

Tutorial: Export FFT to Excel

First store some data.

You can perform FFT only on sync channels. Select channels and press »Store«.

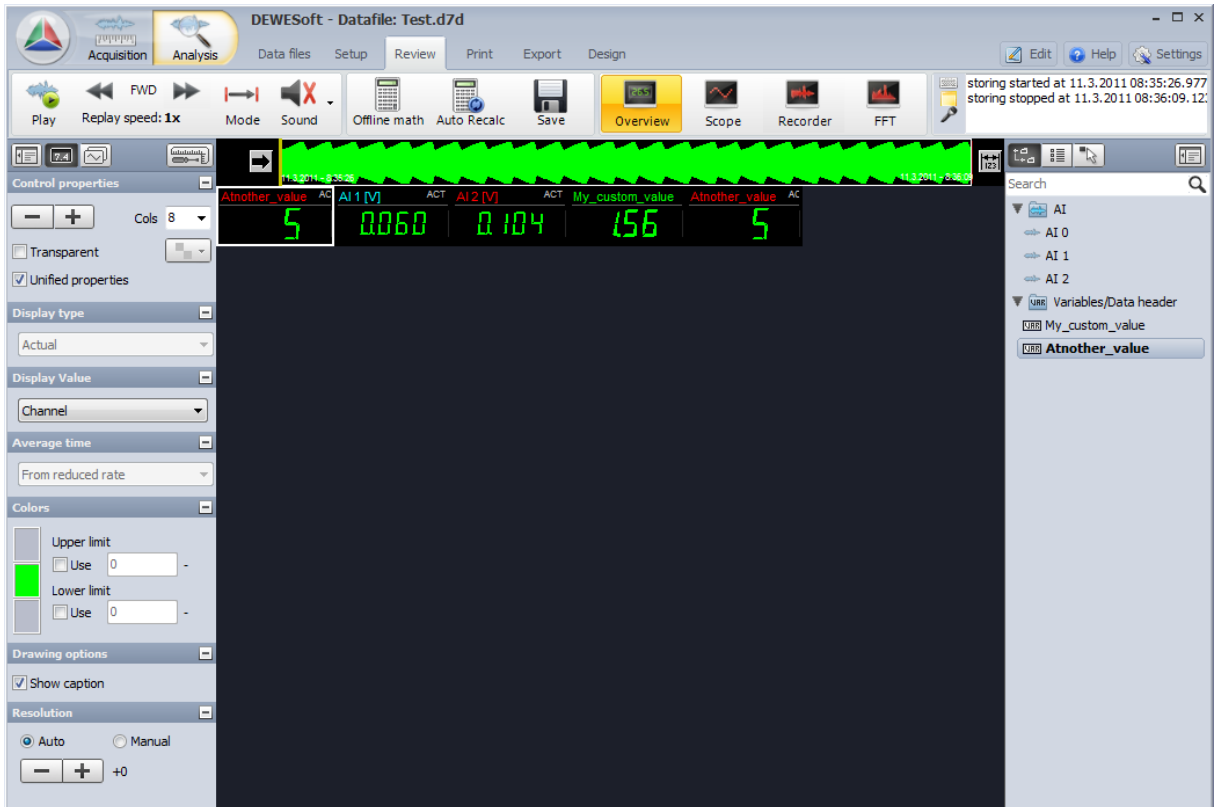
The screenshot shows the DEWESoft 7.0.3 software interface. The top menu bar includes Acquisition, Analysis, Setup files, Ch. setup, and Measure. Below the menu is a toolbar with icons for Store, Save, Save as, File details, Storing, Analog, and Math. The main area displays a table of channel configurations. The table has columns for SLOT, ON/OFF, C, NAME, AMPLIFIER, PHYSICAL VALUES, CAL, and SETUP. The channels are listed from 0 to 7. Channels 0, 1, and 2 are marked as 'Used' and have green bars indicating their physical values. Channels 3, 4, 5, 6, and 7 are marked as 'Unused'.

SLOT	ON/OFF	C	NAME	AMPLIFIER	PHYSICAL VALUES	CAL	SETUP
0	Used	Store	AI 0	Daqcard direct 5 V	-2.348 / 2.482 V	Zero	Set ch. 0
1	Used	Store	AI 1	Daqcard direct 5 V	-2.037 / 2.148 V	Zero	Set ch. 1
2	Used	Store	AI 2	Daqcard direct 5 V	-3.171 / 3.306 V	Zero	Set ch. 2
3	Unused		AI 3	Daqcard direct 5 V	-0.084 / 0.222 V	Zero	Set ch. 3
4	Unused		AI 4	Daqcard direct 5 V	-1.777 / 1.893 V	Zero	Set ch. 4
5	Unused		AI 5	Daqcard direct 5 V	-2.110 / 2.250 V	Zero	Set ch. 5
6	Unused		AI 6	Daqcard direct 5 V	-2.833 / 2.958 V	Zero	Set ch. 6
7	Unused		AI 7	Daqcard direct 5 V	-0.408 / 0.540 V	Zero	Set ch. 7

Recording...

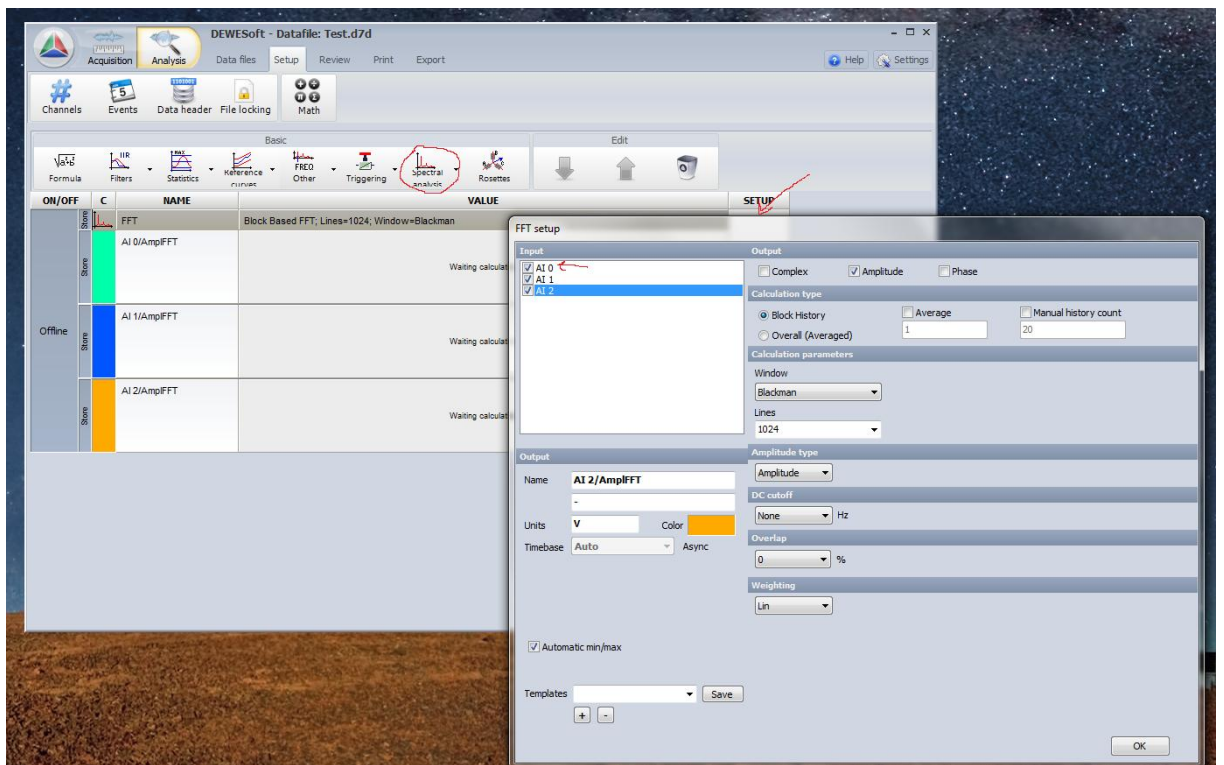
The screenshot shows the DEWESoft software interface during recording. The title bar indicates 'DEWESoft - Datafile: Test.d7d'. The top menu bar includes Acquisition, Analysis, Setup files, Ch. setup, Measure, and Design. The toolbar shows icons for Store, Pause, Stop, Freeze, Overview, Scope, Recorder, and FFT. A status bar at the top right shows 'Ch. OVL', 'Disk left: 382.6 GB', '0.27 MB', and 'CPU: 15: 5 %'. A message box at the top right says 'storing started at 11.3.2011 08:35:26.977'. The main display area shows a digital readout (DRO) with five channels: AI 0 [V] ACT, AI 1 [V] ACT, AI 2 [V] ACT, My_custom_value, and Atnother_value AC. The values are -0561, 1953, 0941, 156, and 5 respectively. The left sidebar shows control properties for the DRO, including display type (Actual), display value (Channel), average time (Fast (0.1s)), colors, and drawing options. The right sidebar shows a search bar and a list of variables: AI, AI 0, AI 1, AI 2, Variables/Data header, My_custom_value, and Atnother_value.

Press »stop« to stop recording and select »Anaysis mode«.



On the right toolbar you now see channels AI 0, AI 1, AI 2

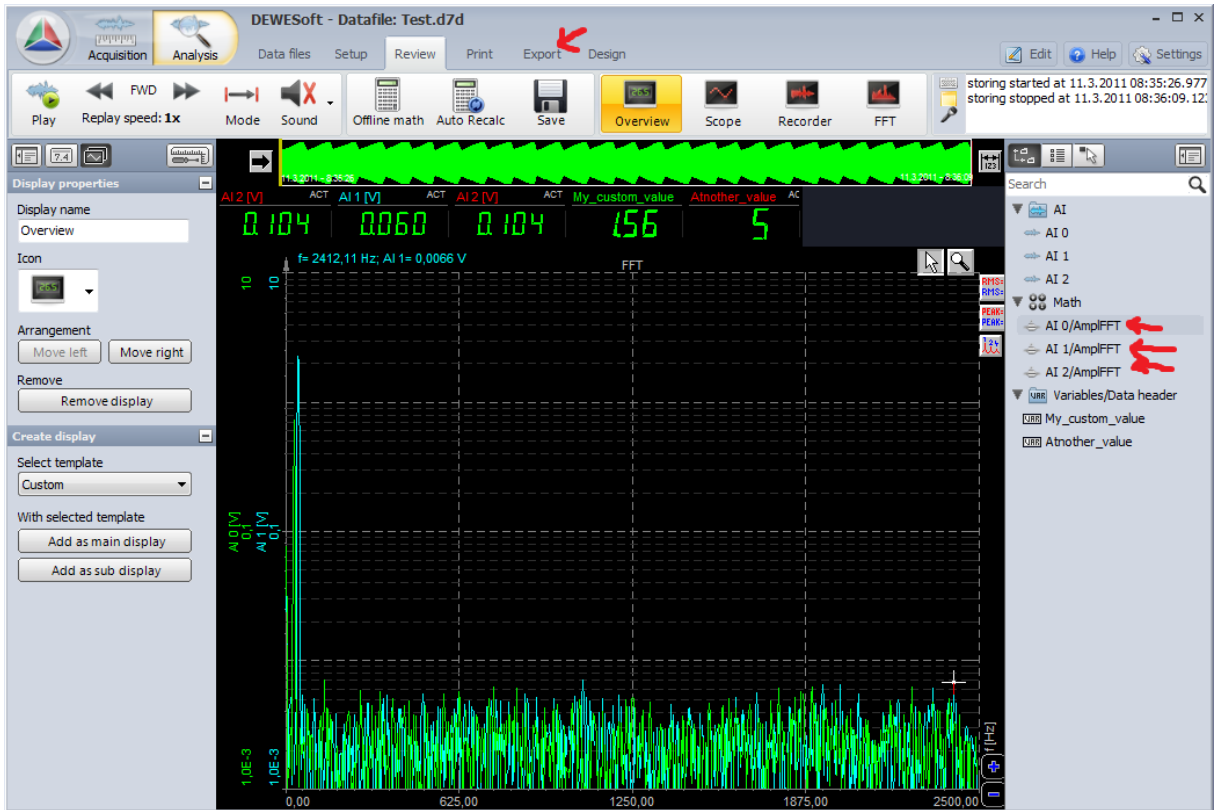
To start FFT analysis select »Offline math«.



Under »Basic« click »Spectrum analysis« and then setup on the right to select desired channels. After that, return to »Review« mode.

Here you must recalculate the data. If »Auto Recalc« is not selected you must recalculate manually. On the right you will now see new channels under Math icon. We added FFT graph in design view for convenience.

Now the last thing is to export.



Select math channels that you want to export and that's it!

The screenshot shows a Microsoft Excel spreadsheet with a table of exported data. The table has columns for 'Exported', 'Index', 'Type', 'Acq. rate', 'Dimension', and 'Name'. The data is as follows:

Exported	Index	Type	Acq. rate	Dimension	Name
No	0	AI 0	5000	Scalar	AI 0
No	1	AI 1	5000	Scalar	AI 1
No	2	AI 2	5000	Scalar	AI 2
Yes	3	Math 0 (FFT)	single	Vector (1024)	FFT0/AI 0/AmpFFT
Yes	4	Math 1 (FFT)	single	Vector (1024)	FFT0/AI 1/AmpFFT
Yes	5	Math 2 (FFT)	single	Vector (1024)	FFT0/AI 2/AmpFFT