

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 Sampling Procedure

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

1. Fill a glass cuvette $\frac{3}{4}$ full with the collected sample.
2. Dry and clean all faces of the cuvette using Kim Wipes.
3. Make sure the AquaFlash is on and ready for use. Press READ. You will be prompted to insert your sample and press READ.
4. Insert the cuvette into your AquaFlash and close the lid.
5. Press READ again and the measurement will begin.
6. Once the measurement is complete, remove the cuvette and discard the sample.
7. Results displayed will show values for Total Chlorophyll (ug/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.

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

Fo: 250	Fm: 450
Blank: 50	

9. 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 Adjustable Solid Secondary Standard Procedure

The AquaFlash is factory calibrated and should remain calibrated for many years. Calibration can be checked using the Solid Secondary Standard (SSS). Users will first have to set the SSS using the following procedure:

1. Purchase or obtain a SSS.
2. Turn the AquaFlash on using the ON/OFF button and wait until warm up has completed.
3. Press the CAL VAL button and record the set calibration value.
4. Loosen the small hex screw located on the back of the SSS and then holding the SSS by the tab, insert it with the tab at the back of the sample compartment and close the sample compartment lid.

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

5. Press the READ button twice to begin measurement and look at the CHL reading for the SSS.
 - a. If the CHL value displayed is lower than the calibration value, adjust the SSS to give you a larger response by rotating the silver hex screw located at the top of the SSS counterclockwise and re-read the SSS.
 - b. If the CHL value displayed is higher than the calibration value, adjust the SSS to give a smaller response by rotating the silver hex screw located at the top of the SSS clockwise and re-read the SSS.
6. Continue adjusting and reading the SSS until the CHL value displayed matches within $\pm 5\%$ the calibration value determined in step 3.
7. When finished, tighten the locking screw on the back of the SSS by turning clockwise to lock the SSS's response.
8. Insert the SSS into the instrument's sample compartment and close the lid.
9. Press the CHK STD button.

"Cal. Check Passed" should be displayed. If "Cal. Check Failed" is displayed, repeat steps 3 – 9 until the SSS is properly adjusted. It is recommended that users make 5 consecutive measurements of the SSS after it is set to ensure it is properly adjusted.

The SSS can now be used to periodically check for instrument drift.