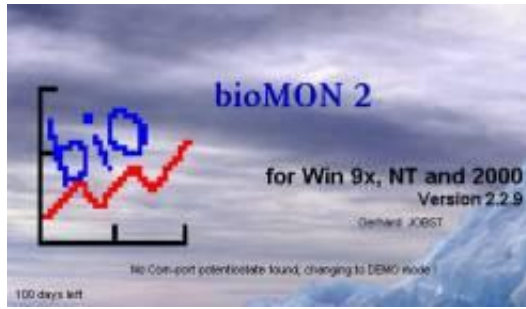




Up and Running with bioMON software

Installation

For installation run setup.exe which will guide you through the setup process.

Permanent improvement of this software is ongoing. In order to keep you updated the program expires after 100 days past installation. Get a free update from info@jobst-technologies.com

In the left lower corner of the splash screen you see the left use time.

Uninstallation of the program is simply done at Windows-Settings/Software.

You access the program from the Windows Start menu at /Programs/bioMON/bioMON (or at a different location if chosen during installation).

The program itself (bioMON.exe),
the hardware definition files (*.def),
the graphing initialization files (*.ini),
the script files (*.sct),
the advanced data files (*.adf), and
the log files with the acquired data (*.txt),
are located (typically) in the folder c:\program files\bioMON\

Conventions and concepts

BioMON software is intended to be used with Jobst Technologies data acquisition devices.

- At startup you are asked to open an *.INI file ([Open INI file](#)) which contains information on how to chart the acquired data.
- Check if all the connected potentiostates were found by the program (message at the [Splash Screen](#); [Main Screen](#) status bar; or in the [Hardware Settings](#) menu)
- If they were not found check the cabling and –
Start a new hardware search by clicking to OPTIONS – Hardware search.
- The hardware search turns each found potentiostates to the last used polarization as also

indicated in the main screens status bar.

- Close a graph by simply pressing the windows close button.
Add a new graph by pressing NEW GRAPH in the [Main Screen](#).
Edit [Graph Properties](#) by clicking on them in the [Graph Window](#).
- [Open Log File](#) (or you will be prompted to do so when you hit the record button)
- Hit the RECORD button of the [Main Screen](#).
- Now connect the sensors and start the measurement.
- Stop the measurement with the stop button.
- Close the LOG file

Finally exit the program. If you have done changes to the graph setting you will be prompted to decide on saving of the changed INI file.

Calculation hierarchy and Data files

Hardware offset and calibration factors (as they can be entered in the [Hardware Settings](#) and are stored in the *.DEF files)
are applied immediately to the received data by:

$$\text{Channel} = (\text{potentiostate reading} - \text{offset}) * \text{calibration factor}$$

(watch out that you do not have calibration factors of 0 since you will receive 0 as channel reading !)

This data is stored in the [LOG File](#). The data of all potentiostates found and all channels is stored to these files independent on if they are charted or not.

You may also import such existing LOG file into the application by FILE – IMPORT.

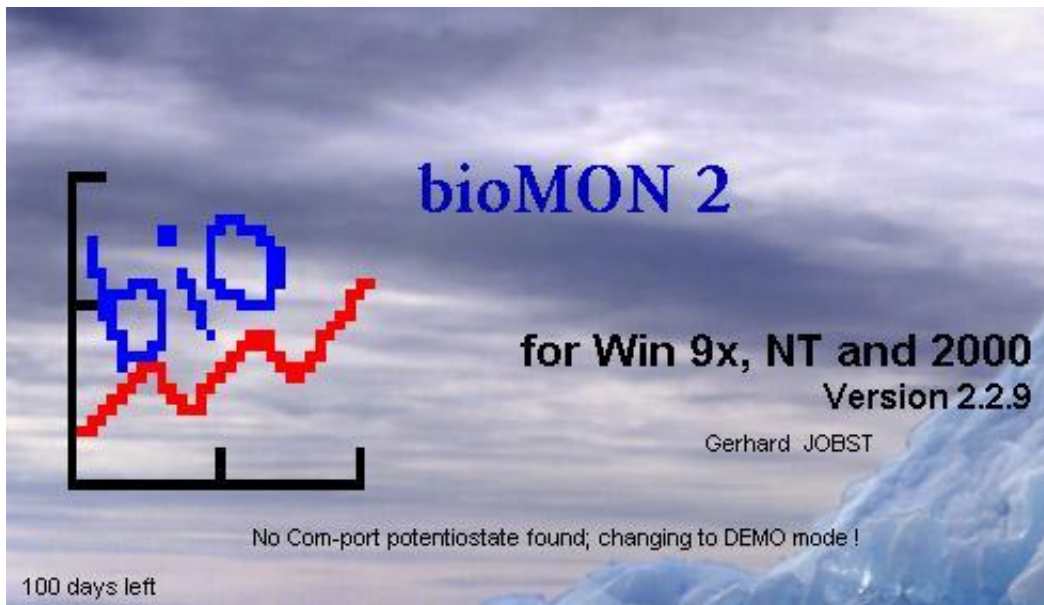
You may create data files representing the graphs by FILE - [Export](#). For Data see below.

These [Exported Graph Data Files](#) contain the data Graph oriented with the graphs pen names and the units (nA, mM, ...) in the header.

Graphing related calculations from [Graph Properties](#) are done according to:

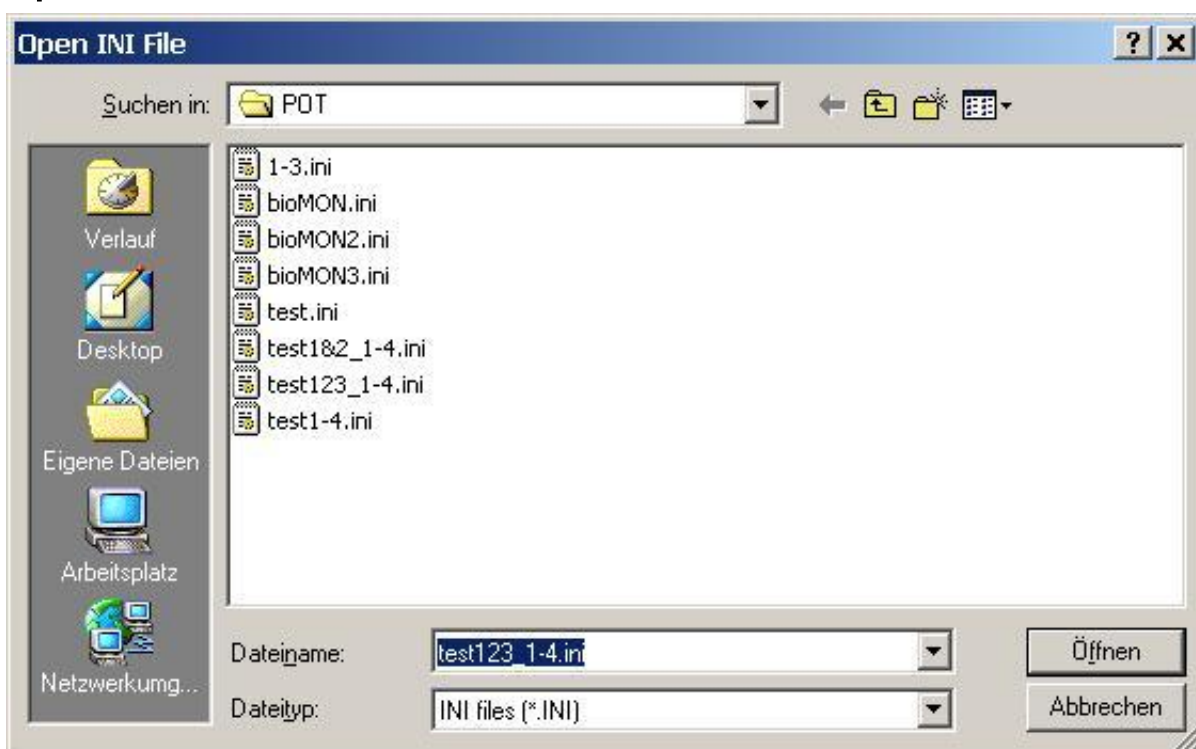
$$\text{Graph line} = (\text{channel} - (\text{difference channel} * \text{weight}) - \text{offset}) / \text{gain}$$

Splash Screen

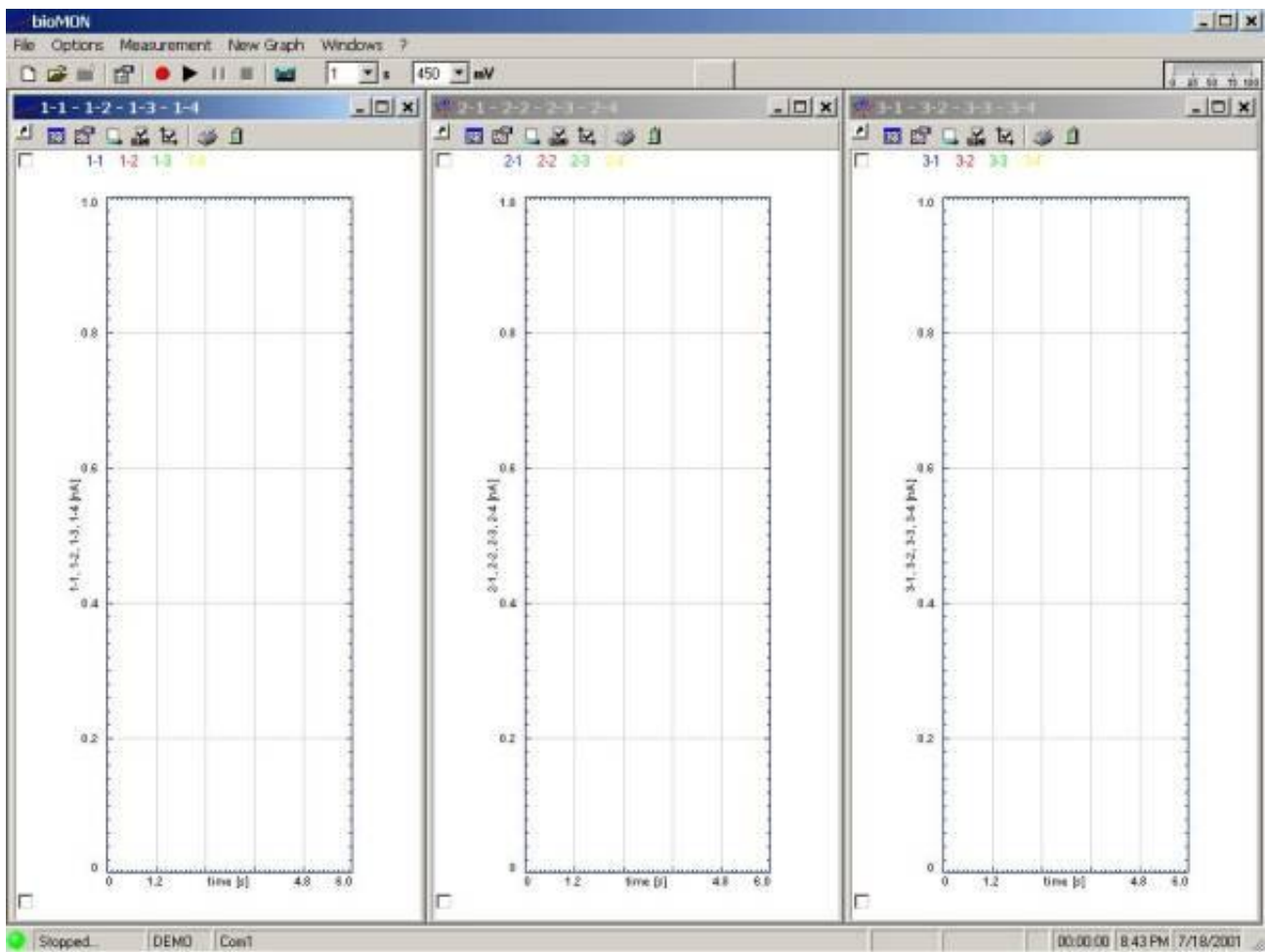


Options – Load INI File – and at startup

Open INI file

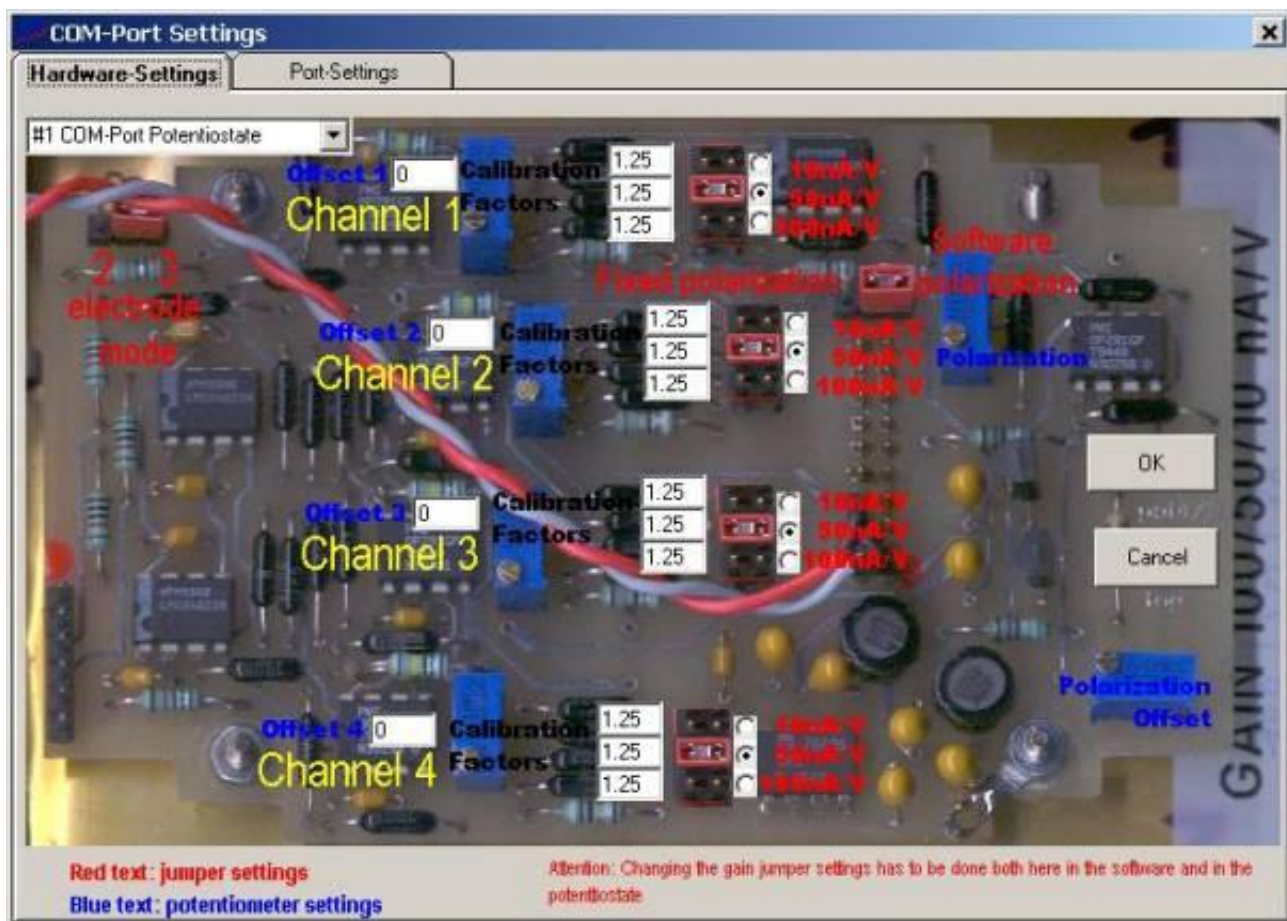


Main Screen



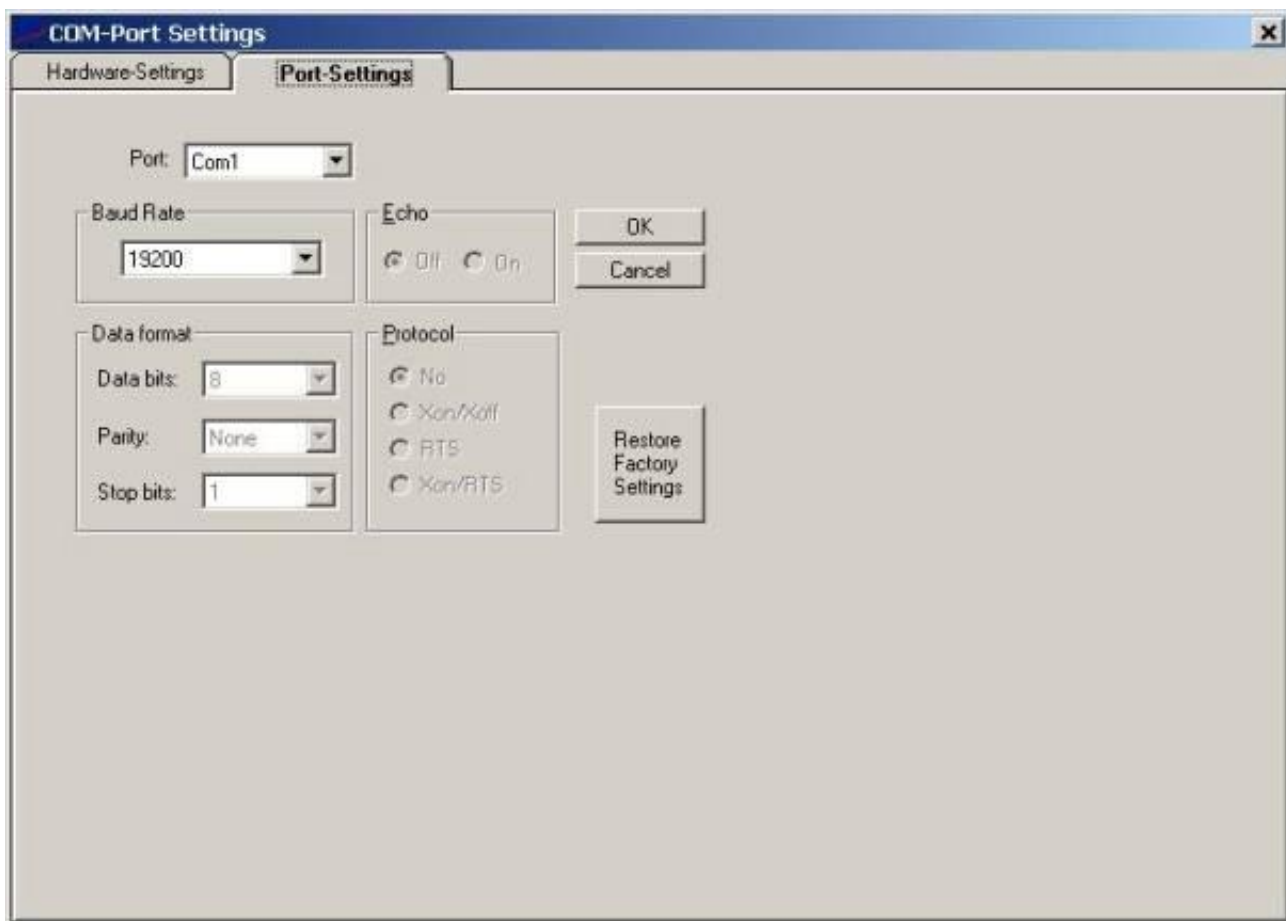
Options – Settings –

Hardware Settings

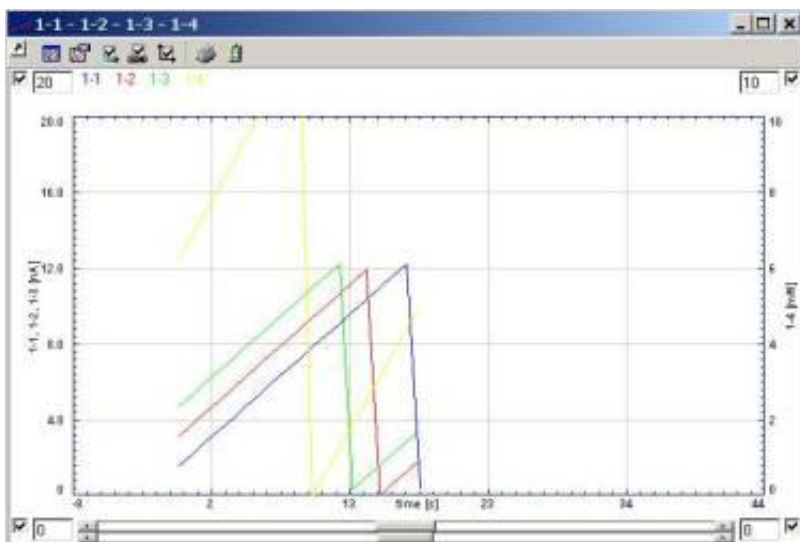


Options – Settings –

Port Settings



Graph Window



Graph Windows

Graph Properties

1-1 - 1-2 - 1-3 - 1-4

☐ Chart Background

1-1 1-2 1-3 1-4

Pen name
1-1 ☐ Color ☒ Draw Left axis

Channel
#1 COM-Port Potentiostat Channel 1

Difference channel
None Channel 1

Weight 1

Conversion
☒ No Conversion
☐ Baseline shift
☐ Concentrations

Conversion values

OK

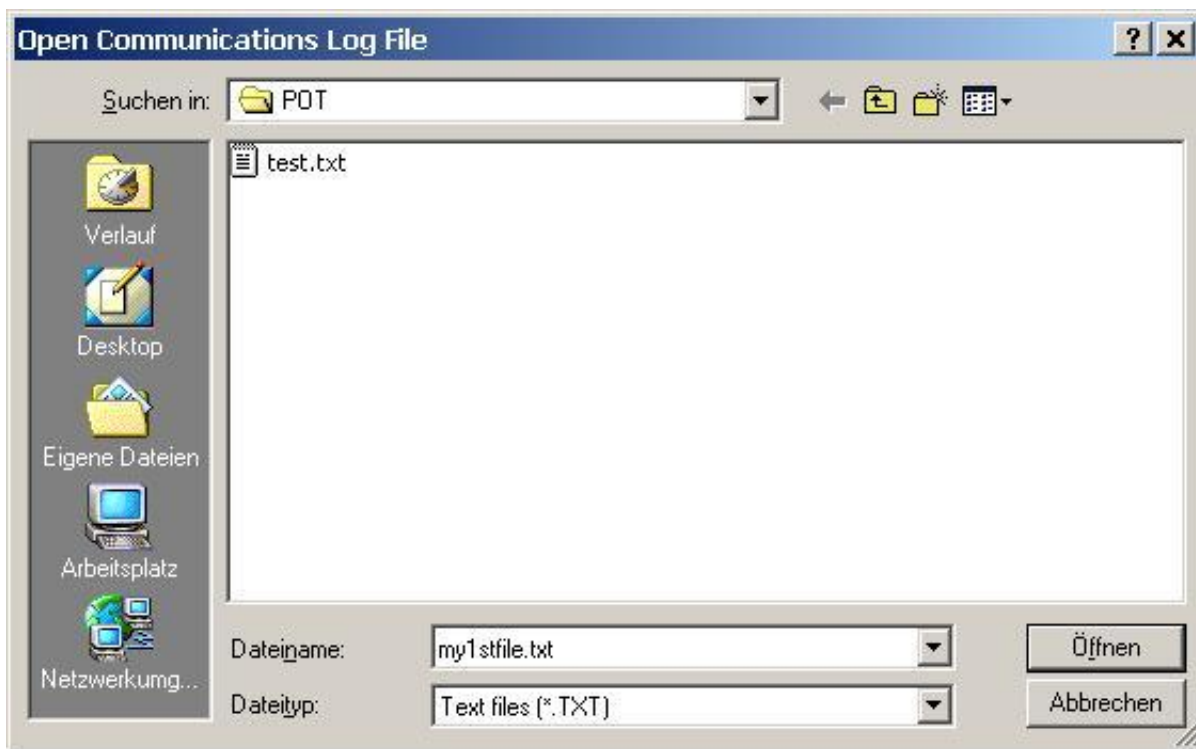
Message

Different Units



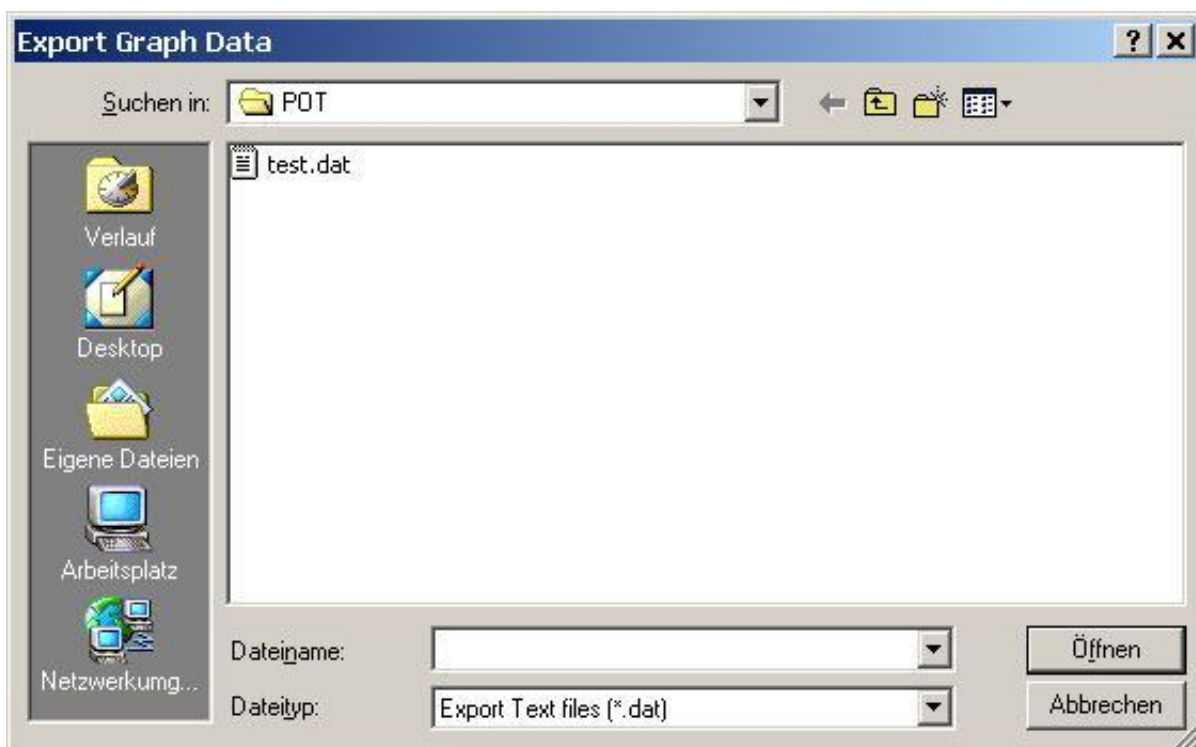
FILE

Open Log File

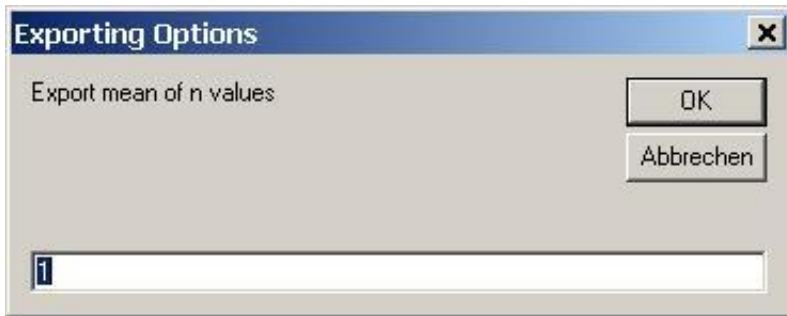


File

Export Graph Data



Exporting Options



LOG File

test.txt - Editor

Datei Bearbeiten Format 2

Created: 7/18/2001 6:44:16 PM

counter	t [min]	#1ch1	#1ch2	#1ch3	#1ch4	#2ch1	#2ch2	#2ch3	#2ch4	#3ch1	#3ch2	#3ch3	#3ch4
0	0	1.562	3.125	4.687	6.25	7.812	9.375	10.937	12.5	14.062	15.625	17.187	18.75
1	0.0166	2.187	3.75	5.312	6.875	8.437	10	11.562	13.125	14.687	16.25	17.812	19.375
2	0.0333	2.812	4.375	5.937	7.5	9.062	10.625	12.187	13.75	15.312	16.875	18.437	20
3	0.05	3.437	5	6.562	8.125	9.687	11.25	12.812	14.375	15.937	17.5	19.062	20.625
4	0.0666	4.062	5.625	7.187	8.75	10.312	11.875	13.437	15	16.562	18.125	19.687	21.25
5	0.0833	4.687	6.25	7.812	9.375	10.937	12.5	14.062	15.625	17.187	18.75	20.312	21.875
6	0.1	5.312	6.875	8.437	10	11.562	13.125	14.687	16.25	17.812	19.375	20.937	22.5
7	0.1166	5.937	7.5	9.062	10.625	12.187	13.75	15.312	16.875	18.437	20	21.562	23.125
8	0.1333	6.562	8.125	9.687	11.25	12.812	14.375	15.937	17.5	19.062	20.625	22.187	23.75
9	0.15	7.187	8.75	10.312	11.875	13.437	15	16.562	18.125	19.687	21.25	22.812	24.375
10	0.1666	7.812	9.375	10.937	0	14.062	15.625	17.187	6.25	20.312	21.875	23.437	12.5
11	0.1833	8.437	10	11.562	0.625	14.687	16.25	17.812	6.875	20.937	22.5	24.062	13.125
12	0.2	9.062	10.625	12.187	1.25	15.312	16.875	18.437	7.5	21.562	23.125	24.687	13.75
13	0.2166	9.687	11.25	0.312	1.875	15.937	17.5	6.562	8.125	22.187	23.75	12.812	14.375
14	0.2333	10.312	11.875	0.937	2.5	16.562	18.125	7.187	8.75	22.812	24.375	13.437	15
15	0.25	10.937	0	1.562	3.125	17.187	6.25	7.812	9.375	23.437	12.5	14.062	15.625
16	0.2666	11.562	0.625	2.187	3.75	17.812	6.875	8.437	10	24.062	13.125	14.687	16.25
17	0.2833	12.187	1.25	2.812	4.375	18.437	7.5	9.062	10.625	24.687	13.75	15.312	16.875
18	0.3	0.312	1.875	3.437	5	6.562	8.125	9.687	11.25	12.812	14.375	15.937	17.5

Exported Graph Data File

test.dat - Editor

Datei Bearbeiten Format 2

Created: 7/18/2001 9:10:42 PM

counter	t [min]	1-1 [nA]	1-2 [nA]	1-3 [nA]	1-4 [nA]	2-1 [nA]	2-2 [nA]	2-3 [nA]	2-4 [nA]	3-1 [nA]	3-2 [nA]	3-3 [nA]	3-4 [nA]
0	0	1.562	3.125	4.687	6.25	7.812	9.375	10.937	12.5	14.062	15.625	17.187	18.75
1	0.0166	2.187	3.75	5.312	6.875	8.437	10	11.562	13.125	14.687	16.25	17.812	19.375
2	0.0333	2.812	4.375	5.937	7.5	9.062	10.625	12.187	13.75	15.312	16.875	18.437	20
3	0.05	3.437	5	6.562	8.125	9.687	11.25	12.812	14.375	15.937	17.5	19.062	20.625
4	0.0666	4.062	5.625	7.187	8.75	10.312	11.875	13.437	15	16.562	18.125	19.687	21.25
5	0.0833	4.687	6.25	7.812	9.375	10.937	12.5	14.062	15.625	17.187	18.75	20.312	21.875
6	0.1	5.312	6.875	8.437	10	11.562	13.125	14.687	16.25	17.812	19.375	20.937	22.5
7	0.1166	5.937	7.5	9.062	10.625	12.187	13.75	15.312	16.875	18.437	20	21.562	23.125
8	0.1333	6.562	8.125	9.687	11.25	12.812	14.375	15.937	17.5	19.062	20.625	22.187	23.75
9	0.15	7.187	8.75	10.312	11.875	13.437	15	16.562	18.125	19.687	21.25	22.812	24.375
10	0.1666	7.812	9.375	10.937	0	14.062	15.625	17.187	6.25	20.312	21.875	23.437	12.5
11	0.1833	8.437	10	11.562	0.625	14.687	16.25	17.812	6.875	20.937	22.5	24.062	13.125
12	0.2	9.062	10.625	12.187	1.25	15.312	16.875	18.437	7.5	21.562	23.125	24.687	13.75
13	0.2166	9.687	11.25	0.312	1.875	15.937	17.5	6.562	8.125	22.187	23.75	12.812	14.375
14	0.2333	10.312	11.875	0.937	2.5	16.562	18.125	7.187	8.75	22.812	24.375	13.437	15
15	0.25	10.937	0	1.562	3.125	17.187	6.25	7.812	9.375	23.437	12.5	14.062	15.625
16	0.2666	11.562	0.625	2.187	3.75	17.812	6.875	8.437	10	24.062	13.125	14.687	16.25
17	0.2833	12.187	1.25	2.812	4.375	18.437	7.5	9.062	10.625	24.687	13.75	15.312	16.875
18	0.3	0.312	1.875	3.437	5	6.562	8.125	9.687	11.25	12.812	14.375	15.937	17.5