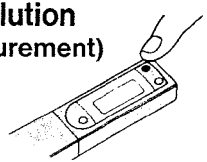
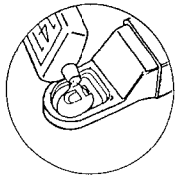
Please read this instruction manual and guarantee before use. Please keep both for future reference

Use in the Following Order 1 Calibration with standard solution 2 Measurement

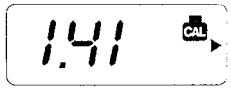
1 How to Calibrate Using Standard Solution (Before measurement)

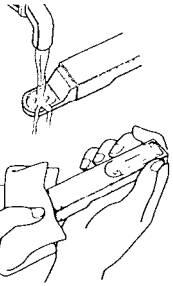


1. Press the POWER button.
2. Drop 1.41 standard solution onto the sensor cell.



3. Press the CAL/MODE button to display the CAL mark and 1.41.





4. Calibration is complete when the CAL mark disappears. Wash the sensor with tap water, and wipe any residual water with a tissue.

Note: A binking CAL mark indicates that the unit is not calibrated. Check that the correct standard solution was used and calibrate again.

Occasionally calibrate using the standard solution to achieve more accurate measurement. (At least once a day is recommended.)

2 How to Measure

The two parameters of conductivity and salinity can be measured.

■To Measure Conductivity

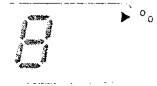
1. Check that the ▶mark indicates either of the mS/cm or μS/cm modes, and drop the of sample solution onto the sensor cell.

2. When the ☺ mark appears, read the figure.

Note: The range automatically switches between the mS/cm and μS/cm ranges according to the concentration of the sample solution.

■To Measure Salinity

1. Check that the ▶ mark indicates the % mode, and drop the of sample solution onto the sensor cell.



2. When the ☺ mark appears, read the figure.

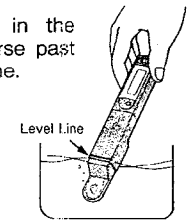
●Each press of the CAL/MODE button changes the ▶mark in order : mS/cm or μS/cm, CAL , and % mode.

Note: When the figure to be measured is outside of the measurable range (20mS/cm or more for conductivity and 1.1% or more for salinity), the displayed figure will blink. Use this figure as a reference value.)

There are two ways of measuring depending on the condition of the sample.

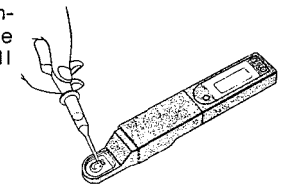
Immersion Measurement

Immerse the sensor in the sample. Do not immerse past the immersion level line.



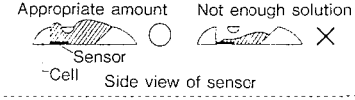
Flat Surface Measurement

Drop the sample onto the sensor cell using a pipet.



In both cases, read the displayed figure when the ☺ mark appears.

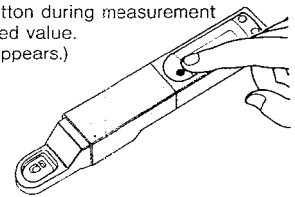
Note: Drop an appropriate amount of standard or sample solution onto the cell as shown in the figure. If there is not enough solution or the solution contains bubbles, the measurement will be inaccurate.



Use the hold function as it aids measurement.

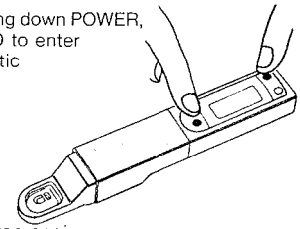
Manual Hold

Press the HOLD button during measurement to hold the measured value. (The H mark also appears.)



Automatic Hold

While holding down POWER, press HOLD to enter the automatic hold mode.



To cancel the hold mode, press the HOLD button again.

After Measurement

1. Press the POWER button to turn the power OFF.
2. Wash the sensor with tape water, and wipe off any residual water on the sensor with a tissue.
3. Replace the protection cap over the sensor.

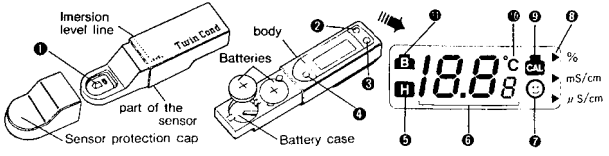
Accessories

Electrode (×1)	No. 0413
Liquid set (1.41 mS/cm×1, washing liquid×4)	No. Y023

040950000

Instruction (2)

Name and Function of Each Section



❶ Conductivity cell

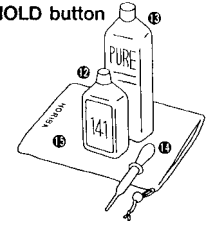
❷ Power button

The power will automatically turn off no buttons are pressed for 15 minutes.

❸ CAL/MODE button

Continuous push button makes mode change of CAL(calibration)→ salinity measure→conductivity measure.
The calibration values are stored in memory even after the power source is turned off.

❹ HOLD button



❺ HOLD indicator H

❻ Display of conductivity/salinity values

Displays blink when the figure to be measured is 20mS/cm or more for conductivity and 1.1% or more for salinity.

❼ Stabilization indicator ☺

❽ Range/mode indicator

❾ Calibration indicator CAL

Appears during calibration. When the unit has not yet been calibrated, this indicator blinks during the calibration mode as well as the measurement mode.

❿ Temperature alarm ℃

Blinks when the temperature of the sample is outside 5-35℃.

⓫ Battery alarm B

⓬ Standard solution 1.41mS/cm

⓭ Purified water (Deionized water)

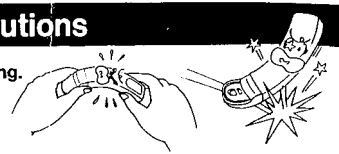
⓮ Pipet

⓯ Storage pouch

Handling Precautions

Please read this before use, and keep.

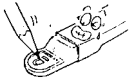
Be cautious about the following.



- Should not be dropped, and excessive force should not be applied.
- The sensor should not be pressed with undue pressure.

- Should not be immersed or wet past the immersion level line.

- The surface of the electrode has been specially treated. Should not be allowed utensils (tweezers, etc.) to come into contact with it, otherwise the electrode may become damaged.

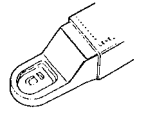


- Should not be allowed to stand in direct sun light or at high temperature and humidity.

- Samples of high temperature (above 35℃) should not be measured.

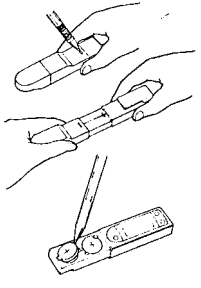
- Should not be washed with thinner, benzine, etc.

- It should be recommended to turn on the power without liquid in the cell.
- The cell should be washed with the sample about 3 times before the measurement.
- In principle, objects of measurement are aqueous solutions. Should not be used for measurement of samples that are likely to damage the sensor cell (such as solids, organic solvents, surfactant, oil adhesive, alcohol, strong acids (pH : 0-2), strong alkalis (pH : 12-14), etc.), otherwise the life of sensor will be extremely short.
- Unstable indication is caused by prolonged non-use leaving in an extremely dry condition. Pour the sample of the standard solution into the cell and leave for a few minutes.
- The indication of CAL is not the value of measuring, but the conductivity value of the standard solution.
- When CAL blinks (CAL alarm), check the standard solution and calibrate again properly.
- When the standard solution touches your hand or skin, wash it with water. If the standard solution touches your eye, immediately wash it with water and consult a doctor.
- Clean the cell with diluted neutral detergent (diluted approx. 100 times). In the case ・・・
  - ・The inside of the cell is contaminated.
  - ・Air bubbles easily appear in the cell.
  - ・The indication is unstable.



- How to keep : Clean the sensor with purified water (deionized water) and close the seansor cap. Purified water remaining in the cell causes no problems.
- Replace both batteries simultaneously.
- Exhausted batteries should not be thrown into a fire or recharge. Exhausted battery should not be placed within reach of children. If a battery is swallowed, call your doctor immediately.
- When battery low, it might happen that you cannot turn on or off the power. Please change the batteries earlier.

How to Replace Batteries



❶ Pull out the sensor while pressing the catch located on the back of the body with the end of a ball point pen.

❷ Detach the battery from the body by raising the battery with the end of a ball point pen as shown in the figure.

❸ Insert new batteries as described in "How to Set and Replace the Sensor and Batteries". (Always use two CR-2032 Lithium Batteries.)