

## **SEISMIC SWITCH**

**Model SS-3** 

The SS-3 Seismic Switch is a low cost alternative to other monitoring systems. The unit is triggered upon a strong seismic motion and used to shutdown sensitive equipment, elevators, open automatic doors, or sound an alarm. Any device that can be controlled by relays.



SS-3 with peak bargraph option

The standard unit includes an internal triaxial +/-2g accelerometer. It has an internal trigger bandpass filter and will only trigger on accelerations with frequency components between 0.5Hz and 15Hz. The user can easily select, without programming, 6 standard acceleration thresholds that will trigger the unit. Standard trigger thresholds are from 0.01g through 0.5g in various steps.

When the user selected acceleration threshold is exceeded, the unit closes its internal relays. The relays will remain in the triggered condition as long as the acceleration remains above the selected threshold. After the acceleration drops below the selected threshold the

relays will automatically reset after a user defined delay time. The user may select the option to latch the relay requiring a manual reset.

An optional bar graph display (pictured above) can either display the maximum acceleration peak of the event on the channel that recorded the largest peak, or a three bar graph display that displays peak accelerations for all three channels.

An optional internal waveform logger will record wave form data upon the activation of the switch. Timeframe duration of the record is user selectable. PC setup and waveform display and analysis software is included.

The SS-3 is housed in a NEMA 4x environmental case with military style connector. It has an LED on the front panel to indicate trigger status. The unit is very easy to install and requires no maintenance. It includes a backup internal battery and A/C wall adapter. It is shipped fully calibrated with instructions on field installation and calibration.

Options include custom trigger levels, variable trigger adjust, remote reset of relays, realtime waveform data with recorder trigger pulse, external 12V battery pack, and R-1 rotational sensor.

## **SS-3 Specifications**

Accelerometer	Internal triaxial accelerometers
Full Scale	+/-2g, others optional
Outputs	2 form C (DPDT) contacts rated 120VAC 5A max
Selectable trigger levels	0.01, 0.025, 0.05, 0.1, 0.25, 0.5 g, others optional
Accuracy	5%
Relay output duration	3-20 Sec (adjustable) or latched
Trigger Bandwidth	0.5hz to 15Hz
Indicators	LED trigger, optional Peak display (bar graph for ei-
	ther maximum channel or 3 bar graphs for each chan-
	nel)
Adjustments	Accelerometer zero offset null, accelerometer span,
	Relay time delay
I/O Connector	10 pin military screw lock style
Operating Voltage	Standard 12V internal battery. 11 – 14 VDC
	(external)
Current	60mA max (triggered), 30mA idle.
Case size	5 x 5 x 2.5 inches (standard unit)
Case type	NEMA 4x, painted diecast aluminum
Environmental	Waterproof, dustproof
Operating temperature	-10° to 60° C
Vibration survival	5 g peak, 20 to 2,000 Hz
Shock survival	1000 g, 1 ms 100 g, 11 ms
Options	Custom trigger thresholds, additional relays, sensor
	output connector, external battery pack with charger,
	and internal waveform logger
Optional Internal Waveform Datalogger Specifications	
Channels	3 internal waveform and 1 trigger
Resolution	12 bits
Internal Data Capacity	256Kb
Maximum Sample Rate	1,900 sps
Communications to PC	USB
Software	PC parameter setup and DaqLab for Windows
	waveform display and analysis software