

The COOLLED 2600 UV LED Light Curing Pen produces bursts of high intensity UV Visible light capable of curing many light curing products within seconds.

This low cost, light weight and safe to use product opens up endless possibilities for UV curing

- Adhesive bonding of small components
- Wire tacking
- Component support
- Glass, metals and plastic bonding

Getting started

Operation of the pen is very simple.

1. Plug mains a.c. power supply into convenient mains socket.
2. Plug pen into flying lead
3. Switch on power
4. After an initialisation period of 10 seconds, the pen will be ready for use.
5. With the indicator LED on the side on the pen showing green, a single press of the button starts the 5 second burst of UV light.
6. The 5 seconds burst is followed by a 15 seconds lock out period when the pen cannot be operated (necessary to prevent the LEDs from over heating). The indicator LED turns red during this period.
7. After the 15 second lock out period, the indicator LED will change to green and the pen will be ready for another 5 seconds burst.

Curing materials

It is important to position the end of the pen as close as possible to the adhesive being cured to ensure that the maximum power is delivered to initiate the photochemical reaction (the curing).

Any adhesive which accidentally gets on the glass window should be removed prior to operating the pen.

Not all UV curing adhesive will be suitable for use with the pen due to the wavelength being produced (peak at 395nm). Most UV Visible materials should be fine. However certain UVA epoxies which require a strong peak at 365nm will not cure properly. A list of suitable materials is available from COOLLED Ltd.



Specialist applications

The pen can be operated in two modes, controlled by an internal microprocessor

1. Fast 5 second burst of full power
2. Low stress curing by gradual power increase
i.e. 1 sec 25% power
1 sec 40% power
4.25 sec 100% power

See Mode Settings on page 2 for instructions on how to change mode.

Mode Setting

Fast curing of adhesives can introduce stresses which with delicate substrates might cause unwanted distortions. The pen can be switched into a Low Stress mode by the following sequence.

- a. Press button to active UV irradiance and wait until the 15 second lock out period indicated by the green LED turning red.
- b. While the red LED is on, press the button 3 times in quick succession. The LED will flash twice in orange to indicate the acceptance of the 3 pushes. Press the button a further 2 times to change to mode 2. Acceptance is acknowledged by a double flash in orange followed by a return to red.
- c. While in mode 2, the led will flash off every 2 seconds
- d. To return to mode 1, repeat the above but after the 3 pushes have been acknowledged in b., press the button a single time to revert to mode 1.
- e. While on mode 1, the led will not flash

Optional Battery Pack

The pen is normally powered from a main plug style power supply connected via a cable. To create the levels of light required for fast curing, high peak currents are required. While batteries are capable of delivering these currents, their size would make the pen cumbersome and difficult to use.

For applications in remote locations, an optional rechargeable battery pack is available, fitted with a belt clip for ease of use. Charging of this battery pack uses the same mains plug style power supply that is used for mains operation of the pen.

Within the battery pack is a battery status monitor and charger circuit with a bi colour LED indicating when recharging is required.

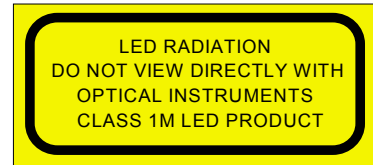
Battery life (between charging)	8 hours
Recharging time	4 hours

COOLLED Ltd

Ardglen Road
Evingar Industrial Estate
Whitchurch
Hants RG28 7BB
UK

Tel: ++44(0) 1256 895394
Fax: ++44(0) 1256 896485
e-mail: sales@cooled.com
web: www.cooled.com

Safety



This product has been tested by an independent test house and meets the requirements for a Class 1M LED product to IEC/EN60825-1 (2001) under normal operating conditions. A Class 1M product can be summarised as being no risk to the naked eyes or skin but potentially hazardous when viewed close up with magnifying lenses (eye loupes) or if optics are used to collimate the beam.

Caution - use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Distributor - Europe and US

Jenton International Ltd
Unit 9/10 Ardglen Industrial Estate
Ardglen Road
Whitchurch
Hants RG28 7BB
UK

Tel: ++44(0) 1256 892194
Fax: ++44(0) 1256 896486
e-mail: enquiries@jenton.co.uk
web: www.jentonuv.co.uk

Issue 1 Feb2005

These Operating Instructions are presented for informational purposes only. The sale of this product is subject to such terms of sale as agreed between the buyer and seller. These Operating Instructions will not form part of that contract unless specifically agreed. You may not infer from these Operating Instructions any representation, warranty, guarantee or other promise, save that nothing in these Operating Instructions will absolve Cooled Ltd or any seller, owner or licensor of the product from any liability in any jurisdiction which it is unlawful within that jurisdiction to exclude or limit. All other liabilities to sellers, buyers and third parties are excluded by Cooled Limited to the maximum extent permitted by the law of the relevant jurisdiction.