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News

Training Days

This week on Thursday 12th and Friday 13th of October we will be running our US Spike2 and Signal training course, prior to the Society for Neuroscience meeting in Atlanta, at the <u>Sheraton Atlanta Hotel</u>. These training days are for both existing and prospective users of Spike2 and Signal and cater for the beginner – with introductions to the software, through to advanced users – with sessions on script writing and output stimulus generation and control. There is our popular Workshop thread where you can discuss your particular requirements with a CED engineer or programmer in a small group environment.

If you or any of your colleagues are interested in attending the course, please follow the links to view the <u>training day program</u> and complete the <u>registration form</u>. Please give a short description of the type of research that you do and analysis that you are interested in. This will allow us to tailor sessions for specific requirements.

Meetings and events

Society for Neuroscience Annual Meeting 2006 Atlanta
October 15th – 18th

American Heart Association Scientific Sessions 2006 Chicago November 12th – 14th

IMN Workshop on Spinal Cord Injury 2006 UCL Institute of Neurology, London December 8th

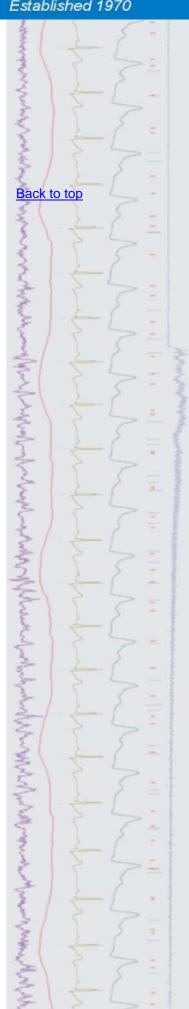
Biophysical Society Annual Meeting 2007Baltimore
March 3rd – 7th

Latest versions of Spike2 and Signal

The latest updates for Spike2 and Signal are available from the <u>CED downloads</u> page, or by clicking on the links in the table below. Demonstration versions of the latest software are also available.

Spike2 downloads	Signal downloads
Spike2 version 6.01	Signal version 3.07
Spike2 version 5.16	Signal version 2.16
Spike2 v6 demo	Signal demo

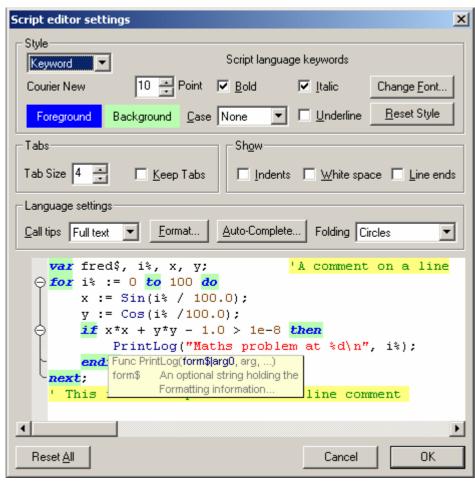
A full list of the new features and changes in the latest software versions is available from the website.





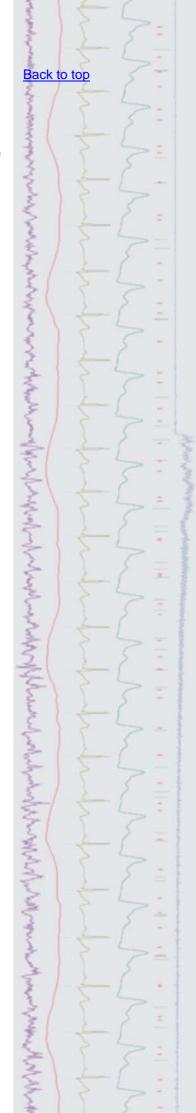
- Q. I have upgraded to Spike2 version 6 and appreciate the new improvements in the script editor. Is there any way I can define my own text colours and formatting?
- A. The new script editor in Spike2 version 6 has many improvements including options for code folding, auto-formatting, auto-complete and call tips for both built-in and user-defined functions. You can also define display styles for a wide range of commands.

The script editor settings are accessed from the General page of the Edit preferences menu. Clicking the Script files button opens a dialog from which you can define your own text and background colours for commands such as keywords and comments. Set preferences for auto-formatting to control indent and outdent behaviour for procedures, functions and control statements and set preferences for auto-complete which will pop up lists of known words, including your own script variables or function calls, that match your typing when writing a script. You can also set the appearance of script folding and call tips. A window at the bottom of the dialog displays the subsequent appearance of any changes you make in the script editor.



Script editor settings in version 6

The output sequencer editor has also been updated to support text folding and display styles for commands such as keywords, directives and operators. See the Spike2 on-line help for a full description of the new editor features.





- Q. I would like to be able to access data recorded in Signal in my own analysis program. Is there any way to get access to the structure of Signal files?
- A. We provide the CFS filing system support as a freely available tool for programmers to read and write data files using the standard CED filing system. The CFS filing system and full documentation can be downloaded free of charge from our website by following this Link.

We can also provide a SON library, which allows programmers to create and read Spike2 data files. Contact us for details.

Scripts: Spike2



- Q. I record responses to repetitive trains of stimulus pulses in Spike2 and log the stimuli times to an event channel. I have a series of files from earlier experiments, that I would like to analyse but these were recorded with another system that didn't have the capacity to log event data. I know when the stimulus was applied and the frequency used for each file as I recorded this in my lab notebook. Is there an easy way to enter these pulses as events in a pre-recorded data file for further analysis?
- A. The attached script, AddEvents.s2s, allows you to set a time range and specify a frequency of stimulation. It then adds events into a new channel at the specified interval over the set time range. You can add multiple event trains into the current data file, simply click cancel in the settings dialog to quit the script. This script could also be used to create pulse trains at a set frequency for output. Once the events have been created as an event channel in the data file, you could load them into the output sequencer using the PlayTrainTable.s2s script along with the PlayTrain.pls sequence, which was made available in issue 9 of our eNewsletter.

Scripts: Signal



- Q. I would like to create a 'grand average' of multiple waveform averages in Signal. Is there a script available to do this?
- A. The attached script, Grand Average.sgs, allows you to 'build' a summed average of multiple waveform averages in Signal. The script opens a file selection dialog where you select the first and then subsequent average files. The grand average is displayed in a new window and is updated each time you select a new file to add. Click Cancel in the file selection dialog to quit the script.

Did you know...?

The Spike2 off-line waveform output dialog now has an option to rerun a data file to match the waveform output, allowing rerun of data with sound for use in teaching or presentations.

Recent questions

- Q. I am giving a presentation at the Society for Neuroscience Annual Meeting next week and would like to re-run my data files along with my Spike2 video multimedia files. I am using an LCD data projector but, when I open the associated video file, it displays on the monitor whereas the projector shows a black rectangle. Is there anything I can do to display the video file correctly using the projector?
- A. Many laptops have a built-in hardware video accelerator, which is assigned to the first video opened. This only works on the main display, hence the projected black rectangle. If you open further video files they use a software method which will work on all displays. So as a work around, open another video file first and minimise it, before opening the one you want to project.



User group

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