

Subject:STS2 seismometer mass re-centering procedure

The STS2 seismometer requires periodic re-centering of the inertial masses in each of the three independent sensors. The mass position is proportional to the single ended output voltage observed at the HOST BOX connector.

The masses should be re-centered whenever the mass position voltage of any or all of the masses is greater than or equal to 2 volts.

The Re-centering procedure is performed on all three elements simultaneously and is accomplished by doing the following:

1) With a voltmeter, measure the voltage between the following pins on the open connector of the HOST BOX;

signal	ground
T	F
U	F
V	F

2) If the voltage between the ground pin (F) and any one of the three mass position signal output pins (T,U,V) is greater than 2 volts then the masses must be re-centered;

3) All masses are re-centered simultaneously by depressing the black pushbutton on the HOST BOX, holding for at least one second, then then releasing the pushbutton;

4) Wait one minute - a relay will activate and deactivate at the beginning and end of the re-centering process; this activation and deactivation is clearly audible to an operator within a few feet of the seismometer; after one minute (relay deactivation)repeat measurement in step 1 above and, if necessary, repeat steps 2 and 3 in succession until all mass position voltages are less than two volts.

NOTE: the HOST BOX is a small green box with two connectors, a pushbutton, and an attached orange cable assembly; the orange cable connects directly to the seismometer - one of the connectors provides the interface to the acquisition system - the remaining connector carries the signals used to make the measurements in step 1 above;

Front of Pier

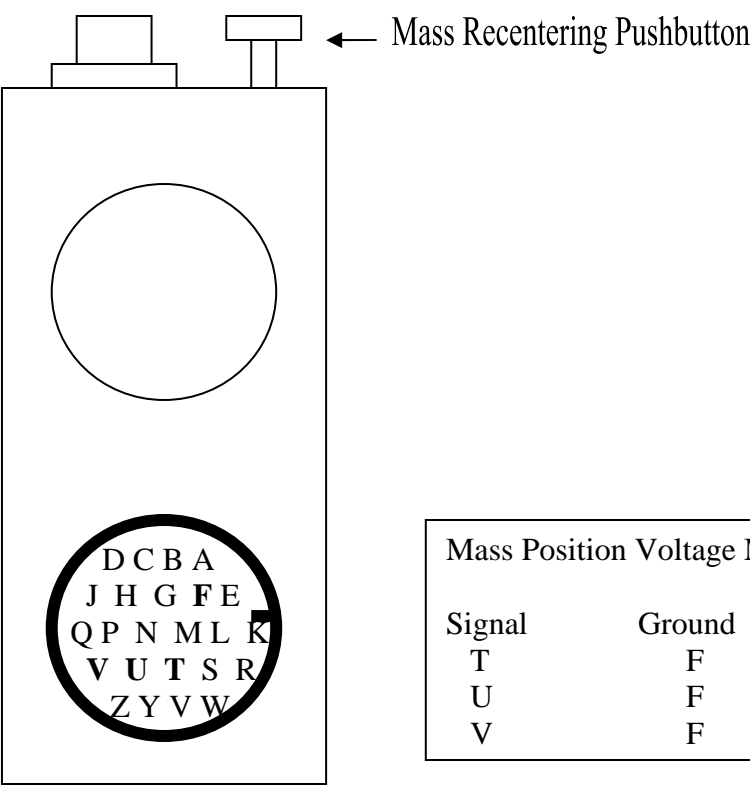


Fig. 1