QPatch Compact Quick Guide

Sophion Analyzer software

Find and download the Sophion Analyzer at sophion.com/products/qpatch-compact

You should create different users in Sophion Analyzer so you can separate the experiments done by different users or in different projects

The Analyzer software allows you to create and plan your screening processes as well as analyzing the recorded data. The Sophion Analyzer software can run on an office PC, which must be connected to your network.

Conducting an experiment

1.	**Prepare the QPlate**	Acclimatize the QPlate at room temperature for at least 1 hour before use.
2.	**Startup the QPC**	Turn on the instrument (on the left-hand side). Login to the touchscreen. *Notice: Username and password are valid also for the QPatch Compact database.*
3.	**Prepare the cells**	Harvest the cells and pour the cell suspensions into vials. *Please refer to the QPatch Compact Cell Guide to learn how to handle cells.*
4.	**Setup the protocols**	Define one whole-cell protocol and the relevant voltage protocols. *Please refer to the QPatch Compact Asset Setup Guide to learn how to set up protocols.*
5.	**Preflight the QPC**	Insert the QPlate into the QPC. QPlate test sites now appear on the screen. Select how many experiments you want to execute. Select the "Whole-cell protocol" you want to use. Define settings for "Samling filter", "Pipetting", "Cell type", "Ion channel type", and "Compound map".
6.	**Start experiments**	Click on "Start" to begin your experiments. The touchscreen will now give you instructions for next steps. *Notice: we recommend to always use reverse pipetting.*

How to reverse the pipette:

- Setup the pipette to the applicable volume
- Depress the plunger completely – go past the first stop to the second stop
- Immerse the tip in the liquid. Slowly release the plunger to full extension
- Dispense by pressing to the first stop
- If you use motorized pipette, select "reverse pipetting"

If you would like to make additional changes to the protocol, go to the Sophion Analyzer software.

7.	**Protocol finished**	The "GO" button changes color to green once your experiments are completed.
8.	**Analyze data**	To analyze your data, go to the Sophion Analyzer software.

Terminating a running protocol

If you want to terminate or abort a running experiment, click on "End all *Experiments"*. A dialog box will appear. Confirm that you wish to stop the experiment. All data up until the stop is stored and can be accessed from the Sophion Analyzer software.

Software button explanations

	Click the button to enter preflight mode. In this window you can initiate and setup your experiments.
	Not applicable in first release
	Click the button to open maintenance mode. In this window you can perform all maintenance tasks.
	Click the button to view all completed results.
	Click the button to get system information and logout possibility.

Preflight parameter explanations

QPlate	Once the QPlate is inserted, well status is displayed: • Blue wells = selected • White wells = can be selected • Greyed out = not usable
Whole-cell protocol	Choose the protocol you wish to use for your experiment.
Pipetting	Choose voltage- or ligand gated, the selection toggles.
Sampling filter	Setup criteria for the filters.
Cell type	Choose the cell type to be used in the experiment.
Ion channel	Choose the ion channel to be used in the experiment.
Compound map	Setup the compound map.
Start	Click this button to start the experiment.