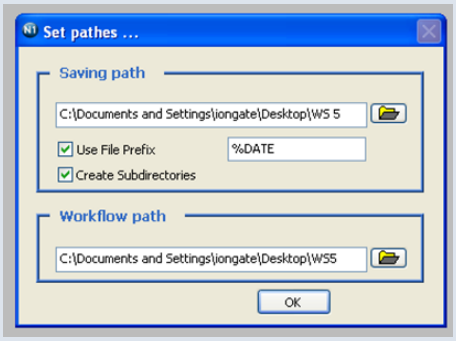
Quickstart Guide SURFE²R N1

Start the system

Turn on the Surfer N1, start SURFE2R-N1.exe and wait until initialization has finished and the software is ready.

A window showing the saving path will appear. Confirm that it is correct and click "ok".

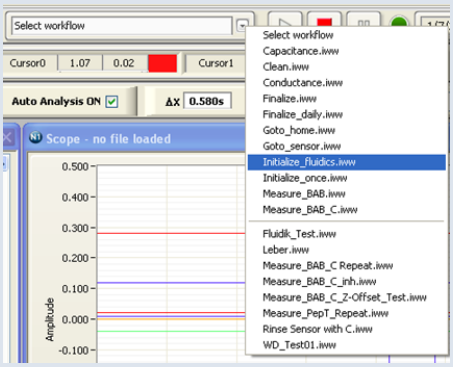


Hint

Checking the box "Create Subdirectories" will create a folder labeled with the date for this experiment. If you don't check it all files will be written in the same folder.

Check that system water is available and the waste container is empty!

Select the workflow "Initialize fluidics" by clicking on the little arrow next to the field "Select workflow" and press the start button to fill all tubes and the syringes with system liquid.



Set up an experiment

Select a workflow. Clicking on the little arrow opens a drop down menu. You can find predefined workflows at the top and custom-designed workflows at the bottom.

Position the buffers. Check in the workflow which positions of the Probe Sampler are in use and which buffer they are supposed to contain. Fill the vessels accordingly and make sure the spring of the Ionjet can't touch the

liquid! Usually position one contains activating buffer, position two non-activating buffer and position three a washing buffer (non-activating buffer or another incubation buffer).

Mount a sensor and close the cage. The sensor only fits in one position: the socket of the sensor has to be positioned on the contact pin. Move the locking to the left over the sensor and mount the black shielding cap. Never use force!

Start the measurement by clicking on the play button. During the measurement the indicator will flash yellow. You can pause and stop the run by clicking on the corresponding buttons. The sampler will not stop right away but the ongoing step will be finished first.

Warning!

If you want to **design your own workflows** there are several points to consider:

- It's not possible to take up more than 2 ml of each buffer.
- The aspirated volume has to be at least 100 µl greater than the dispensed volume.
- If you use a loop take care that you don't run out of buffer. If air is pipetted on the sensor it will be ruined!

Finish for the day

Select the workflow **"finalize"** and follow the instructions on the screen. You will need isopropanol 30% or ethanol 30%. Close the software and shut down windows. The system will turn off automatically.

Warning!

You should run the workflow "Finalize" weekly and the workflow "Clean" at least **once a month!** This is very important since it prevents the formation of a biofilm which will cause noise.