



EASYCAP

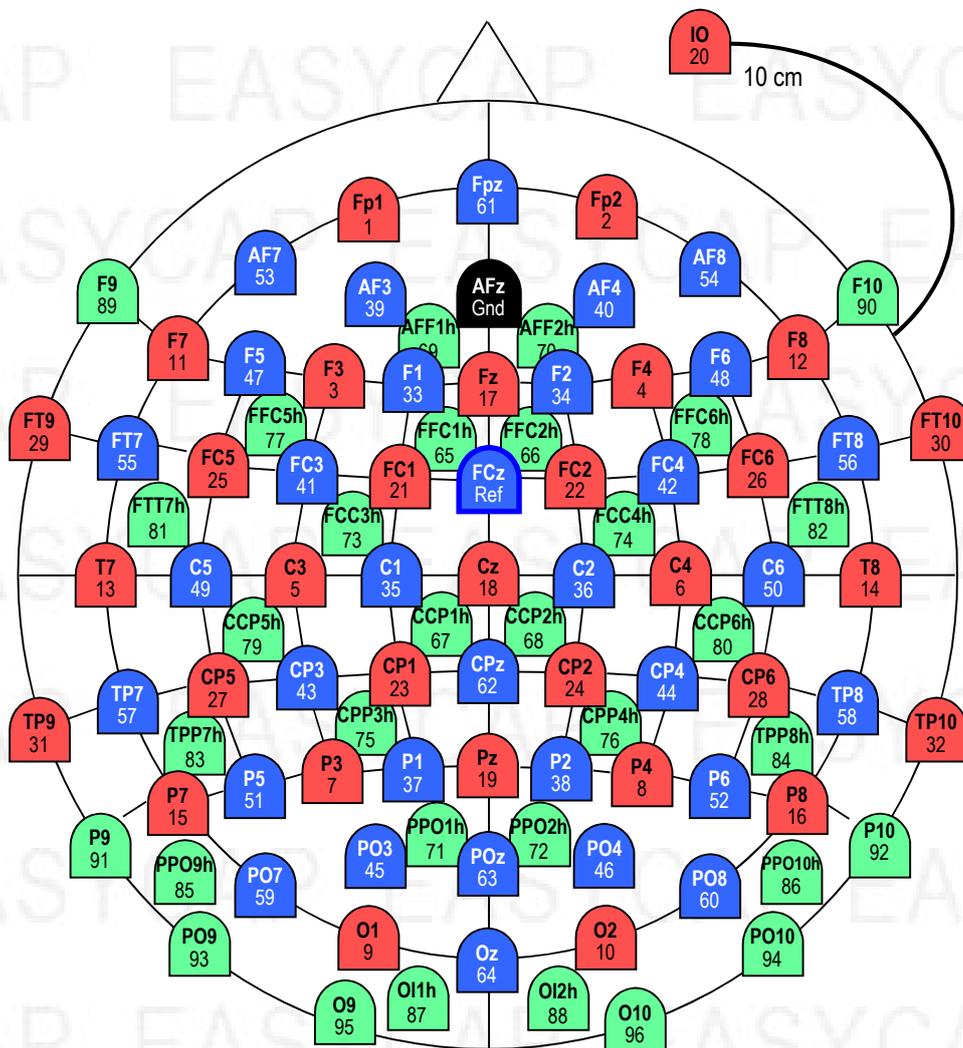
EEG Recording Caps and Related Products

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

96Ch Standard BrainCap with Multitrodes

Electrode Layout and Channel Assignment



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

Details for Users

Ordering Information

For ordering please give **Article Number, Cap Cut, and Size**
(e.g. *BC-96, Caucasian, 56*):

- Article Number: **BC-96**
- 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: **52** (5-10 years), **54** (11-14 years)

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

Standard: Subtemporal Cap with integrated chin belt, white
Sizes 52 – 64 made from High Precision Fabric
Options: *Caucasian* or *Asian*, *Size*

Electrodes

All electrodes are Multitrodes with sintered Ag/AgCl sensors. They are buttoned directly into the cap (total height 3,5 mm) or can be attached to the skin with washers (= double-sided adhesive rings).

All electrodes are number-labelled at the sensor end.
The cable colours correspond to the above figure.

The cables are attached to the cap with nylon threads. Four cable trees leave the cap plait-like in front of and behind the ears, pointing downwards. 20 cm before the connector-boxes there is a crossing-point. Lengths of cable trees are approx. 120 cm.

Termination

Each cable tree is led into a Connector box. From here the caps are connected to BrainAmp with 30 cm-flat-ribbon-cables. These flat ribbon cables come with the BrainAmps. They can be re-ordered from BrainProducts (Cat-No. BP-02400-NN) or from EasyCap (Cat.-No. E80).

Theta/Phi-Coordinates

Please find a table with Theta/Phi-Coordinates of all electrode sites at the end of this file.

Table of Coordinates for BC-96

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	IO	-	-
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	FT9	-113	-18
30	FT10	113	18
31	TP9	-113	18
32	TP10	113	-18
33	F1	-49	-68
34	F2	49	68
35	C1	-23	0
36	C2	23	0
37	P1	-49	68
38	P2	49	-68
39	AF3	-74	-68
40	AF4	74	68
41	FC3	-49	-29
42	FC4	49	29
43	CP3	-49	29
44	CP4	49	-29
45	PO3	-74	68
46	PO4	74	-68
47	F5	-74	-41
48	F6	74	41
49	C5	-68	0

Channel-number	Name	Theta	Phi
50	C6	68	0
51	P5	-74	41
52	P6	74	-41
53	AF7	-90	-54
54	AF8	90	54
55	FT7	-90	-18
56	FT8	90	18
57	TP7	-90	18
58	TP8	90	-18
59	PO7	-90	54
60	PO8	90	-54
61	Fpz	90	90
62	CPz	22	-90
63	POz	67	-90
64	Oz	90	-90
65	FFC1h	-35	-73
66	FFC2h	35	73
67	CCP1h	-16	45
68	CCP2h	16	-45
69	AFF1h	-57	-82
70	AFF2h	57	82
71	PPO1h	-57	82
72	PPO2h	57	-82
73	FCC3h	-35	-19
74	FCC4h	35	19
75	CPP3h	-46	48
76	CPP4h	46	-48
77	FFC5h	-62	-35
78	FFC6h	62	35
79	CCP5h	-57	12
80	CCP6h	57	-12
81	FTT7h	-79	-10
82	FTT8h	79	10
83	TPP7h	-81	29
84	TPP8h	81	-29
85	PPO9h	-101	45
86	PPO10h	101	-45
87	OI1h	-101	81
88	OI2h	101	-81
89	F9	-113	-36
90	F10	113	36
91	P9	-113	36
92	P10	113	-36
93	PO9	-113	54
94	PO10	113	-54
95	O9	-112	72
96	O10	112	-72
Gnd	Afz	67	90
Ref	FCz	23	90

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

The signs follow this convention:

