

Geotech Instruments, LLC

Broadband Seismometer

Model KS-2000M Rev. 2 and KS-2000BH



- 2*1000 V/(m/sec) sensitivity (other sensitivities on special order)
- Three-component
- 120 s to 50 Hz (up to 100 Hz possible)

The Geotech Model **KS-2000M** is a new broadband seismometer based on the time proven Model KS-54000. Its small dimensions make it ideal for portable applications. However, both a surface package and a borehole package are available. A short-period version **KS-2000SP** is also available. Its manual can be downloaded by pressing [here](#) (2.8MB). The seismometer performs mass centering on remote command. The unmotorized version was discontinued.

Recordings with KS-2000 from [Waco](#) and [Dallas](#) seismic stations in Texas

IMPORTANT NOTICE: ALL KS-2000, KS-2000M, KS-2000BH, AND KS-2000EDU SEISMOMETERS SHIPPED BEFORE JULY 15, 2008 HAVE THE FACTORY SHIPPED SENSITIVITY VALUES FOR THE VELOCITY OUTPUT 5% (for vertical) and 11% (for horizontal) LOWER THAN THE ACTUAL VALUE, WHILE FOR THE ACCELERATION OUTPUT 7% (for vertical) and 12% (for horizontal) LOWER THAN THE ACTUAL VALUE.

ALSO, THE CONSTANTS IN SECTIONS 6.3.3 AND 6.3.4 OF THE MANUAL ARE 5% (for vertical) and 11% (for horizontal) TOO SMALL AND THE CONSTANTS IN SECTIONS 6.3.2 AND 6.3.5 ARE 7% (for vertical) and 12% (for horizontal) TOO SMALL. THE MANUAL WILL BE CORRECTED ACCORDINGLY.

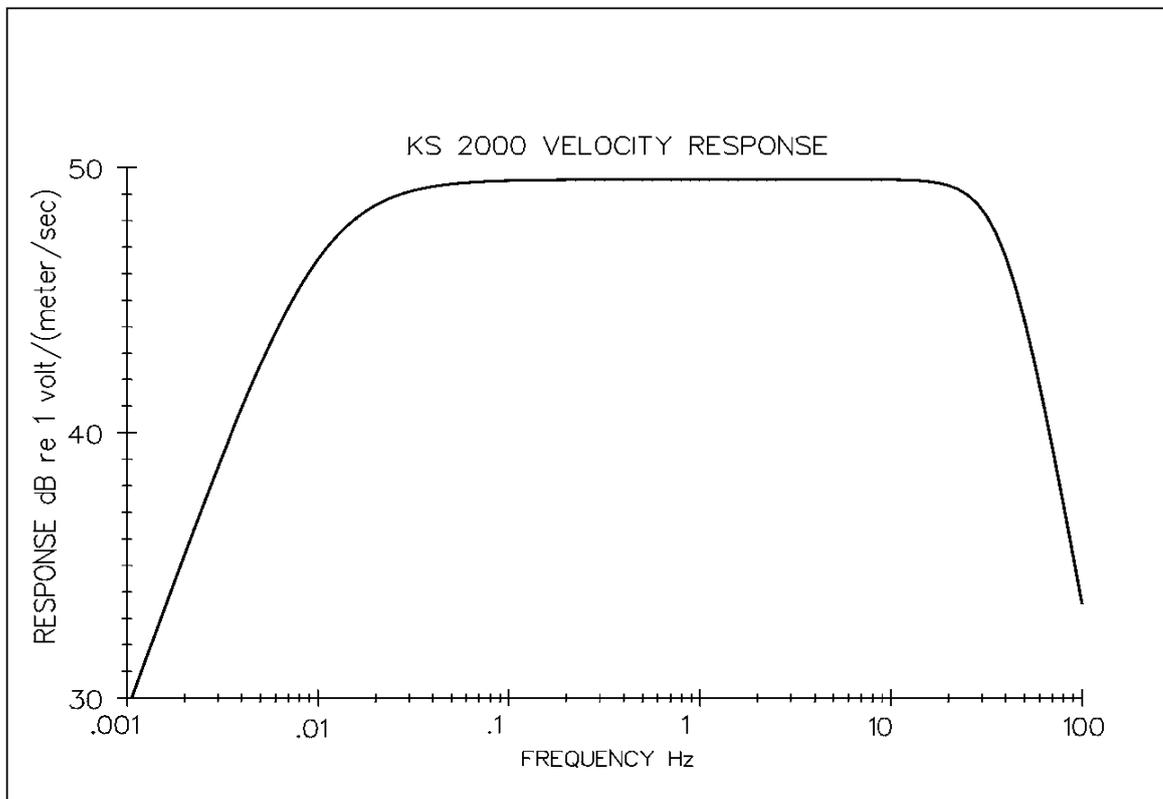


The **CI-2000** Control Interface helps monitoring the mass centering operation. Its manual can be downloaded by pressing [here](#) (0.3MB).

TECHNICAL SPECIFICATIONS

OPERATING CHARACTERISTICS

<u>Configuration</u>	- Three-component
<u>Output</u>	- Differential, 40 V peak-to-peak, optional 20 V peak-to-peak
<u>Sensitivity</u>	- 2*1000 V/(m/sec), other values possible
<u>Temperature Range</u>	- -30 to +65 °C (-22 to +149 °F)
<u>Frequency response</u>	- Flat to velocity from 120 s to 50 Hz (100,60,40,30,20,5,2,1 sec; 100Hz)
<u>Calibration Input Resistive Mode</u>	- Equivalent to flat ground acceleration
<u>Calibration Input Capacitive Mode</u>	- Equivalent to flat ground velocity
<u>Calibration Type</u>	- Voltage - sine wave, pulse, etc
<u>Calibration Level</u>	- 20 V peak-to-peak
<u>Dynamic range</u>	- 143 dB
<u>Noise</u>	- Below the Low Noise Model
<u>Mass centering</u>	- Manual and remote (M version only)
<u>Mass lock/unlock</u>	- No locking mechanism necessary by design
<u>Spurious resonance</u>	- Well above 100 Hz
<u>Power</u>	- 12 V dc (9 to 36 V), <0.9W



PHYSICAL CHARACTERISTICS

Dimensions (surface version)

<u>Height</u>	- 28.5 cm (11.2 in.) with handle
<u>Diameter</u>	- 19.0 cm (7.5 in.)
<u>Net Weight</u>	- 11.3 kg (25 lbs.)
<u>Submerged Operating</u>	- NEMA 6 or IP67

Dimensions (borehole version)

<u>Height</u>	- 143 cm (56 in.)
<u>Diameter</u>	- 8.9 cm (3.5 in.)
<u>Net Weight</u>	- 19 kg (42 lbs.)
<u>Submerged Operating</u>	- Up to 400 m