



ENGLISH

FRANÇAIS

ESPAÑOL

OWNER'S & 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.

PDI Premium
PQNUD1S40, PQNUD1S41



MFL67982920
Rev.04_022924

www.lghvac.com
www.lg.com

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TIPS FOR SAVING ENERGY

Here are some tips that will help you minimize the power consumption when you use the air conditioner. You can use your air conditioner more efficiently by referring to the instructions below:

- Do not cool excessively indoors. This may be harmful for your health and may consume more electricity.
- Block sunlight with blinds or curtains while you are operating the air conditioner.
- Keep doors or windows closed tightly while you are operating the air conditioner.
- Adjust the direction of the air flow vertically or horizontally to circulate indoor air.
- Speed up the fan to cool or warm indoor air quickly, in a short period of time.
- Open windows regularly for ventilation as the indoor air quality may deteriorate if the air conditioner is used for many hours.
- Clean the air filter once every 2 weeks. Dust and impurities collected in the air filter may block the air flow or weaken the cooling / dehumidifying functions.

For your records

Staple your receipt to this page in case you need it to prove the date of purchase or for warranty purposes. Write the model number and the serial number here:

Model number : _____

Serial number : _____

You can find them on a label on the side of each unit.


Dealer's name : _____

Date of purchase : _____

SAFETY INSTRUCTIONS

The following safety guidelines are intended to prevent unforeseen risks or damage from unsafe or incorrect operation of the appliance.

The guidelines are separated into 'WARNING' and 'CAUTION' as described below.

 This symbol is displayed to indicate matters and operations that can cause risk. Read the part with this symbol carefully and follow the instructions in order to avoid risk.

WARNING

This indicates that the failure to follow the instructions can cause serious injury or death.

CAUTION

This indicates that the failure to follow the instructions can cause the minor injury or damage to the product.

WARNING

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.

Operation

- 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.

CAUTION

Installation

- Do not install the unit in potentially explosive atmospheres.

Operation

- 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.
- The appliance is only to be used with the power supply unit provided with the appliance.
- The appliance must only be supplied at safety extra low voltage corresponding to the marking on the appliance.

According to IEC 60335-1

This appliance is not intended for use by person (including children) with reduced physical, 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.

According to EN 60335-1

This appliance can be used by children aged from 8 years and above and person with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

Class A device

NOTE

This equipment has been tested and identified as complying with the limits for a Class A digital device, and acts in accordance with part 15 of the FCC Rules. These rules are designed to provide protect the equipment from any detrimental damages while operating in a commercial environment. This equipment generates, uses, and can emits radio frequency energy.

If it is not installed and used according to the instruction manual, it may cause detrimental damage to the radio communications. Ensure that this product is NOT operated within residential premises as it might emit dangerous radiations. In such a scenario, the user is responsible for damage repair.

CAUTION

Changes or modifications that are not approved by the manufacturer responsible for compliance could render the user authority as invalid.

- Selection of Transformer.
 - Select an insulation product that complies with IEC61558-2-6(or UL5085-3) and NEC Class 2.
 - Considering PDI current consumption, connect only one PDI per Transformer.
 - To supply power to PDIs sold in the U.S., be sure to use a transformer with VA rating not exceeding 20 VA.

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6 Name of each part

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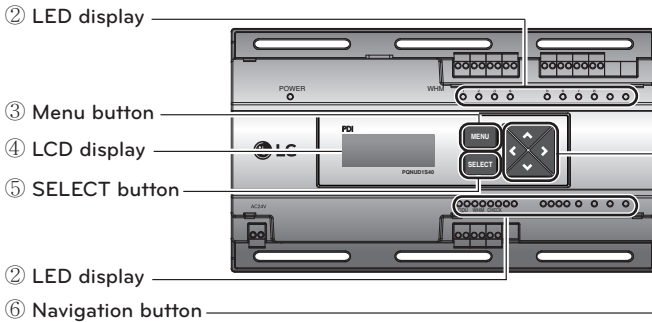
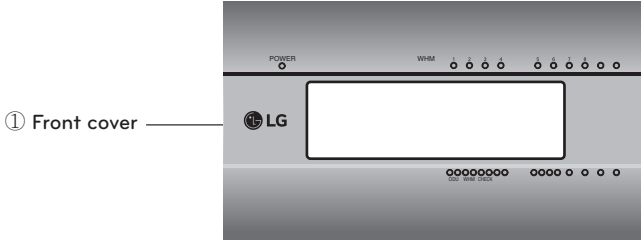
AN ARBITRATION PROVISION

By using this product, you agree that all disputes between you and LG arising out of or relating in any way to this product (including but not limited to warranty disputes) shall be resolved exclusively through binding arbitration on an individual basis.

The terms of the arbitration agreement (including details on the procedure for resolving disputes) is available at www.lg.com/us/arbitration (USA) or www.lg.com/ca_en/arbitration (Canada) and/or your owner's manual or warranty.

NAME OF EACH PART

Name of each part



① Front cover

② LED display Displays current status of power indicator

③ Menu button Use for checking initial setting and electric power

④ LCD display Displays setting information and power usage

⑤ SELECT button Use for initial setting

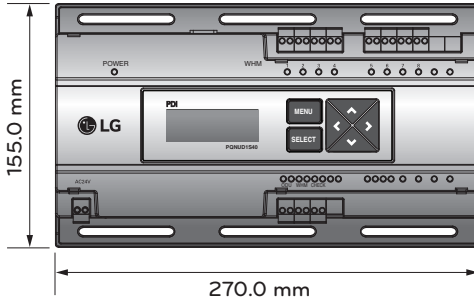
⑥ Navigation button Use for checking initial setting and electric power

⑦ Power supply Supply power for power indicator

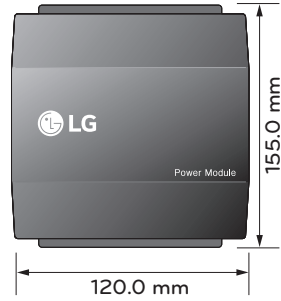
(The Power supply is not provided with the PDI Premium package sold in the U.S.)

COMPONENTS

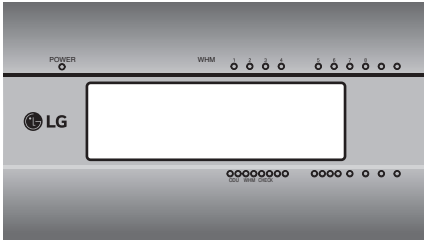
Components



Power indicator



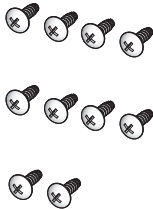
Power supply



Front cover



Manual



10 screws (M4 x 12 mm)

* The Power supply, 4 screws(M4 x 12 mm) are not provided with the PDI package sold in the U.S.

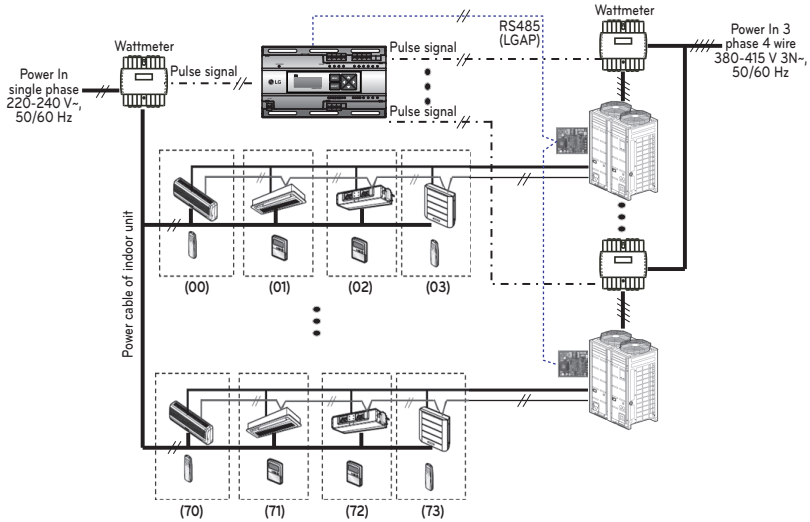
INSTALLATION METHOD







Diagram of overall product configuration

When interlocked to pulse type wattmeter

• When interlocked to EHP product

- Independent Operation of Power Indicator (interlocked to EHP products)



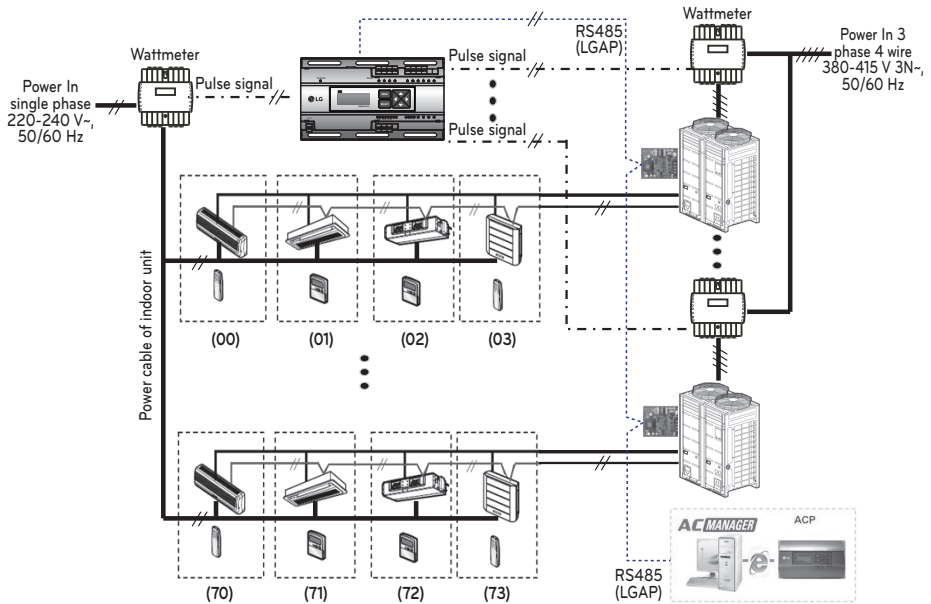
-  : Power cable for 3 phase 4 wire
-  : Power cable for single phase
-  : Communication cable (2 wire shielded cable): Between outdoor unit and central controller
-  : Communication cable (2 wire shielded cable): Between indoor unit and outdoor unit
-  : Pulse signal wire
-  : Refrigerant pipe

CAUTION

- Depending on the electric power, use the wattmeter for remote reading by sending the pulse signal.
- Use the wattmeter with the pulse width of 50 - 400 ms.
- The wattmeter pulse must be able to sink at least 3 mA or more of current in the power indicator.
- Use the wattmeter of 1 W/pulse, 2 W/pulse, 4 W/pulse, 6 W/pulse, 8 W/pulse, 10 W/pulse, 100 W/pulse and PT/CT (1-50 000).
- When setting the wattmeter, set it to Master Mode.
- Maximum of 8 wattmeters can be installed.
- The distance between power indicator and wattmeter should be shorter than 50 m in normal circumstance.
- When electrical or mechanical noise is expected, more shorter wiring is needed.
- For watt-hour meter setting, inquire to the corresponding vendor.

* EHP (Electric Heat Pump): It is an electric air conditioner to drive the compressor by electric power.

• Interlocked Operation with Central Controller (interlocked to EHP product)



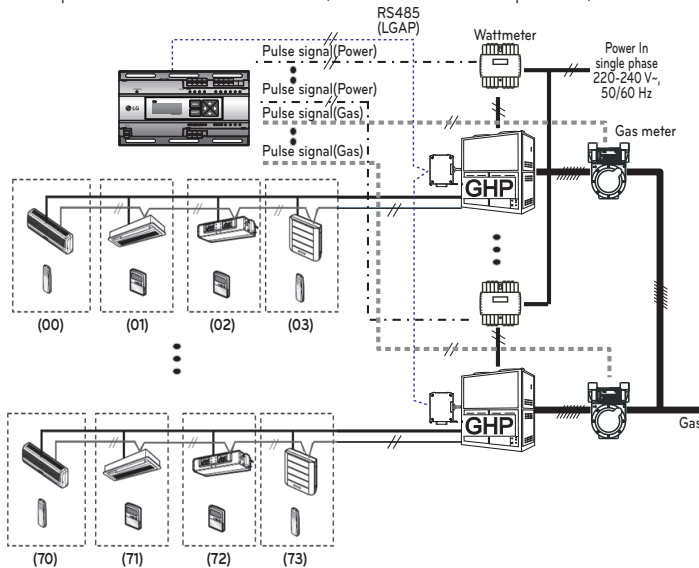
- ////** : Power cable for 3 phase 4 wire
- ==** : Power cable for single phase
-//.....** : Communication cable (2 wire shielded cable): Between outdoor unit and central controller
- ==//** : Communication cable (2 wire shielded cable): Between indoor unit and outdoor unit
- // ..** : Pulse signal wire
- : Refrigerant pipe

! CAUTION

- Depending on the electric power, use the wattmeter for remote reading by sending the pulse signal.
- Use the wattmeter with the pulse width of 50 - 400 ms.
- The wattmeter pulse must be able to sink at least 3 mA or more of current in the power indicator.
- Use the wattmeter of 1 W/pulse, 2 W/pulse, 4 W/pulse, 6 W/pulse, 8 W/pulse, 10 W/pulse, 100 W/pulse and PT/CT (1-50 000).
- When setting the wattmeter, set it to Slave Mode.
- Maximum of 8 wattmeters can be installed.
- The distance between power indicator and wattmeter should be shorter than 50 m in normal circumstance.
- When electrical or mechanical noise is expected, more shorter wiring is needed.
- For watt-hour meter setting, inquire to the corresponding vendor.

• When interlocked to GHP product

- Independent Operation of Power Indicator (interlocked to GHP product)



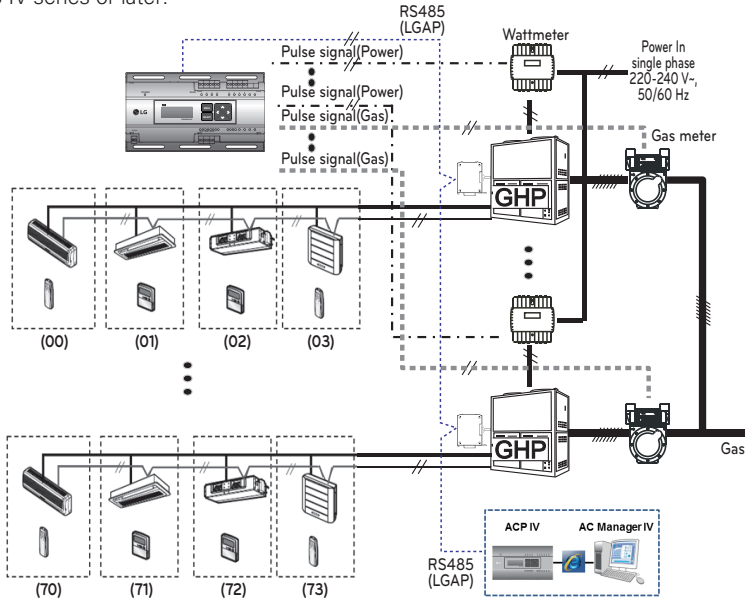
- : Power cable for single phase
- : Communication cable (2 wire shielded cable): Between outdoor unit and central controller
- : Communication cable (2 wire shielded cable): Between indoor unit and outdoor unit
- : Pulse signal wire
- : Refrigerant pipe
- : Gas pipe
- : Pulse signal wire(Gas)

⚠ CAUTION

- Use the wattmeter for remote reading to send pulse signal depending on wattage.
- Use the wattmeter with the pulse width of 50 - 400 ms.
- The wattmeter pulse must be able to sink at least 3 mA or more of current in the power indicator.
- Use the wattmeter for 1 W/Pulse, 2 W/Pulse, 4 W/Pulse, 6 W/Pulse, 8 W/Pulse, 10 W/Pulse, 100 W/Pulse, PT / CT (1 - 50 000).
- Use the gas meter for remote reading to send pulse signal depending on gas consumption.
- Use the gas meter with the pulse width of 50 ms or more.
- Use the gas meter containing the max. gas pressure of 0.2-10 m³/h.
- Gas meter pulse must be able to sink at least 3mA of current or more in the power indicator.
- Use the gas meters for 1 l / Pulse, 2 l / Pulse, 4 l / Pulse, 6 l / Pulse, 8 l / Pulse, 10 l / Pulse, 100 l / Pulse, VT / Pr (1 - 50 000).
- Set to Master Mode when setting the wattmeter or gas meter.
- Wattmeter or gas meter can be installed up to 4.
- Connection cable for the power indicator and wattmeter (gas meter) must not exceed 50 m in normal circumstance.
- Reduce the length of connection cable if there is any electrical or mechanical noise on the site.
- For watt-hour meter and gas meter setting, inquire to the corresponding vendor.

* GHP (Gas engine Heat Pump): It is a gas air-conditioner to drive the compressor with LNG or LPG as a heat source and the gas engine electric power.

- Interlocked operation with central controller(interlocked to GHP product)
- * When linked with the GHP product, the central controller is linked only possible model of ACS IV series or later.



	: Power cable for single phase
	: Communication cable (2 wire shielded cable): Between outdoor unit and central controller
	: Communication cable (2 wire shielded cable): Between indoor unit and outdoor unit
	: Pulse signal wire
	: Refrigerant pipe
	: Gas pipe
	: Pulse signal wire(Gas)

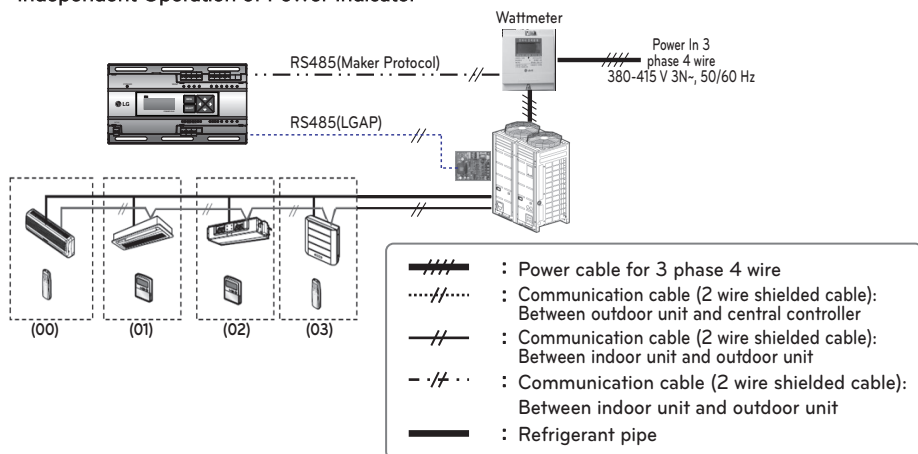
⚠ CAUTION

- Use the wattmeter for remote reading to send pulse signal depending on wattage.
- Use the wattmeter with the pulse width of 50 - 400 ms.
- The wattmeter pulse must be able to sink at least 3 mA or more of current in the power indicator.
- Use the wattmeter for 1 W/Pulse, 2 W/Pulse, 4 W/Pulse, 6 W/Pulse, 8 W/Pulse, 10 W/Pulse, 100 W/Pulse, PT / CT (1 - 50 000).
- Use the gas meter for remote reading to send pulse signal depending on gas consumption.
- Use the gas meter with the pulse width of 50 ms or more.
- Use the gas meter containing the max. gas pressure of 0.2-10 m³/h.
- Gas meter pulse must be able to sink at least 3 mA of current or more in the power indicator.
- Use the gas meters for 1 l / Pulse, 2 l / Pulse, 4 l / Pulse, 6 l / Pulse, 8 l / Pulse, 10 l / Pulse, 100 l / Pulse, VT / Pr (1 - 50 000).
- Set to Slave Mode when setting the wattmeter or gas meter.
- Wattmeter or gas meter can be installed up to 4.
- Connection cable for the power indicator and wattmeter (gas meter) must not exceed 50 m in normal circumstance.
- Reduce the length of connection cable if there is any electrical or mechanical noise on the site.
- For watt-hour meter and gas meter setting, inquire to the corresponding vendor.

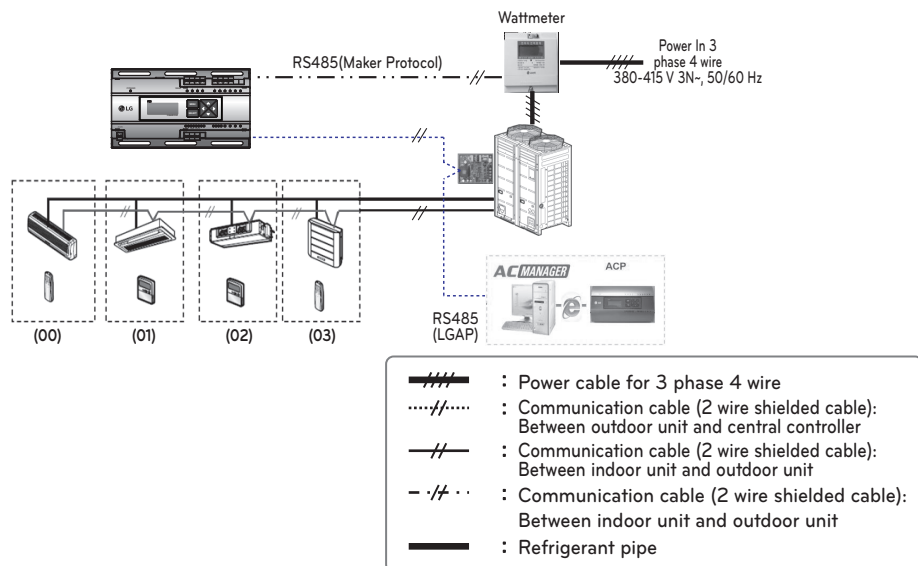
When interlocked to RS-485 type wattmeter (EHP products only)

Interlock function with RS-485 type wattmeter is available only for EHP products.

• Independent Operation of Power Indicator



• Interlocked operation with central controller

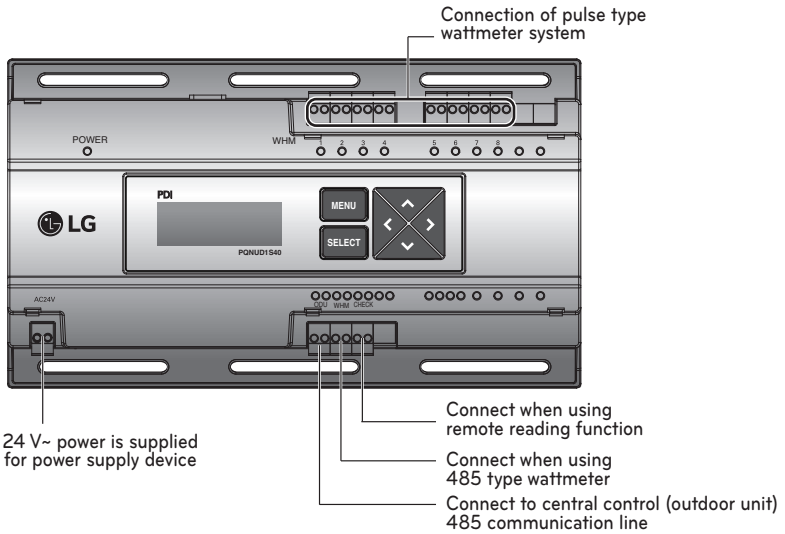


! CAUTION

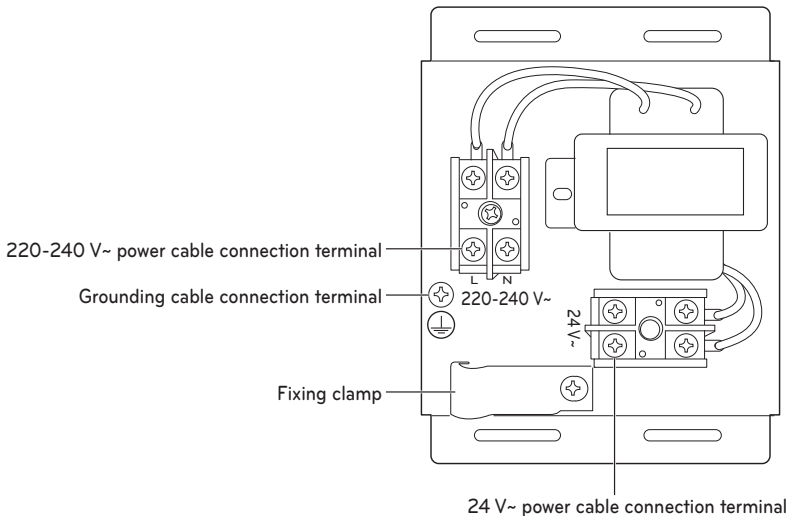
- Use the wattmeter (Interlock function with Omni System) that sends the electric energy through 485 communications.
- When setting the wattmeter, set to Master Mode for independent operation and Slave Mode for interlocked operation.
- When using the 485 wattmeter, maximum of 1 unit can be installed.
- For 485 watt-hour meter setting, inquire to the corresponding vendor.

How to wire the product (when EHP product is connected)

Wiring Power Indicator



Wiring Power Supply

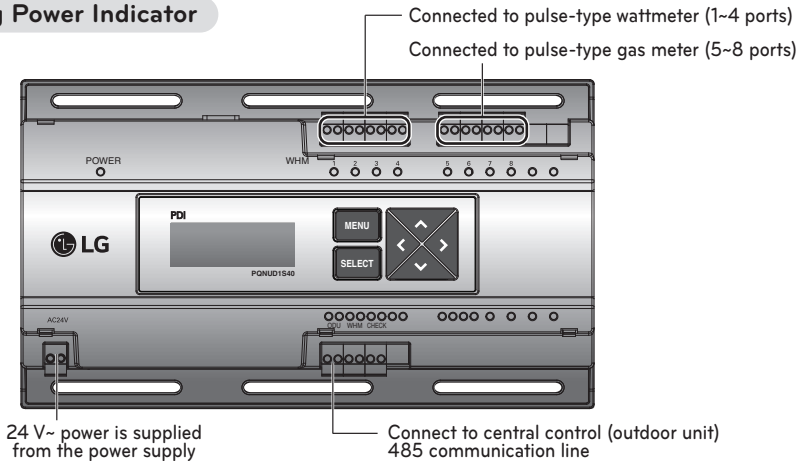


CAUTION

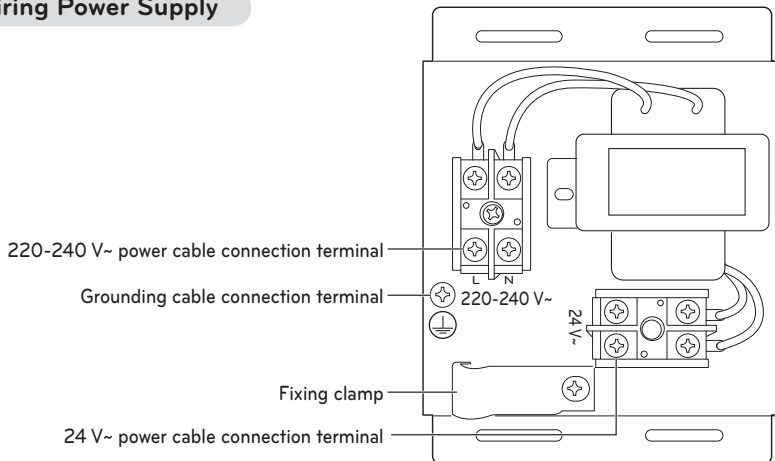
- Power must be turned on after the product is wired completely.

How to wire the product (when GHP product is connected)

Wiring Power Indicator



Wiring Power Supply



CAUTION

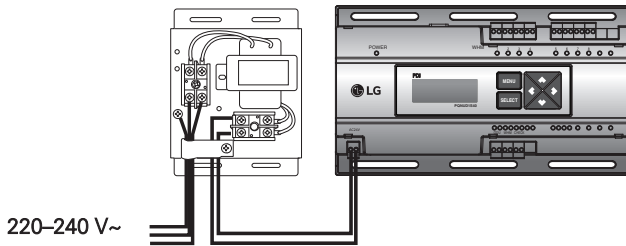
- Power supply must be applied after wiring the product is completed, if applicable.

- * The Power supply is not provided with the PDI package sold in the U.S.
- Selection of Transformer.
 - Select an insulation product that complies with IEC61558-2-6(or UL5085-3) and NEC Class 2.
 - Considering PDI current consumption, connect only one PDI per Transformer.
 - To supply power to PDIs sold in the U.S., be sure to use a transformer with VA rating not exceeding 20 VA.

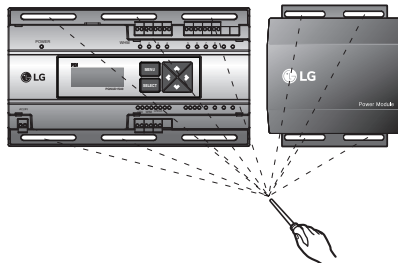
Wiring

- Separate the power supply case.
- Loosen the clamp fixing the power supply.
- Connect the 220–240 V~ power cable to the black and grounding terminal.
- Connect the 24 V~ power cable to the yellow terminal.
- Use the clamp to fixate the 220–240 V~ and 24 V~ power cable.
- Use the screw to assemble the case.
- Use the included screws to fixate the power indicator and power supply at appropriate locations within the electric panel.
- Connect the 24 V~ power cable connected to the power supply to the power terminal of the power indicator.
- Wire wattmeter, gas meter, central controlled communication cable, and the repeater for remote reading.

Power connection

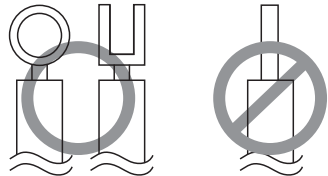


Mounting on wall



! WARNING

- Always tighten the terminal screws so that they do not become loose.
- When connecting the power and communication cable, always use the terminal (O-Ring, Y-Ring).
- For 220–240 V~ power cable, use (CV) 1.5 mm² x 3 and for 24 V~ power cable, use the CV wire.



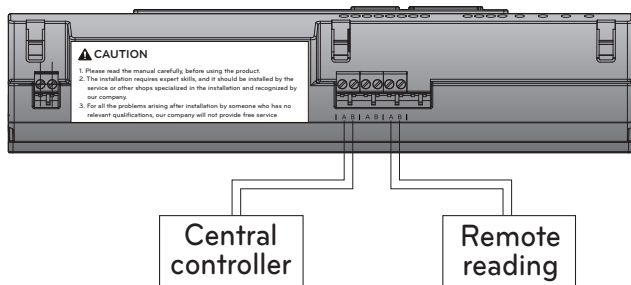
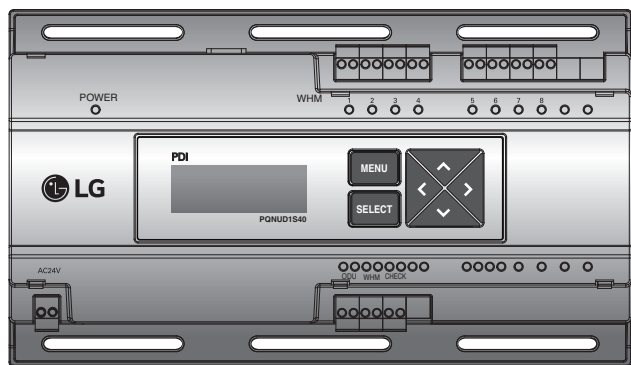
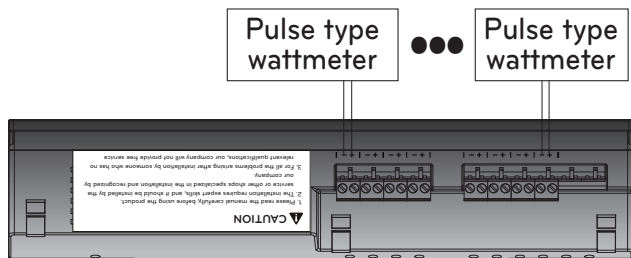
! CAUTION

- Power must be turned on after the product is wired completely.
- When power is removed and then applied again, power on after 2 minutes.

Connect the wattmeter and communication cable (EHP products)

When connecting the pulse-type wattmeter

- Independent Operation of Power Indicator (interlocked to EHP product)

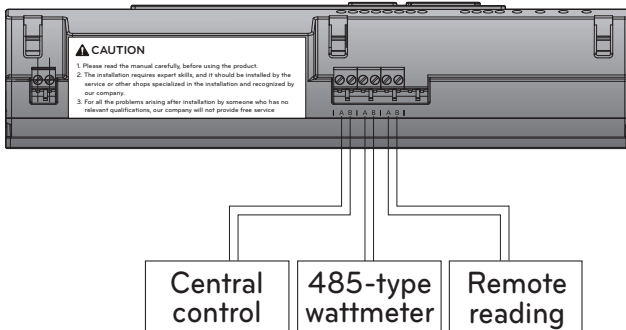
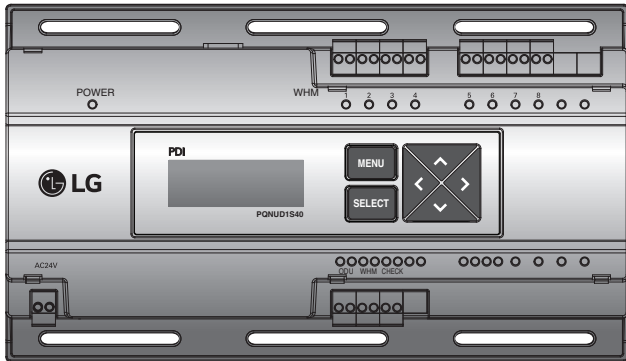
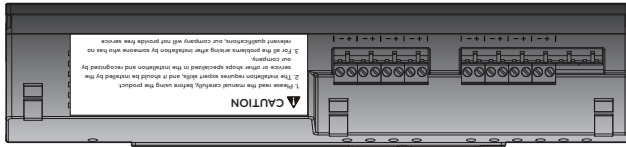


⚠ CAUTION

- The color and polarity of the signal wire may be different from the details indicated on the case depending on the manufacturer of wattmeter. [Black: (-), white: (+)]
- When connecting the 485 communication cable, make sure to check the A, B polarity.
- After connecting the wattmeter, check whether the signal is connected through the LED.
- Power indicator and Pulse Type wattmeter must be installed in same panel.

When connected to RS-485 type wattmeter

- Interlock function with RS-485 type wattmeter is available only for EHP products.

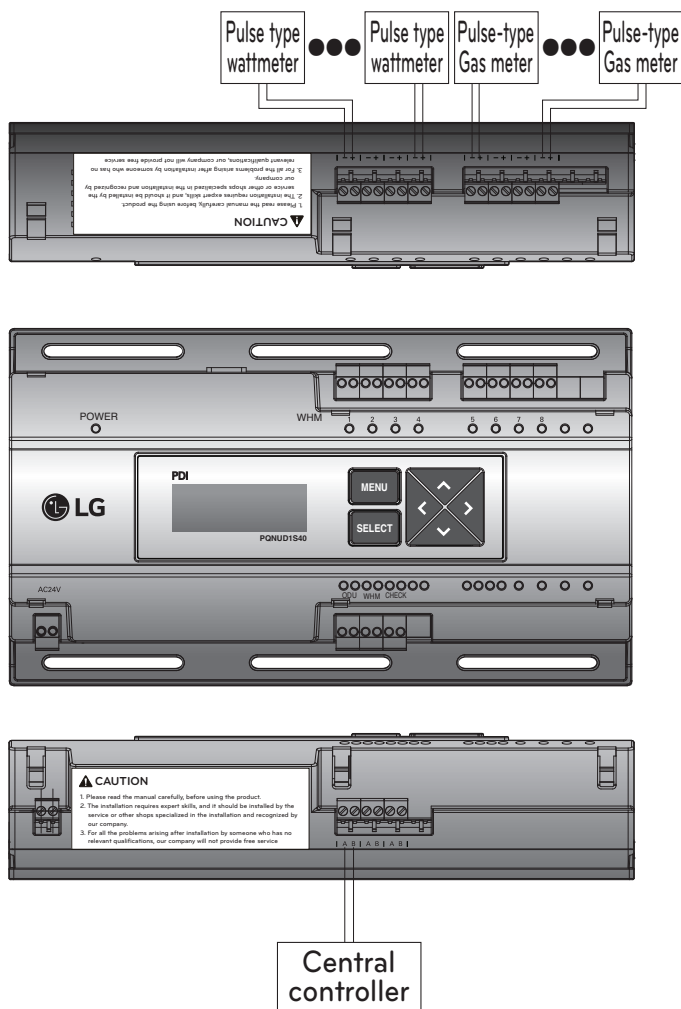


⚠ CAUTION

- The color and polarity of the signal wire may be different from the details indicated on the case depending on the manufacturer of wattmeter. [Black: (-), white: (+)]
- When connecting the 485 communication cable, make sure to check the A, B polarity.
- After connecting the wattmeter, check whether the signal is connected through the LED.
- Power indicator and Pulse Type wattmeter must be installed in same panel.

Connection of wattmeter, gas meter and communication cable (GHP products)

When connecting the pulse-type wattmeter / gas meter



⚠ CAUTION

- The color and polarity of the signal wire may be different from the details indicated on the case depending on the manufacturer of wattmeter. [Black: (-), white: (+)]
- When connecting the 485 communication cable, make sure to check the A, B polarity.
- After connecting the wattmeter, check whether the signal is connected through the LED.
- Install the power indicator and the pulse-type wattmeter on the same panel.
- Make sure that the pulse lines of the wattmeter and gas meter are connected to the correct positions (wattmeter: 1-4 ports; gas meter: 5-8 ports).

SETTING AND USING METHOD

Glossary

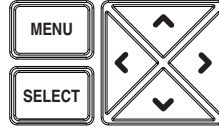
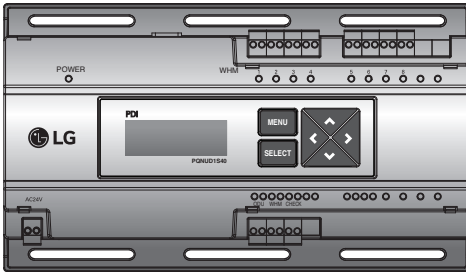
- EHP (Electric Heat Pump)
It is an electric air conditioner to drive the compressor by electric power.
- GHP (Gas engine Heat Pump)
GHP is a gas air conditioner to drive the compressor with LNG and LPG gas as a heat source and power supply for gas engine.
- WHM: wattmeter
- LHM: gas meter
- ODU: Outdoor Unit
- IDU: Indoor Unit
- REMOTE COM: remote meter reading company
- STANDBY P: Standby Power
- NOT USE: setting as disabled
- CT: deflector device
- PT: transforming equipment
- VT: volume adjustment device
- Pr: gauge integer

Setting

Description of button function

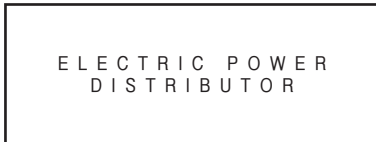
- Menu button: Move to standby screen after setting is completed. Use for reading wattmeter
- Direction button: Move to item to set
- SELECT button: Enter applicable setting window and set changed information

Enter function setting mode

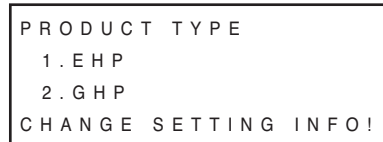


- **If entering the setting screen for the first time.**

- After turning power on, press the MENU button and the SELECT button at the same time and the screen will change to the screen where you can select the product connection type. Select the product type to connect, and then press the SELECT button. Then, the selection of the product will be saved and the screen will be switched to the main standby screen.



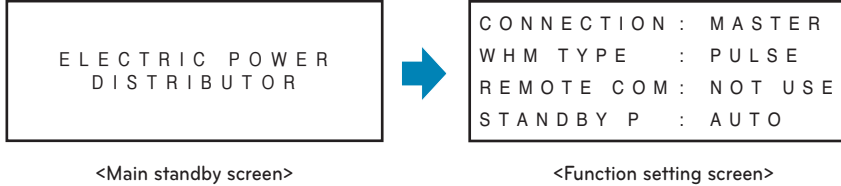
<Main standby screen>



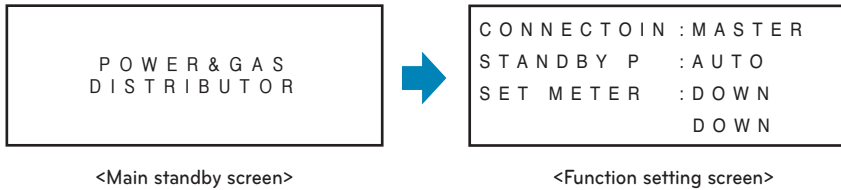
<Connection Product Type Setting Screen>

- If after selecting the connection product type at least once, you are entering the setting screen.

- After turning power on, press the MENU button and the SELECT button at the same time and then will be switched to the function setting screen.



- After selecting GHP product



- The item with letters blinking is the current setting location on the function setting screen.

※ If you want to change the connection type of product

- On the function setting screen, press the (▲) button and (▼) button simultaneously, and then you can enter the connected product type setting screen.

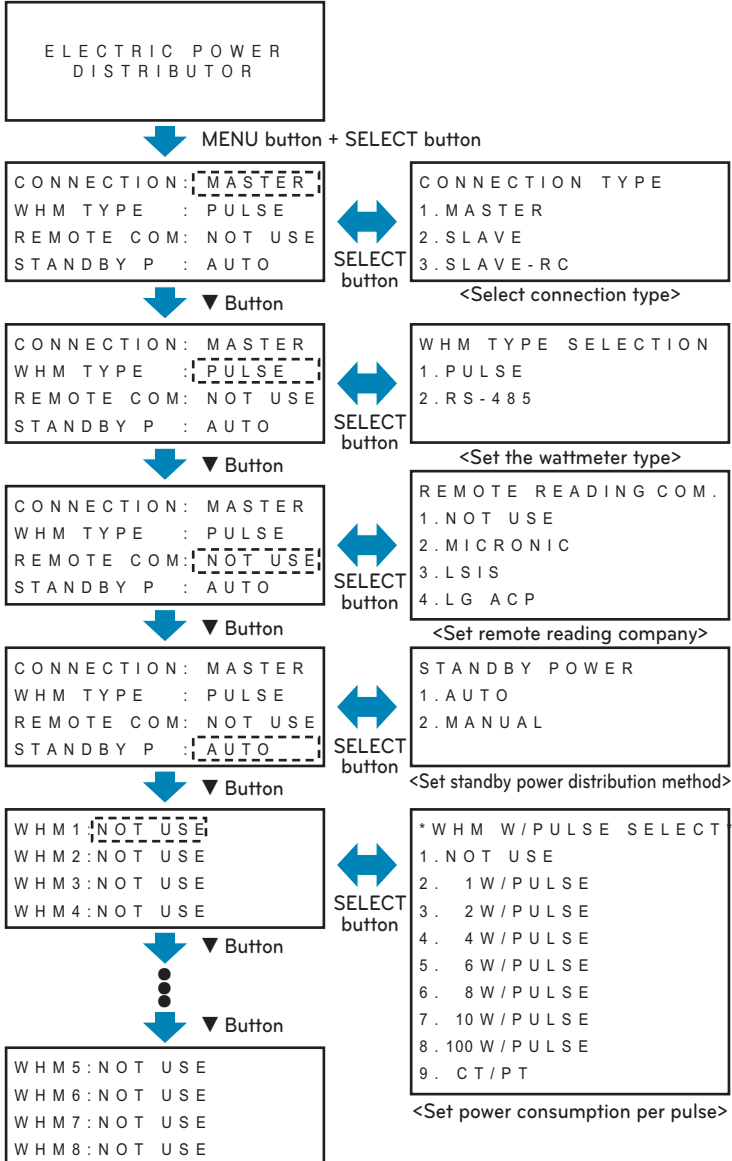
⚠ CAUTION

- Power indicator setting only can be changed during the 20 minutes after turning on the power. Twenty (20) minutes later, if you need to change settings, turn the power indicator on again.

Setting up detailed functions (EHP products)

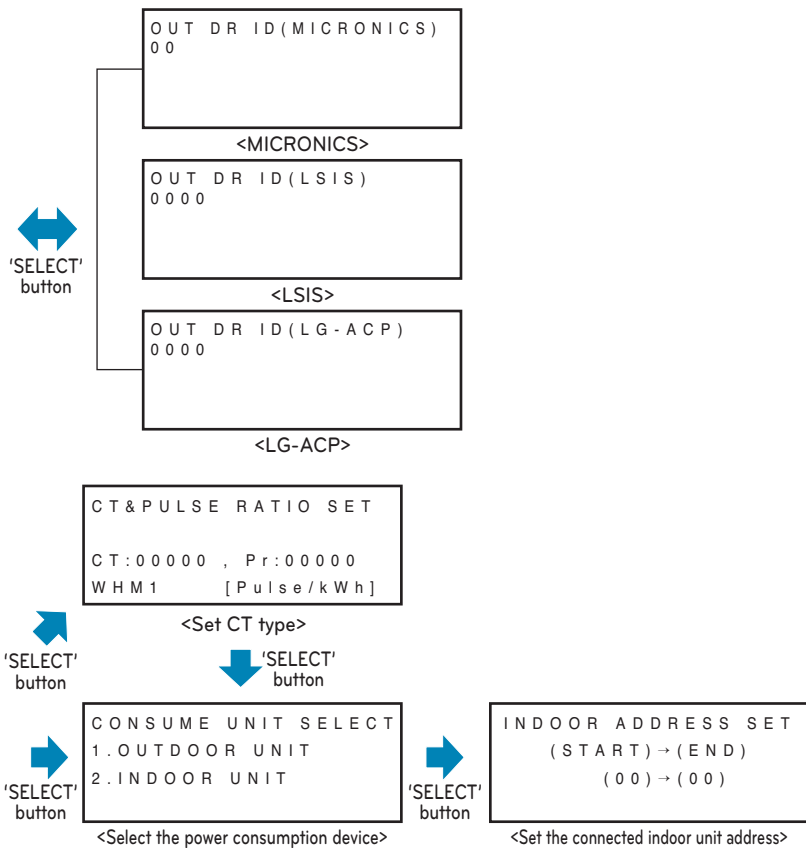
Flowchart for how to set up functions (EHP products)

While EHP product is selected, set the detailed functions of the power indicator with reference to the flowchart below



⚠ CAUTION

- Power indicator setting only can be changed during the 20 minutes after turning on the power. Twenty (20) minutes later, if you need to change settings, turn the power indicator on again.



Setting functions (EHP products)

• Connection type setting: Setting based on system configuration

- In case of power indicator single composition: MASTER
- In case of central controller interface: SLAVE
 - ※ If one unit of SLAVE is set as SLAVE-RC, protection logic for distribution error by central controller failure is operated.

```

CONNECTION : MASTER
WHM TYPE   : PULSE
REMOTE COM : NOT USE
STANDBY P  : AUTO
  
```



```

CONNECTION TYPE
1 . MASTER
2 . SLAVE
3 . SLAVE-RC
  
```

- When the CONNECTION item flashes, press the SELECT button to enter the setting window. Press the SELECT button at the item to set to save the setting and return to the initial setting screen.



CAUTION

- When you set the connection type, you need to set only one unit as SLAVE RC Type.

• Wattmeter type setting: Setting based on connected wattmeter.

- Pulse: When using wattmeter that sends electric energy as pulse signal
- RS-485: When using wattmeter that sends electric energy via RS-485 communication

```

CONNECTION : MASTER
WHM TYPE   : PULSE
REMOTE COM : NOT USE
STANDBY P  : AUTO
  
```



```

WHM TYPE SELECTION
1 . PULSE
2 . RS-485
  
```

- When the WHM TYPE item flashes, press the SELECT button to enter the setting window. Press the SELECT button at the item to set to save the setting and return to the initial setting screen.

• Whether to use remote reading and set the reading company

- NOT USE: Not use the remote reading function
- Set the remote reading company to use

```

CONNECTION : MASTER
WHM TYPE   : PULSE
REMOTE COM : NOT USE
STANDBY P  : AUTO
  
```



```

REMOTE READING COM .
1 . NOT USE
2 . MICRONIC
3 . LSIS
  
```



```

REMOTE READING COM .
4 . LG ACP
  
```

→ When the REMOTE COM item flashes, press the SELECT button to enter the setting window. When the name of the applicable remote reading company flashes, press the SELECT button to set the remote reading company and move to the address input window.

- Address setting based on remote reading company setting

* When setting Micronics: 00,06,12,18...(Increase by 6 units)

```
OUT DR ID (MICRONICS)
00
```

* When setting LS Industrial Systems: Can be changed to 0000-9999 (Increase by 2 units)

```
OUT DR ID (LSIS)
0000
```

* When setting to ACP: Can be changed to 00-99

```
OUT DR ID (LG-ACP)
00 00
```

→ After entering the remote reading ID, press the SELECT button to save the setting and return to the initial setting screen.



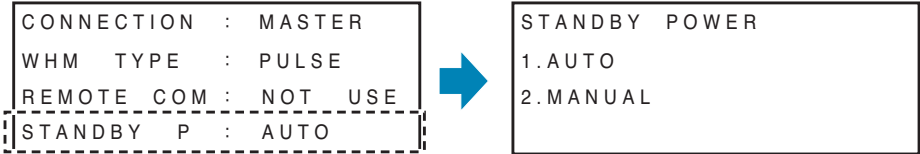
CAUTION

- When setting the remote reading ID, enter the ID assigned by the remote reading company.

- **Standby power distribution method setting**

Standby power: Power consumed by outdoor unit when all indoor units are turned off

- AUTO: Automatically distributes the standby power to all connected indoor units
- Manual: Does not distribute the standby power and saves separately



- When the STANDBY P item flashes, press the SELECT button to enter the setting window.
Press the SELECT button at the item to set to save the setting and return to the initial setting window.



CAUTION

- Factor default is MASTER, PULSE, NOT USE and AUTO.

Setting detailed properties (EHP products)

- **Wattmeter property setting:** Based on the wattmeter type setting, it automatically switches to property setting screen.

- Pulse type: Set power consumption by pulse, set attached location (Indoor/Outdoor unit classification), set indoor unit address
- CT type: Set CT and device constant value, set attached location (Indoor/Outdoor unit classification), set indoor unit address
- RS-485 communication type: Set wattmeter address, set attached location (Indoor/Outdoor unit classification), set indoor unit address

- **When setting pulse type**

```
CONNECTION : MASTER
WHM TYPE  : PULSE
REMOTE COM : NOT USE
STANDBY P : AUTO
```

Press the ▼ button at the initial setting screen to enter the wattmeter property setting screen.

```
WHM1 : NOT USE
WHM2 : NOT USE
WHM3 : NOT USE
WHM4 : NOT USE
```

When the wattmeter item to set flashes, press the SELECT button to change to detail setting window.

```
*WHM W/PULSE SELECT*
1. NOT USE
2. 1W/PULSE
3. 2W/PULSE DOWN
```

It proceeds in the order of Set power consumption by pulse → Set power consumption device → Set connected indoor address.

- Set power consumption by pulse (WHM W/PULSE SELECT) : Enter the value displayed on the wattmeter as power consumption per pulse

- Set power consumption device (CONSUME UNIT SELECT) : Check and set whether the product on which the wattmeter is installed is a indoor or outdoor unit.
 - ※ If one indoor unit is set to use both outdoor unit power distribution and indoor unit power distribution, wattage value is displayed as indoor unit wattage value by summing outdoor unit power distribution value and indoor unit power distribution value.

```
CONSUME UNIT SELECT
1. OUTDOOR UNIT
2. INDOOR UNIT
```

- Set connected indoor address (INDOOR ADDRESS SET)

: Enter the indoor address connected to applicable wattmeter.

※ After the initial installation, address setting of indoor unit connected to each port shall not be changed. If it is changed, previous data cannot be used.

```
INDOOR ADDRESS SET
( START ) → ( END )
( 00 ) → ( 00 )
```

After setting the applicable item, press the SELECT button to save the setting and to move to the next stage.

```
WHM1 : 2W ,ODU ,00-00
WHM2 : NOT USE
WHM3 : NOT USE
WHM4 : NOT USE
```

Setting information is reflected to the detail setting window.

After setting all wattmeters, press the MENU button to save the setting and move to the initial screen.

• When setting CT type

```
* WHM W / PULSE SELECT *
1 . NOT USE
2 . 1W / PULSE
3 . 2W / PULSE          DOWN
```



```
* WHM W / PULSE SELECT *
7 . 10W / PULSE          UP
8 . 100W / PULSE
9 . CT / PT
```



```
CT & PULSE RATIO SET
CT : 00000 , Pr : 00000
WHM1 [ Pulse / kWh ]
```



```
CONSUME UNIT SELECT
1 . OUTDOOR UNIT
2 . INDOOR UNIT
```



```
INDOOR ADDRESS SET
( START ) → ( END )
( 00 ) → ( 00 )
```



```
WHM1 : CT / PT , IDU , 00 - 00
WHM2 : NOT USE
WHM3 : NOT USE
WHM4 : NOT USE
```

Press the (▼) button to set CT/PT from the power consumption setting screen per pulse.

When 9. CT/PT item flashes, press the SELECT button to enter CT, Pr input window.

It proceeds in the order of Set CT, device constant → Set power consumption device → Set connected indoor address.
- CT, calibrating constant setting (CT&PULSE RATIO SET)

* CT: As the device to reduce the current so that the measuring device can take the measurement, enter the rate indicated on the product to the CT item.

Ex) when using 100:1 CT, enter 100 to the CT item.

* Pr: As the device constant value, it is displayed as ratio of output pulse per power consumption of wattmeter.

For the device constant value, enter the value displayed on wattmeter [Pulse/kWh]

Ex) when using 2 500 [Pulse/kWh] wattmeter, enter 2 500 to Pr item.

- Power consumption device setting (CONSUME UNIT SELECT)

: Check whether the product with watt-hour meter installed is outdoor unit or indoor unit first, and perform the setting.

※ If one indoor unit is set to use both outdoor unit power distribution and indoor unit power distribution, wattage value is displayed as indoor unit wattage value by summing outdoor unit power distribution value and indoor unit power distribution value.

- Connected indoor unit address setting (INDOOR ADDRESS SET)

: Input the address of the indoor unit connected to the corresponding watt-hour meter.

※ After the initial installation, address setting of indoor unit connected to each port shall not be changed. If it is changed, previous data cannot be used.

After setting the applicable item, press the SELECT button to save the setting and to move to the next stage.

Setting information is reflected to the detail setting window.

After setting all wattmeters, press the MENU button to save the setting and move to the initial screen.

• When setting RS-485 communication type

```
CONNECTION : MASTER
WHM TYPE   : PULSE
REMOTE COM : NOT USE
STANDBY P  : AUTO
```



```
CONNECTION : MASTER
WHM TYPE   : RS-485
REMOTE COM : NOT USE
STANDBY P  : AUTO
```



```
WHM1 : RS485, ODU, 00-00
```



```
WHM (RS485) ADDRESS
SET : 000000000000
```



```
CONSUME UNIT SELECT
1. OUTDOOR UNIT
2. INDOOR UNIT
```



```
INDOOR ADDRESS SET
(START) → (END)
(00) → (00)
```



```
WHM1 : RS485, ODU, 00-00
```

In the setting screen, change the wattmeter type to RS-485.

Press the (▼) key at the initial setting screen to enter the wattmeter property setting screen.

When the wattmeter item to set flashes, press the SELECT button to change to detail setting window.

It proceeds in the order of Set wattmeter address → Set power consumption device → Set connected indoor address.

- Set wattmeter address (WHM ADDRESS)
 - : For the 485 wattmeter address, enter the 12 digits displayed on the side barcode of 485 wattmeter.
- Set power consumption device (CONSUME UNIT SELECT)
 - : Check and set whether the product on which the wattmeter is installed is an indoor or outdoor unit.
 - ※ If one indoor unit is set to use both outdoor unit power distribution and indoor unit power distribution, wattage value is displayed as indoor unit wattage value by summing outdoor unit power distribution value and indoor unit power distribution value.
- Set connected indoor address (INDOOR ADDRESS SET)
 - : Enter the indoor address connected to applicable wattmeter.
 - ※ After the initial installation, address setting of indoor unit connected to each port shall not be changed. If it is changed, previous data cannot be used.

After setting the applicable item, press the SELECT button to save the setting and to move to the next stage.

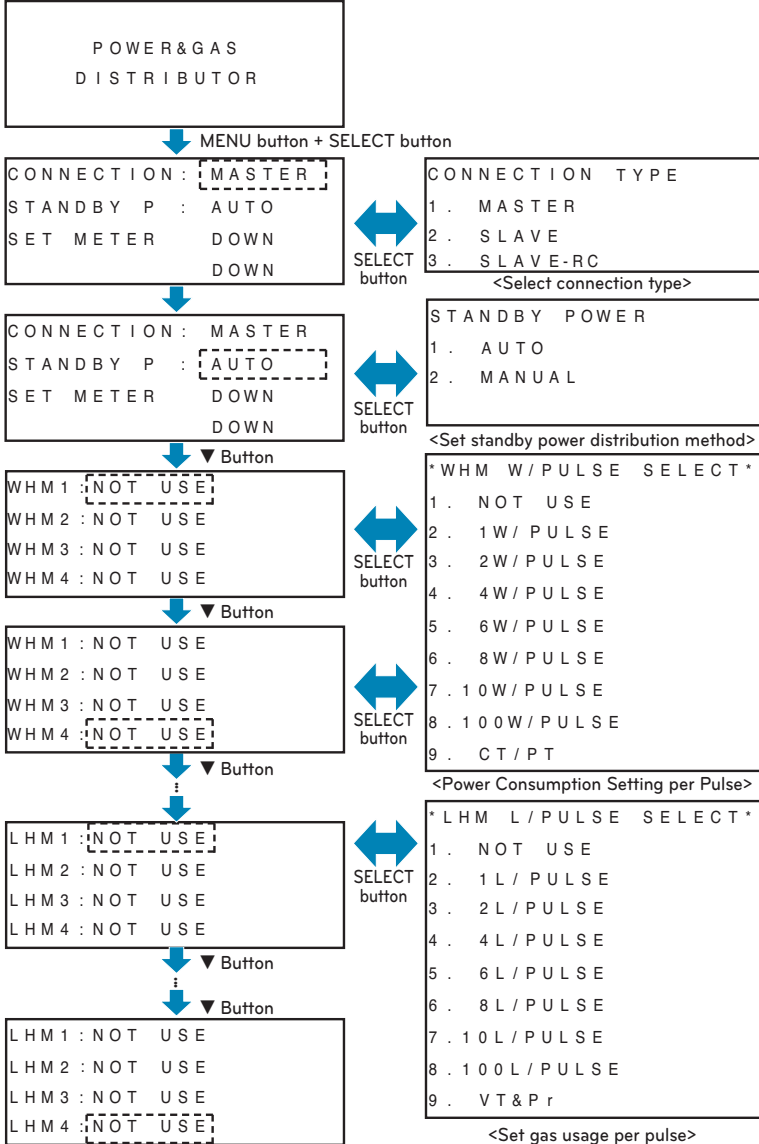
Setting information is reflected to the detail setting window.

After setting all wattmeters, press the MENU button to save the setting and move to the initial screen.

Setting detailed functions (GHP products)

Function Setting Method Flowchart (GHP products)

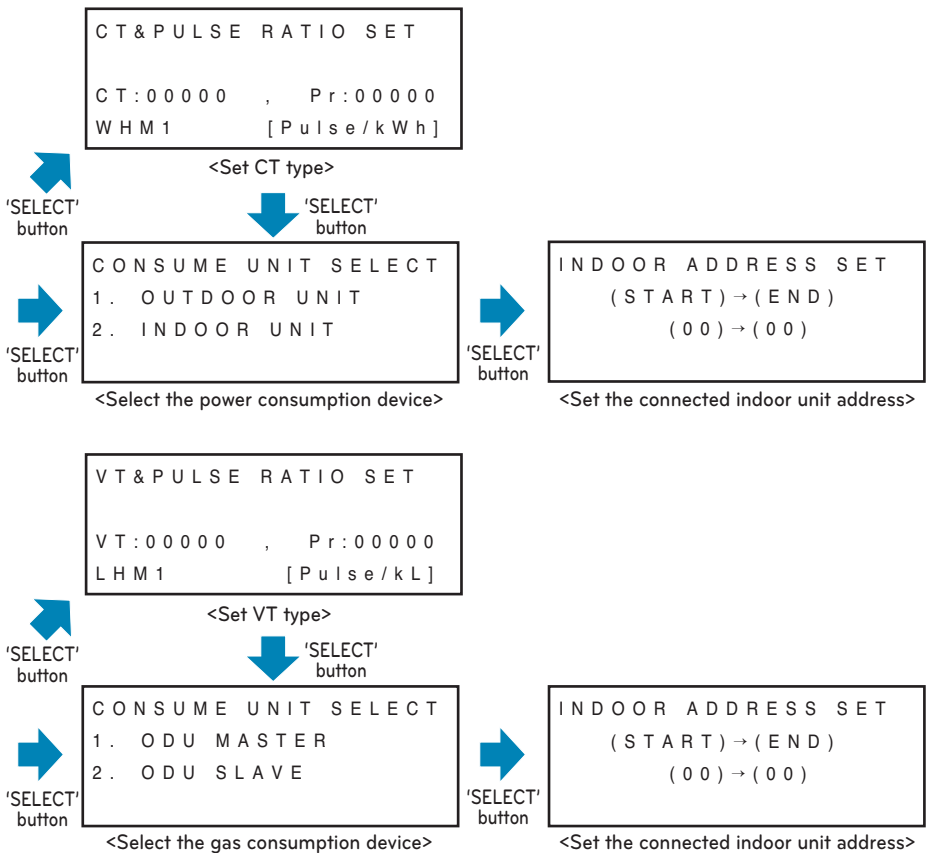
While GHP product is selected, set the detailed functions of the power indicator with reference to the following flowchart.





CAUTION

- Power indicator setting only can be changed during the 20 minutes after turning on the power.
Twenty (20) minutes later, if you need to change settings, turn the power indicator on again.



Setting functions (GHP products)

• Set the properties of the wattmeter and gas meter.

- Pulse type: Set power consumption per pulse / gas consumption, mounting location (divide indoor and outdoor unit), and the indoor unit address.
- CT (VT) type: Set CT (VT), the instrument integer value, mounting location (divide indoor and outdoor unit), and the indoor unit address.

WHM1 ~ WHM4: Mount the wattmeter.

LHM1 ~ LHM4: Mount the gas meter.

• When setting the properties of the pulse-type wattmeter (WHM1 ~ WHM4).

```
CONNECTION : MASTER
STANDBY P  : AUTO
SET METER   DOWN
            DOWN
```

On the Home screen, press the (▼) button and then the screen is switched to the wattmeter / gas meter property setting screen.

```
WHM1 : NOT USE
WHM2 : NOT USE
WHM3 : NOT USE
WHM4 : NOT USE
```

When the item of the wattmeter you want to set is blinking, press the SELECT button, and the screen will be switched to the detailed setting screen.

```
*WHM W/PULSE SELECT*
1. NOT USE
2. 1W/PULSE
3. 2W/PULSE DOWN
```

Set power consumption per pulse → set the power consumption device → set the connected indoor unit address in order.

- Set power consumption per pulse (WHM W / PULSE SELECT).
: Please enter a value shown in the wattmeter as the power consumption recognized per pulse.

- Set the power consumption device (CONSUME UNIT SELECT).
: Please set up after making sure that the wattmeter is installed, and checking whether the product installed is the indoor or outdoor unit.

※ If one indoor unit is set to use both outdoor unit power distribution and indoor unit power distribution, wattage value is displayed as indoor unit wattage value by summing outdoor unit power distribution value and indoor unit power distribution value.

- Set the connected indoor unit address (INDOOR ADDRESS SET).

: Enter the address of the indoor unit connected to the wattmeter.

※ After the initial installation, address setting of indoor unit connected to each port shall not be changed. If it is changed, previous data cannot be used.

After setting the item, press the SELECT button to save the setting, and then move to the next step.

```
CONSUME UNIT SELECT
1. OUTDOOR UNIT
2. INDOOR UNIT
```

```
INDOOR ADDRESS SET
( START ) → ( END )
( 00 ) → ( 00 )
```

```
WHM1 : 2W, ODU, 00-00
WHM2 : NOT USE
WHM3 : NOT USE
WHM4 : NOT USE
```

Configuration information is reflected on the detailed setting window.

After setting every wattmeter, press the menu button to save the settings and the screen will be switched to the initial screen.

• When setting the properties of the pulse-type gas meter (LHM1~LHM4)

```
CONNECTION : MASTER
STANDBY P  : AUTO
SET METER   DOWN
            DOWN
```

On the initial setting screen, press the (▼) button and the screen will be switched to the wattmeter / gas meter property setting screen.

```
WHM1 : NOT USE
WHM2 : NOT USE
WHM3 : NOT USE
WHM4 : NOT USE
```

On the wattmeter property setting screen, press the (▼) button and the screen will be switched to gas meter property setting screen.

```
LHM1 : NOT USE
LHM2 : NOT USE
LHM3 : NOT USE
LHM4 : NOT USE
```

When the item of the wattmeter you want to set is blinking, press the SELECT button, and the screen will be switched to the detailed setting screen.

```
* LHM L/PULSE SELECT *
1. NOT USE
2. 1 L/PULSE
3. 2 L/PULSE      DOWN
```

Set gas consumption per pulse → Set the connected indoor unit address in order.

- Set gas consumption per pulse (LHM L / PULSE SELECT).
: Please enter a value shown in the gas meter as the gas consumption recognized per pulse.

```
CONSUME UNIT SELECT
1. ODU MASTER
2. ODU SLAVE
```

- Gas consumption device settings (CONSUME UNIT SELECT)
: Please check the type of outdoor unit installed with a gas meter and select an appropriate item.

※ If a separate gas meter is installed in the GHP slave outdoor unit, select ODU SLAVE.

- Set the connected indoor unit address (INDOOR ADDRESS SET).
: Enter the address of the indoor unit connected to the gas meter.

※ After the initial installation, address setting of indoor unit connected to each port shall not be changed.
If it is changed, previous data cannot be used.

- Set connected indoor address (INDOOR ADDRESS SET)
: Enter the indoor address connected to applicable wattmeter.

```
INDOOR ADDRESS SET
( START ) → ( END )
( 00 ) → ( 00 )
```

After setting the item, press the SELECT button to save the settings, and then move to the next step.

```
LHM1 : 10 L, ODU, 00-00
LHM2 : 10 L, ODS, 00-00
LHM3 : NOT USE
LHM4 : NOT USE
```

Configuration information is reflected in the detailed setting window.

After setting every gas meter, press the menu button to save the settings, and then move to the initial screen.



CAUTION

- The GHP master outdoor unit and the GHP slave outdoor unit must have the same range of indoor unit addresses.
- The gas amount of the indoor unit is the sum of the value of the master gas distribution of outdoor unit and the value of the slave outdoor unit gas distribution.

• When setting the properties of the CT-type wattmeter (WHM1~WHM4)

```
CONNECTION : MASTER
STANDBY P  : AUTO
SET METER   DOWN
            DOWN
```

On the initial setting screen, press the (▼) button and then will be switched to the wattmeter / gas meter property setting screen.

```
WHM1 : NOT USE
WHM2 : NOT USE
WHM3 : NOT USE
WHM4 : NOT USE
```

When the item of the wattmeter you want to set is blinking, press the SELECT button, and the screen will be switched to the detailed setting screen.

```
*WHM W/PULSE SELECT*
1. NOT USE
2. 1W/PULSE
3. 2W/PULSE DOWN
```

On the screen of the power consumption per pulse, press the (▼) button to select the item of CT/PT.

```
*WHM W/PULSE SELECT*
7. 10W/PULSE UP
8. 100W/PULSE
9. CT/PT
```

When the item of CT/PT is blinking, press the SELECT button, and the screen will be switched to the screen where CT&PULSE RATIO SET is entered.

```
CT&PULSE RATIO SET
CT : 00000 , Pr : 00000
WHM1 [ Pulse / kWh ]
```

It proceeds in the order of Set CT, device constant → Set power consumption device → Set connected indoor address.

- CT, calibrating constant setting (CT&PULSE RATIO SET)

* CT: As the device to reduce the current so that the measuring device can take the measurement, enter the rate indicated on the product to the CT item.
Ex) when using 100:1 CT, enter 100 to the CT item.

* Pr: As the device constant value, it is displayed as ratio of output pulse per power consumption of wattmeter.

For the device constant value, enter the value displayed on wattmeter [Pulse/kWh]

Ex) when using 2 500 [Pulse/kWh] wattmeter, enter 2 500 to Pr item.

- Power consumption device setting (CONSUME UNIT SELECT)

: Check whether the product with watt-hour meter installed is outdoor unit or indoor unit first, and perform the setting.

※ If one indoor unit is set to use both outdoor unit power distribution and indoor unit power distribution, wattage value is displayed as indoor unit wattage value by summing outdoor unit power distribution value and indoor unit power distribution value.

- Connected indoor unit address setting (INDOOR ADDRESS SET)

: Input the address of the indoor unit connected to the corresponding watt-hour meter.

※ After the initial installation, address setting of indoor unit connected to each port shall not be changed. If it is changed, previous data cannot be used.

After setting the item, press the SELECT button to save the settings, and then move to the next step.

```
CONSUME UNIT SELECT
1. OUTDOOR UNIT
2. INDOOR UNIT
```

```
INDOOR ADDRESS SET
( START ) → ( END )
( 00 ) → ( 00 )
```

```
WHM1 : CT / PT , 1 D U , 0 0 - 0 0
WHM2 : NOT USE
WHM3 : NOT USE
WHM4 : NOT USE
```

The set information is reflected on the detailed setting window.

After setting every Watt-hour meter, press the menu button to save the settings, and then move to the initial screen.

• When setting the properties of the VT & Pr gas meter (LHM1~LHM4)

```
CONNECTION: MASTER
STANDBY P : AUTO
SET METER   DOWN
           DOWN
```

On the initial setting screen, press (▼) button, and the screen will be switched to the wattmeter/gas meter property setting screen.

```
WHM1: NOT USE
WHM2: NOT USE
WHM3: NOT USE
WHM4: NOT USE
```

On the wattmeter setting screen, press (▼) button, and the screen will be switched to the gas meter property setting screen.

```
LHM1: NOT USE
LHM2: NOT USE
LHM3: NOT USE
LHM4: NOT USE
```

When the item of gas meter you want to set is blinking, press the SELECT button, and the screen will be switched to the detailed setting window.

```
* LHM W/PULSE SELECT *
1. NOT USE
2. 1 L/PULSE
3. 2 L/PULSE          DOWN
```

On the gas consumption setting screen, press (▼) button to select the item of VT & Pr.

```
* LHM W/PULSE SELECT *
7. 10 L/PULSE        UP
8. 100 L/PULSE
9. VT & Pr
```

When the item of VT & Pr is blinking, press the SELECT button, and the screen will be switched to the screen where VT & PULSE RATIO SET is entered.

```
VT & PULSE RATIO SET

VT: 00000 , Pr: 00000
LHM1      [ Pulse/kL ]
```

Set VT & Pr → Set the connected indoor unit address in order.
- Set VT type (VT & PULSE SELECT).
: You may set a value of gas meter per pulse as VT & Pr is set.

$$\text{* Gas consumption per pulse} = P_1 \times \frac{1000}{P_2} \text{ (l / Pulse)}$$

Example) If you want to use 1 000 l / pulse gas meter, Pr is set to a 1 with VT: 1.

- Gas consumption device settings (CONSUME UNIT SELECT)
: Please check the type of outdoor unit installed with a gas meter and select an appropriate item.
※ If a separate gas meter is installed in the GHP slave outdoor unit, select ODU SLAVE.

- Connected indoor unit address setting (INDOOR ADDRESS SET)
: Input the address of the indoor unit connected to the corresponding watt-hour meter.

※ After the initial installation, address setting of indoor unit connected to each port shall not be changed. If it is changed, previous data cannot be used.

After setting the item, press the SELECT button to save the settings, and then move to the next step.

```
CONSUME UNIT SELECT
1. ODU MASTER
2. ODU SLAVE
```

```
INDOOR ADDRESS SET
( START ) → ( END )
( 00 ) → ( 00 )
```

```
LHM1: VT & Pr, ODU, 00-00
LHM2: NOT USE
LHM3: NOT USE
LHM4: NOT USE
```

Information on the set items and values is reflected in the detailed settings window.

After setting every gas meter, press the menu button to save the settings, and then move to the initial screen.

How to Use Power Indicator (EHP products)

Description of power indicator function

The power indicator is the product that provides the function of displaying the power consumed in the LG Electronics System Air Conditioner by distributing by each connected indoor unit.

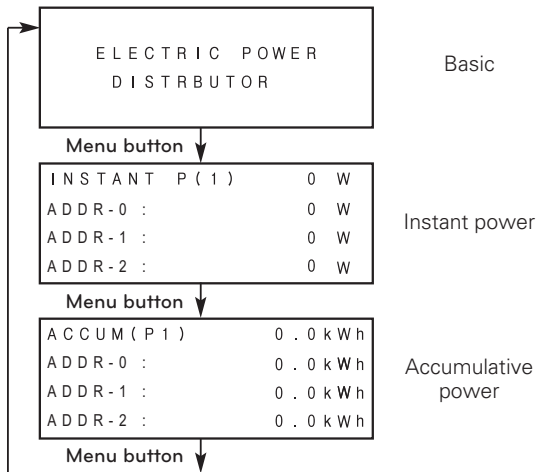
- Wattmeter that can be interlocked: As the cumulative wattmeter, it can interlock with pulse output or RS-485 communication product.
- Number of units that can be interlocked: Maximum of 128 rooms (127 rooms if standby power is displayed)
- LCD power display function: Instant power, cumulative power and error are displayed through the LCD.
- Data save function during power outage: This function saves the data in an event of unexpected power outage.
- LED display function: When power, communication or pulse is connected, the applicable LED flashes so that the operation can be checked.

How to distribute electric energy

- Power consumption of 1 room indoor unit = Total power consumption of outdoor unit x (Weight of indoor unit / Weight of all indoor units)
- Weight of the indoor unit can be calculated based on the information including whether the product operates, product capacity and whether the compressor operates and indoor fan level etc.

Checking electric energy display

The electric energy can be checked by pressing the MENU button from the default screen to check in the order of instantaneous power and accumulative power.



⚠ CAUTION

- This measuring system uses a proprietary method unique to LG Electronics and has no legal basis.
- Version 1.15 or lower, the number indicates not the address of the indoor unit, but the sequential order of each indoor unit.
- Version 1.16 or higher, the number indicates the address of the indoor unit. (version 1.16 or higher : decimal, version 1.18 or higher : hexadecimal)

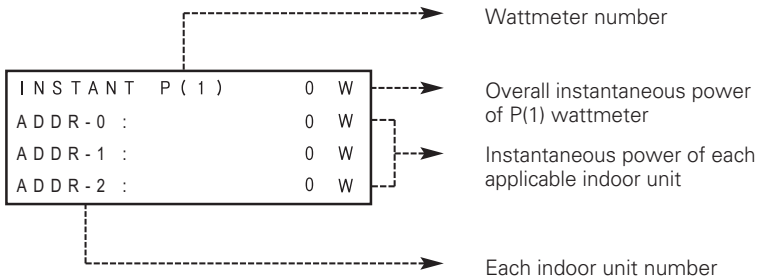
• Checking instantaneous power (Instantaneous Power)

Instantaneous power: As the power consumption per minute, it is refreshed every 1 minute.

*Example of instantaneous power consumption

: When 100 W is displayed, if it is used with the current power consumption for 1 hour, 100 Wh will be consumed.

- Screen Description



- Press the LEFT/RIGHT (◀, ▶) button to increase/decrease the wattmeter number.
- Press the UP/DOWN (▲, ▼) button to check the electric energy of all indoor units connected.

- If the standby power is set to Manual, the last page is displayed as follows.

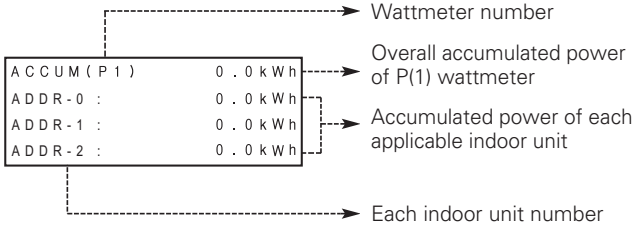
INSTANT P (1)	0 W
STBP :	0 W
	DOWN

• Checking accumulative power

Accumulative power: After the power is initially connected to the power indicator, the values are accumulated.

If the displayed electric energy is 999 999 or above, it will return to 0.

• Screen Description



- Press the LEFT/RIGHT (◀, ▶) button to increase/decrease the wattmeter number.
- Press the UP/DOWN (▲, ▼) button to check the electric energy of all indoor units connected.
- If the standby power is set to Manual, the last page is displayed as follows.

ACCUM (P 1)	0 . 0 k W h
STBP :	0 . 0 k W h
	DOWN

- If you press left/right button (◀, ▶), it is displayed as follows in the last page. You can check the entire indoor units' accumulated power for each address in this screen.

ACCUM (ALL)	
ADDR - 0 :	0 . 0 k W h
ADDR - 1 :	0 . 0 k W h
ADDR - 2 :	0 . 0 k W h

! CAUTION

- According to watt-hour meter and PDI installation time, the final accumulated value displayed by each may be different.
- During the ACP/Smart interface, if you set the e-mail, e-mail alarm is sent when wattage distribution cannot be made by special conditions.
- PDI accumulated power value is not initialized.
- When you change the indoor unit address, you can check the accumulated power amount of each indoor unit address that is not set to each port in ACCUM(ALL) screen.

How to Use the Power Indicator (GHP products)

Description of the Power Indicator Function

The power indicator is a product that provides the function of displaying the power consumed in the LG Electronics System Air Conditioner distributed to each connected indoor unit.

- Wattmeter that can be interlocked: As the cumulative wattmeter, it can interlock with pulse output product.
- Gas meter that can be interlocked: As the cumulative gas meter, it can interlock with pulse output product.
- Number of indoor units that can be interlocked: Maximum of 64 units
- LCD display function: Instant power/cumulative power and instant gas/cumulative gas and error are displayed through the LCD.
- Data save function during power outage: This function saves the data in an event of unexpected power outage.
- LED display function: When power, communication or pulse is connected, the applicable LED blinks so that the operation can be checked.

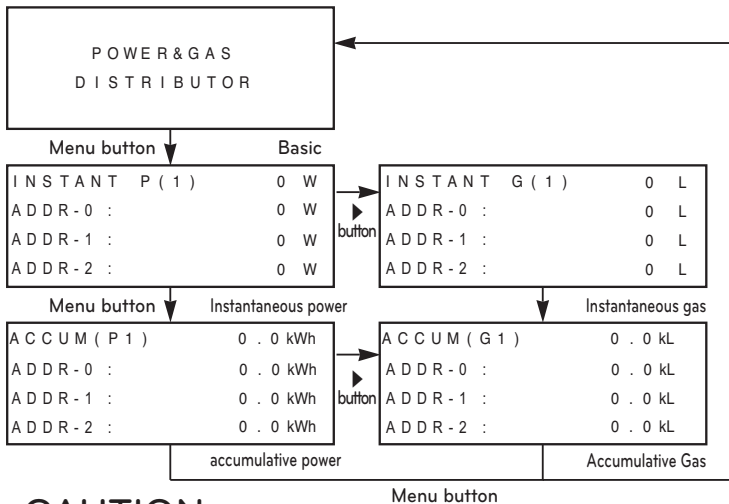
How to distribute electric energy or gas usage

- Power consumption of 1 room indoor unit(gas) = Total power consumption of outdoor unit(gas) × (Weight of indoor unit / Weight of all indoor units)
- Weight of each indoor unit can be calculated based on the information including whether the product operates, product capacity and whether the compressor operates and indoor fan level, etc.

Checking electric energy and gas consumption display

The electric energy and gas consumption can be checked by pressing the MENU button from the default screen to check in the order of instantaneous power and accumulative power.

On the screen of instantaneous power, accumulative power, press the (▶) button to check the instantaneous gas, and accumulative gas.



CAUTION

- This measuring system uses a proprietary method unique to LG Electronics without legal basis.
- Version 1.15 or lower, the number indicates not the address of the indoor unit, but the sequential order of each indoor unit.
- Version 1.16 or higher, the number indicates the address of the indoor unit. (version 1.16 or higher : decimal, version 1.18 or higher : hexadecimal)

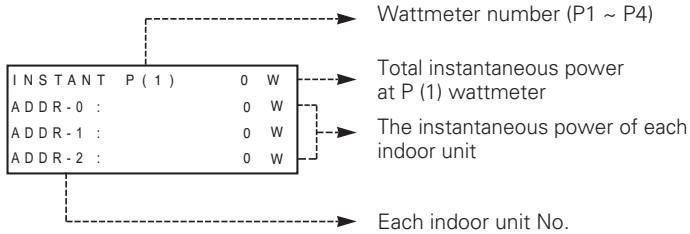
• Checking the instantaneous power (1 ~ 4 ports)

Instantaneous power: It is the power consumption value for one minute which is updated every 1 minute.

*Example of instantaneous power consumption

: When 100 W is displayed, if it is used with the current power consumption for 1 hour, 100 Wh will be consumed.

- Screen Description



- Press the LEFT/RIGHT (◀, ▶) button to increase/decrease the wattmeter meter number.
- Press the UP/DOWN (▲, ▼) button to check the electric energy of all indoor units connected.

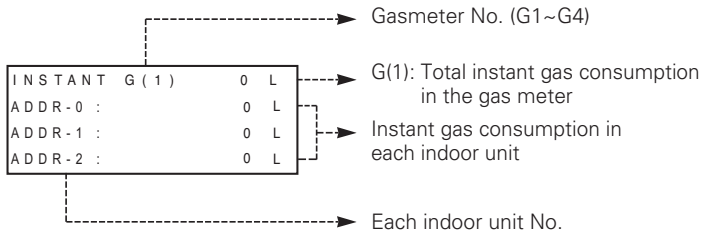
- When you set Standby power manually, the last page will display as below.

INSTANT P (1)		0 W
STBP :		0 W
		DOWN

• Confirming the instantaneous gas consumption (Instantaneous Gas) (5 ~ 8 ports)

Instantaneous gas: It is a gas consumption value for 1 minute which is refreshed every 1 minute.

- Screen Description

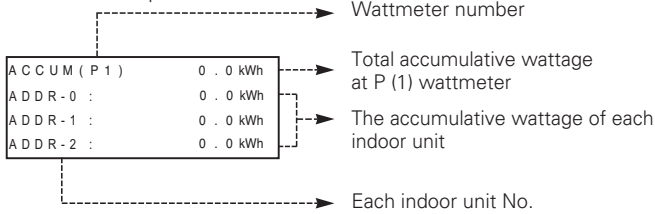


- Press the LEFT/RIGHT (◀, ▶) button to increase/decrease the gas meter number.
- Press the UP/DOWN (▲, ▼) button to check the gas energy of all indoor units connected.
- ※ In the case of gas on, standby gas usage is not displayed separately because there is no standby gas.

• Checking the accumulative power (Accum Power) (1 ~ 4 ports)

Accumulative power: Values have been continuously accumulated since the initial power is applied on the power indicator. When wattage is more than 999 999, it will return to "0".

- Screen Description



- Press the LEFT/RIGHT (◀, ▶) button to increase/decrease the wattmeter number.
- Press the UP/DOWN (▲, ▼) button to check the electric energy of all indoor units connected.

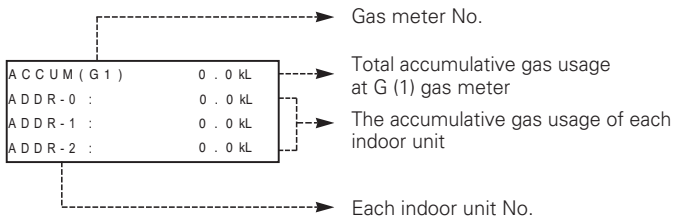
- If the standby power is set to Manual, the last page is displayed as follows.

A C C U M (P 1)	0 . 0 kWh
S T B P :	0 . 0 kWh
	D O W N

• Checking the accumulative gas consumption (Accumulative Gas) (5 ~ 8 ports)

Instant gas: Values have been accumulated since the initial power is applied at the gas meter. When the displayed gas usage is more than 999 999, it will return to "0".

- Screen Description



- Press the LEFT/RIGHT (◀, ▶) button to increase/decrease the wattmeter number.
- Press the UP/DOWN (▲, ▼) button to check the gas energy of all indoor units connected.

* In the case of gas on, standby gas usage is not displayed separately because there is no standby gas.

- If you press left/right button(◀, ▶), it is displayed as follows in the last page.
In this screen, you can check the accumulated power amount (gas usage amount) of each address for the entire indoor units.

A C C U M (A L L)	
A D D R - 0 :	0 . 0 kWh
A D D R - 1 :	0 . 0 kWh
A D D R - 2 :	0 . 0 kWh

⚠ CAUTION

- According to watt-hour meter/gas meter and PDI installation time, the final accumulated value displayed by each may be different.
- During the ACP/Smart interface, if you set the e-mail, e-mail alarm is sent when wattage and gas usage amount distribution cannot be made by special conditions.
- PDI accumulated power value and accumulated gas usage value are not initialized.
- When you change the indoor unit address, you can check the accumulated power amount (gas usage amount) of each indoor unit address that is not set to each port in ACCUM(ALL) screen.

Error display

If the communication with the air conditioner is not smooth or if the pulse signal is not detected from the wattmeter, the error will be displayed on the LCD.

• Communication error display

- If there is no communication with the indoor unit product for 3 minutes, it displays an error.
- During communication error status, power consumption (gas consumption) is reflected on the accumulative power (accumulative gas).
- No power(gas) is distributed to each indoor unit. When communication is resumed, accumulative power (gas) is distributed to each indoor unit.

```

      ERROR - 0 1
NO COMMUNICATION
WITH AIRCONDITIONER
IDU ADDRESS [ 0 0 - 0 7 ]
  
```

• No signal error in the wattmeter (gas meter)

- Error is displayed when there is no signal from the pulse detection in the option-set wattmeter (gas meter) (When no pulse is detected even when 1 or more unit doors are operating)

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      ERROR - 0 2
NO SIGNAL FROM WHM 1
  
```

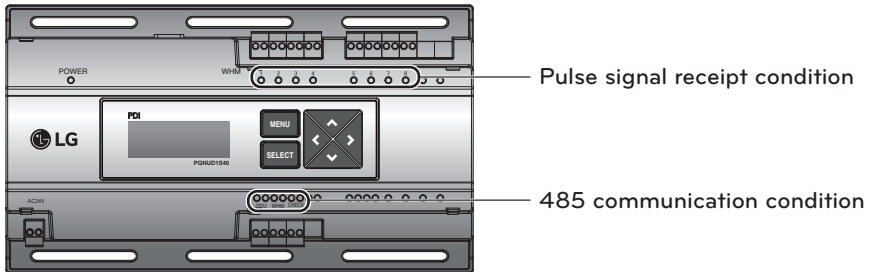
⚠ CAUTION

- In the case of no signal error in the wattmeter (gas meter)
As outdoor unit power consumption (gas consumption) is low, if no pulse is displayed for a certain time, error may be displayed. As soon as pulse is applied, error indication disappears.

Operating condition display

LED condition display

- Power LED (Red): When on, it shows that the product is in operation.
- Communication LED (Green, Red)
- : Central controller, 485 wattmeter, remote reading device and 485 communication condition are displayed.
 - Green LED ON: Signal sent
 - Yellow LED ON: Signal received
- The wattmeter (gas meter) receives pulse (yellow): The connected wattmeter (gas meter) displays the pulse signal reception status. When pulse signal is input, the LED blinks (once per pulse).



- When the power is connected initially, all LEDs are turned on.
- If the pulse signal receipt condition display LED is continuously ON, it could mean that there is a short circuit between the two terminals. Please check.

(If you are using a mechanical gas meter, depending on when operation is stopped, the LED may be on sometimes.)

LIMITED WARRANTY (USA)

The product's full Limited Warranty terms and conditions and arbitration requirements are available at <https://www.lghvac.com>

WARRANTY (CANADA)

ARBITRATION NOTICE: THIS LIMITED WARRANTY CONTAINS AN ARBITRATION PROVISION THAT REQUIRES YOU AND LG TO RESOLVE DISPUTES BY BINDING ARBITRATION INSTEAD OF IN COURT, UNLESS THE LAWS OF YOUR PROVINCE OR TERRITORY DO NOT PERMIT THAT, OR, IN OTHER JURISDICTIONS, IF YOU CHOOSE TO OPT OUT. IN ARBITRATION, CLASS ACTIONS AND JURY TRIALS ARE NOT PERMITTED. PLEASE SEE THE SECTION TITLED "PROCEDURE FOR RESOLVING DISPUTES" BELOW.

PROCEDURE FOR RESOLVING DISPUTES(FOR CANADIAN PRODUCTS):

EXCEPT WHERE PROHIBITED AT LAW, ALL DISPUTES BETWEEN YOU AND LG ARISING OUT OF OR RELATING IN ANY WAY TO THIS LIMITED WARRANTY OR THE PRODUCT SHALL BE RESOLVED EXCLUSIVELY THROUGH BINDING ARBITRATION, AND NOT IN A COURT OF GENERAL JURISDICTION. EXCEPT WHERE PROHIBITED AT LAW, YOU AND LG BOTH IRREVOCABLY AGREE TO WAIVE THE RIGHT TO A JURY TRIAL AND TO BRING OR PARTICIPATE IN A CLASS ACTION.

Definitions. For the purposes of this section, references to "LG" mean LG Electronics Canada, Inc., its parents, subsidiaries and affiliates, and each of their officers, directors, employees, agents, beneficiaries, predecessors in interest, successors, assigns and suppliers; references to "dispute" or "claim" shall include any dispute, claim or controversy of any kind whatsoever (whether based in contract, tort, statute, regulation, ordinance, fraud, misrepresentation or any other legal or equitable theory) arising out of or relating in any way to the sale, condition or performance of the product or this Limited Warranty.

Notice of Dispute. In the event you intend to commence an arbitration proceeding, you must first notify LG in writing at least 30 days in advance of initiating the arbitration by sending a letter to LGECI Legal Team at 20 Norelco Drive, North York, Ontario, Canada M9L 2X6 (the "Notice of Dispute"). You and LG agree to engage in good faith discussions in an attempt to amicably resolve your claim. The notice must provide your name, address, and telephone number; identify the product that is the subject of the claim; and describe the nature of the claim and the relief being sought. If you and LG are unable to resolve the dispute within 30 days of LG's receipt of the Notice of Dispute, the dispute shall be resolved by binding arbitration in accordance with the procedure set out herein. You and LG both agree that, during the arbitration proceeding, the terms (including any amount) of any settlement offer made by either you or LG will not be disclosed to the arbitrator until the arbitrator determines the dispute.

Agreement to Binding Arbitration and Class Action Waiver. Upon failure to resolve the dispute during the 30 day period after LG's receipt of the Notice of Dispute, you and LG agree to resolve any claims between you and LG only by binding arbitration on an individual basis, unless you opt out as provided below, or you reside in a jurisdiction that prevents full application of this clause in the circumstances of the claims at issue (in which case if you are a consumer, this clause will only apply if you expressly agree to the arbitration). To the extent permitted by applicable law, any dispute between you and LG shall not be combined or consolidated with a dispute involving any other person's or entity's product or claim. More specifically, without limitation of the foregoing, except to the extent such a prohibition is not permitted at law, any dispute between you and LG shall not under any circumstances proceed as part of a class or representative action. Instead of arbitration, either party may bring an individual action in small claims court, but that small claims court action may not be brought on a class or representative basis except to the extent this prohibition is not permitted at law in your province or territory of jurisdiction as it relates to the claims at issue between you and LG.

Arbitration Rules and Procedures. To begin arbitration of a claim, either you or LG must make a written demand for arbitration. The arbitration will be private and confidential, and conducted on a simplified and expedited basis before a single arbitrator chosen by the parties under the provincial or territorial commercial arbitration law and rules of the province or territory of your residence. You must also send a copy of your written demand to LG at LG Electronics, Canada, Inc., Attn: Legal Department- Arbitration, 20 Norelco Drive, North York, Ontario M9L 2X6. This arbitration provision is governed by your applicable provincial or territorial commercial arbitration legislation. Judgment may be entered on the arbitrator's award in any court of competent jurisdiction. All issues are for the arbitrator to decide, except that, issues relating to the scope and enforceability of the arbitration provision and to the arbitrability of the dispute are for the court to decide. The arbitrator is bound by the terms of this provision.

Governing Law. The law of the province or territory of your purchase shall govern this Limited Warranty and any disputes between you and LG except to the extent that such law is preempted by or inconsistent with applicable federal or provincial/territorial law. Should arbitration not be permitted for any claim, action, dispute or controversy between you and LG, you and LG attorn to the exclusive jurisdiction of the courts of the province or territory of your purchase for the resolution of the claim, action, dispute or controversy between you and LG.

Fees/Costs. You do not need to pay any fee to begin an arbitration. Upon receipt of your written demand for arbitration, LG will promptly pay all arbitration filing fees unless you seek more than \$25,000 in damages, in which case the payment of these fees will be governed by the applicable arbitration rules. Except as otherwise provided for herein, LG will pay all filing, administration and arbitrator fees for any arbitration initiated in accordance with the applicable arbitration rules and this arbitration provision. If you prevail in the arbitration, LG will pay your attorneys' fees and expenses as long as they are reasonable, by considering factors including, but not limited to, the purchase amount and claim amount. Notwithstanding the foregoing, if applicable law allows for an award of reasonable attorneys' fees and expenses, an arbitrator can award them to the same extent that a court would. If the arbitrator finds either the substance of your claim or the relief sought in the demand is frivolous or brought for an improper purpose (as measured by the applicable laws), then the payment of all arbitration fees will be governed by the applicable arbitration rules. In such a situation, you agree to reimburse LG for all monies previously disbursed by it that are otherwise your obligation to pay under the applicable arbitration rules. Except as otherwise provided for, LG waives any rights it may have to seek attorneys' fees and expenses from you if LG prevails in the arbitration.

Hearings and Location. If your claim is for \$25,000 or less, you may choose to have the arbitration conducted solely (1) on the basis of documents submitted to the arbitrator, (2) through a telephonic hearing, or (3) by an in-person hearing as established by the applicable arbitration rules. If your claim exceeds \$25,000, the right to a hearing will be determined by the applicable arbitration rules. Any in-person arbitration hearings will be held at the nearest, most mutually-convenient arbitration location available within the province or territory in which you reside unless you and LG both agree to another location or agree to a telephonic arbitration.

Severability and Waiver. If any portion of this Limited Warranty (including these arbitration procedures) is unenforceable, the remaining provisions will continue in full force and effect to the maximum extent permitted by applicable law. Should LG fail to enforce strict performance of any provision of this Limited Warranty (including these arbitration procedures), it does not mean that LG intends to waive or has waived any provision or part of this Limited Warranty.

Opt Out. You may opt out of this dispute resolution procedure. If you opt out, neither you nor LG can require the other to participate in an arbitration proceeding. To opt out, you must send notice to LG no later than 30 calendar days from the date of the first consumer purchaser's purchase of the product by either (i) sending an e-mail to optout@lge.com, with the subject line: "Arbitration Opt Out;" or (ii) calling 1-800-980-2973. You must include in the opt out e-mail or provide by telephone: (a) your name and address; (b) the date on which the product was purchased; (c) the product model name or model number; and (d) the serial number (the serial number can be found (i) on the product; or (ii) online by accessing https://www.lg.com/ca_en/support/repair-service/schedule-repair and clicking on "Find My Model & Serial Number").

In the event that you "Opt Out", the law of the province or territory of your residence shall govern this Limited Warranty and any disputes between you and LG except to the extent that such law is preempted by or inconsistent with applicable federal or provincial/territorial law. Should arbitration not be permitted for any claim, action, dispute or controversy between you and LG, you and LG agree to attorn to the exclusive jurisdiction of the courts of the province or territory of your residence for the resolution of the claim, action, dispute or controversy between you and LG.

You may only opt out of the dispute resolution procedure in the manner described above (that is, by e-mail or telephone); no other form of notice will be effective to opt out of this dispute resolution procedure. Opting out of this dispute resolution procedure will not affect the coverage of the Limited Warranty in any way, and you will continue to enjoy the full benefits of the Limited Warranty. If you keep this product and do not opt out, then you accept all terms and conditions of the arbitration provision described above.

Conflict of Terms. In the event of a conflict or inconsistency between the terms of this Limited Warranty and the End User License Agreement ("EULA") in regards to dispute resolution, the terms of this Limited Warranty shall control and govern the rights and obligations of the parties and shall take precedence over the EULA.



Supplier's Declaration of Conformity

47 CFR §2.1077 Compliance Information

Trade Name : LG
Responsible Party : LG Electronics USA, Inc.
Address : 111 Sylvan Avenue, North Building
Englewood Cliffs, NJ 07632
Email : lg.environmental@lge.com

FCC Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

US	Please call the installing contractor of your product, as warranty service will be provided by them. Veuillez appeler l'installateur de votre produit, car le service de garantie est fourni par lui.
CANADA	Service call Number # : (888) LG Canada, (888) 542-2623 Numéro pour les appels de service : LG Canada, 1-888-542-2623