

# Bluemoon

Dental Curing Light

(GCL-01W)

User Manual **ENG**

**Dentium Co., Ltd.**



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**This product is a medical device.**

Thank you for choosing the Bluemoon.

This manual provides detailed explanations of product applications, handling and management, and overall use.

Please make sure to read this manual prior to use to ensure proper equipment use.

Keep the user manual in the vicinity of the equipment for reference at any time.

This equipment may only be used by doctors.

This equipment meets IEC60601-2 standards.

We aim to earn the trust of our customers with various highly reliable products that have undergone comprehensive testing.

Thank you



# Bluemoon

Dental Curing Light

## 1 Product Introduction

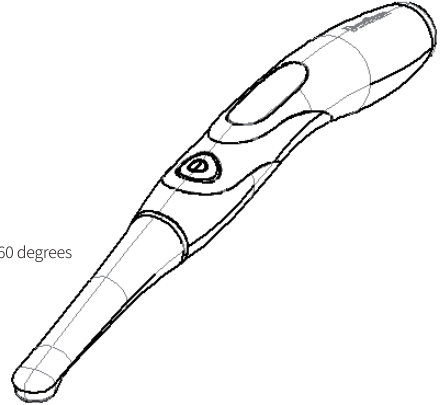
### 1.1 Product Features

High performance output (Max. output: 3000mW/cm<sup>2</sup>) / Dual LED wavelengths (405nm & 460nm)

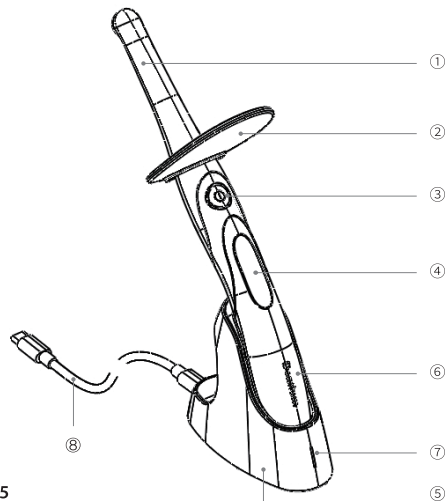
Improved oral accessibility through thin light probe height / Implementation of 4 output modes Light Probe rotates 360 degrees  
/ Light probe section can be attached/detached / Battery pack can be attached/detached

### 1.2 Purpose of Use

Photo-initiator photopolymerization that responds in the range of 380~520nm



## 2 Name



5

No.	Name	Description
①	Light probe	LED light source
②	Antiglare shield	Prevent glare
③	Button	Turn power ON/OFF, start/stop photoirradiation, select program modes
④	LCD	Display product status
⑤	Charging station	Cradle for main body and battery charging device
⑥	Battery pack	Supply power
⑦	Charging lamp	Check charging status
⑧	Charging cable	C to C specification

### 3 Safety Information

The following information is labeled on the product to ensure safe use.

#### 3.1 Warning/Caution

Warning and caution marks are used in the following situations.



Warning

Potential risk factor that can lead to serious injuries or death if warning occurs.



Caution

Potential risk factor that can induce minor injury or property damage if caution occurs.

#### 3.2 Note/Reference

Note and reference marks are used in the following situations.



Note

Issues that can cause product failure if ignored.



Reference

Additional information to ensure proper product use.

### 3.3 Precautions During Installation



Warning

- To prevent electrocution, the charging cable must be detached from the charging station before power is connected.
- To prevent fire or explosions, do not place the product in close vicinity of inflammable substances.
- Protect the product against liquid or moisture to prevent electrocution or functional errors.
- Place the charger on a flat and stable location. If the product is dropped, there is a risk of internal breakdown, overheating, or fire.
- Do not place the power cable in close vicinity of gas burners or heating devices. If the cable is damaged, please contact the place of purchase or manufacturer.



Caution

- Do not leave the product in locations with high temperature or in direct sunlight, as doing so creates a risk of internal functional problems, overheating, or fire.
- When plugging in the power cord, check for presence of foreign matter such as dust.
- Use the product in locations with good ventilation to prevent product overheating or ignition.
- Do not allow the battery or charger terminal to come in contact with conductive materials such as fingers, power cables, or clips as there is risk of electrocution or fire.
- Do not use any products other than the supplied charger, battery, and adaptor in order to avoid the risk of fire or overheating.

### 3.4 Precautions During Use



Warning

- Do not touch the charging cable with wet hands in order to avoid the risk of electrocution.
- If liquid leaks out of the battery or if partial product deformation occurs, stop using the project immediately.
- Charge the battery in the correct direction. If charged in the wrong direction, there is a risk of breakdown, explosion, or fire.
- If there is partial discoloration in the charger, disconnect the charging cable immediately and have the charger repaired.
- If liquid leaking out of the battery comes in contact with eyes, wash with flowing water immediately and seek medical assistance at a hospital.
- Do not use on patients with cataracts or retinopathy, or those displaying allergic reactions to light.
- Do not use the product on patients wearing pacemakers, as doing so could cause pacemaker failure.
- Do not irradiate light to soft tissue as doing so could cause adverse effects.
- Use a disposable cover to prevent cross-infection of patients during use.
- Do not swing the product as doing so may cause the head to become detached and fail.
- Do not modify this equipment without the manufacturer's approval.
- If a problem occurs, please contact us for A/S.
- Do not touch the Light Prove as its temperature can reach up to 80 degrees.
- Do not reuse disposable plastic covers.

### 3.5 Precautions During Use



Caution

- Hold the power cord firmly when disconnecting it from the power source to prevent burns or electrocution.
- Do not exert unnecessary impact or force to the power cord in order to prevent damage and the risk of electrocution and fire.
- Do not use the product for any use other than for dental purposes.

### 3.6 Precautions During Maintenance



Warning

- Please use only the battery provided in order to avoid risk of leakage or explosion.
- Do not dismantle or disassemble the product as doing so creates a risk of erroneous operation, injury, electrocution, or fire.
- Prevent liquid coming in contact with the product in order to avoid the risk of electrocution.
- Clean the product while the charging cable is disconnected from the charging station.

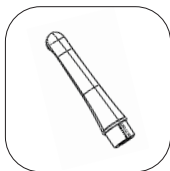


Caution

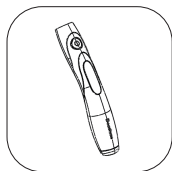
- Take precautions not to lose product accessories during cleaning.
- Users are responsible for product use, maintenance, and storage.

## 4 Contents

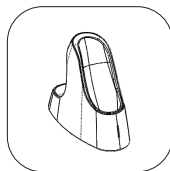
After opening the product package, check whether all the following contents are present.



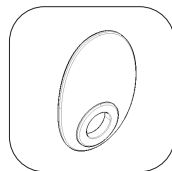
Light Probe



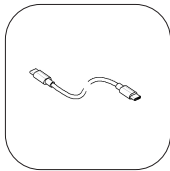
Main body



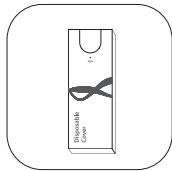
Charging station



Antiglare shield



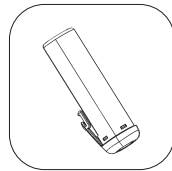
USB C to C cable



Disposable vinyl cover



User Manual

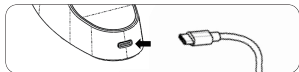


Battery pack



## 5 Installation Method

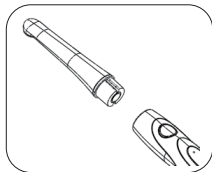
### 5.1 Connecting the Adaptor and Charger



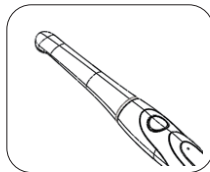
A charging adapter is not provided, so please purchase it separately and connect it in the order below.

- ① Connect the charging adapter to the power outlet.
- ② Connect the charging cable to the charging adapter.
- ③ Connect the charging cable to the charging stand as shown in the picture in Section 5.1.

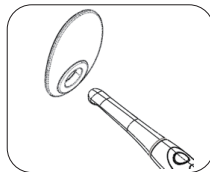
### 5.2 Connecting the Head



- ① Insert the head into the main body as shown.



- ② Push the light probe all the way in.

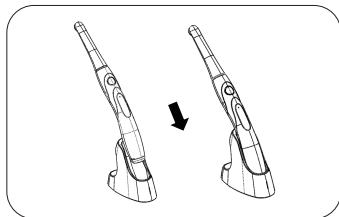


- ③ Insert the antiglare shield.

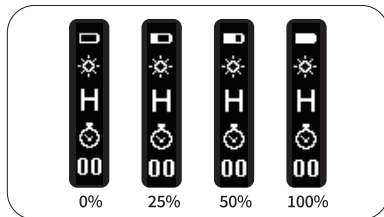


Push the light probe all the way into the main body until they come in direct contact.

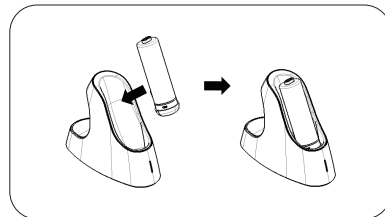
### 5.3 Connecting the Adaptor and Charger



① Place the product on the charging station.



② Once charging starts, the lamp on the charging station lights up, and separate from the charging station and turn the power ON to display the real-time battery status as shown below.



③ Place the battery on the charging station.



Note

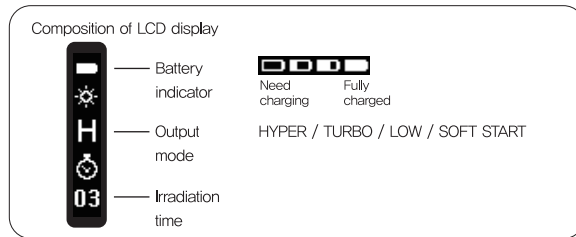
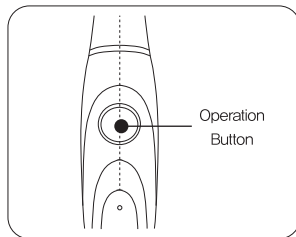
If the battery is completely discharged, charging takes approximately 1 hour to complete.  
The charging lamp on the charging cradle lights up in red when charging, and lights up in green when fully charged.

## 6 How to Use

### 6.1 Product Operation

When the ON button is clicked, the power is turned ON and a beeping sound will be generated.

- ① Battery indicator : Indicates the remaining battery level.
- ② Output mode : Indicates the current mode (indicates the mode used most recently).
- ③ Irradiation time : Indicates the remaining light irradiation time.



- Mode change: Press the ON button for about 1 second and then briefly press it again to change the mode.
- Apply mode change: Press the button briefly to select the desired mode, then press the button again for 1 second to apply the changed mode.
- Memory function: Automatically remembers the last used mode settings even when the power is turned off.

## 6.2 Light Irradiation

When you press the operation button, light irradiation begins in the selected mode.



If you press the operation button during light irradiation, the light irradiation stops.

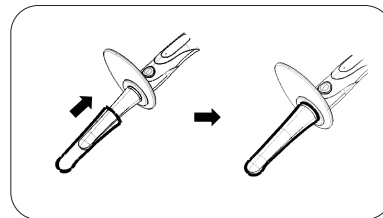
## 6.3 Automatic Screen & Power Turn-Off

- ☐ If the product button is not clicked for 1 minute, the screen will be turned off automatically to save power consumption. Move the product to turn the screen on again.
- ☐ If the product is not manipulated for 10 minutes, the power will be turned off. Click the ON button to turn the power on again.



While light is being irradiated, the automatic screen and power turn-off function does not operate.

## How to use Disposable vinyl cover



Before use, it is recommended to use disposable vinyl covers to prevent cross-infection. It is disposable, so make sure to discard after using it.

## 6.4 Select Photopolymerization Mode

There are 4 built-in programs.

## 6.5 Detailed Explanation of Modes

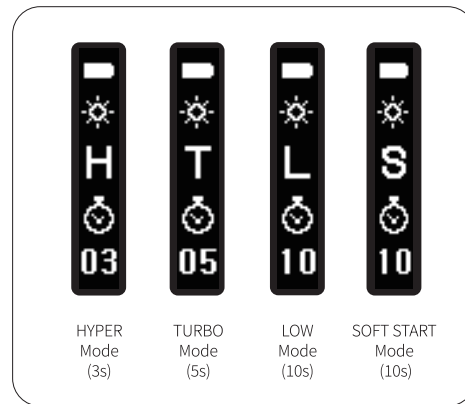
Modes	Output intensity (mW/cm <sup>2</sup> ±10%)	Irradiation (s)
HYPER	3,000	3
TURBO	2,500	5
LOW	1,200	10
SOFT START	(Min)0~(Max)2,000	10

\* SOFT START : Polymerization is carried out with the output gradually increasing from 0 to 2,000.

## 6.6 Buzzer

The buzzer will sound once at the start and end of light irradiation.

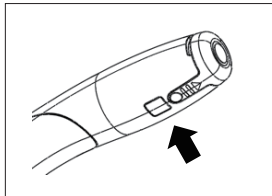
The buzzer will sound 3 times at the rate of once a second from 3 seconds prior to termination of light irradiation. The buzzer will sound 2 times rapidly at the start and termination of mode setting.



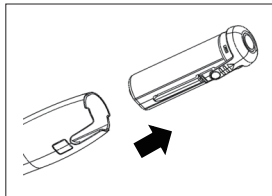
Do not use HYPER Mode continuously for more than 5 seconds when irradiating on soft tissue such as the gums, as doing so creates a risk of burns.

## 6.7 Battery Replacement

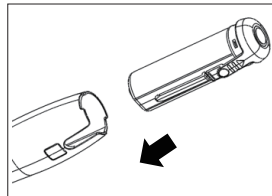
- ① After lightly pressing the protruding portion at the back of the product, detach the battery pack as shown in the diagram on the right. [Fig. 1] & [Fig. 2]
- ② After preparing the replacement battery pack, align the guide in the downward direction and insert the battery pack as shown in the diagram on the right. [Fig. 3] & [Fig. 4]



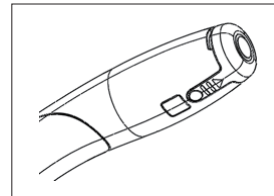
[Fig. 1]



[Fig. 2]



[Fig. 3]



[Fig. 4]



Caution

Push in the battery pack until you hear a clicking sound.  
Take care not to lose the battery pack.

## 7 Maintenance

### 7.1 Cleaning and Disinfection

- To clean, gently wipe the product with a soft cloth free of detergent.
- Use of solvents containing ethanol or acetone, etc. is strictly prohibited.
- Do not clean the product with sharp implements, as doing so can cause scratches or product failure.
- This product is not water-proofed. As such, take precautions against water and moisture.
- Use a disposable cover to prevent cross-infection and liquid entering the device.

### 7.2 Battery Management and Replacement

- High indoor temperatures can affect the battery lifespan and product performance. Use at room temperature.
- It is recommended to fully charge the battery prior to product use.
- Replace the battery if the capacity when fully charged decreases.

### 7.3 Maintenance

- Do not arbitrarily disassemble the product under any circumstances whatsoever.
- Contact the place of purchase and manufacturer for product repairs.
- If the product is not being used, recharge the battery for convenience of use.

### 7.4 Disposal



This product cannot be disposed as urban waste not classified within the EU.  
Comply with local regulations for disposal.

## 8 Troubleshooting

If the product does not operate normally, refer to the following :

Problem	Cause and solution
Does not operate when button is clicked	Check for presence of foreign matter at the contact point between the light probe and main body. Check for presence of foreign matter at the contact point between the battery and main body.
Screen not being displayed	Product may not operate if the battery is fully discharged. Charge the battery before using the product.
Turns off during operation	Power will be turned off if the irradiation button is held down continuously. Click the irradiation button again. If the battery is fully discharged, the product may turn off during operation. Charge the battery before using the product. Check the battery connection.



If the product does not operate normally, refer to the following :

Problem	Cause and solution
Cannot recharge the battery	If the charging cable, etc. is not plugged in properly, charging will not occur. Please recheck the code, etc. Check if there is any foreign matter between the battery pack and the charging cradle.
Intensity of light irradiation drops	If the lens surface is contaminated with foreign matter. If there are scratches or scratches on the lens surface. When the distance between the light source and the material exceeds 0,5mm
Product does not operate normally	If the product operates abnormally, remove the battery pack and reassemble it.

\*If symptoms cannot be addressed even after taking the above measures, inquire at the place of purchase or manufacturer.

## 9 Specifications

Common name : Dental Curing Light(GCL-01W)

Product name : Bluemoon

Manufacturer : GENOSS Co., Ltd.

Address : D-Factory, 56, Changnyong-daero 256beon-gil, Yeongtong-gu,  
Suwon-si, Gyeonggi-do, Republic of Korea

Tel : 031-888-5100

Format of protection against electric shock : Type BF applied part(Light Probe)

Type of protection against electric shock : Internally powered equipment

Classification according to the degree of protection against ingress of water : IPX0

This equipment is not suitable for use in the presence of flammable anesthetic or oxygen

Mode of operation : Continuous operation

### Terms of Use

Temperature (°C)	10 ~ 40
Humidity (%)	20 ~ 80
Atmospheric pressure (hPa)	500 ~ 1060























### Transportation and storage conditions

Temperature (°C)	-10 ~ 40
Humidity (%)	10 ~ 90
Atmospheric pressure (hPa)	500 ~ 1060

## Additional Information

Product (Including head)	Operating voltage	3.7V, 1.75A
	Wavelength range	380 ~ 520nm
	Dimensions	App. 238 x 43.8 x 27.3
	Weight	99g
Charger	Operating voltage	5V, 0.5A
	Dimensions	App. 102 x 85 x 44
	Weight	128g
Battery	Type	Lithium ion battery
	Voltage	DC 3.7V, 0.8Ah
	Dimensions	App. 14.5 x 52.7
Disposable cover	Quantity	App. 100 sheets
	Raw material	Polyethylene
Charging cable	Specification	C to C

## Symbols

	Caution		Type BF applied part		CE marking
	Serial Number		Refer to Instruction manual/booklet		Catalogue number
	Waste Electrical and Electronic Equipment Directive				Non-sterile
	Manufacturer		Distributor		Batch code
	Keep dry		Fragile, handle with care		Date of manufacture
	Keep away from sunlight		Use no hooks		Medical device
	Authorized representative in the European Community/European Union				Unique device identifier
	Temperature limit		Humidity limitation		Atmospheric pressure limitation

## 10 Warranty and After-Service

GENOSS Co., Ltd. guarantees to customers that the dental visible light curing machine will be free from defects in materials and workmanship under normal use and service for 3 years (1 year for battery) from the date of purchase. The product warranty is conditioned on the customer's correct use of the product. During the warranty period, defective parts of the product will be repaired or replaced free of charge to the customer. However, if it is determined that the product warranty does not apply, the customer must bear all parts, shipping, and labor costs for repair. When making a purchase, please fill out the following form and return it to the representative.

### Situations in which the warranty does not apply:

- ① Defects or losses due to accident, misuse, abnormal use, abnormal state, or inappropriate storage arising from user negligence.
- ② Defects or damage due to external causes such as impacts with other objects and use under high-temperature environments such as heaters, pans, and fireproof products.
- ③ Defects or damage due to inappropriate testing, operation, maintenance, installation, or adjustment that GENOSS Co., Ltd. did not provide or approve.
- ④ Defects or breakage occurring due to the warnings stipulated under the user manual being ignored.



# Product Warranty

- This product was manufactured under our company's strict quality control regulations.
- If product failure or defects occur during normal use by the consumer, free repairs will be made in accordance with company A/S regulations.
- The warranty period is based on the purchase date. When making A/S requests, make sure to present this warranty along with the purchase receipt.

Product name	Bluemoon	Customer information	
Purchase date		Customer name	
Date of Manufacture		Contact No.	
Serial No.		Address	
Warranty period	3 years from purchase date		

Dentium

**Bluemoon**  
Dental Curing Light





**Bluemoon**  
Dental Curing Light



**EMERGO EUROPE**

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