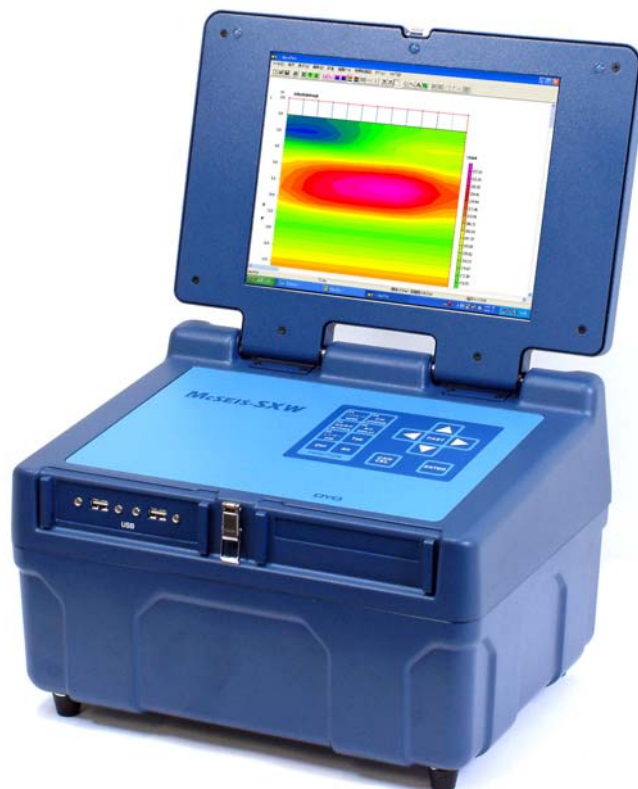


High Resolution Surface-Wave Seismograph

McSEIS-SXW



<Abstract>

This "Surface-wave data acquisition system" is our unique method to produce the underground image of S-wave velocity in two-dimension so easily with multi-point survey and our data analysis technique. McSEIS-SXW is well-designed instrument for the purpose of analyzing the structure of S-wave velocity efficiently. You can acquire the result of analysis at site with the bundled software, "SeisImager/SW". You can also analyze seismic refraction at site with another bundled software of "SeisImager/2D". It's based on the Windows XP SP2 professional with TFT color display, Hard disk drive, USB2.0 ports with higher quality and reliable field performance. Of course not only these advantages but you can make use of this device for various data acquisition for engineering purposes. McSEIS-SXW provides you higher performance than the others.

<Features>

- McSEIS-SXW receives surface-waves, which are generated by artificial sources such as sledge hammer, with 12 or 24 geophones. You can easily survey the underground without using large scale of source like dynamite or vibrators.
- The effective depth for survey is up to approximately 20 meter from the surface of the ground with easy-to-use geophones (4.5Hz).
- Our original technique "CMP Analysis" has been succeeded in improving the data accuracy of horizontal resolution and monitoring S-wave velocity model in 2D.
- With the installed software, you can analyze the underground automatically.
- The estimated N-value structures can be figured by inputting N-value which was measured with the method of Swedish Weight Sounding, SPT or Ram Sounding.
- Softwares for PC are also available (optional).
- McSEIS-SXW is widely available for various purpose of investigation for such as housing-site investigation, earthquake resistant study, for judgement of soil improvement and so on.

<Specification>

Data Acquisition:

Number of Channels:	24 + AUX1 for shot mark
Input Impedance:	20K Ω 0.05 μ F
Gain:	12, 30 and 48dB
Frequency Range:	2 - 4600Hz
A/D Resolution:	24 bits
Sampling Rate:	33.3, 50, 100, 200, 500, 1000, 2000, 4000 μ sec
Pre-Trigger:	0, 128 words
Memory Length:	1K, 2K, 4K, 8K, 16K words
Trigger Input:	Hammer switch, geophone
Trigger Level:	100 - 1000mV in 100mV step

System:

CPU:	ULV Intel Celeron Professor (400MHz)
OS:	Windows XP Professional
System memory:	256MB
Display:	10.4inch TFT color LCD 1024x768dots
HDD:	80GB
Data Format:	SEG-2
Interface:	USB2.0 x 3 ports, Keyboard
Power Requirement:	12VDC (10.5 to 13.5VDC) 2.0A (standby), 4.0A (max)
Operating Temperature:	0 - 45 deg C
Dimensions:	330 (W) x 280 (D) x 220 (H)mm
Weight:	8kg

Relation between sample rate and digital filter

Sampling Rate (μ sec)	Digital Lowpass Filter
33.3	4600 *1
50	4600 *1
100	1000
200	500
500	200
1000	100
2000	100

*1) analog anti-aliasing filter

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



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