DataHog2 setting up relay channels

Connect the DataHog 2 datalead to the RS232 port on the logger, and to the appropriate serial communications port on your PC.

Start the communications software (whichever version you are using) as usual.

Wake up the DataHog by pressing a key after the displayed message as usual. When the logger 'wakes up' you will see the Main Menu displayed. (Please remember that whilst the logger is 'awake' and in Main Menu mode, it is not recording any measurements.)

To reconfigure a relay channel, choose Option C from the Main Menu (by pressing 'C'). Please check your Hardware Configuration Certificate at the front of your DataHog 2 manual before you begin. This will show all the information you will be asked to enter.

Enter the Relay number you wish to configure, e.g. 1

Enter the Software Channel Number of the channel you wish to associate with this relay, e.g. 00.

Enter the relay threshold in the format requested - see below for examples for different channel types

The choices you have just entered will be displayed for your confirmation, however the threshold is now expressed in the units of measurement (e.g. knots). Press 'Y' to confirm and return to the Main Menu.

It is advisable to check that the changes you have just made are in place before returning the DataHog 2 to logging mode.

From the Main Menu, choose Option 1 to display the current setup.

Choose '4' from the sub-menu to check the relay setup. The relay number will be shown with its associated software channel and its threshold setting.

Choose '6' to return to Main Menu

Press ESCAPE to return the DataHog 2 to logging mode. Wait for the message 'ANY NUMERIC KEY TO WAKE UP' to appear before disconnecting the datalead and PC.

FORMAT TO ENTER RELAY THRESHOLD

Humidity channels - enter RH% value in the format xxx.x *(e.g. 045.0 for 45%RH)*

Temperature channels - enter the temperature value, with sign in the format +xxx.xx or -xxx.xx *(e.g. +018.50 for 18.5 °C)*

Ax+B scaled channels - the threshold must be entered as a count value with a +/- sign.

The logger's Full Scale count value is +19000.

The sensor's Full Scale empirical unit value will be shown on the logger's hardware Configuration Certificate *(e.g. 3558.9 for the sensor SKE 510/I 22302)*

So the number of counts per sensor unit is +19000 / (sensor Full Scale)

(e.g. +19000 / 3558.9 = +5.34 for the sensor SKE 510/I 22302)

Multiply the number of counts per sensor unit by the threshold in sensor units required (to obtain the counts value at the threshold) and enter this in the format +xxxxx or -xxxxx

*(e.g. to switch sensor SKE 510/I 22302 at a threshold of 50 watts/m2, +5.34 * 50 watt/m2 = 267 - enter as +00267)*

Windvane sensors - see Appendix 5 at the back of the logger manual for a table of Count value against wind direction degrees. Enter the value as +xxxxx *(e.g. +01621 for 45 degrees)*