

# SPOT CURE-B15

## High Intensity 15 Watt LED Adhesive Curing Light

### Introduction

The SpotCure-B15 high intensity LED UV adhesive curing light is designed for bench-top applications. The system consists of an input power supply, power console, primary curing probe and up to 4 secondary curing probes. The primary curing probe and secondary curing probes are available in wavelengths of 405nm, 365nm or 460nm. The functionality of SpotCure-B15 is software driven by an onboard micro-controller. Dual, built-in, external control inputs are provided to permit the unit to be controlled by a foot switch, PLC or other device.

### Operational Description

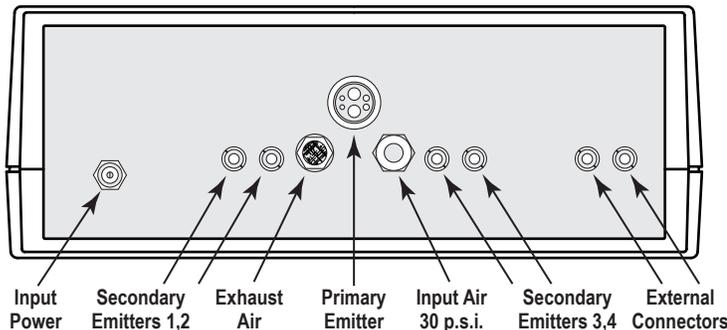
The SpotCure-B15 system employs large-chip LED arrays in the primary emitter. The primary emitter can be driven at 150% of its rated current to produce intense curing capability at any of the three wavelengths available. Because of the substantially high output, forced air cooling is necessary for operation. Generally, only about 30 psi air pressure is required.

The secondary emitters are small cartridge style and are designed to permit curing to be accomplished around the peripheral of an object. Generally, three or four emitters will adequately provide 360 degree irradiance. Due to the lower intensity, air cooling is not required. Secondary emitters have a fixed output.

### Power Console Installation

Attach the primary probe to the rear of the console using the air connection tubing supplied. Attach a REGULATED supply of compressed air at 30 psi to the 1/4" O.D. push connect fitting at the rear of the console using the tubing supplied. Insert the wall power supply cable input plug into the jack on the rear of the console. Plug the power supply into an appropriate outlet. DO NOT use any input power device other than that supplied with the system.

### Connector Orientation



### Power Console Operation - INTERNAL Mode

Depress the PWR button. The unit will now be in the INTERNAL default operation mode with the TIMER duration set to 10 seconds. To change the time cycle from the default 10 seconds to any other time cycle from 1 to 99 seconds, use the two TIME buttons to change the digital display to the time desired. The time can be changed by momentarily depressing each TIME button, or, holding the button depressed will cause the display to increment. Release the button to select the time. To turn on the emitter, momentarily depress the ON button. The emitter will go on and then turn off automatically after the time duration selected. If, for some reason, the cooling air is not operational, the emitter will shut off after 3 seconds and the COOLING indicator will start flashing. In this case, turn on the appropriate air cooling and depress the ON button again.

### Power Console Operation - EXTERNAL Mode

To use an external device to control the LED emitter ON/OFF cycle, two input jacks are provided at the rear of the console for connection of a foot control, PLC or other controlling device. All that is required is a normally open switch closure device. Plug the device into one of the jacks. To put the unit into EXTERNAL mode, depress and HOLD the CTRL button for more than 3 seconds. The mode indicators will begin to step through the three mode selections. Release the CTRL button when the EXTERNAL indicator illuminates. The emitter can now be controlled using the external switching device. If electronic switching is being employed, be certain that the switching device (ie: transistor) is operated in saturation to provide a clean near-zero resistance signal. If, for some reason, the cooling air is not operational, the emitter will shut off after 3 seconds and the COOLING indicator will start flashing. In this case, turn on the appropriate air cooling and reset the external device timing.

### Power Console Operation - MANUAL Mode

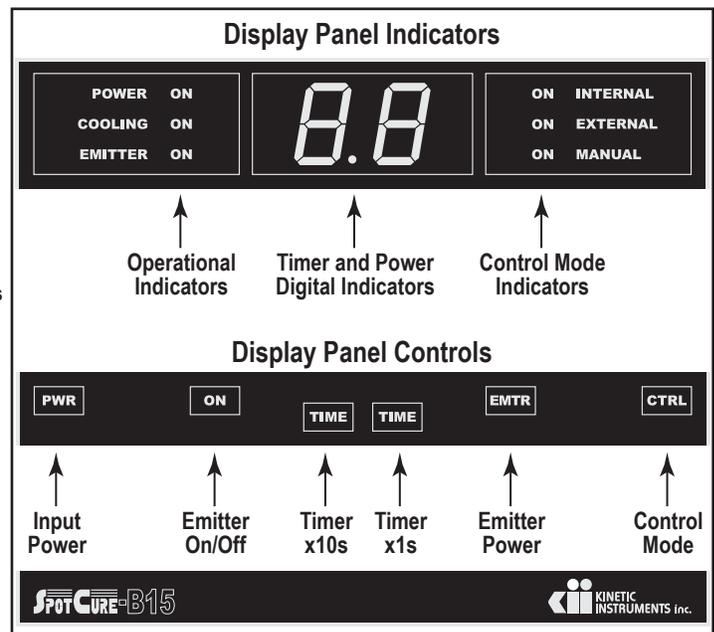
The MANUAL mode is used mostly for testing operations and permits the emitter to be controlled using the ON button with no other timing device operational. To put the unit into MANUAL mode, depress and HOLD the CTRL button for more than 3 seconds. The mode indicators will begin to step through the three mode selections. Release the CTRL button when the MANUAL indicator illuminates. The emitter can now be turned on by depressing the ON button. When the ON button is released, the emitter will shut off. The MANUAL mode is the ONLY operational mode in which the emitter can be turned on without air cooling. DO NOT use this mode to avoid the use of air cooling. It is for adhesive testing purposes only and prolonged operation of the emitter without air cooling may degrade or completely destroy the LED emitter.

### Primary Emitter Operation

The SpotCure-B15 permits adjustment of the primary emitter power setting in increments of 10% from 0.1 to 1.5 or 10% to 150%. To adjust the emitter power, depress and HOLD the EMTR button for longer than 3 seconds. The digital display will begin incrementing down from default 1.0 (100%) in 0.1 steps. When the display reaches 0.1 (10%), the next step will be 1.5 (150%) and then down again in 0.1 steps. Release the EMTR button when the display reads the desired setting. The unit will now be automatically set to the new power selection.

### Secondary Emitter Operation

Since the secondary emitters do not have the facility of being air cooled, their intensity is fixed and cannot be changed. When there is no primary emitter connected, the secondary emitters are automatically enabled. When using the secondary emitters, they must be connected to the unit such that position #1 or #3 are used first and then, if additional emitters are employed, connect to positions #2 and #4. When using secondary emitters, they can be controlled by all the front panel buttons with the exception of the EMTR power function.





## CAUTION

- The UV LED during operation radiates intense UV light.
- Do not look directly into the UV light during operation of device. This can be harmful to the eyes even for brief periods due to the intense UV light.
- If viewing the UV light is necessary, please use UV filtered glasses to avoid damage by the UV light.
- If the UV LED in this product may be viewed directly, please affix a caution label to that effect.

**Avoid direct eye exposure to UV light.**  
Keep out of reach of children