

Neuroscan Products Release Summer 2003

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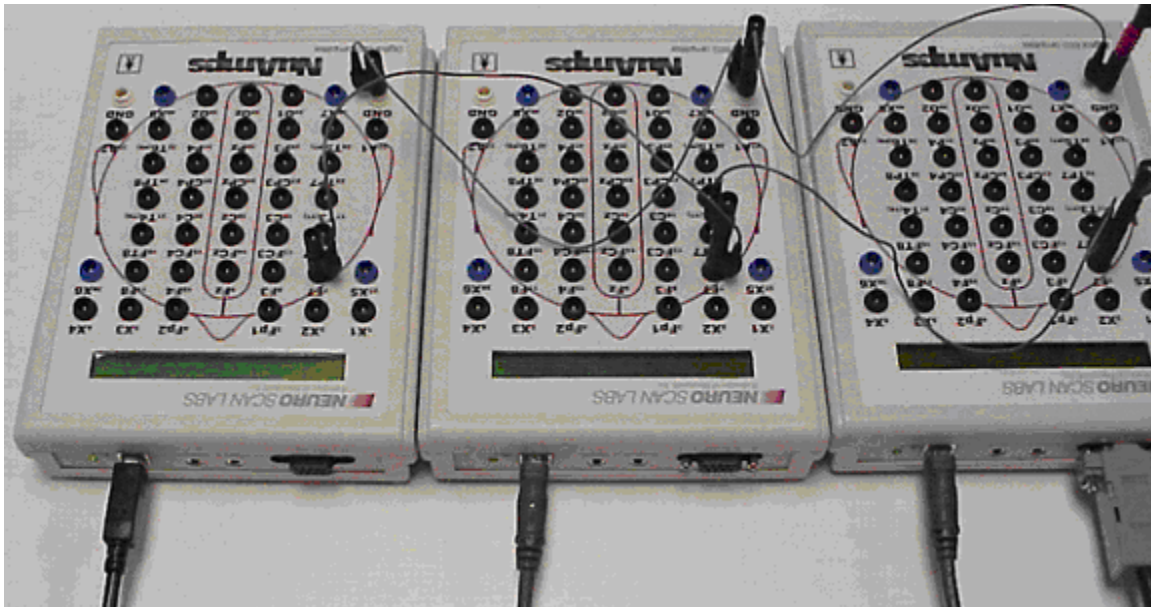
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Products Release Notes, Summer 2003

Neuroscan is pleased to announce the new and modified products that we are releasing in the Summer of 2003. This document summarizes these products. Contact sales@neuro.com for information regarding any of the new products.

Cascaded NuAmps Systems

Coincident with the release of the SCAN 4.3.1 software, it will be possible to chain, or cascade, our NuAmps amplifiers. Each NuAmps amplifier has 40 channels. Up to four NuAmps can be cascaded to achieve 157 channel recordings. As with all of our high-density acquisition systems, Cascaded NuAmps Systems have synchronous sampling across amplifier units. The EEG files are fully compatible with the EDIT analysis program.



SynAmps²

The most significant addition to the SCAN 4.3.1 software is the ability to perform EEG acquisition with our new SynAmps² amplifiers. SynAmps² is our second generation solution for optimal electrophysiological recordings. Designed specifically for high-density recordings, SynAmps² packs the best technology has to offer in to a compact and affordable package.

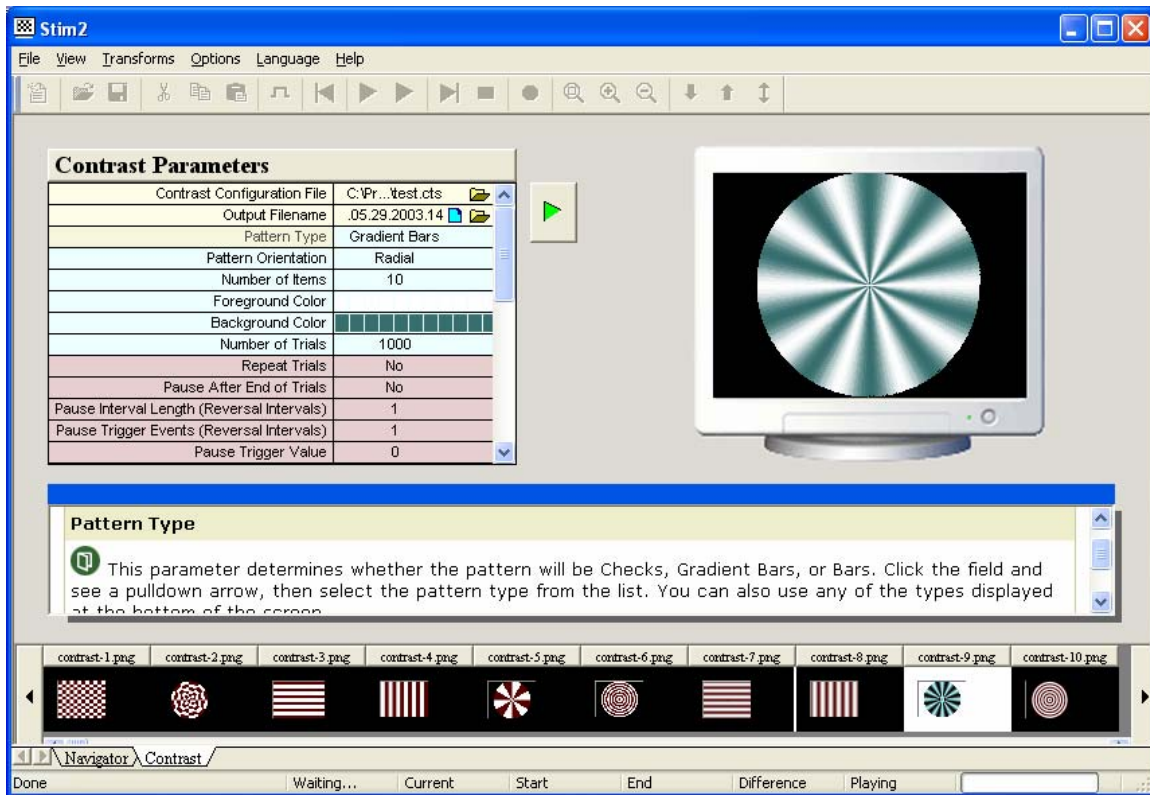
The SynAmps² amplifiers are about the same size as the current SynAmps head box. Each headbox contains 70 channels: 64 EEG channels, 4 bipolar channels, and 2 High Level Input channels. SynAmps², like SynAmps, are broad range amplifiers, with recording capabilities from DC to ABRs, with a maximum AD rate of 20kHz for all channels. Multiple SynAmps² can be chained together to obtain 256 EEG channel high density recordings (or higher depending on your computer speed and acquisition rate).

SynAmps² have a low, fixed gain (approximately 15x in DC mode), yielding a very broad dynamic range, thus making saturation very unlikely. 24 bit AD conversion provides greater resolution and accuracy in measurement. USB 2.0 connections make installation and communication with the amplifiers very easy.



Stim²

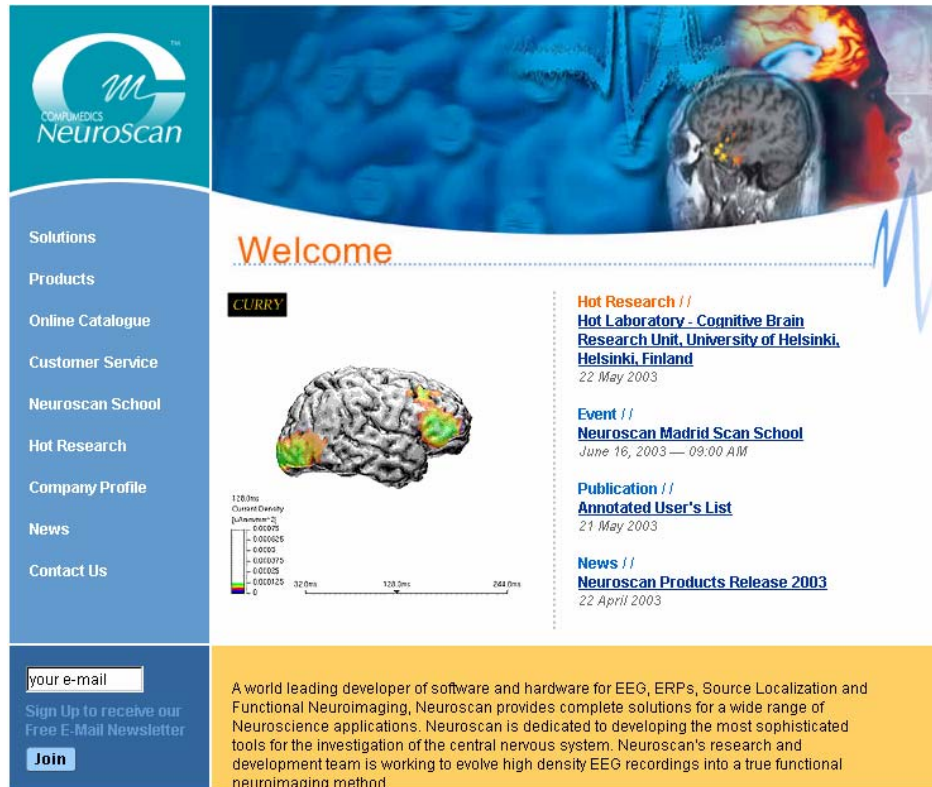
Our STIM (stimulus presentation) program has been upgraded to run in the Windows XP operating system. Two versions are available: a version that uses the existing STIM hardware (boards, Audio System Unit, response pad, microphone), and a software only version that uses the hardware in the computer. The former system offers the most precise timing possible, complete use of the 4-button response pad, software control of the decibel level and other features not available in the software only version. Stim² will be available later this summer.



Tool Box 2003

Tool Box 2003 was introduced with SCAN 4.3. In SCAN 4.3.1, we have added the import and export to MATLAB, and export to Excel functions. The Tool Box 2003 is free for those under the maintenance contract; otherwise, the programs are purchased separately from the SCAN 4.3 or 4.3.1 versions (contact sales@neuro.com or techsup@neuro.com). All plug-ins released in Tool Box 2003 will be included in one price: \$1000 first license, \$250 subsequent license. The Tool Box is an optional add-on to SCAN 4.3..

NOTE for PCA/ICA! *If you are using the PCA/ICA program from SCAN 4.3, you should download the new version for SCAN 4.3.1. This corrects a problem in the ICA part of the program (the first component was the same as the first PCA component).*



Changes to ACQUIRE and EDIT

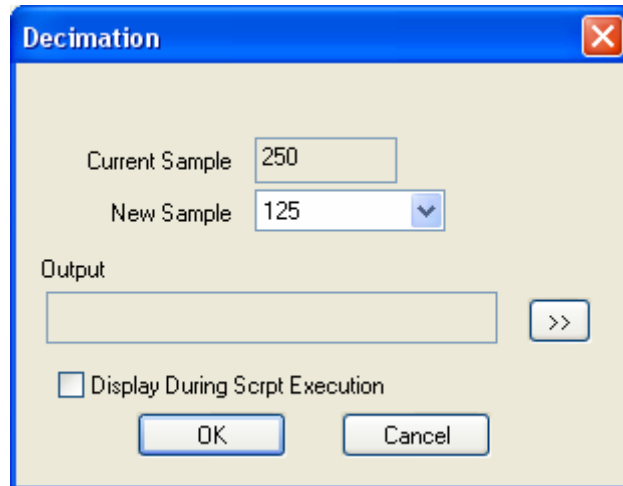
ACQUIRE

The principle change was the ability to interface with the SynAmps² amplifiers and to acquire data from cascaded NuAmps.

EDIT

The changes in EDIT are described below.

1. The new Decimate transform has been added. This allows you to down-sample CNT files to reduce file size while retaining the waveform detail.



2. Application of the SNR transform was discontinued for epoched files (*.eeg files). the transform can be applied to the averages resulting from the epoched files.

Tcl BATCH Files

In SCAN 4.3.1, the **DECIMATE** command has been added.