

# Neuropack S1

## EMG/NCV/EP Measuring System

### MEB-9400A

For more than 50 years, healthcare providers worldwide have relied on the quality and reliability of Nihon Kohden's comprehensive and innovative line of neuro-diagnostic and – monitoring instrumentation to aid in the diagnosis, information and treatment of their patients.

Nihon Kohden's feature rich Neuropack MEB-9400 offers efficient EMG, NCV and EP exams with innovative time saving technology. Available in a 2 or 4 channel amplifier, the Neuropack is offered in a desktop or laptop configuration for portability without compromise. Our compact, low noise amplifier insures clean waveforms easily and quickly. Basic exam software including EMG, NCS, SEP, ABR and VEP is standard with the MEB-9400. Tailor the Quick menu to your examination workflow to reduce testing time. Quick EMG and NCS programs provide the fastest examination possible. The MEB-9400 value is further enhanced with our gold standard 32 channel EEG option for the most flexible multi-modality configuration on the market today.



2 channel, JB-942BK

epilepsy monitoring • electroencephalography • ambulatory recording • polysomnography • ICU/or monitoring • electromyography • ncv • evoked potentials

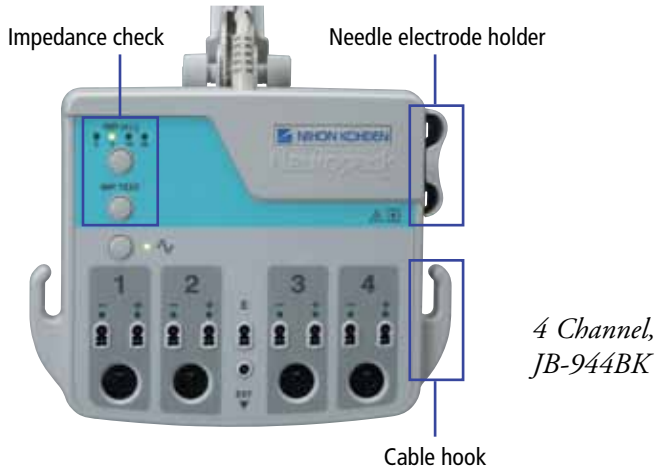
MEB 9400A

## Quick Examination

Innovative hardware and software shorten the examination time.

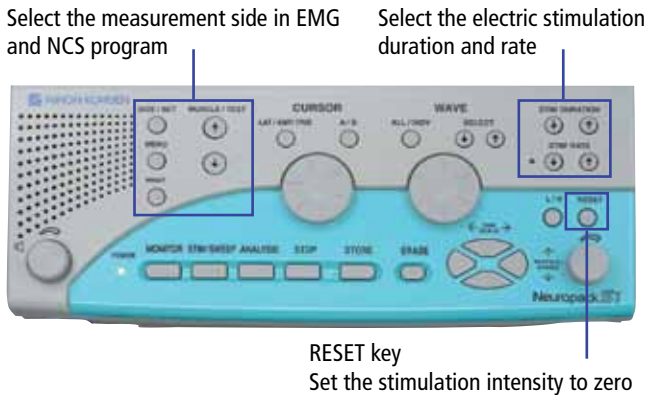
### Low Noise, Compact Amplifier

The low noise amplifier speeds up the examination by giving you clean waveforms easily and quickly. Choose from our 2 or 4 channel amplifier (JB-942BK or JB-944BK).



### User-friendly Control Panel

The easy-to-use control panel allows for smooth and efficient examinations. You can change the electric stimulation duration and rate with a simple one-touch operation. The Side/Set key and Muscle/Test keys allow quicker EMG and NCS examinations.



### EEG Option

Add Nihon Kohden's EEG software and 32 Channel JE-921 Amplifier via USB connectivity to your desktop or laptop model to maximize your investment with a combination EMG/EP/EEG system.



*JE-921 32 Channel Amplifier with 14 bipolar inputs, built in End tidal CO2 and SpO2*

### User-friendly Operation Menu

You can arrange the settings of the Quick menu window according to your preferred operation procedure. Directly open the examination program, saved data, edit program and examination guide from the Quick menu.



### On-Screen Examination Guide

NeuroNavi™ shows examination information and electrode and stimulation positions for NCS and other exams. You can refer to this guide on the screen at any time.



*NeuroNavi screen*

### Standard Examination Protocols

Quick EMG and Quick NCS programs provide the fastest examination possible. Basic protocols, including EMG, NCS and Somatosensory, Auditory, and Visual evoked potential software are provided as standard.

### EMG2

EMG2 is the first routine program to utilize auto MUP waveform detection and pattern classification, as well as real time turns/amp analysis. A more functional and sophisticated EMG findings screen in EMG2 streamlines operation.

### Quick Operation

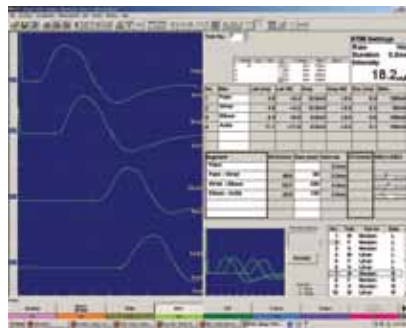
The Muscle List appears when the program starts. You can easily choose the muscle and site from the muscle quick list with the Side/Set key and Muscle/Test key on the operation panel. The list can be modified to suit your own procedures.



*EMG screen*

### **Quick NCS**

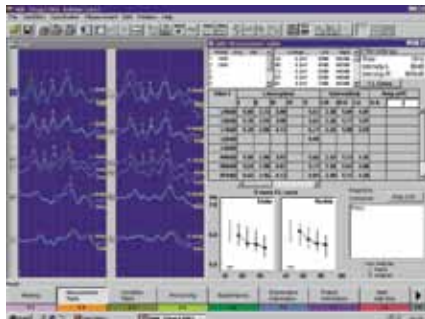
The NCS program lets you perform MCS, SCS and F wave in one program. Up to 42 examinations can be created in your own custom routine protocol by selecting nerve, site and exam. The Side/Set key and Muscle/Test key allow you to select the examination quickly from the examination list box.



*NCS screen*

### **ABR Examination Protocols**

The ABR program lets you perform ABR, MLR, SVR, EcochG and Auditory.



*ABR screen*

### **Data Management and Report Generation**

NeuroWorkbench™ is the core integrator of Nihon Kohden's Neurology product portfolio of IOM, EMG and EEG systems. This optional common interface allows for examination scheduling, protocol administration and data management improving workflow and access to clinical data and records.

NeuroWorkbench is designed to make your patient's data secure. The HIPAA Compliant features include an audit trail, individual logon and user rights, auto logoff and password protected functions such as archive and delete.

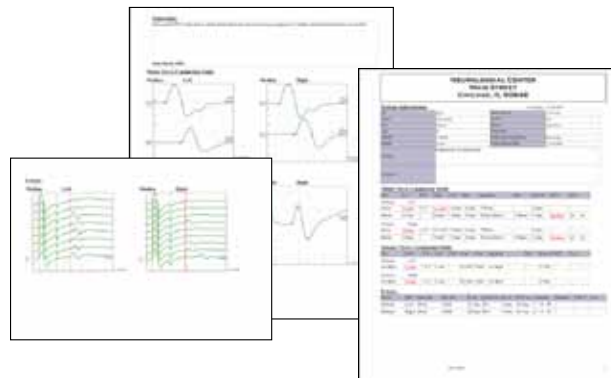


An optional HL-7 program provides communication between NeuroWorkbench (NWB) and other hospital information systems using HL-7 messages. These include:

- Patient Registration which registers patient information to NWB
- Reservation to schedule examination in the NWB program
- Reporting which sends out reports created by NeuroReport™

### **NeuroReport**

A unique report can be generated with the click of a button using our proprietary NeuroReport™ in selectable formats and layouts including your logo, result summary with highlighted abnormal and waveforms.



### **Comprehensive Customer Care and Services**

#### **Clinical and Technical Training**

To maximize utilization and satisfaction with your new system, Registered Clinical Support Specialists are available for customized product training programs at your facility. Biomedical Technicians can take advantage of our EEG, EMG and PSG Service Seminars offered quarterly at our Foothill Ranch, CA location.

#### **Technical Support**

Nihon Kohden's direct Field Service Support are backed by a team of certified Technical and Clinical Support Specialists available to assist around the clock with hardware and applications support and can securely connect into your system using remote diagnostic tools if additional help is needed.

#### **Service Agreements**

To assist you in delivering maximum system uptime, we offer flexible service agreement options and extended warranties available at the time of purchase or at any time during the warranty period.

#### **Supplies and Accessories**

To supplement the superior performance offered by the MEB-9400, we offer a full line of quality electrodes, needles and supplies.

#### **Our Commitment to You**

At Nihon Kohden, we understand that the ultimate test of a healthcare partner is their performance, not their promise. For more than 50 years, healthcare providers worldwide have relied on Nihon Kohden medical instruments, advanced technology services and productivity.

When performance counts, you can rely on Nihon Kohden to make a difference.

## Options

### Hardware

KD-019A or KD-026A Cart  
KH-001A Arm  
DR-531B-14 Headphones  
LS-102J LED Goggles  
JE-921A EEG Amplifier  
LS-120AJ Photic Stimulator

### Software

QP-951BK Quantitative EMG Software  
QP-952BK Single Fiber and Macro EMG Software  
QP-954BK Autonomic Nervous System Testing Software  
QP-930BK EMG Playback  
QP-219BK EMG Review Software  
NK-NWB NeuroWorkbench Server Software  
NK-NWB HL7 Interface Software

## SPECIFICATIONS

### Number of channels:

JB-942BK: 2, JB-944BK: 4

Input impedance: >200 M $\Omega$  (Differential mode),  $\geq$  1000 M $\Omega$  (Common mode)

Noise: <0.6 $\mu$ Vrms or less at 1 Hz to 10 kHz with input shorted

### Sensitivity:

1, 2, 5, 10, 20, 50, 100, 200, 500  $\mu$ V/div, 1, 2, 5, 10 mV/div  $\pm$ 5%

### Low-cut filter:

0.01, 0.02, 0.05, 0.1, 0.2, 0.5, 1, 2, 5, 10, 20, 50, 100, 200, 500 Hz,  
1, 2, 3 kHz 6 dB/oct ( $\pm$ 20%)

### High-cut filter:

10, 20, 50, 100, 200, 500 Hz, 1, 1.5, 2, 3, 5, 10, 20 kHz at 12 dB/oct ( $\pm$ 20%)

AC interference notch filter: 50 or 60 Hz  
(Rejection ratio: < 1/2-0)

Amplitude calibration: 1, 10, 100  $\mu$ V, 1, 10 mV (within  $\pm$ 5%)

Skin-electrode contact impedance check: 2, 5, 10, 20 k $\Omega$   
indication (within  $\pm$ 20%)

### Dimensions and Weight

Main unit, 350 (W) x 62 (H) x 395 (D) mm, 3.0 kg

PC Unit depends on the model selected.

Amplifier:

JB-942BK: 217 (W) x 174 (H) x 34 (D) mm, .71 kg

JB-944BK: 217 (W) x 174 (H) x 34 (D) mm, .74 kg

### Power Requirements

Line voltage: 100 to 240 V AC  $\pm$ 10% Line frequency: 50/60 Hz

Power input: 75 VA (DC-110B)

### Environment

Operating temperature: 10 to 35°C (50 to 95°F)

Operating humidity: 30% to 80%

Operating atmospheric pressure: 70 to 106 kPa

Storage temperature:

-20 to +65°C (-4 to 149°F)

Storage humidity: 20 to 80%

Storage atmospheric pressure: 70 to 106 kPa

*NeuroReport, NeuroNavi and NeuroWorkbench are registered trademarks of Nihon Kohden Corporation*



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