



Digital Input Problems

Datahog2 Loggers with Digital Inputs Problem & Solution

Problem

Digital inputs (e.g. wind speed and rain channels) record zero, erratically or give strange values when all other channels are recording as normal.

Reason

Under specific circumstances the DataHog2 will display the above problem. It is consistent and repeatable and so can be overcome by careful use.

When power is removed from the logger and then reapplied, the logger automatically continues in log mode as it was before the power was lost except for digital channels. Logging of digital channels does not restart unless the logger is woken up into Main Menu mode and then returned back to log mode. This initiates all channels, including digital inputs.

Solution

If power is interrupted or lost, reapply power, wake up the logger into Main Menu mode, then press Escape to return to log mode.

When replacing batteries it is good practice to make a quick check of the reported battery voltage before leaving to log unattended. (Main Menu, Option 1, sub-menu option 5 displays logger setup including battery voltage).

This good practice routine will prevent the above problem ever occurring.

Automatic Software Controlled Systems

If it can be detected that power has been lost and resumed, e.g. by unexpected zeroes recorded on digital channels, initiate the following:

1. Wake up logger by sending a continual string of 2s for a period of say 12 seconds (must be greater than the 10 second ANY NUMERIC KEY message period).
2. This should either put the logger into Main Menu mode or into Option 2, show software version.
3. Send ESC, ESC, ESC, 0,0,0,0, ESC, ESC, ESC (about 0.5 seconds apart) which is guaranteed to always return the logger to log mode.

NOTE once power is resumed, the PSU Reset relay must be activated before the DataHog will operate again (this may be done inside the logger itself or by pushing the red PSU Reset button on the Mains Hog).