

HDice Controls Meeting Minutes

09/08/2015

Present: Xiangdong Wei, Peter Bonneau, Brian Eng, Mary Ann Antonioli, and Sahin Arslan.

⤴ Hardware Status

⤴ Test station hardware

- Reassembled test station hardware in DSG EEL R121 Lab.
 - ⤴ AC Power distribution panel installed and tested.
 - ⤴ Oxford power supply, RF generator, Lock-in amplifier, RF Attenuation/Switching chassis installed.
 - ⤴ Modification of test bench completed to allow access to 208V outlet.
 - ⤴ GPIB, RS232, and RS485 interfaces installed.

⤴ Test station computers

- ⤴ Received one of the two replacement computers.
- ⤴ Added computer to Hall B experimental subnet (129.57.86.xx).
- ⤴ Started installing software to support the test station. (LabVIEW and device drivers)
- ⤴ Delivery of 2nd replacement computer due by 9/11/2015.

⤴ Software Status

⤴ NMR Program - CAENels CT-Box System

- ⤴ Developed LabVIEW device driver files for setting and CT-BOX device status readback for firmware commands, mode commands, and started data acquisition commands.
- ⤴ Tested newly develop device driver files on the prototype CT-Box.
- Resolved Issues
 - ⤴ Received updated manual from CAENels with error code appendix.
 - ⤴ Manual also had some of the updated commands and descriptions needed for program development.
 - ⤴ Received from CAENels: triggering commands, pinout of the I/O connector, logic levels.
- Outstanding Issues
 - ⤴ CT-Box is not working in the HDice needed "Oscilloscope" mode.
 - ⤴ When issued an "OFFSET" command, unit gives an error readback.
 - ⤴ The OFFSET: ZERO command freezes the Daq.
 - ⤴ The internal buffer commands are not available in current command set.
 - ⤴ The error "CT-box Not Ready" is always on. "Reset" has no effect on the error.
 - ⤴ CAENels is working on these issues.

⤴ Rotation of Target Polarization Program

- ⤴ Modification for testing Rotation of Target Polarization Program with a single supply is underway.
- ⤴ Detailed block diagram of program flow has been completed.

⤴ Mathematica analysis code

- ⤴ Each of the seven notebooks requires a certain number of data files in order to proceed. Memory stick received from BNL had sufficient files for *only one of the seven notebooks*.
- ⤴ Craig Thorn at BNL will be contacted regarding the needed files.

- Next meeting: Tuesday, September 22nd at 11:00 AM in DSG Control Room (EEL R121C).