

I'm having trouble triggering my seismograph

Geometrics seismographs are designed to trigger on a contact closure, contact open, or signal input. The trigger circuit has protect from high voltages, but it is possible to damage the input circuit if voltages outside the specified range are connected directly to the input circuit. It is recommended that input signals, or voltages do not exceed + 10 volts.

A typical voltage measurement using a hand held volt meter on pins A (+) and B (-) of the 3 pin trigger input connector will be 4.9 volts DC. Voltages less than 4.0 volts may indicate a problem with the trigger circuitry. Often times the unit will continue to operate and trigger, but should be serviced at the next opportunity. If the circuit has been damaged, typical problems will include false triggers, or failure to trigger.

To verify the trigger function of the Seismograph, begin by removing the external connector from the trigger input, and short pins "A" and "B" together on the trigger input connector of the seismograph. The unit should trigger each time the pins touched as long as the interval between triggers is greater than the record time or the trigger hold off whichever is longer. It should not trigger unless these pins are touched. If consistent triggering is achieved using this method, then attach the hammer switch directly to the seismograph. Do not put the hammer switch on a hammer yet. Tap the hammer switch cylinder on the edge of a table or other hard object and verify consistent triggering. Watch the stack count on the screen to confirm each tap of the hammer switch results in a trigger of seismograph. Check the trigger hold off setting and trigger sensitivity settings. Set the trigger hold off to 0.5 sec. and the trigger sensitivity to 50. If the seismograph is triggering correctly, insert any trigger extension cables between the hammer switch and the seismograph. Repeat the test to confirm consistent triggering. Then attach the hammer switch to the hammer, or other device used for triggering. Make sure the cylinder of the hammer switch is firmly taped to the handle, and the direction of motion is across the diameter of the cylinder. You can also attach a geophone or other signal producing device at this point and verify proper triggering.

If the unit does not properly trigger, contact Geometrics customer service with the results of the tests above for assistance.

<http://support.geometrics.com/kb/questions.php?questionid=10>