

1 Turn the power ON.

Press the ON/OFF switch.



2 Calibrate the sensor to ensure correct measurement.

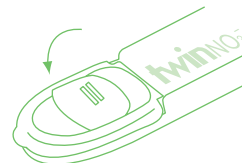
* Always calibrate the sensor at least once per day.

Add the standard solution.



5000 ppm standard solution

Close the light shield cover.



Press the CAL switch.



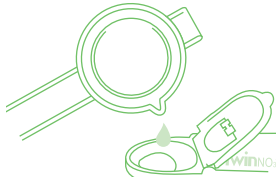
3 Take the measurement.

Press the crop sample.



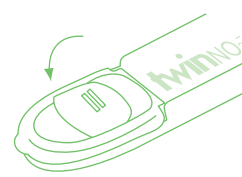
Cut the crop sample to a manageable size and place it in the press.

Add some drops of the juice to the sensor.

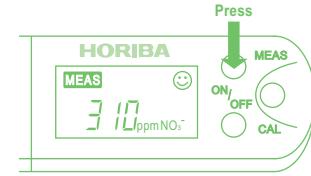


Guideline: 4 or 5 drops.

Close the light shield cover.



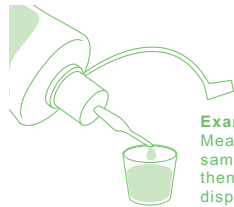
Press the MEAS switch.



Wait until the stability icon (☺) lights before pressing the switch.

If the measured value is 9900 ppm or more:

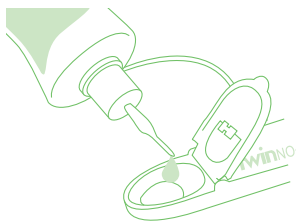
Dilute the sample fluid using the provided cup before measurement.



Example:
Measure a solution of one part sample fluid to one part water, then double the measured value displayed to obtain the result for the undiluted fluid.

4 Always rinse the sensor after use.

Rinse off the sensor with water.



Measurement tip

- Washing the sensor beforehand twice with the sample fluid improves the measurement accuracy.
- When squeezing no succulent vegetables, repeat squeezing action several times.

Note: Read the Instruction Manual in addition to this procedure.

• Crop Measurement (Supplementary Information)

- The measurement procedure printed is just an example. You may try out your own methods to meet your objectives.
- To measure the nitric acid ion concentration of an entire crop, you will need to prepare sample fluid from the entire crop or from a uniform sample.
- The nitric acid ion concentration in crops is higher in stems (leaf stems) than in leaves. The highest concentration is generally considered to be in the outermost stems (leaf stems).
- The sensor is affected by light, so avoid direct sunlight. Use the light shield cover.
- Measurement may be impeded in crops with significantly high electrical conductivity, chloride ion (Cl⁻) concentration or oil concentration. Diluting the pressed fluid to a concentration within the measurement range may reduce the impediments to measurement.

• Consumable parts (supplies)

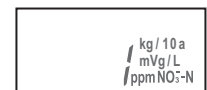
Name	Part No.
Replacement sensor	90880009000
5000 ppm dedicated standard solution (Y041)	90880010000
300 ppm dedicated standard solution (Y042)	90880011000

• Procedure for Two-point Calibration (For More Accurate Measurement)

Select the two-point calibration mode from the special setting modes. Perform two-point calibration when you want high-accuracy measurement.

1. Follow the steps below to set the two-point calibration mode.

① Press and hold the MEAS switch for at least 5 seconds to enter the special setting modes. All the LCD segments light, then the display on the right appears.



② Press and hold the CAL switch until the CAL icon and the number 3 appear.



③ Press the MEAS switch once (0.5 second) to display the number of calibrations currently set. When one-point calibration is set, the number 1 appears.



④ Press the CAL switch to display the number 2.



⑤ Press the MEAS switch.

The two-point calibration mode is now set, and the meter returns to the standard measurement mode.

2. Add some drops of the 300 ppm standard solution to the sensor, and close the light shield cover.

3. Press the CAL switch for at least 2 seconds.

The CAL icon flashes.

When the CAL icon changes from flashing to steadily lit, the first calibration has been finalized.

The first calibration must be finalized before you start the second calibration.

4. Add some drops of the 5000 ppm standard solution to the sensor, and perform the second calibration by the same procedure as the first calibration.