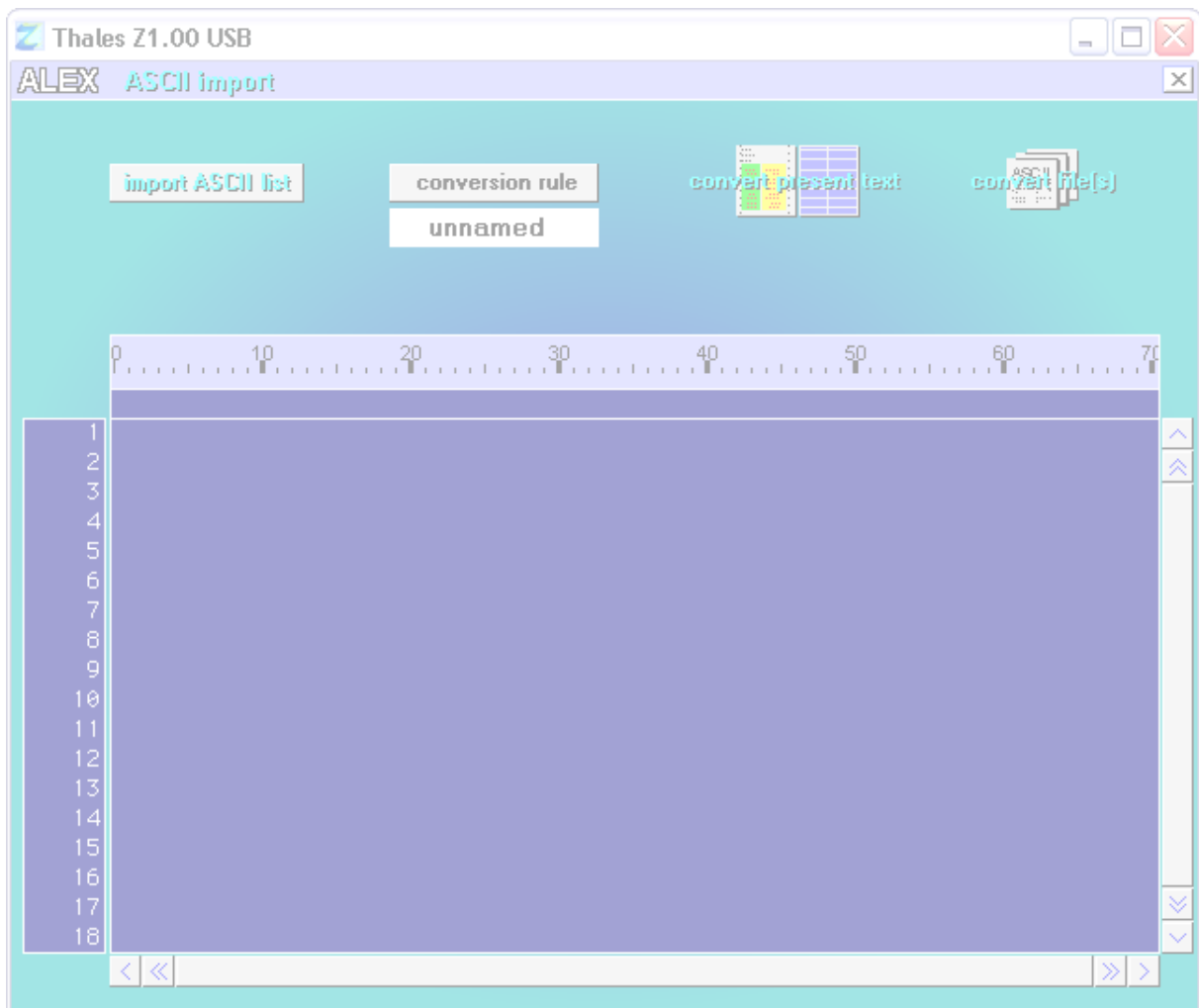


ALEX

ASCII List Conversion Tool

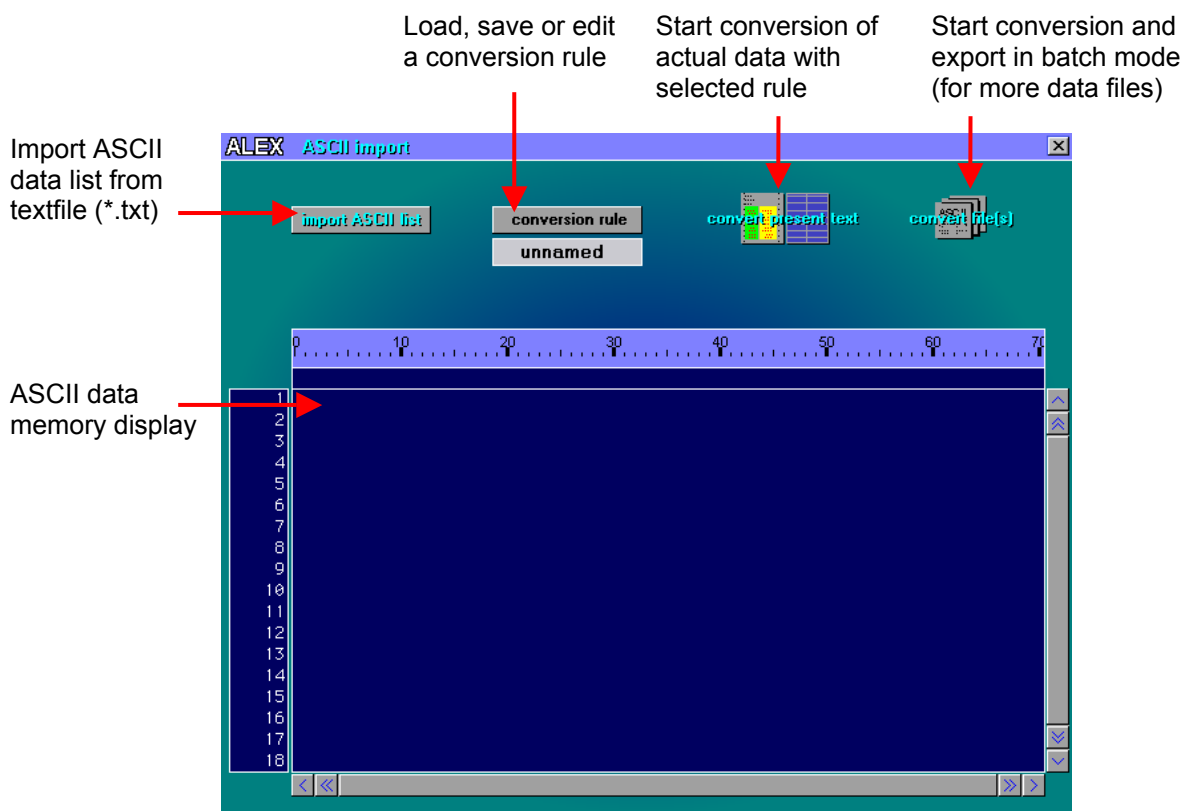


1. Main Menu	4
2. Import ASCII Data	5
2.1 Import ASCII List	5
2.2 Formatting ASCII Data	6
3. Converting Data	7
3.1 Convert Present Text	7
3.2 Batch Conversion	7
4. Conversion Rules	9
4.1 Edit Rule	9
4.2 Load/Save Rule	9

ALEX - ASCII List Conversion Tool

Convert external ASCII-formatted data listings into *Thales* impedance spectra file format for analysis and simulation. The data columns can consist of bode or nyquist over frequency or angular frequency values.

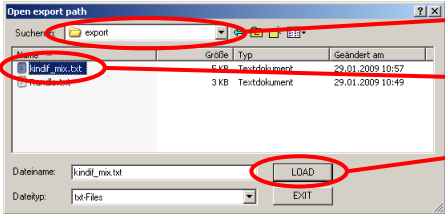
1. Main Menu



2. Import ASCII Data

2.1 Import ASCII List

import ASCII list



Browse folders

Select text file (file extension **.txt**)

Load ASCII data

analyzing text 0% 100%

analyzing data 0% 100%

splitting data 0% 100%

copying data 0% 100%

ALEX ASCII Import

conversion rule unnamed

convert present text convert [F10]

	C1	C2	C3
1	2.9350e+08	1.0386e+08	1.0000e+03
2	2.9450e+08	1.5864e+08	7.9123e+02
3	2.9597e+08	1.6422e+08	6.2665e+02
4	2.9732e+08	2.0859e+08	4.9535e+02
5	2.1943e+08	2.5995e+08	3.9194e+02
6	2.1384e+08	3.2696e+08	3.1012e+02
7	2.1657e+08	4.1128e+08	2.4538e+02
8	2.2518e+08	5.1709e+08	1.9415e+02
9	2.3458e+08	6.0917e+08	1.5323e+02
10	2.4903e+08	8.1737e+08	1.2155e+02
11	2.6761e+08	1.0273e+09	9.6172e+01
12	2.9648e+08	1.2907e+09	7.6095e+01
13	3.2913e+08	1.6207e+09	6.0269e+01
14	4.0311e+08	2.0335e+09	4.7529e+01
15	4.9953e+08	2.5483e+09	3.7594e+01
16	6.4548e+08	3.1875e+09	2.9825e+01
17	8.6674e+08	3.9761e+09	2.3598e+01
18	1.2017e+09	4.9309e+09	1.8572e+01

ALEX is now analyzing the ASCII data. If you have loaded a conversion rule before importing the ASCII data the software will proceed with the conversion automatically.

The imported data is shown in the memory display. Header information and additional data lines will be cut off automatically. The data caption of the ASCII file will be marked green.

To view the hole ASCII data you can scroll through the memory display by clicking on the scrollbar.

2.2 Formatting ASCII Data

For correct data conversion you have to set the data format of the columns.

	R(Z)	I(Z)	FRQ
2	2.0362e+00	1.0366e+00	1.0000e+05
3	2.0468e+00	1.3064e+00	7.9123e+04
4	2.0607e+00	1.6432e+00	6.2605e+04
5	2.0792e+00	2.0669e+00	4.9535e+04
6	2.1043e+00	2.5996e+00	3.9194e+04
7	2.1384e+00	3.2696e+00	3.1012e+04
8	2.1857e+00	4.1120e+00	2.4538e+04
9	2.2518e+00	5.1709e+00	1.9415e+04

Click on the column title to open the data format window.

Select title for column 1

clear title

X-data

- Frequency / Hz
- Angular freq. / Hz
- Time / sec

BODE data

- Z / Ohm
- P / deg
- P / rad

NYQUIST data

- Re(Z) / Ohm
- Im(Z) / Ohm
- Im(Z) / Ohm

clear title: deactivates the column for data conversion
X-data: set column for X-axis as frequency, angular frequency or time
BODE data: set column for Y-axis as impedance or phase
NYQUIST data: set column for Y-axis as real- or imaginary part of impedance

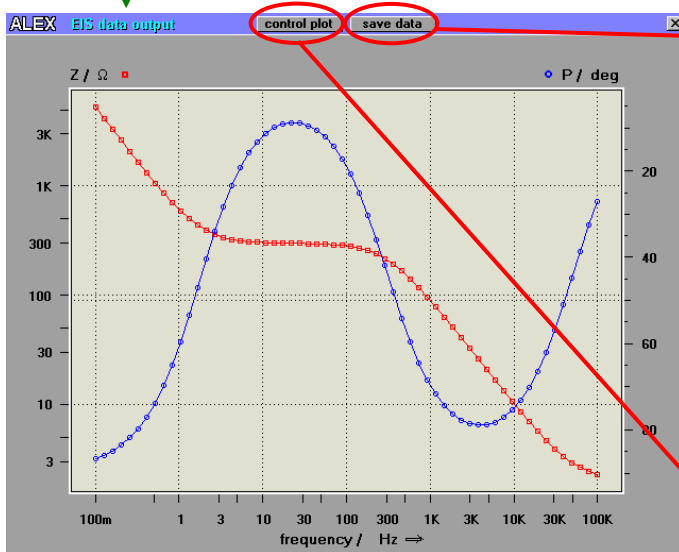
Accept the inputs by clicking on the button or reject the inputs by clicking on the button.

3. Converting Data

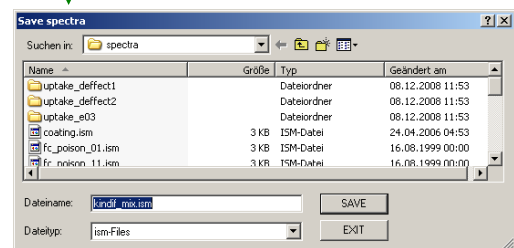
3.1 Convert Present Text



When all necessary data columns are formatted correctly you can start the conversion.



save data



Save the converted data as EIS data file (file extension **.ism**).

control plot

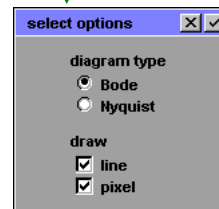
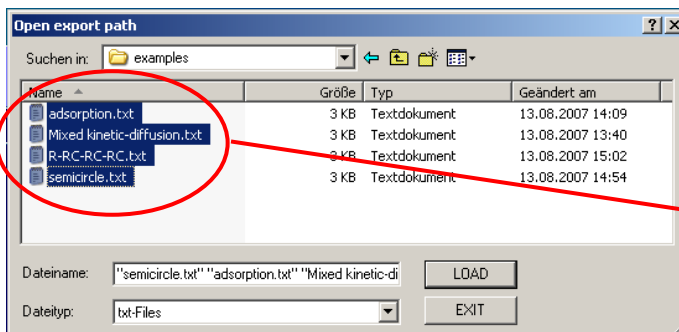


diagram type:
Bode plot or Nyquist plot
draw: line and/or data points (pixel)

3.2 Batch Conversion

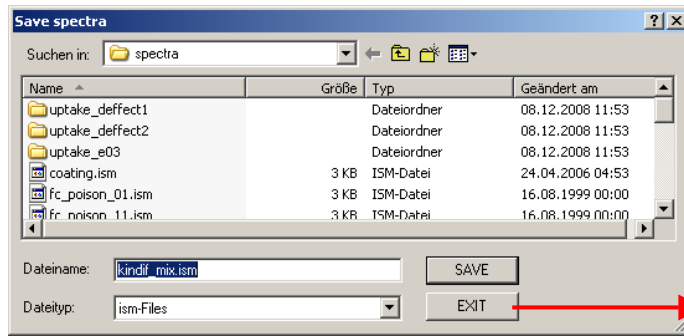


After loading a conversion rule you can also start the batch conversion of one or more files with the same data format.



Select files for batch conversion: Use **SHIFT** or **CTRL** key to select multiple files.

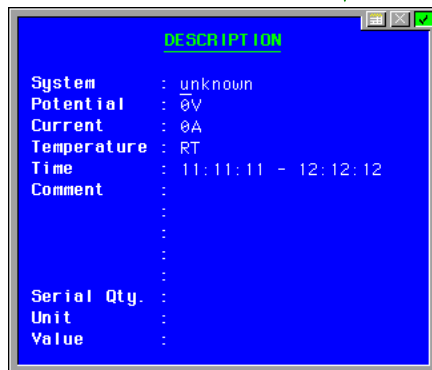
ALEX is loading and converting a data file and proceed automatically with the saving dialog:



Save the converted data as EIS data file (file extension **.ism**).



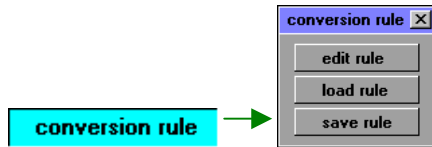
You can skip saving the actual data or even abort the whole batch conversion job.



A **description** box opens where you may input your measurement parameters and comments. The last three lines are reserved for series recording information.

After saving the EIS data file (or skip this file) the batch conversion proceed with the next ASCII data.

4. Conversion Rules



4.1 Edit Rule

select conversion rule mnrule

valid rule

total colums	evaluated column	type of data
3	3	Frequency/Hz
	1	real part R(Z)/Ohm
	2	imaginary part I(Z)/Ohm

comment
 Manual Example

saving options:
 edit filename edit header auto-replace

Annotations:
 - Delete all entries. (points to 'reset')
 - Rule information about data format. (points to table)
 - Edit comment I (points to comment field)

4.2 Load/Save Rule

Open conv-data

Suchen in: conv-data

Name	Größe	Typ	Geändert am
egg.ist	2 KB	IST-Datei	23.11.2007 09:17
zahnerbode.ist	1 KB	IST-Datei	08.11.2007 00:00
zahnernyqu.ist	1 KB	IST-Datei	08.11.2007 00:00
zview.ist	1 KB	IST-Datei	08.11.2007 00:00

Dateiname: ist

Save conv-data

Suchen in: conv-data

Name	Größe	Typ	Geändert am
egg.ist	2 KB	IST-Datei	23.11.2007 09:17
zahnerbode.ist	1 KB	IST-Datei	08.11.2007 00:00
zahnernyqu.ist	1 KB	IST-Datei	08.11.2007 00:00
zview.ist	1 KB	IST-Datei	08.11.2007 00:00

Dateiname: myrule.ist

Annotations:
 - Load rule (points to dialog title)
 - Browse folders (points to 'conv-data')
 - Select rule file (file extension .ist) (points to rule files)
 - Load conversion rule or abort. (points to 'LOAD')
 - Save rule (points to dialog title)
 - Browse folders (points to 'conv-data')
 - Type in rule filename (file extension .ist) (points to 'myrule.ist')
 - Save conversion rule or abort (points to 'SAVE')