

RELEASE NOTES

AARC510

Adaptive Aeromagnetic Real-Time Compensator

Host Firmware Release RMS11031-02-E

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 outline functional enhancements, adaptive changes and, if applicable, problem corrections.

Please read this documentation carefully. References to pertinent sections in the product's user's guide are shown in square brackets.

Compatibility:

(D)AARC500 Front End – Requires firmware RMS1877-04-E or later

AARC5XX Support Software – Requires v. Apr/2018 or later

1. The firmware now supports the next-generation processor used in AARC510 systems with Hardware Rev. \geq 2.00.
[User's Guide: Section 1.1]
2. The maximum data output & recording rate (F_{SH}) has increased from 40 to 80 Hz in systems with Hardware Rev. \geq 2.00.
[User's Guide: Section 3.4.1.1]
3. Support of *sweep mode* for frequency-domain analysis functions. Sequentially processes and displays sliding windows of data (PSD, coherence), from start to end of a file. Very useful, for example, in troubleshooting installations when trying to identify short bursts of interference that may occur only occasionally.
[User's Guide: Section 3.9.3]
4. New command ('Qq') for the remote control interface: triggers an orderly and safe shutdown of the system. Case sensitive. Accepted regardless of whether the system is idle or in run-mode. Functionally, equivalent to new keyboard hot-key 'CTL+ALT+Q' (point #6).
[User's Guide: Section 3.8.2]

5. New pair of commands ('7' and '8') for the remote control interface: start calibration and compensated run modes, respectively, with file-name checking taking place. This is the same functionality previously offered by commands '1' and '2'.

Commands '1' and '2' remain in place, but now without file-name checking.

[User's Guide: Section 3.8.2]

6. New keyboard hot-key, 'CTL+ALT+Q'. Triggers an orderly and safe shutdown of the system. Accepted regardless of whether the system is idle or in run-mode. Functionally, equivalent to new command 'Qq' for the remote control port (point #4).

[User's Guide: Section 3.8.3]

7. Minor/cosmetic: The default value of the *gradient-gain* parameter for adaptive mode has changed from 120 to 1. The initial label 'Count' (in red) on the main window has changed to '0' (in black). Potential redundant replication of messages in the text section of the main user interface window is now avoided.