

EEG Head Set

AE-120A

Quick and simple EEG monitoring



Fighting Disease with Electronics

 **NIHON KOHDEN**

Quick and simple EEG monitoring in ER/ICU —Opening a new era in critical care

The AE-120A EEG head set is a telemetry EEG amplifier developed for EEG monitoring performed in an ER/ICU setting.

This EEG head set utilizes Nihon Kohden's knowledge and experience of many years in manufacturing electroencephalographs. It provides staff unfamiliar with EEG with quick and simple EEG monitoring at busy sites where critical care is provided.

Simple Noise

'Simple' is the best. Anyone can apply EEG electrodes quickly.

Appearance is *simple*



Since there are two (power / start) buttons on the EEG head set, operation is quite simple and error-free.

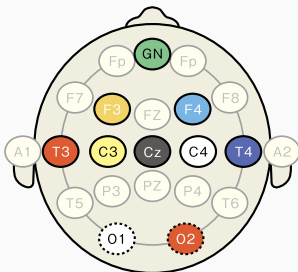
Application is *simple*



Just apply the EEG head set with disposable electrodes attached beforehand to a patient's head. Anyone can do it. Thanks to the head set's flexible arms, it fits various shapes of patient heads.

Electrode positioning is *simple*

Seven electrodes positions are fixed on the EEG head set. No need to measure and mark the electrode positions. Apart from the Z electrode (GN), two more optional EEG disk electrodes can be added.



Head set electrode pattern

Noise-robust EEG recording

The built-in active amplifier reduces external noise. The built-in motion sensor makes it easier to distinguish a seizure wave from noise caused by motion.

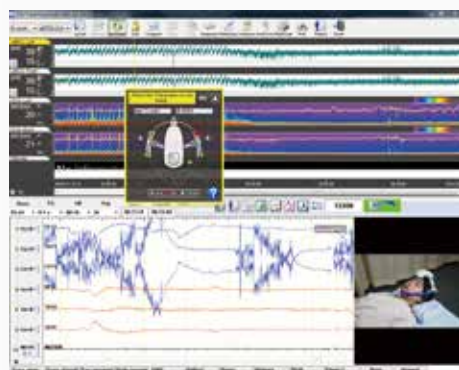


Disposable electrode for EEG NE-091S7

A sufficient amount of gel is pre-filled in a cup. With the low impedance of the conduction gel, skin preparation is not required any more.

-robust Wireless

Software interface is *simple*

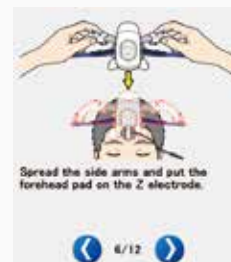


Communication error

The EEG monitoring software displays various helpful information on the monitor screen, including visual fitting guidance and status information such as battery, and electrode status. It continuously monitors the condition of each electrode and if it detects a bad electrode, it notifies medical staff attending the patient to check electrode.



Electrode attachment error



Fitting guidance



Bluetooth® wireless communication

By using Bluetooth® communication, the patient does not need to be surrounded by cables. This is ideal for an ER/ICU setting where many cables from several medical devices are connected to the patient's body, creating a nuisance for the medical staff attending the patient.



Neurofax EEG-1250 electroencephalograph

Indications for Continuous Electroencephalogram (EEG) Monitoring

1. Detection of nonconvulsive seizures and characterization of spells in patients with altered mental status with:
 - A history of epilepsy
 - Fluctuating level of consciousness
 - Acute brain injury
 - Recent convulsive status epilepticus
 - Stereotyped activity such as paroxysmal movements, nystagmus, twitching, jerking, hippus, autonomic variability
2. Monitoring of ongoing therapy
 - Induced coma for elevated intracranial pressure or refractory status epilepticus
 - Assessing level of sedation
3. Ischemia detection
 - Vasospasm in subarachnoid hemorrhage
 - Cerebral ischemia in other patients at high risk for stroke
4. Prognosis
 - Following cardiac arrest
 - Following acute brain injury

Specifications

Amplifier

Number of electrodes	10 (EEG electrodes 8, Reference electrode 1, Z electrode 1)
Noise level	5 μ Vp-p or less (0.53 to 60 Hz)
CMRR	90 dB or more
Input dynamic range and differential offset voltage	\pm 500 mV or more

Data processing components

Sensitivity	5 to 200 μ V/mm
Time constant/low-cut filter	0.03, 0.1, 0.3 sec/0.53, 1.6, 5.3 Hz
High-cut filter	60, 50 (RAPID), 35, 30, 15 Hz
AC filter	50/60 Hz

Others

Safety	Defibrillation-proof type BF applied part
Resistance to water/dust	IP33
Battery	AA (LR6) alkaline battery: 2 pcs
Dimensions and weight	56 W \times 43 H \times 151 D mm, 240 g (without the belts, forehead pad and batteries)

Components

Components

- Head Set
 - Connectable EEG: EEG-1200/EEG-1250/EEG-9100
- Accessory set YZ-003A4
 - Rear belt: 3 pcs
 - Top belt: 3 pcs
 - Chin belt: 3 pcs
 - Forehead pad: 3 pcs
- System program
 - AE-120A system disk
 - QP-160AK upgrade disk
- EEG disk electrode NE-118A (red and white: 3 pcs for each)

Consumables



Disposable electrode for EEG
NE-091S7
H548A
7 pcs \times 6 packs/box



Disposable electrode for EEG
NE-090S1
H548B
1 pc \times 6 packs/box



EEG disk electrodes
NE-118A
H503E
Red (3 pcs), white (3 pcs)/pack

- Accessory set YZ-003A4 H467B

Related Products



Headband for EEG
BE-090AS (S size) H564B
BE-090AM (M size) H564C



Neurofax EEG-1200 electroencephalograph,
Neurofax EEG-1250 electroencephalograph,
Neurofax μ EEG-9100 electroencephalograph



Shield junction cord
BM-090Y K640A



EEG trend program
QP-160AK

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