ART-L3 CURING LIGHT Pro Fiber Type

User Manual



Tel: 909-594-8066 Fax: 909-594-7266

Website:http://www.bonartmed.com

Email: sales@bonartmed.com

ECREP Jorgen Kruuse A/S

Marslev Byvej 35, DK-5290, Marslev, Denmark



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NOTICE



Please keep the contact points clean to avoid bad connection.





Power saving & charging.

The ART-L3 LED cordless Curing Light System is designed to automatically turn to sleep mode after the unit has been idle for a few minutes to be energy efficient. Insert the handpiece into the charging unit after use.





Do not operate.

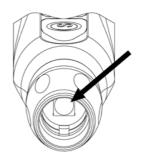
Do not operate 20-second curing cycle for more than 3 times continuously to avoid LED from overheating.





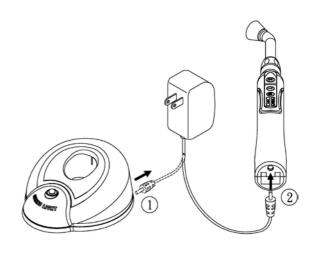
Keep clean

Check & clean LED area after each use.



NOTE:

As an alternative option for user to use the system while in low battery, Is to plug the power cord adapter to the system.



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Operator Safety:

Please read carefully and completely before operating unit.

ENGLISH VERSION

ART-L3 LED CURING LIGHT Pro

Only properly trained personnel are designated to use this system as described in this manual. Only qualified personnel shall carry out any kinds of adjustment, maintenance and repair of the equipment.

• WARNING!

<u>WARNING:</u> The intended use of ART-L3 is for light curing only; it is not suitable for work

in full power more then 2 minutes continuously.

WARNING: For continuous operation, please wait for at least 30 seconds between each

curing cycle.

WARNING: Use only specified accessories.

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Installation and Operations:

- 1. Plug the optic fiber into the nozzle of the handpiece.
- 2. Attach the adaptor into the wall plug.
- 3. Attach the eye protecting cap to the tip of the optic fiber or put on blue light resistant goggles as a protection of user's eyes.
- Adjust the curing time by pressing the key "T". Two timing, 10, 20 second, can be selected, LED indicates the selected curing time.
- Select curing mode by pressing the key "M". There are 3 modes: Fast mode, Pulse mode and Ramp mode can be choose. Mode LED indicator indicates which curing mode was selected.
- 6. Adjust the optic fiber direction to suit different restoration position in mouth. The optic fiber can be rotated by 360°.
- 7. Start curing: Press the key "S" to activate the LED output.
- 8. Curing will be ended automatically or press key "S" again to end.
- 9. Press the key "S" to terminate the sleeping mode.

System Maintenance:

1. Prevention of cross infection, cleaning, disinfection and storage

It is mandatory that doctors need to wear sterilized gloves during these procedures at all time to avoid any possibilities of incomplete sterilization and/or getting infected.

After use, remove the optic fiber and eye protecting cap. Clean and disinfect body with commercial alcohol based surface disinfecting solution (Dürr FD 322, Henkel Incidin Liquid, S&M Mikrozid Liquid, B. Braun Meliseptol rapid). Keep other solvents or flammable liquids as well as intense sources of heat away from the unit as they may damage its plastic housing. Always safeguard charger, Body against moisture as this may cause electrical short-circuit or dangerous malfunction.

After each usage, there will be saliva or other debris left on the light guide fiber and eye protecting cap, it is necessary to clean the light guide fiber and eye protecting cap with a supersonic cleaner first. This can be done manually by scrubbing with a brush or by use of an ultrasonic cleaner with a solution of detergent and water. After scrubbing. The optic fiber and eye protecting cap should be rinsed thoroughly with water to remove all detergent and dried the rinsed light guide fiber and eye protecting cap, and finally, put the light guide fiber and eye protecting cap in a bag and then put it into a medical-equipment autoclave and sterilize the fiber at 260°F(127°Q) for 30 minutes or as recommended by the manufacturer of the particular sterilizer used.

2. Light output control

Make sure that the optic fiber is clean and scratch-free, otherwise light output will be reduced and may be insufficient for proper curing of the material.

Control of light efficiency is recommended (e.g. by using CureRite TM light intensity testing device).

The light intensity measured by CureRite testing device should exceed 1000 mW/cm².

3. Battery maintenance

The battery needs approximately 2 hours to be fully recharged.

While the battery is recharging, the indicator light will flash.

If fully charged, the battery has a capacity of approximately 180 ten-second cures (approximately 30 minutes operating time). Under most conditions of use, the device only needs to be recharged 1.5 hours.

When battery is low, the indicator light will come on and flash. There should be approximately 80 ten-second cures left in the reserved circuit to complete of the light curing treatment. Light output is not reduced during this period. After these 80 ten-second cures, the device will automatically switched off.

Caution: To gain better performance of the battery, the new battery must be fully charged for 2.5 hours.

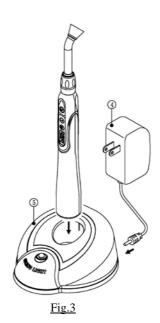
4. Charging method

- A. (1)Plug in charging Stand. (2)Insert the Handpiece into the charging stand refer Fig.3.
- **B.** Plug in Handpiece refer Fig.2.

<u>Fig.1</u>

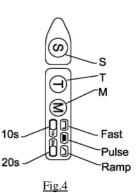


Fig.2



Components

- 1. Light guide
- 2. Handpiece
- 3. Eyes protection cap
- 4. Power supply
- 5. Charger



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Specifications:

Power:

LED Curing Light:

Optical specifications: wavelength 450~470nm

Flux intensity: 1000mW/cm² (Min.)

LED power consumption: 3watt

Equipment class: Class II

Protection from electric shock: Type BF

Operation environment Temperature:0 $^{\circ}$ C \sim 40 $^{\circ}$ C Relative Humidity:

10% ~ 90% (non-condensing)

Transport and storage conditions

Temperature: 0° C ~ 60° C Relative Humidity:

10% ~ 90% (non-condensing)

Atmospheric pressure:860~1060 hPa

Power Adaptor:

Input: 100~240VAC, 50~60Hz,0.6A Output: 5.0VDC/1.0A, 5W Max.

Battery:

Type: Li-ion

Voltage:DC.3.6V

Capacity: 700mAh

Handpiece will operate approximately 30 minutes time starting upon complete recharging.

Time for battery recharge: approximately 2 hours

Autoclavable optic fiber light guide: 8mm