BUILT-IN LED CURING LIGHT

LED 55B

Installation, Operation & User Manual

LED curing light built into the delivery unit · Operation and installation manual · Includes troubleshooting and warranty



DOCUMENT
LED 55B Manual
November 2026 · LED55B-MAN-002

TPC DENTAL
851 S. Lawson St.
City of Industry, CA 91748

CONTACT
Tech support (800) 560-8222
service@tpcdental.com

CONTENTS

In this manual

01 **General information** 3
Technical specifications · Packing list

02 **Installation** 4
Components · Installing the handpiece

03 **Operation** 5
Push button · Status lights · Curing programs

04 **Care and troubleshooting** 6
Maintenance · Troubleshooting

05 **Warranty** 7
Coverage · Contact

How to read this manual

⚠ **WARNING** Risk of injury or damage to the equipment. Follow exactly.

ⓘ **NOTE** Information that makes the job easier or the result more reliable.

Technical support

(800) 560-8222

Monday to Friday, 8:00 AM to 5:00 PM Pacific.

SECTION 01

Technical specifications

Main power adapter	90–250 V AC, 50–60 Hz, or 24 V AC 50/60 Hz, 0.6 A (see the adapter label)
Handpiece voltage	3.8–4.2 V DC
Power consumption	≤ 20 VA
Wavelength	430–490 nm
Output intensity	1,250 mW/cm²
Curing time	20 seconds; the unit beeps every 10 seconds
Curing depth	**[TPC: value missing in source]**
Working conditions	5–40 °C (41–104 °F)
Storage conditions	−40 to +55 °C (−40 to 131 °F)

Packing list

1	LED curing light handpiece	**1**
2	Light guide rod with adapter	**1**
3	Main power adapter, 90–240 V AC or 24 V AC	**1**
4	Light shield	**1**
5	O-ring	**2**
6	Curing light handpiece tubing	**1**
7	Operation and installation manual	**1**

SECTION 02

Components and installation

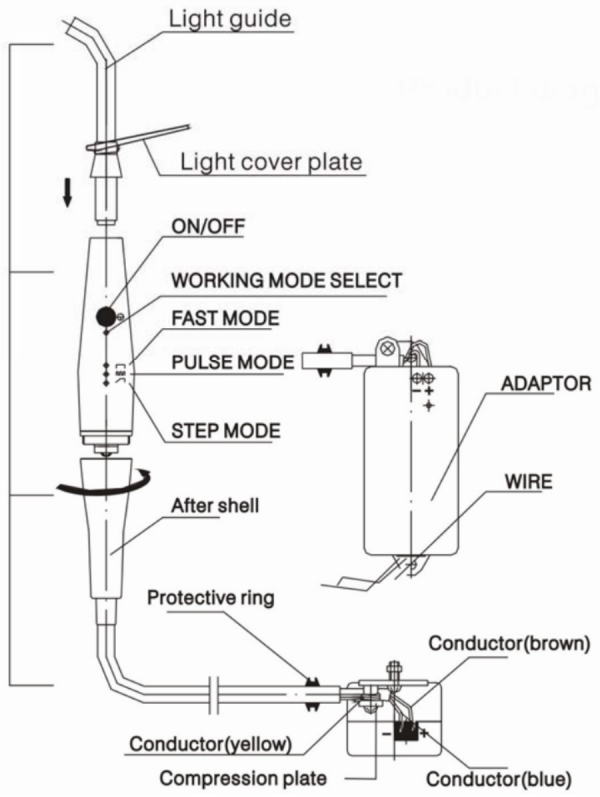


Fig. 1 Components: light guide, light shield, push button, mode indicators, after shell, tubing and power adapter

1. **Insert the light guide** into the end of the handpiece and press it into place.
2. **Attach the handpiece** to the after shell and turn it clockwise to fasten.
3. **Connect the wires** from the gray tubing to the power adapter. Observe the polarity: this is a DC circuit.
4. **Connect the input power** to the power adapter: 90–240 V AC, or 24 V AC 50/60 Hz 0.6 A, depending on the adapter. Check the adapter label first.

⚠ **WARNING** Never connect line voltage to the 24 V power adapter. It will be damaged.

Installation is complete.

SECTION 03

Operation

The handpiece has one push button and four indicator lights.

1. **If the power indicator is off,** press the button once to wake the light.
2. **Press the button again** to start curing. The unit beeps, beeps again every 10 seconds, and turns off automatically after 20 seconds.

Power indicator

The light nearest the push button.

Green	Enough power to the unit
Yellow	Main power is low
Yellow, flashing	The handpiece has overheated

Curing programs

Press and hold the button for 2 seconds; the programs change once a second. Release on the one you want.

Green · FAST	Full power
Blue · PULSE	On and off every ½ second
Orange · RAMP	Starts low and ends at full power

Notices

- If the light is not used every day, disconnect the handpiece from its connector.
- Do not run the light continuously. After 10 curing cycles in a row, let it cool.

⚠ **CAUTION** Never look directly into the light. Use the light shield and colored protective glasses.

SECTION 04

Maintenance

- Replace a damaged or cracked light guide so you get the full intensity of the light.
- To disinfect the light guide, immerse it in 75% alcohol several times, or bag it and steam sterilize at 134 °C (273 °F) for 4 minutes.
- Keep both ends of the light guide clean so light passes through without obstruction.

Troubleshooting

Light intensity seems low	Check the light guide is clean and free from cracks.
Mode changes on its own	Check the push button is not stuck in.
Mode will not change	Press and hold the push button for 2 seconds.
Light guide feels loose	Remove the light guide and check there is an O-ring in the end of the handpiece.
Light guide slides in its metal housing	Remove the housing, insert the glass tip into it, then turn the housing counterclockwise and the tip clockwise to lock them together.
No mode or status lights	Check all connections to the power adapter. If there is voltage in but no DC voltage out, replace the adapter.
DC voltage at the adapter, but no light	Check the handpiece tubing for a broken wire inside.
DC voltage at the tubing end, but no light	Check the connector pins on the bottom of the handpiece. If they are damaged, send the light to TPC for service.

CARE AND WARRANTY

Warranty

1 year limited warranty

TPC products are guaranteed free from defects in workmanship and materials for 1 year from the date of purchase, unless otherwise stated. TPC will repair or replace any defective part at no charge during the warranty period.

Not covered

- Light guides, LEDs and batteries
- Labor, and shipping to and from TPC
- Normal wear or stains on the surface finish
- Damage from improper installation, misuse, or accidents in shipping and handling

Shipping damage

Claims against the freight carrier must be started when the damaged items are received. Filing the claim is the customer's responsibility.

TPC improves its products continuously and may modify them without notice, without obligation to modify items already made.

90 day warranty on tubing

All tubing is guaranteed free from defects for 90 days.

Technical support

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TPC

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ADDRESS

TPC Dental
851 S. Lawson St.
City of Industry, CA 91748

OFFICE

Phone (626) 810-4337
Fax (626) 810-4245

ONLINE

tpcdental.com