

DARAY[®]

Medical



DCL1500

LED Multifunction Curing and Intraoral light User Manual

QAM.DCL1500.0516.3

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1. Introduction

Thank you for choosing a Daray DCL1500 LED Dental Curing light. Our range of dental lights are specifically designed to meet the demanding needs of today's dental establishments whilst providing the finest quality design with superior performance, reliability and value. This manual has been provided to give detailed descriptions covering the performance, operation and safety information of the device. It is recommended that users read through this manual before using the device so they are aware of how to operate the device and all of its features appropriately. This user & installation guide contains all the information you need for installation, operation and maintenance of the light.

Restrictions and Liabilities

Information in this document is subject to change and does not represent a commitment by DARAY. Changes made to the information in this document will be incorporated in new editions of the publication. No responsibility is assumed by DARAY for the use or reliability of software or equipment that is not supplied by DARAY

For further information on our product range and find out more about our company please visit www.daray.co.uk or call **0333 321 0971**

This product was designed & manufactured in Great Britain by:

**Daray Ltd. Marquis Drive, Moira, Swadlincote,
Derbyshire DE12 6EJ**

2. Safety

2.1 Considerations

1. This equipment should be used as described within this manual, Daray will not accept responsibility for use in any other way.
2. Only use the supplied charging adaptor.
3. The blue light curing light is harmful, do not aim it into eyes. The light should be only aimed at the area of the teeth being treated.
4. Allow the temperature to normalise before use if the light is moved from a colder environment.
5. Only use the original battery supplied with the product. Use of non-original batteries could result in damage to the product. If the light is to be stored for a period of time, please remove the battery.
6. The product and accessories can be cleaned with water. Do not soak, or use solvent cleaners as this could result in damage.
7. Keep the product away from flammable liquids or sources of heat.
8. Do not insert anything other than directed into the product, it could result in damage to the product electric shock

9. Daray will accept no responsibility for damage caused by use of non-original accessories. Use of non-standard mains adaptor and battery could result in damage and injury.
10. Please avoid the detergent entering the equipment, in case of the short circuit and malfunction.
11. Do not disassemble the product
12. The sleeves are not designed to be used more than once. Dispose of correctly after use to avoid cross infection.
13. Strong electromagnetic fields and unstable voltage may cause the product to operate abnormally.
14. Not recommended for use on patients fitted with pacemakers.
15. In the event that the product needs to be disposed of, please ensure this is done following local guidelines. Do not open, or burn the battery.
16. Do not Autoclave this product
17. The product is recommended for professional use only.

2.2 Intended use

1. The High-intensity blue light is a specific wavelength designed to cure dental resins.
2. The white light is recommended for Intraoral illumination.

3. Construction & installation

This product consists of:

1 x LED head

1 x Light handle

1 x Li-Ion Battery

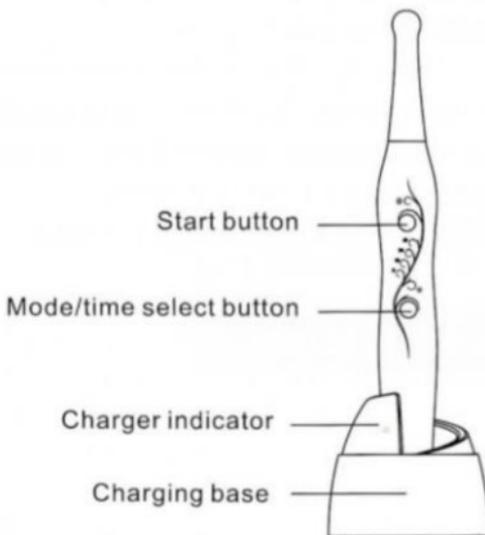
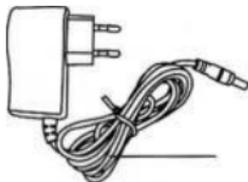
1 x EU-UK Plug adaptor

1 x Charging base

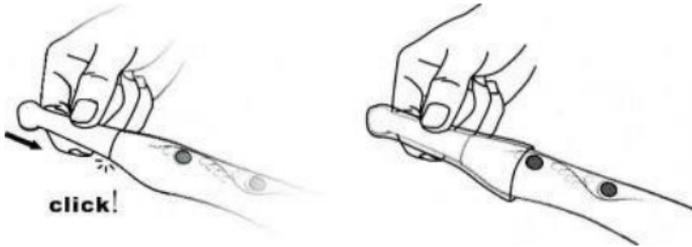
1 x Power supply

1 x Light hood

100 x Disposable sleeve



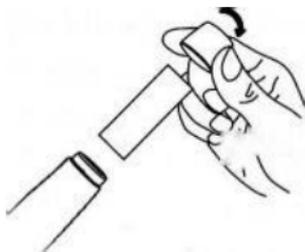
3.1 Installation of the head



- 1 To Install the LED head. Push the head into the handle as shown, until it clicks into place.
2. Place a disposable sleeve over the head to avoid the risk of cross-infection.

NOTE: If the product is turned on before the head is installed, the Intraoral indicator light will flash for 3 seconds to warn the user that the head isn't installed.

3.2 Changing the battery

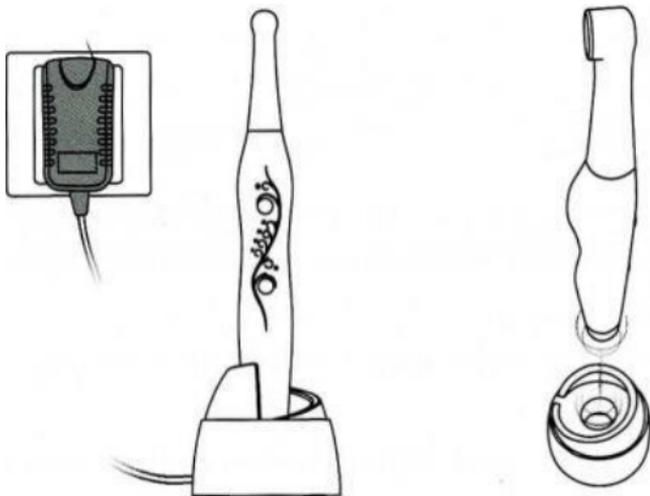


Turn the battery cover anti-clockwise, remove the battery, insert a new battery into the unit, then replace the cover, turning clockwise.



NOTE: There are two locating lugs which align the cover with the handle. Ensure that the cover is turned fully in the correct direction.

3.3 Charging the battery



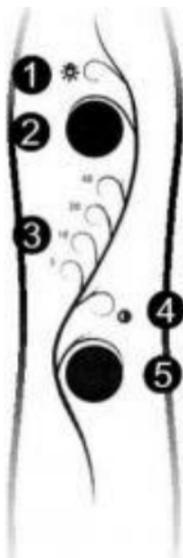
1. Connect the supplied mains adaptor to the base.
When turned on the indicator will illuminate
2. Place the DCL1500 into the base and the indicator will turn red and the battery will start charging
3. When charging is complete, the indicator will turn green and charging will stop automatically.

Note:

Ensure that the DCL1500 is charged for a minimum of 4 hours (8 hours for the first charge). Although it is recommended that the product is kept on charge when not in use.

4. Operation

- 1 Intraoral (white light) indicator
- 2 Start button
- 3 Time indicator
- 4 High/low indicator
- 5 Mode/time selector



4.1 Mode switching

- a. In the off state press Start button (2) to turn on the unit, hold it for 2 seconds to switch between Intraoral light (white light) and Curing light (blue light) modes.

4.2 Intraoral light mode (White light)

- a. In this mode, the intraoral indicator (1) will illuminate.
- b. Time indicator (3) and High/low indicator (4) are not illuminated, and Mode/time selector (5) is inoperable.
- c. Press Start button (2), the LED head will show White light, pressing a second time will turn off.

4.3 Curing light mode (Blue light)

- a. In this mode, the Intraoral indicator (1) is not illuminated.
- b. Mode/time selector (5) is operable.
- c. Press and hold the Mode/time selector (5), this will switch between High intensity and Low intensity light. The High/low indicator (4) illuminates during the Low light mode only. If the High/Low indicator is not illuminated whilst in 'Blue Light' mode, then you are on the highest possible setting.
- d. On either setting, the time indicator will illuminate green. By pressing the Mode/time selector, you can select the period of time for operation of the Curing light. This can be adjusted between 5s, 10s, and 20s. On the Low setting, the time can be adjusted between 5s, 10s, 20s, and 40s.
- e. Press start button (2), the LED head will turn on with the Blue Curing light, and will start the timer to the selected period. The unit will beep every 5s until the selected time is reached - at which point the light will switch off.

- f. Pressing the start button again will turn off the light and reset the timer.
- g. After a treatment, pressing the start button (2) again will start a subsequent treatment period. If the unit gets hot, do not use until it has cooled sufficiently.

4.4 Power

- a. The DCL1500 will automatically power off after 2 minutes of inactivity.
- b. When low power is detected, the Intraoral indicator (1) will start flashing, all other indicators will go out, and a beep will sound. The unit will then become inoperable until it is recharged.

5. Routine maintenance and cleaning

- a. We suggest the unit should be cleaned and sterilised before the first use.
- b. When cleaning, the handle and light must be separated completely. The light assembly must be cleaned and sterilized before use with the next patient.
- c. The handle and accessories can be cleaned with alcohol or neutral detergent. **DO NOT** use caustic or rubbing detergent, **DO NOT** autoclave or clean with ultrasonic methods.
- d. The light assembly can be cleaned with alcohol, or can be sterilized for 3 minutes at 135°C.
- e. Between uses, place the product on the charging base. However if the product is not used for extended periods, it is recommended that the battery and light assembly are removed and stored in original packaging.

6. Storage and transportation

- a. This product should be stored in a dry, cool environment.
- b. Avoid storing with toxic, corrosive, flammable, explosive products.
- c. This equipment should be stored in a humidity not more than 90%RH, air pressure 50-106kPa, temperature 10-55 °C.
- d. During transportation, shock and impact should be avoided

7. Technical specifications

Power adaptor: Input: 200-240Vac 50/60Hz
 Output: DC 10V/1.5A

Li-ion battery: Voltage: DC3.7V
 Capacity: 1400 mAh

Curing light power: $\geq 1200\text{mW/cm}^2$

Curing light wavelength: 420-480nm

Oral lighting illumination: ≥ 25000 Lux

Light colour temperature: 5000-6500K

Temperatures: Operating: $+10^{\circ} \sim +40^{\circ} \text{C}$
 Storage: $-10^{\circ} \sim +55^{\circ} \text{C}$

Humidity: Operating: 30~75%RH
 Storage: 20~85%RH

Atmospheric pressure Operating: 80~106kPa
 Storage: 50~106kPa

Protection against electrical shock: Type B

Symbols and definitions

	<p>Class II Equipment</p>
	<p>Direct Current (DC)</p>
	<p>Type B Equipment</p>
	<p>Caution</p>
	<p>Use Indoor only</p>
	<p>CE marked product</p>
	<p>WEEE</p>
	<p>Please refer to the instruction</p>

8. Warranty Information

8.1 Returns Policy



IMPORTANT!

Please fill out your warranty registration online at www.daray.co.uk/warranty or contact Daray by phone (0800 878 9864) or email support@daray.co.uk

DARAY's standard warranty is 12 months. However, this period may be extended for most lighting products* free of charge by completing and submitting the warranty registration.

Year 1:	Warranty includes parts and labour (Return to Base)	*UK only
Year 2+:	Parts only	

We want you to be completely satisfied with your purchase. If you need to return goods purchased from DARAY Ltd, please read the following information carefully. The DARAY Ltd returns policy provides guidance on when you can return goods we have supplied, and what you can expect from us once you do. To see our detailed returns policy and procedure visit www.daray.co.uk/returns

...continued on the next page.

TYPE OF RETURN	REMEDY
DAMAGED GOODS Goods which are physically damaged on delivery	We must be notified within 24 hours of receipt.

Dead On Arrival (DOA) Goods which do not work	Goods which do not work on arrival or develop a fault within 28 days, we will advance replace the item.
GOODS DEVELOPING A FAULT Goods which have developed a fault within the warranty period.	If the fault develops after 28 days, but within the warranty period, we will initiate the returns procedure.
NON WARRANTY Goods which have developed a fault outside the warranty period.	If a fault develops outside the warranty period, we will initiate the returns procedure charges may be applicable.
OTHER Any situation which is not covered by any of the above.	We will always try to help, but we cannot normally offer a refund.

For additional clarification, please refer to our terms and conditions at www.daray.co.uk/terms.

In a small number of cases, we may determine that a replacement would not work any better than the original product we supplied. In such cases we will only offer a refund rather than a replacement for qualifying returns. Replacement bulbs and spare parts ordered on our website or from supplied part codes are not eligible for credit. We will accept returns and exchange for the correct item.

If your purchase an item incorrectly you can return it within 14 days and it can be exchanged for another product of equal or higher value, excluding transportation charges incurred. Goods and packaging must be returned in their original condition. Under no circumstances will goods be accepted for return if they are damaged, have been subjected to improper handling or abuse or have been used.

If you send us goods that do not qualify for return, you will invalidate your claim to any refund, and you will be obliged to compensate DARAY Ltd for the cost of return postage and any other reasonable costs incurred processing the goods.

Your statutory rights are not affected.

DARAY CUSTOMER SERVICES:

0800 878 9864

support@daray.co.uk

8.2 Warranty Details

TERMS AND CONDITIONS OF WARRANTY

1. To qualify for this warranty you must register on www.daray.co.uk or return to Daray Ltd (Daray) the duly completed warranty-registration form accompanying the product.
2. Daray warrants this product (excluding lamp) against faulty material and workmanship during the period of the warranty. The period of warranty is the period stated on your warranty card and commences on the date of purchase of the product. In the event that the product is not in good working order Daray will provide, during the warranty period, a free repair service within the United Kingdom. The warranty is subject to proof of purchase being provided; therefore, you should retain your original receipt.
 - 2.1 The repair service consists of the provision of spare parts and/or replacement products (at Daray's discretion) which will be provided on an exchange basis and will either be new, equivalent to new or reconditioned. All replaced spare parts and products shall become the property of Daray.
 - 2.2 Daray's only obligation under this warranty is the provision of the service as set out above.
 - 2.3 All products are returned to Daray at the customer's cost and risk. Products to be returned should be adequately packed. For the address to send returns to please visit www.daray.co.uk
3. Daray's arrangements for providing service provided under this warranty may include the use of sub-contractors.
4. This warranty does not cover damage or defects in the Product caused by or resulting from:
 - Wilful neglect or negligence by anyone other than Daray;
 - Improper use, storage or handling of the product;
 - Use of non-Daray approved parts (such as replacement lamps) not compatible with the Product;
 - Fire, accident or disaster;
 - Use of non-Daray modifications other than in accordance with Daray's instructions;Attachment of fittings and accessories not approved by Daray;
Repairs, modifications carried out by service personnel not approved by Daray;
 - Damage caused by chemical corrosion from cleaning agents not approved by Daray.

- Failure to use or install the product in accordance with the manufacturer's instructions.
5. Nothing in this warranty shall have the effect of restricting or excluding the liability of Daray in respect of:
- a) Death and personal injury caused by the negligence of Daray, or for fraud;
 - b) Under the *Consumer Protection Act 1987* to a person who has suffered damage caused by a defective product or to a dependant or relative of such a person;
 - c) Direct damage to your property caused by the proven negligence of Daray.
6. This agreement does not give any rights other than those expressly set out above and in particular, Daray will not be responsible for any loss of income, profits or contracts or any direct or indirect consequential loss, damage caused to or suffered by the purchaser as a direct result of this agreement.
7. This warranty is offered (subject to these terms and conditions) in addition to, and does not affect your statutory rights.
8. Daray may disclose your details and other personal information to companies within the Daray group including any subsidiary company or sub-contractor of Daray for the purposes of performing our obligations hereunder.
9. You must not resell outside the UK any products supplied by Daray and covered by the *Export of Goods (Control) Order 1992* (or any law that replaces it) without obtaining all necessary licences. You also agree not to sell the product in the UK if you know or think that the person buying the product intends to export it without getting the necessary licences. You agree to impose similar conditions to these on anyone you sell the product to.
10. These conditions shall in all respect be governed and construed in accordance with English law and the exclusive jurisdiction of the English courts.

Product:

Serial No: