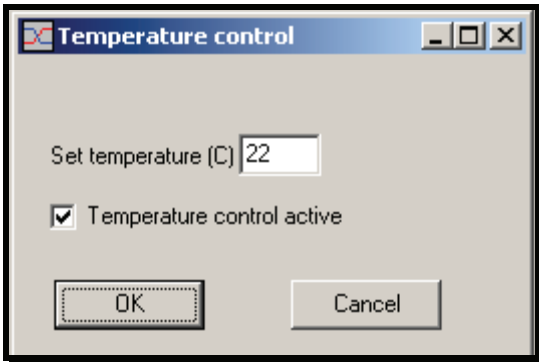


Quick Start

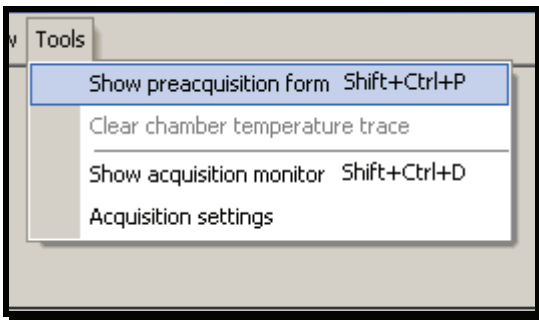
The most important steps to a successful measurement



1 Switch the electronics unit on, and start QSoft 401. Wait a few seconds for the program to establish connection to the instrument. When “Tact” shows a value on the information bar below the main screen, the connection is established.



2 Click on the temperature info bar to access the **Temperature Control** settings window.



3 (Optional) To display the temperature stabilization before starting the measurement, the “Preacquisition form” could be opened.



1 2 3 4

4 Connect tubing and pump to the flow modules.

- Before inserting a sensor crystal, make sure that the o-ring is lying flat in its track.
- Insert the sensor crystal with the backside electrode positioned as the symbol indicates; close the flow module (finger tight) and place on chamber platform.
- For liquid measurements, fill the system with the start solution/ buffer and make sure no air is introduced.
- Note the numbering of the sensor positions.

Find all resonances

Quick-check found resonances

Autostart measurement

Find specific resonance

Crystal: Res.:

Included crystals

All crystals have the same fundamental freq.

Crystal	1	2	3	4
Include	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fund. F (MHz)	4,95	4,95	4,95	4,95

Included resonances

All crystals have the same included resonances

Res \ Xtal	1	2	3	4
1st	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3rd	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5th	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7th	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
9th	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
11th	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
13th	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Resonance optimization

Automatically optimize all resonances

Xtal : Res	F (Hz)	D (1E-6)
2 : 1st	4960737,4	357,8
2 : 3rd	14866551	186,2
2 : 5th	24774849	152,9
2 : 7th	34681933	124,8
2 : 9th	44589602	110,3
2 : 11th	54497036	100,6
2 : 13th	64405175	96,9

5

In the main menu, go to **“Acquisition”** and then **“Setup Measurement”** and pick the sensor crystals corresponding the chosen platform positions (above), and overtones to be measured, by ticking the boxes.

- For standard measurements, make sure **“Automatically optimize all resonances”** are checked.
- Start searching for the resonances of each sensor crystal by clicking **“Find all”**. *D* values in water should be within 20% from the typical values listed above. A larger deviation from these values indicates:

- The crystal might be incorrectly mounted in the flow module – check carefully that it is lined up and lies flat. A good sensor should show clean peaks as the one to the right:
- The crystal might be damaged – try a different crystal.
- There’s a trapped air bubble over the sensor surface

6

Start measuring by clicking **“Start Measurement”** under **“Acquisition”** in the main menu.

