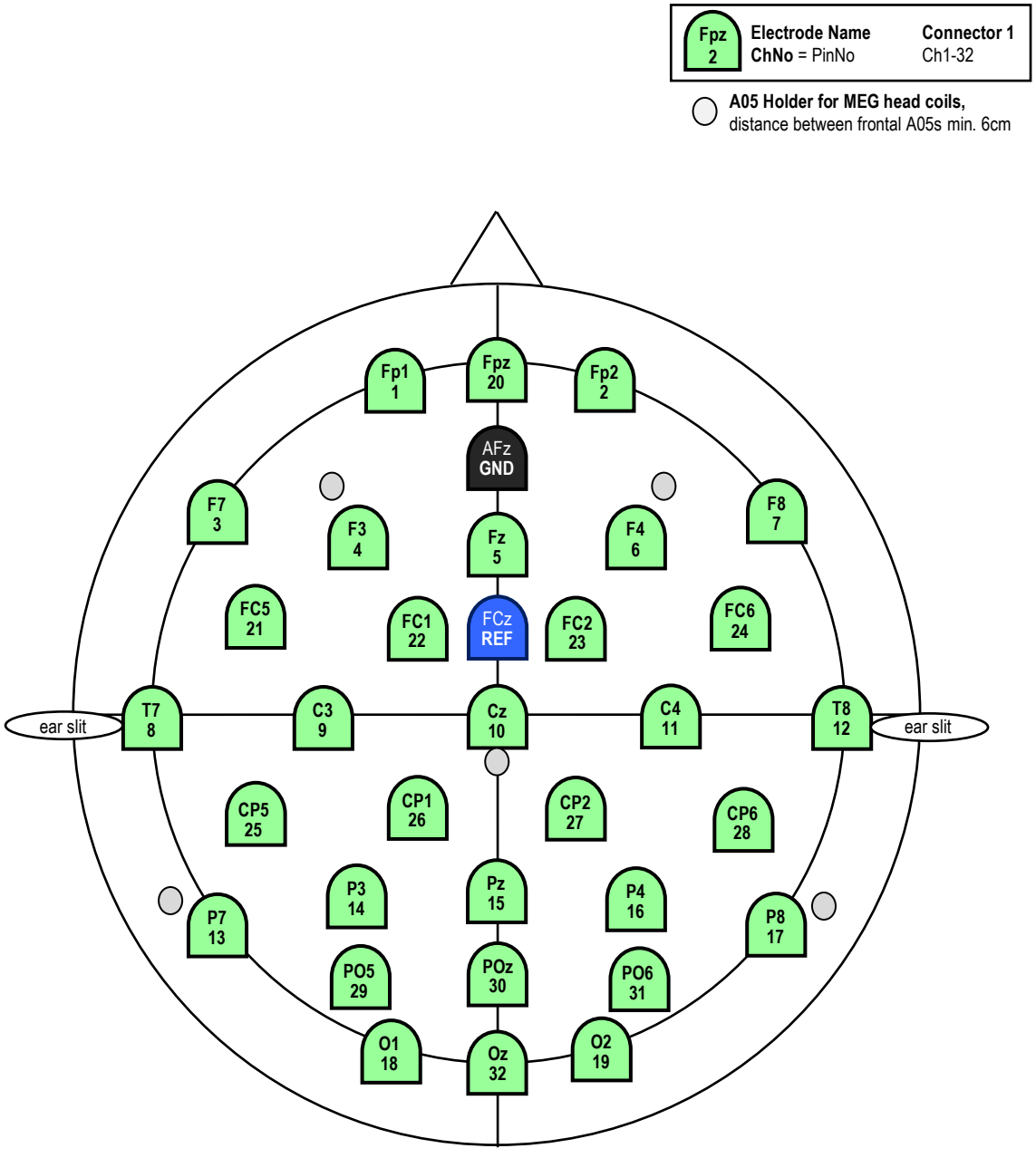
BC-MEG-32-X5 - 32Ch BrainCap for MEG for TRIUX

Layout and Channel Assignment equal to Elekta NeuroMag 32Ch-EEG-Cap



Easycap GmbH Am Anger 5, 82237 Wörthsee, Germany www.easycap.de support@easycap.de

Details

Ordering Information

For ordering please give **Layout Name, Cap Cut, Cap Fabric and Size**
(e.g. *BC-MEG-32-X5, C-Cut, High Precision, 56*):

- Layout Name: *BC-MEG-32-X5*
- Cap Cut: *C-Cut* or *A-Cut*
- Cap Fabric*:* *High Precision* or *High Comfort*
- 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*** (3 years)

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: White Subtemporal Cap with integrated chin belt
Sizes 52 – 64 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.

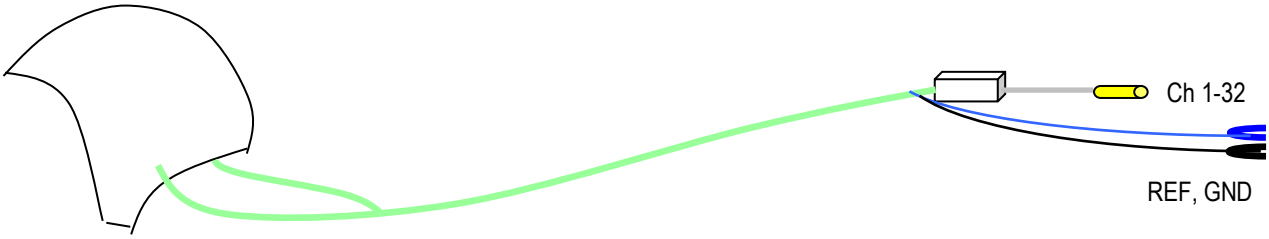
Electrodes & Termination

All electrodes are MEG-suited 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 cap-electrodes are labelled with name (Fp1, …) AND channel number (1 thru 32) at the sensor end. The cable colours correspond to the above figure.
The cables are attached to the cap with nylon threads. Cables leave the cap plait-like in two branches behind the ears, pointing downwards, and uniting afterwards. Length of cable trees is approximately 160 cm.

Additional 5pcs of A05 holders are inserted at the indicated positions (little gray circles) for MEG head coils, at approximate positions AFF5h/AFF6h (minimum 6cm apart), TPP9h/TPP10h (slightly posterior), and CCPz.

Cable tree is terminated into a push-pull-32Ch-connector to match the Triux-Input. REF and GND leave the cable tree before the connector and terminate into silver-plated 1.5mm touch-proof safety sockets.



Cap Layout download

The QR code and link below take you to the download section of our website, where you can search for and download this cap layout document including Theta/Phi coordinates:
https://easycap.de/cap-layout-download/

Hints for Handling MEG-compatible Electrodes

It is important to understand that although MEG-compatible electrodes are and stay non-magnetic if handled correctly, they still contain soft metals which will become magnetic if exposed to a magnetic field.
Therefore, please never take them close to sources of electromagnetic fields, e.g. into a MR-scanner. Even closeness to neon-bulbs, wall outlets etc. should be avoided.

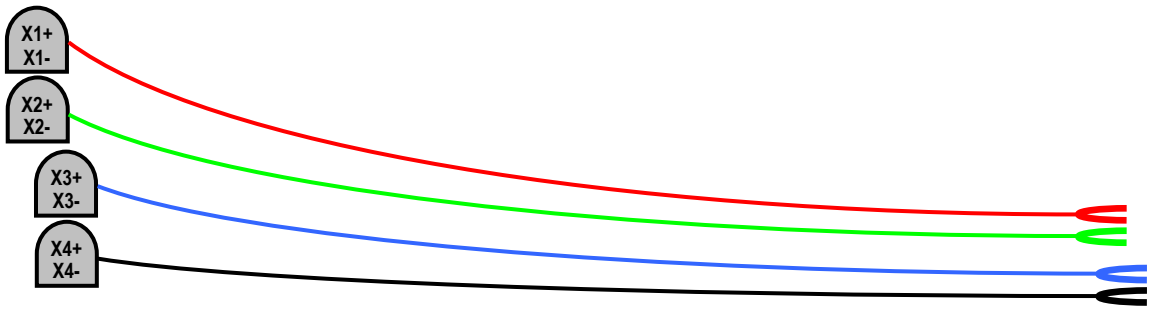
Further, cleanliness is important not only for hygienic but also for technical reasons: it is astonishing how many ferro-magnetic particles are contained in ordinary household dust. Thus not only the cap but also the storage room should be kept clean.

As tap water may contain metallic particles, the whole cleaning process should be performed with purified water (pharmacy-available). If this is not possible, then at least the last step of each cleaning should be to rinse the electrodes with purified water.

In case electrodes become (slightly) magnetized, in most cases they can be made MEG-compatible again either by simple cleaning or else by de-magnetizing the electrodes with e.g. a hand-held degausser (among others available from us).

Extra Electrodes (to be ordered separately)

For additional bipolar channels, separate single electrodes are required.
See here an example of a set for 4 bipolar channels (= 8 electrodes):



8x B18-MEG-HS-200 MEG-compatible Multitrodes
(transparent housing, 200 cm heavy duty leadwire, silver-plated 1.5mm touchproof safety socket)
with labels „X1+/X1- .. X4+/X4-“ on both ends
(e.g. cable colours: 2 red, 2 green, 2 blue, 2 black)

Table of Coordinates for BC-MEG-32-X5

Channel-number	Name	Theta	Phi
1	Fp1	-90	-72
2	Fp2	90	72
3	F7	-90	-36
4	F3	-60	-51
5	Fz	45	90
6	F4	60	51
7	F8	90	36
8	T7	-90	0
9	C3	-45	0
10	Cz	0	0
11	C4	45	0
12	T8	90	0
13	P7	-90	36
14	P3	-60	51
15	Pz	45	-90
16	P4	60	-51
17	P8	90	-36
18	O1	-90	72
19	O2	90	-72
20	Fpz	90	90
21	FC5	-69	-21
22	FC1	-31	-46
23	FC2	31	46
24	FC6	69	21
25	CP5	-69	21
26	CP1	-31	46
27	CP2	31	-46
28	CP6	69	-21
29	PO5*	-78	63
30	POz	67	-90
31	PO6*	78	-63
32	Oz	90	-90
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.

*Positions PO5 and PO6 are 1/3rd the distance from PO7/PO8 towards POz

The signs follow this convention

