

## Using the ECL100/ECL101 With a ThreadSense Probe

The ECL100/ECL101, in combination with a ThreadSense probe, can detect the presence/absence of threads in a hole in aluminium.

Consult the ECL100/ECL101 User Guide for basic connection and operating instructions.

### Setup/Calibration

#### Overview

The ECL100/ECL101 is factory calibrated to generate a 1V difference between a threaded and unthreaded hole. It is specifically calibrated to generate a 1V output in an unthreaded hole and a 2V output in a threaded hole.

The setup procedure is used to adjust the output voltage to these voltages in the application.

#### Procedure

Do ONE of the two procedures below, dependent on hardware available for the setup.

1. Unthreaded Calibration
  - a. Insert the probe into the unthreaded hole
  - b. Adjust ZERO for an output voltage of 1V
2. Threaded Calibration
  - a. Insert the probe into the threaded hole
  - b. Adjust ZERO for an output voltage of 2V

### Mechanical Considerations

The probe must be reasonably well centered within the hole under test. Off-center positioning introduces small errors in the sensor output voltage which could then indicate the wrong condition.

For details, please consult the Lion Precision TechNote *LT02-0015 ThreadSense Probe Centering Errors* at [www.lionprecision.com](http://www.lionprecision.com) > click on Technical Library.