EEG PREWIRED HEADCAPS



BIONEN S.A.S.

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GENERAL INFORMATION

Intended use: Electroencephalogram (EEG) on integral skin

Instructions for use: Using a meter, measure the patient to determine the appropriate measure headphones to the actual size of the head and measure the distance nasion-inion directly along the median axis of the scalp. Locate the position of the two front electrodes (Fp1 and Fp2) on the patient's forehead above the nasion to 10% of the distance nasion-inion (eg. If the distance is nasion-inion36 cm, Placing the electrodes in 3,6 cmabove the nasion) and mark this position with a pencil. Fit the headset by placing the two front electrodes in the points identified, all other electrodes will automatically be positioned, if the measurement of the headset is adequate.

Attach the headset using the preferred mounting methods:

- Connect the chest strap a few centimeters above the mamillary line and fix the two shoulder straps of the headphone crossing them to adhere better to the headset on the head.
- Connect the chin to the two fastening rings side of the headset.

Clean the skin carefully through the holes of the electrode by means of degreasing with abrasive creams or solutions. Use a cotton swab to models with cylindrical electrodes, a needle bevel for all other models. To promote contact between skin and electrode, fill the wells of electroconductive cream electrodes by means of a syringe with needle bevel or directly using the cream of the tube (in models with cylindrical electrodes).

After inserting the connector into the registrant machine, measuring the interelectrode impedances. If some electrodes with impedances are too high, re-apply the electroconductive cream and use August chamfer / cotton swab so as to scarify the underlying skin.

The application of the cap and of the electrodes is painless and does not cause discomfort to the patient.

Cleaning instructions: After use, at the end of shift, the headset must be washed, both for hygienic reasons and because all the cream must be removed from the headset, to avoid that the fabric loses elasticity.

Use detergents for delicate clothing. Other detergents or soaps, especially those commonly used in hospitals, they leave a residual film on the electrode. After a few washes the film will isolate the electrode

and artifacts will occur. Before washing the headset remove metal clips. Remove mechanically or by means of a jet of water residues electroconductive cream.

Immerse the headset in cold water with detergent for delicate garments for 4 hours, avoiding to insert the connector into the water. taking care not to wet the connector Rinse in running water and dry at room temperature. Hang the headphones in such a way that the connector is higher, otherwise the water may corrode the terminals. When dry, reapply the clips.

Do not use electric dryers as too high a temperature will weaken the elastic material and the duration of life of the headset will be extremely reduced.

Sterilization: Device NOT. Do not autoclave.

Lifetime: reusable device. If used properly the headset can be reused up to 500 times before the deterioration of the electrical parts. Also the elasticity of the fabric determines the life of the headset. If the headset loses elasticity must be replaced because they no longer guarantees the exact positioning of the electrodes. Do not use after 5 years of placing on the market.

Storage: No special precautions for handling and storage but it is good practice to store the headset in its case after washing, always dry well.

Packaging: minigrip resealable bag / box.

Contraindications and interactions: none.

Declared toxicity: none. LATEX FREE

Transport and Waste disposal: there are no particular mode of transport and disposal. Treat as medical waste in accordance with current regulations.

CND code: N010102

Regulation: Class I device.

Comply with the MDD 93/42/CEE (D.L. 46/97) and manufactured according to the procedures of BIONEN Quality System certified ISO 13485.

- High-quality signal with low impedance for reliable recording even in long-term tests
- UNIVERSAL OR DEDICATED connection compatible with popular systems for EEG
- Elastic fabric with coding to 7 colors for a simplified use
- Available in 7 sizes (1 neonatal, pediatric 2, 4 adults):
- 3 versions available: flat electrode, cylindrical spool electrode in Ag/AgCl
- Accessory Kit consists of: syringe, blunded needle, chest strap and elastic laces, chin strap.



UNIVERSAL HEADCAPS:

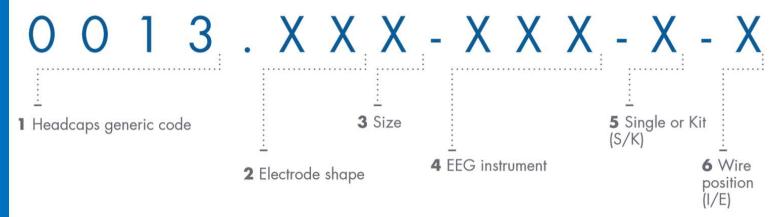
Universal Headcaps used with the adapter cable (ref. 0015,011 or 0016.011) can be used on EEG instruments from various manufacturers

AVAILABLE CONFIGURATIONS:

| DEE | USE | MODEL | N° ELECTRODES | ELECTRODE TYPE | | SIZE | COLOR |
|----------|-----|-------|---------------|-------------------|---|-----------|------------|
| REF. | | MODEL | | | | | COLOR |
| 0013.C00 | EEG | - | 10 | CILINDRIC AG/AGCL | 0 | NEWBORN | <u> </u> |
| 0013.C01 | EEG | - | 10 | CILINDRIC AG/AGCL | 1 | NEWBORN | BOWN |
| 0013.C02 | EEG | - | 10 | CILINDRIC AG/AGCL | 2 | PEDIATRIC | PINK |
| 0013.C03 | EEG | - | 10 | CILINDRIC AG/AGCL | 3 | PEDIATRIC | LIGHT BLUE |
| 0013.C04 | EEG | - | 21 | CILINDRIC AG/AGCL | 4 | ADULT | GREEN |
| 0013.C05 | EEG | - | 21 | CILINDRIC AG/AGCL | 5 | ADULT | YELLOW |
| 0013.006 | EEG | - | 21 | CILINDRIC AG/AGCL | 6 | ADULT | RED |
| 0013.C07 | EEG | - | 21 | CILINDRIC AG/AGCL | 7 | ADULT | BLUE |
| | | | | | | | |
| 0013.F00 | EEG | - | 10 | FLAT AG/AGCL | 0 | NEWBORN | - |
| 0013.F01 | EEG | - | 10 | FLAT AG/AGCL | 1 | NEWBORN | BOWN |
| 0013.F02 | EEG | - | 10 | FLAT AG/AGCL | 2 | PEDIATRIC | PINK |
| 0013.F03 | EEG | - | 10 | FLAT AG/AGCL | 3 | PEDIATRIC | LIGHT BLUE |
| 0013.F04 | EEG | - | 21 | FLAT AG/AGCL | 4 | ADULT | GREEN |
| 0013.F05 | EEG | - | 21 | FLAT AG/AGCL | 5 | ADULT | YELLOW |
| 0013.F06 | EEG | - | 21 | FLAT AG/AGCL | 6 | ADULT | RED |
| 0013.F07 | EEG | - | 21 | FLAT AG/AGCL | 7 | ADULT | BLUE |
| | | | | , | | | |
| 0013.L00 | EEG | - | 10 | SPOOL AG/AGCL | 1 | NEWBORN | |
| 0013.L01 | EEG | - | 10 | SPOOL AG/AGCL | 1 | NEWBORN | BOWN |
| 0013.L02 | EEG | - | 10 | SPOOL AG/AGCL | 2 | PEDIATRIC | PINK |
| 0013.L03 | EEG | - | 10 | SPOOL AG/AGCL | 3 | PEDIATRIC | LIGHT BLUE |
| 0013.L04 | EEG | - | 21 | SPOOL AG/AGCL | 4 | ADULT | GREEN |
| 0013.L05 | EEG | - | 21 | SPOOL AG/AGCL | 5 | ADULT | YELLOW |
| 0013.L06 | EEG | - | 21 | SPOOL AG/AGCL | 6 | ADULT | RED |
| 0013.L07 | EEG | - | 21 | SPOOL AG/AGCL | 7 | ADULT | BLUE |
| | | | | | | | |

FAST CONNECTION HEADCAPS

The fast connection headcaps have a specific connector for each EEG system and allow an immediate connection of the head. Codification system:



- 2 Electrode shape: FOX = Flat electrode COX = Cylindric electrode LOX = Spool electrode
- 3 Size: 1 to 7: 1 = newborn; 2 = small pediatric; 3 = pediatric, 4 = small adults; 5 = medium adult; 6 = large adults; 7 = extra large adult

| REF. | | SIZE | CIRCUMFERENCE | COLOR |
|------------------|---|-------------------|---------------|------------|
| 0013.XX | 1 | NEWBORN | 30 ± 2CM | BROWN |
| 0013.XX 2 | 2 | SMALL PEDIATRIC | 35 ± 2CM | PINK |
| 0013.XX 3 | 3 | PEDIATRIC | $40 \pm 2CM$ | LIGHT BLUE |
| 0013.XX 4 | 4 | SMALL ADULT | $45 \pm 2CM$ | GREEN |
| 0013.XX 5 | 5 | MEDIUM ADULT | $50 \pm 2CM$ | YELLOW |
| 0013.XX 6 | 6 | LARGE ADULT | 55 ± 2CM | RED |
| 0013.XX 7 | 7 | EXTRA LARGE ADULT | $60 \pm 2CM$ | BLUE |
| | | | | |



4 – EEG Instruments: DEDICATED headcaps for direct connection on the EEG instrument must specify the model used, the code follows the following code system:

| BRAND | MODEL SYSTEM EEG | CODE SYSTEM |
|--------------------------|---------------------|-------------|
| BIONEN | BluNet EEG | BLU |
| EBN (ATES Medica Device) | NEUROTRAVEL | NTL |
| EBN (ATES Medica Device) | NEUROTRAVEL SMART | NTS |
| EBNeuro | SAFETY — SIRIO | SIR |
| EBNeuro | VEGA | VEG |
| EBNeuro | HALLEY 32 | H32 |
| EBNeuro | MIZAR — BE | MBE |
| EBNeuro | BE MICRO | BEM |
| EBNeuro | BE LIGHT | BEL |
| EBNeuro | BE LIGHT 36 | B36 |
| EBNeuro | BE PLUS | BEP |
| EBNeuro | NEMUS 2 | NEM |
| Micromed | BRAIN QUICK | BQK |
| Nihon Kohden | NEUROFAX | NKH |
| - | UNIVERSALE | UNI |
| - | SINGOLI TOUCH PROOF | TPR |
| | | |

^{5 -} Single / Kit: Headcaps can be ordered complete with accessories kit (K) or single (S)

⁶ - Cables Position: Headcaps can have internal cables (I) or external (E)

ADAPTERS AND ACCESSORIES:

| REF. | DESCRIPTION | USE | CND |
|----------|--|-----|---------|
| 0014.001 | ELECTRODE FOR EMERGENCY (MCH CONNECTOR 2MM) | EEG | N010199 |
| 0014.002 | ELECTRODE FOR EMERGENCY (FMM CONNECTOR 1.5MM) | EEG | N010199 |
| 0014.003 | EMERGENCY CABLE L = 1M (FMM CONNECTOR 1.5MM) | EEG | N010199 |
| 0014.004 | REPLACEMENT ELECTRODE | EEG | N010199 |
| 0014.005 | ELECTRODE FOR EMERGENCY (FMM CONNECTOR 1.5MM) | EEG | N010199 |
| 0014.006 | REPLACEMENT ELECTRODE | EEG | N010199 |
| 0015.011 | CONNECTING CABLE FOR HEADCAPS WITH 10 PREWIRED ELECTRODES - CONNECTOR $D = 1.5 \text{ MM}$ (Universal) | EEG | Z129080 |
| 0016.011 | CONNECTING CABLE FOR HEADCAPS WITH 21 PREWIRED ELECTRODES - CONNECTOR $D = 1.5 \text{ MM}$ (Universal) | EEG | Z129080 |
| 0052.003 | CASE FOR HEADCAPS | EEG | - |
| 0063.001 | Chest belt and elastic laces $L = 130$ adults | EEG | - |
| 0063.002 | CHEST BELT AND ELASTIC LACES $L = 100$ pediatric | EEG | - |
| 2011.001 | RIBLENE CHIN | EEG | - |
| 2011.003 | CHIN WITH WHITE VELCRO (INFANT) | EEG | - |
| 2011.004 | LEATHER CHIN WITH VELCRO (ADULT) | EEG | - |
| 2011.005 | NEOPRENE CHIN (ADULT) | EEG | - |
| 2011.011 | RIBLENE CHIN WITH TIES (ADULT / PEDIATRIC) | EEG | - |
| 2011.014 | LEATHER CHIN WITH VELCRO (PEDIATRIC) | EEG | - |
| 2011.015 | NEOPRENE CHIN (Pediatric) | EEG | - |
| 2011.024 | LEATHER CHIN WITH VELCRO (INFANT) | EEG | - |
| 4020.00X | LINEN REPLACEMENT HEADSET X SIZE = | EEG | - |
| 0049.001 | August CANT STEEL FOR INJECTION CREAM Lessee - STERILIZABLE | EEG | N010199 |
| 0049.002 | STEEL BLUNDED NEEDLE FOR CREAM CONDUCTIVE INJECTION - DISPOSABLE NONSTERILE - CONF. 100 PCS. | EEG | N010199 |
| 0049.003 | STEEL BLUNDED NEEDLE FOR CREAM CONDUCTIVE INJECTION - DISPOSABLE NONSTERILE - CONF. SINGLE | EEG | N010199 |
| 0049.004 | PLASTIC BLUNDED NEEDLE FOR CREAM CONDUCTIVE INJECTION - DISPOSABLE NONSTERILE - CONF. 100 PCS. | EEG | N010199 |
| 2072.001 | SYRINGE NONSTERILE | EEG | - |



