graphical_user_interface

Pamgene Support

6/19/2019

Introduction

A user requirement for a pamservice tool to be used with

- exising ps12 instruments
- new ps12 instruments

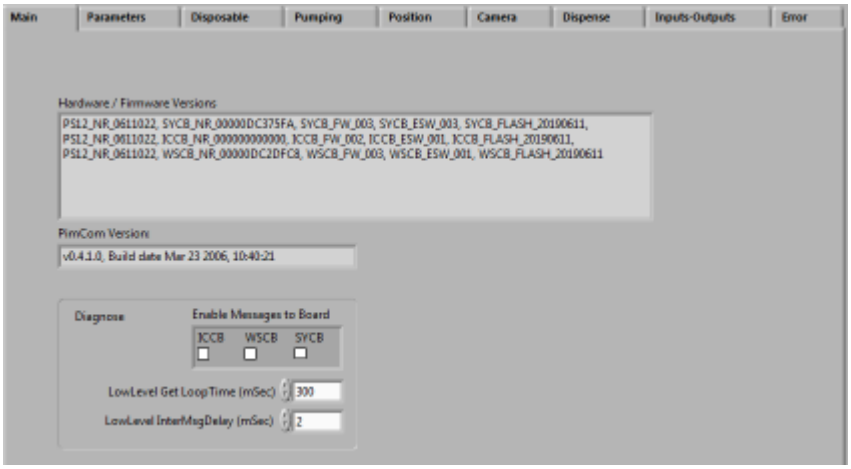
The requirements cover the graphical user interface (GUI) for servicing the ps12.

Graphical User Interface

The requirements for a the GUI is outlined below and each tab is dealt with in each section.

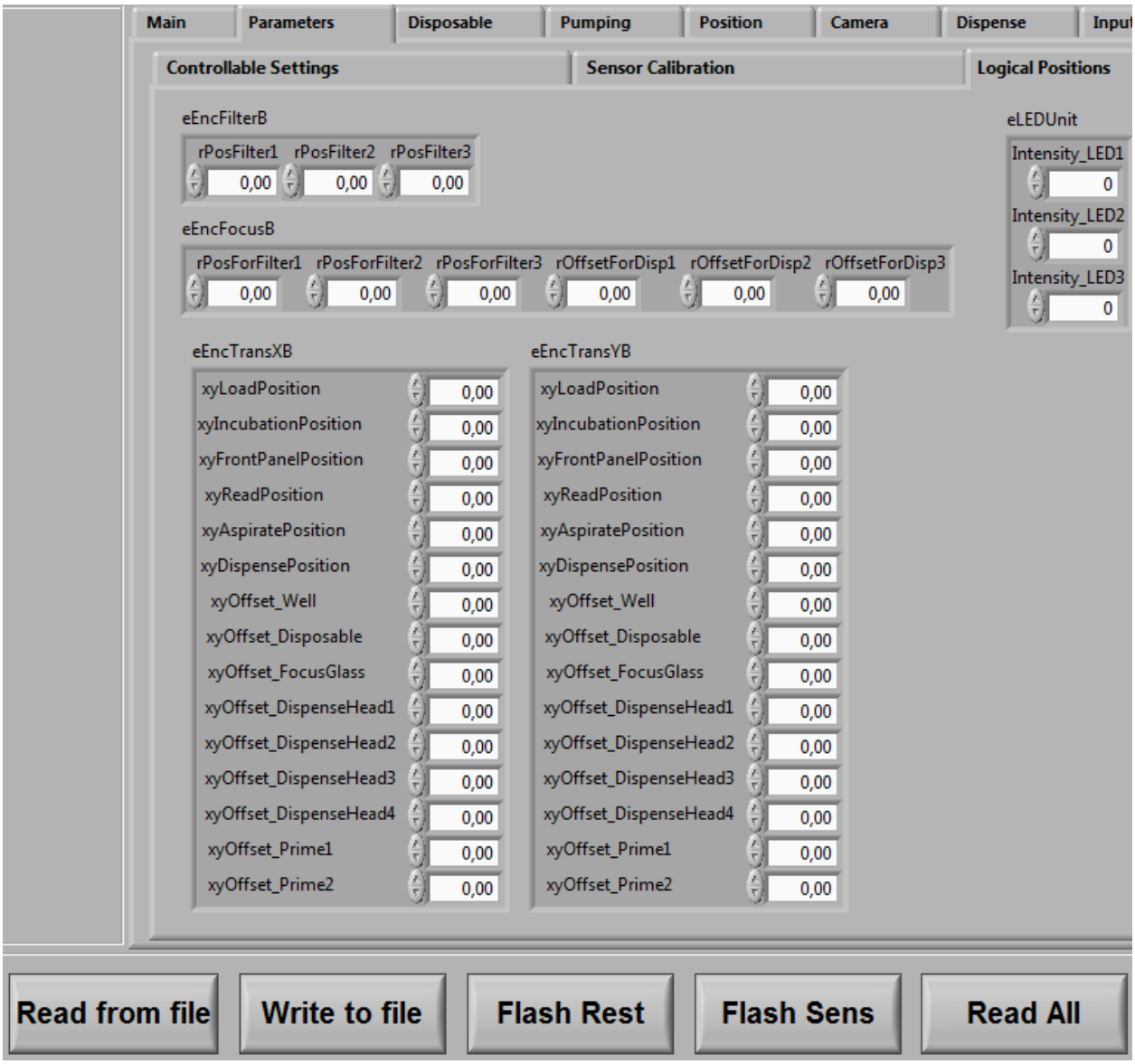
main tab

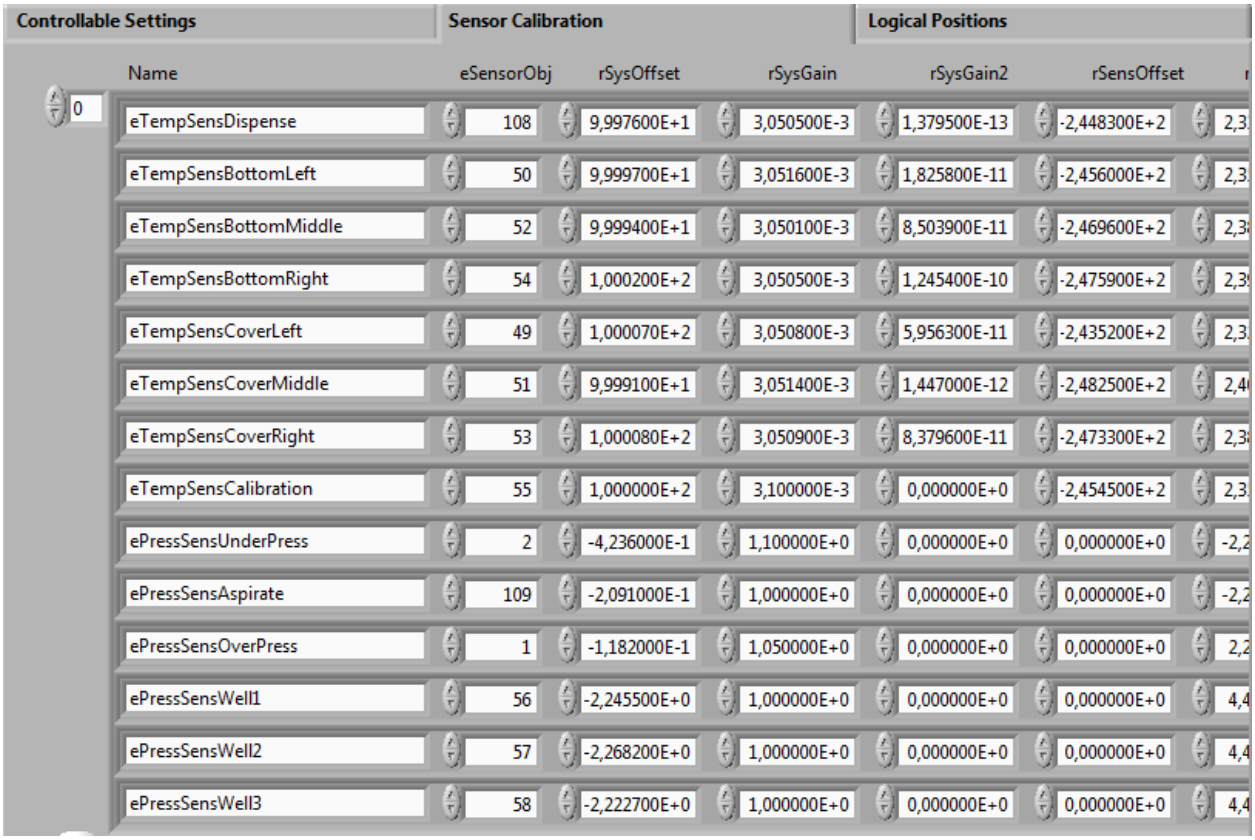
Used to decide which board to connect to. This tab is removed in the new pamservice tool.



parameters tab

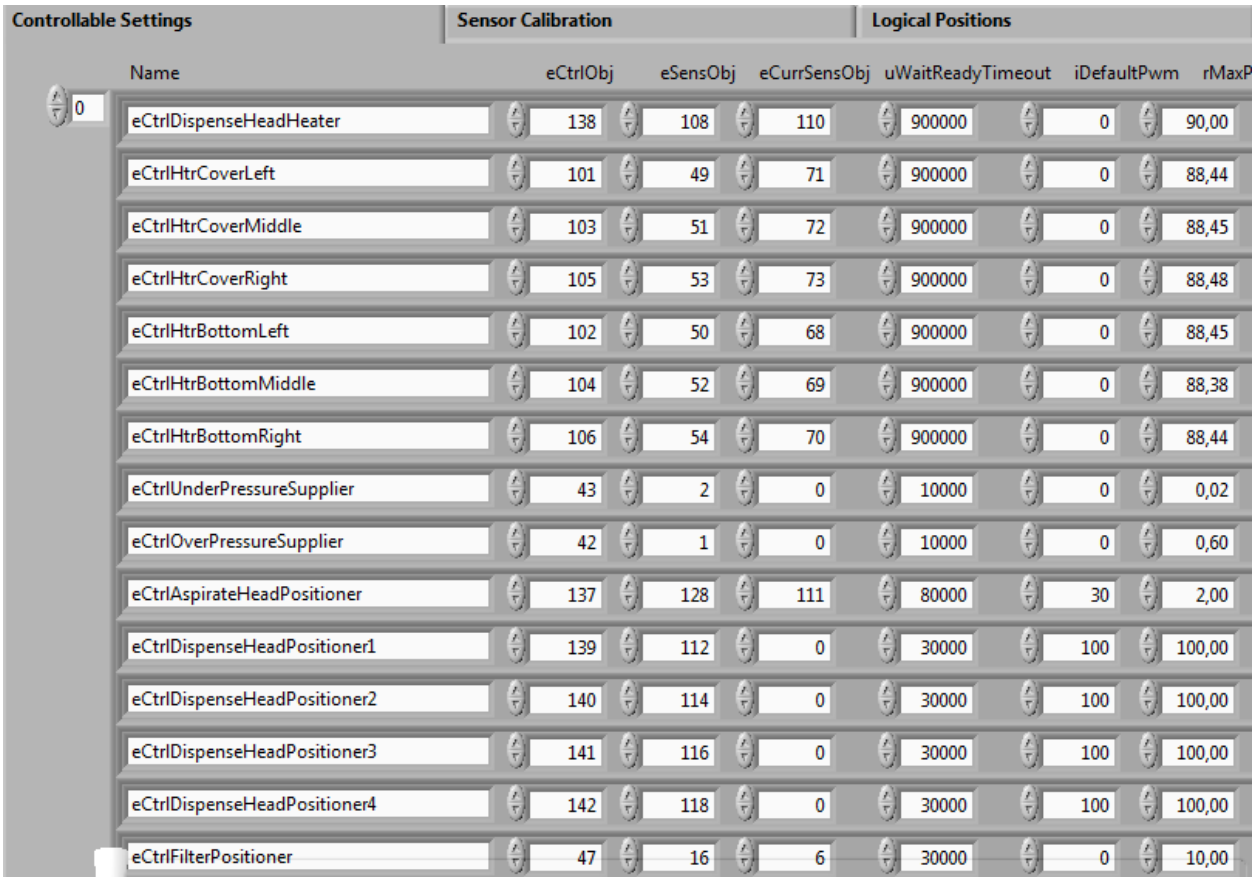
used to get and set the values of the parameters


Main
Parameters
Disposable
Pumping
Position
Camera
Dispense
Input
Controllable Settings
Sensor Calibration
Logical Positions
eEncFilterB
rPosFilter1 rPosFilter2 rPosFilter3
0,00 0,00 0,00
eEncFocusB
rPosForFilter1 rPosForFilter2 rPosForFilter3 rOffsetForDisp1 rOffsetForDisp2 rOffsetForDisp3
0,00 0,00 0,00 0,00 0,00 0,00
eLEDUnit
Intensity_LED1
0
Intensity_LED2
0
Intensity_LED3
0
eEncTransXB
xyLoadPosition 0,00
xyIncubationPosition 0,00
xyFrontPanelPosition 0,00
xyReadPosition 0,00
xyAspiratePosition 0,00
xyDispensePosition 0,00
xyOffset_Well 0,00
xyOffset_Disposable 0,00
xyOffset_FocusGlass 0,00
xyOffset_DispenseHead1 0,00
xyOffset_DispenseHead2 0,00
xyOffset_DispenseHead3 0,00
xyOffset_DispenseHead4 0,00
xyOffset_Prime1 0,00
xyOffset_Prime2 0,00
eEncTransYB
xyLoadPosition 0,00
xyIncubationPosition 0,00
xyFrontPanelPosition 0,00
xyReadPosition 0,00
xyAspiratePosition 0,00
xyDispensePosition 0,00
xyOffset_Well 0,00
xyOffset_Disposable 0,00
xyOffset_FocusGlass 0,00
xyOffset_DispenseHead1 0,00
xyOffset_DispenseHead2 0,00
xyOffset_DispenseHead3 0,00
xyOffset_DispenseHead4 0,00
xyOffset_Prime1 0,00
xyOffset_Prime2 0,00
Read from file
Write to file
Flash Rest
Flash Sens
Read All



Controllable Settings | Sensor Calibration | Logical Positions

	Name	eSensorObj	rSysOffset	rSysGain	rSysGain2	rSensOffset	r
0	eTempSensDispense	108	9,997600E+1	3,050500E-3	1,379500E-13	-2,448300E+2	2,3
	eTempSensBottomLeft	50	9,999700E+1	3,051600E-3	1,825800E-11	-2,456000E+2	2,3
	eTempSensBottomMiddle	52	9,999400E+1	3,050100E-3	8,503900E-11	-2,469600E+2	2,3
	eTempSensBottomRight	54	1,000200E+2	3,050500E-3	1,245400E-10	-2,475900E+2	2,3
	eTempSensCoverLeft	49	1,000070E+2	3,050800E-3	5,956300E-11	-2,435200E+2	2,3
	eTempSensCoverMiddle	51	9,999100E+1	3,051400E-3	1,447000E-12	-2,482500E+2	2,4
	eTempSensCoverRight	53	1,000080E+2	3,050900E-3	8,379600E-11	-2,473300E+2	2,3
	eTempSensCalibration	55	1,000000E+2	3,100000E-3	0,000000E+0	-2,454500E+2	2,3
	ePressSensUnderPress	2	-4,236000E-1	1,100000E+0	0,000000E+0	0,000000E+0	-2,2
	ePressSensAspirate	109	-2,091000E-1	1,000000E+0	0,000000E+0	0,000000E+0	-2,2
	ePressSensOverPress	1	-1,182000E-1	1,050000E+0	0,000000E+0	0,000000E+0	2,2
	ePressSensWell1	56	-2,245500E+0	1,000000E+0	0,000000E+0	0,000000E+0	4,4
	ePressSensWell2	57	-2,268200E+0	1,000000E+0	0,000000E+0	0,000000E+0	4,4
	ePressSensWell3	58	-2,222700E+0	1,000000E+0	0,000000E+0	0,000000E+0	4,4

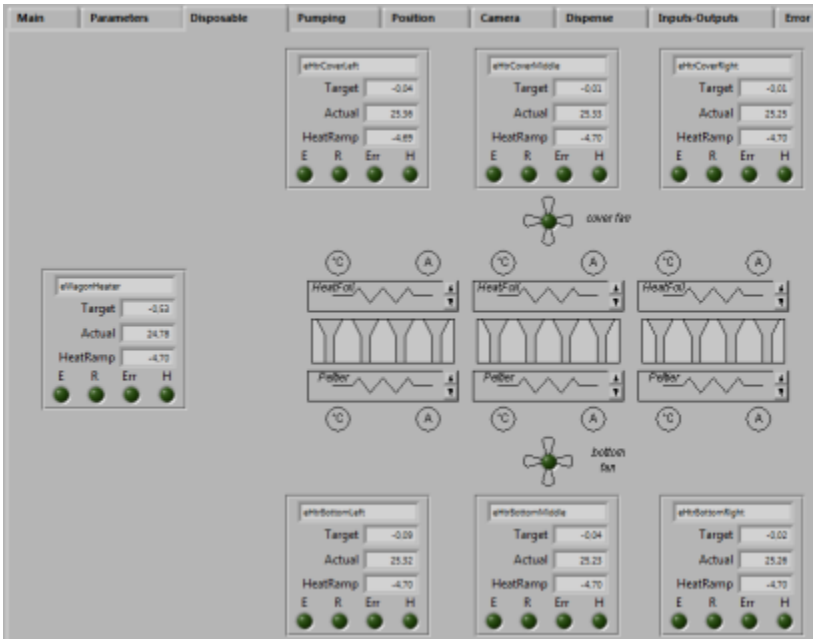


Controllable Settings | Sensor Calibration | Logical Positions

	Name	eCtrlObj	eSensObj	eCurrSensObj	uWaitReadyTimeout	iDefaultPwm	rMaxP
0	eCtrlDispenseHeadHeater	138	108	110	900000	0	90,00
	eCtrlHtrCoverLeft	101	49	71	900000	0	88,44
	eCtrlHtrCoverMiddle	103	51	72	900000	0	88,45
	eCtrlHtrCoverRight	105	53	73	900000	0	88,48
	eCtrlHtrBottomLeft	102	50	68	900000	0	88,45
	eCtrlHtrBottomMiddle	104	52	69	900000	0	88,38
	eCtrlHtrBottomRight	106	54	70	900000	0	88,44
	eCtrlUnderPressureSupplier	43	2	0	10000	0	0,02
	eCtrlOverPressureSupplier	42	1	0	10000	0	0,60
	eCtrlAspirateHeadPositioner	137	128	111	80000	30	2,00
	eCtrlDispenseHeadPositioner1	139	112	0	30000	100	100,00
	eCtrlDispenseHeadPositioner2	140	114	0	30000	100	100,00
	eCtrlDispenseHeadPositioner3	141	116	0	30000	100	100,00
	eCtrlDispenseHeadPositioner4	142	118	0	30000	100	100,00
	eCtrlFilterPositioner	47	16	6	30000	0	10,00

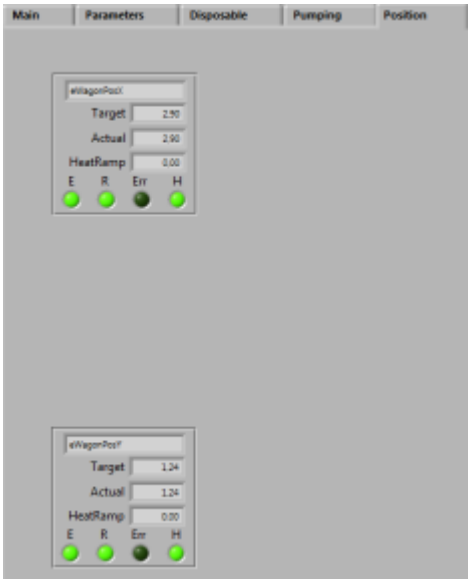
disposable tab

used to set and get the disposable parameters



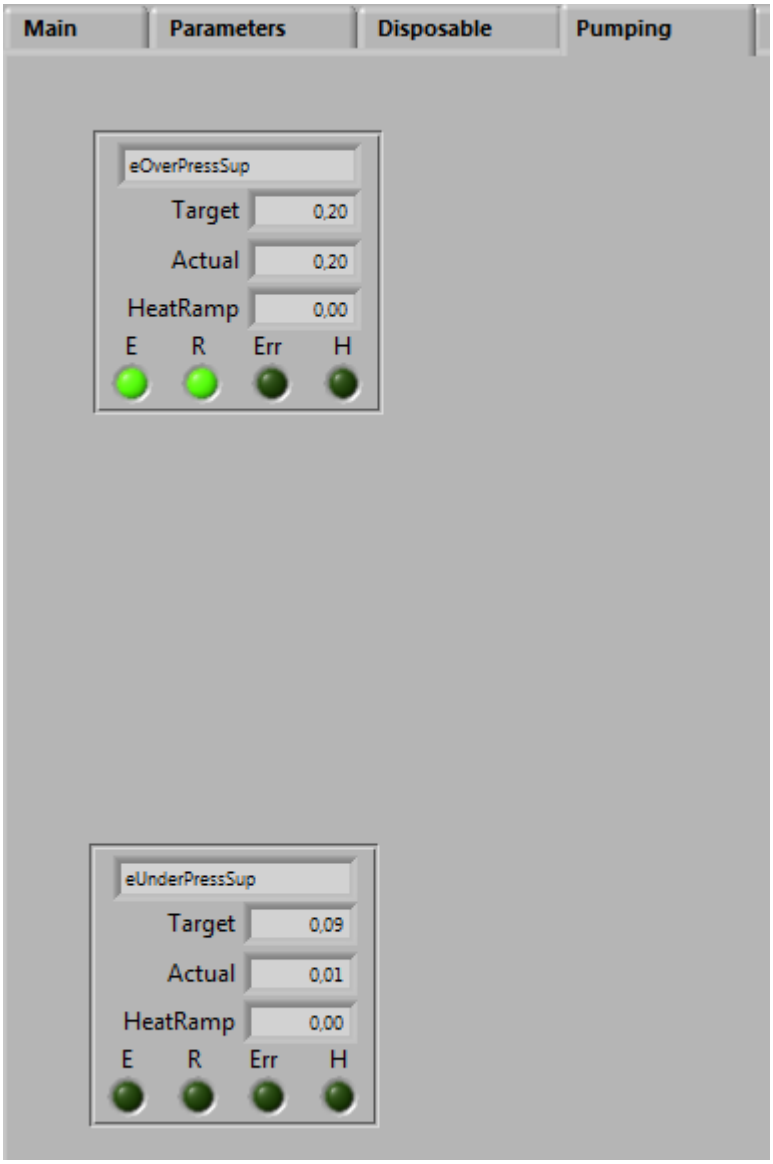
position tab

used to set and get of the position parameters



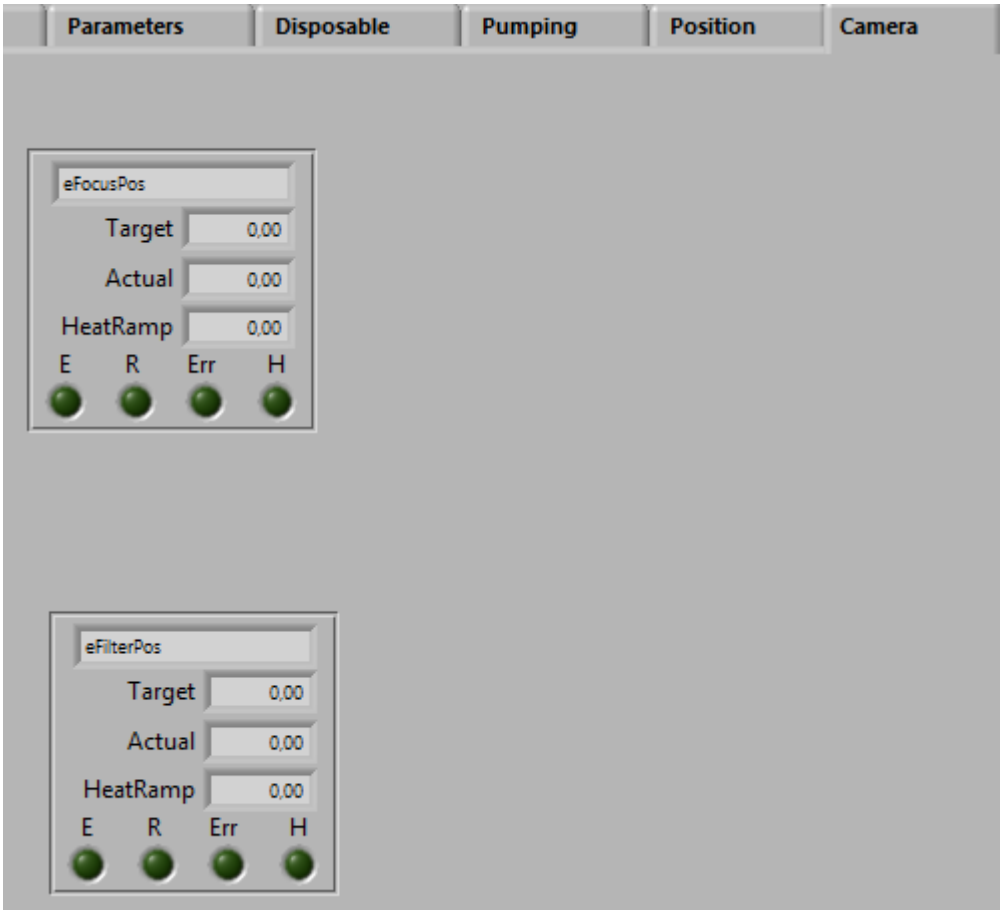
pumping tab

used to set and get of the pumping parameters



camera tab

used to control the camera



dispense tab

Used to have setting and getting of dispense.

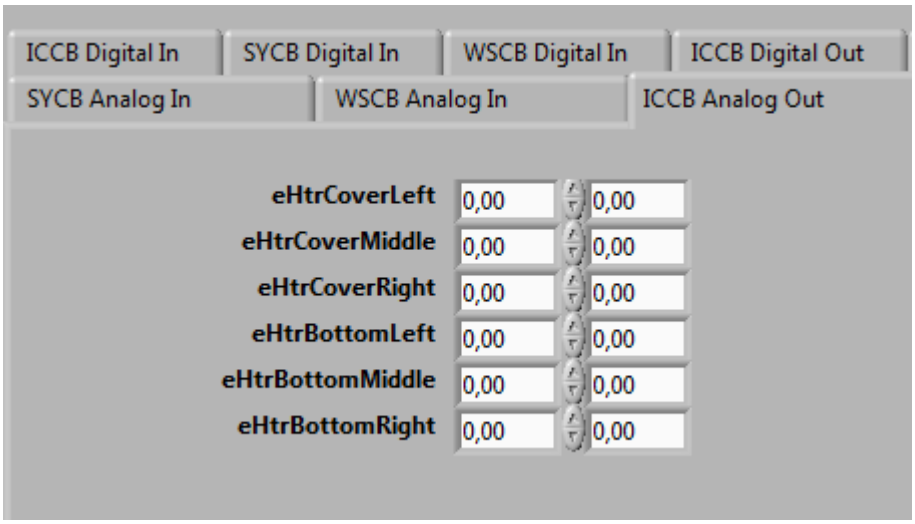
input/outputs tab

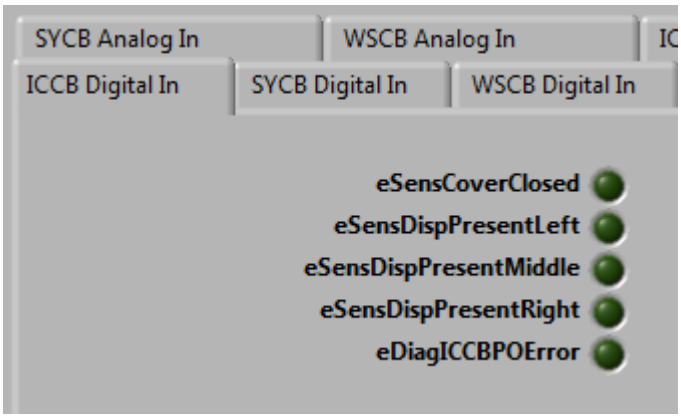
Used to get and set the values across the three control boards.

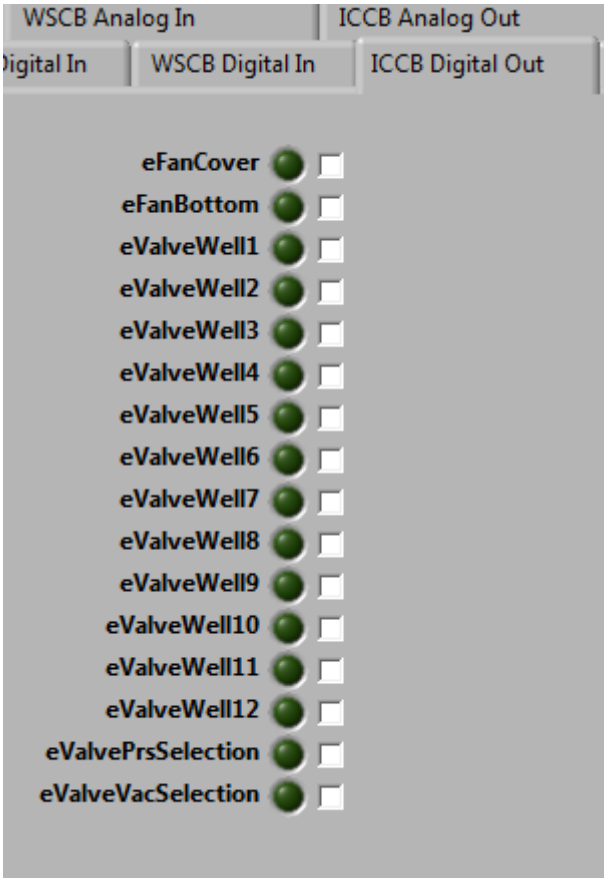
- iccb (incubate board)
- sycb (system board)
- wsb (wash board)

iccb (incubate board)

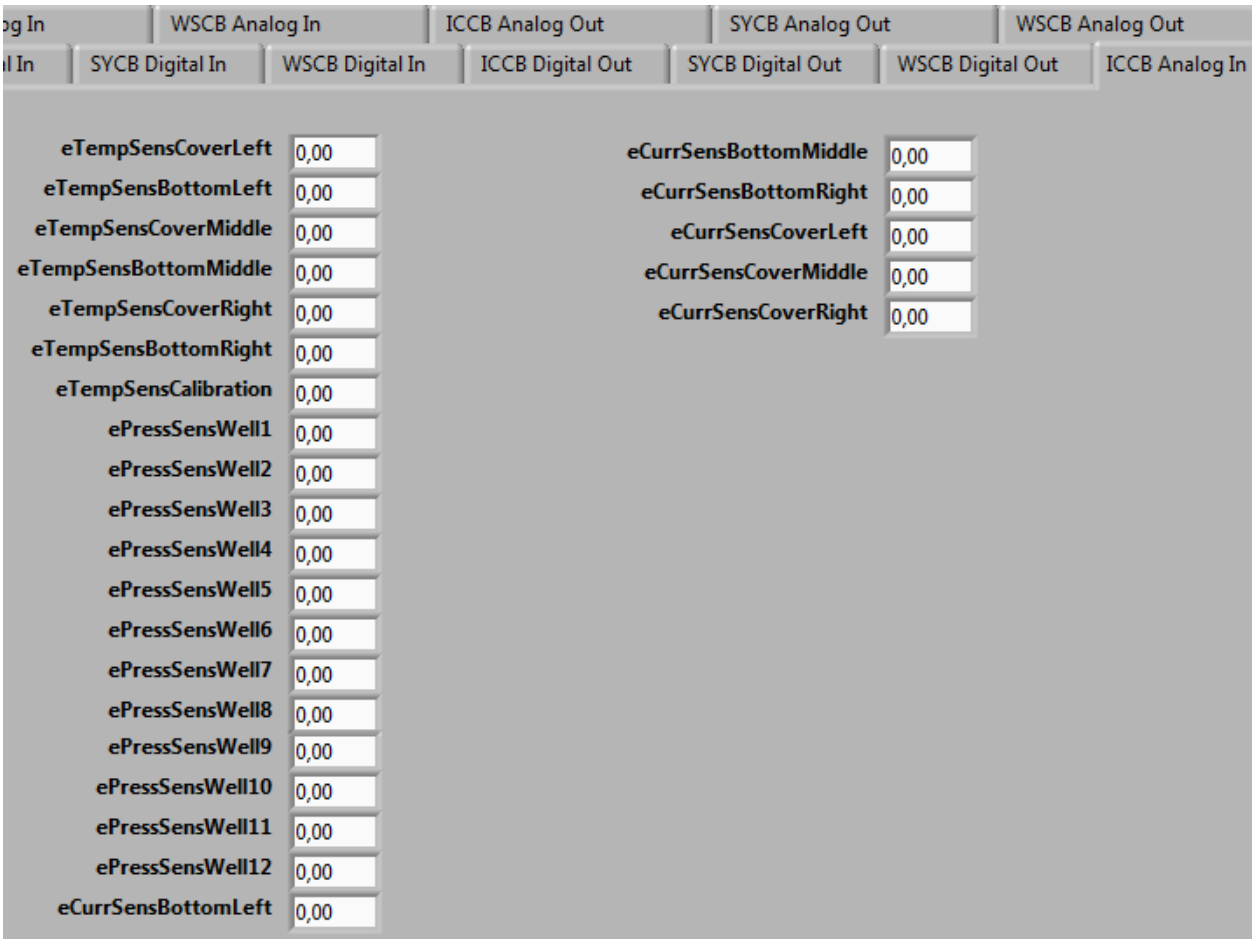
The following four tabs are moved into one incube board tab.





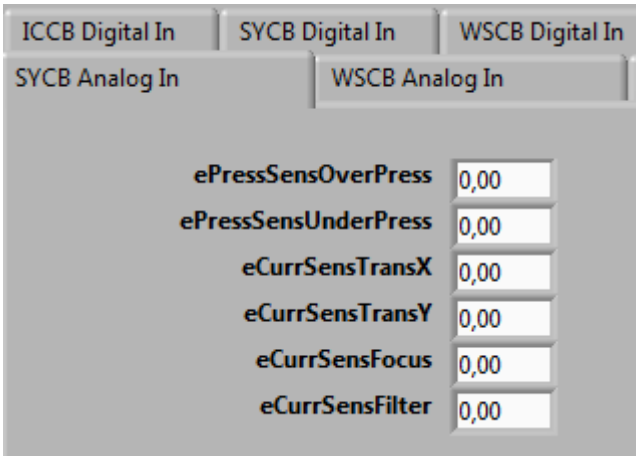


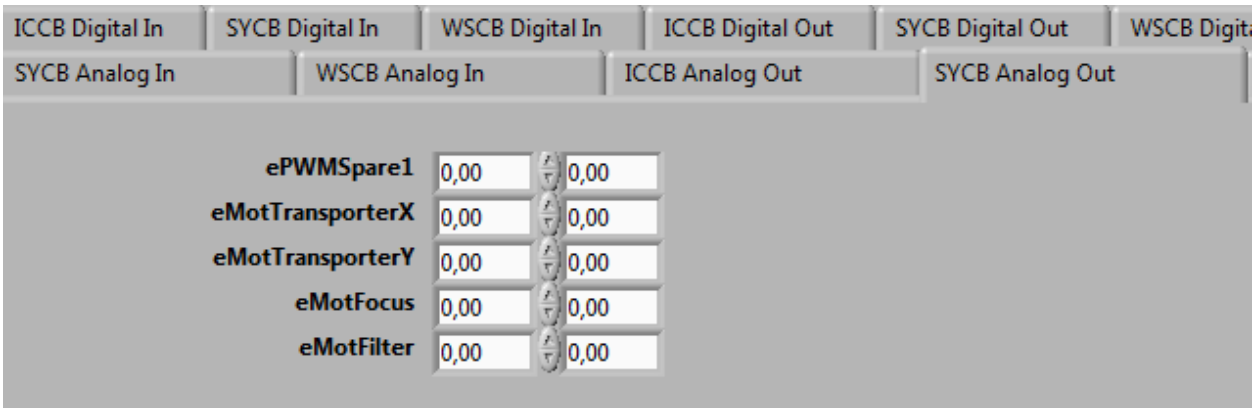
Select all values button

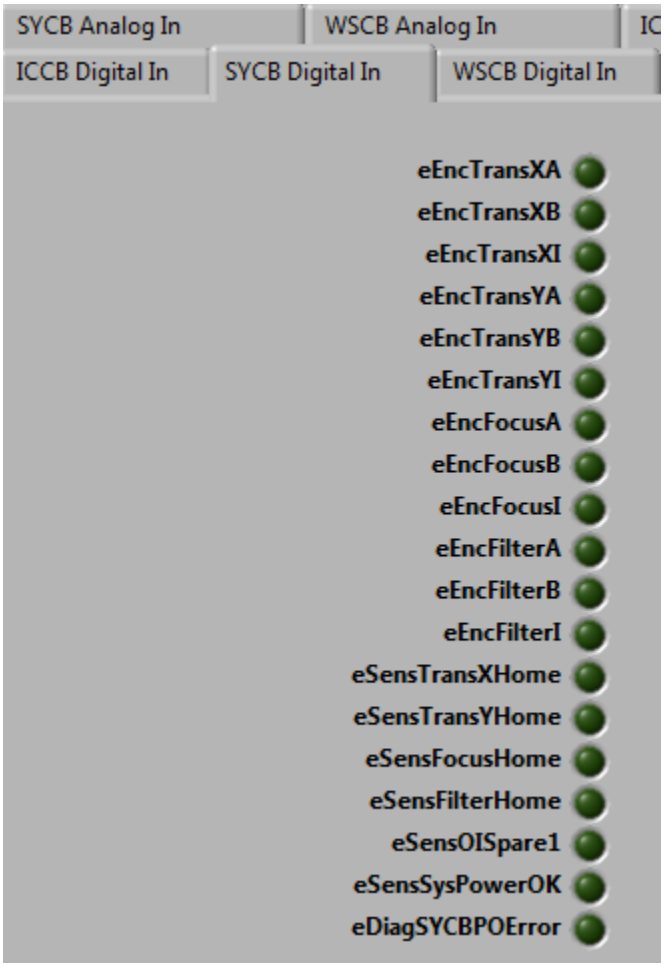


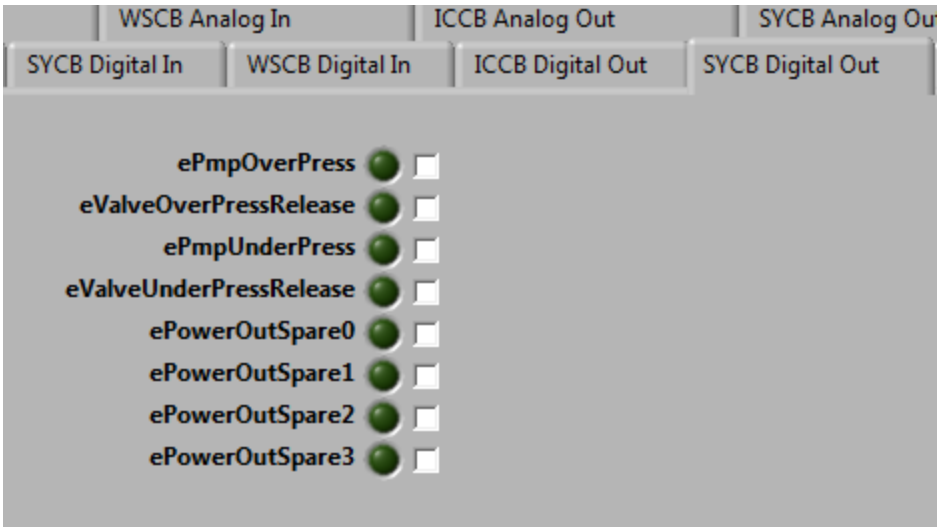
sycb (system board)

The following four tabs in one incube board tab.



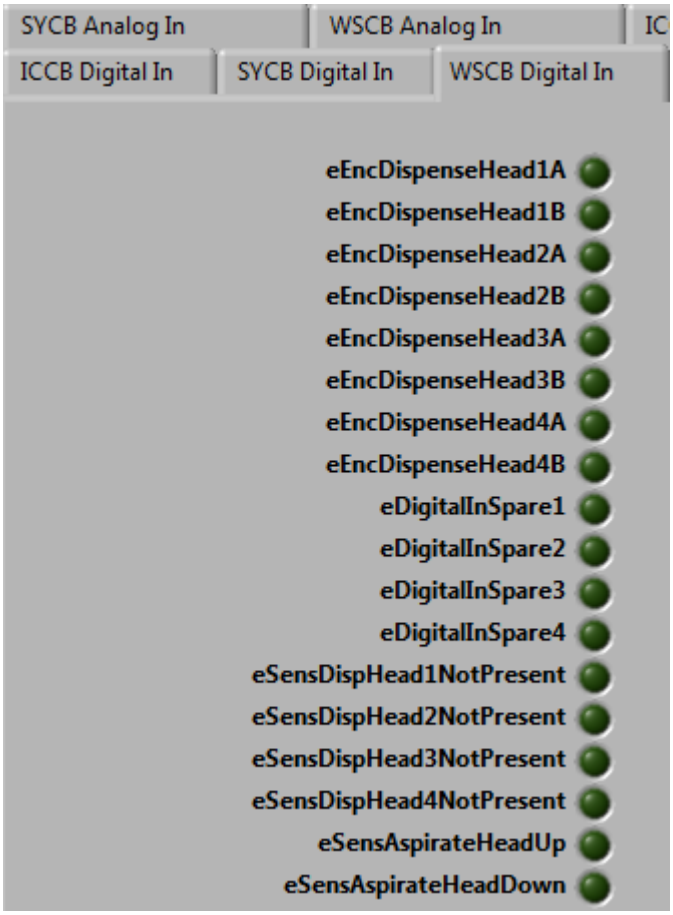

ICCB Digital In
SYCB Digital In
WSCB Digital In
ICCB Digital Out
SYCB Digital Out
WSCB Digit
SYCB Analog In
WSCB Analog In
ICCB Analog Out
SYCB Analog Out
ePWMSpare1
eMotTransporterX
eMotTransporterY
eMotFocus
eMotFilter
0,00
0,00

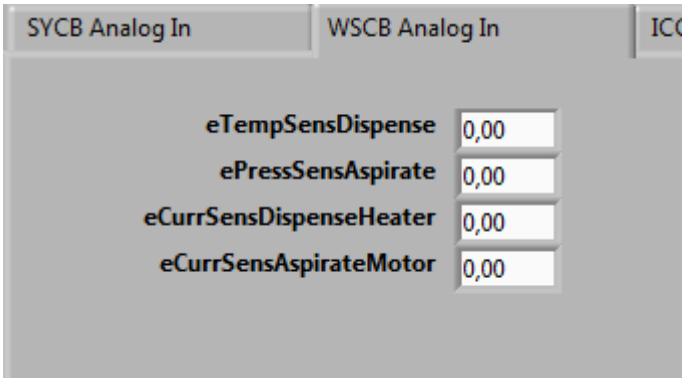

SYCB Analog In
WSCB Analog In
ICCB Digital In
SYCB Digital In
WSCB Digital In
eEncTransXA
eEncTransXB
eEncTransXI
eEncTransYA
eEncTransYB
eEncTransYI
eEncFocusA
eEncFocusB
eEncFocusI
eEncFilterA
eEncFilterB
eEncFilterI
eSensTransXHome
eSensTransYHome
eSensFocusHome
eSensFilterHome
eSensOISpare1
eSensSysPowerOK
eDiagSYCBPOError

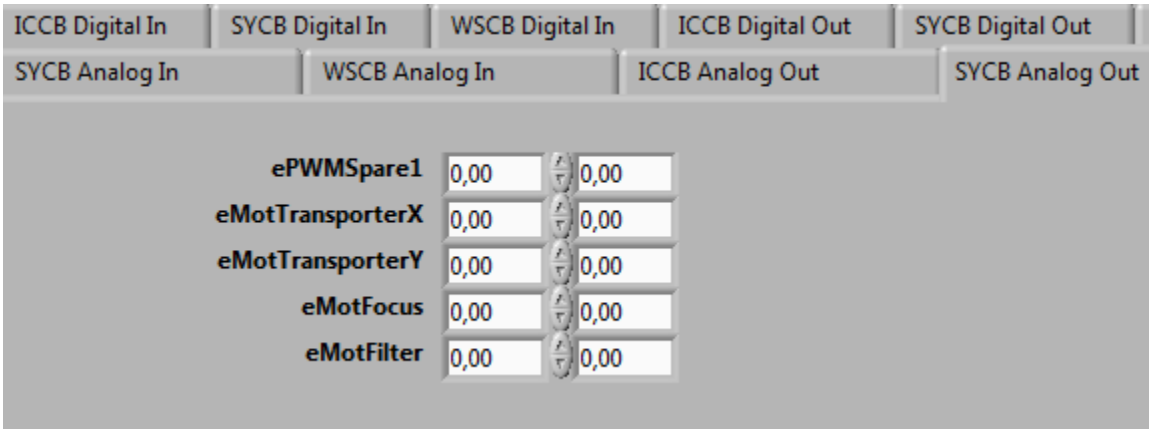


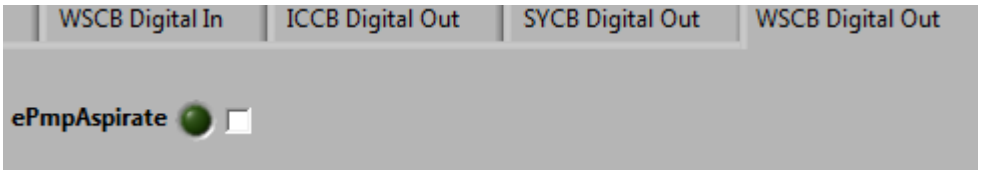
wsb (wash board)

The following four tabs are moved into one wash board tab.

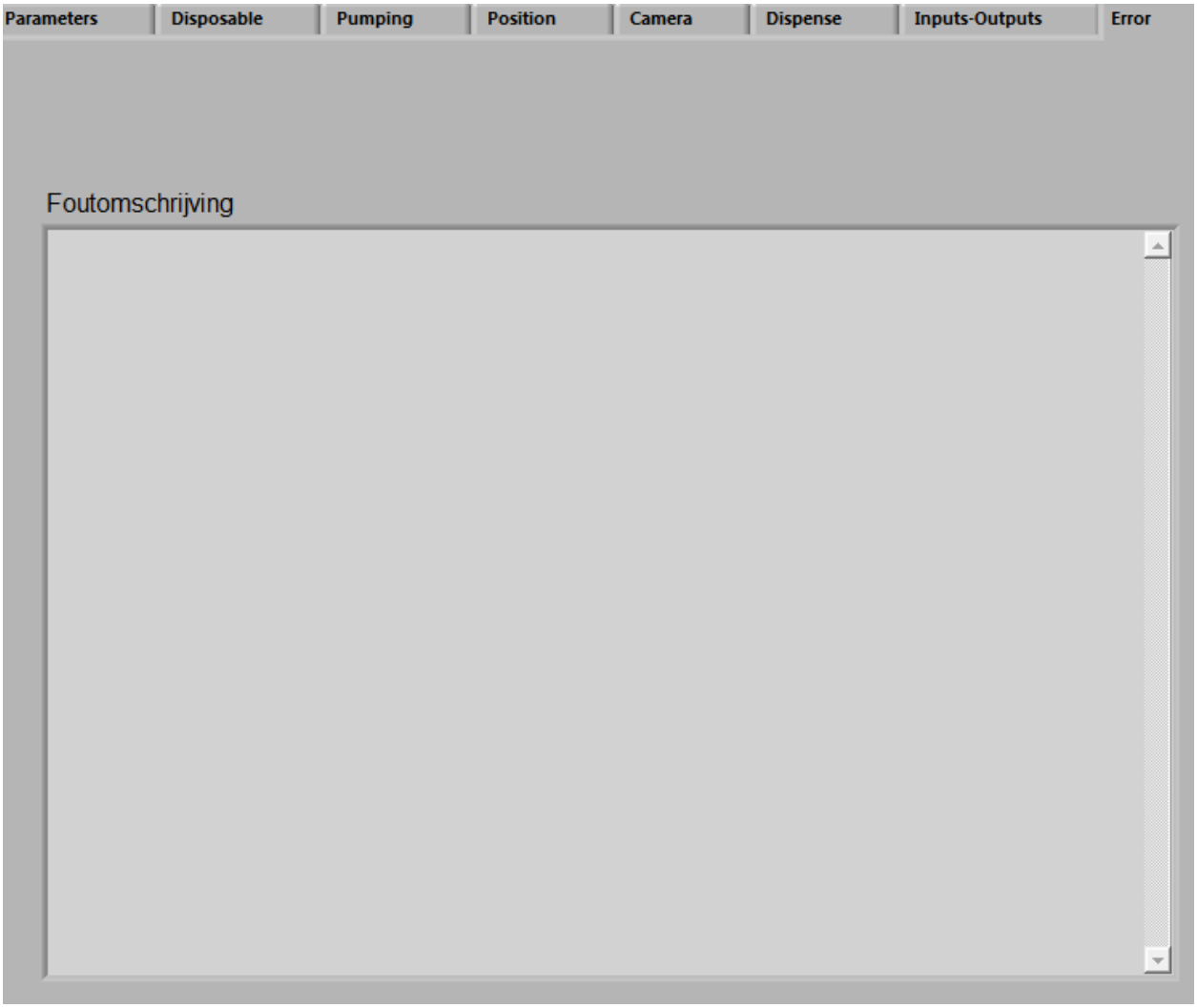



SYCB Analog In
WSCB Analog In
eTempSensDispense
0,00
ePressSensAspirate
0,00
eCurrSensDispenseHeater
0,00
eCurrSensAspirateMotor
0,00


ICCB Digital In
SYCB Digital In
WSCB Digital In
ICCB Digital Out
SYCB Digital Out
SYCB Analog In
WSCB Analog In
ICCB Analog Out
SYCB Analog Out
ePWMSpare1
0,00
0,00
eMotTransporterX
0,00
0,00
eMotTransporterY
0,00
0,00
eMotFocus
0,00
0,00
eMotFilter
0,00
0,00


WSCB Digital In
ICCB Digital Out
SYCB Digital Out
WSCB Digital Out
ePmpAspirate

error tab


Parameters
Disposable
Pumping
Position
Camera
Dispense
Inputs-Outputs
Error
Foutomschrijving