

Congratulations on your new AquaFlash Handheld Active Fluorometer. We are committed to customer satisfaction. If you need assistance, technical specialists are available to answer your questions at 408-749-0994 or toll-free at 877-316-8049. This Quick Start Guide will help you use the AquaFlash, for more detail please refer to the manual.

## 1 Measure a Sample Procedure

Read Section 3 Sample Analysis Guidelines in the user's manual before proceeding.

1. Turn the AquaFlash on using the ON/OFF button and wait until warm-up has completed.
2. Obtain a glass cuvette.
3. Rinse the cuvette 3x with the water sample you intend on measuring.
4. Fill a glass cuvette  $\frac{3}{4}$  full with the collected sample.
5. Dry and clean all faces of the cuvette using Kim Wipes.
6. Press READ.
7. You will be prompted to insert your sample and press READ.
8. Insert the cuvette into your AquaFlash and close the lid and press READ.
9. Once the measurement is complete, remove the cuvette and discard the sample.
10. Results displayed will show values for Total Chlorophyll ( $\mu\text{g/L}$ ) as CHL, Yield or photosynthetic efficiency as YLD, time sample was recorded in hours:minutes, and the sample number as a 4 digit value representing sample numbers from 1 to 1000.

CHL: 5.25	HH:MM
YLD: 0.54	# 0001

*Note: The figure to the left is an example of results displayed after measuring a sample.*

11. Press the down arrow key to view Fo (minimum), Fm (maximum), and Blank raw fluorescence values.

Fo: 250	Fm: 450
Blank: 50	

12. When finished viewing data, or if ready to run the next sample, press ESC to get to the Home screen and repeat sampling procedure

## 2 Viewing Data

Data can be viewed on the AquaFlash's display or downloaded to a computer for viewing. To view data use the  $\leftarrow \rightarrow$  arrow keys to scroll to a desired sample, sample number will be displayed in the bottom right corner of the screen. Press the down arrow key to view raw fluorescence data for that sample.

Refer to the AquaFlash manual for instructions on how to send and view data on your computer and how to clear logged data from the AquaFlash's memory.

### 3 Calibration Check Procedure

The AquaFlash is factory calibrated and should remain calibrated for many years. It is recommended users make periodic checks prior to use and after sampling to ensure the instrument is not damaged.

**NOTE: The AquaFlash should be on a flat surface when reading the SSS.**

To check calibration/instrument stability use the AquaFlash Calibration Solution P/N 8600-225 LOT that was used to calibrate the instrument. If the AquaFlash was not calibrated with the AquaFlash Calibration Solution LOT being used, calibrate the instrument following the calibration procedure - see section 2.3 prior to making a Calibration Check, then:

1. Turn the AquaFlash on and wait until warm-up completes.
2. Obtain a glass cuvette.
3. Rinse the cuvette 3x using the AquaFlash Calibration Solution.
4. Fill the cuvette  $\frac{3}{4}$  full with AquaFlash Calibration Solution.
5. Dry and clean all faces of the cuvette using Kim Wipes.
6. Insert the cuvette into the sample compartment and close the lid.
7. Press the CHK STD button.
  - a. The AquaFlash should display "Cal. Check Passed".
  - b. If the AquaFlash displays "Cal. Check Failed".
    - i. Check to make sure the AquaFlash Calibration Solution hasn't expired.
    - ii. Check to make sure the AquaFlash Calibration Solution Lot used for the Calibration Check is the same Lot that was used to calibrate the instrument.

If 7bi and 7bii have been checked and the AquaFlash Calibration Solution used for the Calibration Check is good, but the instrument continues to display "Cal. Check Failed", contact Turner Designs Technical Support Team for assistance.