

Quick Start Guide – mar165

(APS Detector Pool)

1. Connect Orange **Fiber Optic Cable** from Detector to PCI card.
 - a. **NB:** Mar165 A & B have fiber, but Mar165 C has black SCSI-like cable!!!!
2. **Turn on Detector** (only with power strip next to chiller).
3. Start PC and login (username: marccd)
4. Start marccd GUI from x-term:
 - a. **Type:** *marccd*
5. Reboot CCD controller & start cooling:
 - a. Configure → Detector
 - i. Click on “**Reboot**” (should hear 2 beeps from controller)
 - b. If Pressure < 1.0 Torr, then say “Yes” to **cooling** dialog box
 - i. Compressor should start about one minute after you say “Yes”.
6. Start marccd **Remote Control Mode:**
 - a. Acquire → Remote Control
 - i. Click on “Start” in dialog box
7. Start **EPICS**
 - a. Start a new x-term
 - b. Type: *./start_epics*
 - i. You will have the EPICS server in the x-term and an MEDM control window.
 - ii. Also, the computer must be on the network for EPICS to work!!!!
 - iii. You can also access the medm screens from your local beamline computer if you mount APSshare from the dserv’s. The medm startup scripts are located in: /APSshare/DetectorPool/ For example: start_Mar165A_medm, start_Mar165B_medm, etc...
8. **Take a Background image**, first and frequently!!!!
 - a. If your file size is only 4096 bytes, then you probably did not take your first background, which marccd stores in the controller memory!!!!
 - b. Also, 2 x 2 Binning is the smallest you can use. **There is no 1 x 1 binning on the marccd!**

For more information, go to:

http://www.aps.anl.gov/Xray_Science_Division/Beamline_Technical_Support/Detector_Pool/Detector_Information/Mar_165_CCD_Camera/