripheral operation

4.1. Dry contact (ex. Lighting or Ventilation installation)

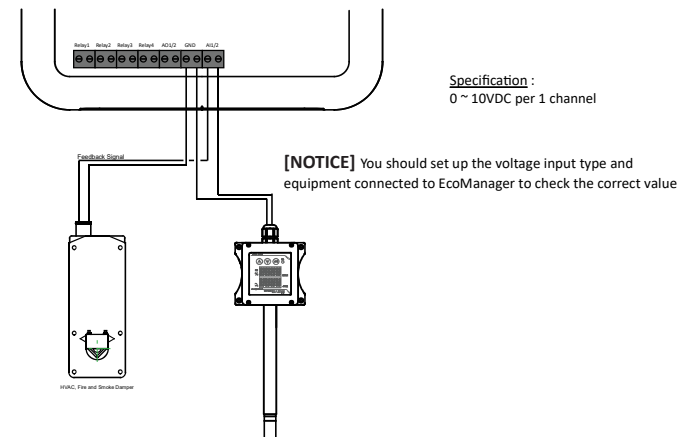


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4.2. Voltage output(ex. Lighting dimmer or Damper)



4.3. Voltage input(ex. Sensor or Damper feedback)



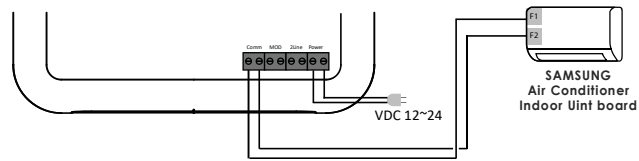
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5. Installation Configuration for Air-conditioner

5.1. Samsung Air-conditioner

■ F1/F2

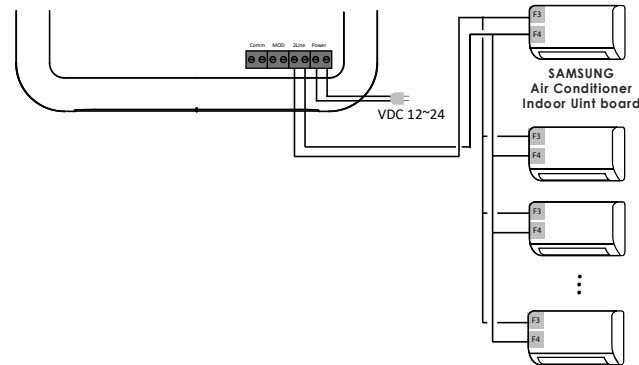
When connecting the F1 / F2 communication line, one communication channel per outdoor unit is available



[NOTICE] CL-MC07F model supports two outdoor communication channels. You can make additional communication connections to MOD channel.

■ F3/F4

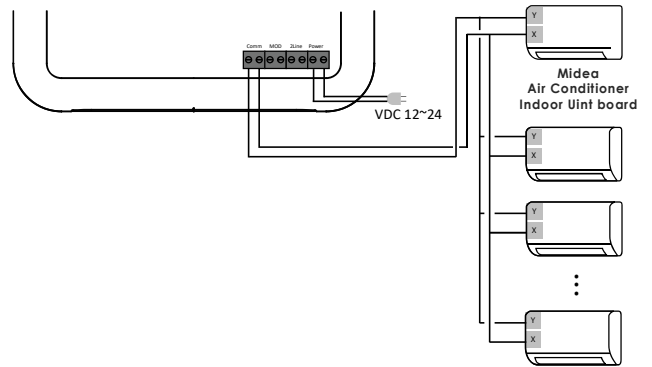
Connect EcoManager to F3 / F4 when connecting indoor units regardless of outdoor unit connection. The maximum number of indoor units that can be connected is 16 units.



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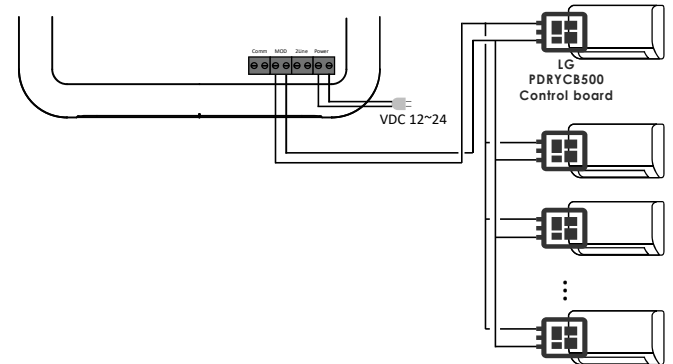
5.2. Midea Air-conditioner

The maximum number of indoor units that can be connected is 16 units.



5.3. LG Air-conditioner

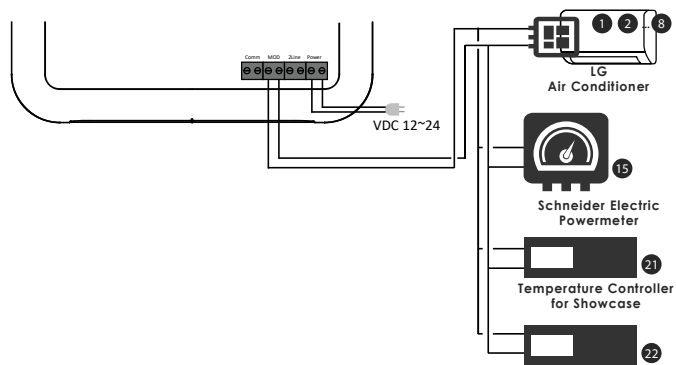
Connect the LG Dry contact model PDRYCB500 to the indoor unit, then connect the communication line A / B to the EcoManager MOD terminal.



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6. Installation Configuration for Modbus Devices

This communication channel is for connection of devices supporting Modbus. After setting each address individually for each device, connect A / B communication of devices and connect to MOD terminal of EcoManager.



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