

## LG PMNFP14A0 Owner's Manual

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LG

# LG PI485 for Outdoor Unit INSTALLATION MANUAL

Models: PMNFP14A0 PMNFP14A1 PGNFP14A0

#### **IMPORTANT**

- 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.

**ENGLISH** 

HALIAN

ESPANC

FRANÇAIS

DEUISCH

CHINES

## PI 485 INSTALLATION MANUAL

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## **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.

**AWARNING** 

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.

	Be sure not to do.
0	Be sure to follow the instruction.



#### ■ Installation -

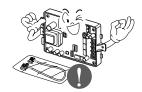
#### Don't touch with the hands while the power is on

• 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 reinstall 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.

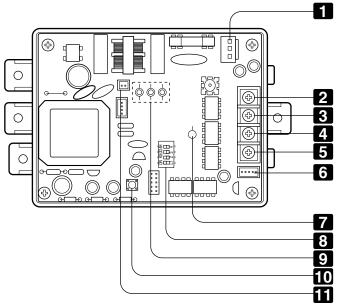
• There is risk of fire, electric shock, or product damage.



## **ENGLISH**

## **Part Description**

## PMNFP14A0 / PMNFP14A1 / PGNFP14A0



\* The location of parts might be different in case of PMNFP14A1.

PMNFP14A0: For connecting 1 ~ 16 Indoor Units PMNFP14A1: For connecting 1 ~ 48 Indoor Units PGNFP14A0: For connecting only base controller

#### PI485 GATEWAY(M)

1 CN\_PWR: AC 220V Connector

2 +10V: DC 10V Terminal

3 GND: Ground

4 BUS\_A: \*RS-485 (+) Terminal

(Refer to note)

5 BUS\_B: RS-485 (-) Terminal

6 CN\_OUT: Outdoor Unit Connector

7 LED1:RS-485 Status LED

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

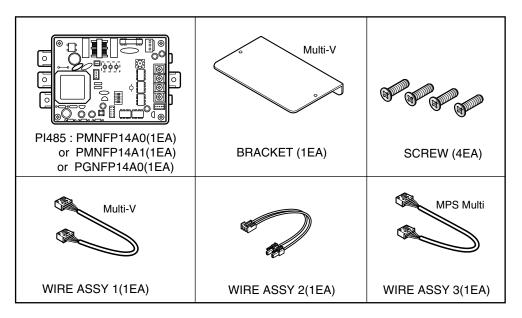
9 LED01G, 02G, 03G: Communication Status LED

10 Reset Switch: PI485(M) Reset

11 CN\_DRY: DRY Contact

\* **Note**: RS-485 is one of the international interface standards for serial communication.

## **Acceassory Parts**



Others: Tie Wrap (3 EA) - Cable Tie

Clamp (1 EA)

## **Installation Guide**

## Installation Steps

- 1. 6 Connect CN\_OUT with Outdoor Unit by the cable (provided)
- 2. 4 5 Connect RS-485 BUS\_A(+) and BUS\_(B)(-) with other network products (ex. Central Controller, I-Gateway.....)
- 3. 2 3 In case of using Simple Central Controller, connect VCC(+10V) and GND. No need to connect otherwise.
- 4. 8 Select DIP Switch Configuration(Refer page 8)
- 5. Connect CN\_PWR with Outdoor PCB Power connector (Refer page 9, 10)
- 6. After Power is ON, check the Communication LED 9
  - LED1G(Red)
    - Normal : LED blinks for 5 times and then gets 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. **7** Check RS-485 Communication Status LED:
  - Normal: LED's blinks 2 times in every 10~30 seconds
  - Error : Check the wiring connections
- 8. Finally if all of the above steps are OK, then tie the cables by tie wraps & clamp



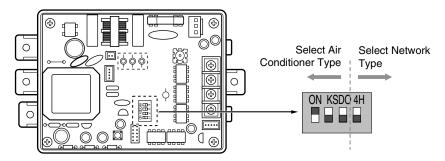
\* Example about Multi V plus



#### **CAUTION:**

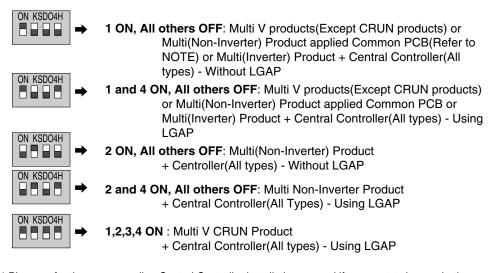
Install the PI485 on the Noise Filter in Multi V plus. Install the PI485 after checking the hole for screw.

## **DIP Switch Configuration**



\* LGAP : LG Air conditioner Protocol

Multi V & Multi(LGAP applied) products Configuration Methods



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



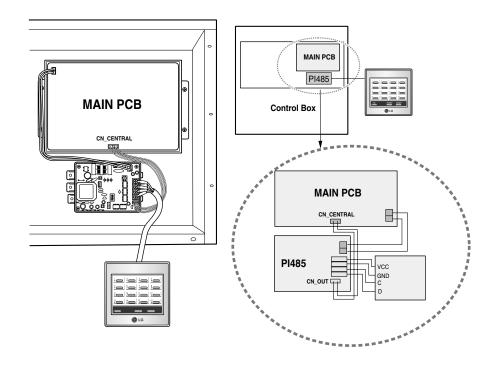
#### **CAUTION:**

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\*

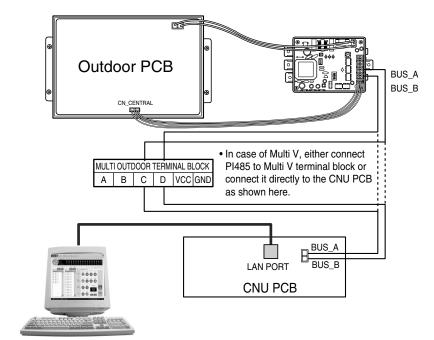
## Simple Central Controller - Connection Diagram



#### **CAUTION:**

After product installation, tie the cables with Clamps & Tie-Wraps provided. Check the right connection of each BUS A and BUS B.

## PC/ Deluxe Central Controller - Connection Diagram



PC / Deluxe Central Controller



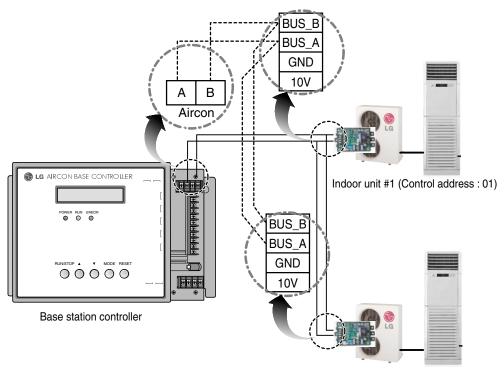
#### **CAUTION:**

After product installation, tie the cables with Clamps & Tie-Wraps provided. Check the right connection of each BUS A and BUS B.

## How to connect the base station controller

## • PGNFP14A0 (Only)

## Connecting the PI 485 communication line



Indoor unit #1 (Control address: 02)

### [Steps to connect]

\*Note: See the PI 485 manual for the internal setting.

\*Note: Because the RS485 communication line connecting to the PI 485 has polarity, check A and B. PI485



 $P/No.: MFL37115809 \\ {\bf After \ reading \ this \ manual, \ keep \ it \ in \ a \ place \ easily \ accessible \ to \ the \ user \ for \ future \ reference.}$