

문서번호	KUKJE-565
Order No.	CWROM-1607-00396
P/No.	MFL57868523

최종 컨펌일자 : 2016-7-13

작업자	연구실 담당자
김재형	이찬호

개정일자 : 2016-6-1

QA 요청사항 : 1. 원고에 지시된 대로 작업한 후 이상없이 작업 되었는지 재차 검토 후 PDF 파일을 생성한다.
 2. 작업완료 후 담당 연구원에게 수정부분에 대한 검증요청한다.
 (** 반드시 필요 - 의뢰자가 요청한 의도대로 작업이 정확히 되었는지 반드시 확인이
 필요함)
 3. 아래 체크리스트에 따라 놓치기 쉬운 사항을 우선으로 한번 더 확인한다.

* 필수확인 - QA요구사항

작업원고와 수정내용이 일치하는가?	<input checked="" type="checkbox"/> 예
언어표시띠의 위치(누락여부)는 바른가?	<input checked="" type="checkbox"/> 예
약물(기호)이 깨지거나 위치가 어긋 난 곳은 없는가?	<input checked="" type="checkbox"/> 예
그림이 가려지거나 잘려나간 곳은 없는가?	<input checked="" type="checkbox"/> 예
바코드와 P/No.가 일치하는가? (바코드 확인)	<input checked="" type="checkbox"/> 예

*최종 확인후 본 체크리스트는 삭제됩니다.

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.

Models: PHNFP14A0 / PSNFP14A0
TYPE: PI485 Gateway(C, R)



P/NO : MFL57868523

www.lg.com

TABLE OF CONTENTS

■ Safety Precautions.....	3~4
■ Part Description	5~6
■ Installation Guide	7~12
■ Installation Steps	7
■ DIP Switch Configuration.....	8~9
■ Advanced Lock Control Type	10
■ Central Controller Connection Diagram.....	11
■ Examples For Product Installation.....	12
■ Accessory Parts	13

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.

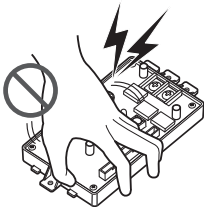
	Be sure not to do.
	Be sure to follow the instruction.

⚠ WARNING

■ Installation

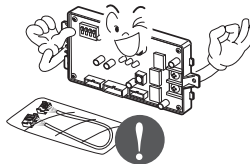
Don't touch with the hands while the power is on

- 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.



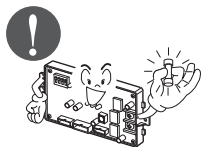
For electrical work, contact the dealer, seller, a qualified electrician, or an Authorized Service Center.

- 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.



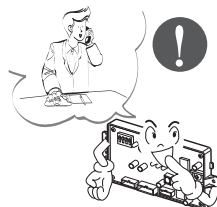
Do not install, remove, or re-install the unit by yourself (customer).

- 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

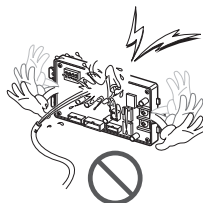
When the product is soaked (flooded or submerged), contact an Authorized Service Center.

- There is risk of fire or electric shock.



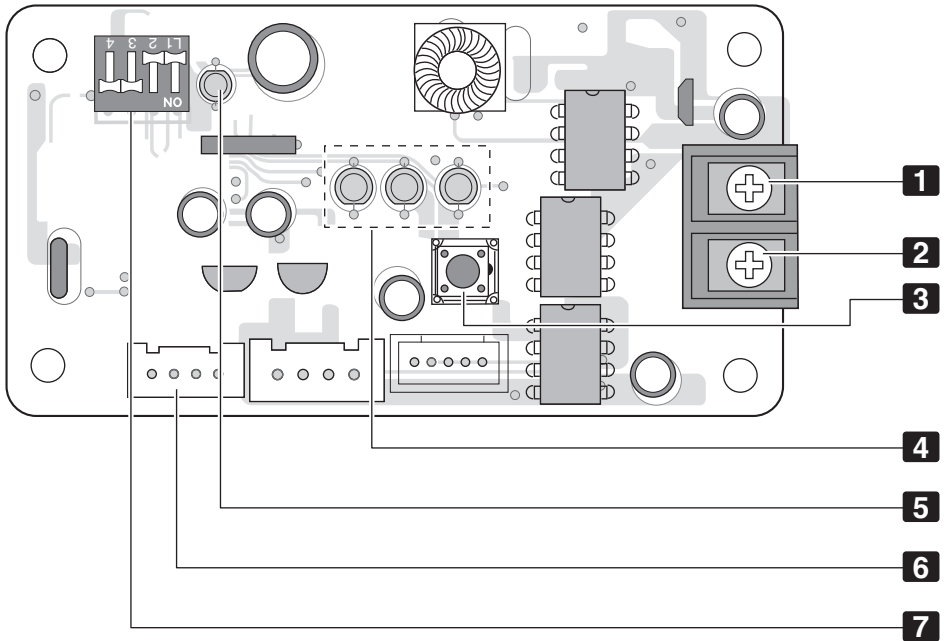
Be cautious that water could not enter the product.

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



Part Description

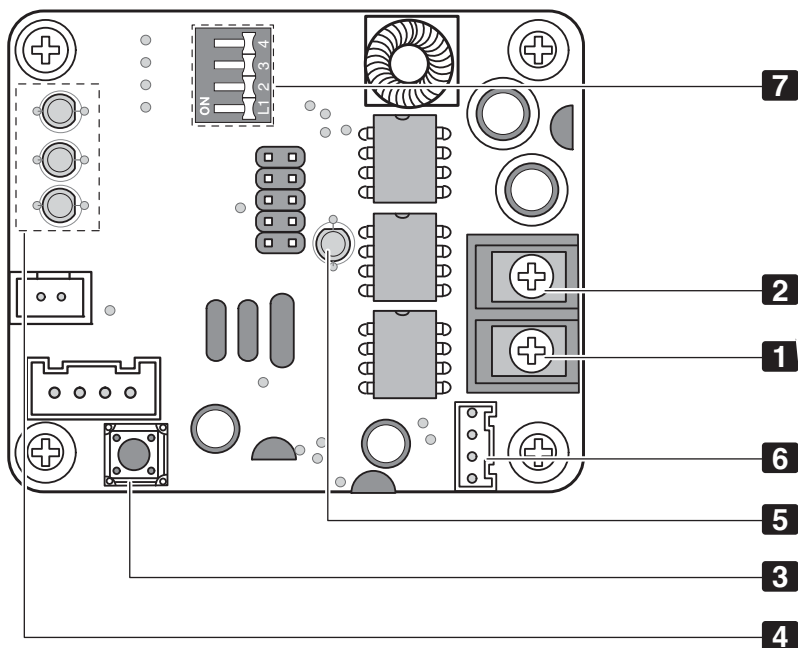
PHNFP14A0



PI485 GATEWAY(C)

- 1** BUS_B: RS-485 (-) Terminal
- 2** BUS_A: RS-485 (+) Terminal
- 3** Reset Switch: PI485(C) Reset
- 4** LED01G,02G,03G: Communication Status LED
- 5** LED1: RS-485 Communication Status LED
- 6** CN_OUT: Indoor Unit Connector
- 7** DIP Switch: Product Selection (Refer Page 8~10)

PSNFP14A0



PI485 GATEWAY(R)

- 1** BUS_B: RS-485 (-) Terminal
- 2** BUS_A: RS-485 (+) Terminal
- 3** Reset Switch: PI485(R) Reset
- 4** LED01G,02G,03G: Communication Status LED
- 5** LED1: RS-485 Communication Status LED
- 6** CN_OUT: Indoor Unit Connector
- 7** DIP Switch: Product Selection (Refer Page 8~10)

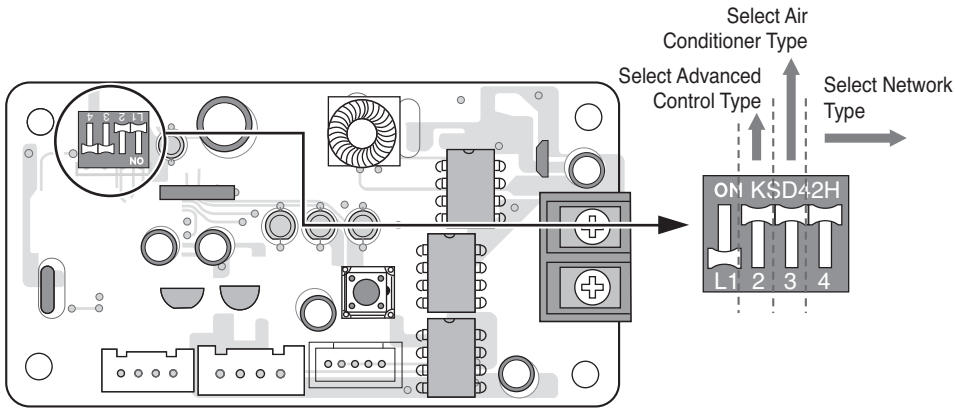
Installation Guide

Installation Steps (PHNFP14A0/PSNFP14A0)

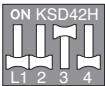
1. **7** Select DIP Switch Configuration(Refer page 8 ~ 10)
2. **1 2** Connect RS-485 BUS_A(+), BUS_(B)(-) with other network products (ex. Simple Central Controller , ACP.....)
3. **6** Connect CN_OUT with Indoor Unit by the cable (provided)
4. **4** Check the Communication Status LED
 - LED1G(Red)
 - OK operation : LED blinks for 5 times and then gets OFF
This process is repeated after every 3 minutes
 - NG operation : Check the Indoor Unit's address & wiring connections
 - LED2G(Yellow), LED3G(Orange)
 - NG operation : Check the DIP Switch setting & wiring connections
5. **5** Check RS-485
 - OK operation :
(1) LED blinks when PI485 receives data from central controller.
 - NG operation : Check the wiring connections
6. Finally if all of the above steps are OK then tie the cables by tie wraps & clamp

DIP Switch Configuration

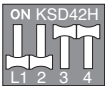
• PHNFP14A0



For CAC products using LGAP
* This means Central controller type
(Central controller using LGAP is under development. Next generation controller would use LGAP.)



➡ 3 ON+ALL OFF: Using LGAP CAC Products + Central Controller

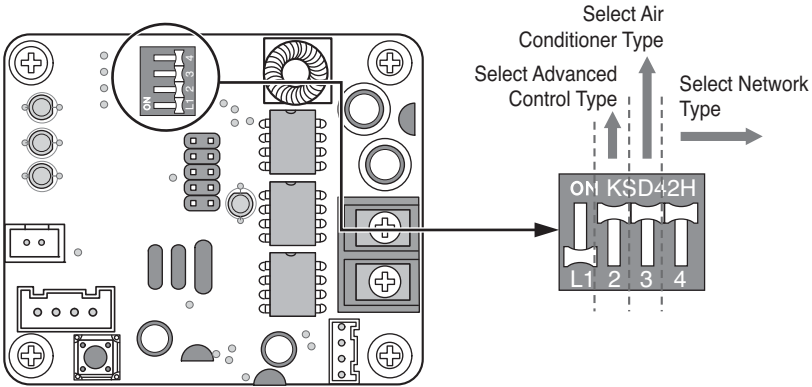


➡ 3, 4 ON+ALL OFF: LGAP CAC Products + Central Controller (ALL type)-Using LGAP



CAUTION:
Wrong products configuration can lead to malfunction.
The wrong setting of air-conditioner switch could cause malfunctioning.
Switch setting must be done carefully.

• PSNFP14A0



For RAC/SRAC/PAC products using LGAP



3 ON+ALL OFF: LGAP RAC/SRAC/PAC Products + Central Controller (ALL type)-Without LGAP



3, 4 ON+ALL OFF: LGAP RAC/SRAC/PAC Products + Central Controller (ALL type)-Using LGAP



CAUTION:

Wrong products configuration can lead to malfunctioning

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 second 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.



→ **2,3,4 ON+All OFF** : LGAP CAC/RAC/SRAC Products + Central Controller (All types) - Using LGAP

NOTE : The advanced lock setting

Some products do not support advanced lock function.

In this case, The second dip switch on PI485 must be on.

In case of product applied to advanced function, it can process the advanced lock function without second dip switch ON.

If all units support advanced lock function,

It is recommended that the second dip switch be off, so that advanced lock function is processed faster.



CAUTION:

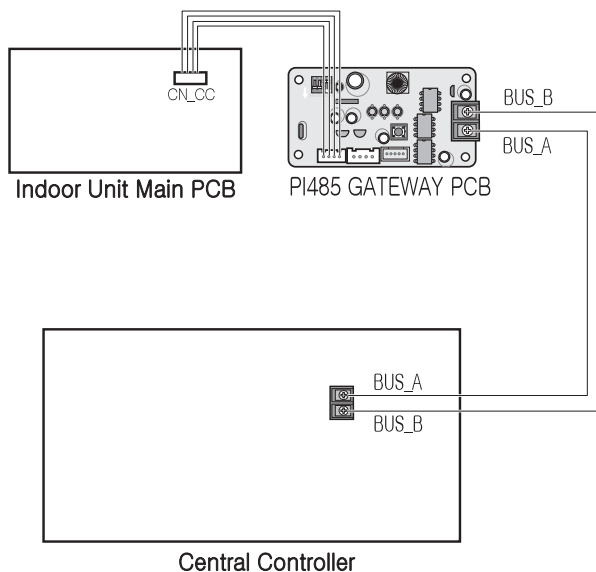
The wrong setting of air-conditioner switch could cause malfunctioning.

Switch setting must be done carefully.

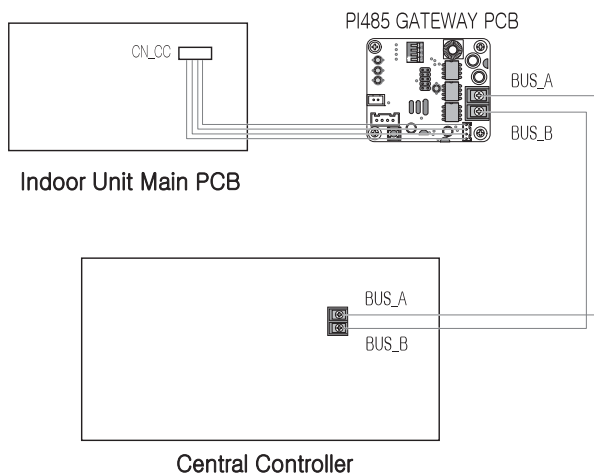
After setting the dip switch, PI485 must be reset

Central Controller Connection Diagram

• PHNFP14A0



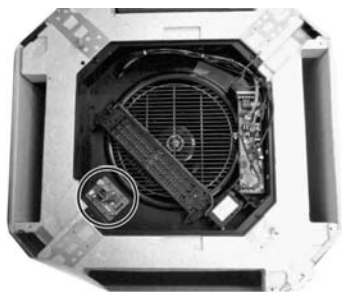
• PSNFP14A0



CAUTION:

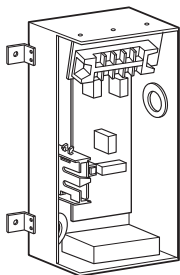
After product installation, tie the cables with the clamps & tie-wraps provided.

Examples For Product Installation



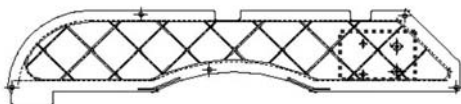
(1) The Installation for 4Way Cassette Product

→ Check Screw boss for PCB in 4way Cassette Product then fix it.



(2) The Installation for DUCT Product

→ Using PCB Holder provided



(3) The Installation for Cassette Product Cover

→ Check Screw boss for PCB in 4way Cassette Product Then fix It

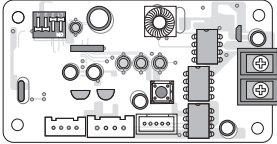
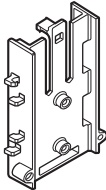
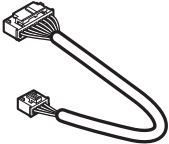
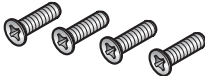
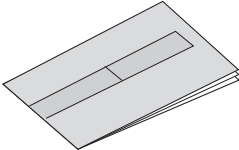



CAUTION:

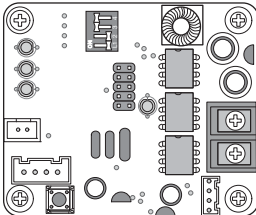
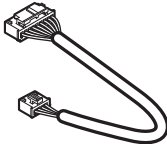
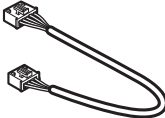
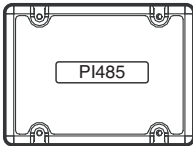
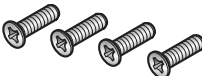
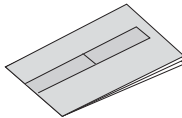
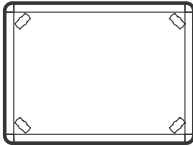
Installation location can be different depending upon product's structure.

Accessory Parts

• PHNFP14A0

		
PCB :6871A20484H	Holder for DUCT :3110A 20056A	WIRE ASSY 1(for RAC/SRAC/CAC)
		
Screw 4 EA	Installation Manual	WIRE ASSY(for Others)

• PSNFP14A0

			
PCB :6871A20484C	WIRE ASSY 1(for RAC/SRAC/CAC)	WIRE ASSY(for Others)	Top Case(3110A20124A)
			
Screw 4 EA	Installation Manual	Bottom Case(3110A20125A)	

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

Disposal of your old appliance(as per e-waste Rules)



1. When this crossed out wheeled bin symbol is depicted on the product and its operator's manual, it means the product is covered by the e-waste Management and Handling Rules , 2011 and are meant to be recycled, dismantled, refurbished or disposed off.

2. Dos

- a. The product is required to be handed over only to the authorized recycle for disposal.
- b. Keep the product in isolated area, after it becomes non-functional/un-repairable so as to prevent its accidental breakage.

Don't

- a. The product should not be opened by the user himself/herself, but only by authorized service personnel.
- b. The product is not meant for re-sale to any unauthorized agencies/scrap dealer/kabariwalah.
- c. The product is not meant for mixing into household waste stream.
- d. Do not keep any replaced spare part(s) from the product in exposed area.

3. Any disposal through unauthorized agencies/person will attract action under Environment (Protection) Act 1986 .

4. This product is complied with the requirement of Hazardous Substances as specified under Rule 13 (1) & (2) of the E-Waste (Management & Handling) Rules, 2011.

5. To locate a nearest collection centre or call for pick-up (limited area only) for disposal of this appliance, please contact Toll Free No. **1800-180-9999** for details. All collection centre and pick up facilities are done by third parties with **LG Electronics India Pvt. Ltd.** Merely as a facilitator.
For more detailed information , please visit : <http://www.lge.com/in>.

अपने पुराने नपिटान के उपकरण (ई-अपशष्टि नयिम के अनुसार)



1. जब इस काटे गए पहिये वाले बनि का चन्हिह किसी उपकरण और इसके ओपेरटर की पुस्तिका के साथ संलग्न होता है तो इसका मतलब है कि इसे "ई-अपशष्टि" (प्रबंधन और हथालन) नयिम २०११ के अंतर्गत सम्मलिति किया गया है , और इसे नवीनीकरणकरण ,वघिटन और नपिटान के लिए बनाया गया है ।
2. करें
क . उपकरण को सरिफ अधकृत पुनः नवीनीकरणकर्ता को ही नपितारण करने हेतु हस्तांतरति करें ।
ख. जब उपकरण कार्यरत न हो इसे अलग क्षेत्र में रखें ताकि उपकरण से होने वाली दुर्घटनाओं से बचा जा सके ।
न करें
क. इस उपकरण को स्वयं/खुद नहीं खोलना चाहिए ! उपकरण को केवल अधकृत अधिकारी के द्वारा ही खोला जाना चाहिए ।
ख. इस उपकरण को पुनः बकिरी के लिए किसी भी कबाड़ीवाला / भंगार-वाला / अनाधकृत संस्था को न दें ।
ग. इस उपकरण को किसी घरेलू अपशष्टि सामान के साथ मलिकर न रखें ।
घ. उपकरण के बदले हुए या आंतरकि पुरजो को खुले क्षेत्र में न रखें ।
3. यदि किसी अनाधकृत वभिग या व्यक्तिके द्वारा नपिटारन किया जाता है तो यह पर्यावरण (सुरक्षा) धारा १९८६ के अंतर्गत आता है ।
4. यह उत्पाद खतरनाक पदार्थों के लिए बनाये गए नयिमांक १३ (१) और (२), ई-वेस्ट (प्रबन्धन और रखरखाव) नयिम २०११ के कानून का पालन करता है.
5. उपरोक्त पदार्थो के नपिटारन के लिए नजदीकी नपिटारन संस्थान (संकीर्ण क्षेत्र)में कॉल करें। अधिक जानकारी के लिए हमारे टोल फ्री नंबर **1800-180-9999** पर कॉल करें. सभी संग्रहण केंद्र व पकि-अप की सुविधाएं किसी थर्ड-पार्टी जो "LG Electronics India Pvt. Ltd." को अपनी सेवाएं प्रदान कर रही हों, से करवाएं ।
ज्यादा जानकारी के लिए देखें वेब:साईट - <http://www.lge.com/in>

