

7. INSTALLATION

The CURE 24 is designed to be installed on a dental unit console and connected to the power supply of the unit. AC and DC models are available. A qualified technician should determine that the supply voltage matches the requirements of the curing light.

8. CURE TIMES

A3 shades and lighter take approximately 6-8 seconds to cure. Darker shades and flowables typically take more time. It is recommended that dentists perform their own tests to confirm full depth of cure.

9. LIGHT MEASUREMENT

To ensure proper curing, a radiometer should be used on a regular basis to measure the light intensity. There should be little variation over time as the lifetime of the LED is extremely long. If the reading drops, check that the lens is clear. Clean or replace it if necessary.

10. CLEANING / DISINFECTING

DO NOT IMMERSE IN LIQUID. Thoroughly wipe the handpiece with cleaning solution or soap and water. Disinfect by wiping down with alcohol, phenolic or glutaraldehyde disinfectants per the disinfectant manufacturer's instructions. Curing sleeves are recommended for each use.

11. LIABILITY

Spring Health considers itself responsible for the safety and performance of the product only if installation or modifications are performed by persons authorized by Spring Health, the electrical installation meets local requirements, and the equipment is used in accordance with these instructions.

OPERATION MANUAL *the CURE 24*

Box Contents

<u>QTY</u>	<u>DESCRIPTION</u>
1	<i>the CURE 24</i> handpiece with 8mm lens
1	Hardwire enabled cord
2	Light Shields – for eye protection
1	Wrench – for changing lens
50	Curing Sleeves – for protective barrier
2	Flat surface mount holders
1	Operations Manual and Warranty Card

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1. DESCRIPTION

The CURE is an LED dental curing light for the polymerization of dental composites, sealants and adhesives. *The CURE 24* is designed for hard wired installation in a dental unit console providing 12 to 28 volts. Models are available for AC or DC installations.

2. ERGONOMIC FEATURES

- a) Light weight: 50 grams.
- b) Shape resembles a high speed handpiece and can be held like one.
- c) Two switches are provided for ease of use in any position.
- d) *The CURE 24* has smooth surfaces for easy cleaning.

3. SPECIFICATIONS

- a) Hard wire enabled. For connection to 24 volt dental unit
- b) Power Input 10 watts
- c) Voltage to Handpiece 12 to 28 volts AC, regulated
- d) Operation Continuous operation with intermittent loading. Duty cycle of 20 sec. on and 15 sec. off. 8 timer settings.
- f) Lamp Ultra-high output LED. Service center replacement only. Lifetime in excess of 5000 hours.
- g) Output Wavelength 450 to 490 nm
- h) Output Intensity Greater than 1000 mw/cm²
- i) Thermal Safety Handpiece thermostat protection. If overheating occurs, the unit will shut off for a brief time and four beeps will be heard.
- j) Fuse Internal to handpiece. Automatic reset.
- k) Shutoff Automatic shutoff at end of timed cycle or by pressing either button when the light is in operation.

4. CONTRAINDICATIONS:

This LED has a narrow peak at 470 nm and should only be used on dental formulations containing camphorquinone as the photo initiator. It is contraindicated with other photo initiators. To date the only known resins that will not cure properly with this light are Pyramid Enamel (Bisco), Principle (Dentsply Caulk) and Den Mat (Core Build-up). The practitioner should always perform a test outside of the mouth if in doubt.

5. SAFETY PRECAUTIONS

CAUTION: The light is provided in a non-sterile condition and must be disinfected prior to patient contact. **CAUTION:** This curing unit produces high output curing energy. A significant increase in curing energy is possible compared with equipment previously used. It is important to observe the following precautions and procedures.

CAUTION: Do not place light directly on or towards unprotected gingiva or skin. **CAUTION:** Adjust the curing techniques in accordance with the increase in curing energy. Some examples are: decrease curing time, increase composite thickness, increase distance between the tip of the curing light and light cured materials.

CAUTION: Do not look directly at the light emitted from this curing unit. Do not use this device without suitable protective eyewear for the operator, assistant and patient. Suitable protective eyewear blocks all energy below 550 nm. **ATTENTION:** Safety protective barrier sleeves should be changed after each patient.

6. OPERATION / INSTALATION

Set the timer by holding both buttons at once. Release when desired cycle time is reached on the digital display. Single click either button to start the curing cycle. The cycle stops when the timer reaches zero, or turn off by pressing either button.

The CURE 24 can be used from 12 to 28 volts. Most dental units have 24 volts at the central box. DC models must be connected positive to positive and negative to negative. If no connection point is available in the central box you may run the wires to a 24 volt tap on the main transformer.