

**Warning – Refer to Safety Precautions Booklet 035-00636R for all safety precautions prior to use. User Guide 035-00628R**

## INSTALLATION PROCEDURES

### General Installation

1. Connect the UV LED Head cable to the rear of the Controller.
2. Determine the desired UV LED Head location and position specific to application.
3. Determine the working location of the controller; and ensure any possible obstructions have been removed.
4. Install the supplied installation clamp to the existing fixture using either the 3 metric or imperial threaded screw holes. The two end faces of the installation bracket are identified for metric and imperial thread sizes.
5. Install the UV LED Head into the installation clamp and secure its location/position by tightening the hex screw. Refer to Section 5.5 (User Manual 035-00628R)

 *Caution to avoid damage to the UV LED Heads mounting clamps should be positioned above the reference line.*



6. Attach the appropriate lens and remove the protective cap. To remove the cap, pull the cap-hat — do not rotate the LED head or cap.

## OPERATION

### Powering Up/Powering Down


1. Ensure that the UV LED Head is securely mounted in the desired orientation, the UV LED Head is connected to the back of the Controller, and the PLC remote door lock jumper is properly installed.
2. Plug in the OmniCure LX500 AC adaptor into a properly grounded electrical outlet
3. Turn the Controller power switch to on "I" (refer to Figure 1).
4. The LCD screen will turn on and the Excelitas Technologies logo and the software version number will appear. *(A warning message may appear indicating that the Head is not in the same position when last turned on. Press Select to clear the warning message or power off and correct the connections).*
5. When the title screen for the LX500 disappears and the Main Control Panel is displayed, the system is ready for use.



### Main Control Panel Screen

- The Main Control Panel screen will display the controller configuration (2 or 4 channel)
- When a head is plugged into a channel, the timer and intensity will be displayed. Only timer and intensity are programmable in the Main Control Panel (*Empty channels are disabled*)
- Use the arrow keys on the front panel to highlight the field you wish to change. The text in the highlighted field will turn red.
- Press the "select" button on the front panel to select the field you wish to change. Selected fields will begin to flash.
- Use the up and down arrow keys to change the value of the field. Holding down an arrow key will increase how fast the value changes. *(Note: If the timer is displaying 0.0 seconds then the unit is in "count up" mode and the UV LED head will remain on for as long as the enable signal is present.)*
- Intensity is displayed as a % for un-calibrated heads and in W/cm<sup>2</sup> for calibrated heads. Refer to Section 8.5 in User Manual (035-00628R) for more details.
- Closed loop feedback (CLF) will be engaged for intensities below 80%. When "CLF" is on, an icon will appear beside the intensity bar for that channel.
- For all other screen indicators, alarms or faults please refer to User Manual 035-00628R for more details

### Running an Exposure from the Controller

1. Set the timer and/or intensity on the Main Control Panel, or use the StepCure screen to set up multiple step exposure parameters. Refer to Section 6.3, "Defining Exposure Parameters".
  2. Press Start/Stop on the front panel of the Controller to trigger an exposure.
- All LEDs are in either count up or countdown mode:
- If the arrow in the status bar is pointing up, the unit is in count up mode. Each UV LED Head will be on until you press Start/Stop again or one of the other input control signals is toggled.
  - If the arrow in the status bar is pointing down, the unit is in countdown mode. Each UV LED Head will be on for the duration of the set timer for that channel on the Main Control Panel screen.

 **Warning** – Refer to User Manual for all safety precautions prior to use.

  **Caution, Hot Surface:** Due to elevated operating temperatures; avoid contact of the LED head(s) when energized. It is strongly advised to use the clamp type heat sink provided with the LED Head(s)



Caution eye damage may result from directly viewing ultraviolet light – Protective eye shielding and clothing must be used at all times  
RISK GROUP 3 Caution Label: IEC 62471-2: 2009 (Located on side cover of LX500-2 / L500-4- controller chassis)

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### Using the Foot Pedal

The foot pedal does not disable the Start/Stop button and can be used simultaneously with the Start/Stop button on the front panel in any mode or setting. However, the Start/Stop button overrides all foot pedal configurations.

1. Connect the foot pedal to the port that corresponds with the UV LED Head on the back of the Controller (refer to Figure 2).
2. Use the StepCure screen refers to Section 6.3 User Manual 035-00628R to set up the exposure parameters and, optionally, to override the default action described below.
3. Press the foot pedal to trigger an exposure.

### Count Up / Count down Mode

- If the arrow in the status bar is pointing up, the unit is in count up mode. The UV LED Head connected to channel 1-4 will be on for as long as the foot pedal signal is held low or one of the other input control signals is toggled.
- If the arrow in the status bar is pointing down, the unit is in countdown mode. The UV LED Head connected to channel 1-4 will be on for the duration of the set timer for that channel on the Main Control Panel screen.

*(Note: All LEDs are in either count up or countdown mode)*

### Using the PC Interface with USB Connection

The LX500 can be commanded via a virtual RS-232 serial port. The serial port communication settings are not adhered to and instead communication occurs at the USB 2.0 speed of 12Mbps. All serial commands are available in an SDK which is available upon request. The LX500 complies with the S2000 command set. Use the StepCure screen to select which LEDs will respond to this command set. To do this, the first row is the LED #, set the last row to PC. Refer to Section 6.3 in User Manual 035-00628R

### PLC Signal Descriptions

Refer to User Guide **035-00628R** for PLC Signal Description Features.

**REGULATORY** (refer to user guide for complete details)

### **Product Safety and Electromagnetic Compatibility**

The OmniCure LX500 Series has been tested and found to comply with product safety and electromagnetic compatibility requirements. For a complete list of tests and for certification details, please contact your OmniCure representative or visit:

<https://www.excelitas.com/product-category/omnicure-led-spot-uv-curing-systems-and-accessories>

### **CE Marking**

- Council Directive 2014/35/EU
- Council Directive 2014/30/EU
- Council Directive 2012/19/EU
- Council Directive 2011/65/EU as amended by (EU) 2015/863

Low Voltage Directive  
EMC Directive  
WEEE Directive  
RoHS

