

Item	Part Numbers
Conductivity Probe	1402 Cond-P
Conductivity Electronic Panel	1407 Cond-EP
Calibration Solution	1413 µS/cm
Thumbscrews Set (2)	3250 TScrewsx2

**Note:** For best results, calibrate the **Conductivity Plus Meter** in 1413 µS/cm solution before each measurement session. To maximize battery life, the **Conductivity Plus Meter** automatically shuts off after 5 minutes of inactivity. When the battery is low, "LOW BATT" appears on the display panel. The meter will continue to operate, but the battery should be changed as soon as possible.



**Figure 2**



**Figure 1**  
**1407 Cond-EP**

## HERON ALSO MANUFACTURES:

- Water Level Meters
- Data Loggers
- Interface Meters
- Temperature Meters
- Well Casing Indicators
- Well Depth Indicators

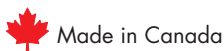
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## Conductivity Plus

Operating and Maintenance Instructions



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# Conductivity Plps Instructions

## General Care of the Conductivity Plps

- Do not scrape the tape against sharp-edged well casing. (Figure 2)
- Avoid entanglement with other equipment in boreholes and wells.
- Rewind the tape onto the reel after each use.
- Clean the probe tip with distilled water.
- Do not tap or hit the probe to dislodge dirt or mud. Soak the probe tip in water to remove trapped dirt.

Warranty is conditional upon adherence to these guidelines

## Equipment Check

### Clean the probe and check for damage

Thoroughly clean the probe with distilled water to minimize any buildup that could interfere with results.

Inspect the unit for obvious signs of damage. Nicks in the tape that expose the conductors will cause the tape to malfunction.

### Test the Battery

1. Press and release the red power button. A brief message will appear indicating firmware version. The digital display will then update with conductivity and temperature readings.
2. If the unit does not turn ON, replace the 9V battery in the battery box (Figure 1). Make sure the battery is not in backwards.

### Test the Probe

1. Turn the unit ON.
2. Allow 4 seconds for the probe to synchronize with the display panel.
3. Place the probe in tap water. The unit will emit a short audio and visual indication and the display will update with temperature and conductivity readings.
4. Remove the probe from the water. The unit will emit an intermittent 3 second audio and visual indication.

## Use in the Field

1. Press and release the red power button. A brief message will appear indicating firmware version. The digital display will then update with conductivity and temperature readings.
2. Slowly lower the probe until a solid 3 second light and tone indicate the presence of water.
3. Take note of the marking on the tape. This is the static water level.
4. After 3 seconds the display updates with the temperature and conductivity values. Allow 60 seconds for the readings to stabilize.
5. Continue to lower the probe and take readings of temperature and conductivity at the desired depths.
6. When the probe is removed from the water, the unit emits an intermittent tone while the LED lights.
7. To turn OFF the **Conductivity Plps Meter** press and hold the power button until "Power Off" appears in the digital display.

## Calibration of the Conductivity Plps

For best results, calibrate the **Conductivity Plps Meter** in 1,413  $\mu\text{S}/\text{cm}$  solution at 25°C before starting a measurement session.

1. Clean the probe with distilled water and allow it to dry.
2. Press the power button to turn the meter on.

3. Place the probe in 1,413  $\mu\text{S}/\text{cm}$  solution and gently position the probe so that air bubbles are not trapped under the shroud.
4. Wait approximately 60 seconds for readings to stabilize.
5. Press and hold the calibration button on the control panel (see Figure 1) until "Please Wait" appears on the display, then release the button.
6. The meter will calibrate, after which the conductivity and temperature values will appear on the display panel. The calibration values are stored until the meter is recalibrated.

## Troubleshooting the Conductivity Plps

### Q. The unit turns off when the probe contacts water

- A. Replace the battery (Figure 1).

Check the tape for cuts that would allow water to enter. This condition may require service.

### Q. The unit does not calibrate properly

- A. Gently move the probe to displace air bubbles and perform calibration.

Ensure that temperature readings are stable before performing calibration.

Clean the probe tip in distilled water, dry the probe and perform calibration.

### Q. The unit does not stop sounding in water

- A. The unit is designed to work in solutions 100  $\mu\text{S}$  and above.

Contact Heron Instruments or your supplier if you cannot isolate the problem.

## Warranty (3 years, probe 1 year)

**Heron Instruments Inc.** warrants to repair or replace any such defective equipment or part (determined to our satisfaction to be a defect in workmanship or original material) upon receipt and inspection of such defective equipment to Heron Instruments Inc. with all shipping pre-paid by the user.

In no event shall Heron be liable for any direct, indirect or consequential damages, abuse, acts of third parties (rental equipment), environmental conditions or other expenses which may arise in connection with such defective equipment.

This warranty shall not apply to damage of equipment caused by improper installation, usage, storage, alteration or inadequate care.

**Heron Warranty** coverage does not extend to the following:

- Tape, bag or batteries used with the product
- Products used as rental equipment
- Products contaminated by materials which are known to be hazardous and; as such, have rendered the unit unserviceable
- Parts failure due to neglect in cleaning or incorrect servicing
- Failure of parts caused by misuse

For service information:

- visit [www.heroninstruments.com](http://www.heroninstruments.com) under the **CONTACT** heading
- email [service@heroninstruments.com](mailto:service@heroninstruments.com)
- call 1-800-331-2032 or 905-628-4999

**Warranty is conditional upon adherence to these guidelines.**