



EASYCAP

EEG Recording Caps and Related Products

EASYCAP GmbH
Steingrabenstrasse 14
DE-82211 Herrsching
Germany
Delivery Address: Am Anger 5, DE-82237 Woerthsee-Etterschlag

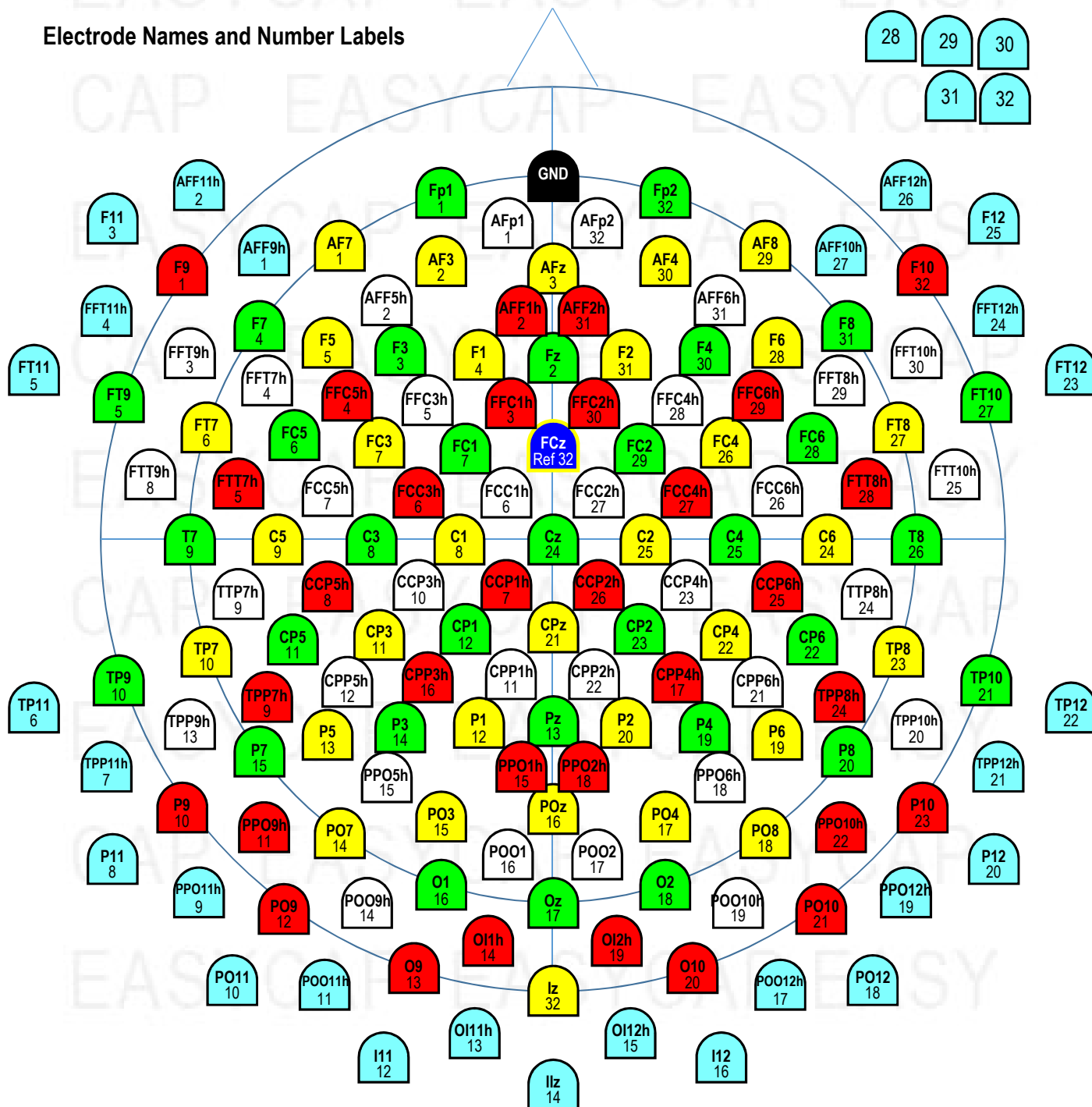
Tel +49 (0) 8153 88702-00
Fax +49 (0) 8153 88702-10
www.easycap.de
info@easycap.de

Standard 160Ch actiCAP snap

Cap with holders for acticap slim electrodes

- Green Holders: Label 1-32, Hardware Channel 1 – 32
- Yellow Holders: Label 1-32, Hardware Channel 33 – 64
- Red Holder: Label 1-32, Hardware Channel 65 – 96
- White Holders: Label 1-32, Hardware Channel 97 – 128
- Blue Holder: REF/Ch64 (yellow 32)
- Black Holder: GND
- Blue Holders: Label 1-32, Hardware Channel 129 – 160

Electrode Names and Number Labels



Details for Users

Ordering Information

For ordering please give **Article Number, Cap Cut, and Size**

(e.g. CACS-160, Caucasian, 56):

- Article Number: **CACS-160**
- Cap Cut: **Caucasian** or **Asian**
- Size (given in cm head circumference):
Adult caps: **52, 54, 56, 58, 60, 62, 64** (average male: 58, average female: 56)

The catalogue-number comprises the cap as described, serial number, and this document; all packed in a labelled cardboard box. For further information about accessories or consumables, please visit our website or contact our local distributor.

Cap

White Infracerebral Cap with integrated chin belt, made from High Precision Fabric

Options: Caucasian or Asian, Size

The holders are mounted according to the figure. The positions are chosen from 5%-System¹. Positions TP9/TP10 approximately meet left and right mastoids.

Apart from using the cap holders, it is also possible to use some electrodes on bare skin, e.g. for recording EOG. To do so, the electrodes can be attached to the skin with double-sided adhesive rings (washers). The grip of the washer is better, when both, skin and electrode, are degreased with alcohol prior to application.

Blue holders for the last five channels (blue 28-32) are added extra, are not in the cap.

Electrode Assignment

The actiCAP electrodes come in bundles of 32, each labelled 1-32.

Plug the GND-Electrode into the black holder at Fpz.

Plug the electrodes 1-32 of the first bundle into the green holders (label 1-32), for amplifier channels 1-32.

Plug the electrodes 1-32 of the second bundle in the yellow holders (label 1-32), for amplifier channels 33-64.

Plug the electrodes 1-32 of the third bundle into the red holders (label 1-32), for amplifier channels 65-96.

Plug the electrodes 1-32 of the fourth bundle into the white holders (label 1-32), for amplifier channels 97-128.

Plug the electrodes 1-32 of the fifth bundle into the blue holders (label 1-32), for amplifier channels 129-155).

(The last five electrodes, channel 156-160, are not in the cap)

Usage WITH or WITHOUT REF-Electrode

If your hardware requires a REF electrode (e.g. actiCAP control box),
plug REF into the blue holder at FCz.

If your hardware uses NO REF electrode (e.g. actiCHamp),
you can use Ch 64 (electrode 32 from second bundle) to record from FCz by using the blue holder,
or you can record from Iz by using the yellow 32 holder.

The velcro straps attached to the cap help you to organize and fixate the cable wires.

¹ Electrode Nomenclature according to: Oostenveld, R. & Praamstra, P. *The five percent electrode system for high-resolution EEG and ERP measurements*. Clinical Neurophysiology 2001; 112: 713-719

Supplementary Files

Each cap comes with a memory stick containing two bvef-files, one for use with REF, one for NO_REF. Use these bvef-files to assign the electrode names to channel numbers while creating the BrainVision Recorder Workspace. The bvef-file also contains the coordinates of the electrodes. In addition, the stick contains a bvef-readme file, a guide map to illustrate the sequence of electrode numbers, and this document.

Accessories

The cap can be fixed either by the integrated chin belt alone, or additionally / alternatively by a chest belt (not included). Normally the decision between these two methods can be made according to what is more comfortable for the subject. Under difficult conditions the chest belt will hold the cap in place a little better.

Service

In case of any further questions

- Regarding consumables (e.g. electrolyte gel, syringes) and their usage, regarding cap, holders, layout, belts, please contact our local distributor or info@easycap.de. Please have the serial number of your cap at hand (syntax CACSxxxxx, located on the backside label of the cap).

Regarding actiCAP electrodes and associated electronics and software, please contact the local Brain Products Distributor or support@brainproducts.com.