

# Flash Max P3 460 4W

## Manual



CE

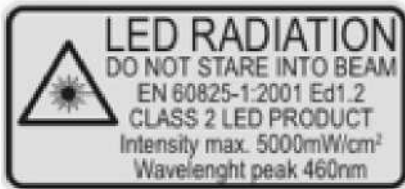
## 1. Technical description

The FlashMax P3 light is a medical device, class I, in compliance with MDD (Medical Devices Directive) section IX. The light must only be used in dental clinics by dental personnel, and only for designated purposes. The product is classified as an electronic medical device electric class II according to DS/EN 60601-1:2006. The product is classified as a class 2 LED product according to EN 60825-1:2001 Ed1.2.

CMS Dental declares that the product described in this manual complies with the above mentioned standards.

The FlashMax P3 light consists of a hand piece, a combined re-charger/holder and an external power supply. Disposable covers and tips protect against cross contamination.

## WARNINGS



1. Do not expose directly into the eyes, or look directly at the emitted light.
2. Eyewear protection should be used.
3. Medical electronic equipment is sensitive to electromagnetic fields. Portable and mobile high frequency communication devices may interfere with medical devices. In order to maintain proper operation, follow instructions in this manual. Use of the light without a tip may cause

overheating of the tissue if the light is used close to the gingiva.

4. Do not reuse covers or tips as this may cause cross contamination.
5. If the light beeps every 2 s when placed in docking station, it is a warning that the charging voltage is 6 V or higher, i.e. a wrong power supply is being used.

## 1.1 Technical specifications

Power supply	
Producer	Dongguan Shilong Fuhua Electronic Co. LTD.
Model	UE08WCP-0501 00SPA
Input power	1 00–240VAC, 50/60Hz
Output power	5.0VDC, 1 .0A
Battery	
Battery type	LiFePO <sub>4</sub>
Nominal voltage	3.2V
Nominal capacity	1 .200mA
Re-charging time	2 hours
User capacity	approx. 500 seconds
LED Diode	
Output intensity	4.000-5.000mW/cm <sup>2</sup>
Wavelength	450-470nm (85%), peak 460nm

## 1.2 Environmental conditions for intended use

Temperature range	+10°C to +40°C
Humidity range	30% to 75%
Atmospheric pressure range	70kPa to 1 06kPa (0.7 bar to 1.06 bar)

## 2. Preparing to use the FlashMax P 3 460 4W light

Connect the power supply under the base of the charging dock and to a main electrical outlet. Place the light in the dock and the battery will begin charging. This is indicated by a green light flashing.

### 3. Use

The FlashMax P3 is only intended for the polymerization of dental materials:

1 s time cycle is used for a layered build-up and/or bonding agents. The 3 s time cycle is used for the finishing layer and/or darker shades.

#### Three program modes

The FlashMax P3 light has three programs each with time settings of 1 or 3 s.

To see the program selected, press the two buttons at the same time and hold for 3 s until a beep is heard. The diode will flash the color of the program, green, orange or red.

To change the program, scroll using any button. Stop at the chosen program and wait for the beep. The light will stay in the chosen mode until changed manually.

#### 3.1 Intelligent Automated Functions

The FlashMax P3 is the first light with this new concept.



The green program mode is the manual mode. Press the large button and the unit will light for 3 s. Press the small button and it will light for 1 s.



In the orange program mode, pressing the large button will give you 3 s of light, a 0.5 s pause, then again 3 s of light. The small button 1s of light, a 0.5 s pause, then 1 s of light.

This mode is used for layered build-ups when the composite restoration is wide enough to require two side by side activations.



In the red program mode the unit will light continuously for either 3 s + 3 s + 3 s + 3 s etc, or 1s +1s +1s +1s etc with 0,5 s intervals until you press the button again to stop it. This mode is used for cementing brackets or veneers or in any other situation where repetitive activations are required.

#### 3.2 Temperature safety

The FlashMax P3 light has a safety cut off to preserve the lifetime of the diode should overheating occur.

When the light gets close to the cut off temperature, you will be warned by intermittent beeping. The light can be used for approximately another 15 s before it cuts off. Overheating is indicated by 3 short beeps followed by fast red flashing.

The light can cool passively or be actively cooled if you need to use it right away.

#### 3.3 Battery power saving

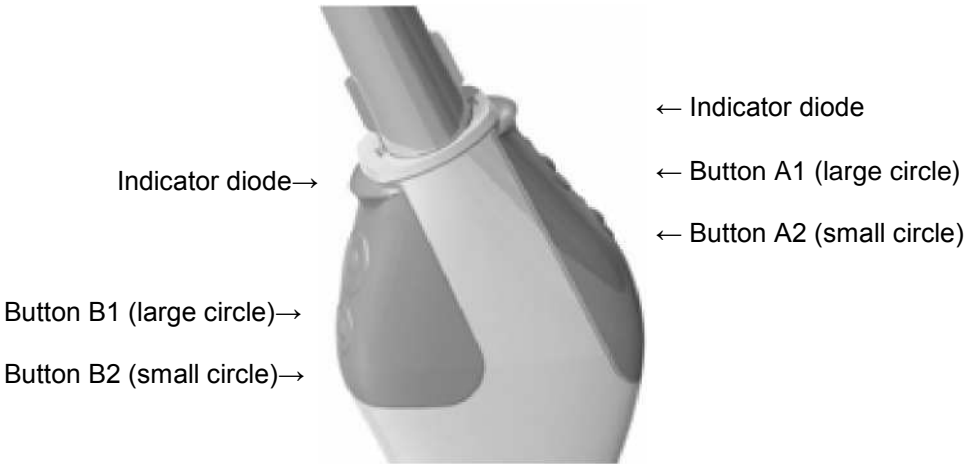
##### Sleep

If the light has not been activated for 5 minutes, or placed in the dock, it will go into sleep mode to conserve energy. Press any button to reactivate it.

##### Deep sleep

If not placed in the charging dock or activated for 6 hours the light will go into deep sleep mode. It must be placed in the dock for one second to be reactivated

# Intelligent Automated Functions: Program modes

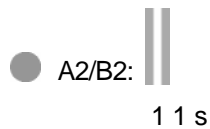


Button function: A1 = B1

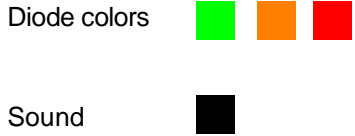
Button function: A2 = B2






Program change:

● → ● → ● : Press A1 +A2 at same time 3 s → scroll → wait 3 s / beep



# Indications: Three-colored diode and sound



Ready		ready for use
Activated light		sound to indicate start and stop
Charging battery		may be used
Low battery		if not used, place in dock
Diode heat warning		15 s from cut-off
Diode overheated		needs to cool before it can be activated
Sleep mode		press any button
Deep sleep mode		place in dock
Error		reset by pressing two buttons on same side for 3 s

## 4. Covers and tips



**d 4 mm**

**d 8 mm**

The light should **only** be used with a tip and cover attached.

There are two standard tips for the FlashMax P3 - a d 4 mm and a d 8 mm tip.

The removable cover is disposable.

The tips are disposable.

### **Attaching and detaching tips.**

Tips are snapped onto the cover by pressing the two items together. The tips can be moved +/-15 degrees in the longitudinal direction of the cover. To detach the tip, rotate the tip away from the cover and it will pop out.

## 5. Cleaning

The hand piece and charging dock may be wiped with a slightly damp cloth using standard cleaning solutions and surface disinfection products, typically based on 70% alcohol.

Do not disperse disinfection fluids into the diode opening. This may damage the diode.

## 6. Labelling

		Observe Operating Instructions
		Product Serial Number
		Medical Electrical Equipment Directive, DS/EN 60601-1:2006 Electrical shock protection, Type B
		Safety of laser products, EN 60825-1 :200 1 Ed1 .2 Class 2 LED product
		Medical Electrical Equipment Directive, DS/EN 60601-1:2006 Electrical double insulation, Class II
		Medical Devices Directive, MDD Directive 93/42/EEC Medical device, Class I
		Canadian Standards Association, CSA Approved for use in Canada and USA
		Waste Electrical and Electronic Equipment Directive, WEEE Directive 2002/96/EC Dispose product to a recycling central

## 7. Service and repair

The FlashMax P3 light is covered by a 2 year warranty.

### CAUTION

The FlashMax P3 light must only be serviced and repaired by your CMS Dental distributor, otherwise the warranty will be void.



Your FlashMax P3 distributor:

**HEXAGON INTERNATIONAL (GB) LTD**

[www.HexagonLimited.com](http://www.HexagonLimited.com)