

## 48ch Portable Engineering Seismograph

# McSEIS-SX48



### <Abstract>

McSEIS-SX is a portable and cost effective 48 channel seismograph for refraction exploration, downhole PS logging and crosshole seismic for engineering and construction.

This is also used as a data acquisition system for multi-channel surface wave analysis.

The system is compact, light in weight to transport and do the job with a smaller 12VDC battery anywhere.

It's based on the Windows XP SP2 professional with XGA/TFT color display, Hard disk drive, USB2.0 ports with higher quality and reliable field performance.

### <Features>

- All-in-one seismograph for conventional refraction, multi-channel surface wave analysis and simple reflection survey for engineering application
- Very Compact, light in weight and low power consumption
- Real time noise monitoring for trigger and real time digital filter
- 24 bit dynamic range with high speed sampling rate: 33.3  $\mu$  s fastest
- Enough frequency response for Surface Wave Analysis with 4.5Hz geophones
- Easy data download to USB memory stick

## <Specifications>

### ●Data Acquisition

Number of Channels : 48ch max + 2AUX  
Input Connector : PT02A-22-55P (Bendix) x2  
Input Impedance : Differential 20K  $\Omega$  / 0.005  $\mu$  F  
Preamp Gain : 12, 30, 48dB  
Frequency Response : 2-4600Hz  
A/D Resolution : 24 bits  
Sampling Interval : 33.3, 50, 100, 200, 500, 1000,  
2000, 4000  $\mu$  sec  
Pre-Trigger : 0, 128 samples  
Data Length : 1K, 2K, 4K, 8K@<4msec  
and 16K/ch at 4msec sampling  
only  
Trigger Input : Hammer Switch (Contact  
Closure), Geophone  
Data Storage : SEG1(OYO SEG1) and SEG2

### ●System

CPU : ULV Intel Celeron Processor  
Display : 10.4", XGA/TFT color LCD  
Hard Disk : 80GB  
Interface : USB2.0 port x 3  
External keyboard port  
Power Requirement : 12VDC (10.5 to 13.5VDC)  
3.5A (standby), 5.0A (max)  
Operating Temperature : 0 - 45°C  
Physical  
Dimensions : 330(W) x 280(D) x 260(H) mm  
Weight : 11kg

### ●Others

Real Time Noise Monitor  
Digital Low-Pass Filter  
Notch Filter (post acquisition)  
Channel Switching  
Data Stacking  
AGC (TVG)

### ●Option

Printer  
Seismic Starter  
Geophone 28Hz, 4.5Hz  
Seismic Takeout Cable  
Data Processing Software: SeisImager/2D  
Borehole Pick Model-3315



JQA-2772

Please note specifications are subject to change without notice for the improvement.

- Instruments Division  
43 Miyukigaoka, Tsukuba, Ibaraki, 305-0841 Japan  
Phone: +81-(0)298-51-5078, Fax: +81-(0)298-51-7290  
e-mail: prosight@oyonet.oyo.co.jp
- Head Office  
2-6 Kudankita, 4-chome, Chiyoda-ku, Tokyo 102-0073 Japan  
Phone: +81-(0)3-3234-0811, Fax: +81-(0)3-3262-5169

■ Your representative

