

QDAC firmware release notes

Firmware version 1.07 (and 1.06), released 2019-05-08

Features

- Added staircase waveform to the predefined waveform generators. This is especially useful for the slow axis in two dimensional gate sweeps.
- Software triggers for starting multiple waveform generators simultaneously have been implemented. This is useful for example for multi-dimensional gate sweeping. Firing of triggers can be delayed until a hardware trigger pulse is received.
- Implemented support for the new optional sync-board used for sample clock- and trigger synchronization between multiple QDACS and third party equipment.
- Query functionality has been added to the “run” command so that the setup of the AWG can be retrieved.
- A new “version” command which will report firmware version, build-date, etc. has been implemented.

Bug fixes

- Added delay when reading current sensors repeatedly in order to account for dead time.
- Waveform generators are now initialized to meaningful state at power up.
- Streamlined query format for the new commands released in version 1.06
- Fixed discrepancy between actual current sensor relay positions and reported positions at power-up. Now the relays are actually set to the high current range at power up as designed. Bug occurred in firmware version 1.04.