



## LLG-uniREFRACTO 5 pro Calibration procedure

The LLG-uniREFRACTO has a user ZERO calibration function is designed to correct any minor changes in the instrument's calibration.

When a user ZERO calibration is carried out the instrument first takes a measurement and checks that the sample on the prism is water. The instrument expects that the RI should be between 1.33005 and 1.33417, which is what water should read at approximately 43.5°C and 1.5°C respectively. Outside of this the instrument will report an error message "L" or "H", which means the calibrant is too low or too high.

In most cases the user ZERO calibration will allow the calibration to be corrected. In cases where the calibration error is greater and therefore water sample reads outside the required specification above a Service ZERO calibration is available.

The instrument uses factory set cleansplot data to improve reading linearity. Should the cleansplot data become unrepresentative due to movement in the optics this will have a detrimental effect upon linearity.

The Service ZERO calibration combines a cleansplot calibration and a tolerance free ZERO calibration.

### Service Zero Calibration Procedure

---

Remove any sample and ensure that the prism is thoroughly clean.

---

Press the READ key to reset the consecutive ZERO counter.

---

Press and hold ZERO until "000" is displayed, this indicates that a ZERO calibration has been started. A few seconds later the display will show either "L", "H" or "000". This step has to be carried out 10 times.

If a PIN has been previously set, then after 8 zeros, the instrument will show "OPEN" and remove the PIN protection, after 2 further zeros the "service zero calibration" is still carried out.

---

As before press and hold ZERO until "000" is displayed. Once the calibration has finished the display will show "L H" to indicate that a cleansplot calibration has completed.

---

Finally apply water and press and hold ZERO until "000" is displayed. Now the display will show "000" indicating that ZERO calibration has been successful.

This document was sent online and is valid without signature