GURALP SYSTEMS

CMG-DM24
Digitizer

Installation

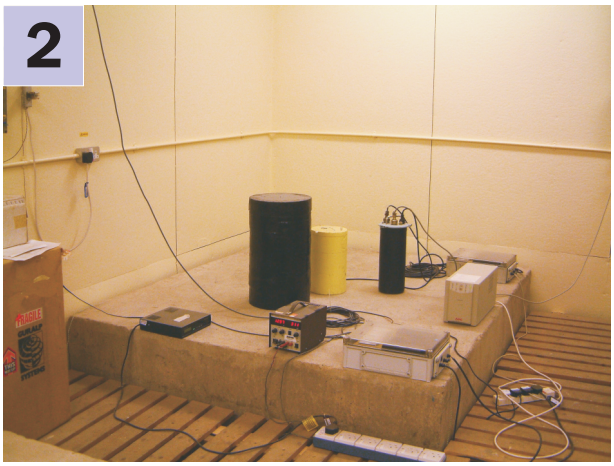
1

Check you have all components and cables.

- CMG-DM24 digitizer
- GPS receiver
- Brown GPS—digitizer cable
- Blue/grey combined digitizer—PC and power cables
- Digitizer calibration data booklet

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

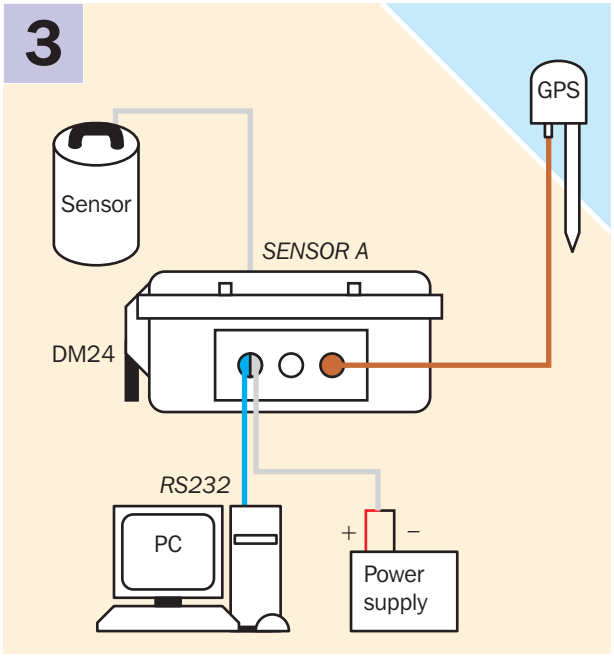
2



Choose suitable sites to install the digitizer and GPS. The DM24 should be placed
- near to the sensor
- at, or ideally below, ground level
- in an environment with constant temperature
- away from electrical cables and appliances

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

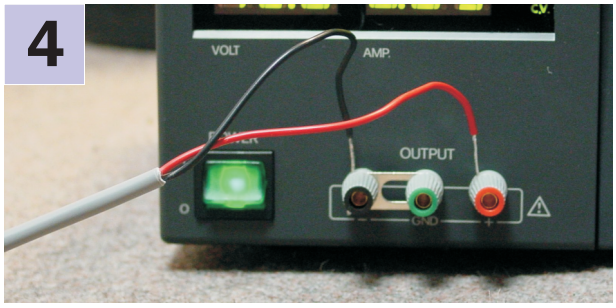
3



Connect the various parts together.
- Connect the grey sensor cable to the *SENSOR A* socket on the digitizer. Connect a second sensor to *SENSOR B* if applicable. To use a sensor's remote mass control facilities, it must be connected to the *SENSOR A* port.
- Connect the brown cable attached to the GPS to the *GPS* socket on the digitizer.
- 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 digitizer. *Do this step last.*

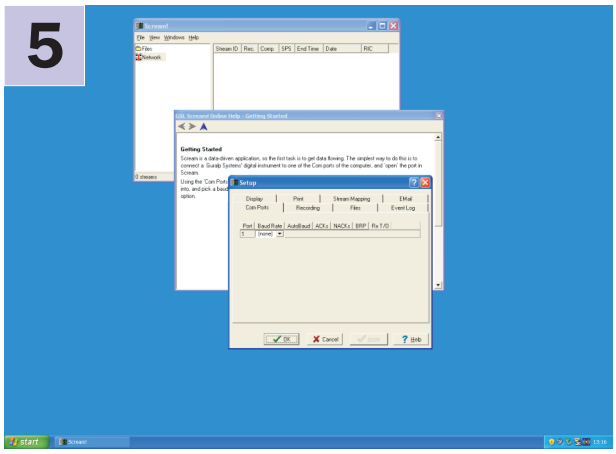
Testing

4



Switch on the power supply and measure the current through the instrument. With the GPS connected and running, the current should be around 120 mA. Once a fix has been obtained, the digitizer will power down the GPS, and the current will drop to around 90 mA.

5

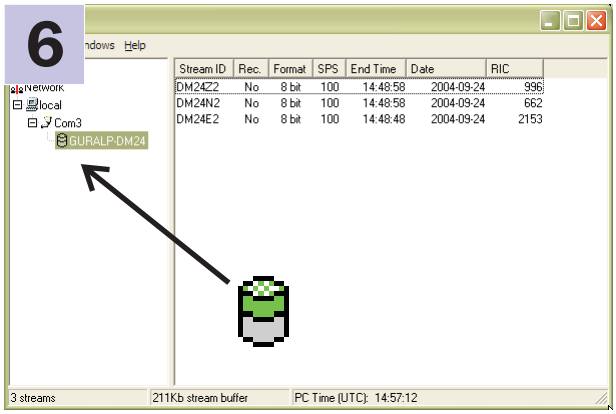


Start the PC and run Güralp Systems' Scream! software (provided, or available for download.)

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.

6



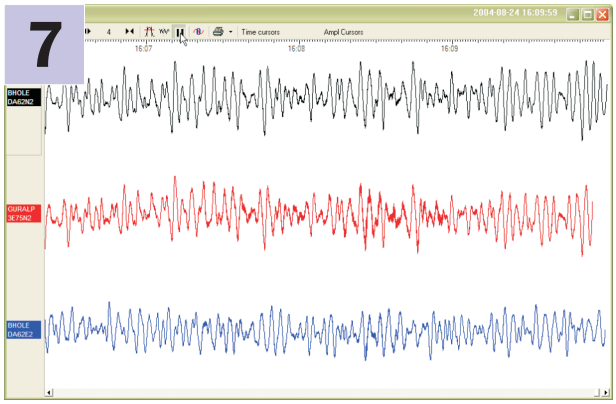
Unlock the sensor (if applicable), and leave it running for a few minutes.

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.

7



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.