

# SPOTCURE-B6

## Ultra High Intensity L.E.D. UV Adhesive Spot Curing Light

The SpotCure-B6 high intensity LED UV adhesive curing light is designed for bench-top use in various industrial applications. The system consists of a wall transformer, power console and curing probe. The standard curing probe is 395nm wavelength (Black) with optional probes available in 375nm (Purple) and 470nm (Blue) wavelengths. The functionality of SpotCure-B6 is software driven by an onboard micro-controller. A built-in external switch control input is provided to permit the unit to be controlled by a foot switch, PLC or other device.

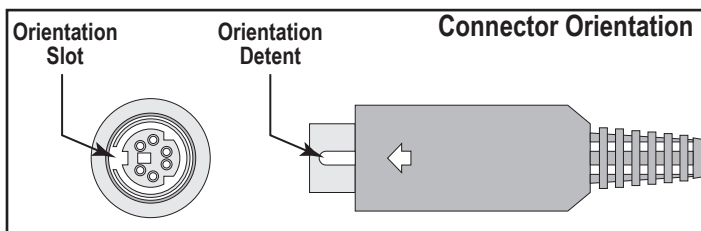
### Operational Description

The SpotCure-B6 system employs a high intensity array of UV light emitting diodes operating at 395nm to effectively cure a myriad of UV cured industrial adhesives. The optional probes that are available in different wavelengths simply replace the standard 395nm probe and do not affect the operational characteristics or external control devices.

The UV probe is generally stored connected to the power console. An automatic IR sensor is located in the probe holder which will sense when the probe is placed into the holder and turn off the LED array. If the external switch function is being employed, then the UV probe will be controlled by the external device.

### Power Console Operation

Plug the UV LED probe into the console cable connector being careful to align the connectors correctly to avoid bending the electrical pins. Refer to the diagram below for proper alignment. Insert the UV probe into the probe holder on top of the console. Insert the wall transformer cable input plug into the jack on the rear of the console. Plug the wall transformer into an appropriate outlet. DO NOT use any other wall transformer than that supplied with the system.



There are six indicators on the console which display the selected timing cycle of 10, 20, 30, 40, 50, or 60 seconds. Initially, when power is first applied, the unit will default into the 10 second timing cycle. This can be seen by the green indicator which should indicate "10". When the UV probe is removed from the holder, an IR sensor will detect the probe removal and a 1.5 second delay will be initiated before the UV LED array is automatically turned on. The LED array will remain ON continuously and an audible tone will sound after each completed time cycle. Simply replace the probe to turn off the array.

### Selecting a Different Timing Cycle

To change the time cycle from the default 10 seconds to any other of the time cycles, the time selector switch is used. This switch is identified by the "clock" icon located just underneath the time cycle indicators. Depress the time selector switch and hold it depressed. After three seconds, all six of the time cycle indicators will start blinking for a short period of time. Then, each one of the time cycle indicators will illuminate one at a time from left to right. Keep the selector switch depressed until the desired time cycle indicator illuminates and release the selector switch. The new timing cycle will now be locked into effect and the appropriate time indicator will be illuminated. The time selector switch can be utilized whenever desired. If the LED array is ON, depressing the timing selector switch will immediately terminate the current cycle and turn the array OFF.

### Using the External Control Switch

To use an external device to control the LED array ON/OFF cycle, an optional control cable is necessary that plugs into the jack on the back of the console. This cable is two conductor and can be connected to any normally open single pole switch either mechanical or electronic. 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.

After connecting the cable to the switching device, remove the power from the console and insert the cable plug into the jack on the rear of the console. When the plug is inserted, the IR probe sensor in the probe holder will be disabled and will not initiate a timing cycle when the probe is removed from the holder. Even if the external cable is not connected to a switch, simply having the cable plug inserted will disable the probe holder IR sensor.

Once the external switch is completely connected, it can control the LED array in two different modes, momentary or duration. The momentary mode is initiated by closing the external switch for any time period LESS than 3 seconds. The duration mode is initiated by closing the external switch for any time period MORE than 3 seconds. The momentary mode is used when it is desired that the LED array ON be controlled by the external switch and the LED array OFF be controlled by the SpotCure-B6 timing cycle. The duration mode is used when it is desired that the LED array ON and OFF be controlled by the external switch.

**Momentary Mode:** Close the external switch for any period of time LESS than 3 seconds. The LED array will go ON when the external switch is closed and OFF when the selected time cycle on the console has expired. Refer to previous instructions regarding the selection of a different time cycle if desired.

**Duration Mode:** Close the external switch for any period of time MORE than 3 seconds. The LED array will go ON when the external switch is closed and OFF when the external switch is opened. In the duration mode, if the external switch fails to open in less than 2 minutes, an overheat safety will turn the LED array OFF and indicate external switch malfunction by a series of audible tones every 30 seconds until the external switch is repaired or disconnected.

