E1400132 # LHO CO2P Install List March 28, 2014

COLOR CODE - dates correspond to when this was verified
Does not exist and should
Not installed
Installed but issues remain
Deliberately installed contrary to design - design or install will change
Installed correctly - no issues
Couldn't figure out status
Now defunct - added for completeness

CO2P LLO

Cables	X-arm	Y-arm	
1	Power meter - cable installed. Box end NC	Power meter - not installed	
2	QPD1 - cable installed. Box end NC	QPD not installed	
3	QPD2 - cable installed. Box end NC	QPD2 not installed	
4	PD1 cable - NC to PD	PD1 not installed	
5	PD2 cable - NC to PD	PD2 not installed	
6	Thermopile - INSTALLED MAR 28	Thermopile connected - Feb 28	
7	PZT - INSTALLED MAR 28	PZT connected - Feb 28	
8	ISS analogue out to ADC: ontable- - connected, INSTALLED MAR 28	ISS analgoue out - on-table NC - gender changer used	replaced hex screws on gender changer with longer ones
9	ISS analogue out to ADC - INSTALLED MAR 28	ISS analogue out to ADC - connected, Feb 28	
10	ISS analogue in from DAC - ontable connected Mar 28	ISS analogue in from DAC - ontable connected Feb 28	used short 0.16" hex nuts and tightened with nut driver
11	ISS analagoue out from DAC -INSTALLED - Mar 28	ISS analagoue out from DAC -pulled - Mar 19	
12	HV cable on table - connected FT to box Mar 7	HV cable on table - connected Feb 28	
13	HV cable connected to feedtthrough - not to HV supply in CER - Mar 7	HV cable connected to feedtthrough - not to HV supply in CER - Mar 7	
14	Power to ISS on table - connected thru feedthru - Mar 7	Power to ISS on table - connected Feb 28 (no feed through)	
15	Power to ISS from rack - connectedthru feed thru -Mar 7	Power to ISS from rack - connected Feb 28 (no feed through)	
16	Laser chiller splitter to AA chassis - pulled to chiller March 19 - installed	Laser chiller splitter to AA chassis - pulled to chiller March 19 - installed	Requires M-M DB9 gender changer at chiller
17	TTL out to RF driver - INSTALLED - Mar 28	TTL to RF splitter connected - Feb 28	
18	AI to IO expansion - installed Mar 19		
19	ISS to AOM in - installed on table NC to AOM driver - Mar 7	ISS to AOM IN - not installed - Feb 28	
20	not needed as driver is on-table	not needed as driver is on-table	
21	Rotation stage control cable - from stage to controller installed - Mar 4	Rotation stage control cable - from stage to controller installed - Feb 28	
22	Picomotor power - connected _ mar 28	Picomotor power - connected _ mar 4	
23	CO2 interlock box power connected - Feb 28	CO2 interlock box power connected - Feb 28	
24	AOM drive RF input from Mech Room ??	AOM drive RF input from Mech Room pulled - Mar 19	
25	AOM power - pulled Mar 19	AOM power - pulled Mar 19	
26	AOM drive to AOM - CONNECTED - MAR 28	AOM drive to AOM - not installed - Feb 28	
27	AOM drive to feedthrough - not required - Feb 28	AOM drive to feedthrough - not required - Feb 28	
28	Laser RTD extension on table installed - NC to feedthrough	Laser RTD extension on table installed - Feb 28	
29	Laser RTD extension to rack installed - MAR 28	Laser RTD extension to rack installed - Feb 28	
30	Laser RF driver on table installed - MAR 28	Laser RF driver on table installed - Feb 28	
31	Laser RF driver to rack installed - MAR 28	Laser RF driver to rack installed - Feb 28	
32	Laser RF driver on table installed - MAR 28	Laser RF driver on table installed - Feb 28	
33	Laser RF driver to rack installed - MAR 28	Laser RF driver to rack installed - Feb 28	
34	Flow meter to interlock cable - INSTALLED MAR 28	Flow meter to interlock cable - pulled to chiller room - Mar 19	
35	EtherCAT to interlock cable installed - Mar 4	EtherCAT to interlock cable installed but not connected to interlock - Feb 28	
36	AA to IO expansion - installed Mar 19	AA to IO expansion - installed Mar 19	
37	Laser power cable on-table installed - Feb 28 (nc at feedthrough, or driver)	Laser power cable on-table installed - Feb 28 (nc at feedthrough)	
38	RF splitter on-tablepower, INSTALLED - MAR 28	RF splitter on-tablepower, not installed - Feb 28	
39	Db25 to 2x DB9 - Cable installedand connected - Mar 7	Db25 to 2x DB9 - Cable installed but missing end cap - Feb 28	
40	Chiller to Interlock box in rack - pulled Mar 19	Chiller to Interlock box in rack - pulled Mar 19	needs gender changer on controller end
41	Picomotor driver to feedthrough - installed - and connected - Mar 25	Picomotor driver to feedthrough - installed - Feb 28 (feedthrough not in)	
42	EtherCAT chassis to pico driver - installed Mar 26 - NC chassis end	EtherCAT chassis to pcio driver - installed Feb 28	
43	EtherCAT chassis from pico driver - installed Mar 26 - NC chassis end	EtherCAT chassis from pico driver - installed Feb 28	
44	TTL RF input installed - Mar 7	TTL RF input to feedthru installed (panel missing) - March 4	
45	Feedthrough to RF driver in Mech Room - installed Mar 19	Feedthrough to RF driver in Mech Room - installed Mar 19	
46	EtherCAT chassis to EtherCAT splitter - pulled - March 19	EtherCAT chassis to EtherCAT splitter - pulled - March 19	
47	EtherCAT chassis from EtherCAT splitter - pulled - March 19 - requires FF gender changer	EtherCAT chassis from EtherCAT splitter - pulled - March 19 - requires FF gender changer	
48	EtherCAT table breakout to feedthrough - installed - March 28	EtherCAT table breakout to feedthrough - Not installed - March 4	

49	Feedthrough to EtherCAT splitter in rack - installed - March 28	Feedthrough to EtherCAT splitter in rack - not installed - March 4
50	Aiming laser power cable - installed - NC to laser - march 7	Aiming laser power cable - not installed - march 4
51	Beam imager power cable - installed NC to imager - March 7	Beam imager power cable - not installed - March 4
52	24V power to corner feedthrough - EtherCAT on table - connected Mar 28	18V power to corner feedthrough - EtherCAT on table - not connect. Mar 4
53	24V on table to EtherCAT - connected - March 28	18V on table to EtherCAT - not connected - March 4
54	DB15 from rotation stage to controller - installed March 4	DB15 from rotation stage to controller - installed March 4
55	100ft EtherCAT to rotation stage feedthroguh - (connected directly to chassis, not feedthrough - March 4	100ft EtherCAT to rotation stage feedthroguh - (connected directly to chassis, not feedthrough - March 4
56	Osc. In Mech room to Splitter in TCSX rack - can't see - march 19.	
57	Power from ISS box to TTL box - installed March 28	Power from ISS box to TTL box - installed March 4
58	Chiller splitter cable - installed - March 19	Chiller splitter cable - installed - March 19
59	Camera CAT5 cable on-table - installed NC to camera - Mar 26	Camera CAT5 cable on-table - not installed - march 4
60	Camera CAT5 cable feedtrhough to network switch - not installed - mar 4	Camera CAT5 cable feedtrhough to network switch - not installed - mar 4
61	2Pin Dsub Motor Supply cable for rotation stage - connected directly from power not feedthrough - March 4	2Pin Dsub Motor Supply cable for rotation stage - connected directly from power not feedthrough - March 4
62	Laser power cable from Mech room - pulled - Mar 19 NC @ FEEDTHROUGH	Laser power cable from Mech room - pulled - Mar 19
63	Intek BO box to site interlock - NC - march 4	Intek BO box to site interlock - NC - march 4
64	2Pin Dsub Motor Supply cable on-table - NC - March 4	2Pin Dsub Motor Supply cable on-table - NC - March 4
65	Swapped pins 2 and 6 and installed - Mar-19	Swapped pins 2 and 6 and installed - Mar-19
66	Instek BO chassis to AA chassis - installed Mar 19	Instek BO chassis to AA chassis - installed Mar 19
68	AOM interlock cable from AOM to driver - connected - March 28	AOM interlock cable from AOM to driver - not connected - March 4
69	N/A doesn't exist anymore (AOM interlock feedthrogh to driver)	N/A doesn't exist anymore (AOM interlock feedthrogh to driver)
70	24V feedthrough to rotation stage controller power - installed MAR 28	24V feedthrough to rotation stage controller power - not installed
71	24V rack to feedtrhrough for rotation stage controller - INSTALLED Mar 28	24V rack to feedtrhrough for rotation stage controller - onsatlled but connected directly to controller - Mar 7
RF to Laser	4 cables installed - no driver	4 cables installed
Distrib. To RF	4 cables insatlled - no driver	4 cables insatlled
Cable dressing - ontable	Incomplete - Mar 5	Incomplete - Mar 5
Cable dressing - rack to table	Incomplete - Mar 5	Incomplete - Mar 5
Cable dressing - rack	Incomplete - Mar 5	Incomplete - Mar 5

Electronics	**X**	**Y**
Laser RF driver	installed - MAR 28	Installed - SN 21106D-20608 - Mar 5
Laser	Installed - MAR 28	Installed - SN 20608-21106D - Mar 5
Distribution box	Installed - MAR 28	Installed - Mar 5
Sine To TTL	Installed - MAR 28	Installed - Mar 5
D1300015 - ISS	Installed - - MAR 28	Installed - no serial number - Mar 5
AOM Driver	INSTALLED 1 - MAR 28	Not installed Phase 1 - Mar 5
D1201062 - Slow BO	Installed - - MAR 28	Installed - SN1301939 - Mar 5
Flipper 1	Removed Phase 1(is on-table) - Mar 5	Removed Phase 1(is on-table) - Mar 5
Sensor 1	Not installed Phase 1 - Mar 5	Not installed Phase 1 - Mar 5
Flipper 2	Installed - Mar 5 - need to change to fixed	Removed Phase 1(is on-table) - Mar 5
Sensor 2	Not installed Phase 1 - Mar 5	Not installed Phase 1 - Mar 5
Beam Imager	Not installed Phase 1 - Mar 5	Not installed Phase 1 - Mar 5
Temperature Sensor 1	Installed - Mar 7 - RF driver lines	Not installed Phase 1 - Mar 5
Temperature Sensor 2	Not installed Phase 1 - Mar 5	Not installed Phase 1 - Mar 5
Temperature Sensor 3	Not installed Phase 1 - Mar 5	Not installed Phase 1 - Mar 5
Temperature Sensor 4	Not installed Phase 1 - Mar 5	Not installed Phase 1 - Mar 5
Temperature Sensor 5	Not installed Phase 1 - Mar 5	Not installed Phase 1 - Mar 5
Temperature Sensor 6	Not installed Phase 1 - Mar 5	Not installed Phase 1 - Mar 5
Picomotor 1	Installed and working - Mar 5	Installed and working - Mar 5
Picomotor 2	Installed and working - Mar 5	Installed and working - Mar 5
Picomotor 3 - UPM	Installed and working - Mar 5	Installed and working - Mar 5
Picomotor BO Box 1	Installed and working - Mar 5	Installed and working - Mar 5
Picomotor BO Box 2	Installed and working - Mar 5	Installed and working - Mar 5
Rotation Stage Controller	Installed - Mar 5	Installed and working - Mar 5
CO2 Controller - D1200745	Installed - top removed - Mar 28	Installed - top removed - Mar 5
RF distribution - D1000124	Installed and working - Mar 5	Installed - required? - Mar 5
DC Sequencer - D1200757	Installed - S1202549 - Mar 5	Installed - S1202576 - Mar 5
CO2P EtherCAT splitter D1201063	Installed - Mar 20	Installed - Mar 20
Picomotor Driver D1100323	Installed - Mar 25	Installed - S1107549 - Mar 5
IR Sensor Amplifier - D1300366	Installed - Mar75 - limit not set	Installed - Mar 5 - limit not set
Viewport Sensor	Installed - not aligned - Mar 7	Installed - not aligned - Mar 5
Chiller Flow Meter	Installed - Mar 20	Installed - Mar 20
HEPA Filter	Installed - Mar 19	Installed - Mar 19
AC Drop for HEPA	Installed - Mar 19	Installed - Mar 19
AC Drop for Lighting	Installed - Mar 19	Installed - Mar 19
HEPA And light switches	Installed - Mar 19	Installed - Mar 19
Lighting	Installed - Mar 19	Installed - Mar 19

FEEDTHROUGHS	X	Y
D1300767	Panel installed - Mar 5	Panel installed - Mar 5
CNR BO POWER	Insert installed: Mar 24	Insert installed: Mar 24
CNR BO ETHERCAT SPLITTER	Insert installed: Mar 24	Insert installed: Mar 24
MOTOR POWER	Insert installed: Mar 24	Insert installed: Mar 24
CTRL TO ROT STAGE	Insert installed: Mar 24	Insert installed: Mar 24
ROT STAGE SUPPLY	Insert installed: Mar 24	Insert installed: Mar 24
D1300766	Panel installed - Mar 7	Panel installed - Mar 5
RF TO LASER	Insert installed: Mar 24	Insert installed: Mar 24
CO2 LASER RTD	Insert installed, cables connected: Mar 26	Insert installed: Mar 24
CO2 LASER RF1	Insert installed, cables connected: Mar 26	Insert installed: Mar 24
CO2 LASER RF2	Insert installed, cables connected: Mar 26	Insert installed: Mar 24
D1300765	Panel installed - Mar 5	Panel installed - Mar 5
AOM DRIVE	Insert installed: Mar 24	Insert installed: Mar 24
AOM INTERLOCK	Insert installed: Mar 24	Insert installed: Mar 24
HV SUPPLY TO PZT	Insert installed: Mar 24	Insert installed: Mar 24
POWER TO ISS	Insert installed, cables connected: Mar 26	Insert installed: Mar 24
ISS ANALOG INPUTS	Insert installed, cables connected: Mar 26	Insert installed: Mar 24
ISS ANALOG OUTPUTS	Insert installed, cables connected: Mar 26	Insert installed: Mar 24
EMPTY PANELS	Some installed - gaps exist - Mar 5	Some installed - gaps exist - Mar 5
D1100323	Panel not installed - Mar 5	Panel installed - Mar 5
IN FROM PICO CONTROLLER	Insert installed: Mar 24	Insert installed: Mar 24
OTHERS	Panel installed - Mar 25	**DOES NOT EXIST**
AOM DRIVE POWER	Insert installed: Mar 25	**DOES NOT EXIST**
CAT5 NETWORK CABLE - IMAGER	Insert installed: Mar 25	**DOES NOT EXIST**
CO2 LASER POWER	Insert installed: Mar 25	**DOES NOT EXIST**

OPTICS - PHASE1&2	Installed and aligned?	
Optic name	**X**	**Y**
M1	Installed - Mar 5	Installed - Mar 5
POL1	Installed - Mar 5	Installed - Mar 5
AOM	installed - Phase 2 - Mar 26	Not installed - Phase 2 - Mar 5
AOM FOLD M1	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
AOM DUMP	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
DUMP1	Installed - Mar 5	Installed - Mar 5
M2/PO1	Installed - to be replaced in phase 2 - Mar 5	Installed - to be replaced in phase 2 - Mar 5
ISS BS	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
PD1 LENS	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
PD1 M1	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
PD1	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
PD2 M1	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
PD2 LENS	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
PD2	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
PM1	Installed - Mar 5	Installed - Mar 5
LENS1	Installed - Mar 5	Installed - Mar 5
PM2	Installed - Mar 5	Installed - Mar 5
M3/PO2	Installed - to be replaced in phase 2 - Mar 5	Installed - to be replaced in phase 2 - Mar 5
QPD BS	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
QPD1 LENS	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
QPD1	Installed - Mar 5	Not installed - Phase 2 - Mar 5
QPD2 M1	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
QPD2	Installed - Mar 5	Not installed - Phase 2 - Mar 5
HWP & MOTORIZED ROT STAGE	Installed - Mar 5	Installed - Mar 5
POL2	Installed - Mar 5	Installed - Mar 5
POL3	Installed - Mar 5	Installed - Mar 5
DUMPWC	Installed - Mar 5	Installed - Mar 5
DUMP2	Installed - Mar 5	Installed - Mar 5
M4/FLIPPER 1	Installed - to be replaced in phase 2 - Mar 5	Installed - to be replaced in phase 2 - Mar 5
FLIPPER 1 SENS	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
LENS2	Installed - Mar 5	Installed - Mar 5
M5	Installed - Mar 5	Installed - Mar 5
CENT MASK	Not installed - Mar 5	Installed - currently an iris - Mar 5
CENT MASK DUMP	Installed - Mar 5	Installed - Mar 5
FLIPPER 2	Installed - have to replace with a fixed mirror - Mar 5	Installed fixed mirror - to be replaced in phase 2 - Mar 5
FLIPPER 2 SENS	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
ANN M1	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
ANN LENS1	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
ANN M2	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
ANN M3	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
ANN MASK	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
ANN MASK DUMP	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
BS1	Installed - Mar 5	Installed - Mar 5
IMG LENS 1	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
IMG LENS BS	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
PWR METER HEAD	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
IMG M1	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
IMG M2	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
IMG M3	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
IMG SCREEN	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5
FLIR CAMERA	Not installed - Phase 2 - Mar 5	Not installed - Phase 2 - Mar 5

LENS3	Installed - Mar 5	Installed - Mar 5
DCBS/FINAL MIRROR	Installed - have to replace with a fixed mirror - Mar 5	Installed - Mirror - change in design - Mar 5
AIML	Installed - Mar 5	Installed - Mar 5
AIMM1	Installed - Mar 5	Installed - Mar 5
AIMM2	Not Installed - change in design - Mar 5	Not Installed - change in design - Mar 5
OUTPUT IRIS 1	Installed - Mar 6	Installed - Mar 5
OUTPUT IRIS 2	Installed - Mar 6	Installed - Mar 5
PERISCOPE	Installed - Mar 5	Installed - Mar 5
LPM	Installed - Mar 5	Installed - Mar 5
UPM	Installed - Mar 5	Installed - Mar 5
PERISCOPE - RANGE CHECK (actuator range covers test mass?)	Checked - mar 5	Checked - mar 5

PLUMBING	**X**	**Y**
CO2 Laser on-table hoses x2	Installed - Mar 5	Installed - Mar 5
Feeds to manifolds x2	Installed - Mar 5	Installed - Mar 5
Manifolds x 2	Installed - Mar 5	Installed - Mar 5
RF driver hoses x 8	Installed - RF driver not connected - Mar 5	Installed - Mar 5
WC beam dump x 2	Installed - Mar 5	Installed - Mar 5
AOM Driver x2	Not installed - Mar 5	Not installed - Mar 5
AOM x2	Not installed - Mar 5	Not installed - Mar 5

Calibrations `/opt/rtcds/lho/h1/chans/H1TCSCS.txt`

D1300650

Channel	**Working**	**Calibration**	**Safe snapped**
YARM			
L1:TCS-ITMY_CO2_PWR_SUPPLY_I	Real-time filter is working - Mar 21	2.441E-3 A/count	Safe snapped - Mar 21
L1:TCS-ITMY_CO2_PWR_SUPPLY_V	Real-time filter is working - Mar 21	4.882E-3 A/count	Safe snapped - Mar 21
L1:TCS-ITMY_CO2_LSRPWR_MTR	Filter ok, input not confirmed - Mar 5	Not calibrated - Mar 5	Not BR - Mar 5
L1:TCS-ITMY_CO2_PZT_MON	Filter ok, input not confirmed - Mar 5	3.05176E-3 V@PZT/count??	Not BR - Mar 5
L1:TCS-ITMY_CO2_LSRPWR_HD_PD	Filter ok, input not confirmed - Mar 5	Not calibrated - Mar 5	Not BR - Mar 5
L1:TCS-ITMY_CO2_PZT_SET_POINT	Filter ok, output not confirmed - Mar 5	327.68 counts/V@PZT	Not BR - Mar 5
L1:TCS-ITMY_CO2_CHILLER_SET_POINT	Real-time filter is working - Mar 21	T = 5.14E-4 counts + 5.84C (calibration). OFFSET= -5.84C. GAIN = 1945.53 C/counts	Safe snapped - Mar 21
L1:TCS-ITMY_CO2_AOM_SET_POINT	Filter ok, output not confirmed - Mar 5	3276.8 counts/V@AOM, 0.8Hz zero	Not BR - Mar 5
L1:TCS-ITMY_CO2_ISS_OUT_AC	Filter ok, input not confirmed - Mar 5	6.10352E-4 counts per volt	Not BR - Mar 5
L1:TCS-ITMY_CO2_ISS_OUT_DC	Filter ok, input not confirmed - Mar 5	Not calibrated - Mar 5	Not BR - Mar 5
L1:TCS-ITMY_CO2_ISS_IN_AC	Filter ok, input not confirmed - Mar 5	Not calibrated - Mar 5	Not BR - Mar 5
L1:TCS-ITMY_CO2_ISS_IN_DC	Filter ok, input not confirmed - Mar 5	Not calibrated - Mar 5	Not BR - Mar 5
L1:TCS-ITMY_CO2_CHILLER_SERVO_GAIN	Filter okay. Not calibrated, no gains - mar 5	Not calibrated - Mar 5	Not BR - Mar 5
L1:TCS-ITMY_CO2_AOM_SERVO_GAIN	Filter okay. Not calibrated, no gains - mar 5	Not calibrated - Mar 5	Not BR - Mar 5
L1:TCS-ITMY_CO2_LSRPWR_SET_POINT	Filter okay. Not calibrated, no gains - mar 5	Not calibrated - Mar 5	Not BR - Mar 5
L1:TCS-ITMY_CO2_LSRPWR_ERR_SIGNAL	Filter okay. Not calibrated, no gains - mar 5	Not calibrated - Mar 5	Not BR - Mar 5
L1:TCS-ITMY_CO2_MTRX	Matrix runs. Not feeding through - wrong matrix on MEDM screen	Not calibrated - Mar 5	Not BR - Mar 5
L1:TCS-ITMY_CO2_ISS_CTRL1		Not calibrated - Mar 5	
L1:TCS-ITMY_CO2_ISS_CTRL2		Not calibrated - Mar 5	
L1:TCS-ITMY_CO2_ISS_LOOP_SW		Not calibrated - Mar 5	
L1:TCS-ITMY_CO2_LOOP_SW_RB		Not calibrated - Mar 5	
L1:TCS-ITMY_CO2_QPD_A_SEG1		Not calibrated - Mar 5	
L1:TCS-ITMY_CO2_QPD_A_SEG2		Not calibrated - Mar 5	
L1:TCS-ITMY_CO2_QPD_A_SEG3		Not calibrated - Mar 5	
L1:TCS-ITMY_CO2_QPD_A_SEG4		Not calibrated - Mar 5	
L1:TCS-ITMY_CO2_QPD_B_SEG1		Not calibrated - Mar 5	
L1:TCS-ITMY_CO2_QPD_B_SEG2		Not calibrated - Mar 5	
L1:TCS-ITMY_CO2_QPD_B_SEG3		Not calibrated - Mar 5	
L1:TCS-ITMY_CO2_QPD_B_SEG4		Not calibrated - Mar 5	
L1:TCS-C_CO2_Y_LASERPOWER - rotation stage	Rotation stage channels are working - Mar 5	Central: Pin = 43.894W, phi_min = 37.702 deg, P0 = 1.825E-4	Not BR - Mar 5
L1:TCS-C_CO2_Y_FLOWRATE	Input from Beckhoff - not checked - Mar 5	GAIN = 1.2742 gpm/V, OFFSET = -2.5	Not BR - Mar 5
L1:TCS-C_CO2_Y_LASERTEMP	Input from Beckhoff - not checked - Mar 5	VGAIN = 2.829E-3, VOFFSET = 20.16E-3, RCABLE = 2.85 (Ohms), VBRIDGEIN = 1.25, check RCABLE for Y	Not BR - Mar 5
L1:SYS_MOTION_C_PICO_H	PICOMOTORS working - Mar 5	14200 counts = 1/80 in -> 8.8E-7m per count	Not BR - Mar 5
L1:TCS-C_CO2_Y_LASERONOFFMON	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_Y_INTERLOCKRTDMON	Beckhoff - channel doesn't exist - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_Y_INTERLOCKFLOWMON	Beckhoff - channel doesn't exist - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_Y_INTERLOCKAUX1MON	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_Y_INTERLOCKAUX2MON	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_Y_LASERTEMPVOLTAGE	Beckhoff - not checked - Mar 5	See calibration above	N/A
L1:TCS-C_CO2_Y_FLOWRATEVOLTAGE	Beckhoff - not checked - Mar 5	See calibration above	N/A
L1:TCS-C_CO2_Y_SHUTTER1MON	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_Y_SHUTTER2MON	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_Y_SHUTTER3MON	N/A defunct channel	N/A - binary	N/A - binary
L1:TCS-C_CO2_Y_TEMPERATURESENSOR1	**BECKHOFF OUT OF ORDER - Check this**	N/A - calibrated in Beckhoff	N/A
L1:TCS-C_CO2_Y_TEMPERATURESENSOR2	**BECKHOFF OUT OF ORDER - Check this**	N/A - calibrated in Beckhoff	N/A
L1:TCS-C_CO2_Y_TEMPERATURESENSOR3	**BECKHOFF OUT OF ORDER - Check this**	N/A - calibrated in Beckhoff	N/A
L1:TCS-C_CO2_Y_TEMPERATURESENSOR4	**BECKHOFF OUT OF ORDER - Check this**	N/A - calibrated in Beckhoff	N/A
L1:TCS-C_CO2_Y_TEMPERATURESENSOR5	**BECKHOFF OUT OF ORDER - Check this**	N/A - calibrated in Beckhoff	N/A
L1:TCS-C_CO2_Y_TEMPERATURESENSOR6	**BECKHOFF OUT OF ORDER - Check this**	N/A - calibrated in Beckhoff	N/A
L1:TCS-C_CO2_Y_LASERONOFFSWITCH	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary

L1:TCS-C_CO2_Y_ACTAUX1	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_Y_ACTAUX2	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_Y_AIMENABLE	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_Y_FLIRENABLE	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_Y_ACTFLIP1	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_Y_ACTFLIP2	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
XARM			
L1:TCS-ITMX_CO2_PWR_SUPPLY_I	Real-time filter is working - Mar 21	2.441E-3 A/count	Safe snapped - Mar 24
L1:TCS-ITMX_CO2_PWR_SUPPLY_V	Real-time filter is working - Mar 21	4.882E-3 A/count	Safe snapped - Mar 24
L1:TCS-ITMX_CO2_LSRPWR_MTR	Filter ok, input not confirmed - Mar 5	Calibrated in Volts - Mar 24	Safe snapped - Mar 24
L1:TCS-ITMX_CO2_PZT_MON	Filter ok, input not confirmed - Mar 24	3.05176E-3 V@PZT/count	Safe snapped - Mar 24
L1:TCS-ITMX_CO2_LSRPWR_HD_PD	Filter ok, input not confirmed - Mar 5	3.05176E-4 V/count	Safe snapped - Mar 24
L1:TCS-ITMX_CO2_PZT_OUT_GAIN	Filter ok, output not confirmed - Mar 5	327.68 counts/V@PZT	Safe snapped - Mar 24
L1:TCS-ITMX_CO2_PZT_SERVO_GAIN	Filter ok - Mar 24	control filter not set - Mar 24	Not SS - Mar 24
L1:TCS-ITMX_CO2_PZT_SET_POINT	Filter ok - Mar 24	No calibration required - internal filter, 50V	Safe snapped - Mar 24
L1:TCS-ITMX_CO2_CHILLER_SET_POINT	Real-time filter is working - Mar 21	No calibration required - internal filter, 20C	Safe snapped - Mar 21
L1:TCS-ITMX_CO2_CHILLER_OUT	Real-time filter is working - Mar 21	T = 5.14E-4 counts + 5.84C (calibration). OFFSET= -5.84C. GAIN = 1945.53 C/counts	Safe snapped - Mar 21
L1:TCS-ITMX_CO2_AOM_SET_POINT	Filter okay - Mar 24	No calibration required - internal filter, 0.1V	Safe snapped - Mar 24
L1:TCS-ITMX_CO2_AOM_OUT_GAIN	Filter ok, output not confirmed - Mar 24	3276.8 counts/V@AOM, 0.8Hz zero	Safe snapped - Mar 24
L1:TCS-ITMX_CO2_ISS_OUT_AC	Filter ok, input not confirmed - Mar 5	Not calibrated - Mar 5	Not BR - Mar 5
L1:TCS-ITMX_CO2_ISS_OUT_DC	Filter ok, input not confirmed - Mar 5	Not calibrated - Mar 5	Not BR - Mar 5
L1:TCS-ITMX_CO2_ISS_IN_AC	Filter ok, input not confirmed - Mar 5	Not calibrated - Mar 5	Not BR - Mar 5
L1:TCS-ITMX_CO2_ISS_IN_DC	Filter ok, input not confirmed - Mar 5	Not calibrated - Mar 5	Not BR - Mar 5
L1:TCS-ITMX_CO2_CHILLER_SERVO_GAIN	Filter okay - Mar 24	control filter not set - Mar 24	Not BR - Mar 5
L1:TCS-ITMX_CO2_AOM_SERVO_GAIN	Filter ok - Mar 24	control filter not set - Mar 24	Not BR - Mar 5
L1:TCS-ITMX_CO2_LSRPWR_SET_POINT	Filter okay. Not calibrated, no gains - mar 5	Not calibrated - Mar 5	Not BR - Mar 5
L1:TCS-ITMX_CO2_LSRPWR_ERR_SIGNAL	Filter okay. Not calibrated, no gains - mar 5	Not calibrated - Mar 5	Not BR - Mar 5
L1:TCS-ITMX_CO2_MTRX	Matrix is okay - values not set	Not calibrated - Mar 5	Not BR - Mar 5
L1:TCS-ITMX_CO2_ISS_CTRL1		Not calibrated - Mar 5	
L1:TCS-ITMX_CO2_ISS_CTRL2		Not calibrated - Mar 5	
L1:TCS-ITMX_CO2_ISS_LOOP_SW		Not calibrated - Mar 5	
L1:TCS-ITMX_CO2_LOOP_SW_RB		Not calibrated - Mar 5	
L1:TCS-ITMX_CO2_QPD_A_SEG1		Not calibrated - Mar 5	
L1:TCS-ITMX_CO2_QPD_A_SEG2		Not calibrated - Mar 5	
L1:TCS-ITMX_CO2_QPD_A_SEG3		Not calibrated - Mar 5	
L1:TCS-ITMX_CO2_QPD_A_SEG4		Not calibrated - Mar 5	
L1:TCS-ITMX_CO2_QPD_B_SEG1		Not calibrated - Mar 5	
L1:TCS-ITMX_CO2_QPD_B_SEG2		Not calibrated - Mar 5	
L1:TCS-ITMX_CO2_QPD_B_SEG3		Not calibrated - Mar 5	
L1:TCS-ITMX_CO2_QPD_B_SEG4		Not calibrated - Mar 5	
L1:TCS-C_CO2_X_LASERPOWER - rotation stage	Rotation should be working - not checked Mar 5	Not calibrated - Mar 5	Not BR - Mar 5
L1:TCS-C_CO2_X_FLOWRATE	Input from Beckhoff - not checked - Mar 5	GAIN = 1.2742 gpm/V, OFFSET = -2.5	Not BR - Mar 5
L1:TCS-C_CO2_X_LASERTEMP	Input from Beckhoff - not checked - Mar 5	VGAIN = 2.829E-3, VOFFSET = 20.16E-3, RCABLE = 2.85 (Ohms), VBRIDGEIN = 1.25,	Not BR - Mar 5
L1:SYS_MOTION_C_PICO_H	PICOMOTORS working - Mar 5	14200 counts = 1/80 in -> 8.8E-7m per count	Not BR - Mar 5
L1:TCS-C_CO2_X_LASERONOFFMON	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_X_INTERLOCKRTDMON	Beckhoff - channel doesn't exist - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_X_INTERLOCKFLOWMON	Beckhoff - channel doesn't exist - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_X_INTERLOCKAUX1MON	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_X_INTERLOCKAUX2MON	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_X_LASERTEMPVOLTAGE	Beckhoff - not checked - Mar 5	See calibration above	N/A
L1:TCS-C_CO2_X_FLOWRATEVOLTAGE	Beckhoff - not checked - Mar 5	See calibration above	N/A
L1:TCS-C_CO2_X_SHUTTER1MON	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_X_SHUTTER2MON	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_X_SHUTTER3MON	N/A defunct channel	N/A - binary	N/A - binary
L1:TCS-C_CO2_X_TEMPERATURESENSOR1	**BECKHOFF OUT OF ORDER - Check this**	N/A - calibrated in Beckhoff	N/A
L1:TCS-C_CO2_X_TEMPERATURESENSOR2	**BECKHOFF OUT OF ORDER - Check this**	N/A - calibrated in Beckhoff	N/A
L1:TCS-C_CO2_X_TEMPERATURESENSOR3	**BECKHOFF OUT OF ORDER - Check this**	N/A - calibrated in Beckhoff	N/A
L1:TCS-C_CO2_X_TEMPERATURESENSOR4	**BECKHOFF OUT OF ORDER - Check this**	N/A - calibrated in Beckhoff	N/A
L1:TCS-C_CO2_X_TEMPERATURESENSOR5	**BECKHOFF OUT OF ORDER - Check this**	N/A - calibrated in Beckhoff	N/A
L1:TCS-C_CO2_X_TEMPERATURESENSOR6	**BECKHOFF OUT OF ORDER - Check this**	N/A - calibrated in Beckhoff	N/A
L1:TCS-C_CO2_X_LASERONOFFSWITCH	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_X_ACTAUX1	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_X_ACTAUX2	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_X_AIMENABLE	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_X_FLIRENABLE	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_X_ACTFLIP1	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary
L1:TCS-C_CO2_X_ACTFLIP2	Beckhoff - not checked - Mar 5	N/A - binary	N/A - binary