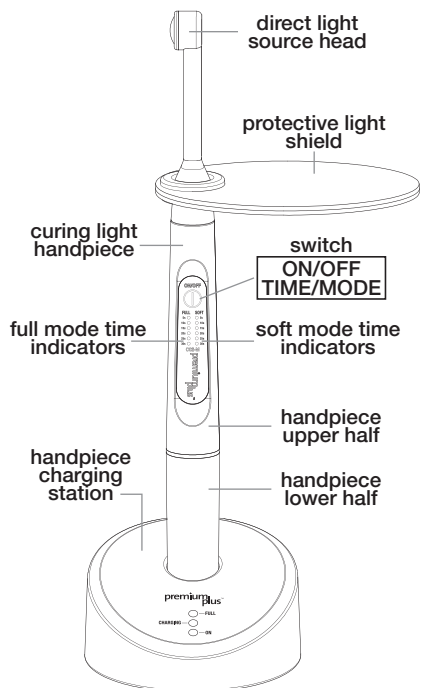


# C02-M CURING LIGHT INSTRUCTIONS



**Intended use:-** This curing light is intended for use by trained dental professionals for the purpose of light curing dental resins and composites

C02-M SPECIFICATIONS		
DIRECT LIGHT SOURCE HEAD	10 mm ( dia. )	
LIGHT WAVELENGTH	440~480 nm	
APPLICATION	General	
MODE	FULL	1,200 mW/cm <sup>2</sup> ±10% for 5, 10, 15, 20, 25, 30 seconds
	SOFT CURE	1 <sup>st</sup> five seconds from 0-900 mW/cm <sup>2</sup> ±10% next 5, 10, 15, 20, 25, 30 seconds 900 mW/cm <sup>2</sup> ±10%

## Contents:-

- C02-M Curing Light Handpiece with Charging Station
- C02-M-1 10 mm Direct Light Source Head
- C02-2 Protective Light Shield
- C02-3 Autoclavable Heat Protective Rings (6 pcs)
- 228 Disposable Curing Light Sleeves Mini (100 pcs)

## ENVIRONMENTAL FACTORS:-

Operation: 10°C~40°C / 30%~75% relative humidity / 500hPa~1060hPa atmospheric pressure  
 Transportation and Storage: -10°C~55°C / 10%~95% relative humidity / 500hPa~1060hPa atmospheric pressure.

## INSTALLATION:-

### A. CHARGING STATION:-

- Plug in USB Type-C power cord with the charging station and the USB power supply (not included).
- Charging Station power indicator light will be on if power is connected.

### B. CURING LIGHT HANDPIECE:-

- Put the battery (included in the box) inside the lower half of the handpiece. Connect the handpiece upper and lower halves together by screwing the lower half into the upper half. Ensure the handpiece is connected securely.
- Insert Direct Light Source Head into the curing light handpiece with a TWISTING motion. Ensure the Direct Light Source Head is fitted securely in the handpiece.
- Put the handpiece in the charging station as shown in above diagram. The “CHARGING” indicator light will be on if handpiece is fitted correctly into the charging station.
- The battery is not fully charged prior to shipment. Please charge the battery for a minimum of 2 hours prior to the first use.
- When curing light handpiece is fully charged, “FULL” indicator light on the charging station will turn on.
- Curing light circuit will automatically compensate for power during use for constant light intensity output.
- We recommend placing the curing light handpiece into the charging station to charge whenever the curing light is not in use. Continually charging the curing light will not affect the life of the battery as the unit has a built-in safety function that will stop charging when the battery is full.
- The curing light intensity should be checked regularly with a light intensity meter.

## USE AND CHANGING OF SETTINGS:-

- Turn on the curing light by pressing **[ON/OFF/TIME/MODE]** switch.
- The curing light is preset in the factory at “FULL” mode for 10 seconds.
- To change the time or the mode full/soft cure, press and hold **[ON/OFF/TIME/MODE]** switch for 3 seconds, the curing light will signal with 2 continuous ‘beeps’. The lights on the left are the full mode times and the right are the soft mode times. Time can only be adjusted in 5 second increments.
- Continue pressing the **[ON/OFF/TIME/MODE]** switch to locate the time and mode required.
- The time/mode will be locked after 3 seconds with 2 continuous ‘beep’ signaled if there are no further changes to the settings. To change, press and hold the **[ON/OFF/TIME/MODE]** switch for 3 seconds to unlock.
- Every start and end of a programme or every change of time or mode, will be signaled with a ‘beep’.
- The light will automatically turn off if it is not in operation for 1 minute. The light will keep the last selected programme in memory once restarted.
- Put on the disposable curing light sleeve to cover the whole curing light for cross-infection control.
- Put on the protective light shield from the top of the direct light source head until it is firmly held.
- If curing light handpiece is off, press **[ON/OFF/TIME/MODE]** switch to turn on. The curing light is now ready for operation.
- Press **[ON/OFF/TIME/MODE]** switch to start light curing when preparation is ready.
- After the light curing process is finished, remove and dispose the curing light sleeve for every patient.
- If the battery power is low, curing light will not operate and all of the 12 light indicators will flash.

## CURING LIGHT MODE APPLICATIONS:-

<b>FULL</b>	For general applications
<b>SOFT CURE</b>	With first 0-5 seconds ramped for more gentle processing, designed for patients sensitive to heat

## DEPTH OF CURE:-

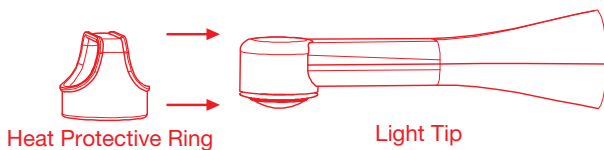
MODE	Intensity mW/cm <sup>2</sup>	Time	Depth Measurements	ISO 4049 Depth Measurements (-50%)
<b>FULL</b>	1,200±10%	10 seconds	4.3 mm	2.15 mm
<b>SOFT CURE</b>	900±10%	15 seconds	4.6 mm	2.30 mm

**Remarks:** Above data is based on test results using an A2 shade composite. The light tip was placed above and pointed perpendicular to the composite. Tests were done as per ISO 4049 Standard. The samples were measured and the data was divided by two (50% of the total composite depth cured). ISO 4049 Standard requires that the results for class II restorative materials should be at least 1.5 mm for non-opaque shades and 1.0 mm for opaque shades. All resins and composites have different curing times. It is recommended that you should test your resins and composites performance to determine curing times required.

**Data is only for reference, always follow the instructions from your resin and composite manufacturers**

### ⚠ CAUTION:-

- There are many variables (distance and angle between the tip and composite, area, shade, thickness and type etc.) affecting composite curing times. It is recommended to place and cure only 2 mm for each composite placement.
- Using a barrier sleeve for the curing light will reduce 5-10% of curing light intensity.
- The light tip should be placed approximately 1-2 mm above the composite or resin and pointed perpendicular to tooth surface.
- High intensity lights produce more heat, this is a direct indication of the power of light being emitted. When using the lights for more than 10 seconds, do not keep the light head in one position. It is always recommended to use a dental syringe to blow a cold air flow on the area during long periods of curing. This will maintain a lower temperature for the composite and surrounding area, particularly when using rubber dam so as to avoid any rubber dam breakage due to heat built-up.
- Do not expose soft tissue to curing light for more than 2 seconds or burns may occur.
- Avoid the curing light tip coming into contact with any soft tissue in the mouth. As an option, you may cover the entire curing light with a disposable sleeve and then place the Heat Protective Ring (included inside packing box) onto the curing light head covered with sleeve as shown below. Ensure the Heat Protective Ring is securely positioned on the light before starting the cure.



Increasing the distance between the light tip and the composite or resin will reduce the light intensity. With the heat protective ring on the light tip, it is strongly recommended you should test your composite and resin performance to determine if any extra curing time is required.

## CLEANING AND DISINFECTING:-






Switch off the curing light and disconnect the USB cord from the USB power supply. The handpiece, direct light head and charging station can only be wiped with a non-alcohol based disinfectant wipe for cold sterilization only. Heat Protective Rings are autoclavable silicone. Take out the ring from the tip. Remove dirt and debris using a water soaked nylon brush. Clean and dry with a wipe, then autoclave as per ISO 17665-1 121°C(250°F) for a minimum of 15 minutes.

Always follow autoclave manufacturer's recommended instruction.

## WARNINGS:-

- For use by trained dental professionals only for the intended use.
- This device must be used in strict conformity with these INSTRUCTIONS. The manufacturer rejects all liabilities if these rules are not followed or if the unit is used for any other applications.
- The light radiation produced by this type of device can be dangerous and must not be pointed at the eyes. The light produced by this device must be directed only at the zone to be treated in the oral cavity. Always use protection shields and eyewear during curing light in operation.
- Do not use the unit near a heat source. Do not use solvents, detergents or flammable products, which may damage the unit or cause short-circuit.
- Prevent any liquid from entering the handpiece, charging station or power adaptor.
- Never modify the device or any of its component. Any modification may compromise its safety and effectiveness.
- The curing light is not field-repairable. Do not disassemble this product. Unqualified repairing or tampering with internal parts may lead to serious injury and will VOID manufacturer's warranty.
- Before every use, check the device. Do not use the device if it is damaged in any way. The continuous use of a damaged unit may cause injury or improper results.
- If not using the device for a long time, please charge for at least 2 hours before use.
- US Federal Law restricts the sale of this device to or on the order of a health care professional/dentist.

## SYMBOLS:-

	Symbol for "Class II Equipment"		Symbol for "Type B Applied Part"
	Electronic Waste: properly dispose of when use is discontinued	<b>IPX0</b>	Symbol for "protection from ingress of liquids into handpiece"
	Symbol for "Manufacturer"		Follow Instructions for use
<b>LOT</b>	Batch code	<b>SN</b>	Symbol for "Serial Number"

**WARRANTY:** Curing light is warranted to the original purchaser against any defective workmanship and materials under accepted installation, use, and service for a period of 24 months from date of purchase.



manufactured by:  
**Premium Plus International Ltd.**  
 1001, Yuen Long Trading Centre  
 No.33, Wang Yip Street West  
 Yuen Long, N.T.  
**Hong Kong**  
 Email: mailbox@premiumplushk.com



imported and distributed by :  
**Premium Plus UK Ltd.**  
 2, Knighton Heath Industrial Estate  
 847 Ringwood Road, Bournemouth  
 Dorset BH11 8NE  
**U.K.**  
 Email: info@premiumplusuk.com

imported and distributed by :  
**Premium Plus Dental Supplies Inc.**  
 155 Liberty Avenue  
 Brooklyn NY 11212  
**U.S.A.**  
 Email: sales@premiumplususa.com

imported and distributed by :  
**Premium Plus Japan Co., Ltd.**  
 2nd Floor, 1-4-2, Jonan, Ikedashi  
 Osaka, 563-0025  
**Japan**  
 Email: info@premiumplus.jp