Cordless LED Curing Light System

Operation and Installation Manual

TPC

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Technical Specifications:

- Main Power Adapter: AC 90 ~ 250 VAC @ 50 ~ 60 Hz
- Handpiece Voltage: DC 3.8 ~ 4.2 VDC
- Power Consumption: ≤ 20 VA
- Optical Specifications: Wavelength 430 ~ 490 nm.
- Output intensity: 1250mW/cm²
- Working Time settings: 20 seconds (unit sounds every 10 seconds)
- Solidifying Depth:
  1. Temperature: 5 ~ 40 Degrees centigrade RH: ≤ 80%
- Storage Temperature
  2. Temperature: -40 ~ 55 Degrees centigrade RH: ≤ 80%

Packing List

<table>
<thead>
<tr>
<th>QTY</th>
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1. LED curing light handpiece
2. Light guide rod with adaptor
3. Main power adaptor
4. Light shield
5. O-ring
6. Battery
7. Operation / installation manual
Overview of components / Installation Instructions

Installation:

- Insert the light guide rod into the end of the curing handpiece. Press into place.
- Remove black battery caps from batteries.
- Connect battery to curing light body. Turn clockwise to fasten.
- Connect power supply to main charging base.
- Place both batteries on charging base. Let the batteries completely charge. The green LED’s on charging base will turn off when batteries are completely charged. While charging the green LED’s will flash. This indicates that the batteries are charging.
- The led to the most right position is an intensity indicator. This will let the user know if there is sufficient power to cure materials. To use this feature you must have the light guide inserted into the hand piece. Turn the curing light on and place the tip on the charging base. If the led turns green then there is sufficient power to operate the light. If the light turns red then either the power is not sufficient or the light guide is dirty or damaged.

Built in radiometer  
Radiometer indicator

Battery Indicator 1  Battery Indicator 2
Operation:

LED curing light handpiece.

There is one push button and 4 LED located on the handpiece. Press this button once to activate the curing light if the power indicator is not illuminated. Press again to begin the curing process.

The LED located closest to the push button indicates that there is sufficient power supplied to the hand piece.

<table>
<thead>
<tr>
<th>LED Color / Location</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED Green Closest to push button</td>
<td>Indicated that there is sufficient power to unit.</td>
</tr>
<tr>
<td>LED Yellow Closest to push button</td>
<td>Indicates that the main power is low.</td>
</tr>
<tr>
<td>LED Yellow Flashing Closest to push button</td>
<td>Indicates that the handpiece has overheated.</td>
</tr>
</tbody>
</table>

Modes: To change curing modes press and hold the push button for two seconds and you will see the modes change every second. To stop on the desired mode simply let go of the depressed button for the desired mode.

<table>
<thead>
<tr>
<th>LED Color</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED Green</td>
<td>Fast or normal mode high power.</td>
</tr>
<tr>
<td>LED Blue</td>
<td>Pulse mode On / Off every ½ second.</td>
</tr>
<tr>
<td>LED orange</td>
<td>Ramp mode Starts low and end with high power.</td>
</tr>
</tbody>
</table>

Once the button is depressed on any mode the unit will beep and then curing will begin. The light till tone every 10 seconds and will shut off automatically after 20 seconds.

Notice:

- If this device is not used every day, preserve the main handpiece by disconnecting it from the battery.
- This device can’t be used continuously; it’s limited to 10 working cycles repeatedly. After 10 cycles let the curing light cool.

Maintenance:

- If the light guide is damaged or cracked you may need to replace it. This will insure that you are utilizing the full intensity of the curing light.
- When disinfecting the light guide you must immerse the light guide in 75% alcohol several times. Or place in a bag and steam sterilize at a temperature of 134 for 4 minutes.
- Keep the light guide rod ends clean to ensure the quality of the light passes through light guide without obstructions.
Troubleshooting

- Light intensity seems low. Check the light guide and ensure it’s clean and free from cracks.
- The mode on my handpiece changes on its own. Check the main push button and ensure it is not stuck in.
- My light will not change modes. Make sure that you press the main push button and hold it in for 2 seconds. Then the mode should change.
- My light guide does not feel secure in the hand piece. Remove the light guide and ensure that there is an o-ring installed in the end of the hand piece.
- My light guide slides in and out of the metal light guide housing. Remove the light guide housing, then insert the glass tip in to the housing. Turn your left hand counter clock wise and your right hand clockwise to securely fasten the light guide back together.
- None of the mode or status lights illuminate. Check all your connection to the main power adapter. If you are able to measure voltage into the main power adapter but no DC voltage out then you may need to replace the main power adapter.
- I am able to measure DC voltage out of the main power adapter but my light still does not work. Attempt to use a different battery
- I can measure DC voltage at the end of the handpiece tubing but the light does not work. Check the connection pins located on the bottom of the handpiece. If the pins are damaged then you may need to send the light back to the manufacture for service.
- The charging LED’s on the charging base do not illuminate. Check the main power adaptor and insure its connected.

Warranty Information

All of our products sold are guaranteed to be free from defects in workmanship and materials for a 1 year from date of purchase, unless otherwise stated. TPC will repair or replace any defective part at no charge. TPC will not be responsible for labor charges or shipping charges to / from the TPC facility. This guarantee does not cover normal wear or stains on surface finish. The guarantee does not cover damage resulting from improper installation, misuse or accidents incurred in shipping and handling. All claims against the freight carrier must be initiated at the time the damaged items are received. The claim is the responsibility of the customer. We are improving our products on a continuous basis. We reserve the right to make modifications without the need for prior notification and are not obliged to modify previously manufactured items. Light guides, LED’s, and batteries are not covered under any type of warranty. All tubing is covered under a 90 day warranty to be free from defects.