

SunSpot

High Intensity Rapid Cure L.E.D. Curing Light System

INTRODUCTION

The **SunSpot** LED Curing Light is a cordless, high power curing light that utilizes LED (light emitting diode) technology. The LED technology provides a minimum output of 1,000 mW/cm² and compatibility with all materials formulated with the common photo initiator camphorquinone. One of the many benefits that result from the LED feature is that it provides the operator with a compact, portable curing unit. The sleek, ergonomic design of the **SunSpot** LED Curing Light retains the familiar feel of a gun style unit and enables easy access to all areas of the oral cavity.

SAFETY AND OPERATIONAL PRECAUTIONS

It is important to observe the following guidelines:

1. The fiberoptic light guide provided is in a non-sterile condition and should be sterilized prior to patient contact.
2. Do not place the light guide directly on unprotected gingiva or skin. Avoid directing the curing light towards unprotected gingiva or skin.
3. Use a hardness disk to determine the ideal curing times for materials.
4. Do not look directly at the light emitted by this curing unit. Always use suitable protective eyewear for the operator, assistants and patient.
5. Patients with a history of photosensitivity reactions, or who are using drugs that cause photosensitivity, should not be exposed to this light.
6. Insufficient output of under 400 mW/cm² can result in inadequate curing of light cured materials. Low output will also provide a reduction in the physical properties of restorative materials and bonding agents.
7. The curing light utilizes a lithium-ion battery for its power supply. Do not place this unit in any location that could expose the battery to high temperatures. Do not incinerate this unit. Dispose of in accordance with federal, state, and local regulations.
8. To maintain optimum curing performance, do not permit the fiberoptic light guide to come in contact with restorative material within the first 3 seconds of curing. After 3 seconds the light guide may be placed in direct contact with the restorative material. This prevents the restorative material from adhering to the tip.

PRE-OPERATING INSTRUCTIONS

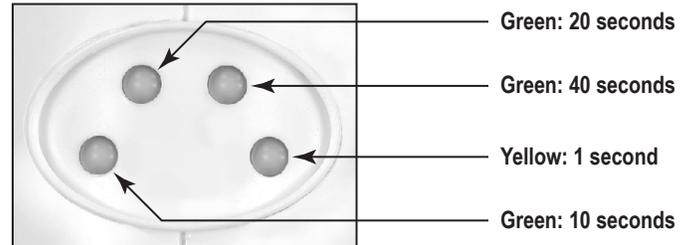
The **SunSpot** system contains a curing gun, fiberoptic light guide, charging base and wall transformer. Insert the fiberoptic light guide into the nose cone of the curing gun by pushing and slightly rotating it until an audible click is heard indicating it is fully seated in place. Place the curing gun into the charging base and ensure that it is properly seated. Connect the power cord from the wall transformer to the receptacle located at the rear of the charging base unit. Plug the wall transformer into a power outlet. Before initial use, charge the battery for a minimum of 8 hours. A blinking green LED on the back of the curing gun will indicate that the unit is charging.

CAUTION: DO NOT use any transformer other than the one supplied. To do so could cause severe damage to the unit and/or produce safety concerns.

OPERATING INSTRUCTIONS

Thoroughly familiarize yourself with the unit before using it on a patient. The **SunSpot** LED Curing Light is equipped with time settings of 1, 10, 20 and 40 seconds to facilitate a variety of different curing procedures. To select a time setting, remove the curing gun from the charging base, depress the trigger switch and hold it depressed for 3 seconds. The 4 time duration indicators will simultaneously flash then begin to illuminate one at a time. From left to right the indicators are 10, 20, 40 and 1 seconds. The first three indicators are green and the last, 1 second indicator, is yellow. When the duration indicator reaches the desired time selection, release the handpiece trigger switch. The unit will remain in this time setting until reset by repeating the time selection process.

To activate a curing cycle, briefly press and release the trigger switch. The unit will operate for the selected time period and will automatically turn off at the end of the cycle. An audible signal will sound at the end of the cycle. A curing cycle may be terminated at any time by briefly pressing and releasing the trigger switch a second time.



The **SunSpot** LED Curing Light uses a lithium ion battery to provide the operator with the convenience of a portable light source. To assure that the battery is adequately charged and ready for operation, the curing gun should be returned to the base when not in use. When the curing gun is inserted into the base, the selected time cycle indicator will begin to blink which indicates a proper electrical connection. The curing light will provide full power for 45 minutes without charging but should be kept fully charged by storing the curing gun in the charging base.

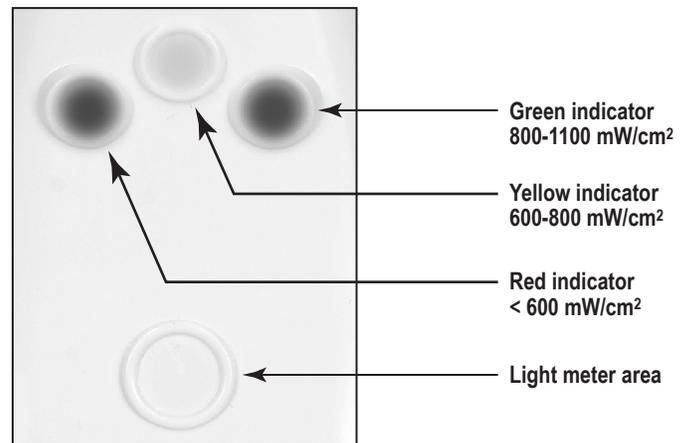
USING THE LIGHT INTENSITY INDICATOR

The **SunSpot** LED Curing Light has a built-in light intensity indicator located on the top center of the base unit. This device is used to monitor the relative performance of the curing gun. To check power output, place the end of the light guide onto the center recess on the base unit ensuring that it is parallel to the center recess. Briefly press and release the trigger to initiate a curing cycle. One of three indicators will remain illuminated.

Green: Output is between 800 and 1100 mW/cm².

Yellow: Output is between 600 and 800 mW/cm².

Red: Output is less than 600 mW/cm². (Return the unit for evaluation)



AUTO-SHUTDOWN MODE

The **SunSpot** LED Curing Light has an auto shutdown mode designed to conserve battery life when the unit is not in use. This feature will automatically activate when the curing gun isn't in the charging base and has not been used for more than 30 minutes. The absence of illuminated time indicators signals that the curing gun has entered the auto shutdown mode. To return the unit to an operational status simply press and release the trigger or return the curing gun to the charging base.