GURALP SYSTEMS

CMG-6TD
Digital sensor

Installation

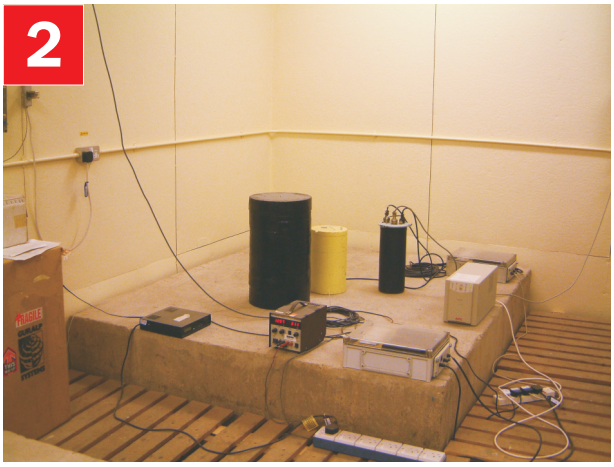
1



Check you have all components and cables.
- CMG-6TD digital medium motion seismometer
- Breakout box
- GPS receiver
- GPS—breakout box cable
- Breakout box—PC cable
- Breakout box—power cable
- Sensor calibration data booklet

You will need a Windows or Linux PC with an RS232 port and a 12–24 V DC power supply.

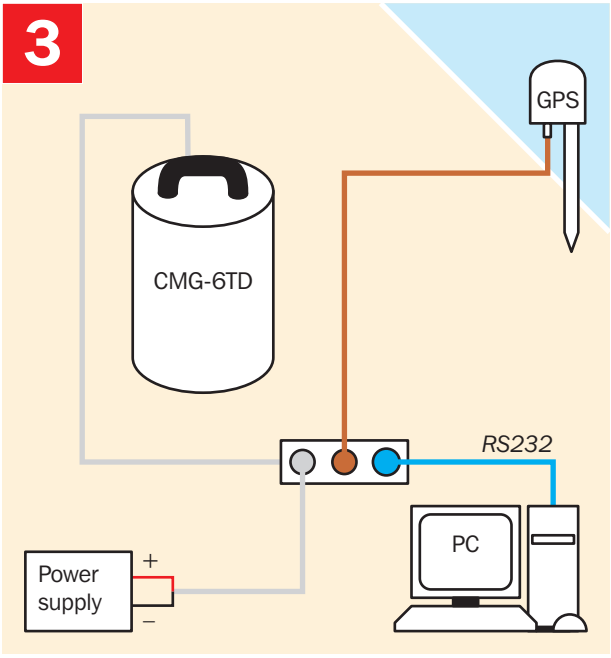
2



Choose suitable sites to install the sensor and GPS. The sensor should be mounted
- at, or ideally below, ground level
- in contact with bedrock, if possible
- otherwise, on a hard granite or concrete pier
- in an environment with constant temperature
- shielded from air currents
- away from electrical cables and appliances

The GPS should be placed
- within 15 m of the sensor
- in a place with a wide view of the sky and a low horizon.

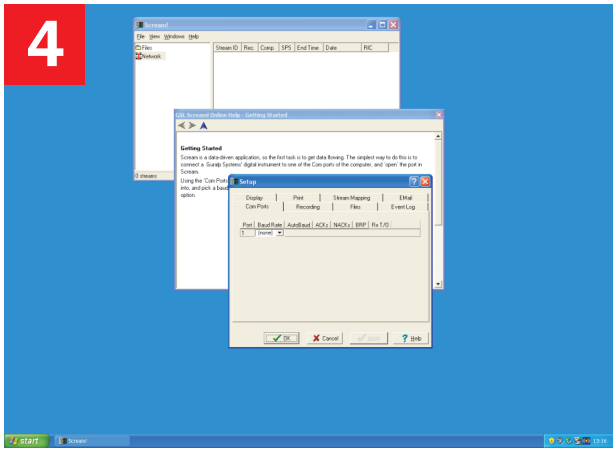
3



Connect the various parts together.

- Connect the brown cable attached to the GPS to the 6-pin socket on the breakout box.
- The blue cable ends at a 9-pin RS232 socket. Connect this socket to your PC's serial connector. Connect the other end to the 6-pin plug on the breakout box.
- The grey cable ends in red and black wires. Connect the black wire to the negative (–) terminal of the power supply, and the red wire to the positive (+) terminal.
  Connect the other end to the 10-pin plug on the breakout box.
- The cable moulded into the breakout box ends at a 10-pin mil-spec socket. Attach this to the *DATA* connector on the sensor. *Do this step last.*

Installation

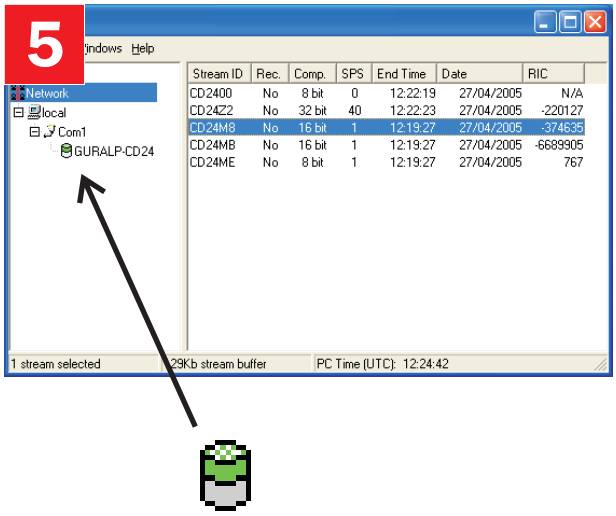


Start the PC and run Güralp Systems' Scream! software.

If you have not run Scream! before, the *Setup* window will open automatically. Otherwise, choose *File* → *Setup...* from the main menu and view the *Com Ports* tab.

Set the *Baud Rate* to 19200 and click *OK*.

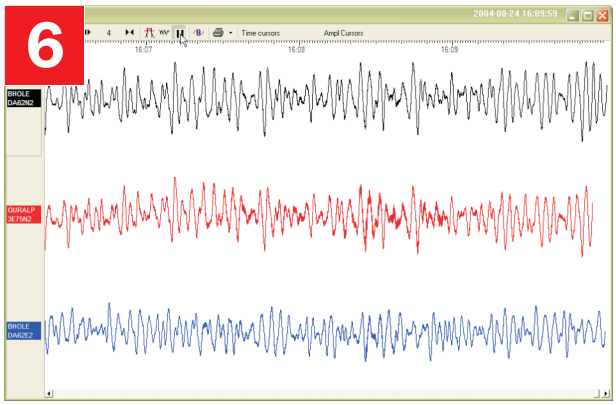
Data streams should start appearing in the main window.



After a few minutes, the top half of the digitizer icon on the left should change from grey to green.

If the top half fails to turn green, there is a problem receiving GPS signals. The status messages in the *****00* stream may help you diagnose the problem.

If the bottom half turns red, the sensor is not level. Move the sensor to a more level surface and try again.



Select some data streams and double-click. A *Waveview* window will open on the streams. Check that the output responds to vibrations near the sensor.

Please refer to the full manual for detailed usage instructions, calibration and troubleshooting.