RMS INSTRUMENTS
Data Recording Systems

RELEASE NOTES

DAARC500 DAS & Adaptive Aeromagnetic Real-Time Compensator

Host Firmware Release RMS11030-01-D

These release notes contain important information about the new firmware and how it will affect the performance of instruments in which it is installed. The notes include information about enhancements, adaptive changes, and corrections to known problems. Please read this documentation carefully.

When a new revision of the user's guide for the product to which this firmware applies, accompanies the firmware release, references to the pertinent sections are shown in square brackets.

Compatibility:

(D)AARC500 Front End –   Requires firmware RMS1877-03-E or later

1. The numerical section of the main screen, used to display signal values in real-time, can now work with either the *standard* configuration, or with a *custom* configuration.

   The standard configuration remains as it has been in the past – the first row of numerical values shows uncompensated Mag1–Mag8, the second row shows fourth differences, and the third row compensated values.

   The custom configuration allows the user to select the signals for display. They can be selected from the set of 179 signals available (which are also accessible for graphical display on the screen and/or chart recorder). Signal values are shown in their "native" units (e.g., 'nT' for all magnetics, engineering units for analog channels, etc.), and each is preceded by a unique mnemonic identifying it.

   [User's Guide, Section 3.3.2]

2. An additional item can now be included in data packets transmitted out via any of the 8 general-purpose serial channels. This field (RALT) is intended for transmission of readings from a radar altimeter to an external navigation system. This is required for precise altitude control during flight in certain applications. [The packet generated has a format compatible with the input expected by navigation systems from AG-NAV.]

   [User's Guide, Section 3.4.7.3]

3. Operation of the unit at *access level* 0 has become significantly more restricted, in terms of access to configuration parameters. This is the most basic of the access levels available, and the only one that requires no password. Amongst others, a number of entries in the *options* menu, for set up of various configuration parameters, are no longer visible/accessible.

    This is intended to (i) prevent accidental changes to configuration parameters by field operators, and (ii) simplify the *options* menu making it easier to identify the entries commonly used during day-to-day operation.

    [User's Guide, Section 3.4.1.1a]

4. Enhanced the command set supported by the *remote control* interface (J13). A new command allows selection of any of the graph configuration files (*graph1.y–graph16.y*). Two other commands were also added, which allow to easily scroll ("up" and "down") the set of graph configuration files that have been defined.

    [User's Guide, Section 3.8.2]

5. The up-arrow and down-arrow keys on a keyboard connected to the unit can be used to scroll through the various graph configuration files.

    [User's Guide, Section 3.8.3]

6. The window used for monitoring analog signals numerically, now uses a more "conventional" decimal notation. When necessary, to display a value either too large or too small, it automatically switches to exponential notation.

7. Enhancements to the user interface in the serial I/O configuration window, prevent the modification of parameters which are not applicable when a specific type of protocol has been selected for data reception.

8. Graph traces are cleared after switching to a different graph screen.