

# Product Testing Guides

Quick and easy 'go to guides' for cleaning, calibrating and troubleshooting Bluelab products.

### Some meters look alike.

Please match the serial number on the back of the meter to the serial number at the top of the page to ensure you are using the correct page.



### Let's Talk

If you need assistance or advice, we're here to help.

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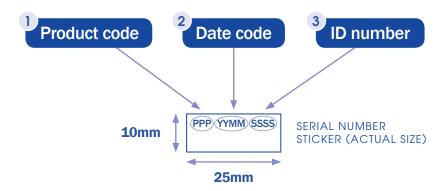




### How to read Bluelab® serial numbers

Serial numbers are printed on a 'serial number sticker' and placed on both the product and packaging.

# Bluelab product serial numbers consist of three (3) parts (excluding pH Probe serial numbers - see below)



How to read a Bluelab® product serial number:

CM1-1801-2345 = Combo Meter - Manufacture date (January 2018) - ID number

How to read the Bluelab® pH Probe serial number:

**P1180151257** = Product code (P1), manufacture date (1801), ID (51257)

# How to determine if a product is under guarantee Using the manufacture date of 1801 (January 2018);



If there is a **6 month guarantee** on the product (includes pH Soil Probes and pH Probes), the **guarantee expires in July 2018**.



If there is a **1** year guarantee on the product (includes Soil pH Pens, pH Pens, ppm/EC Pens and Pulse) the guarantee expires in January **2019**.



If there is a **2** year guarantee on the product (includes Guardian Monitors, pH Controllers and Pro Controllers), the guarantee expires in January **2020**.



If there is a **5** year guarantee on this product (includes Combo Meter, pH Meter, Soil pH Meter, and Truncheon), the guarantee expires in January **2023**.



**NOTE:** Calibration instructions and serial number on back.



### **Trouble-shooting**

### Calibrates to 7.0 but not to 4.0:

- Did not wait long enough to get down near 4.0 pH before pressing CAL
- The probe tip is dirty. Clean the pH probe tip and retry the full calibration process again.
- The probe requires further hydration in KCL storage solution.
   Allow the probe to soak in KCl storage solution for a further
   12 hours (overnight), and calibrate again the following day.

#### Calibrates to pH 7.0 but won't move from 7 afterward:

 Most likely pH probe is broken. Check for broken glass on probe (Broken pH probes are not covered under Guarantee.)

#### Error message appears - possible "Err" causes:

- The pH probe is damaged. Check for broken glass on tip of pen pH probe. (Broken pH probes are not covered under Guarantee.)
- Calibration solutions are contaminated. Calibration solutions must be fresh.
- Wrong calibration sequence. Calibrate to pH 7.0 first, then pH 4.0 afterward.
- The pH Pen's probe life has ended so Pen requires replacing.

### No power:

- · Replace battery.
- Clean away any build-up on battery contacts which may be present.
- If battery spring contacts are rusted in battery carriage,
   Pen has come into contact with water (water ingress is not covered under Guarantee).

# Reading "drifts' when customer places pH probe in RO, distilled or deionized water:

 It can be very difficult to get an accurate pH reading in samples of water that have a low ionic strength. Adding a small amount of nutrient will help.

### pH Pen probe cleaning and calibration

- Clean pH Pen probe with Bluelab pH Probe Cleaner and rinse well (see cleaning instruction's on last sheet).
- 2 Press "power/hold" button to turn on.
- 3 Place probe tip in fresh Bluelab pH 7.0 Calibration Solution. Always 7 first!
- 4 Long press "cal" button until "CAL" is displayed. Release button.
- 5 '[]' starts to flash indicating the start of calibration. Leave the probe in the solution while the display is flashing. After '[] [] [] 's stops flashing, 'CAL' shows the calibration point is complete.



- 6 Rinse probe tip in clean tap water and then gently shake off any excess water.
- Place probe tip in fresh Bluelab pH 4.0 or pH 10 calibration solution.

- 8 Long press "cal" button until "CAL" is displayed. Release button.



- A check mark will be displayed at the bottom of the screen to indicate a successful calibration. It will disappear after 30 days to indicate calibration is required.
- 11 The Bluelab pH Pen should always be calibrated to 2 points! Always calibrate to pH 7 first, then pH 4 or 10.

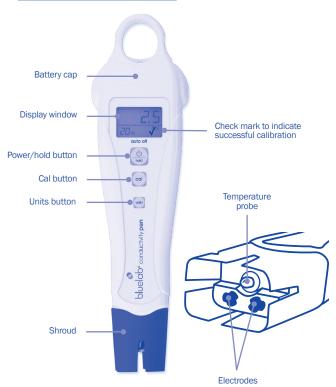
NOTE: The pH Pen will not hold calibration if it is only calibrated to pH 7.0. Calibration to pH 7.0 and pH 4.0 is required.



# Bluelab® Conductivity Pen

Serial Numbers start with BP2 or BP5





### **Trouble-shooting**

### If reading is low:

- · Is the shroud on? Place shroud on and re-test.
- Leave in 2.77 EC solution for 3 4 minutes for temperature to compensate (especially in winter).
- Repeat cleaning as dirty probes can require repeat cleans.
- Do not use any conductivity solutions other than Bluelab.

# Erratic reading – conductivity readings can swing from 1.3 – 2.8 EC:

· Is the shroud on? Place shroud on and re-test.

### If reading is high:

• Ensure the solution is fresh and uncontaminated.

#### No power:

- · Replace battery.
- Clean away any build-up on battery contacts which may be present.
- If battery spring contacts are rusted in battery carriage, Pen has come into contact with water (Water ingress is not covered under Guarantee).

### Works in testing solution, customer says does not work in nutrient reservoir tank:

 Have customer remove a sample from reservoir and test sample out of nutrient tank. Stray electrical currents may be present in reservoir tank.

### Conductivity probe cleaning and calibration

NOTE: Calibration is optional. Cleaning and testing is sufficient.

### To Clean and Test

- Remove Shroud.
- 2 Clean conductivity probe face with Bluelab Conductivity Probe Cleaner and rinse well (see cleaning instructions on last sheet).
- 3 Place shroud back on.
- 4 Place probe tip into sample of fresh Bluelab 2.77 EC Standard Solution only.
- 5 Meter should automatically turn on to read:
  - a. **In EC mode:** plus or minus 0.1. An acceptable reading is 2.7, 2.8, 2.9 EC.
  - b. **In ppm 500 mode:** plus or minus 50 ppm. Acceptable reading 1340-1440 ppm.
  - c. **In ppm 700 mode:** plus or minus 70 ppm. Acceptable reading 1870-2010 ppm.

#### To Calibrate

- 1) To calibrate the conductivity pen, place into fresh Bluelab 2.77 EC Conductivity Standard Solution only.
- 2 Press and hold the "cal" button until 2.8 EC appears on screen. For the ppm 500 scale, a reading of 1390 ppm will be achieved during calibration. For the ppm 700 scale, a reading of 1960 ppm will be achieved.

NOTE: The Conductivity Pen must be showing values within the "Acceptable Readings" provided above for calibration to be successful.

3 A check mark will appear on screen to indicate calibration was successful.

### To change the units from EC to ppm 500 or ppm 700

- 1 Press and hold the "units" button until the conductivity scale are flashing.
- 2 Short press the units button to cycle through each scale available until you reach the required scale.
- 3 Do not press any buttons and the pen will automatically save that scale.

### Bluelab® Truncheon Nutrient Meter V1 & V2

V2 Serial Numbers start with TR2 (standard), TR3 (commercial), or TR4 (French/English)

# Conductivity (ppm) cleaning and testing

- Remove Shroud.
- 2 Clean conductivity probe face with Bluelab Conductivity Probe Cleaner and rinse well (see cleaning instruction's on last sheet).
- 3 Place shroud back on.
- Place probe tip into sample of fresh Bluelab 2.77 EC Standard Solution only.
- 5 Meter should automatically turn on to read:
  - a. In EC mode: plus or minus 0.1.

    An acceptable reading is 2.7, 2.8, 2.9 EC.
  - b. **In ppm 500 mode:** plus or minus 50 ppm. Acceptable reading 1350-1450 ppm.
  - c. In ppm 700 mode: plus or minus 70 ppm.
     Acceptable reading 1870-2010 ppm. The reading bounces between two variances.

### **Trouble-shooting**

### If reading is low:

- Is the shroud on? Place shroud on and re-test.
- Leave in 2.77 EC solution for 3 4 minutes for temperature to compensate (especially in winter).
- Repeat cleaning as dirty probes can require repeat cleans.
- Do not use any conductivity solutions other than Bluelab.

# Erratic reading – conductivity readings can swing from 1.3 – 2.8 EC:

• Is the shroud on? Place shroud on and re-test.

### If reading is high:

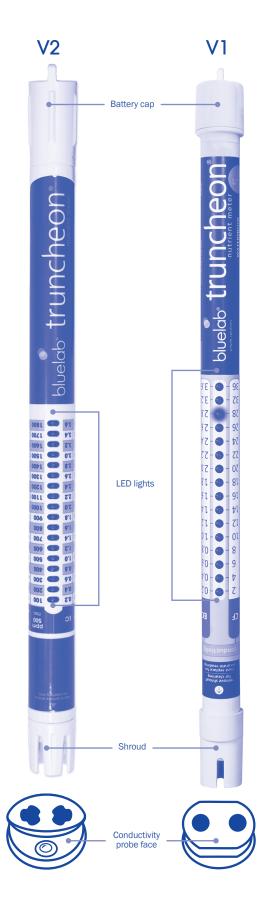
• Ensure the solution is fresh and uncontaminated.

### No power:

- Replace batteries with same age and brand.
- Clean away any build-up on battery contacts which may be present.
- If battery spring contacts are rusted in battery carriage, the Truncheon Nutrient Meter has come into contact with water (water ingress is not covered under Guarantee).
- Ensure battery cap is all the way tight for contact to occur.

### No reading when placed in RO, distilled or deionised water.

• The Truncheon Nutrient Meter will not turn on or provide a reading when the solution is under 100 ppm.

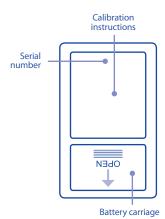




# Bluelab® Multimedia pH Meter



### Back



### **Trouble-shooting**

### Calibrates to 7.0 but not to 4.0:

- Most likely Leap™ pH Probe requires replacing.
- Did not wait long enough for reading to get down near 4.0 pH before pushing pH/calibrate.

# Error message appears during calibration – possible "Err" causes:

- The Leap<sup>™</sup> pH Probe is damaged. Check for broken glass bulb on tip of probe. (Broken Leap<sup>™</sup> pH Probes are not covered under Guarantee).
- Calibration solutions are contaminated. Calibration solution must be fresh.
- Wrong calibration sequence. Calibrate to pH 7.0 first, then pH 4.0 afterwards.
- The Leap<sup>™</sup> pH Probes life has ended so requires replacing.
- The Leap™ pH Probe is not properly attached. Check it is securely fitted to the Meter.

#### **No Power:**

- · Replace batteries with same age and brand.
- Wipe any dirt from battery spring contacts which may be present.
- If battery spring contacts are rusted in battery carriage, meter has come into contact with water (Water ingress is not covered under Guarantee).

# Reading "drifts' when customer places pH probe in RO, distilled or deionized water:

It can be very difficult to get an accurate pH reading in samples
of water that have a low ionic strength. Adding a small amount
of nutrient will help.

### Leap pH probe cleaning and calibration

- 1 Clean Leap™ pH probe with Bluelab pH Probe Cleaner, rinse well. (See cleaning instruction on last sheet).
- 2 Place Leap™ pH probe tip in fresh Bluelab pH 7.0 Calibration Solution. Always 7 first!
- 3 Wait until pH reading has stopped moving for at least 30 seconds. Should settle somewhere near 7.
- 4 Long press "pH/calibrate" button. CAL is displayed. Release. 7.0 is displayed.
- 5 The pH7 indicator will be displayed on screen.
- 6 The pH4 indicator will flash on screen indicating CAL to pH 4 is required.
- Rinse Leap™ pH Probe in clean tap water. Shake off any excess water.
- 8 Place Leap™ pH Probe tip in fresh Bluelab pH 4.0 Calibration Solution.
- Wait until pH reading has stopped moving for at least 30 seconds. Should settle somewhere near 4.
- Long press the 'pH/calibrate' button. CAL is displayed. Release. 4.0 is displayed.
- 1 The pH7 and pH4 indicators appear on screen. They will disappear after 30 days to indicate calibration is required.
- 12 The Meter should always be calibrated to 2 points. Always calibrate to pH 7 first, then pH 4 or 10.

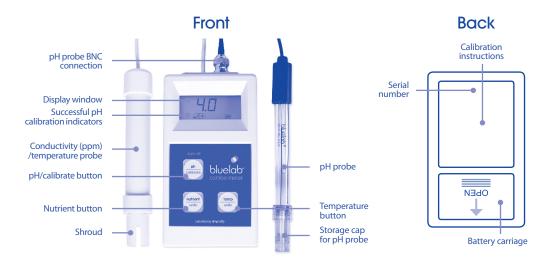
### Bluelab® Combo Meter V2

Current model - from Nov 2015 onwards

# How to tell this is a V2 Meter:



Button labels are different



### Conductivity (ppm) / Temperature Probe cleaning and testing

- Clean conductivity / temperature probe with Bluelab Conductivity Probe Cleaner (see cleaning instructions on last sheet).
- 2 Place shroud back on.
- 3 Place probe tip in fresh Bluelab 2.77 EC Standard Solution only.
- 4 Press nutrient button. Meter should read:
  - a. **In EC mode:** 2.8 EC, plus or minus 0.1. Acceptable reading is 2.7, 2.8 or 2.9 EC.
  - b. **In ppm 500 mode:** 1335 ppm, plus or minus 50 ppm. Acceptable reading 1335-1435 ppm.
  - C. In ppm 700 mode: Acceptable reading 1870 2010 ppm.

### pH Probe cleaning and calibration

- 1 Clean pH probe with Bluelab pH Probe Cleaner, rinse well. (See cleaning instruction on last sheet).
- 2 Place pH probe tip in fresh Bluelab pH 7.0 Calibration Solution. Always 7 first!
- Wait until pH reading has stopped moving for at least 30 seconds. Should settle somewhere near 7.
- 4 Long press "pH/calibrate" button. CAL is displayed. Release. 7.0 is displayed.
- 5 The pH7 indicator will be displayed on screen.
- 6 The pH4 indicator will flash on screen indicating CAL to pH 4 is required.
- Rinse pH probe in clean tap water. Shake off any excess water.
- 8 Place pH probe tip in fresh Bluelab pH 4.0 Calibration Solution.
- Wait until pH reading has stopped moving for at least 30 seconds. Should settle somewhere near 4.
- D Long press the 'pH/calibrate' button. CAL is displayed. Release. 4.0 is displayed.
- 1 The pH7 and pH4 indicators appear on screen. They will disappear after 30 days to indicate calibration is required.
- 12 The Meter should always be calibrated to 2 points. Always calibrate to pH 7 first, then pH 4 or 10.

### **Trouble-shooting**

### If reading is low:

- Is the shroud on? Place shroud on and re-test.
- Wait for temperature to compensate for 3 to 4 minutes (especially in winter).
- Repeat cleaning as dirty probes can require repeat cleans then re-test.

### If reading is high:

 Ensure the solutions are fresh and uncontaminated.

# Works in testing solution, customer says does not work in nutrient reservoir tank:

 Have customer remove a sample of solution from reservoir and test the sample. Stray electrical currents may be present in reservoir tank.

### **Trouble-shooting**

### Calibrates to 7.0 but not to 4.0:

- Most likely pH probe requires replacing.
- Did not wait long enough for reading to get down near 4.0 pH before pushing pH/ calibrate.

# Error message appears during calibration – possible "Err" causes:

- The pH probe is damaged. Check for broken glass bulb on tip of probe. Check that the glass tube is not damaged. (Broken pH probes are not covered under Guarantee).
- Calibration solutions are contaminated.
   Calibration solution must be fresh.
- Wrong calibration sequence. Calibrate to pH 7.0 first, then pH 4.0 afterwards.
- The pH probes life has ended so requires replacing.

The pH probe is not properly attached.
 Check it is securely fitted to the Meter.

#### No Power:

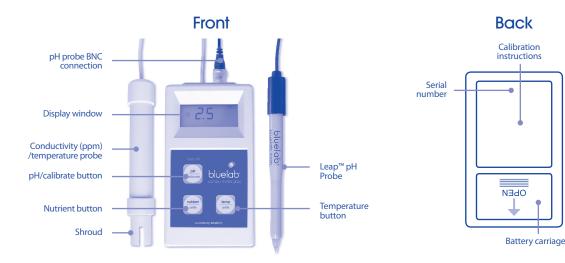
- Replace batteries with same age and brand.
- Wipe any dirt from battery spring contacts which may be present.
- If battery spring contacts are rusted in battery carriage, meter has come into contact with water (Water ingress is not covered under Guarantee).

# Reading "drifts' when customer places pH probe in RO, distilled or deionized water:

 It can be very difficult to get an accurate pH reading in samples of water that have a low ionic strength. Adding a small amount of nutrient will help.



# TESTING GUIDE Bluelab® Combo Meter Plus



### Conductivity (ppm) / Temperature Probe cleaning and testing

- Clean conductivity / temperature probe with Bluelab Conductivity Probe Cleaner (see cleaning instructions on last sheet).
- 2 Place shroud back on.
- 3 Place probe tip in fresh Bluelab 2.77 EC Standard Solution only.
- 4 Press nutrient button. Meter should read:
  - a. **In EC mode:** 2.8 EC, plus or minus 0.1. Acceptable reading is 2.7, 2.8 or 2.9 EC.
  - b. **In ppm 500 mode:** 1335 ppm, plus or minus 50 ppm. Acceptable reading 1335-1435 ppm.
  - C. **In ppm 700 mode:** Acceptable reading 1870 2010 ppm.

### **Trouble-shooting**

### If reading is low:

- Is the shroud on? Place shroud on and re-test.
- Wait for temperature to compensate for 3 to 4 minutes (especially in winter).
- Repeat cleaning as dirty probes can require repeat cleans then re-test.

### If reading is high:

Ensure the solutions are fresh and uncontaminated.

# Works in testing solution, customer says does not work in nutrient reservoir tank:

 Have customer remove a sample of solution from reservoir and test the sample. Stray electrical currents may be present in reservoir tank.

### Leap pH probe cleaning and calibration

- Clean Leap™ pH Probe with Bluelab pH Probe Cleaner, rinse well. (See cleaning instruction on last sheet).
- 2 Place Leap™ pH Probe tip in fresh Bluelab pH 7.0 Calibration Solution. Always 7 first!
- Wait until pH reading has stopped moving for at least 30 seconds. Should settle somewhere near 7.
- 4 Long press "pH/calibrate" button. CAL is displayed. Release. 7.0 is displayed.
- 5 The pH7 indicator will be displayed on screen.
- 6 The pH4 indicator will flash on screen indicating CAL to pH 4 is required.
- Rinse Leap™ pH Probe in clean tap water. Shake off any excess water.
- 8 Place Leap™ pH Probe tip in fresh Bluelab pH 4.0 Calibration Solution.
- Wait until pH reading has stopped moving for at least 30 seconds. Should settle somewhere near 4.
- Long press the 'pH/calibrate' button. CAL is displayed. Release. 4.0 is displayed.
- 11 The pH7 and pH4 indicators appear on screen. They will disappear after 30 days to indicate calibration is required.
- 12 The Meter should always be calibrated to 2 points. Always calibrate to pH 7 first, then pH 4 or 10.

### **Trouble-shooting**

### Calibrates to 7.0 but not to 4.0:

- Most likely Leap<sup>™</sup> pH Probe requires replacing.
- Did not wait long enough for reading to get down near 4.0 pH before pushing pH/ calibrate

# Error message appears during calibration – possible "Err" causes:

- The Leap<sup>™</sup> pH Probe is damaged. Check for broken glass bulb on tip of probe.
   Check that the glass tube is not damaged.
   (Broken Leap<sup>™</sup> pH Probes are not covered under Guarantee).
- Calibration solutions are contaminated.
   Calibration solution must be fresh.
- Wrong calibration sequence. Calibrate to pH 7.0 first, then pH 4.0 afterwards.

- The Leap<sup>™</sup> pH Probes life has ended so requires replacing.
- The pH probe is not properly attached. Check it is securely fitted to the Meter.

### No Power:

- Replace batteries with same age and brand.
- Wipe any dirt from battery spring contacts which may be present.
- If battery spring contacts are rusted in battery carriage, meter has come into contact with water (Water ingress is not covered under Guarantee).

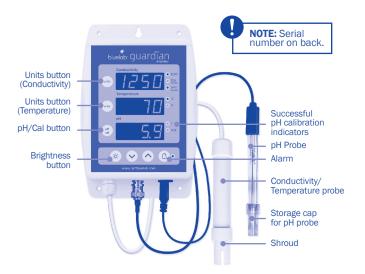
#### Reading "drifts' when customer places Leap™ pH Probe in RO, distilled or deionized water:

 It can be very difficult to get an accurate pH reading in samples of water that have a low ionic strength. Adding a small amount of nutrient will help.



# Bluelab® Guardian Monitor

Serial Numbers start with GM1



### Conductivity (ppm)/Temperature Probe cleaning and testing

- Remove shroud.
- 2 Clean conductivity probe face with Bluelab Conductivity Probe Cleaner and rinse well (see cleaning instructions on last sheet).
- 3 Place shroud back on.
- Place probe tip into sample of fresh Bluelab 2.77 EC Conductivity Standard Solution only.
- 6 Monitor will read:
  - a. **In EC mode**: plus or minus 0.1. An acceptable reading is 2.7, 2.8, 2.9 EC.
  - b. In TDS or ppm 500 mode: plus or minus 50 TDS/ppm. Acceptable reading 1335-1435 TDS/ppm.
  - c. In ppm 700 mode: plus or minus 70 ppm. Acceptable reading 1870-2010 ppm.

### **Trouble-shooting**

### If reading is low:

- · Is the shroud on? Place shroud on and re-test.
- Leave in 2.77 EC solution for 3 4 minutes for temperature to compensate (especially in winter).
- · Repeat cleaning as dirty probes can require repeat cleans.

# Erratic reading – conductivity readings can swing from 1.3 – 2.8 EC:

· Is the shroud on? Place shroud on and re-test.

### If reading is high:

• Ensure the solution is fresh and uncontaminated.

### Works in testing solution, customer says does not work in nutrient reservoir tank:

 Have customer remove a sample from reservoir and test sample out of nutrient tank. Stray electrical currents may be present in reservoir tank.

### pH Probe cleaning and calibration

- Clean pH probe tip with Bluelab pH Probe Cleaner and rinse well. (see cleaning instruction's on last sheet).
- 2 Place probe tip in fresh Bluelab pH 7.0 Calibration Solution. Always 7 first!
- 3 Wait until pH reading has stopped moving for at least 30 seconds. Should settle somewhere near 7.
- 4 Long press "pH cal" button. Wait until "PH and CAL" are displayed. Release button.
- 5 pH 7 is displayed and the pH 7 calibration indicator will glow green.
- 6 Rinse probe tip in clean tap water and then gently shake off any excess water.
- Place probe tip in fresh Bluelab pH 4.0 Calibration Solution.
- 8 Wait until pH reading has stopped moving for at least 30 seconds. Should settle somewhere near 4.
- 2 Long press "pH cal" button. Wait until "PH and CAL" are displayed. Release button.
- pH 4 is displayed and the pH 4 calibration indicator will glow green. Calibration is complete.
- 11 The Bluelab Guardian Monitor should always be calibrated to 2 points! Always calibrate to pH 7 first, then pH 4 or 10.
- 12 The calibration indicators will flash 30 days after the last successful calibration to indicate that calibration is required.

### **Trouble-shooting**

### If calibrates to 7.0 and not 4.0:

- Did not wait long enough to get down near 4.0 pH before pressing CAL.
- The probe tip is dirty. Clean the pH probe tip and retry the full calibration process again.
- The probe requires further hydration in KCL storage solution. Allow the probe to soak in KCl storage solution for a further 12 hours (overnight), and calibrate again the following day.
- · Most likely pH probe requires replacing.

### Calibrates to pH 7.0 but won't move from 7 afterward:

 Most likely pH probe is broken. Check for broken glass on probe (broken pH probes are not covered under Guarantee).

### Error message appears – possible "Err" causes:

- The pH probe is damaged. Check for broken glass bulb on tip of probe (broken pH probes are not covered under Guarantee).
- Calibration solutions are contaminated. Calibration solutions must be fresh.
- Wrong calibration sequence order. Calibrate to pH 7.0 first, then pH 4.0 afterward.
- The pH probe's life has ended so the pH probe only requires replacing.
- The pH probe is not properly attached. Check it is securely fitted to the monitor.
- The pH reading was not stable enough when the "pH cal" button was pressed. Allow the pH reading to stop moving for at least 30 seconds before pressing "pH cal".

### Display is flashing:

· Alarm is on and reading is out of set alarm range.

#### No power:

Try testing unit with the power supply from the Bluelab Retail Probe Tester
or another power supply from another monitor known to be working.

# Reading "drifts' when customer places pH probe in RO, distilled or deionized water:

 It can be very difficult to get an accurate pH reading in samples of water that have a low ionic strength. Adding a small amount of nutrient will help.



# Bluelab Conductivity/ Temperature Probe and Bluelab pH Probe cleaning guide

### How to clean a Bluelab conductivity/temperature probe:

Remove the shroud.

For the Bluelab Truncheon® Meter (V2); twist the shroud 90 degrees and then remove the shroud.

For all Bluelab Conductivity/Temperature Probes and Bluelab Truncheon® Meter (V1); warm the shroud in your hand for a few seconds to help with removal. Hold the body and pull the shroud off.

2 Clean the probe face.

Place one or two drops of Bluelab Conductivity Probe Cleaner onto the probe face and rub with the Bluelab Chamois or your finger firmly and vigorously.

3 Rinse the conductivity probe face.

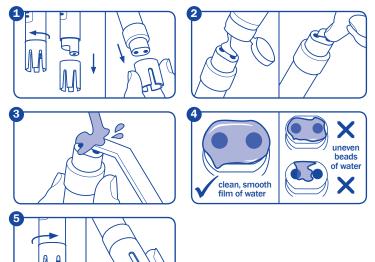
Rinse off all traces of cleaner under running tap water while scrubbing the probe face with the other side of the Bluelab Chamois or the same finger.

4 Check that the water forms a smooth film on the probe face.

If you can see beads of water, repeat steps 2 and 3.

5 Refit the shroud firmly.

Test in 2.77 EC solution to ensure the probe face has been cleaned adequately.



## How to clean a Bluelab pH Probe/Pen and Leap:

1 Remove storage cap from pH probe/pen.

For standard pH probes and soil pH probes/soil pens; hold the top of the storage cap, twist the cap to loosen then remove.

For the Bluelab pH Pen; simply pull cap away from body.

2 Rinse pH probe tip under fresh tap water. Never use RO (Reverse Osmosis), Distilled or De-ionized water.

3 Fill a small plastic container with clean tap water.

Add a small amount of Bluelab pH Probe Cleaner or mild detergent (dishwashing liquid).

4 Gently stir the probe tip in the mixture.

Ensure that you do not 'knock' the pH probe/pen on the side of the container as this may cause damage to the probe.

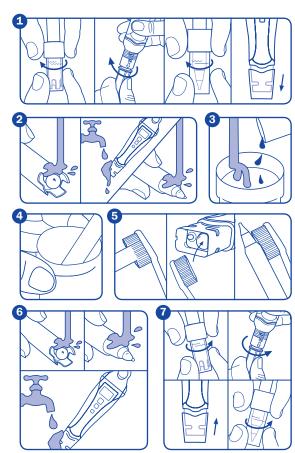
5 The probe tip may require removal of heavy contamination.

Dip a soft toothbrush in the Bluelab pH Probe Cleaner and water mix. Gently brush around the probe tip to remove contamination

Note: if you need to hydrate the pH probe, soak probe tip for 24 hours in KCl storage solution **before** you calibrate.

- 6 Rinse the probe tip well under fresh running tap water to remove all traces of the detergent mixture.
- Calibrate pH probe after cleaning, refer to the relevant probe manual for instructions on how to do this.

After calibration, store pH probe in the storage cap, ensuring there is enough KCl Storage Solution to cover the probe tip.





# Updated calibration instructions for pH Pens, Meters and Monitors.

Bluelab® instruments with the updated calibration process will still successfully calibrate using previous methods.

New calibration method is intended to make calibration easier for the user and improve the quality of calibration.

### Serial numbers effective from:

pH Pen: Serial numbers 1511-0001

Combo Meter: Serial numbers 511-0001

pH Meter: Serial numbers 1511-0001

Soil pH Meter: Serial numbers 1511-0001

Multimedia pH Meter: Serial numbers 1711-0001

Combo Meter Plus: Serial numbers 1807-0001

### New pH calibration process

- Turn instrument on
- 2 Place probe tip in fresh Bluelab pH 7.0 Calibration Solution. Always 7 first!
- 3 Long press Calibrate Button until calibration process starts. Release button.
  - 's starts to flash indicating the start of calibration. Leave the probe in the solution while the display is flashing.

    After starts to flash indicating the start of calibration. Leave the probe in the solution while the display is flashing.

Rinse probe tip in clean tap water and then gently shake off any excess water.

- 4 Place probe tip in fresh Bluelab pH 4.0 or pH 10 calibration solution.
- 5 Long press Calibrate Button until calibration process starts. Release button.
- 6 '[]' starts to flash indicating the start of calibration. Leave the probe in the solution while the display is flashing.

  After stops flashing, display shows the calibration point is complete.
- 7 Always calibrate to 2 points! Always calibrate to pH 7 first, then pH 4 or 10. Successful calibration is shown when:

**pH Pen/Soil pH Pen:** A check mark will be displayed at the bottom of the screen to indicate a successful calibration. It will disappear after 30 days to indicate calibration is required.

### Combo Meter/Multimedia pH Meter/Combo Meter Plus/Guardian Monitor:

The pH 7 and pH 4 indicators appear. They will disappear after 30 days to indicate calibration is required.

### Instruments look alike.

Please match the serial number on the back of the instrument to the serial number at the top of the page to ensure you are using the correct page.