

## Product Developments

### The actiCAP system has come of age

by Bernd Picht

It is a problem that all of us know: New products sometimes spawn new problems. As is known, we were not immune from such problems with actiCAP, but finally they have now been resolved for some time. Admittedly, it was not possible to implement the changes overnight, but a lot has happened around actiCAP over the past year.

So why are we only producing this summary now, you may be asking yourself. Well, we are of the opinion that arguments, developments and figures should not be just a matter of theory. They should be supported by practical evidence. Of course, that is only possible after sufficient data has been collected, and that takes time.



#### What changes have we already made to the actiCAP?

First and foremost, we have been using a new casting compound and housing material for some time. This measure alone made it possible to reduce the failure rate of the actiCAP system to below 1 % within a year. (investigated before delivery).

If a customer nevertheless identifies a fault in their actiCAP system, the

new production and repair department that we have established at our Gilching headquarters allows us to rectify the fault within a very short time (approx. 2 working days) or to supply the customer with an equivalent replacement.

In addition, numerous small changes and improvements that have also been made make the actiCAP system simple and fast to work with. Take for example the newly developed cable clips that prevent the individual electrode cables from twisting together, or the retaining clip that is now fitted to both the actiCAP control box and the splitter box. The clips permit the boxes to be simply clipped to the test subject's clothing during the experiment. The complete reworking of the actiCAP electrode housing shape makes it far easier to clean the actiCAP electrodes.

#### What changes are planned for the actiCAP in future?

Even if a lot has already been done, and the actiCAP system is now stable and reliable in operation, we shall continue striving to expand and optimize the system into the future. We are planning to launch for special application cases, such as actiCAP modules especially for BCI.

Additional equipment, such as special children's caps are also under consideration, and the systematic integration of the actiCAP system in our software will continue to progress (e.g. impedance measurement direct from our BrainVision Recorder software).

One impressive piece of evidence that we are moving in the right direction is our „eXtreme EEG“ project, where the actiCAP system was able to demonstrate its qualities in many different ways. Even under extreme conditions (EEG acquisition in the Himalayas or on a roller coaster), our customers and we were always able to rely on the stability of the system and on the acquisition of high-quality data. But despite all this, we shall continue to strive for the „perfect actiCAP system“ ... ●



#### News in brief: Downloads, Programs and Updates

Oct 22nd, 2009 / New Analyzer 2 Update available!

Analyzer 2 now supports Windows 7. Moreover this update fixes a bug in the Progress Bar of Analyzer 2. Please visit our Analyzer 2 Download Section ([www.brainproducts.com/downloads.php?kid=9&tab=2](http://www.brainproducts.com/downloads.php?kid=9&tab=2)) to download the update.

Nov 6th, 2009 / Updated versions of RDA Clients available

Updated versions of the RDA clients for MATLAB and Python can be downloaded in our Recorder Download Area ([www.brainproducts.com/downloads.php?kid=2&tab=5](http://www.brainproducts.com/downloads.php?kid=2&tab=5)). Both updates include the consideration of data resolution in example calculation.

Nov 23rd, 2009 / Updated V-Amp/FirstAmp Control Component available

An updated version of the V-Amp/FirstAmp Control Component can be found in our Recorder Download Section ([www.brainproducts.com/downloads.php?kid=2&tab=4](http://www.brainproducts.com/downloads.php?kid=2&tab=4)). Contained bugfixes are:

- » impedance measurement for Ground and Reference electrodes
- » enter of decimals into the workspace-field [Gradient] for AUX-Channel

All Updates and New Modules can be downloaded on our website at [www.brainproducts.com/downloads.php](http://www.brainproducts.com/downloads.php). If you'd like us to keep you posted on any new Update for BrainVision Analyzer 2, please register for our Analyzer 2 Newsflash at [www.brainproducts.com/a2\\_newsflash.php](http://www.brainproducts.com/a2_newsflash.php)