



EASYCAP

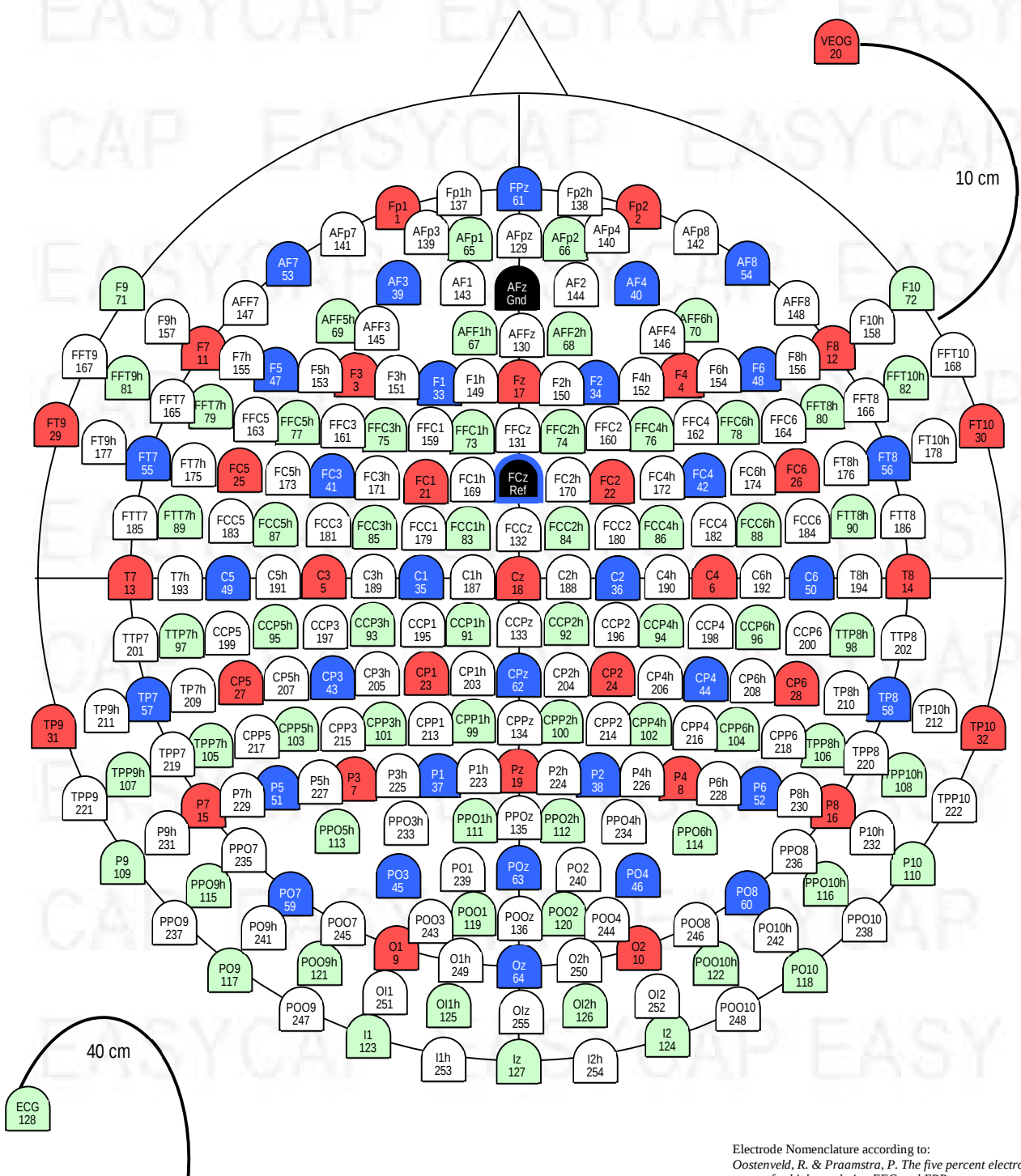
EEG Recording Caps and Related Products

EASYCAP GmbH
Am Anger 5
82237 Wörthsee
GERMANY

Tel +49 8153 88702-00
www.easycap.de
info@easycap.de

256Ch 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

Ordering Information

For ordering please give Article Number, Cap Cut, and Size (e.g. BC-256, C-Cut, 56)

- Article Number: BC-256
- Cap Cut: C-Cut or A-Cut
- Size (given in cm head circumference):
Adult caps: 56, 58, 60, 62, 64 (average male: 58, average female: 56)

The catalogue-number comprises the cap as described. 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 54 – 60 made from High Precision Fabric, Sizes 50 and smaller made from High Comfort Fabric

Options: C-Cut or A-Cut, Size. For further variations, contact us

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. Electrodes leave around the top of the head, from where cable trees continue to connector-boxes. After about 50cm, cables are bundled. Lengths of cable trees are approx. 120 cm.

Termination

Cable tree is led into combined BrainCap-Boxes. From here the caps are connected to BrainAmp with 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-256

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	VEOG	--	--
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

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	AFp1	-79	-82
66	AFp2	79	82
67	AFF1h	-57	-82
68	AFF2h	57	82
69	AFF5h	-72	-55
70	AFF6h	72	55
71	F9	-113	-36
72	F10	113	36
73	FFC1h	-35	-73
74	FFC2h	35	73
75	FFC3h	-46	-48
76	FFC4h	46	48
77	FFC5h	-62	-35
78	FFC6h	62	35
79	FFT7h	-81	-29
80	FFT8h	81	29
81	FFT9h	-101	-27
82	FFT10h	101	27
83	FCC1h	-16	-45
84	FCC2h	16	45
85	FCC3h	-35	-19
86	FCC4h	35	19
87	FCC5h	-57	-12
88	FCC6h	57	12
89	FTT7h	-79	-10
90	FTT8h	79	10
91	CCP1h	-16	45
92	CCP2h	16	-45
93	CCP3h	-35	19
94	CCP4h	35	-19
95	CCP5h	-57	12
96	CCP6h	57	-12
97	TTP7h	-79	10
98	TTP8h	79	-10
99	CCP1h	-16	45
100	CCP2h	16	-45
101	CPP3h	-46	48
102	CPP4h	46	-48

103	CPP5h	-62	35
104	CPP6h	62	-35
105	TPP7h	-81	29
106	TPP8h	81	-29
107	TPP9h	-101	27
108	TPP10h	101	-27
109	P9	-113	36
110	P10	113	-36
111	PPO1h	-57	82
112	PPO2h	57	-82
113	PPO5h	-72	55
114	PPO6h	72	-55
115	PPO9h	-101	45
116	PPO10h	101	-45
117	PO9	-113	54
118	PO10	113	-54
119	POO1	-79	82
120	POO2	79	-82
121	POO9h	-101	63
122	POO10h	101	-63
123	l1	-112	72
124	l2	112	-72
125	O11h	-101	81
126	O12h	101	-81
127	lz	112	-90
128	ECG	-	-
129	AFpz	79	90
130	AFFz	56	90
131	FFCz	34	90
132	FCCz	11	90
133	CCPz	11	-90
134	CPPz	34	-90
135	PPOz	56	-90
136	POOz	79	-90
137	Fp1h	-90	-81
138	Fp2h	90	81
139	AFp3	-82	-75
140	AFp4	82	75
141	AFp7	-90	-63
142	AFp8	90	63
143	AF1	-69	-79
144	AF2	69	79
145	AFF3	-66	-60
146	AFF4	66	60
147	AFF7	-90	-45
148	AFF8	90	45
149	F1h	-46	-78
150	F2h	46	78
151	F3h	-54	-58
152	F4h	54	58
153	F5h	-66	-46
154	F6h	66	46
155	F7h	-82	-38

156	F8h	82	38
157	F9h	-101	-36
158	F10h	101	36
159	FFC1	-40	-59
160	FFC2	40	59
161	FFC3	-54	-41
162	FFC4	54	41
163	FFC5	-71	-31
164	FFC6	71	31
165	FFT7	-90	-27
166	FFT8	90	27
167	FFT9	-113	-27
168	FFT10	113	27
169	FC1h	-25	-64
170	FC2h	25	64
171	FC3h	-40	-35
172	FC4h	40	35
173	FC5h	-59	-24
174	FC6h	59	24
175	FT7h	-80	-19
176	FT8h	80	19
177	FT9h	-101	-18
178	FT10h	101	18
179	FCC1	-25	-27
180	FCC2	25	27
181	FCC3	-46	-15
182	FCC4	46	15
183	FCC5	-68	-11
184	FCC6	68	11
185	FTT7	-90	-9
186	FTT8	90	9
187	C1h	-11	0
188	C2h	11	0
189	C3h	-34	0
190	C4h	34	0
191	C5h	-56	0
192	C6h	56	0
193	T7h	-79	0
194	T8h	79	0
195	CCP1	-25	27
196	CCP2	25	-27
197	CCP3	-46	15
198	CCP4	46	-15
199	CCP5	-68	11
200	CCP6	68	-11
201	TTP7	-90	9
202	TTP8	90	-9
203	CP1h	-25	64
204	CP2h	25	-64
205	CP3h	-40	35
206	CP4h	40	-35
207	CP5h	-59	24
208	CP6h	59	-24

209	TP7h	-80	19
210	TP8h	80	-19
211	TP9h	-101	18
212	TP10h	101	-18
213	CPP1	-40	59
214	CPP2	40	-59
215	CPP3	-54	41
216	CPP4	54	-41
217	CPP5	-71	31
218	CPP6	71	-31
219	TPP7	-90	27
220	TPP8	90	-27
221	TPP9	-113	27
222	TPP10	113	-27
223	P1h	-46	78
224	P2h	46	-78
225	P3h	-54	58
226	P4h	54	-58
227	P5h	-66	46
228	P6h	66	-46
229	P7h	-82	38
230	P8h	82	-38
231	P9h	-101	36
232	P10h	101	-36
233	PPO3h	-62	67
234	PPO4h	62	-67
235	PPO7	-90	45
236	PPO8	90	-45
237	PPO9	-113	45
238	PPO10	113	-45
239	PO1	-69	79
240	PO2	69	-79
241	PO9h	-101	54
242	PO10h	101	-54
243	POO3	-82	75
244	POO4	82	-75
245	POO7	-90	63
246	POO8	90	-63
247	POO9	-112	63
248	POO10	112	-63
249	O1h	-90	81
250	O2h	90	-81
251	OI1	-101	72
252	OI2	101	-72
253	I1h	-113	81
254	I2h	113	-81
255	OIz	101	-90
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:

