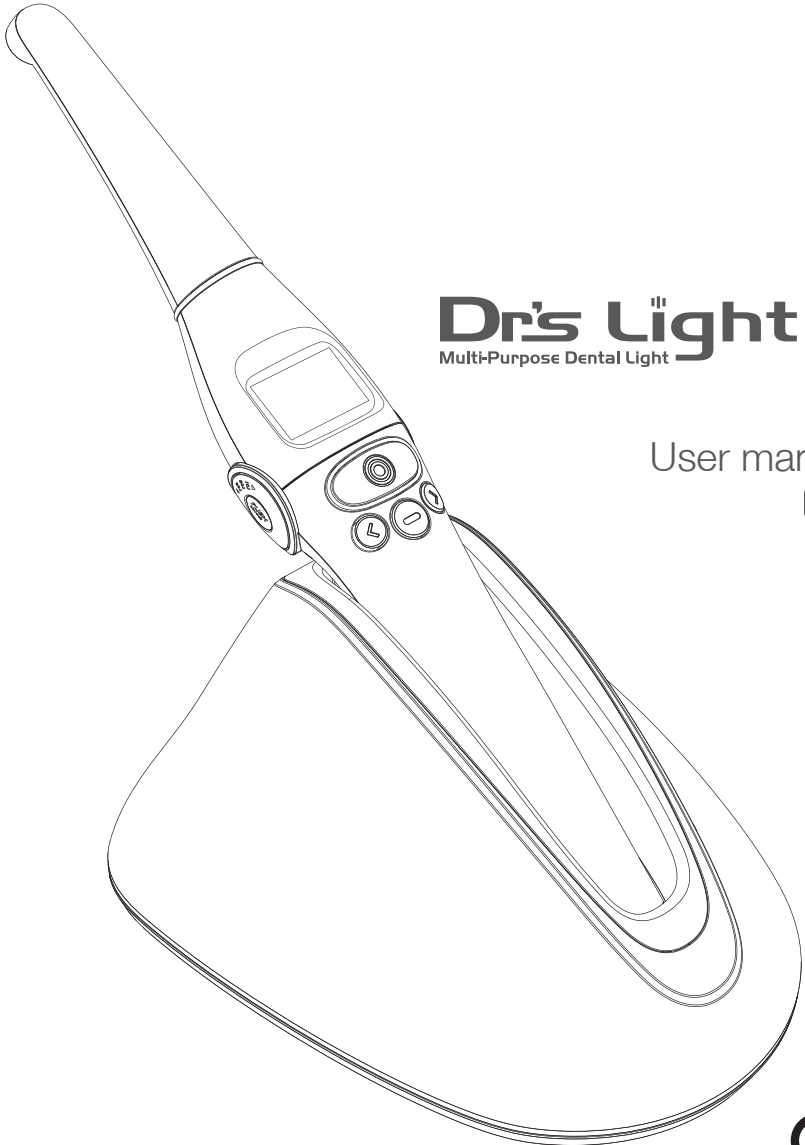


Master of Dental Light



Dr's Light 2

Multi-Purpose Dental Light

User manual

Eng

CE

1. Introduction	04
– Features	
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– Notes and references	
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1 Introduction

Thank you for purchasing the device.

The instructions described below have been designed to provide the necessary information for the successful operation, daily maintenance and safety for the use of this device.

Features

- High power intensity
- Dual wavelength LED (peak 405nm & 460nm)
- Adjustable intensity power
- Ortho mode
- Easy to ready color OLED screen
- 280° twistable head
- Adjustable handpiece angle
- Big capacity & Interchangeable battery

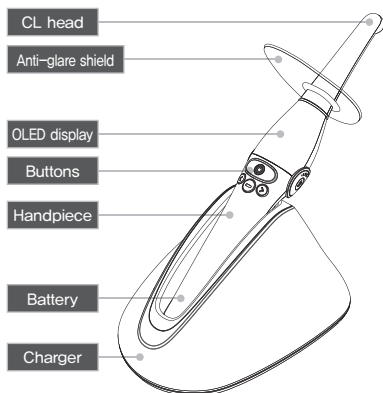
Intended for use

- Polymerization of light-cure catalyst containing dental materials with a wavelength spectrum of 400 ~ 490nm.

Intended for use of optional head

- WA Head: for the orthodontic's direct bonding

Overview



[Option]



2 Safety information

It is important to understand the following information to use this product safely.

Warning and caution

Warning and caution used in this manual are shown below.



Indicates a potentially hazardous situation which, if not avoided, may result in serious injury or death.



Indicates a potentially hazardous situation which, if not avoided, may result in minor/moderate injury or in damage of property.

Notes and references

Notes and references used in this manual are shown below.



Indicates that potential malfunctions may occur if the description is ignored.



Supplementary information to facilitate better operation.

2 Safety information

Installation and connection



Warning

- The adapter should be disconnected from charger before connect the power cable to prevent an electric shock.
- Keep away from sources of ignition to avoid fire or explosion.
- Protect the handpiece, charger, and battery from any liquid to avoid electric shock or functional error.
- Place the charger on a flat and stable surface. Do not drop handpiece and charger to avoid internal defect that may cause overheating or fire.
- Do not place the electric cord near a gas burner or sources of heat. If the cord catch on fire, replace to new one to avoid short-circuit.



Caution

- Do not use or leave the unit in areas of high temperature or exposed to direct sunlight. Internal circuit may cause overheat or fire.
- Securely connect the power plug to the outlet with dust-free.
- Use this device in well ventilated areas. Overheating may cause fire.
- Do not touch the terminal areas of charger or battery with fingers or conductive objects such as metal wire or safety-pin. It may electric shock or fire.
- Do not use other charger, battery, or adapter. It may cause fire or device malfunction.

2 Safety information

Operation



Warning

- Do not plug the power cord with wet hands. This may result in an electric shock.
- In case of fluid leak from battery or partial discoloration / deformation of the handpiece, immediately stop use.
- Place the battery on correct direction when charging.
Wrong directed placing may cause malfunction, explosion, or fire.
- In case partial discoloration of the charger, immediately disconnected the power plug and repair the charger.
- In case battery fluid contacts the eye, immediately flush with copious amount of clean water and get medical attention.
- Do not use the device on patients with a history of cataract, retinal damage or allergic reaction to light.
- Do not use this device on a person with a pacemaker as it may cause malfunction of pacemaker.
- Avoid exposing the light on intraoral soft tissue as it may affect the soft tissue.
- Be careful when use the soft lens on the LED part to avoid detach on use.
And please use disposable cover on use.
- Do not put the battery on the charger upside down. This may cause an explosion or fire.
- Use disposable cover when use the device for patient to avoid cross-infection.



Caution

- Disconnect the power cord by grasping the power plug. This may cause injuries or burns.
- Avoid damage or use of unnecessary force on the power cord.
This may cause an electric shock or fire.
- Should battery fluid contact the skin or clothes, immediately wash it off with copious amount water to avoid skin damage.
- Take the battery out of from handpiece, if it won't use for more than one week.
- Do not use this product for any purposes other than dental use.

2 Safety information

Maintenance



Warning

- Use only the battery supplied to avoid fluid leak or explosion.
- Never disassemble or overhaul the product.
Unusual performance may cause injuries, electric shock, or fire.
- Ensure that charger and battery are always separated from the handpiece, and disconnect adapter cable from electric source prior to cleaning.

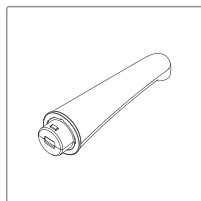


Caution

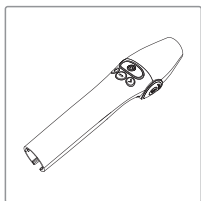
- If the OLED screen malfunctions, remove the battery from the handpiece and reinsert it.
- Careful to avoid missing accessories like soft lens or etc.
- User must be in charge of operation, maintenance and check.

3 List of components

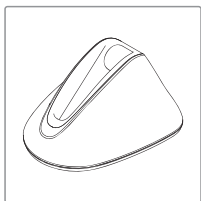
Please check the contents described below when removing the contents from the original packaging.



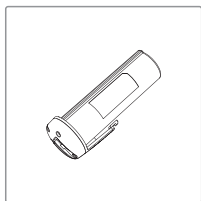
CL head



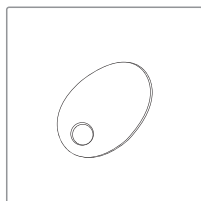
Handpiece



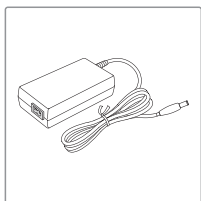
Charger



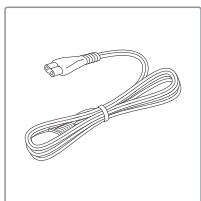
Battery



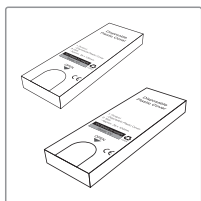
Anti-glare shield



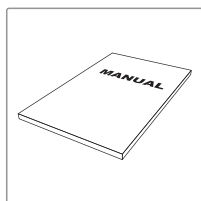
Adapter



Power cable

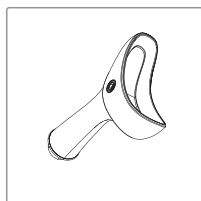


Disposable cover
(x 100 pcs by weight)
x 2ea



User manual

Option head



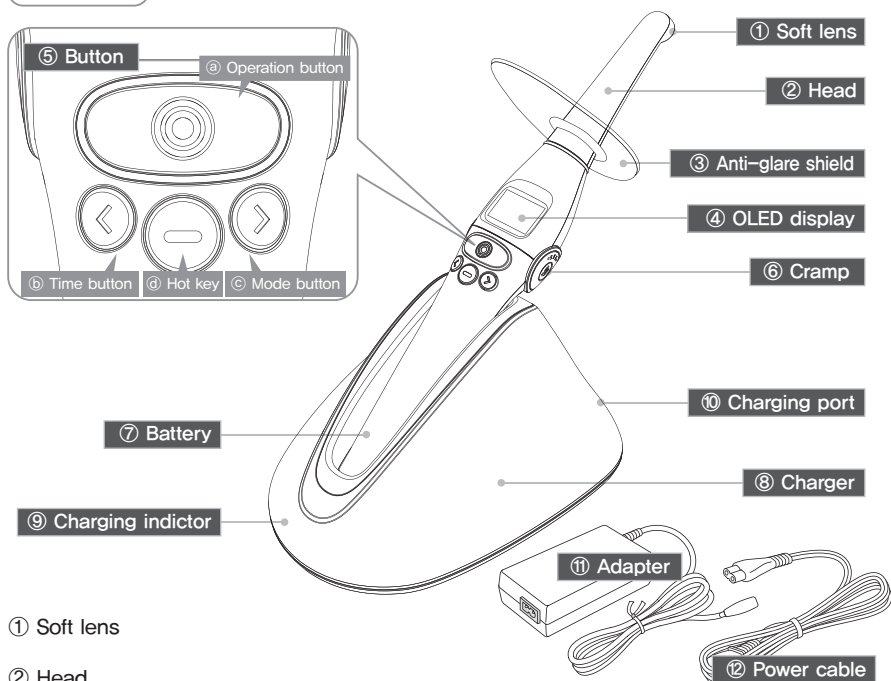
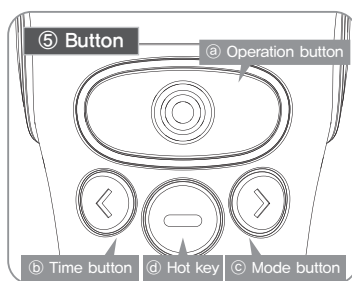
WA head

* CL: Curing Light, WA: Wide Angle

4 Parts and functions



Option
WA: Wide Angle



① Soft lens

② Head

– Twistable 280° degrees – Detachable

③ Anti-glare shield

④ OLED display

– Show the device states

⑤ Button

③ Operation button

– Power on / off

– Light irradiation start / stop.

② Time button

– Time setting which set for each mode.

– On Power mode it is turn to Ortho mode.

① Mode button

– Mode selection

(Low → High → Turbo → Soft Start → Pulse → Low rotated)

④ Hot key

– Go to Power mode with short click

– Go to Timer mode with long click

⑥ Cramp

– Change head angle (3 steps)

⑦ Battery

⑧ Charger

⑨ Charging indicator

– Red: On charging

– Blue: Full charged

⑩ Charging port

– Connect the AC adapter for charging

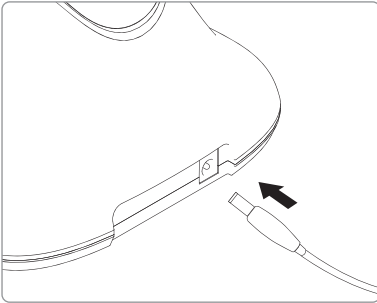
⑪ Adapter

⑫ Power cable

5 Installation

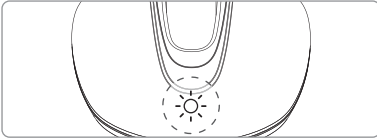
Refer to the information supplied on safety precautions during installation and connection.

1. Connection between adapter and charger



Securely insert the connector of the adapter into the inlet at the back of the charger

The adapter is able to use with a power outlet of 100V ~ 240V



When electric power is connected, red and blue light is flashed instantly. It shown the charger works normally.



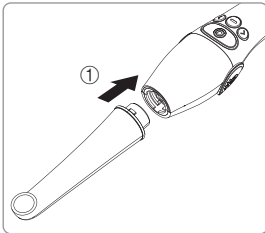
Caution

Use only supplied adapter.

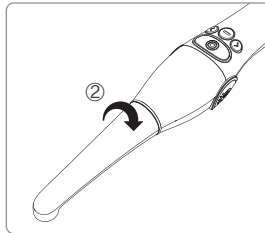
If the adapter is not supplied one, it may make charger malfunction

2. Inserting head

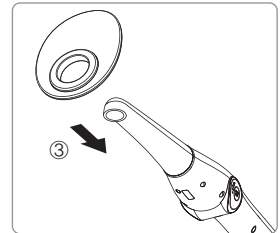
Connect the head with handpiece. Be careful the direction, and do not force much when connect the head.



Place the head to handpiece as upper direction.



Spin the head for arrow direction.



Mount Anti-glare shield as upper picture.



Note

The head should be placed upside down to connect it.

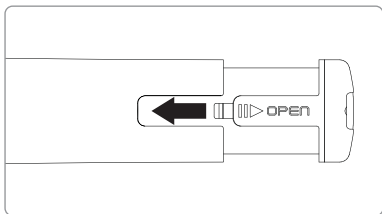


Reference

Other heads are same to attach with the body.

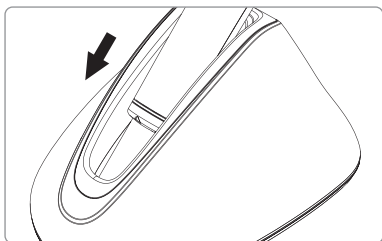
5 Installation

3. Inserting battery

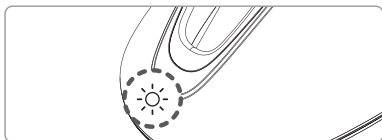


Carefully insert the battery into the handpiece directed by the arrow. Avoid forcing the battery.

4. Charging



Insert the handpiece into the vertical slot at the front of the charger.



The charger light at the front of the charger will appear.

- Red light on: Charging in progress.
- Blue light on: Charging process is complete.

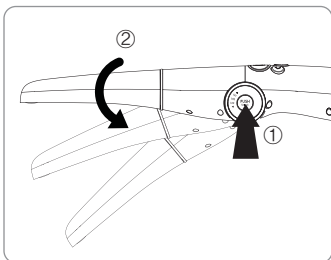
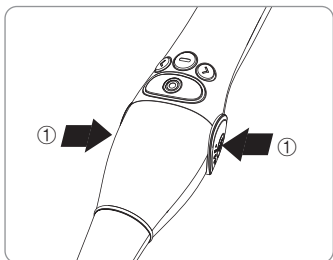


Note

If the remaining battery is extremely low, red light may flicker while recharging, which is not a malfunction.

It will take approximately 3~4 hours before the battery will be fully charged.

5. Change the handpiece angle.



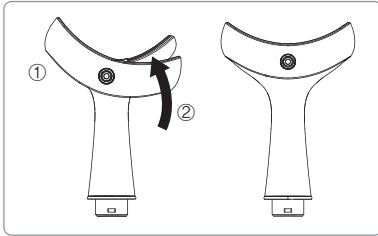
Caution

Should use clamp when change the angle. If don't the durability will be weaker.

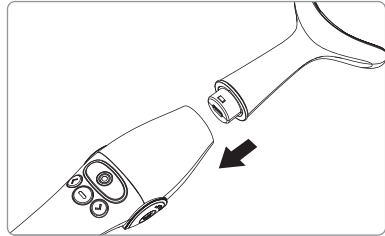
5 Installation

6. WA Head installation (Option)

<Installation>



Mount silicon cover on the WA head.



Mount silicon cover on the WA head.



Reference

– There are Ortho mode with WA Head. Refer 06. How to use

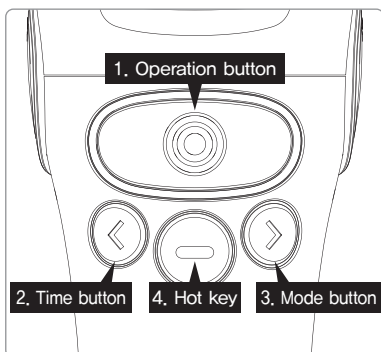


Caution

- Read and check contents and manual before installation.
- Read and reference this manual. Careless on installation or of injury.
- Dropping this unit would lead to injury or device malfunction.
- Tighten kinds of bolt or nut surely to avoid accident.
- Check the bolt or nut whenever using to avoid accident.
- Manufacturer doesn't have any liability cause from misuse or user-careless.

6 How to use

1. Button description



- 1. Operation button**
 - Power on / off
 - Light irradiation start / stop.
- 2. Time button**
 - Time setting which set for each mode.
 - On Power mode it rotate Ortho and Power mode
- 3. Mode button**
 - Mode selection
(High → Turbo → Soft → Pulse → Low rotated)
- 4. Hot key**
 - Go to Power mode with short click
 - Go to Timer mode with long click

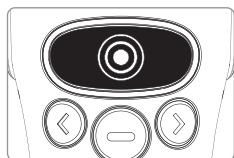
Option head

WA head

- 1) Operation button**
 - Power on / off
 - Light irradiation start / stop.
- 2) Time button:** Set the time.
(10, 15, 20, 25, 30 Minutes rotated.)
- 3) Mode button:** Click and hold for 3 seconds, it turn to Ortho mode.
- 4) Hot key:** Go to timer mode with long click.

2. Activating handpiece

- Insert battery and click operation button. Then OLED screen will turn on with beep sound.



Intro display



Last selected mode

6 How to use

– OLED screen



- ① Show the light irradiation level by visually.
- ② Show selected mode.
- ③ Show set time.
- ④ Show residual time.
- ⑤ Show residual battery electric capacity.

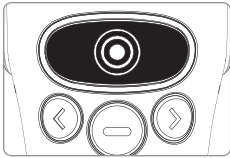


Reference

When turn on the device, the mode and time are set for last selected one when turn off.

3. Start of exposure

Press operation button to start exposure with the selected mode.



Reference

Press any button if you wish to end the irradiation process.

4. Battery indicator



This icon indicates the Power remaining of battery.

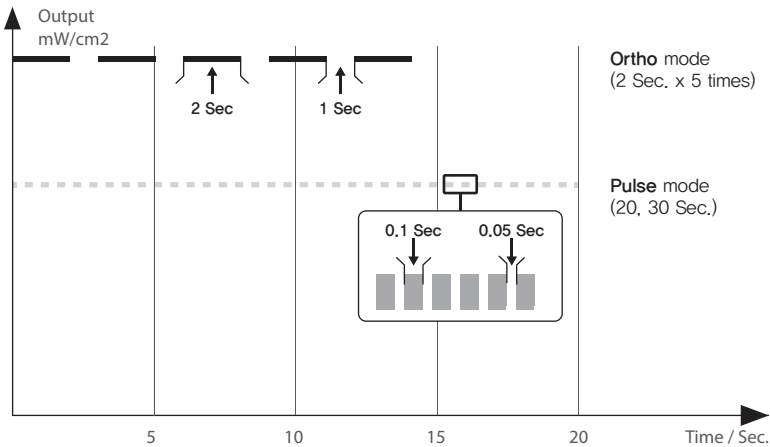
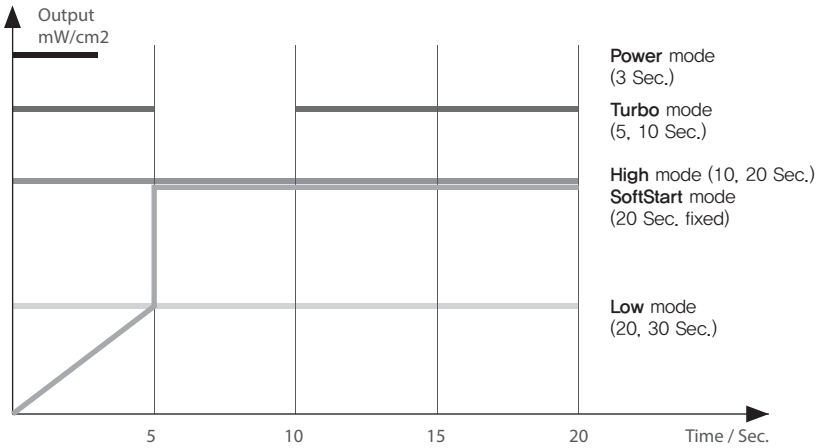


Recharge or replace the battery pack when "LOW BATTERY" sign appears on the display screen, and turn off the device.

6 How to use

5. Selection of curing mode

– Six curing programs are available in this device.

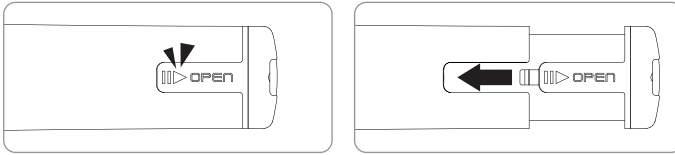


In Power mode, do not expose soft tissue for more than 5 seconds.
Power mode exposure time set is fixed for 3 seconds.

6. Reset

In case the device seems work abnormally, try to device reset.

To reset the device, take off the battery. And re-insert the battery after 5 seconds.



7. Auto display off & Auto power off

- In case of no button click for 30 seconds, the display will be turn off to save electric power.
To turn on the display, shake the device.

- In case the device doesn't operated for 1 hour. The device will power off. To turn on, click operation button.



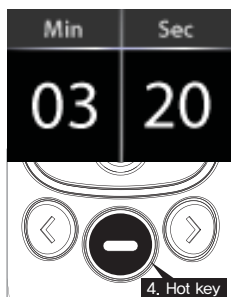
Reference

Auto display off or power off function doesn't work during irradiation.

6 How to use

8. Timer mode

This device has timer function. Long click hot key. Then device is turn to timer mode.



- 1) Operation button
– Start timer
- 2) Time button
– Decrease the figure (Min: – 1 minute, Sec. – 10 seconds)
- 3) Mode button
– Increase the figure (Min: +1 minute, Sec. +10 seconds)
- 4) Hot key
– Sort click: Select figure (Min, 10 → Min, 1 → Sec. → Min, 10 / rotation)
– Long click: Get out to previous mode.

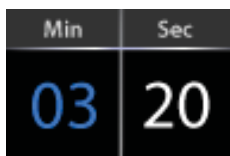


Reference

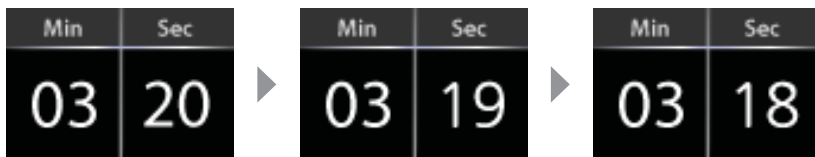
Selected figure is shown by blue letter.

Minimum setting time is 10 seconds, and maximum setting time is 59 minutes 50 seconds.

1. Set the time with buttons.



2. Click operation button, then the time is reduced till 00:00 from set time.



Reference

– Press any button if you wish to end the progress.

– Beep sound make per every 10 seconds.

3. In case the residual time is reach 00:00, device makes beep sound for 1 minute.
Click any button beep sound is stop and turn to timer with set time.

4. To get out the timer mode, long click the hot key.

6 How to Use

9. WA head

1. Ortho mode



1) When connect WAhead OLED screen show Ortho mode standby.

① Setting time & Residual time



2) Set the time with time button. And click operation button for irradiation.

7 Maintenance

Cleaning and disinfection

- Clean the device gently with clean, soft, lint-free cloth.
- Avoid using solvents which contain ethanol or acetone.
- Do not use sharp or pointed tools to clean as they may damage or scratch the plastic case.
- Do not spill any liquid into the device. It might make device malfunction.
- Take off the battery when the device cleaning to avoid electric shock.

Maintenance and replacement of the battery

- Exposure to high room temperature may shorten the battery life and affect device performance. Use the device in normal temperature.
- It is recommended for rechargeable battery to be charged immediately before use to maximize efficiency.
- Remove the battery from the handpiece, if not being used for a week.
- If the running time declines with a full-charged battery, replace the battery before use.

8 Trouble shooting

If the device is not operating normally, please refer to the following points.

Problem	Cause and solution
Button doesn't work	If the buttons are pressed with excess force, it will not work. In such case, press the button gently.
Display screen does not work	If the battery is completely discharged or connected incorrectly, display will not appear. Recharge the battery or reconnect the battery to reset the device.
Power off while in operation	If the operation button is pressed for a moment, power will be turned off. Press operation button again. Check the battery connection. If the battery is completely discharged, device can be turned off. Recharge the battery.
Not able to charge	If the power cord or etc. is not correctly connected, the battery can not be charged. If the battery or handpiece is not properly placed on the charger, the battery can not be charged. If the battery life is finished, it could not be charged. Replace the battery.
Light intensity is poor	If there is contamination on the soft lens, the light intensity could be poor. Clean or replace the soft lens. User could think the light intensity is poor even the device is normal. Check the material is polymerized well or not.
Optional head doesn't recognized	In case of wrong connection, the device can not recognize the head. Take off the head and reconnect it.
Device works abnormally	In case the device works abnormal condition, takes off the battery and reinsert it after 5 seconds for device reset.

* If the trouble is not fixed after following solution, please contact your local dealer or manufacturer.

9 Specification

■ Equipment Class

Model:	CL-DLT30
Trademark:	Dr's Light2
Power supply:	3.7V Lithium ion battery
Protection from ingress of liquids:	IPX0 (ordinary equipment)

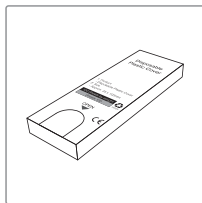
■ Operation, transport, and storage condition for the main unit

	Operation	Storage	Transport
Temperature	10~40C	10~40C	-10C~50C
Humidity	10~80%	20~80%	20~80%
Atmospheric pressure	800 ~ 1360 hPa		

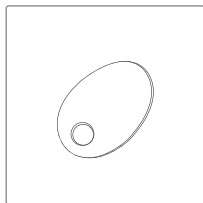
■ Additional Information

Handpiece (included curing light head)	Operation voltage	3.7V
	Peak wavelength	405nm & 460nm
	Measurement	Approx. 273 x 45 x 39 mm
	Weight	Approx. 114 g
Charger	Operation voltage	5V
	Measurement	Approx. 169 x 148 x 89 mm
	Weight	Approx. 170 g
Battery	Type	Lithium Ion battery
	Nominal voltage	DC 3.7V
	Measurement	Approx. 80 x 27 x 30mm
	Weight	Approx. 56g
Disposable cover	Quantity	Approx. 100 pcs by weight x 2ea
	Raw material	Polyethylene
Adapter	Input voltage	AC 100 ~ 240 V
	Output voltage	DC 5V 2A
	UL number	E333054

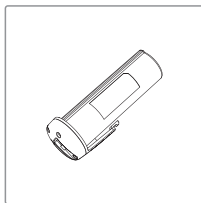
10 Accessories



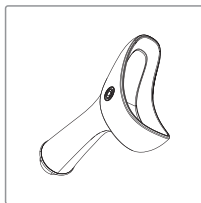
Disposable cover
(Approx. 100 pcs by weight)



Anti-glare shield



Battery

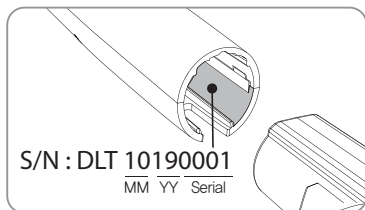


WA Head

11 Warranty

This product is only shipped after strict inspection. Should the product incur any problems under normal use conditions within one year from the date of purchase, the repair will be free of charge. However, repair of consumables (Disposable cover, Anti-glare shield, Battery and etc.) are not covered by the warranty. For more information, refer 12. Warranty card attached.

Serial number check



S/N : DLT 10190001
MM YY Serial

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21315, Republic of Korea
Tel : + 82 32 424 6325 Fax : + 82 32 424 6326
E-mail : info@gooddrs.com Website : www.gooddrs.com



We guarantee the quality of the product as follows

Name of product :

< Assurance details >

Name of model :

Customer information

- Office name :
- Office phone :

1. If there is any defect of manufacturer or product has any fault itself within the assurance period, it will be replaced with the same product.

2. Below cases are not effective for the free refund.

- Malfunction and damage according to user's carelessness.
- Malfunction and damage according to natural disaster such as fire, earthquake and flood etc.
- Malfunction and damage according to user's intention or accident.
- Malfunction and damage according to using incompatible product.

3. The manufacturer does not accept any liability resulting misuse.

Distributor

- Dealer name :

Assurance period

- Date of purchase : from , 20
- Product is for 1 year except accessories.



Good Doctors Co., Ltd.

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Rev.3 - 10. 2019

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