

Instrument Configuration

Mainframe,
 Pamplifier,
 Simulator,
 Dsplay,
 Pinter,
 Stimulating and collection electrode,
 Grounded electrode,
 Software system etc.

Main Technical Index of the Instrument

Computer part

CPU: Intel Pentium more than 800MHz
 EMS memory: More than 256M
 HD: More than 40G
 CD driver: CD-ROM or higher configuration
 I/O interface: more than four USB2.0 interfaces
 operating system: WINDOWS XP
 17" high resolution color display
 Laser printer

Main system part

A/D conversion resolution 16 Bit
 Sampling ratio 200kHz
 Analysis time 5-5000ms
 Stimulating frequency 0.1-50Hz

Amplifier part

four leads
 sensitivity 0.05 μ V-20mV/Grid
 earth noise EMG \leq 4 μ V (Vpp)
 EP \leq 0.1 μ V (Vpp) (1000 times in average)
 Common-mode rejection ratio \geq 100dB
 50Hz Ban wave setting
 upper limit Filter-frequency 20kHz
 lower limit Filter-frequency 0.01Hz
 plus amplifies 25 times-400000 times

Stimulator part

Current stimulator: constant current 0.2-100mA
 pulse width 50-1000 μ S
 short circuit and over loading protection

1. EMG:0-2500 μ vRMS (1-2000 μ V)
 2. Resolution : >0.25 μ v/div(same)
 3. BW: 8-1500Hz(1-20KHz)
 4.Main supression : > 40Db (\geq 100dB) 5. Tol-
 erance : 8% (\pm 10%)

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NeuroPro EMG 4

MDX Instruments Co. Inc USA



Summarization

EMG/EP system is based on electrophysiological detection principle. It is valuable on diagnosing neurogenic diseases and myogenic pathological changes, orientating neurogenic pathological changes, degree of damage and prognosis.

The application value of electrophysiological detection technology is increasing, which is mainly because that whether potential exercises or potential feeling can be analyzed using quantitative analysis along with the improving of record establishment and standardization of methodology. The value of quantitative analysis is as follow:

1. Can expatiate on the severity of the disease exactly .
2. Can compare the patient's along with the changes of time when the disease is progressing .
3. Can compare the results of patients tested by different people .
4. The change displayed through fix quantify can not be recognized by subjective analysis .

From here we can see, it not only evaluates the pathological changes objectively, orientates the neurogenic pathological changes correctly, but also evaluates the around nerval function characters correctly.

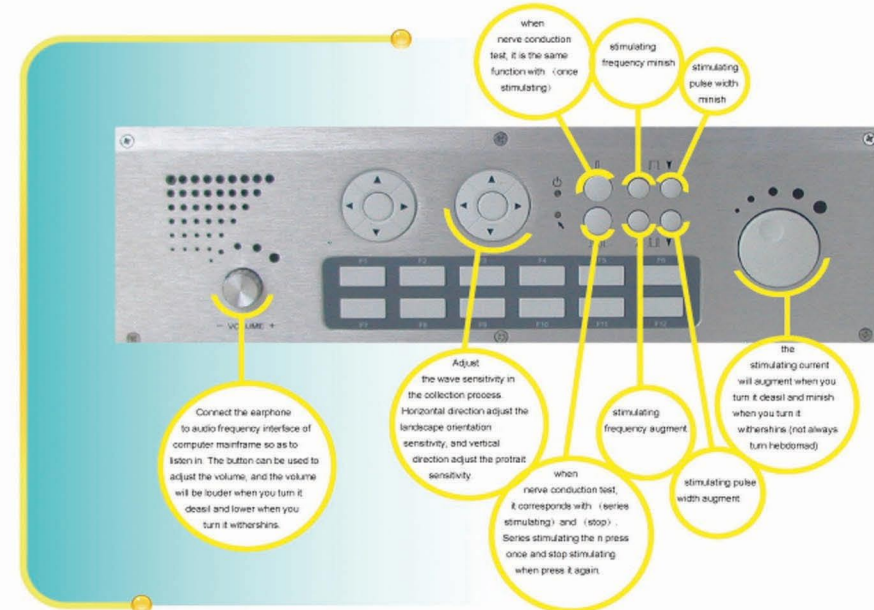
EMG/EP system is with a view to the above points. With the advantages of easy operation, clear test, exact record and beautiful interface, it helps a lot when the doctors of neural surgery, internal medicine, rehabilitation Ophthalmology, pediatrics etc. diagnoses.

Features of the Instrument

- (1) The software is the most popular international window system "Windows", which has a friendly interface and easy operation;
- (2) The software uses modularization design, which is easy to extend the function and update the version;
- (3) Self-contained patients archives management system, patients' data storage and fast read;
- (4) high speed and big capability HD, which can store a lot of information;
- (5) The whole hardware system uses integrated design, which is easy for compact configuration and convenient move.
- (6) The system equipping—medical special isolated power to make sure of tested people's safety.
- (7) The system has high anti-jamming ability, and requests less for the lab.



Full-featured Operating Panel



Wiring District



Applied Scope of the Instrument

EMG test;
 SCS test; MCS test; F Wave test; H Reflex test;
 Blink Reflex test; RNS test;
 BAEP test; VEP test; SEP test.