

FAQ Sensors Over Range Test

1. Introduction

- GeoSIG sensors can be tested by shaking each axis to see if they reach the fullscale

2. Required Tools

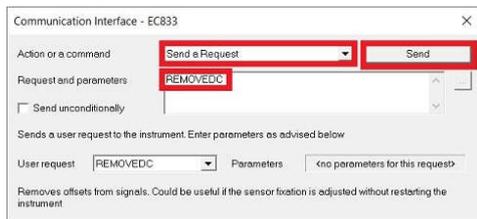
- Sensor to test
- Recorder/Datalogger to record sensor output
- Software to read recorded sensor output (GeoDAS is recommended)

3. Check for existing Procedures

- Please check if there is a project-specific procedure for your system to follow instead. Especially if your system is tied to an alarm system as the execution of the over range test described in this procedure may cause an alarm.

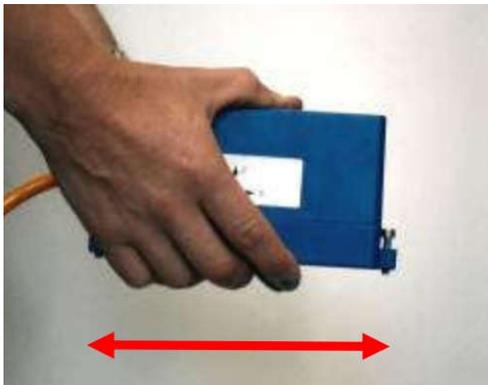
4. Remove Offset

- In GeoDAS window **Stations: General Information**, right-click on the station and choose **Instrument Control...** -> **Send a Request** -> **REMOVEDC** -> **[Send]**

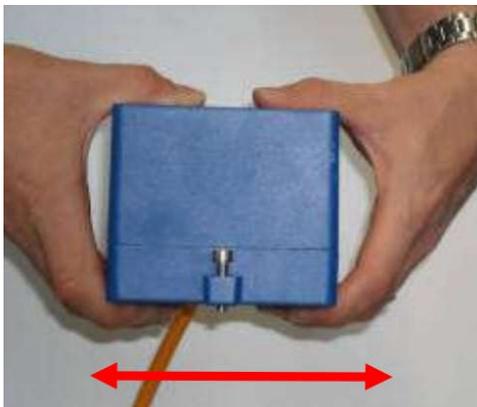


5. Shake each Sensor Axis

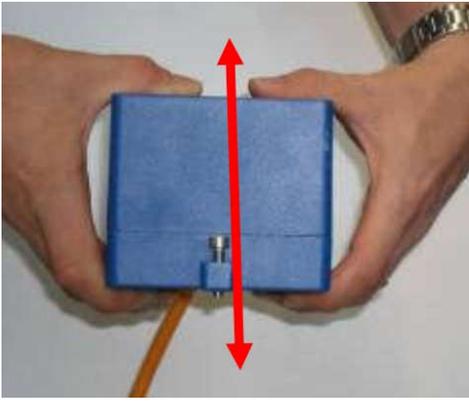
- Velocity sensors need only slight shaking to reach the fullscale. Accelerometers need stronger shaking, more than 2g can be hard to reach when shaking by hand.
- Shake the sensor horizontally in the direction of x-axis



- Shake the sensor horizontally in the direction of y-axis



- Shake the sensor vertically in the direction of z-axis



6. Access Over Range Test File

- With default setting, a miniseed file (file prefix TRG_) will be uploaded to the **Data** folder of your station in GeoDAS (C:\GeoDAS_DATA\Data\)
- If continuous recording (ringbuffer) is active, the over range test will also be visible in the latest ringbuffer (file prefix RBF_) uploaded to the folder **DataStreams** of your station (C:\GeoDAS_DATA\Datastreams\)

7. Check Over Range Test

- Double-click the file to open it in GeoDAS
- Click into the yellow part of the window to make the cursor appear
- Move the cursor to the positive and negative peaks of each axis (see red markings in the picture below)



- Check that the peak values exceed the fullscale of your sensor (the fullscale is indicated on the sensor label)