

How to use one 2500 Seismic Switch to control multiple elevators/escalators

Each model 2500 seismic switch has three relays. It can controls up to maximum three elevators without external circuits.

These three relays are marked as “Alarm Latching”, “Alarm Non-latching”, “Trouble Latching” on the unit. All the relays are individually configurable by the user. See the manual on page 9 section “relay” for more information.

Three events can activate the relays.

- 1) Alarm: earthquake motion that exceed the preset alarm threshold.
- 2) P-wave early warning: earthquake motion in vertical direction(P-wave) exceed a preset limit.
It can act as a backup for Alarm event.
- 3) Trouble: The above two events plus the event of any component fails.

The following table lists the different options available to choose from.

Event	Option						
	A	B	C	D	E	F	G
Alarm	●	✗	✗	●	●	●	✗
P-Wave Early Warning	✗	●	✗	●	✗	●	●
Trouble	✗	✗	●	✗	●	●	●

● Will activate relay ✗ Will not activate relay

The default values for each set of contacts are:

Relay	Option
Alarm Latching	A
Alarm Non-Latching	A
Trouble Latching	F

According to California Code of Regulations, if any component fails, the elevator will go into the earthquake-sensing mode and be removed from service in the same manner as though an earthquake were occurring. In California, Option “F” or “E” is required. If three relays are needed to control different elevators, all of them need to be configured as option” F”.