



EASYCAP

EEG Recording Caps and Related Products

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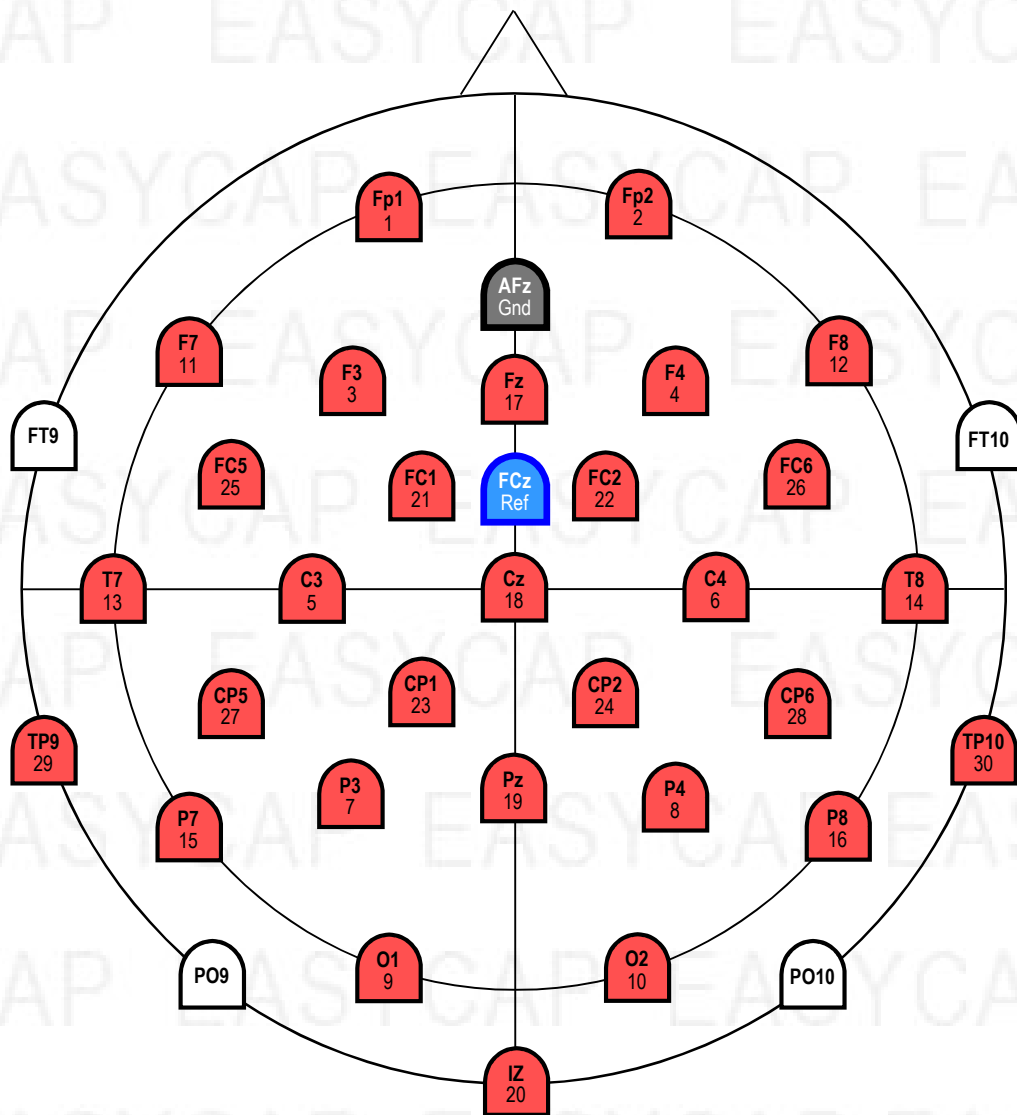
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32Ch-Standard-BrainCap for TMS with Multitrodes

Electrode Layout and Channel Assignment

Red: Channels 1-30

White: Additional slits



Details for Users

Ordering Information

For ordering please give **Article Number, Cap Cut, and Size**
(e.g. *BC-TMS-32, Caucasian, 56*):

- Article Number: **BC-TMS-32**
- Cap Cut: **Caucasian** or **Asian**
- Size (given in cm head circumference):
 - Adult caps: **54, 56, 58, 60, 62, 64** (average male: 58, average female: 56)
 - Children caps: **50** (3-4 years), **52** (5-10 years), **54** (11-14 years)
 - Infant caps: **36** (newborn), **38, 40** (3 months), **42, 44** (7 month), **46, 48** (2 years)

The catalogue-number comprises the cap with 30 + 2 electrodes as described, 2 additional spare electrodes, 32Ch-electrode input box and flat-ribbon cable, 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

Standard: Subtemporal Cap with integrated chin belt, white

Sizes 52 – 64 made from High Precision Fabric, Sizes 50 and smaller made from High Comfort Fabric

Options: *Caucasian or Asian, Size*

Electrodes

All electrodes are Multitrodes for TMS with sintered Ag/AgCl sensors (total height approx. 3 mm). They are buttoned directly into the cap or can be attached to the skin with washers (= double-sided adhesive rings).

All electrodes are:

- Name-labelled near sensor according to graphic (Spare electrodes are labelled as 31, 32.).
- Number-labelled near connector according to graphic (Spare electrodes are labelled as 31, 32.).
- The electrode wires are loose and not attached to cap. Thus each electrode can be rotated 360°.
- Plugged into Electrode Input Box EIB32. The EIB32 comes with 30 cm flat-ribbon cable E80.

Hints

Unused electrodes can be buttoned out of the cap and their connections can be removed from the EIB.

To minimize the TMS artefacts onto the EEG signal, electrode cables should be led away from the TMS stimulation point. To be able to do so, the electrodes can be rotated in their cap holes.

Depending on the locus of the TMS stimulation point it might be advisable in some circumstances to move the Ref-electrodes in its entirety to another locus further away from the stimulation point.

Table of Coordinates for BC-TMS-32

Channel-Number	Name	Theta	Phi
1	Fp1	-90	-72
2	Fp2	90	72
3	F3	-60	-51
4	F4	60	51
5	C3	-45	0
6	C4	45	0
7	P3	-60	51
8	P4	60	-51
9	O1	-90	72
10	O2	90	-72
11	F7	-90	-36
12	F8	90	36
13	T7	-90	0
14	T8	90	0
15	P7	-90	36
16	P8	90	-36
17	Fz	45	90
18	Cz	0	0
19	Pz	45	-90
20	Iz	113	-90
21	FC1	-31	-46
22	FC2	31	46
23	CP1	-31	46
24	CP2	31	-46
25	FC5	-69	-21
26	FC6	69	21
27	CP5	-69	21
28	CP6	69	-21
29	TP9	-113	18
30	TP10	113	-18
	FT9	-113	-18
	FT10	113	18
	PO9	-113	54
	PO10	113	-54
Ref	FCz	23	90
Gnd	AFz	67	90

These values are standardized to a Theta of 90° for the plane through Fpz, T7, T8, Oz.

The signs follow this convention:

