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MALTI | SLOVENČINA | SLOVENŠČINA | LATVIEŠU VALODA | LIETUVIŲ KALBA | GAEILGE | МАКЕДОНСКИ | SHQIP | ÍSLENSKA | BOSANSKI

INSTALLATION MANUAL

AIR CONDITIONER

Please read this installation manual completely before installing the product.
Installation work must be performed in accordance with the national wiring standards by authorized personnel only.
Please retain this installation manual for future reference after reading it thoroughly.

V-NET (PI485)
PMNFP14A0 / PMNFP14A1

P/NO : MFL57868530

www.lg.com

ENGLISH

SAFETY PRECAUTIONS

To prevent injury to the user or other people and property damage, the following instructions must be followed.

- Incorrect operation due to ignoring instruction will cause harm or damage. The seriousness is classified by the following indications.

WARNING

This symbol indicates the possibility of death or serious injury.

CAUTION

This symbol indicates the possibility of injury or damage.

- Meanings of symbols used in this manual are as shown below.

WARNING

Installation

- Don't touch with the hands while the power is on.
  - There is risk of fire or electric shock.
- Use standard parts(connector).
  - Do not disassemble or repair the product. There is risk of fire or electric shock.
- For electrical work, contact the dealer, seller, a qualified electrician, or an Authorized Service Center.
  - Do not disassemble or repair the product. There is risk of fire or electric shock.
- Use the correctly rated breaker or fuse.
  - There is risk of fire or electric shock.
- Do not install, remove, or re-install the unit by yourself (customer).
  - There is risk of fire, electric shock, explosion, or injury.
- For installation, always contact the dealer or an Authorized Service Center.
  - There is risk of fire, electric shock, explosion, or injury.

Operation

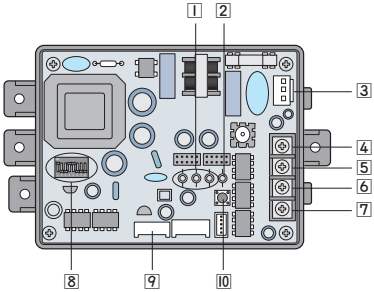
- When the product is soaked (flooded or submerged), contact an Authorized Service Center.
  - There is risk of fire or electric shock.
- Be cautious that water could not enter the product.
  - There is risk of fire, electric shock, or product damage.

NOTE

Install and use by qualified personnel only.

PART DESCRIPTION

PMNFP14A0 / PMNFP14A1



* The location of parts might be different in case of PMNFP14A1.
  PMNFP14A0 : For connecting 1 ~ 16 Indoor Units
  PMNFP14A1 : For connecting 1 ~ 64 Indoor Units

PI485 GATEWAY(M)

1 LED01G, 02G, 03G: Communication Status LED

2 LED1:RS-485 Status LED

3 CN_PWR: 220V~ Connector

4 +10V: DC 10 V Terminal

5 GND: Ground

6 BUS_A: *RS-485 (+) Terminal (Refer to note)

7 BUS_B: RS-485 (-) Terminal

8 DIP Switch: Product Selection (Refer to the 「DIP Switch Configuration」)

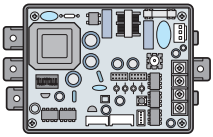
9 CN_OUT: Outdoor Unit Connector

10 Reset Switch: PI485(M) Reset

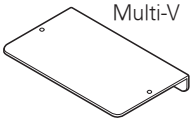
NOTE

RS-485 is one of the international interface standards for serial communication.

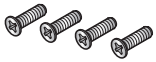
ACCEASSORY PARTS



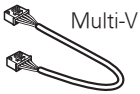
PI485 : PMNFP14A0(1EA)
or PMNFP14A1(1EA)



BRACKET (1EA)

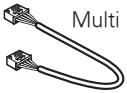


SCREW (4EA)



WIRE ASSY 1(1EA)

WIRE ASSY 2(1EA)



WIRE ASSY 3(1EA)

Others : Tie Wrap (3 EA) - Cable Tie Clamp (1 EA)

INSTALLATION GUIDE

Installation Steps

1. 9 Connect CN_OUT with Outdoor Unit by the cable (provided)
2. 6 7 Connect RS-485 BUS_A(+) and BUS_(B)(-) with other network products (ex. Central Controller , I-Gateway.....)
3. 4 5 In case of using Simple Central Controller, connect VCC(+10V) and GND. No need to connect otherwise.
4. 8 Select DIP Switch Configuration.
5. 3 Connect CN_PWR with Outdoor PCB Power connector
6. After Power is ON, check the

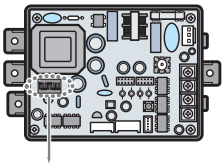
   Communication LED 1
   - LED1G(Red)
     - Normal : LED blinks as many as the number of Connected Indoor units, and then turns OFF. This process is repeated after every 3 minutes
     - Error : Check the Indoor Unit's address & wiring connections
   - LED2G(Yellow), LED3G(Orange)
     - Normal : LED blinks continuously
     - Error : Check the DIP Switch setting & wiring connections
7. 2 Check RS-485 Communication Status LED:
   - Normal : LED blinks when PI485 receives data from central controller.
   - Error : Check the wiring connections
8. Finally if all of the above steps are OK, then tie the cables by tie wraps & clamp.

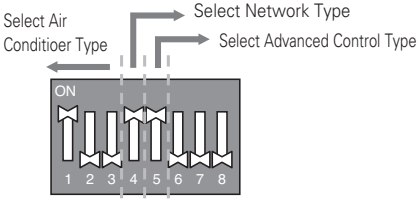
* Example about Multi V plus.

CAUTION

Install the PI485 on the Noise Filter in Multi V plus.
Install the PI485 after checking the hole for screw.

DIP Switch Configuration





*LGAP: LG Air conditioner Protocol

Multi V & Multi(LGAP applied) products Configuration Methods

→ **1 ON, All others OFF :** Multi V products(Except CRUN products) or Multi(Non-Inverter) Product applied Common PCB(Refer to NOTE) or Multi(Inverter) Product + Central Controller(All types) - Without LGAP

→ **1 and 4 ON, All others OFF :** Multi V products(Except CRUN products) or Multi(Non-Inverter) Product applied Common PCB or Multi(Inverter) Product + Central Controller(All types) - Using LGAP

→ **2 ON, All others OFF :** Multi(Non-Inverter) Product + Centroller(All types) - Without LGAP

→ **2 and 4 ON, All others OFF :** Multi Non-Inverter Product
+ Central Controller(All Types) - Using LGAP

→ **1,2,3,4 ON :** Multi V CRUN Product
+ Central Controller(All types) - Using LGAP

* Please refer the corresponding Central Controller installation manual if you want to know whether your Central Controller is compatible with LGAP or not.

CAUTION

The wrong setting of air-conditioner switch could cause malfunctioning. Switch setting must be done carefully. Push the Reset button after changing the Dip switch.

NOTE

Multi(Non-Inverter) Product applied Common PCB
PCB P/NO. : 6871A20917*
P/NO. : 6871A20918*
P/NO. : 6871A20910*

Advanced Lock Control Type

- To use the advanced lock function (Run Mode lock, Fan Speed lock, Temperature Lock, and Temperature Range lock; adjustable only within certain boundary) by central controller, Set up the fifth dip switch according to the type of outdoor product.
- In case of advanced lock function, it can use only the central controller applied to LGAP.

→ **1, 4 and 5 ON, All others OFF :** MultiV Products (Except CRUN products) or MPS Inverter Product + Central Controller (All types) - Using LGAP

→ **2, 4 and 5 ON, All others OFF :** Multi Standard Product + Central Controller (All types) - Using LGAP

→ **1, 2, 3, 4and 5 ON, All others OFF :** MultiV CRUN Product + Central Controller (All types) - Using LGAP

NOTE

The advanced lock setting.
Some products do not support advanced lock function.
In this case, The fifth dip switch on PI485 must be on.
In case of product applied to advanced function, it can process the advanced lock function without fifth dip switch ON.
If all units support advanced lock function, It is recommended that the fifth dip switch be off, so that advanced lock function is processed faster.

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