RoboELF Known Issues

Cannot start at limits

 The Galil throws a “Cannot complete command due to limit switch” error if one or more axes’ limit switches are activated on startup. This may be fixable in software, but simply moving the joints off of limits before starting avoids the issue.

QAbstractSocket Error

 The PC Program will crash several minutes after startup because of the following error:

QAbstractSocket::WaitForBytesWritten() is not allowed in UnconnectedState

 This has something to do with the network connection. If the PC was connected to another network connection other than the Galil Ethernet cable, it will try to identify the new connection as an internet connection. This takes several minutes, and when it fails because it is connected to the Galil, not the internet, this error occurs and crashes the RoboELF program.

 It can be avoided by waiting several minutes after connecting the Galil Ethernet cable to start the program. When the network indicator icon on the Windows taskbar stops spinning, it is safe to start the program. It only seems to happen if an internet connection was present before.

PC BSOD on close

 If the RoboELF program is closed by closing the terminal window instead of the Qt window, the PC crashes. We think it is related to the video capture card drivers, but not positive. PC always seems to restart without issue, but this should be avoided if possible by closing the program properly.

Galil Error on Close

 Sometimes the Galil throws a command error during shutdown:

2010 COMMAND ERROR. Galil::command("MO") got ? instead of : response. TC1 returned "7 Command not valid while running"

 It does not affect the system. It still turns off and cuts power. It is an indication that the protocol is wrong. I believe it happens when a “ST” or “MO” command is sent multiple times. This should be fixed.

Random Watchdog Timeouts

 The Galil watchdog stops responding after being turned on for several minutes. This is very unpredictable. Sometimes it stops almost immediately, sometimes after five minutes or more. Increasing the CISST task period seemed to have fixed the issue for a short time, but it still happens. We are not sure what is causing this problem.