

# SV II

## ***Vibration / Sound Monitor & Data collector***



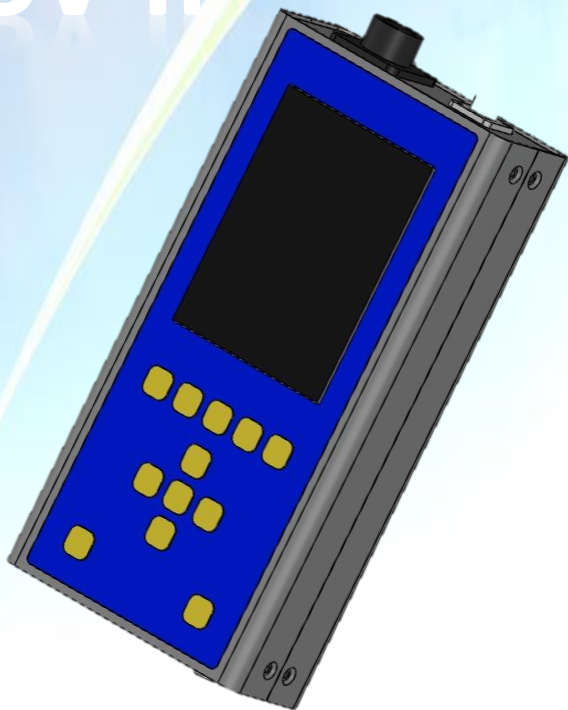
[www.svdigital.com](http://www.svdigital.com)



**SV  
CORPORATION**

# Seismic / Vibration & Sound Monitoring

SV II



### Features

- measurement of vibration in respect of peak particle velocity in various directions, frequency air (noise) over pressure due to blasting, construction activities. 4 channels system, 3 Ch. vibration & 1 Ch. Microphone
- Vibration Measurement by JIS C 1510(dBV)
- Vibration Measurement by DIN4150
- Simultaneously 3-Axis Vibration Level & Sound Level Display
- Simultaneously Multi-Processing & Display
- Vibration & Sound measurement by Trigger Level of Vibration Level
- LTE/USB Communication with PC Software
- 3.5" 240 \* 320 TFT-LCD + TSP
- Long term Data storage (4GB SD Memory card)
- Report and Post Processing & Analysis Software on PC
- Check the Saved Result Data and Measurement Setup by SV II on PC
- Measured data to convert to Trace, Octave, FFT graph on PC

### Applications

- Mining Monitoring
- Ground Vibration Monitoring
- Blast Monitoring
- Construction Field
- Bridge Monitoring
- Power Plant Monitoring
- Building Vibration Monitoring

SV-II is based on Smart technology with versatile application software to measure the Blast/Environment Vibration & Sound monitoring and analysis on the portable rugged system.

### Main Specifications

Operating system	WinCE for Device, Windows7 and higher(32bit,64bit) for PC	USB Interface	1 Device
CPU	PXA320 (860MHz)	Power	5V, 3A
Touch Screen	3.5" 240 * 320 TFT-LCD + TSP	International protection	IP64
Flash memory	NAND 128MD	Dimension & Weight	240 (W) x (D) x 320 (H)mm
System memory	DDR SDRAM 128MB	Weight	600g (without accessories) ultra-light weight
External memory slot	SD/MMC Slot	Operating temperature	-40 °C ~ 85 °C (-4 °F ~ 121 °F)
Communication	Serial	Humidity	5%~95%Non-condensing

### Data Acquisition Unit Specifications

A/D Converter	16 bit
Input Channel	4channel (3ch for Vibration and 1ch for Sound)
Sensor Type	MEMS & IEPE, Vibration +/- 2.5g full scale
Sampling Frequency	Vibration : 1.2kHz for each channel / Sound up to : 16kHz
Input Range	±5V (peak)
Measuring Range	Sound : 30~148 dB(50mV/Pa)
	Vibration : +/- 2.5g full scale
Frequency Range	Vibration : 0.5 ~ 500Hz(3dB) / Sound : 2 ~ 8000 Hz(3dB), Microphone Assembly with 2 meter cable, specification: Range : 30 to 148 dB with Liner weighting
Accuracy	+/- 5% or 0.5 mm/s/better, minimum 5 m cable length
Linear Accuracy	+/- 0.1 dB/30Hz
Trigger Range	minimum 0.10mm/s-0.15 mm/s, Manual entry of GPS waypoints
Record Time	1sec to user defined time Sec , up to 60 days of recording of full waveform, histogram & combination

# Seismic / Vibration & Sound Monitoring

## Seismic Vibration & Sound Measurement

### [Vibration]

- Provide the influence evaluation data nearby Structure : 3axis peak and PVS(mm/sec)
- Vibration Measuring Range 250mm/s, PPV, PVS, ACC, DISP, Freq.
- Frequency Range : 0.5 ~ 500Hz for each channels Vibration
- Accuracy : Less than 1% error
- Vibration Resolution: 0.01 mm/sec
- Vibration Measuring Sample Rate: More than 2100Hz
- Storage Sample Rate: Same as Vibration Measuring fs

### [Sound]

- Sound Measuring Range: 30 ~ 148 dBA
- Frequency Weighting Filter : A and L
- Frequency Range : 2 Hz ~ 8000 Hz
- Sound Accuracy : IEC 60651 Type2
- Sound Data : Simultaneously Lmax, Lmin, LeqLn, LeqAv

### [Common]

- Trigger Level : Set up from 0.1mm/sec with 0.1mm/sec step
- Measuring Mode : Selectable Manual, Single, Continuous mode (Unlimited Events)
- Selectable Measurement Time : 1sec, 2sec, 3sec, 5sec, 10sec, 1min, 5min, 30min, 1hr, 1day, User definable time
- Data Storage Capacity: SD Memory Card 4GB (Continuously 26 hrs. for the measurement data including Graph) Measurement cycle time: no dead time

### [Sensors] Standard Tri-axial Seismic Sensor and mic

- Range: 250mm/s and more,
- Trigger: minimum 0.10mm/s-0.15 mm/s,
- Resolution: minimum 0.007 mm/s-0.008 mm/s,
- Accuracy: +/- 5% or 0.5 mm/s/better, minimum 5 m cable length
- Frequency Range : 2 - 8kHz, Microphone Assembly
- with 2-meter cable, specification: Range : 30 to 148 dB with Liner
- Weighing scale, Liner resolution : minimum 0.015 Pa - 0.016Pa,
- Frequency response : 5 to 8kHz

### [Software]

- Vibration Data Analysis Modular Software with free upgrade
- Graph Standards DGMS & DIN 4150, time, FFT, frequency vs velocity, trigger time, acceleration, displacement, ZC

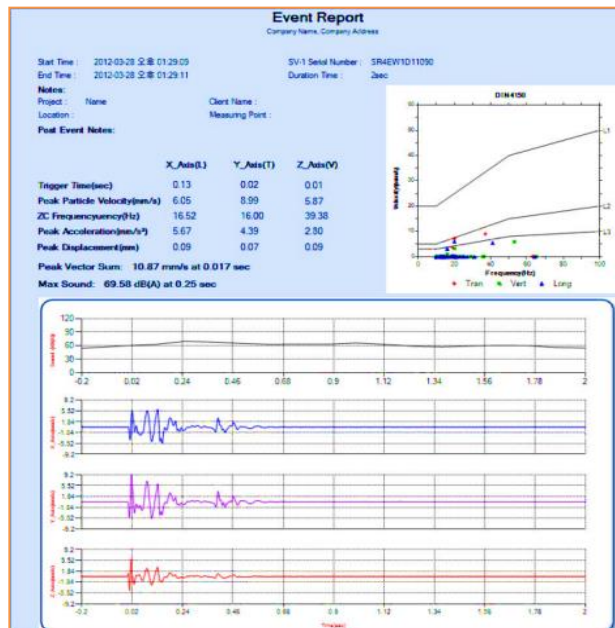
### [Accessories]

- SV-II vibration monitor device
- ONE Microphone Assembly with 2-meter cable with tripod
- ONE Tri-axial Geophone Assembly with 5-meter cable
- Ground Mounting Screws
- Tripod for Mic setup
- User Manual
- Carry case/bag



SV-II Vibration & Sound Analysis Software (3.0.0 (64bit)) - (Event Manager)

Sl. No.	Date/Time	Vel. Pk.	Vel. Peak	Vel. Peak Hold(Z_Ave)	PVS	LMax(Sound)
1	21/02/2019 01:16:05 PM	0.04	0.03	0.05	0.06	56.82
2	21/02/2019 01:20:17 PM	3.98	0.98	2.02	4.27	53.51
3	21/02/2019 01:20:52 PM	1.97	1.13	0.50	2.18	51.94
4	21/02/2019 01:30:44 PM	0.22	0.09	0.14	0.27	72.26
5	21/02/2019 01:36:05 PM	1.82	1.67	2.63	3.13	65.13
6	21/02/2019 01:58:50 PM	2.73	5.15	1.73	5.18	78.76
7	21/02/2019 02:00:11 PM	2.33	4.59	1.33	4.74	74.99
8	21/02/2019 02:08:22 PM	2.39	1.83	1.41	2.45	74.78
9	21/02/2019 02:09:29 PM	2.98	2.60	1.92	3.20	71.20
10	21/02/2019 02:19:49 PM	1.75	3.88	1.54	3.94	84.26
11	21/02/2019 02:20:16 PM	4.35	3.31	2.45	4.60	89.51
12	21/02/2019 02:22:51 PM	0.87	0.11	0.08	0.11	61.93
13	21/02/2019 02:23:21 PM	0.18	0.17	0.09	0.18	69.92
14	21/02/2019 02:27:31 PM	5.06	7.35	1.80	8.61	70.05
15	21/02/2019 02:27:50 PM	3.44	5.46	1.79	5.89	66.46
16	21/02/2019 02:28:08 PM	0.10	0.15	0.07	0.16	71.73
17	21/02/2019 02:36:25 PM	1.72	4.49	1.07	4.52	76.99
18	21/02/2019 02:36:40 PM	2.15	5.23	2.39	5.45	69.79
19	21/02/2019 02:43:34 PM	3.38	4.05	1.60	4.49	77.85



Event list, Time Data, Result data and DIN 4150

Company Specialized in Sound/Vibration



**SV Corporation**

RM. 302, Sangshin B/D, 719-1, (Yi-Dong), Jungbo-ro 11,  
Sangrok-Gu, Ansan, Kyongki-Do, 426-863, KOREA  
TEL : +82-31-501-4030 / FAX : +82-31-501-4032  
http://www.svdigital.com, www.svsmall.com



**SVib Software Technologies Pvt. Ltd.**

(Branch office of SV Corporation)

#129, 4th J Cross Road, Above Jumbo xerox-3rd floor Kasturinagar  
2nd Main Road, Bengaluru, Karnataka 560043, INDIA.  
Mob: +91 96207 51019, +91 72592 53724. [sales@svibtech.net](mailto:sales@svibtech.net),  
[info@svibtech.net](mailto:info@svibtech.net) <http://www.svibtech.net>, [www.svibtech.com](http://www.svibtech.com)