Platform calibrate instructions

Requirements:

PC: Python 2.7 with pyserial and pyqt4.

Install pyqt4 using: pip install PyQt4-4.11.4-cp27-cp27m-win\_amd64.whl

Sensors: encoders, optional IMU and scale

Encoders: plug 6 encoders into encoder board ensuring that encoder numbering matches sequence of physical actuators and valves. Connect board usb to computer (note the com port number)

Scale – a USB scale can be used to automatically measure the load. The scale is plugged into the small black interface box which in turn is connected to the PC (note the com port number). If the USB scale is not used, you must manually weight and enter the load into the gui

IMU (optional) place the IMU on the center of the upper platform and connect the USB cable to the computer (note the com port number

Festo interface: this is similar to the current chairs. The festo address is 192.168.0.10 and the PC must be on the same subnet.

Install and configure:

Copy all files in the PlatformCalibrate directory (and subdirectories) to a directory on the PC. If pyqt4 has not been installed, see Requirements above.

Open serial\_defaults.py in a text editor and change the com ports to match the ones noted when connecting the sensors. If not using the IMU or USB scale, set these to ‘ignore’ (all lower case)

‘Python Platformcalibrate.py’ will start the program. The Comms combo boxes should indicate the ports

Entered in the serial\_default.py file

Manually controlling movement:

Calibrating

Running ride scripts

Capturing and saving data

Emergency stop