

Quick Logging Guide

1. Turn the instrument on.
2. Go to the 1st menu by pressing the down arrow.
3. Select the required sensitivity level by pressing no. 1,2 or 3 on the number pad.
(High for low concentrations -Low for high concentrations)
4. From the 2nd menu : select No.3 LOGGING INTERVAL and enter the required interval in hh:mm and press OK.
5. From the 2nd menu : select No.1 START TIMED LOGGING – the instrument will now log at the set sensitivity and interval until option No.1 STOP TIMED LOGGING is pressed.
6. From the 2nd menu: select No.4 to UPLOAD DATA to the PC – press Ok to upload –ensure Terminal program is installed first, No.6 -EXTERNAL LOGGER is set to on and the RS232 cable connected as per the manual.

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1 START TIMED LOGGING
2 LOG START TIME/DATE
3 LOGGING INTERVAL
4 UPLOAD DATA LOG
5 DELETE DATA LOG
6 EXTERNAL LOGGER ON
PRESS NUMBER TO SET
MENU
  
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STS SMF4 Portable Fluorimeter Quick Sample Guide

1. Turn the instrument on.
2. Go to the 1st menu by pressing the down arrow.
3. Select the required sensitivity level by pressing no. 1,2 or 3 on the number pad.
(High sensitivity for low concentrations –
Low for high concentrations)

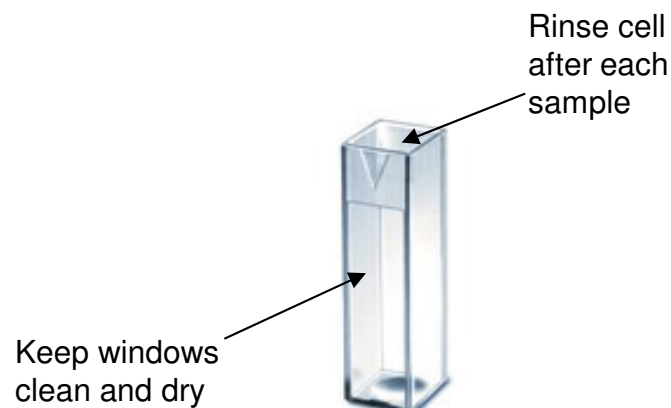


4. Press the up arrow to return to the home screen.
5. Insert the cell containing the sample and place the cover over the cell.
6. Press the Trig button to take the sample.
7. Always ensure the cell is removed before moving the instrument – the cell holder is NOT waterproof and water ingress will damage the electronics.



Operators Guide

- Always ensure the lid is placed over the sample before triggering to reduce ambient light.
- Keep the cell clean and free from residue, the cell should be rinsed between each measurement and the cell windows wiped with paper cloth to ensure they are clean and dry.
- If using a quartz cell clean thoroughly with a suitable decon agent weekly.
- Ensure the sample taken is representative of the water body being monitored, ideally take a number of samples and average the results.
- The sensitivity setting should be adjusted to suit the sample, ie high sensitivity when looking at low concentrations and low sensitivity when looking at high concentrations. Readings of over 7500 counts indicate saturation, and a lower sensitivity should be selected
- If correlating to a BOD figure best results are achieved by producing a localised BOD correlation specific to that water course or water body.



User Information

SMF4 – cell types

The SMF4 will accept either plastic or quartz cells. The plastic cells are very low cost, but have slightly less good optical performance than the quartz cells.

To accommodate both types, the SMF4 has a cell well which allows both to be used. The quartz cell rests on a shelf within the cell well, so protrudes about 14 mm above the top of the well, while the plastic cell rests about 4 mm lower.

When inserting the cell, regardless of type, it will position itself correctly.

For field work where ultimate accuracy is not required the plastic cells are recommended – but for precision work, the quartz cells are better.

Please note that the plastic and quartz cells have different transmission characteristics so samples taken in a quartz cell Cannot be compared to those taken with plastic cells. **We strongly suggest that you use only one cell type for routine work.**

Background Subtraction

A Background Subtraction facility is built into the SMF4. This allows a “blank” reading to be subtracted from a series of readings – for instance, river water above a suspected discharge could be set as blank, when the instrument will then indicate the increase above background.

It should be noted that if this function is left in the set position and other measurements undertaken, these will also have this background subtracted, leading to confusion. The Background Subtraction function is **NOT** switched off when the SMF4 is turned off.

Trouble Shooting

If the SMF4 readings do not appear to change check the following:

1. Background subtraction may have been left on – go to the menu screen and select no 5 Erase Calibration.
2. The instrument may be saturated – if counts are over 7800 the sensor may become saturated – try adjusting the sensitivity by selecting a lower level from the 1st menu – ie low (1) if currently on medium.
3. The instrument may be in logging mode meaning that individual triggering is not possible – turn off logging from the 1st option in the 2nd menu page.
4. The memory may be full – try triggering the instrument and look at the counter on the screen – if the number does not increase the memory is full and requires deleting (2047 records max)