

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.

Meter Interface

Original instruction



MFL62179517
Rev.00_062918

www.lg.com

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IMPORTANT SAFETY INSTRUCTIONS

READ ALL INSTRUCTIONS BEFORE USING THE APPLIANCE.

Always comply with the following precautions to avoid dangerous situations and ensure peak performance of your product.

WARNING

It can result in serious injury or death when the directions are ignored.

CAUTION

It can result in minor injury or product damage when the directions are ignored.

WARNING

- Installation or repairs made by unqualified persons can result in hazards to you and others.
- Installation work must be performed in accordance with the National Electric Code by qualified and authorized personnel only.
- The information contained in the manual is intended for use by a qualified service technician familiar with safety procedures and equipped with the proper tools and test instruments.
- Failure to carefully read and follow all instructions in this manual can result in equipment malfunction, property damage, personal injury and/or death.

Installation

- Be sure to request to the service center or installation specialty store when installing products.
It will cause fire or electric shock or explosion or injury.

- Request to the service center or installation specialty store when reinstalling the installed product.
It will cause fire or electric shock or explosion or injury.
- Do not disassemble, fix, and modify products randomly.
It will cause fire or electric shock.
- Be sure to turn off power before installation. It will cause electric shock.
- Installation work must be performed in accordance with the national wiring standards by authorized personnel only.
- Always perform grounding.
Otherwise, it may cause electrical shock.
- You need to use a safely insulated power supply which follows IEC61558-2-6 and NEC Class2.
If you do not follow, It may cause fire, electric shock, explosion or injury.
- Securely attach the electrical part cover to Module.
If the electric part cover of Module is not attached securely, it could result in a fire or electric shock due to dust, water, etc.

In-use

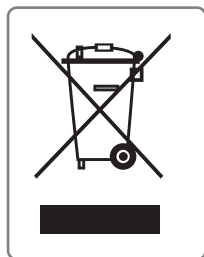
- Do not place flammable stuffs close to the product. It will cause fire.
- Do not allow water to run into the product. It will cause electric shock or breakdown.
- Do not give the shock to the product. It will cause breakdown when giving the shock to the product.
- Request to the service center or installation specialty store when the product becomes wet.
It will cause fire or electric shock.
- Do not give the shock using sharp and pointed objects. It will cause breakdown by damaging parts.
- Do not touch the board when the power is connected. It can cause a fire, electric shock, explosion, injury and problem to the product.

- Unplug the unit if strange sounds, smell, or smoke comes from it. Otherwise, it may cause electrical shock or a fire.

CAUTION

In-use

- Do not clean using the powerful detergent like solvent but use soft cloths. It will cause fire or product deformation.
- Do not press the screen using powerful pressure or select two buttons. It will cause product breakdown or malfunction.
- Do not touch or pull the lead wire with wet hands. It will cause product breakdown or electric shock.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.



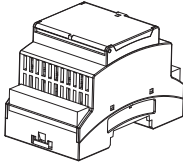
ENGLISH

Disposal of your old appliance

1. When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.
2. All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

METER INTERFACE SPECIFICATION

Components

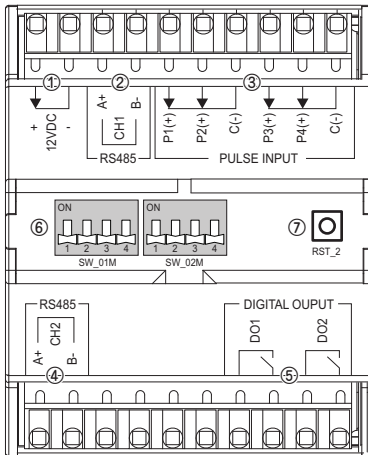


Meter Interface (1EA)



Installation Manual (1EA)

Part Description



- ① Power : DC 12 V
- ② RS485 (CH1)
: Between Indoor Unit and Meter Interface
- ③ Pulse Input : Meter Pulse Input
 - P1(+), P2(+), P3(+): Meter Pulse Input
 - P4(+): Heat Meter
 - C(-): Common
- ④ RS485(CH2)
: Between Meter Interface and Meter
- ⑤ Digital Output
 - DO1 : Operate Status
 - DO2 : Error status
- ⑥ DIP Switch
- ⑦ RST_2 : Reset

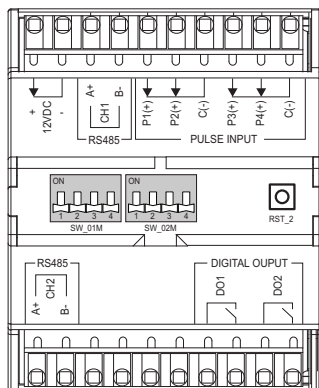
CAUTION

- This model requires external power supply (DC 12 V)
(Select an insulating transformer that complies with IEC61558-2-6 and NEC Class 2.)
- Please check the product operation range below.

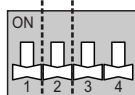
Power supply		DC 12 V
Product operation range	Ambient temperature	-20 ~ 65 °C
	Humidity	0 ~ 98 % (Non-condensing)

METER INTERFACE INSTALLATION

DIP Switch Setting



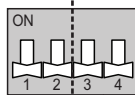
SW_01M



→ Watt Hour Meter Interlock Type Setting

→ MODBUS Address Setting

SW_02M



→ Watt Hour Meter Unit Setting
(When setting up interworking
by communication)

SW_01M	Function	DIP Switch Setting	
1	Address Setting	Off	Address value: 1
		On	Address value: 2
2	Watt Hour Meter Interlock Type Setting	Off	Comm. (Modbus RTU)
		On	Pulse Input
3	Not Used	-	-
4	Not Used	-	-

! CAUTION

When connecting 2 modules, please set different address each modules.

SW_02M				Function
1	2	3	4	Watt Hour Meter Unit Setting (When setting up interworking by communication)
Not Used		Off	Off	1 Wh
Not Used		Off	On	10 Wh
Not Used		On	Off	100 Wh
Not Used		On	On	1 000 Wh

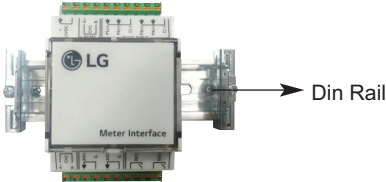
! CAUTION

When setting up interlocking by pulse input, it have to set from wired remote control.
Refer to the wired remote control manual about watt hour meter setting

Installation Method

When installing the meter interface, please fix and install using Din Rail

(Example of Installation)



- 1 Connect the '3rd PARTY CONTROLLER' of IDU and CH1 of Meter Interface
- 2 When connecting Heat meter, connect 'P4 (+)' and 'C (-)' to +, - terminal of meter. Refer to the installation manual of each meter for detailed wiring of the meter.

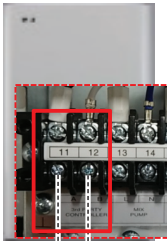
CAUTION

Be sure to turn off power before installation.

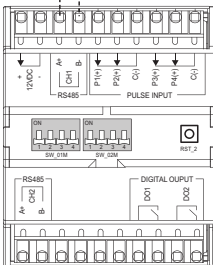
Please match A and B polarity and install it. And match +, - polarity and install it. It does not work when wrong wiring.

(IDU)

----- Field Wiring

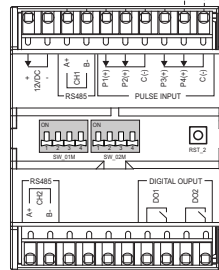


Bus_A Bus_B



(Meter Interface)

(Sontex Supercal 531)



(Meter Interface)

CAUTION

- For the wired Power wire, Communication wire and Signal wire, remove the coating at the end of the wire to connect and then use the pin type (JOBN153) to connect to the terminal block



Pin type (JOBN153)

- All field supplied parts and materials and electric works must be conform to local codes.
- Use copper wire only.
- All wiring must be performed by an authorized electrician.

- 3 Interlocking method of watt hour meter has 2 types (communication & Pulse Input)
Please select one and use it.

When interlocking by communication

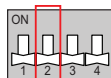
When connected by watt hour meter communication method, After Setting DIP S/W (SW_01M) No. 2 to 'OFF' and connect it to the RS485 terminal of 'CH2' and Meter.

Refer to the installation manual of each meter for detailed wiring of the meter.

! CAUTION

Please match A and B polarity and install it. It does not work when wrong wiring.

- 1) DIP Switch Setting

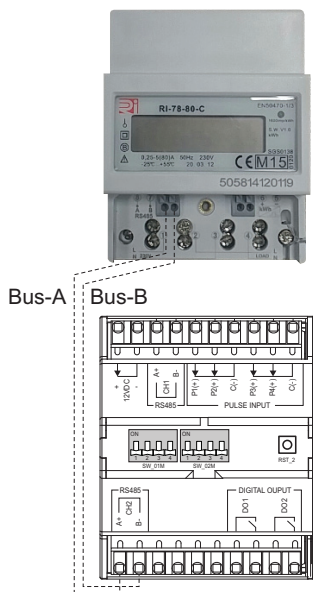


SW_01M

- 2) Wiring Method

----- Field Wiring

(Rayleigh RI-78-80-C)



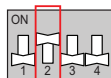
When interlocking by Pulse Input

When connecting the watt hour meter pulse input, After setting No. 2 of DIP S/W (SW_01M) to 'ON', connect one of 'P1 (+)', 'P2 (+)', 'P3 (+)' and 'C (-)' to the +, - terminals of the meter. Refer to the installation manual of each meter for detailed wiring of the meter.

! CAUTION

Please match +, - polarity and install it. It does not work when wrong wiring.

- 1) DIP Switch Setting

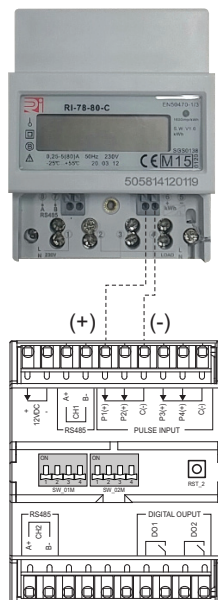


SW_01M

- 2) Wiring Method

----- Field Wiring

(Rayleigh RI-78-80-C)





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