

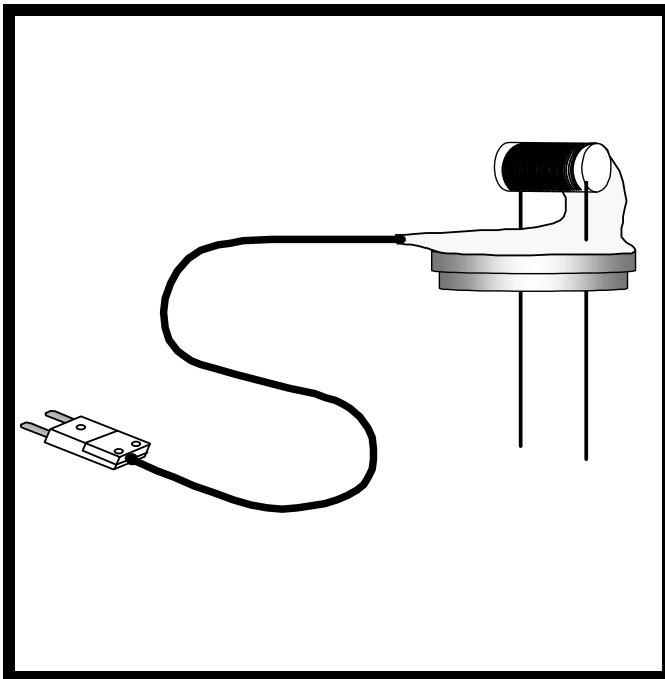
# LC-IR-12 with Thermocouple Monitored, Stabilizable IR Source

## INFRARED SYSTEM

This Infrared System consists of our standard 800C Series 12 Infrared Light Source, a Type-K Thermocouple and optional digital thermometer.

This unit is intended as a low cost standard unit for general use. These units have been used as checks on Infrared Instruments such as thermometers and cameras. Emissivity value is not guaranteed but fairly constant. Temperature can be monitored quite precisely with this unit and can be maintained constant with feedback to your power source.

When power is applied to the Infrared Light Source the unit heats and the thermometer generates a digital read out of the surface temperature. The thermocouple output can also be used as an input to the [user supplied] power supply system to control the source temperature. Nominal source power requirement is 1.8 amps at 5 volts to maintain 825C [1100K]. The unit can be operated up to 1100K for long [3+ years] duration or at higher temperatures to 1400K for shorter durations. Temperatures from 300K up are easily achievable and operation cooler than 1100K extends lifetime rapidly.



**Construction:** The Type-K Thermocouple sensor is fabricated using special limit error thermocouple wire. This wire is rated at +/- 1.1° C. The sensor is applied directly to the coil of the Infrared Light Source. High temperature, low expansion, material is used to apply the sensor to the source. The thermocouple is terminated with a standard Type-K miniature plug. Other thermocouple types can be supplied on request.

**Optional Digital Thermometer:** The sensor output probe can be plugged directly into this unit. The meter accepts all type K thermocouple probes with ANSI miniconnectors. Meter features: HOLD button to freezes reading, switch for readouts in °F and °C. The display has large ½" digital features. Meter comes with 9 volt battery.

We will customize our existing products to your design specifications. We would be pleased to quote a new custom IR source, including engineering, which will meet your requirements.

