

Echem Analyst 2[™] software QUICK-START GUIDE



988-00074 Echem Analyst 2 Quick-Start Guide - Rev. 1.0 - Gamry Instruments, Inc. © 2022



- *.gpf (Gamry Project File) for any saved project in the Echem Analyst 2

Navigating through the Echem Analyst 2

After opening a data file, the corresponding data set appears in the **Main Window**. It contains several **Experiment Tabs** allowing to switch between different plots, setup parameters, notes, or fitted data values.

Print

Exit

Ctrl+P

Ctrl+Q

At the right side of the main window is the **Curve Selector** area which shows the currently active trace. You can also chose what parameter is displayed on the x-axis, y-axis, and y2-axis.



Above each plot is the **Graph toolbar** which enables the use of various commands for graph formatting and data handling.

At the top of the Echem Analyst 2 is the **Menu** bar and the **Menu toolbar**. Both include universal tools and commands for data management. The menu also includes various experiment-specific functions that are unique to the opened experiment type. This additional menu allows using the most important tools to analyze the measured data.

Main Window

The main window displays the measured data as plot when a data file is opened. It contains additional information about the experiment and is the workspace to analyze the data set.

Experiment Tabs

The main window is sub-divided into several experiment tabs which display different information about the data file.

Note tha some tabs are only displayed for specific experiments.



- The first tabs always show the default and most commonly used **chart** for the opened experiment type. For example, a Cyclic Voltammogram experiment displays the measured current (y-axis) versus the applied potential (x-axis).

- The **Experimental Setup** tab lists all parameters that were set within Framework[™] software for this experiment.

- In **Experimental Notes**, any notes entered in Framework[™] software are automatically listed. You may also enter additional notes in the Notes... field.

- **Electrode Settings** and **Hardware Settings** show advanced information about the electrode used for the measurement as well as potentiostat settings.

- The **Open Circuit Voltage** tab is only active if an experiment includes an open circuit potential measurement before the actual experiment. It is required for any experiment that uses potential reference versus the Open Circuit Potential.

Curve Selector

The Curve Selector area appears on the right side of the window and allows you to select which data files and which parameters you want to display. You can hide the Curve Selector area by pressing the **Curve Selector button**.

- The drop-down menu in the **Active Trace** area allows you to select the data series on which the analysis is performed. Use it for overlayed data files.

- Chose which traces are visible on your plot in the **Visible Traces** ara by activating the checkbox(es) next to your desired trace(s).

- At the bottom, chose which paramaters are plotted on the **x-axis**, **y-axis**, and **y2-axis** to fully customize your plots.



Menu bar

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The menu bar is displayed at the top of the Echem Analyst 2 and includes universal as well as experiment-specific functions.

The file name of the currently opened data file is stated above the menu bar.

File

Open, overlay, save files, print data and graphs, and exit the software.

Help

Open the Help documentation for the Echem Analyst 2 and find additional software information.

Tools

Tools to customize software scripts and additional options to customize the graph interface.

Common Tools

Includes functions to format and edit measured data for further analysis.

Echem Analyst 2 [Sample Chronoemperometry.DTA]			
File Help Tools Chronoamperometr	y Common Tools		
	Add E Constant Add I Constant		
Chart Second Chart Experimental Setup	Post-Run iR Correction as Hardware		
	Linear Fit		
📃 🖳 🌌 🔤 🐝 🔇	Smooth Data		

Experiment-specific tools

When opening a data file, a new menu function appears with the name of the experiment.

The drop-down list includes a series of advanced and most important tools to analyze the measured data for this specific experiment type. The example shows a Cyclic Voltammetry data set.



) Menu toolbar



For convenience, the most common **File** commands are separately listed in the Menu toolbar below the Menu bar.

Open File Open a * . DTA or * . gpf data file.

Open Overlay Open a * . DTA file of the same experiment type to overlay with the current data.

Save Save Save your data as Gamry Project File (* . gpf).

Print 📥 Print your plot.

Exit O Close the Echem Analyst 2.

Graph toolbar

The Graph toolbar includes general functions for replotting, graph formatting, and data handling. It is displayed at the top of each experiment tab.



Copy to	clipboard	
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Copy the plot as an image or your data (as text) to the Windows[®] clipboard. Paste then directly in Microsoft programs for reports or presentations.

Select X Region / Select Y Region 🛛 🚈 👘

Select a desired region of the plot across the x-axis or y-axis.

Select Portion of Curve using the Mouse 🧉

Left-click on the active trace using the mouse to select a section of the curve.

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Draw Freehand Line 🚺

Draw a line on the plot.

Enable/Disable Points / Show/Hide Disabled Points 🐰 🍭

Enable or disable point settings. Show or hide data points not being used in the plot.

Pan / Zoom / Auto-Scale \, 🔶 🍳 🝳

See different areas of a zoomed view in Pan view mode. Zoom in on a selected region and automatically adjust x-axis and y-axis range to display the full curve.

Vertical Grid / Horizontal Grid 🛛 🕍

Toggle between showing and hiding vertical and horizontal grid lines on the plot.

Properties... 🔀

Open the GamryChart Properties window to adjust effects, colors, markers, lines, etc.

Print Chart Print the plot.

To Save a Gamry Data File

Go to File in the menu and choose the Save function in the drop-down window.

You can also press the Save button in the **Menu toolbar**.

The Save As window appear. Name and save the file here or chose a different folder.

After saving a file in the Echem Analyst 2, their file becomes *****.gpf (Gamry Project File). This data file contains information on curve fits, graphing options, and multiple raw data files if data sets are overlayed. Any *****.gpf file is only viewable in the Echem Analyst 2.

NOTE: Do not delete your * . DTA files. They contain the raw data of your experiment and may be re-used again for additional analysis.

For more information

See the Echem Analyst 2 Operator's guide (Gamry P/N 988-00016).

You can find the guide on our website, www.gamry.com or within the Echem Analyst 2 in the **Menu** under **Help**.