

## Instruction manual

### Features:

**provided with EC, CF and ppm scales**

**fully waterproof**

**fully guaranteed for 5 years**  
(with proof of purchase)

**no calibration required**

**auto turn on / off function**

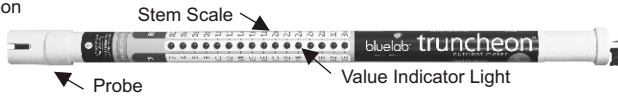
blue**lab**<sup>™</sup> **truncheon**<sup>™</sup>  
the world's favorite nutrient meter

[www.getbluelab.com](http://www.getbluelab.com)

# Operating Instructions

Using the bluelab truncheon to measure nutrient conductivity involves warming the probe sensor head in the solution, followed by measuring and reading conductivity values on the stem scale indicator light. Figure 1 shows the Truncheon.

Figure 1. Truncheon



**1 Warm Sensor Head**

Place probe into nutrient solution for 1-2 minutes to reach the nutrient temperature

**2 Measure Conductivity**

Briefly remove Truncheon from solution then place it back for 1-2 seconds

**3 Read Conductivity Values**

Remove Truncheon from the solution and read indicator light values on stem.

Note: If the lights are dancing between two values, the reading is between those two values.  
eg: lights dancing between "6" and "8" indicates a reading of "7".

Or count the number of flashes between two values i.e. 28 and 32, two flashes on the 28 light before flashing the 32 light would indicate a value of "29".

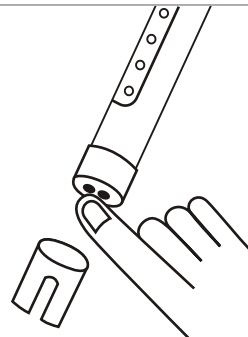
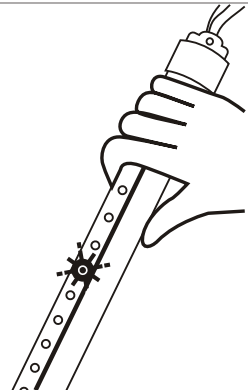
Equal numbers of flashes on the lights would indicate halfway between i.e. "30", one flash on the 28 light and then two flashes on the 32 light would indicate "31".

**4 Obtain Another Reading**

To take another reading, allow the Truncheon to switch off and then repeat the above procedure.

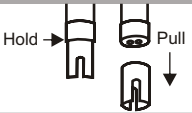
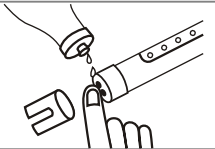
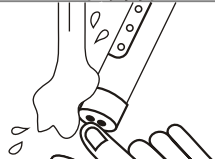

**5 Clean Probe**

The probe needs to be cleaned often, once every 2 weeks, according to the instructions on the following page.






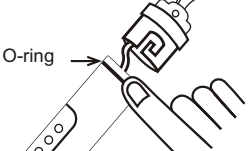

## Cleaning and Maintenance

Cleaning the Truncheon probe periodically ensures accurate readings. Cleaning includes using 'Jif', this is a trade name for a liquid scourer cream used as such in home bathrooms and kitchens, similar products are called 'Liquid Vim' and 'Soft Scrub'. Scented varieties are never used as they affect the probe functions. Follow these steps to clean the probe.

<p><b>1 Remove Shroud</b> Dismantle by holding the body and pulling away the shroud.</p>	
<p><b>2 Clean Probe Face</b> Place one or two drops of unscented liquid scourer, such as 'Jif' or 'Soft Scrub' on the probe face and rub with your finger firmly and vigorously to clean the probe face.</p>	
<p><b>3 Rinse Probe</b> Rinse off all traces of cleaner under running water using the same finger. Check that the water forms a film on the probe face with no 'beads' of water. If beading is present repeat the cleaning process.</p>	
<p><b>4 Replace Shroud.</b></p>	

## Battery Replacement

The Truncheon is powered with 3 AA type standard or alkaline batteries. Rechargeable batteries are never used. Follow these steps to replace the batteries.

<p><b>1 Remove Old Batteries</b> Push down and twist the top cap anticlockwise. Gently remove, taking care not to pull off connecting wire as shown in figure on the right.</p>	
<p><b>2 Check for Corrosion</b> Check battery contacts and batteries for any sign of corrosion. Contacts should be cleaned first if corrosion is found before proceeding to step 3.</p>	
<p><b>3 Fit New Batteries</b> Replace the batteries making sure they are inserted positive (+) down into the body.</p>	
<p><b>4 Check O-Ring</b> Ensure the O-ring is correctly located and lubricated with petroleum jelly. Note: It is essential that the O-ring seal is correctly positioned and lubricated to ensure a 100% waterproof seal.</p>	
<p><b>5 Replace Cap</b> Replace the cap by inserting and twisting clockwise.</p>	

## Troubleshooting

Trouble	Correction
Trunccheon turns off before reading taken.	Take out of solution for 3-5 seconds. Dip in solution again and take reading.
Trunccheon not lighting when dipped in solution.	Clean the probe (see page 2). If this is unsuccessful replace batteries (page 2). "Do not use rechargeable batteries."
Trunccheon gives low readings.	Clean the probe (see page 2). Ensure unscented cleaner is used, such as plain 'Jif'/'Soft Scrub'/'Liquid Vim'.

## Technical Specifications

Range	2 - 36 CF 140 - 2520 ppm (EC x 700) 0.2 - 3.6 EC 100 - 1800 ppm (EC x 500)
Resolution	1 CF, 0.1 EC, 70ppm 700, 50 ppm 500
Accuracy	± 4% of reading
Temperature Compensation	Automatic
Operating Temperature	0 - 50°C, 32 - 122°F
Calibration	Factory Calibrated
Power Source	3 x AA Alkaline Batteries
Auto Sense	Auto On and Auto Off

## Contact Details

### Bluelab Limited

43 Burrows Street, PO Box 949 Tauranga, New Zealand  
 Ph +64-7-578 0849 Fax +64-7-578 0847  
 Email support@getbluelab.com www.getbluelab.com

### Limitation of Liability:

Under no circumstances shall Bluelab Limited be liable for any claims, losses, costs and damages of any nature whatsoever (including any consequential loss) that result from the use of, or the inability to use, these instructions.