

# OmniCure LX400+

The Most Advanced, Versatile and Easy-to-use UV LED Spot Curing System



Fast curing time and high power efficiency

Flexibility with a wide range of UV curable adhesives

Maximum versatility for curing processes

Reduction in UV manufacturing costs

Ease of use with a single solution for multiple applications

Low cost of set up and ownership





Utilizing advanced UV LED technology, the OmniCure® LX400+ LED spot curing system has been specially designed to reduce UV bonding manufacturing costs through faster

curing times, higher power efficiency and superior control with monitoring capabilities.

OmniCure®

The LX400+ system offers a robust and intuitive user interface with quick configuration capabilities including ready to use timer, power level and head temperature display modes, as well as a durable and reliable "Start/Stop" activation button.

Sequential exposure of channels 1, 2, 3 and 4 with the channel configuration mode FP6

	CH1	CH2	CH3	CH4
Operator Trigger	Exposure	Exposure	Exposure	Exposure
	Setting #1	Setting #2	Setting #3	Setting #4

FEATURES	BENEFITS	
Latest UV LED technology to provide high irradiance at different wavelengths:  • 9,500mW/cm² (typical) at 365nm  • 12,400mW/cm² (typical) at 385nm  • 9,000mW/cm² (typical) at 400nm	Reduction in UV manufacturing costs with faster curing times and higher power efficiency while supporting a wide range of UV cured adhesives	
Full Control of up to four UV LED heads simultaneously or independently	Maximum flexibility for manufacturing setups where single or multiple foot pedals are needed to control a number of curing stations simultaneously	
Precise monitoring and regulation of UV light exposure time (+/- 0.1 seconds) and intensity level (+/- 1%) of up to four different UV LED heads	Repeatability in UV curing processes for consistent and highest product quality	
Highly efficient and Intelligent UV LED heads with extra cooling capability and patented Intelli-Lamp® technology	Maximum UV LED head power efficiency, long term reliability and guaranteed lifetime	
UV LED head temperature on display in real time	Optimization of UV LED head output power efficiency	
Customized multi-phase curing processes directly from the LX400+ controller	Ease of use while eliminating the need for an external control unit	





## Overview of Accessories Available

### Interchangeable/Replaceable Focusing Lens Options

#### **UV LED HEADS**

The LED Heads have been uniquely designed for highly efficient cooling to maximize continuous operation without over-heating. This will minimize costly downtime and extend the life of the LED Heads, resulting in low cost of ownership and convenience that manufacturers can rely on. Due to its superior design, when properly clamped, the head may be used continuously while remaining cool.

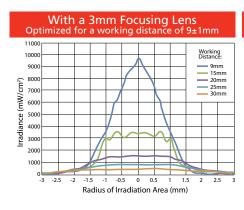


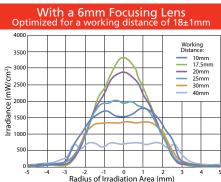


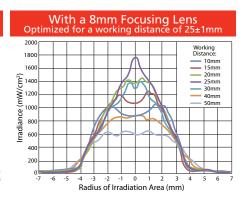
#### **FOCUSING LENSES**

OmniCure UV LED Heads use replaceable focusing lenses that offer the flexibility essential to meet the spot size and irradiance level required for a specific application.

Beam profiles for the OmniCure 365nm UV LED MAX heads with the 3mm, 6mm and 8mm lenses are illustrated below. Additional beam profiles and technical information are available on the OmniCure website (www.excelitas.com/omnicure).







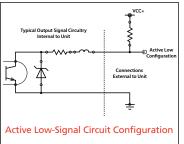
#### **UV LED LIGHT METER**

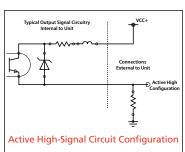
The OmniCure LED Light Meter can measure power and irradiance by selecting a specific wavelength on the meter that corresponds to the wavelength of the UV LED source. This enables manufacturers to achieve greater accuracy with ease of use while maintaining reliable and controlled UV processes. (NIST, NRC Traceable)



#### **USER INTERFACE GENERAL SPECIFICATIONS UV LED Heads** Up to 4 interchangeable individual heads **LED Indicators** Mode and Up/Down buttons to control the display mode Programmable trigger mode: Mode Control • Countdown Mode: Range programmable from 999.9s to 0.1s, in 0.1s intervals • Count Up Mode: User controlled timing via the front panel or foot pedals Programmable trigger mode: •Countdown Mode: Range programmable from 999.9s to 0.1s, in 0.1s intervals **Exposure Time Control** Count Up Mode: User controlled timing via the front panel or foot pedals Intensity Level Control 15%-100% (with 1% increments) **Head Actuation Button** Control start or stop of UV LED emission **Foot Pedal Ports** 4 foot pedal ports to control start or stop of the LED Emission **LED Indicators** Indicates Timer Control, Level, Trigger Mode and UV Emission (UV ON) **Key Switch** Turn on/off controller **External Unit Controller Input** PLC port allowing external control and monitoring: Start/stop, intensity level selection, (PLC Port) lock front panel interface and timer mode selection **UV LED Head Over Temperature** Cutoff temperatures 365 nm MAX heads: 65°C, 385 nm MAX heads: 65°C, 400 nm heads: 60°C Protection Controller Dimensions and Weight W x L x H: 7.55" (191.77 mm) x 6.6" (167.64 mm) x 2.9" (73.66 mm) 2.15 lbs (0.98 kg)

#### **PLC Connector Pin-Outs**

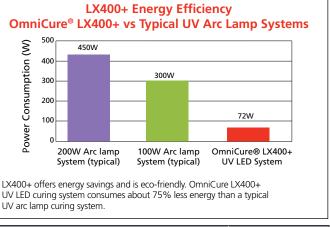






#### Foot Pedal Channel Control

	CH1	CH2	CH3	CH4
FP1 Mode	FP1	FP2	FP3	FP4
FP2 Mode		ontrols nultaneously	FP3	FP4
FP3 Mode	FP1 Contro	FP1 Controls CH 1, 2, 3 Simultaneously FP4		FP4
FP4 Mode	FP1 Controls All Channels Simultaneously			
FP5 Mode		ontrols nultaneously		ontrols nultaneously
FP6 Mode	FF	P1 Sequentially E	xposes CH 1,2,3	,4 I



OmniCure LX Series Controller	Part Number
OmniCure LX400+ Controller	010-00243R

To learn more about OmniCure UV curing solutions, please visit www.excelitas.com/omnicure.



www.excelitas.com omnicure@excelitas.com

2260 Argentia Road Mississauga, Ontario L5N 6H7 CANADA

Telephone: +1 905 821-2600 Toll Free (USA and CAN): +1 800 668-8752 Fax: +1 905 821-2055