
BrainAccess CAP

Version 2.0

User's Manual
Version 2.0
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Introduction

Welcome to the user's manual of BrainAccess EEG cap – BrainAccess CAP. The cap comes in different sizes and is inclusive of dry-contact, shape-adapting gold electrodes. This manual overviews the main features of the BrainAccess cap together with setup instructions. Should you have any further questions not covered in this guide please visit www.brainaccess.ai where you can find more information or contact us at brainaccess@neurotechnology.com.

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I Overview

The BrainAccess CAP is a flexible EEG cap that is available in different sizes and comes with dry-contact, shape-conforming gold electrodes. The BrainAccess CAP is designed to work with BrainAccess electroencephalographs and can be purchased as part of BrainAccess kits.

3 different sizes. The cap is available in 3 different sizes: L, M, S to fit different adult head sizes and shapes.

37 electrode positions. The cap provides 37 positions where the electrodes can be placed using an easy-to-use clipping mechanism. The positions follow the standard 10-20 system.

Holes for cables. Additional holes are provided for the cables to ensure the tidiness of the setup.

Dry-contact electrodes. The cap comes with dry-contact electrodes. The electrodes feature spring-loaded spikes that enable the electrode to conform to the curvature of the head resulting in a more comfortable wear when compared to standard dry-contact electrodes.

Dry-contact pad electrodes. Electrodes with golden pads are provided for the positions without hair, i.e. forehead.

Easy electrode placement. It is easy to change the positions of the electrodes on the cap using the standard clipping mechanism.

Ultra small cables. The CAP is equipped with ultra-miniature coaxial cables that not only ensure shielding from the noise but are also thin and flexible to ensure the comfort. The cables can be directly plugged into the BrainAccess electroencephalographs.

Machine washable. For hygienic purposes the cap can be machine washed using delicate wash cycle. Make sure to remove the electrodes and cables from the cap before washing. The electrodes can be cleaned with standard disinfectant liquids/sprays and non-abrasive wipes.

Velcro tape attachment. The cap features a piece of velcro tape below at the back side of the cap. BrainAccess electroencephalograph should be attached there.

Number of electrodes. The total number of the electrodes provided with the cap varies depending on the purchased kit, the BrainAccess Standard Kit having 8 spike electrodes and 2 pad electrodes and BrainAccess Extended Kit having 16 spike electrodes and 2 pad electrodes.

2 Specifications

Main specifications of BrainAccess CAP are given in the table 2.

Cap	
sizes	L (54-59 cm), M (50-55 cm), S (48-52 cm)
colour	black
number of electrode positions	37
number of holes for cables	18

Electrodes	
material	gold-plated
diameter	19.5 mm
number of spikes	12 x spring-loaded
number of pads (forehead)	5 x 6 mm diameter
input connector	Ultra-mini RF coaxial connector

Cables	
type	Ultra miniature RF coaxial cables
length	different lengths provided for different positions

Table 1: Specifications of BrainAccess CAP.

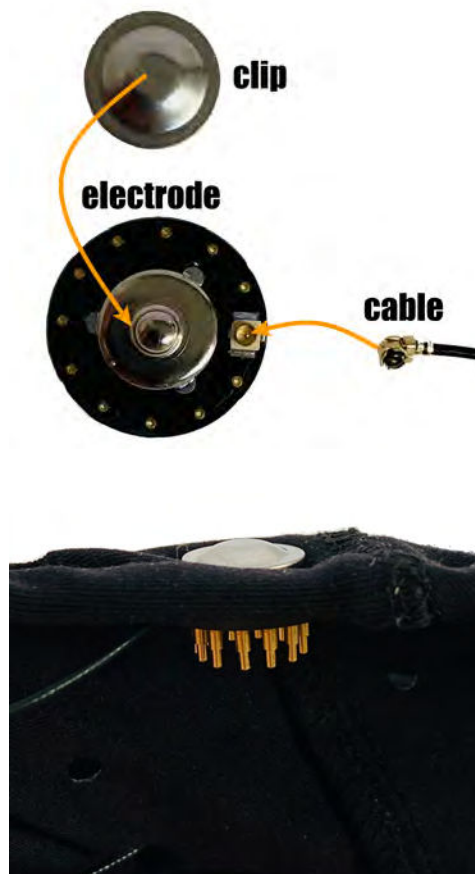
3 Setup

BrainAccess CAP has smaller and larger holes. Smaller holes should be used for electrode attachment to the cap and larger holes for the cables to pass from the inner part of the cap to the outer. Follow the steps below for setting up BrainAccess CAP.



- Place the electrode at the desired location and use the clip to attach the electrode to the cap.
- Connect one end of the provided ultra-mini coaxial cables to the socket on the electrode.
- Pass the other end of the cable through the nearest larger hole to the outer side of the cap and connect to the BrainAccess electroencephalograph (typically mounted at the back of the cap).
- Repeat the steps above until all the required electrodes are installed on the cap.

Note: The reference and bias electrodes are typically placed at Fp1 and Fp2 positions respectively in BrainAccess setups. Use electrodes with gold pads at these positions.



4 Safety Notice

BrainAccess CAP will be referred as 'the cap' in this safety notice.

- Do not use the cap in rainy/snowy conditions.
- Do not use the cap near the water or in extremely damp conditions.
- Do not use the cap in an explosive atmosphere.
- Connect the electrodes only to the inputs of the BrainAccess electroencephalograph.
- Do not use the cap if any of the electrodes are broken, remove the broken electrodes first.

5 Warranty

Neurotechnology ltd. warrants this product (BrainAccess CAP) against defects in materials and workmanship for two (2) year from purchase date under normal consumer use conditions. If the product fails during normal and proper use within the warranty period, Neurotechnology will repair or replace the product. The liability of Neurotechnology does not include any incidental or consequential damages.

This warranty does not include failure caused by improper set-up, operation, maintenance, accident, damage, misuse, modifications not approved by Neurotechnology, normal wear and tear, any event or act outside Neurotechnology's control.

6 Support

Please contact Neurotechnology if you have any problems using any of the BrainAccess products.

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