



## WinVue User Interface

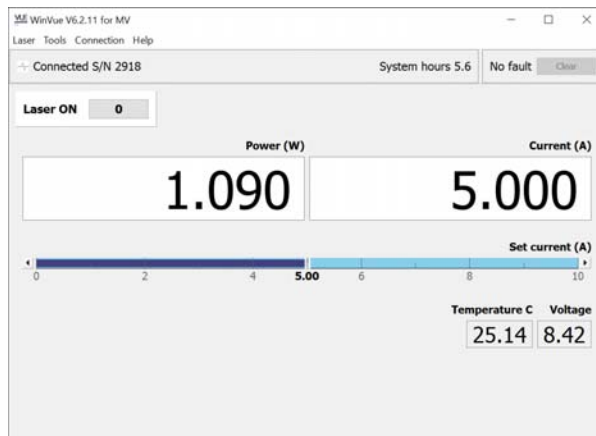
WinVue is our standard Windows interface program for our laser diode and TEC controllers, and is included in our Developer Kits. It has a slightly different configuration for each product, accessing all the features of the controllers through a familiar GUI environment. It is useful for first-time setup, daily operation and troubleshooting. Special features facilitate laser device characterization, temperature servo tuning and monitoring, and extended data logging of critical parameters. It uses the features of the PC to present data graphically in ways that are not possible with the front panels found on many instruments.

WinVue is one of several possible interface options and its use is not required. All of the critical control functions are in the controller itself, not in WinVue; should the controller be disconnected for any reason it will continue to power the laser and/or the TECs. Using our **Autostart** feature, all of our controllers are capable of stand-alone operation without an attached PC (although WinVue will simplify the setup and configuration of Autostart). All of our controllers are likewise capable of functioning as components in a larger system using our extensive library of low-level interface commands, documented for each product.

Here we briefly describe some of the main features of WinVue. Demo versions of some configurations are available, allowing you to see how the program works with a realistic simulation of an actual controller. The descriptions here are generic and specific configurations will differ.

### Main laser control panel

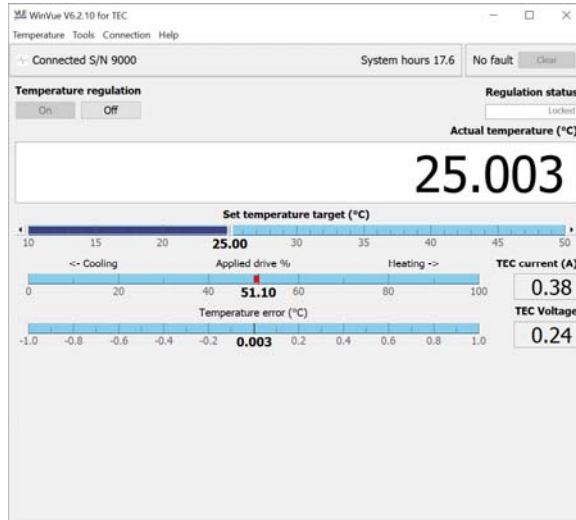
This is for daily operation of a laser diode, providing on/off control, current and power setting, changing current and power limits. Readouts display laser temperature, voltage, current, power, and an hour meter.



Example of main control window (this one is for Vue-MV controller)

## TEC control panel

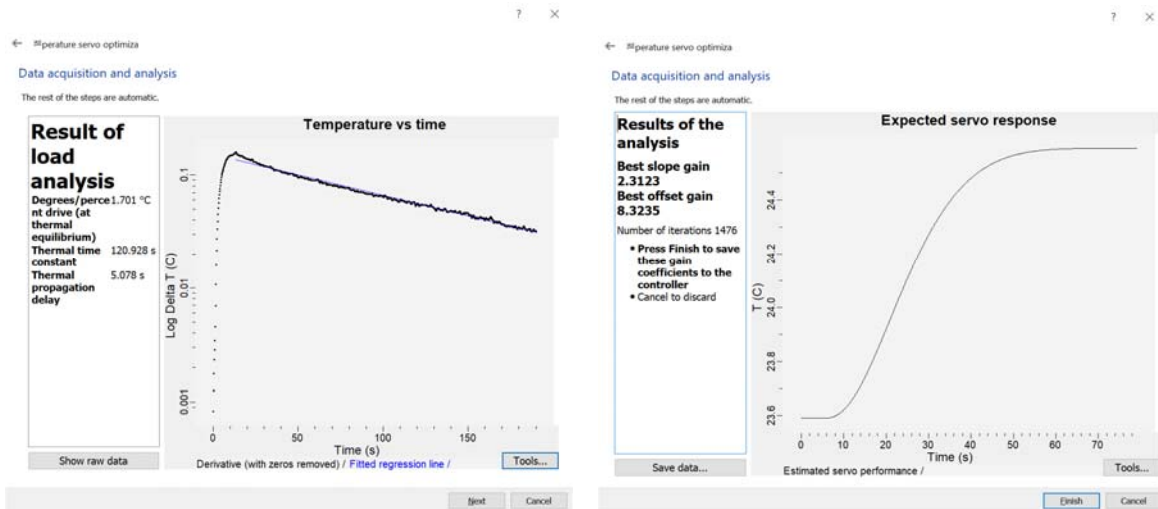
This is for daily operation of a temperature (thermoelectric cooler or TEC) controller. In this panel you can set the temperature, engage or disengage the servo, read the instantaneous temperature and observe what fraction of the available output drive is being used.



Example of main control window for Vue-TEC controller

## Temperature servo tuning wizard

This is for first-time setup of temperature controllers, or for when the thermal load has changed. The Wizard will automatically measure the response of your load to a standard amount of output drive. It will parametrize this data and calculate the best servo constants. The tedious process of “tuning” the servo is reduced to a few clicks.



Example of data acquisition with Wizard for Vue-TEC controller

Example of calculated servo response with Wizard for Vue-TEC controller

**Data logging**

This feature periodically writes a disk record of any signal that the controller produces or can monitor. The data is stored in a standard .csv format that can be imported to spreadsheet or graphical programs.

**Service**

All the controller's internal signals are displayed here for troubleshooting purposes.

**Temperature logging**

This panel produces a time graph of temperature and TEC drive, allowing you to observe and troubleshoot the temperature controller.

**LIV curve**

With a few clicks of the mouse you can acquire a power-current-voltage (usually called an LIV or PIV) curve for your laser diode, a standard tool for device characterization. This can be stored to disk for archiving.