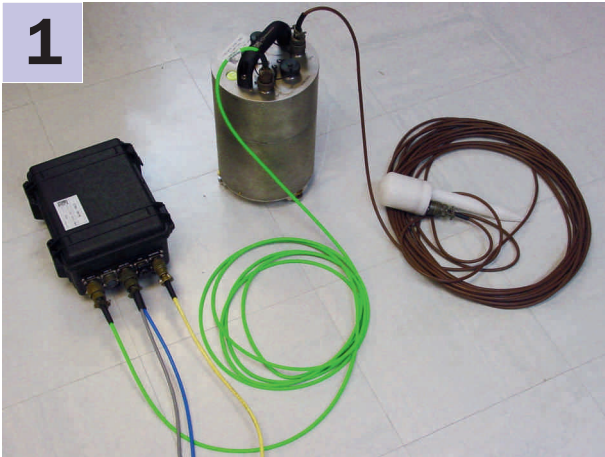# GURALP SYSTEMS

# CMG-EAM
## Acquisition module
### Platinum Firmware

## Network installation

**1**



Check you have all components and cables.

* The CMG-EAM module
* Green cable (digitizer↔EAM)
* Blue/grey combined cable (EAM↔PC and power)
* Yellow cable (EAM↔Ethernet)

You will need a Windows or Linux PC with an RS232 (COM) port, a Güralp Systems digitizer or digital sensor and a DC power supply of between 12 and 24 volts.

Choose a suitable location for the EAM.

**2**
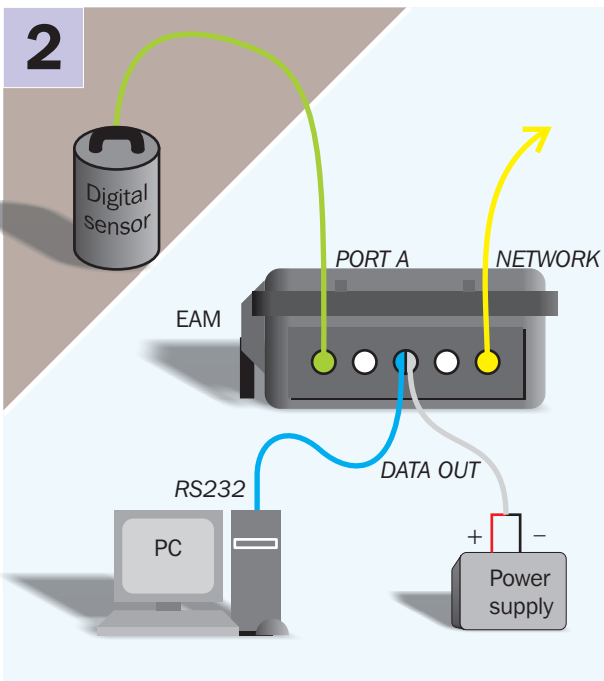


Connect the various parts together:
* Connect the green digitizer cable (signal + power) between the *PORT A* socket on the EAM and the *DATA* connector on the digitizer. Connect a second digitizer or digital sensor to *PORT B* if applicable;
* Connect the yellow EAM↔Ethernet cable between the *NETWORK* socket on the EAM and your network switch or hub;
* Connect the 9-pin 'D' connector on the blue cable to your PC's serial (COM) connector;
* Connect the free, stripped end of the grey cable to the power supply. Connect the black wire to the negative (−) terminal 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 OUT* connector on the EAM, and switch on the power supply. *Do this step last.*

**3**
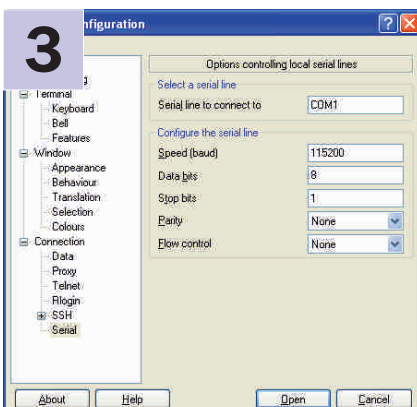


Run a terminal program, e.g. PuTTY, on your PC. Connect to the relevant serial port with these settings:
* 115,200 baud;
* 8 data bits;
* No parity bit;
* 1 stop bit;
* No hardware flow control
* No software flow control; and
* vt100 emulation (necessary for `gconfig`).

Press *ENTER* a few times until you get a ***login:*** prompt.

# Network installation

**4** When you get the "login:" prompt, type **`root`** and press *<ENTER>*.
Enter the password **`guralp3`** and press *<ENTER>* again.

You should get a prompt which looks like
`[eam-1234 ~]`

You can now start entering commands. Type **`passwd`**, and press *<ENTER>*. Enter a new password for the administrator account. If you must write it down, store it securely.

**5** Type **net-setup** to configure the network interface. Choose first whether to use DHCP or static addressing. If using static addressing, specify the IP address (in CIDR format) on the next screen. If required, you can also specify a default router (gateway) and up to two DNS servers.

CIDR format requires the IP address to be followed by a forward-slash and then the number of network bits in the address, which is usually 24. A typical CIDR IP address is 192.168.0.1/24

Use the *<TAB>* key to highlight the `OK` button and then press *<ENTER>.*

**6** 
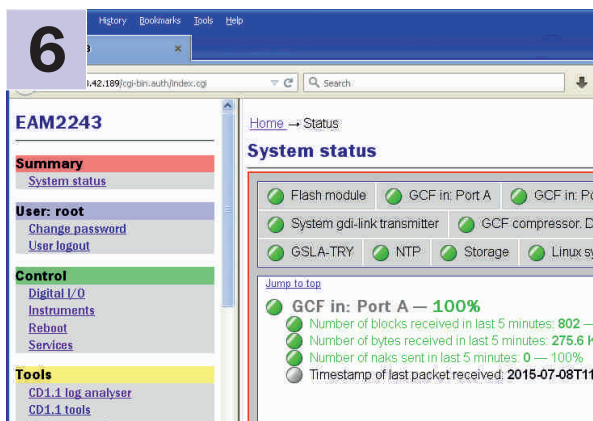
Navigate your Web browser to *https://aaa.bbb.ccc.ddd/* replacing *aaa.bbb.ccc.ddd* with the IP address of the EAM.

Click "User login" and then enter the username **root** and the password you chose in step 4 - You should see the EAM's Web interface.

In the main status display, click the tab labelled "GCF in: Port A". Where there is a connected digitiser, the indicator is green to indicate that GCF data are being received. The number of packets received in the last five minutes is also displayed. Use this to check the connection.

**7** 
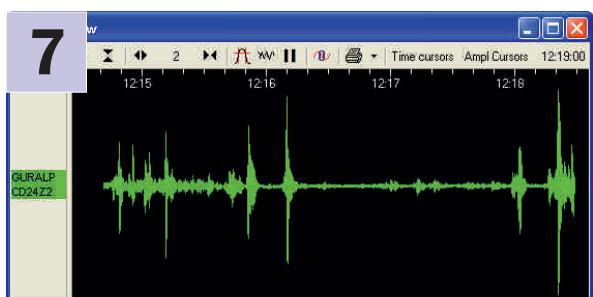
Run Scream! on a computer elsewhere on your network, and use the Network Control window to add a new UDP server at port 1567 of the EAM. Right-click and select `GCFSEND:B`. Check that the data streams appear.

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