

HEAT DISSIPATION

Lifetime and output power for LED lights are based on the junction temperature of the high current LED. The junction is the point where the light is generated inside the LED and the point of heat generation. To dissipate heat, Smart Vision Lights directly mounts high current LEDs to an aluminum circuit board or backplate (Figure1). In continuous operation the backplate on Smart Vision Lights L300 series and S75 series lights will run at 50°C to 60°C in an ambient temperature of 25°C. In OverDrive™ strobe operation (ODL300 and ODS75) the backplate will run at 25°C to 40°C depending on duty cycle.

CONTINUOUS OPERATION

Smart Vision Lights recommends additional heat sinking for lights used in continuous operation (constant “on” operation). Mounting the lights backplate to any heat sinking material (metal – aluminum or steel) will increase LED life and stability of light intensity.

OVERDRIVE™ STROBE MODE

Smart Vision Lights recommends lights to be used in OverDrive™ strobe mode for most uniform consistent lighting. All Smart Vision Lights with built-in drivers have a temperature compensation circuit that maintains the intensity of light as the temperature of the LEDs/ light changes.

OverDrive™ Strobe Advantages

- Higher uniformity and stable lighting
- Little to no heat

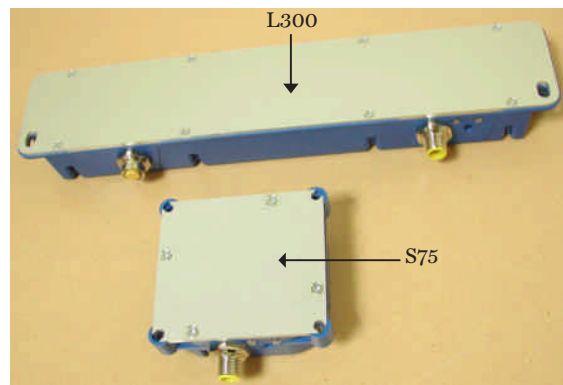


Figure 1. Arrows point to the aluminum backplate of each light.