



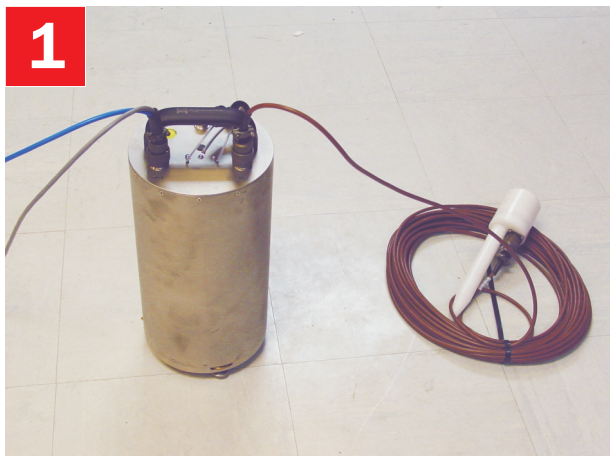
GURALP SYSTEMS

CMG-40TD

Digital sensor

Installation

1

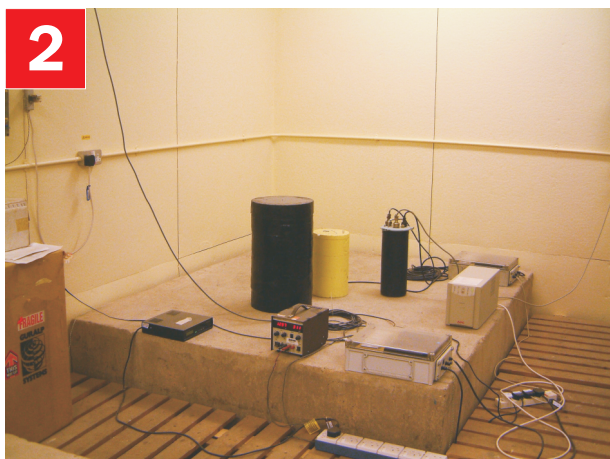


Check you have all components and cables.

- CMG-40TD digital medium motion seismometer
- GPS receiver
- Brown GPS—sensor cable
- Blue/grey combined sensor—PC and power cables
- 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.

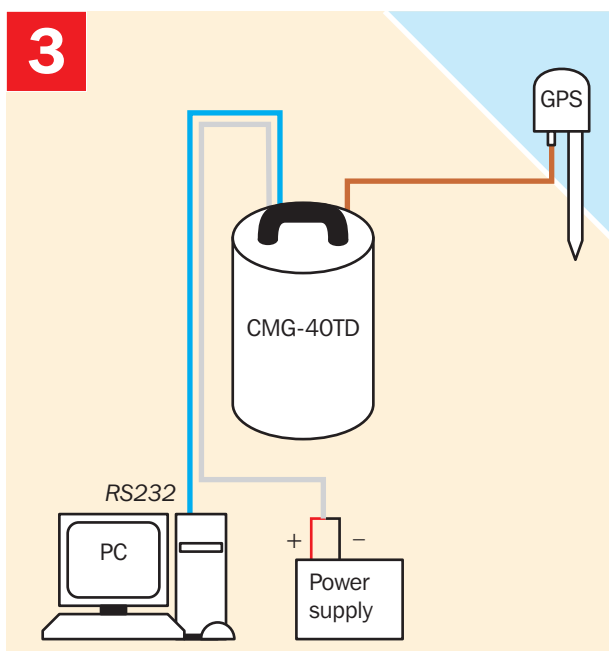
The sensor should be mounted

- 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



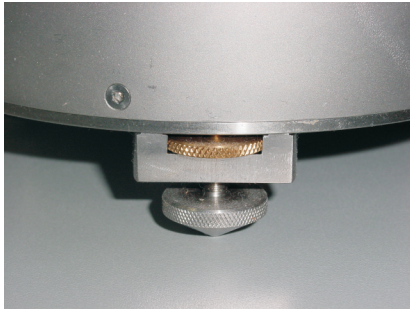
Connect the various parts together.

- Connect the brown cable attached to the GPS to the GPS connector on the sensor.
- The blue cable ends at a 9-pin RS232 socket. Connect this socket to your PC's serial connector.
- The attached 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.
- The blue and grey cables are joined together at a 10-pin mil-spec socket. Attach this to the DATA connector on the sensor. *Do this step last.*

To test the installation, follow the steps overleaf.

Installation

4

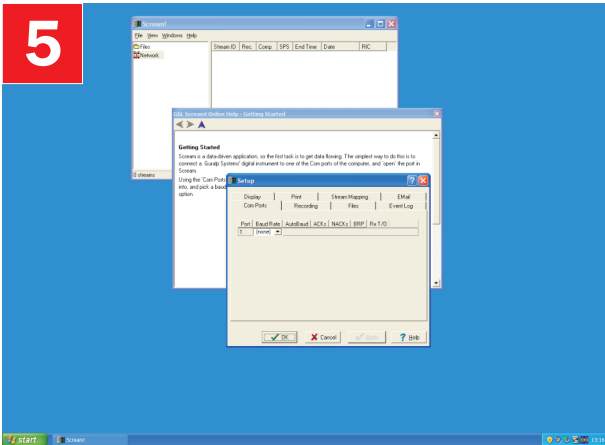


Loosen the brass locking nut on one of the adjustable feet. Turn the foot, screwing it in or out to level the sensor. Check using the spirit level on the sensor lid.

Repeat with the other adjustable feet, until the bubble in the spirit level lies entirely within the inner circle.

Tighten the brass locking nuts *downwards* to secure the

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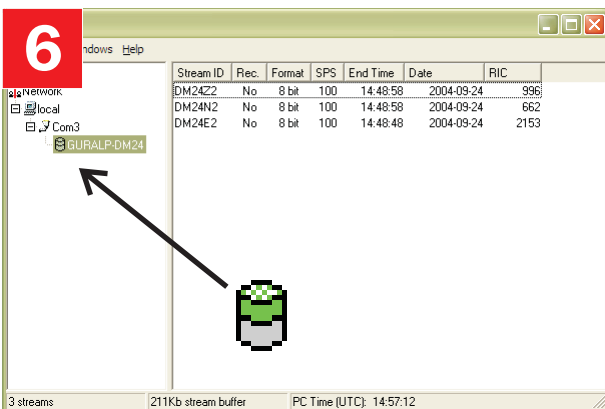


Start the PC and run Güralp Systems' ScreaM! software.

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 38400 and click *OK*. Data streams should start appearing in the main window.

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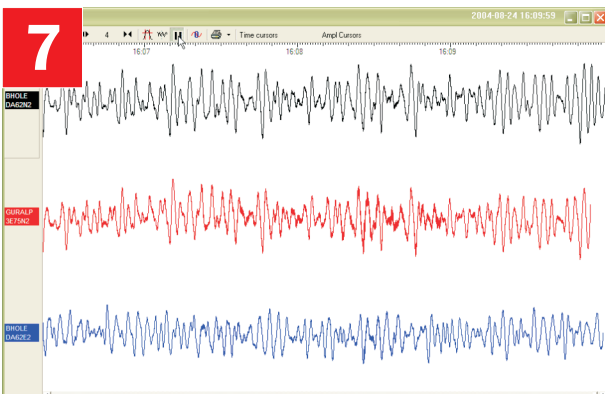


Look for the digitizer icon on the left side of the window. After a few minutes, the top half of the digitizer icon should change from grey to green.

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.

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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.