

Using the PL530 Laser and Heater Driver Board

Without TEC and Thermistor

The PL530 laser and heater driver board is specifically designed for the Osram PL530 green laser. It includes TEC driver temperature-controlled circuits to ensure optimal performance of the 530 nm SLM light source. If TEC temperature regulation fails, the system automatically disables the laser to prevent damage.

For some users, integrating a TEC and thermistor into the laser assembly may be impractical. However, if opting to use only the laser and heater drivers—excluding the TEC and thermistor—the temperature protection circuits can be bypassed by shorting the 1–1 and 5V holes, marked by a blue circle in the reference image.

When these two holes are shorted, the LED indicator will remain red, but the laser and heater can still be activated. To prevent laser diode overheating, it's essential to mount a substantial heatsink for adequate cooling.

Using the driver board without the TEC and thermistor is not recommended for general operation. This configuration is intended solely for rapid testing of lasers or producing short bursts of green light.

Short the 1-1 and 5V pins to bypass temperature protection to enable the laser and heater

