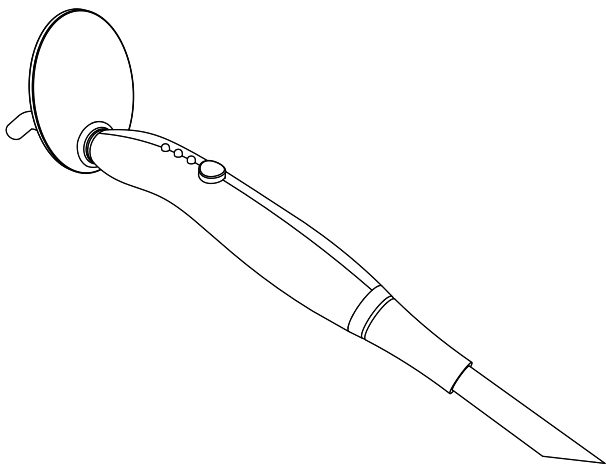




CURING LIGHT LED.Q USER'S MANUAL

(Please read this manual before operating)



GUILIN WOODPECKER MEDICAL INSTRUMENT CO., LTD.
www.glwoodpecker.com

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1. Introduction

1.1 Foreword

Guilin Woodpecker Medical Instrument Co., Ltd. is a high-tech enterprise in researching, developing, and producing dental equipment, and has a perfect quality assurance system. Main products include periodontal treatment device, ultrasonic scaler, curing light, high speed turbine handpiece, apex locator and ultrasurgery etc.

1.2 Feature:

- A) Sealed, connect to dental unit.
- B) Time setting: 10s, 20s, 30s.
- C) Working mode: Full.

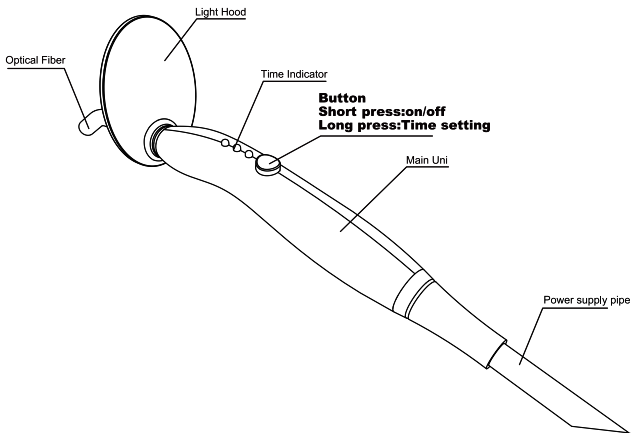
1.3 Principle and usage

1.3.1 LED.Q adopts the principle of ray radiation to solidify the light-sensitive resin by shooting at it in a short time.

1.3.2 This product is used to restore teeth and solidify material for whitening teeth.

2. Structure and components

LED.Q is composed mainly of main unit, optical fiber, light hood, high power LED and cable. (Picture 1)



3. Technical specifications

3.1 Dimensions: 248mm×26mm×26.5mm

3.2 Net weight: 127g

3.3 Configuration:

Main unit *1

Optical fiber *1

Light hood *1

Instruction book *1

Product certificate *1

Warranty card *1

3.4 Power supply

3.4.1 According to the classification of power supply

Connect to dental unit ~24V

3.4.2 Power input: ~24V 50Hz/60Hz 0.4A Max

3.5 Light source

3.5.1 3W high power blue LED light

3.5.2 Wave length: 420nm-480nm

3.5.3 Light intensity: $1000\text{mW}/\text{cm}^2 \sim 1200\text{mW}/\text{cm}^2$

3.5.4 Category: 1

3.5.5 Launch limit(AEL): $3.9 \times 10^{-3}\text{J}$

3.5.6 Inspection method: If the LED light shines when operate correctly, it's in good condition.

3.5.7 Clinical commonly used resin can match with the wavelength, such as 3M, Dentsply etc.

3.6 Radiation during 400nm~515nm(blue light):

$\cong 250\text{mW}/\text{cm}^2$

3.7 Optical active area: 50mm^2

3.8 Working condition:

3.8.1 Environment temperature: 5°C to 40°C

3.8.2 Relative humidity: 30%~75%

3.8.3 Atmosphere pressure: 70kPa to 106kPa

- 3.9 Protection type against electrical shock: class II
- 3.10 Protection against electrical shock: type B
- 3.11 Protection against harmful ingress of water or particular matter: ordinary equipment (IPX0)
- 3.12 Safety in the presence of flammable anesthetic mixture with air, oxygen or nitrous oxide: not suitable under this condition.

4. Install and uninstall way

4.1 Connect the LED power supply line with the power (24V~) of dental unit. Tight the nylon thread to the fixation of the dental unit, then it will be available for operation.

Notice: When installing the LED, be sure the power is cut off. The two power wires should be a little longer than the nylon thread to keep the power wire safe.

4.2 Take off the red cap from the optical fiber and insert the metal part into the front of the built-in LED.Q (Make sure to screw the fiber to the end by rotating it).

4.3 Install the light hood as shown in picture 1.

5. Operation

5.1 Press the button to turn on the device.

5.2 After turning on the device, keep pressing the button in 1second, then the indicator light scroll shines. Now you can choose 10s, 20s, and 30sworking time.

5.3 While operating, put the light source alignment the position where needs to be solid, press the button in a short time, then with a “Di” voice, the main unit shines blue light and starts the countdown. When countdown back to 0, the main unit stops working, and with a long “Di” voice, the indicator light comes back to the setting time.

5.4 It can be stopped working at any time by short pressing the button while operating.

5.5 At the end of a working cycle, the next working cycle can be started immediately by short pressing the button. If the main unit gets hot obviously, please turn off the device until the main unit becomes cool.

Please don't make it continuously illuminate more than 10times.

5.6 If there is resin on the fiber after using, please clear it by cotton cloth to make sure the power intensity is good.

5.7 The device will turn off after 2 minutes idle.

5.8 This device can cure composite resin not less than 4mm in 10 seconds.

6. Precaution

6.1 Optical fiber is fragile glass, do not knock, collide it or let it fall.

6.2 During operation the light should be aimed straightly on the resin, to ensure solidification effectively.

6.3 Be sure to use the original light hood, and make sure to install it in correct way to avoid the blue light hurt eyes. Strictly prohibit aiming light at eyes directly.

7. Contraindication

The heart disease patients, pregnant women and children should be cautious to use this equipment.

8. Maintenance

8.1 This product does include repair part, machine maintenance and repair shall be made by the designated professional or repaired at a repair shop.

8.2 Users can replace light hood and optical fiber on hand. Besure to use the original accessories. Please contact with the local dealer or the company. Banning the use of other related accessories, lest cause curing light damage or other dangerous.

8.3The optical fiber should be sterilized for 4 minutes with 134℃ and

2.0bar~2.3bar (0.20MPa~0.23MPa) before each use.

8.4 After operation each time, please shut off the power source and clean the optical fiber.

9. Trouble shooting

Faulty	Possible cause	Solution
No-indication Non-act.	1, Continuous use time is too long, thermal protection circuit working. 2, The device is not connected well with power. 3, main unit broken.	1, Wait for a few minutes, it will be back to normal. 2, Check the connection of the device and the power. 3, Contact the local dealer or us.
Light intensity insufficient.	1, Optical fiber isn't inserted well to the bottom. 2, The optical fiber is cracked. 3, There is resin remain on the surface of the optical fiber.	1, Install the optical fiber well. 2, Change the optical fiber. 3, Remove the resin.

If all the above solutions have been completed, the machine still can not work normally. Please contact our

special repair shop or us.

10. Storage and transportation

10.1 This equipment should be handled carefully, kept away from shaking point, installed or stored at shadowy, dry, cool and ventilated places.

10.2 Don't store it together with articles that are combustible, poisonous, caustic and explosive.

10.3 This equipment should be stored in a room where the relative humidity is 10%~93%, atmospheric pressure is 70kPa to 106kPa, and the temperature is -20°C to +55°C.

10.4 Excess impact or shake should be avoided during transportation.

10.5 Don't mix it with dangerous articles during transportation.

10.6 Keep it away from sun or snow or rain during transportation.

11. After-sale service

From the date of this equipment sold, if the equipment can't work normally because of the quality problems, our

company will be responsible for the maintenance base on the warranty card. Please refer the warranty scope and period from warranty card.

12. Environmental protection

Please dispose according to the local laws.

13. Symbol instruction



Trademark



Type B applied part

IPX0

Ordinary equipment



Class II equipment



Date of manufacture



Manufacturer



Recovery



Used indoor only



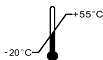
Keep dry



Screw inside/ outside



Handle with care



Temperature limitation for storage



Humidity limitation for storage



Atmospheric pressure for storage



Appliance compliance WEEE directive



Consult the accompanying documents

14. Manufacturer's right

We reserve the rights to change the design of the equipment, the technique, fittings, the instruction manual and the content of the original packing list at any time without notice. If there are some differences between blueprint and real equipment, take the real equipment as the norm.

Scan and Login website
for more information



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