



# IMPORTANT INFORMATION ABOUT YOUR NEW TRI-GAS MIXER: BEST PRACTICES AND CALIBRATION OPTIONS FOR CO2-O2-MODULE

To ensure accurate measurements, the Tri-Gas Mixer automatically performs a periodic Zero Reset on the sensors using the already connected pure N2 tank. This procedure runs automatically in the background once per week without interrupting gas delivery to the incubators, and is described in detail in the user manual.

However, it is also necessary for you to perform periodic maintenance of the CO2 and O2 sensors in your Tri-Gas Mixer. Thankfully, this is easy to do with the mixer's integrated CO2-O2-MODULE.

It requires two types of maintenance for optimal performance:

- **Periodic (at least once annual) sensor module calibration, with these options:**
  - **using high accuracy pre-mixed gas of known concentration, or**
  - **using a calibrated gas analyzer, or**
  - **sensor replacement under contract, or**
  - **sending the sensor module to Okolab for calibration**
- **Sensor replacement – at sensor module's end of life (5 years)**

## Sensor Module Lifetime

After 5 years, the CO2-O2-MODULE reaches its expected end of life and can no longer be factory calibrated. Keep your TRI-GAS-MIXER running smoothly for years to come by installing a fresh CO2-O2-MODULE - either by ordering a replacement sensor, or by enrolling in an automatic replacement service such as OKO-CARE (details on next page).

See back of page for Sensor Calibration methods and details.

## QUESTIONS? EMAIL US:

[info@oko-lab.com](mailto:info@oko-lab.com)  
[usa@oko-lab.com](mailto:usa@oko-lab.com) (for North and South America)



## Sensor Calibration

A full calibration of the sensor should be performed at least once per year. If you have a calibration gas cylinder or a calibrated gas analyzer, you can choose to do this more often, depending on your laboratory quality protocols. The procedures are described in the user manual.

---

*Option 1: Use a calibration gas cylinder of certified gas concentration (close to your typical set points).*

- You can perform this procedure “manually” by connecting the cylinder to the mixer’s calibration input and initiating the procedure in the touch screen’s calibration menu. This calibration does not interrupt gas delivery to the incubators.
- Alternatively, if you can keep the cylinder connected to the mixer at all times, the calibration process can run automatically once per week, along with the Zero Reset. Although this is more often than needed, there is no harm in running the process weekly, for peace of mind.

---

*Option 2: Use a calibrated CO<sub>2</sub>-O<sub>2</sub> analyzer.*

- For this procedure, you need to use a calibrated gas analyzer, such as Okolab’s LEO 2.0, connected to the sample port on the mixer’s rear panel. This is a manual calibration where you use the touch screen’s calibration menu to input the CO<sub>2</sub>% and O<sub>2</sub>% values measured by your analyzer. The mixer will then self-correct with an offset.
- Refer to the **Meter Offset** feature described in the user manual.

---

*Option 3: Annual replacement under contract.*

- If you have subscribed to an annual replacement-based calibration contract with your local dealer or directly with Okolab (OKO-CARE), you simply remove the original sensor module from TRI-GAS-MIXER, and insert the calibrated replacement module. Sensor replacement can be easily performed onsite with instructions that are found in the TRI-GAS-MIXER user manual, without the need to send your mixer away for service.

---

*Option 4: Send the sensor module to Okolab for calibration.*

- If the options above are not available or convenient, you can always remove the sensor module from the Tri Gas Mixer and send it to Okolab for calibration. For the period that the module is not installed on the mixer, the system will continue to operate with the last known settings, and you will have the ability to manually adjust the gas concentration. This feature is described in the user manual.
- Okolab calibration always includes a factory calibration certificate.

QUESTIONS? EMAIL US:

[info@oko-lab.com](mailto:info@oko-lab.com)  
[usa@oko-lab.com](mailto:usa@oko-lab.com) (for North and South America)

