Power Light 150
Curing Light

OPERATING AND SERVICE

MANUAL

www.tpcadvancedtechnology.com

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Preface

Dear Customers,

Thank you for buying the Power Light 150 Dental Curing Light. The system meets the highest quality standards and is easy for operators to use.

Please read this before beginning work!

These operating instructions are intended to help you connect, operate and maintain your system properly.

Caution:

Transportation and storage conditions

The light is capable, while packed for transport or storage, of being exposed for a period not exceeding 15 weeks to environmental conditions not outside the following ranges:

a) an ambient temperature range of -20C to 45C;
b) a relative humidity range less than 80%, including condensation;
c) an atmospheric pressure range of 500hPa to 1060hPa(of 500mbar to 1060 mbar)

Packing clearance

-- carton box
-- polystyrene packing
-- polythene bag

Light clearance

Before cleaning or maintaining the light, please remove plug from the power socket and cut the mains supply.

1. General Introduction

   The optical solidified sticking is a novice technique that can be conveniently used in fast sticking and is characterized by strong sticky, lifelike and staying color, and high hardness. When operating, it has enough time to form a desired shape for better cosmetic effectiveness. This technique is widely used for the treatment of dyed tooth, tooth gap and tooth breakage caused by dental caries and damages.

   The dental curing light is a new model of the curing light family, which has its characters in circuit, structure, adaptation and shape, that is, convenient operation, direct display, and multiple protections.

   The unit possesses the following main features:

   1) The unit is governed by a microcomputer, and its main circuit parts are composed of high-quality elements with following function:
      - Self-supporting when power switching on
      - Timing setting for illuminating up
   2) The optical fiber is fixed by a spring clip for mounting or dismounting conveniently. Therefore, the optical fiber can make a 360-degree rotation around the handpiece.
   3) The main circuit adopts a protection program and protection parts with multiple protection for safe

and reliable operation.

2. Principal Parameters

This unit belongs to BF type of Class I of ordinary electrical medical apparatus.

1) Operating condition
   a. Environmental temperature: 5 ~40 degree
   b. Relative humidity ≤ 80%
2) Power supply: voltage AC 220V (or 110V) , frequency 50HZ (or 60HZ)

3. Technical Specifications

1) Halogen reflector bulb: 12V, 75 W
2) Output wave length range: 380~540nm
3) Total power consumption:≤ 100VA
4) Fuse: Φ5 X 20 mm, 2A
5) Noise level < 55db(A)

TYPE	Box Size	Gross Weight	Net Weight
SCL - I	350mm X 245mm X 140mm	4.5 Kg	3.5 Kg
SCL- II	350mm X 245mm X 140mm	2.6 Kg	2.2 Kg
SCL- III	350mm X 245mm X 140mm	3.0 Kg	2.2 Kg

4. Contents

Check the delivery for completeness.

The light consists of the following components:

No.	Description	Q'ty
1	Handpiece	1
2	8mm light probe	1
3	Anti-glare protection cap	1
4	"O" ring	2
5	Lamp	1
6	Operating instructions	1

5. Power connection

Make sure that the voltage indication on the rating plate complies with the local power supply.

6. Installation

1) Mounting the light probe.

2) Mode of operation
   a. Working mode: exposure time is fixed at 20 seconds. Simply pressing on the handpiece switch button triggers exposure time, which can be interrupted at any time by a further press of the handpiece switch.
   b. After operation, light will be off automatically and the fan will continue to run for a few minutes to cool down the light after operation.

3) Changing the bulb

a. Allow the bulb to cool down.
b. Unscrew the screw-on cap by turning it anti-clock wise.
c. Remove the halogen bulb from its socket.
d. Insert the new halogen bulb into its socket. Do not touch the bulb with your fingers.
e. Replace the screw-on cap by turning it clockwise.

4) Cleaning

Wash the grip of the handpiece and the control unit with a customary disinfectant. Do not use solvents (e.g. acetone) or sharp instruments. Clean dirty plastic parts with a soap solution. Wipe light probe using a disinfectant and a soft cloth. Carefully remove any material that might be sticking to the light emission window.

5) Autoclaving

The light probe is autoclave able. To avoid transmission loss at the light probe, we recommend cleaning the light emission window with acetic or citric acid after autoclaving.
The anti-glare cone is also autoclave able.

7. Points for attention

1) Don't irradiate the blue light beam directly to eyes. Put on dizzying-proof slices or protection orange glasses.
2) Don't dismount the halogen light when it is illuminating or the bulb is not cooling down in order to avoid scalding.
3) Keep the optical bar head clean. Don't touch it with teeth or resin. Otherwise that will affect the effectiveness of the light output.
4) When working with switches, buttons, the handy set, etc., press and place them properly with care.
5) Avoid greatly shocking the unit when delivering and using it.

8. Trouble shooting

1) Every part of the apparatus does not work: check and make sure that the fuse is broken
2) There is no illuminating output: check and make sure that the filament of the halogen light, light bulb pins and the socket are properly connected.
3) The composite hardness is not strong enough:
   - It is necessary to change the bulb because the halogen light has been aging.
   - The light fiber working surface is probably stained, and use a soft thing or a piece of optical polishing material to wipe the dirt or smear away.
4) As for other complex breakdowns, send the Unit to a repair department or the factory for examination and repair.

9. Warranty

The warranty for the unit is one year from the date of purchase.

Malfunctions resulting from faulty material or manufacturing errors are repaired free of charge during the warranty period. For that purpose, the unit has to be sent (C+F) to the dealer or directly to manufacturer. Claims under warranty are only processed if the unit is returned together with the corresponding receipt.

The following damages are not covered by the warranty:

1) Damage resulting from wear under standard operating conditions (i.e. halogen lamps, etc., are not covered by the warranty).
2) Damage resulting from external influences, e.g. transportation damage.
3) Damage resulting from incorrect set-up or installation.
4) Damage resulting from connecting the unit to a power supply, the voltage and frequency of which does not comply with the ones stated on the rating plate.
5) Damage resulting from failure to observe the stipulated use of the apparatus.
6) Damage resulting from improper repairs or modifications that have not been carried out by certified service centers.

The warranty does not provide the right to recover any material or idealistic damage other than the ones mentioned.