

Calibrating the MJK Phix pH probe

pH sensors must be calibrated at regular intervals to provide an accurate reading. Follow the steps below to calibrate an MJK Phix pH probe while it is connected to a Consibio Logger.

The calibration is performed on the probe itself, using the calibration ring and two buffer solutions. The Logger only needs to supply constant power while you work.

What you need

- Deionized water to rinse the probe.
- A calibration buffer solution with **pH 7.0**.
- A calibration buffer solution with **pH 4.0**.
- A soft cloth that will not scratch the electrode.

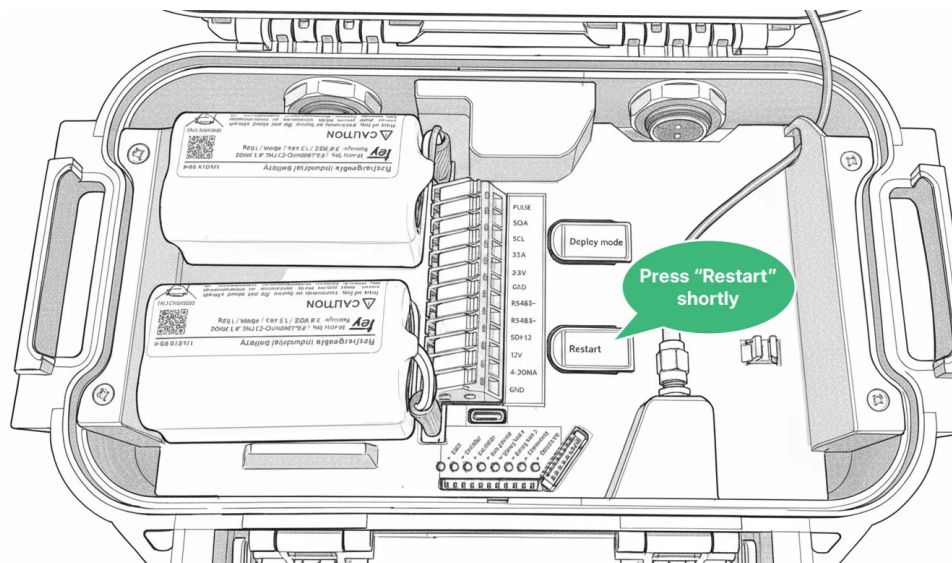
1. Keep the Logger powered up

During normal operation, the Logger powers the sensor up and down with every measurement to preserve battery. That interferes with the calibration procedure, so put the Logger into a configuration where it stays online:

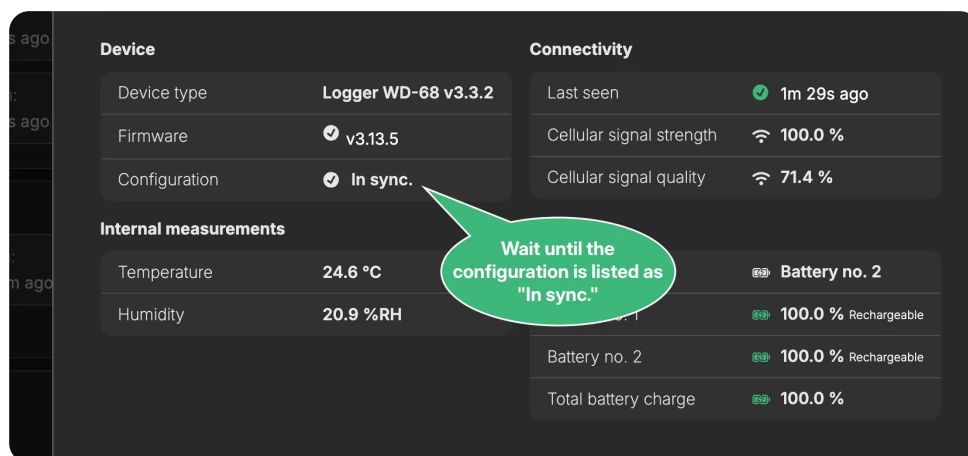
1. Open the device in Consibio Cloud, set the **Transmission interval** to **0** seconds and select **Save**. At 0s, the device attempts to stay online indefinitely.

The screenshot displays the configuration page for a 'Logger WD-68 v3.3.2'. It is divided into several sections: 'Device' (showing firmware v3.13.5 and 'In sync' status), 'Connectivity' (showing 100.0% signal strength and 71.4% quality), 'Internal measurements' (showing 24.6 °C temperature and 20.9 %RH humidity), and 'Power' (showing two 100.0% rechargeable batteries). At the bottom, the 'Transmission interval' is set to 0 days, 0 hours, 0 minutes, and 0 seconds. A red arrow points to this section, and another red arrow points to the 'Save' button. A message at the bottom left states 'You have 1 unsaved change...'. The 'Save' button is green and labeled 'Save', while the 'Cancel' button is grey and labeled 'Cancel'.

2. Press **Restart** shortly on the Logger to force a restart and an immediate connection, so the new setting is synchronized to the device right away.



3. Wait until **Configuration** is listed as **In sync.** in Consibio Cloud. This can take a couple of minutes.

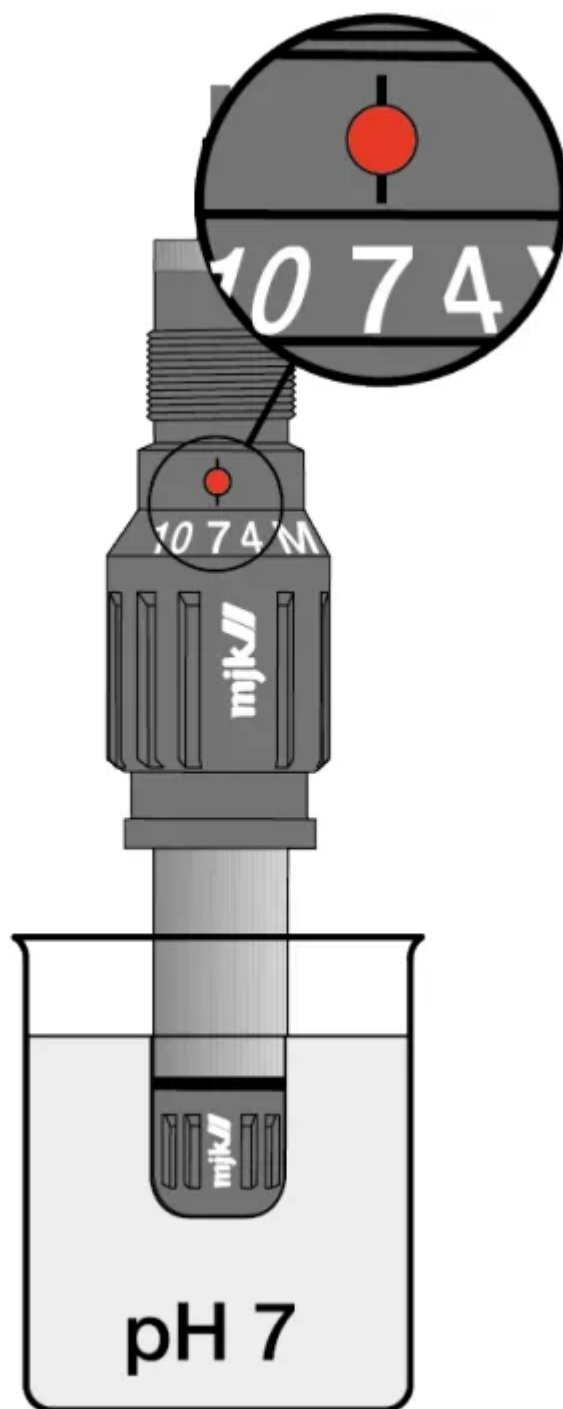


4. Wait at least **10 minutes** for the sensor to stabilize.

For more about the interval settings, see [Logger WD-68](#).

2. Calibrate at pH 7

1. Clean the sensor carefully in deionized water, then dry the electrode with a soft cloth.
2. Turn the calibration ring to the **7** indicator position and submerge the probe in the pH 7 buffer solution.

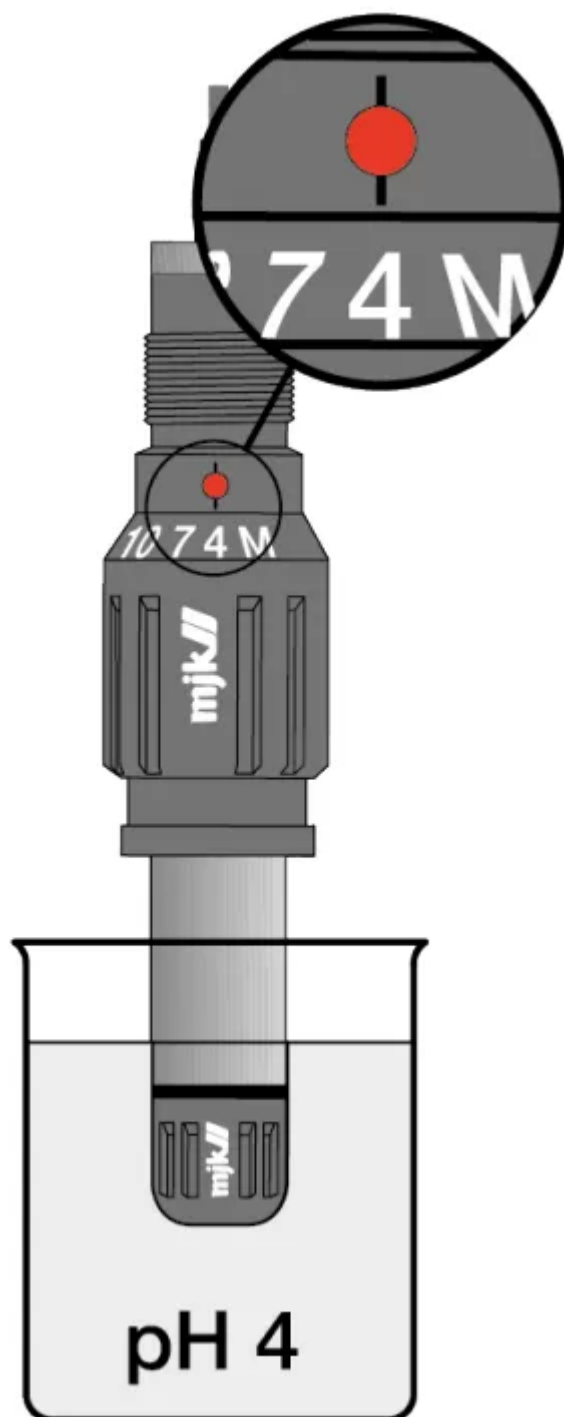


3. The sensor begins to blink **3 times** every 5 seconds.

4. Wait until the sensor blinks **2 times** every 5 seconds. The first calibration value is now saved.

3. Calibrate at pH 4

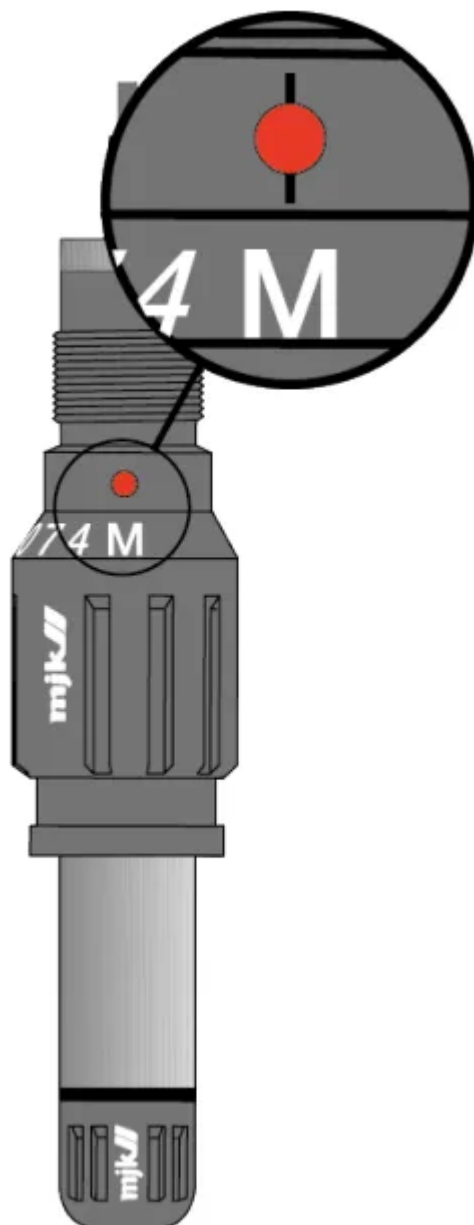
1. Take the sensor out of the buffer solution and dry the electrode with a soft cloth.
2. Turn the calibration ring from the **7** to the **4** indicator position and submerge the probe in the pH 4 buffer solution.



3. The sensor begins to blink **3 times** every 5 seconds.
4. Wait until the sensor blinks **2 times** every 5 seconds. The second calibration value is now saved.

4. Return the probe to measuring

Turn the calibration ring to the **M** (Measure) indicator position.



The sensor is now calibrated.

5. Restore the transmission interval

Set the **Transmission interval** back to the value you want the Logger to run with, and select **Save**.

The screenshot displays the configuration page for a 'Logger WD-68 v3.3.2'. The interface is divided into several sections: 'Device' (showing device type, firmware v3.13.5, and sync status), 'Connectivity' (showing last seen time and signal strength/quality), 'Internal measurements' (showing temperature and humidity), and 'Power' (showing battery status). At the bottom, the 'Transmission interval' is set to 0 days, 0 hours, 0 minutes, and 0 seconds. A red arrow points to the '0' in the 'Days' field. Below this, a note explains that setting the interval to 0s means the device will stay online indefinitely. At the bottom right, there are 'Cancel' and 'Save' buttons, with a red arrow pointing to the 'Save' button. A status bar at the bottom left indicates 'You have 1 unsaved change...'.

Device		Connectivity	
Device type	Logger WD-68 v3.3.2	Last seen	12m 31s ago
Firmware	v3.13.5	Cellular signal strength	100.0 %
Configuration	In sync.	Cellular signal quality	71.4 %

Internal measurements		Power	
Temperature	24.6 °C	Power source	Battery no. 2
Humidity	20.9 %RH	Battery no. 1	100.0 % Rechargeable
		Battery no. 2	100.0 % Rechargeable
		Total battery charge	100.0 %

Transmission interval

How often should the device send data to the cloud? If set to 0s, the device will attempt to stay online indefinitely.

0 Days 0 Hours 0 Min. 0 Sec.

You have 1 unsaved change... Cancel Save

If you have any questions, reach out to us at support@consibio.com.