

### **User Guide**

### **Streamwatch Alert Kit**

#### General

This kit is designed to do the testing on site in the creek.

In wet weather, when extracting the strips, take care opening the strip cases to avoid rain. Wear gloves following high rainfall or in polluted creeks. For further information, consult the manual.

### Temperature – Air and Water: there is a healthy range for life

- 1. Remove thermometer from kit and wait for 1 minute then record result.
- 2. Then immerse thermometer in the stream for 1 minute (ensure casing holes are covered) and record result while thermometer is still in the water.



# Dissolved Oxygen (Guideline Value >6.5): oxygen is needed for life in the water

- Attach the probe and meter. Remove the bottom cap of the reader and match the internal notch on the metal part of the probe connector with the white marker on the reader and push in. To release the metal ring on the probe connector must be pulled back.
- 2. Press the power button. The display will read in mg/L and temperature.
- 3. Calibrate in the air by holding down the MODE/CAL button for 5 seconds and release. The display should show 100%.
- 4. Place the probe in the creek until the reading has stablised and record result.
- 5. Rinse the probe in clean tap water and wipe with a soft cloth to avoid any hardening of deposits.



## Electrical Conductivity S-100 Probe (Guideline Value 350-1000 $\mu$ S/cm): salts in the water

Calibration can be done prior to going to the site.

- 1. To calibrate pour 20ml of Conductivity Standard Solution into the beaker.
- 2. Press the power on button and ensure it is measuring Microsiemens Per Centimeter ( $\mu$ S/cm) and not %. (Use MODE/CAL to adjust if necessary.)
- 3. Dip the sensor and stir gently, the reading should be 500  $\mu$ S/cm. If not then you need to calibrate.
- 4. To calibrate press and hold MODE/CAL for 5 seconds and release. The display will show CAL and then a reading on the display. While the display is flashing you can use the up or down arrow to adjust the reading to 500 µS/cm.
- When you reach 500 then allow the tracer about 5 seconds to return to the normal recording mode. This will be indicated when it stops flashing. You have now calibrated the probe.
- 6. If the Conductivity Standard Solution is still clean and undiluted then it can be returned to the bottle.
- 7. Place the probe into the creek and record the result.
- 8. Rinse the probe and cap with clean tap water and dry with a soft cloth.



#### pH strip

- 1. Remove one pH strip from the container; do not touch the coloured section.
- 2. Immerse the coloured section into the water for a few seconds.
- 3. Shake off excess water and match the coloured squares on the pH strip to the colour scale on the container.
- 4. Record to nearest .5 value.

#### Nitrate (NO<sub>3</sub>)

Quantofix Nitrate 100 strip

- 1. Remove one strip from the container; do not touch the raised sections.
- 2. Immerse the raised sections into water for 1 second.
- 3. Shake off excess water and wait 1 minute.
- 4. Match the coloured squares on the strip to the colour scale on the container. Use the right hand to do this so that nitrate and nitrite are aligned correctly.
- Record Nitrate value on the left side only.
  (Note: The container also has a Nitrite reading on the right side, but Streamwatch does not record Nitrites)



## Total Phosphate: (Available Phos Guideline value <0.0612 ) Nutrients in the water endangering life

Insta-test Pro Phosphate strip

- 1. Remove the cap from the plastic tube and rinse tube twice in the creek water.
- 2. Fill to the 10ml level.
- 3. Remove one strip from the container and gently bend the strip in half with the pads facing inwards. Place inside the cap.
- 4. Place the cap with the strip into the test tube and invert slowly 5 times (invert the tube slowly to allow the bubble to go from the top to the bottom and then the bottom to the top.)
- 5. Remove the cap and test strip.
- 6. Place the open test tube on the white boxed area of the colour chart of the container and look through the test tube to compare the colour chart.
- 7. Divide by 1000 to get mg/L and record the results i.e. 300 = 0.3.
- 8. To clean rinse the tube twice with tap water.

### Turbidity: (Guideline value <50 NTU) : Solid matter clouding the water

- 1. Join the two sections of the NTU tube.
- 2. Fill with water until the pattern on the bottom of the tube stops being distinct.
- 3. Record the value below that point when the pattern was last visible.

4. Rinse with tap water twice.