



APPENDIX H

: USER'S MANUAL

PDLC Remote Controller

User Manual

GIS-1012



GOOIL SOLUTION Co., Ltd.

GOOIL SOLUTION



● Product overview

- PDLC Remote Controller (GIS-1012) is a product that allows wireless control of PDLC Power Controller (GIS-1011).
- It's a wireless (RF) communication device and uses Bluetooth streaming connectivity.
- If the PDLC Power controller does not receive the remote control button command, press the button again.

● Product Configuration



※ Battery must be purchased separately



<Battery Type : CR2032 x 1EA>

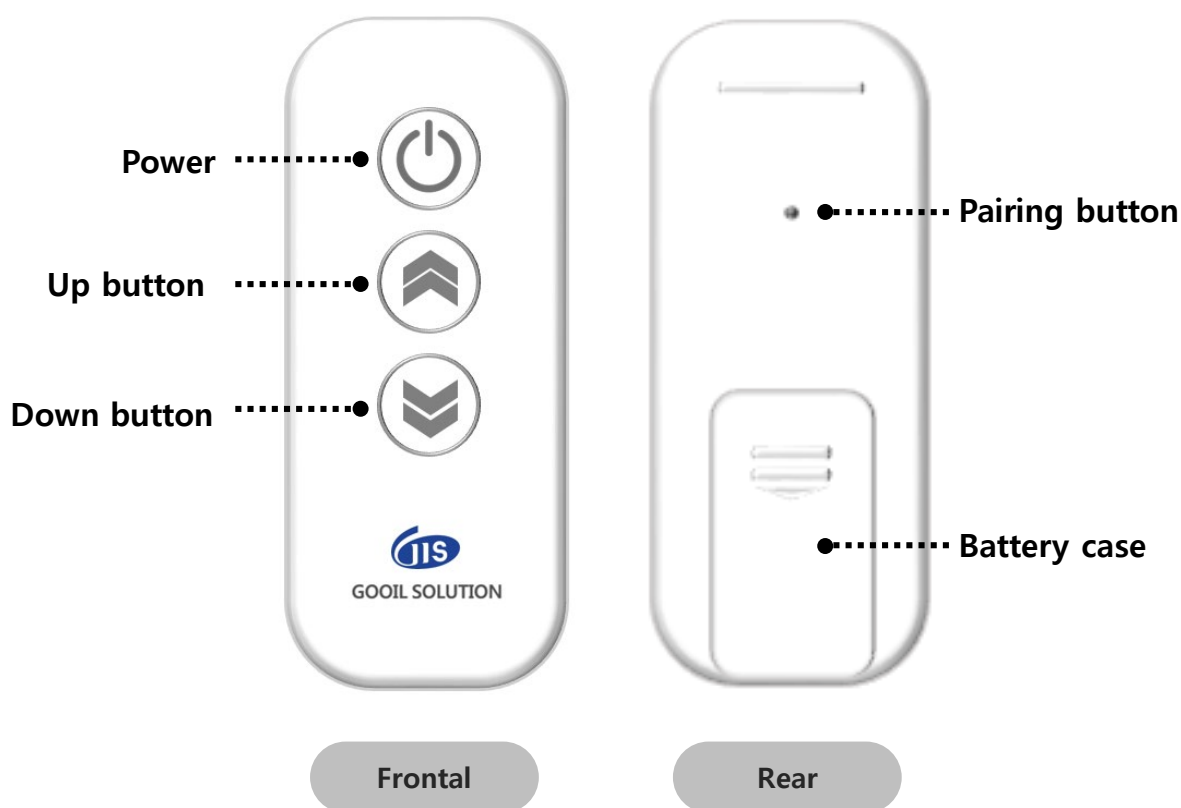
PDLC Remote Controller 1EA

● Before you start

※ Please read the precautions before using.

- This device is a dedicated remote controller for use with 'PDLC Power Controller' (GIS-1011).
- There is a magnet inside the remote controller. Read the safety manual before using.
- Remove and store the batteries if you won't be using the remote controller for a long time.

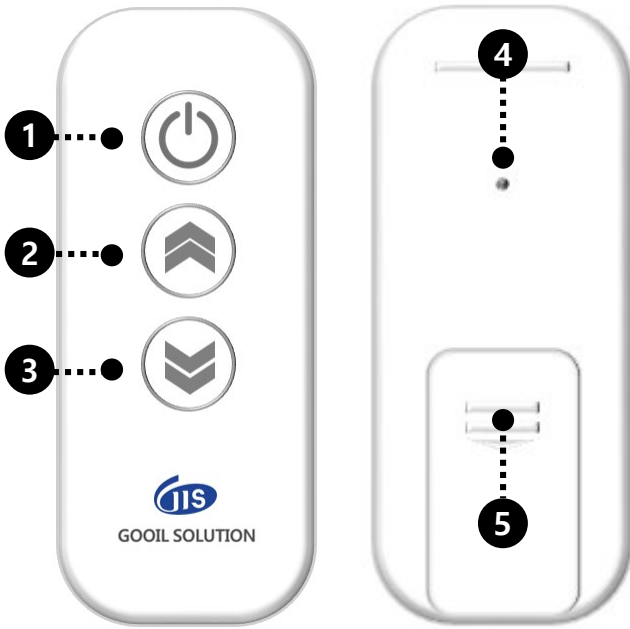
● The name and function of each part



● PDLC Power Controller (GIS-1011)

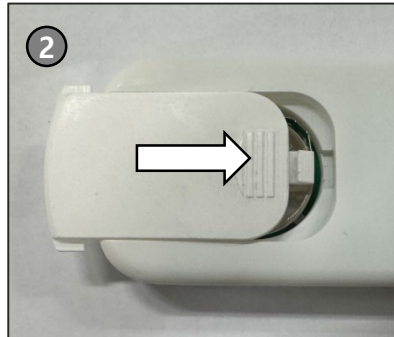
This product is for use with the PDLC Remote Controller (GIS-1012).

● How to operate and use the product



- 1 Press the power button to start the operation at Level 3. Press one more time to stop.
- 2 You can raise the level with the Up button.
(Max Level 4)
- 3 You can lower the level with the down button.
(Min Level 1)
- 4 Press the Pairing button to connect with the controller.
- 5 Battery case to replace the batteries.

● How to mount a battery <Battery type : CR2032 X 1EA>



Insert the + mark of the battery so that it looks up.

Slide the battery case into the main body of the remote control as shown in the picture.

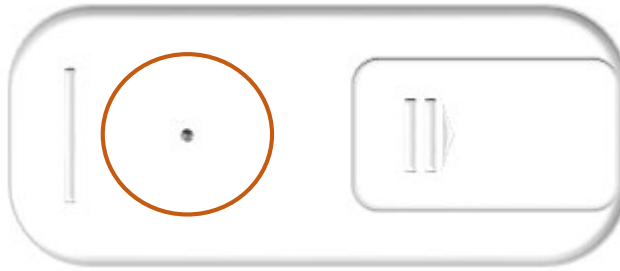


CAUTION

- There is a magnet inside the remote controller.
Keep away from pacemakers, defibrillators, credit cards, and electronic storage media.
- If a child swallows the battery, Take the child to the hospital immediately.
- Remove and store the batteries if you won't be using the remote controller for a long time.
- Do not store or discard where there is a fire hazard.
- If left unused for long periods of time, the electrolyte in the battery may leak out.

● How to pairing

1



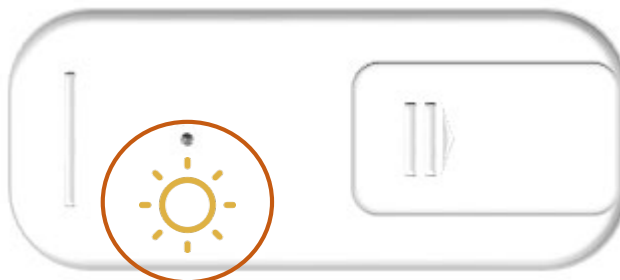
Press the pairing button using a thin tool on the back of the remote controller.

2



Press the pairing button using a thin tool on the front of the controller.

3



When flashing orange light on the back of the remote controller, press the pairing button again

● What to keep for safety

- In order to use this product safely and properly, please read part ● What to keep for safety carefully and fully understand before using it.
- The precautions indicated here are intended to prevent damage or loss to oneself or others by using the product correctly.
- If this device is improperly used or is not used in accordance with the instruction manual, the warranty will be invalid and we may refuse to be responsible for the device.
- The use of this product prohibits the use of persons with motor, sensory or intellectual degradation and experience and knowledge (including children) unless the person in charge manages and instructs them on safety.
Make sure that the child does not play with this product.
- We have set up situations that may occur if the product is not used correctly and marked  **[Warning]** and  **[Caution]**.
Both of which are important to safety, so please be sure to follow them.

**WARNING**

Negligence of this could lead to death or serious injury of an operator



There is a magnet inside the remote controller.

Keep away from pacemakers, defibrillators, credit cards, and electronic storage media.

※ Magnets can create magnetic fields that interfere with the normal operation of devices and products or cause malfunctions

※ Regarding the pacemaker, please consult your doctor before using it.

① If this device is improperly used or is not used in accordance with the instruction manual, the warranty will be invalidated and we may refuse to be liable for any damage.

② To avoid the risk of electric shock, keep the device, cable, adapter, etc. from getting wet with water or other liquids.

※ There is a risk of fire due to electric shock, short circuit, etc.

③ Do not assemble or disassemble.

④ Never disassemble, modify, or repair the product.

※ It can cause fire, electric shock, and injury

(Please check that even a free repair period will be paid for any disassembly or renovation.)

⑥ Do not use gas stoves, etc. where sparks are present, where flammable substances (gasoline, benzene, thinner, gas, etc.) are present, or where moisture or water droplets may splash

※ There is a risk of electric shock or fire.

⑦ If the product is damaged or drowned, stop using it and contact the warranty center.

⑧ In addition, in case of abnormality or failure, stop using it and contact the A/S center immediately.



CAUTION

Negligence of this could lead to an injury of an operator or cause damage to your properties..

※ Damage to properties refer to extended damage to a house, crayfish or livestock or pets.

① Do not apply high-temperature heat or process the product.

※ It can cause fire and ignition.

② Keep the batteries on the remote control out of reach of children.

※ If a child swallows the battery, Take the child to the hospital immediately.

③ Do not drop the product or give it a strong impact.

(Stop using it as soon as it does not work properly and contact the consumer counseling office.)

This equipment has been tested and found to comply with the limits for a [Class B digital device](#), pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against [harmful interference](#) in a residential installation.

This equipment generates, uses and can radiate [radio frequency energy](#) and, if not installed and used in accordance with the instructions, may cause [harmful interference](#) to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause [harmful interference](#) to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

● FCC Caution

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

- This device may not cause harmful interference
- This device must accept any interference received, including interference that may cause undesired operation. Any changes or modifications not expressly approved by the party responsible for compliance could void the authority to operate equipment. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

● Federal Communication Commissions (FCC) Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. The device has been evaluated to meet general RF exposure requirement.

The device can be used in portable exposure condition without restriction.

● Product information

- Company name : GIS (Gooil Solution)
- Date of manufacture : Separately marked
- Manufacturer : GIS (Gooil Solution)
- Country of manufacture : Korea

● Product specifications

Separation		Contents
Product Name		PDLC Remote Controller
Model Name		GIS-1012
Dimension		100mm (L) x 35mm (W) x 15mm (H)
Control steps		4 Steps (1~4 Level)
RF Remote Control		External button, 2.4GHz RF transmitter (BLE)
Rated input voltage (V)		Battery : CR2032 / DC 3V
Addition	Operating temperature range	-20°C ~ 60°C
	Operating humidity range	0~90

● BLE Module specifications

Bluetooth 5.1, IEEE 802.15.4, 2.4 GHz transceiver

- -95 dBm sensitivity in 1 Mbps Bluetooth low energy (BLE) mode
- -103 dBm sensitivity in 125 Kbps BLE mode (long range)
- +8 dBm TX power (down to -20 dBm in 4 dB steps)
- On-air compatible with nRF52, nRF51, nRF24L and nRF24AP Series
- Programmable output power from +8dBm to -20dB
- RSSI (1 dB resolution)
- Supported data rates:
 - Bluetooth 5.1: 2 Mbps, 1 Mbps, 500 kbps, 125 kbps
 - IEEE 802.15.4-2006: 250 kbps
 - Proprietary 2.4 GHz: 2 Mbps, 1 Mbps