



VARIAN

Number: SHT-440LC-01

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SERVICE How To

Model Number:	Originator:	Topic
900 Series LC	Des Wichems	Reloading the Fraction Collector Calibration Coefficients

Reloading the Fraction Collector Calibration Coefficients

1. Unplug the serial cable from connection P4 on the back of the 900-Series System and connect it directly to the serial port of the PC with the Fraction Collector Diagnostic Program (Varian SPS MDS).



Figure 1: Back panel of the 900 Series

2. Once the serial cable is connected to the PC, power up the fraction Collector and allow it to go through its start up routine. Launch the Varian SPS MDS software, and you should see the screen in Figure 2.

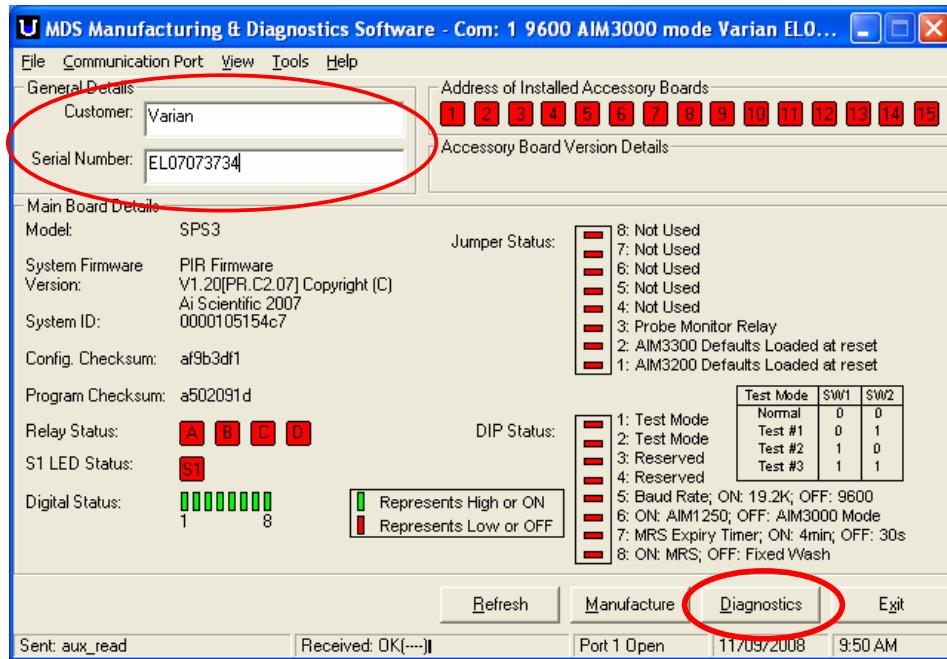


Figure 2: Varian SPS MDS Software Front Page

3. Insert the customer Details and Serial number of the unit. Then click the *Diagnostics* Button (Figure 2). You should now see the screen in Figure 3.

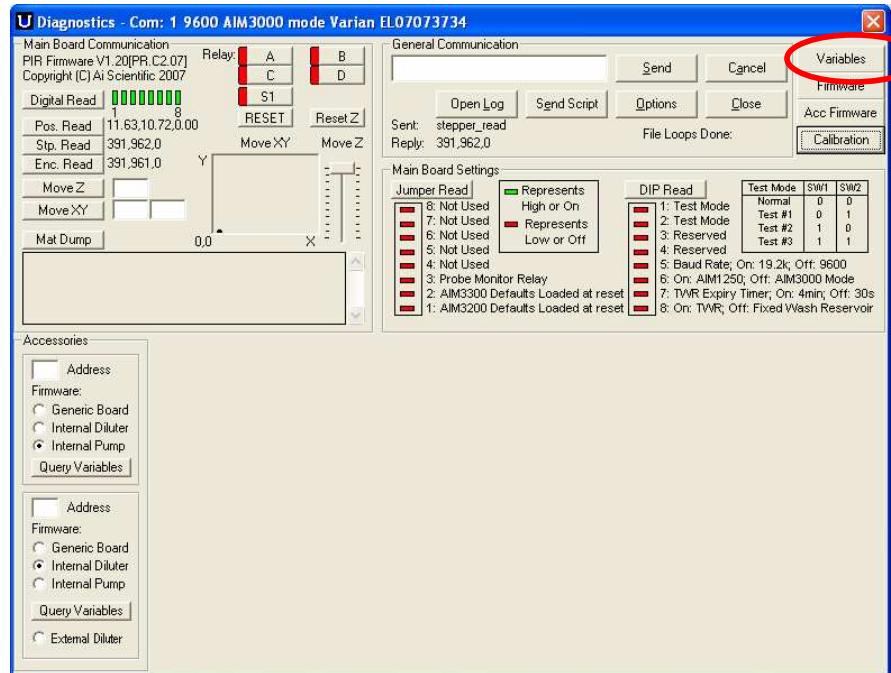


Figure 3: Diagnostics Section of the SPS Software

4. Select the *Variables* option (Figure 3) and that should open the Calibration Variables Page.

Motion Variables		Calibration Variables	
stpr_x_vi	0.200000	stpr_zd_vi	0.200000
stpr_x_vf	5.500000	stpr_zd_vf	2.000000
stpr_x_a	1.250000	stpr_zd_a	1.250000
stpr_x_i	0.000150	stpr_zd_i	0.000150
stpr_t_vi	0.200000	stpr_zu_vi	0.200000
stpr_t_vf	5.000000	stpr_zu_vf	1.750000
stpr_t_a	1.250000	stpr_zu_a	1.250000
stpr_t_i	0.000150	stpr_zu_i	0.000150
System Variables		Boundary Variables	
stpr_x_error_band	8	odom_x_steps	350
stpr_t_error_band	8	odom_z_steps	135
stpr_z_error_band	8	odom_z_steps	134
sys_stx	45.45	sys_conf_cksum	af953d1f
sys_elx	45.45	sys_prog_cksum	a502091d
aip_a_baud	7	sys_ver	PIR Firmware
hip_a_echo	1	sys_id	0000105154c
model	2	sys_dilutor	1
Place the mouse pointer over the variable name for a description of the variable and what units are used. Refer to the Programmers Manual before adjusting variables.			
Green: OEM Variables		Red: Advanced OEM Variables	
Read Variables		Load Variables	
Save As...		Print	
Report		Close	

Figure 4: Variables Page

- Click the *Load Variables* button (Figure 4), and then select the txt file that has the calibration coefficients that you want to load up (Figure 5). It is a good idea to make the variables file name one that reflects the serial number of the Fraction Collector. If you have multiple files, then add a date stamp to your file name to ensure that you can distinguish them from each other.

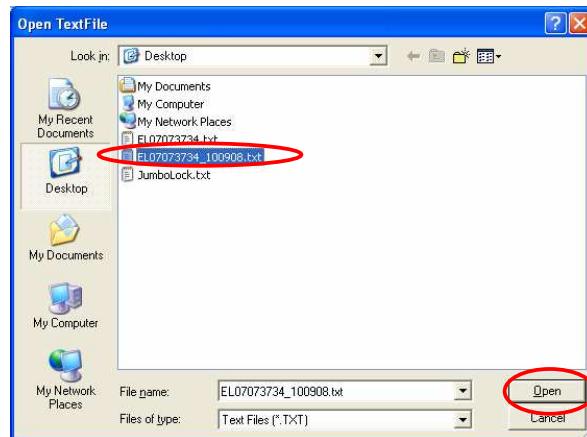


Figure 5: Calibration File Selection

- Once you have selected the desired file to upload and pressed the *Open* (Figure 5). You will then need to select the *Write All* (Figure 6) option to write the variable to the firmware. You can then *close* the Variables page.

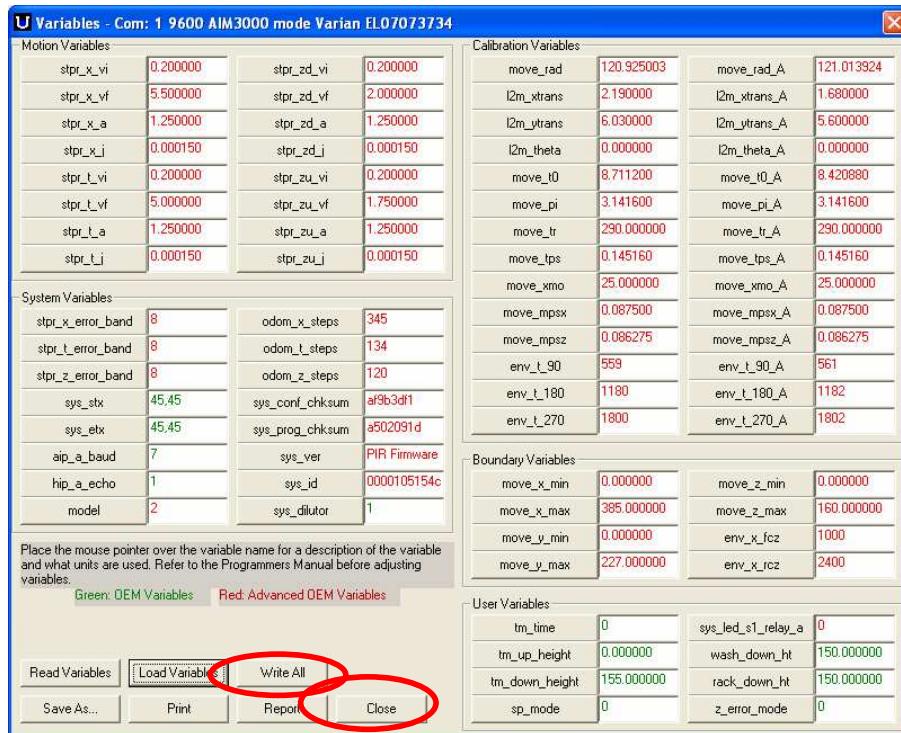


Figure 6: Writing the Calibration to the Firmware

7. Press the *Close* button again (Figure 7) and you will be back to the main page of the software (Figure 8).

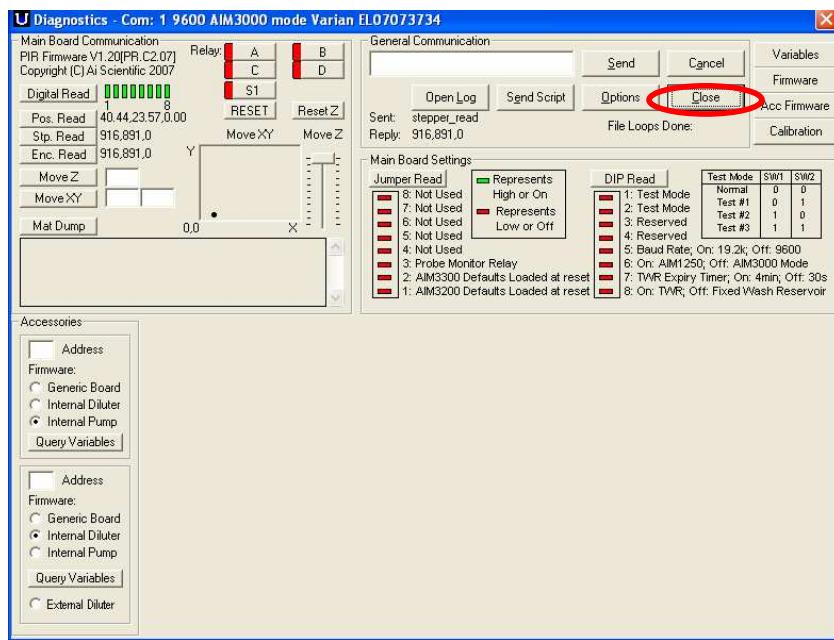


Figure 7: Closing the Diagnostics Page

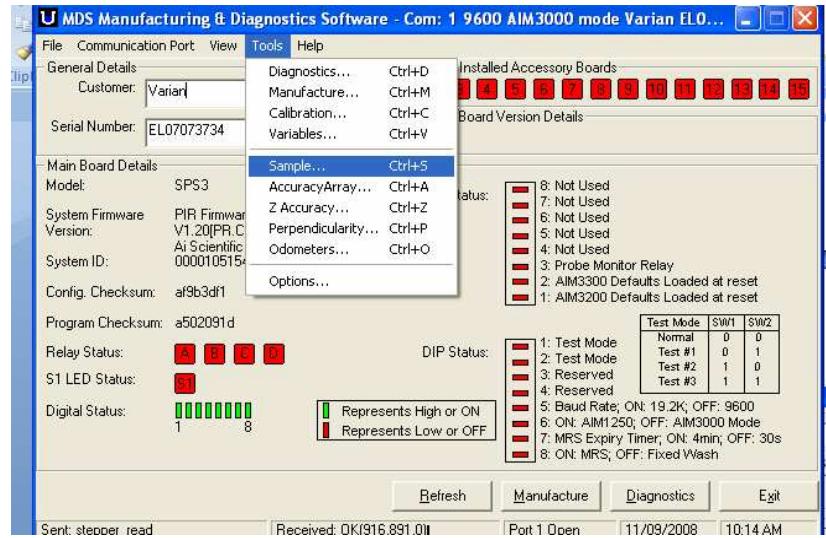


Figure 8: Main Page of the software

8. Select the *Tools* option from the pull down menu and click on *Sample* (Figure 8). This will open the window in Figure 9 where you can choose which racks the Fraction Collector has and the rack size.

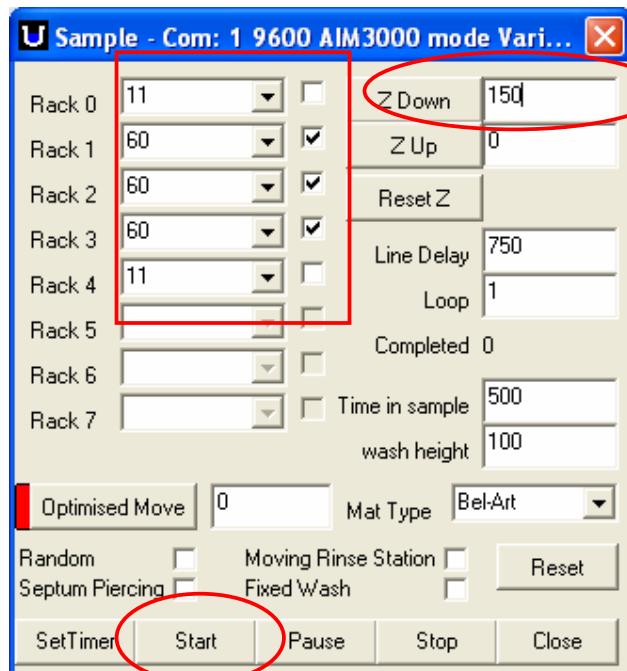


Figure 9: Fraction Collector Rack Configuration

9. The different rack positions are shown in Figure 10

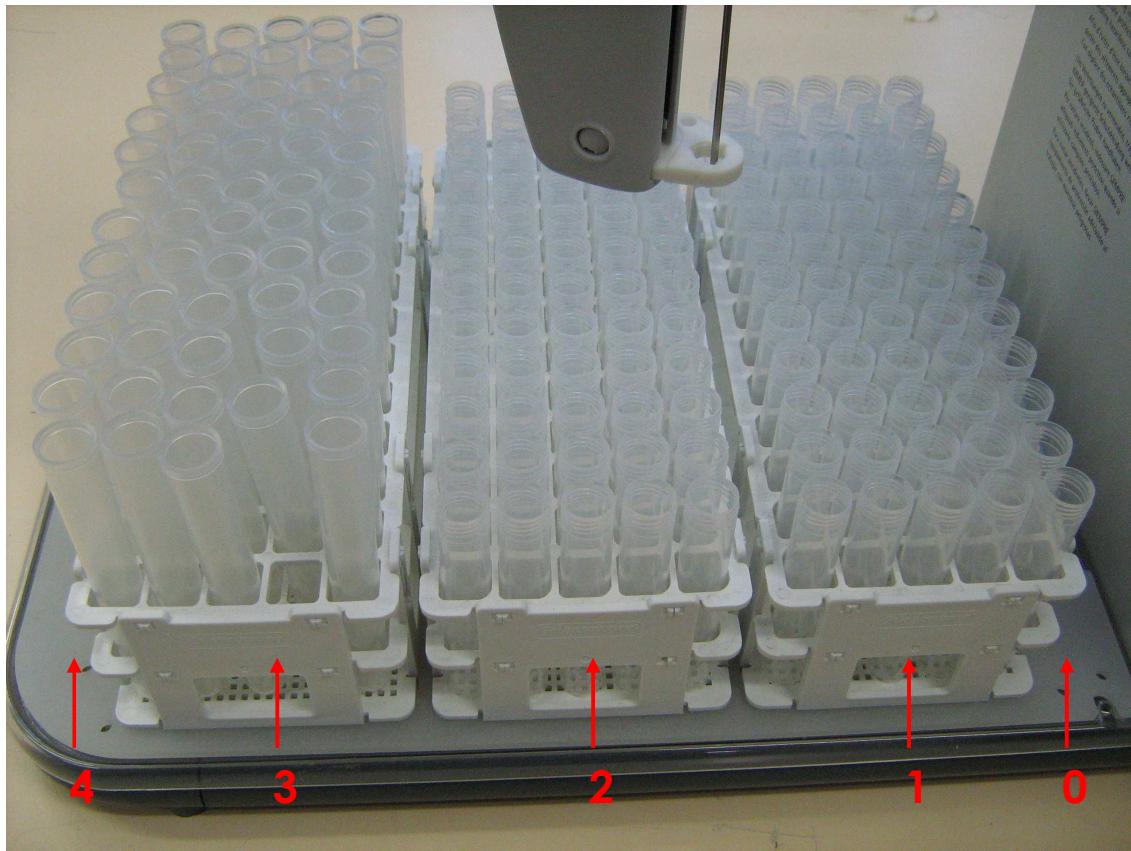


Figure 10: Rack Positions on the Fraction Collector

10. Select a Z down (Figure 9) value so that you can easily see if the probe is going into the sample collection tube properly. I usually pick a value of about 150. Once you are happy with the setup, click on the Start button and the probe will move through all the positions for the number of racks you have selected.