

EASY CAP PRODUCTS MODULAR EEG RECORDING CAPS & UTILITIES

CAPS

EASY CAP Modular EEG Recording Caps are made in every desired electrode configuration and for all ages from newborn to adult. easycap is a patented technology (Patent No. DE 19601807).



■ CAPS FOR ADULTS

encompass the sizes (= head circumference) 54, 56, 58, 60, 62. With two sizes, best choose 54 and 58, as third size choose 60.

Product Description

Part Number

Cap for adult size 54 cm	Cap SU-54
Cap for adult size 56 cm	Cap SU-56
Cap for adult size 58 cm	Cap SU-58
Cap for adult size 60 cm	Cap SU-60
Cap for adult size 62 cm	Cap SU-62



■ CAPS FOR CHILDREN

encompass the sizes 50 (5 years), 52 (approx. 6 years), 54 (9 years) and 56.

Product Description

Part Number

Cap for children size 50 cm	Cap SU-50
Cap for children size 52 cm	Cap SU-52
Cap for children size 54 cm	Cap SU-54
Cap for children size 56 cm	Cap SU-56



■ CAPS FOR INFANTS

cover the sizes from 36 (newborn), 38, 40 (3 months), 42, 44 (7 months), 46, 48 (3 years) to 50.

Product Description

Part Number

Cap for infant size 36 cm	Cap SU-36
Cap for infant size 38 cm	Cap SU-38
Cap for infant size 40 cm	Cap SU-40
Cap for infant size 42 cm	Cap SU-42
Cap for infant size 44 cm	Cap SU-44
Cap for infant size 46 cm	Cap SU-46
Cap for infant size 48 cm	Cap SU-48
Cap for infant size 50 cm	Cap SU-50



■ Adaptors

are necessary to mount the electrodes onto the cap or - with washers - onto the skin. When ordering caps, please always specify, where to mount the adaptors. Either choose a montage from our booklet Electrode arrangements or specify your own electrode sites.

Product Description

Part Number

Adaptor for ring electrodes	A06
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The electrodes are snapped into the adaptors

Adaptors are usually mounted in the cap by us. However, if necessary adaptors can also be placed on the skin with washers. Further, new adaptors can be added to the cap by the user himself.

This figure also shows, how EASY CAP can incorporate sites for HEOG or on T1/T2.



ELECTRODES



Ring electrode with 1,5mm touchproof safety socket



Ring electrode with 2mm-pin

Electrodes

Electrodes have to be ordered together with the specification of the correct termination and the leadwire length (from 100 to 200 cm).

Terminations:

S = 1,5mm touch-proof safety socket (e.g. B10-**S**-200)

P = 2mm-pin (e.g. B10-**P**-120)

Other terminations on request.

Product Description

Ag/AgCl sintered ring electrode..... B10-?-#

Part Number

Electrode Labels

can designate numbers (1,2,3,...) or site names (FP1, FP2,...).

Please specify:

Type (number or name)

Place (near sensor or near connector)

Product Description

Label on leadwire..... S05

Part Number



C2 Pair of Ear clamps with fitting electrodes



C4 Pair of Ear clips with fitting electrodes

Ear electrodes

For attaching electrodes to the earlobes we don't use clips with springs but rather a „mini-clamp“. This technique exerts a static pressure and therefore doesn't hurt. Since you cannot use ring electrodes for this we provide them with conventional electrodes.

Product Description

Pair of ear clamps C1

Pair of ear clamps with fitting electrodes C2

(Cable length and termination will be made to match your other electrodes)

To attach the mini-clamps affords a little practice. As an alternative we therefore offer conventional ear clips too. For those, hat-shaped electrodes with flat rim are required (e.g. electrode E220X, see below).

Pair of Nihon-Kohden ear clips C3

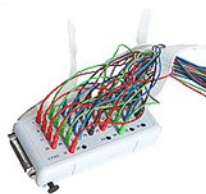
Pair of Nihon-Kohden ear clips with fitting electrodes..... C4

(Cable length and termination will be made to match your other electrodes)

QUICK-CONNECT INTERFACES INPUT BOX & ELECTRODE BOARD ADAPTOR



KV: Electrode board adaptor



KI: Inputbox

■ CAPS FOR ADULTS QUICK-CONNECT INTERFACES INPUT BOX & ELECTRODE BOARD ADAPTOR

In order to connect and detach many electrodes quick and error free to any EEG amplifier we offer a common connector for up to 38 single electrodes.

Product Description

38-Channel-Inputbox..... KI

To plug in the electrodes here instead of the EEG amplifier. A belt for hanging up is supplied with the box.

Part Number

38-Channel-Electrode board adaptor..... KV

38 single safety sockets on the one end, a Dsub-connector on the other.

Input box and electrode board adaptor are connected in no time by a 38-pin-Dsub-connector. The single channels of box and adaptor are numbered.

CHEST BELTS AND CHIN BELTS



Chest belt set



Chin belt

■ CHEST BELTS AND CHIN BELTS

may be used alternatively for fixing the caps. The GS systems are provided in the sizes S (age of elementary school), L (youths, adults) and XL (big adults). They are equipped with velcro tape and push-buttons, such allowing quick and easy mounting.. The metal-free button-and-rubber-band KG system is necessary for adults only in MEG and MRI environments.

Chin belt and KG system are suited for all ages.

Product Description

Chest belt set with push-buttons GS-(Size)

1 chest belt, 2 chin straps, 1 chin belt

Sizes:

S: 50-80 cm,

L: 75-105 cm,

XL: 100-130 cm

Metal free button-and-rubber-band

chest belt set KG

1,70 m elastic tape with button holes, 6 buttons, 1 chin belt

Chin belt alone KR

ELECTROLYTES



Lectron II, tube á 250 grams

This chloride-free gel supports the superior qualities of sintered electrodes: it is utmost stable and not influenced by sweat or body warmth. It allows lowest impedances for best signal quality. It is hypoallergenic and chloride free, i.e. suited for sensitive subjects and long term recordings. It is of clear substance, free of odours and water soluble.

For use with children or when no abrasive preparation is necessary:

Product Description

Lectron II, tube á 250 grams V14
Chloride-free electrolyte gel

Part Number



Lectron III-10, tube á 250 grams

There are two instances, where chloride-free electrolyte is not recommended: for DC recordings the same ion is required in the electrodes and the electrolyte. In case of Ag/AgCl electrodes that's salt. Further, one should not switch from chlorided gel to a chloride-free one on the same machine (though the opposite is possible). Therefore we supply a chlorided gel too. Due to its above-average salt share of 10% lowest impedances are achieved even quicker.

Product Description

Lectron III-10, tube á 250 grams..... V15
High-chloride electrolyte gel

Part Number



ABRALYT 2000

our standard electrolyte, is made of "V14: Lectron II " (see above), to which a gentle abrasive is added, resulting in a high quality electrolyte gel, which at the same time is abrasive. Thus, ABRALYT 2000 saves a step when minimizing impedances.

Product Description

Abralyt 2000 (1000 gr.) V17
Chloride-free, abrasive electrolyte gel

Part Number



Product Description

Abralyt HiCl (1000 gr.) V19
High-chloride, abrasive electrolyte gel. This is the abrasive version of Lectron III-10.

Part Number

V14 and V17 can be used together in the same recording, and also V15 and V19 are compatible to each other.



ELECTROLYTE PASTE FOR SKIN ELECTRODES

These two chlorided electrolyte pastes are suited to place single electrodes onto the head or - combined with washers - onto the skin. Elefix is easier to remove, while EC2 is recommended for application longer than one hour.

Product Description

Elefix (400 grams) V11
Electrolyte paste

Part Number

EC2 (100 grams) V12
Electrolyte paste

CONSUMABLES



■ Disinfection Solution

Sekusept-PLUS, which is effective against (among others) Hepatitis B-Virus, HIV and TBC-bacteria, was tested together with the cap fabric and electrodes for tolerability. Since it is free of glutaraldehyde, no unhealthy vapors evade.

Product Description

Sekusept-PLUS (2000 ml) V92
Disinfection solution

Part Number

V92



■ Isopropylalcohol 70% (60 ml)

For degreasing the skin

Product Description

Isopropylalcohol 70% (60 ml)..... V30
For degreasing the skin

Part Number

V30



■ Skin Pure, tube 135 grams

Gentle abrasive paste, for use with V14 or V15.

Product Description

Skin Pure, tube 135 grams V21
Gentle abrasive paste, for use with V14 or V15.

Part Number

V21



■ Washers, inner-Ø 4mm (100 pieces)

Product Description

Washers, inner-Ø 4mm V52
(100 pieces)

Part Number

V52



■ Washers, inner-Ø 8mm (100 pieces)

Product Description

Washers, inner-Ø 8mm V53
(100 pieces)

Part Number

V53



■ Washers, inner-Ø 12mm (100 pieces)

Product Description

Washers, inner-Ø 12mm V54
(100 pieces)

Part Number

V54



■ **Cotton-swabs, non-sterile**
(100 pieces)

Product Description	Part Number
Cotton-swabs, non-sterile (100 pieces)	V40U

■ **Syringe**

Product Description	Part Number
Syringe	V34



■ **Skin marking pen**
free of grease

Product Description	Part Number
Skin marking pen free of grease	V61

MISCELLANEOUS



■ **Electrode holder**
This device serves to hang up electrodes to save space and prolong life span. It can be mounted on every wall or inside a locker door.

Product Description	Part Number
Electrode holder	MHS-4025



■ **Polysterene head large**
With pre-marked electrode positions: Fpz, Cz, Inion, T9, T10.
The polysterene heads are meant for designing individual electrode arrangements or just for storing caps.

Product Description	Part Number
Polysterene head large	D01-58



■ **Polysterene head medium**
With pre-marked electrode positions: Fpz, Cz, Inion, T9, T10.
The polysterene heads are meant for designing individual electrode arrangements or just for storing caps.

Product Description	Part Number
Polysterene head medium	D01-56

SINGLE LEADWIRE TERMINATIONS & ADAPTOR-CONVERTERS



E50 / E51

■ Single leadwire terminations

To make it possible to convert existing electrodes to other terminations we provide the 2mm-pins and 1,5mm safety sockets as single items. Each terminator comes with jacket and 1,5 cm adhesive heat shrink tube for tension relief and 1 cm heat shrink tube as bend protection at the electrode end.

Product Description	Part Number
1,5mm safety socket	E50
2mm pin	E51
1,5mm safety socket, non-magnetic	E52
2mm pin, non-magnetic	E53



E60 / E65

■ Adaptor-converters

Product Description	Part Number
Adaptor-converter	E60
Changes 1,5mm safety sockets into 2mm pins.	
Adaptor-converter	E65
Changes 2mm pins into safety sockets.	



Two E70's

■ 2mm-stackable shorting plug

To ground unused channels

Product Description	Part Number
2mm-stackable shorting plug	E70
To ground unused channels	



Two E75's

■ 1,5mm-stackable shorting socket

To ground unused channels

Product Description	Part Number
1,5mm-stackable shorting socket	E75
To ground unused channels	

Further terminations, converters, common connectors on request. We try to realize individual solutions!

OLDER PRODUCTS STILL AVAILABLE

■ Older products

Our former electrode types, Standard and Extra-flat, as well as their appropriate electrode adaptors and service is still available:

Product Description	Part Number
Ag/AgCl sintered standard electrode	B01-?-#
Ag/AgCl sintered extra-flat electrode	B04-?-#
Please specify leadwire type, leadwire length and type of termination.	
Electrode adaptor for standard electrodes	A04
Electrode adaptor for extra-flat electrodes	A05
Groove cutting	S01
To change IVM E224N electrodes into B01 electrodes.	
Deepening top side of electrodes	S03
For secure pointer placement while measuring 3D coordinates.	
Abralyt LIGHT (1000 gr.)	V18
Chlorided, abrasive electrolyte gel. This product can still be supplied upon request.	

OTHER AG/AGCL SINTERED ELECTRODES IN VARIOUS SHAPES



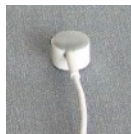
E224A



E224N



E220A



E220N



E220X



E271



E272



E273

Other Ag/AgCl sintered electrodes

Further to our ring electrodes other electrodes in various shapes are available too. As the sensors are the same, these and ring electrodes can be used within the same recording.

Electrodes can be made with different:

- cables:

Heavy-duty = H
Light-duty = L
Shielded
Carbon

- terminations:

1.5mm-touchproof safety sockets = S
2mm-pins = P
Other (please specify)

- cable lengths:

80 cm, 100 cm, 120 cm,
150 cm, 200 cm

Examples:

E224N-HS-120 is with 120 cm Heavy-duty cable and 1.5mm-touchproof safety socket

E220A-LP-100 is with 100 cm light-duty cable and 2mm-pin

If no code is given, please use plain text for specification.

Not all options are available for all electrodes.

Some options cost extra.

Please contact us, if in doubt, which one to choose.

Product Description	Part Number
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Skin electrode, Housing 16/8 mm	E224A
Skin electrode, Housing 13/8 mm	E224N
Skin electrode, Housing 13/4 mm	E220A
Skin electrode, Housing 7/4 mm	E220N
Hat-shaped electrode	E220X
Skin electrode, Housing 16/8 mm, with Snap Connector	E256A
Skin electrode, Housing 13/8 mm, with Snap Connector	E256N
Skin electrode, Housing 13/4 mm, with Snap Connector	E264A
Cable for Snap Connectors	C-H
Shielded Cable for Snap Connectors	C-GS
Flat electrode 4 mm	E271
Flat electrode 8 mm	E272
Flat electrode 12 mm	E273

SIGNAL GENERATOR / IMPEDANCE METER



Signal generator / Impedance meter

Please click here for a detailed description of SIGGI II
Signal Generator / Impedance Meter / Data Logger /
Electrode Tester

Product Description	Part Number
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SIGGI II	SG2
Signal generator / Impedance meter	

STANDARDIZED CAP SETS

■ We compiled easy-to-order complete cap sets for EEG from 19/21, 32/40 and 64/80 channels. The electrode arrangements are based on the international 10%-system. The chosen electrode positions allow equidistant setups, suitable for all basic and advanced data analysis methods.

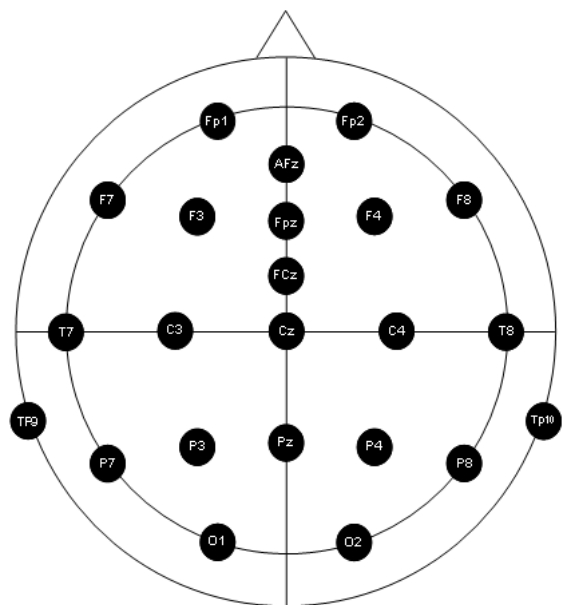
To order, just add the cap size instead of the #



The EC20, EC40 and EC80 packages contain everything to start recording right out of the box.

■ Ready-to-use EEG Recording Cap for 19/21 Channels

- Cap with 23 equidistant electrode positions (Int. 10/20-System)
- 26 Ag/AgCl sintered ring electrodes, number labeled
- 2 Ear-lobe electrodes
- Quick-connect interface
- Chest belt set
- All necessary consumables



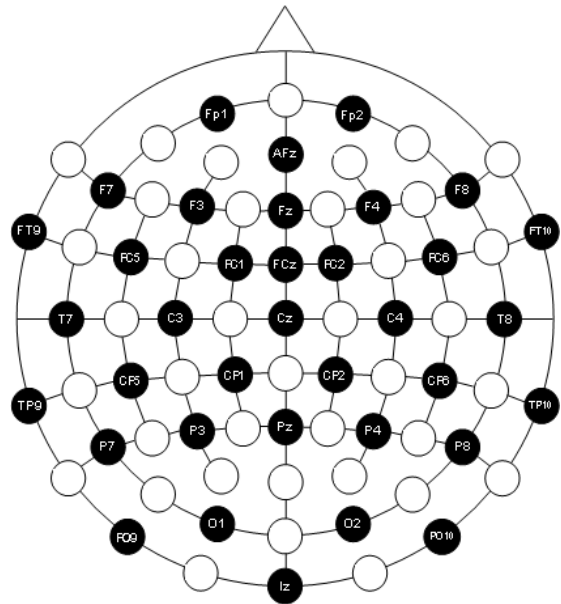
21-Channel Electrode Arrangement of EC20

Product description	Part Number
Ready-to-use EEG Recording Cap for 19/21 Channels	EC20-#
Extra cap for EC20	SU-# (EC20)

Ready-to-use EEG Recording Cap for 32/40 Channels

- Cap with 36 equidistant electrode positions (10%-System)
- 38 Ag/AgCl sintered ring electrodes, number labeled
- 2 Ear-lobe electrodes
- Quick-connect interface
- Chest belt set
- All necessary consumables

Product description	Part Number
Ready-to-use EEG Recording Cap for 32/40 Channels	EC40-#
Extra cap for EC40	SU-# (EC40)

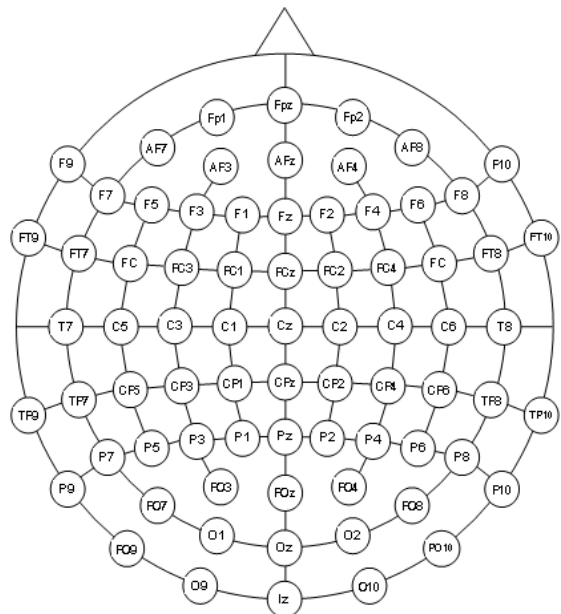


36-Channel Electrode Arrangement of EC40

Ready-to-use EEG Recording Cap for 64/80 Channels

- Cap with 74 equidistant electrode positions (10%-System)
- 78 Ag/AgCl sintered ring electrodes, number labeled
- 2 Ear-lobe electrodes
- 2 Quick-connect interfaces
- Chest belt set
- All necessary consumables

Product description	Part Number
Ready-to-use EEG Recording Cap for 64/80 Channels	EC80-#
Extra cap for EC80	SU-# (EC80)



74-Channel Electrode Arrangement of EC80

For later re-ordering, all parts and consumables are available individually. They are all listed elsewhere in this Product list.