



## Taking a reading:

1. Open the hatch – the display briefly shows **8888**, then shows **CAL**
2. • If no Lot number has been previously selected, and the batch of test strips to be used have not been 'characterised' as described in section 5.4, select **Lot 5** – this will set the meter to its 'median' calibration.  
• If **Lot 5** is already displayed, and 'median' calibration is acceptable, proceed to stage 3 below.  
• Otherwise, select the correct Lot number, by means of the ▲▼ buttons, and then proceed to stage 3, below.
3. Remove a Mquant Nitrate test strip from its container (close the container immediately, and check expiry date). Carefully and fully insert the unused test strip into the meter's read-head, between the hinged retaining tongue and the face of the carrier, with the test strip's pad downwards and facing towards the meter's body – see picture on the right.
4. Close the hatch: the display will show ---, followed by **GO** and two beeps, indicating that the meter has accepted the unused test strip and 'zeroed' on it. **Err** may be displayed instead of **GO** after this initial auto-calibration procedure, indicating that the test strip used for calibration seems unacceptable to the meter. Reopen the hatch, and the display will revert to **CAL**. Remove the test strip, and check for reasons. This procedure must be repeated until **GO** is obtained.
5. At **GO**, open the hatch and remove the test strip. Approximately five seconds after opening the hatch, the meter will beep at the start of a 60 second countdown period (shown on the display), immediately preceded by two short warning beeps at one second intervals.
6. Upon removal, the test strip must *immediately but carefully* be dipped in the solution to be analysed, for two seconds, and therefore removed from the solution before the start of the 60 second countdown.
7. As the countdown approaches zero (after 60 seconds), the meter beeps a '3, 2, 1' warning. At the start of this warning, carefully re-insert the test strip (again, pad downwards and facing towards the meter's body), and close the hatch. With hatch closed, measurement takes place automatically at the end of the countdown (if the hatch is still open, shut is displayed).
8. The symbol "---" will be displayed, followed by the measurement value in ppm (mg/l) of nitrate – eg. **47 ppm**. If the display shows **HI**, the level of nitrate detected exceeds the meter's maximum range. This probably means that a dilution is required: see section 5.5. If the display shows **LO**, the level of nitrate detected exceeds the meter's minimum range. Both sample and operating procedure should be checked, and the test repeated if appropriate. If the sample has been diluted, then probably a reduced dilution factor is required.
9. After noting the result, open the hatch and remove test strip. The display will show **8888**, followed by **CAL**, and the reading just taken will be stored in memory. If no more readings are to be taken, close the hatch again, and the meter will switch itself off. If the meter is accidentally left switched on, it will automatically turn off after about two minutes. Memory storage is not lost.

