LHO CO2P Install List   **April 23, 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 - cable installed. Apr 18	
	2	QPD1 - cable installed. Box end NC	QPD1 - cable installed. Apr18	
	3	QPD2 - cable installed. Box end NC	QPD2 - cable installed. Apr 18	
	4	PD1 cable - NC to PD	PD1 cable - NC to PD Apr16	
	5	PD2 cable - NC to PD	PD2 cable - NC to PD Apr16	
	6	Thermopile - INSTALLED MAR 28	Thermopile - INSTALLED APR16	
	7	PZT - INSTALLED MAR 28	PZT - INSTALLED APR16	
	8	ISS analogue out to ADC: ontable- - connected, INSTALLED MAR 28	ISS analogue out to ADC: box to feedthrough, INSTALLED APR 16	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 - boz to feedthrough connected - APR 16	used short 0.16" hex nuts and tightened with nut driver
	11	ISS analogue out from DAC -INSTALLED - Mar 28	ISS analague out from DAC -pulled - Mar 19	
	12	HV cable on table - connected FT to box Mar 7	HV cable - connected FT to box APR 16	
	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 thru feedthru - APR 16	
	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 out to RF driver - INSTALLED - APR16	
	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 - installed on table NC to AOM driver - APR16	
	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 - Apr 4	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 - CONNECTED - APR 16	
	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 - APR 16	
	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 - APR 16	
	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 - APR 16	
	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 to feedthrough APR	Laser power cable on-table installed to feedthrough APR	
	38	RF splitter on-tablepower, INSTALLED - MAR 28	RF splitter on-tablepower, INSTALLED - APR 16	
	39	Db25 to 2xDB9 installed and connected to feedthough: Con1 to 1"pic, Con2 to PERpico	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 - and connected - Apr18	
	42	EtherCAT chassis to pico driver - installed Mar 26 - NC chassis end	EtherCAT chassis to pico driver - installed Apr18 - NC chassis end	
	43	EtherCAT chassis from pico driver - installed Mar 26 - NC chassis end	EtherCAT chassis from pico driver - installed Apr18 - NC chassis end	
	44	TTL RF input installed - Mar 7	TTL RF input installed - Apr16	
	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 - installed - APR16	
	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 and connected Apr 17	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	

#	X	Y
53	24V on table to EtherCAT - connected - March 28	24V on table to EtherCAT - connected - APR16
54	DB15 from rotation stage to controller - installed March 4	DB15 from rotation stage to controller - installed Apr16 NC: to stage
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 APR16
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 through feedthrough - Apr 16
62	Laser power cable from Mech room - Connected @ FEEDTHROUGH	Laser power cable from Mech room - Connected @ FEEDTHROUGH Apr 16
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 - installed APR 16
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 - no driver
Distrib. To RF	4 cables insatlled - no driver	4 cables installed - no driver
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 - APR 16
Laser	Installed - MAR 28	Installed - APR 16
Distribution box	Installed - MAR 28	Installed - APR 16
Sine To TTL	Installed - MAR 28	Installed - APR 16
D1300015 - ISS	Installed - - MAR 28	Installed - APR 16
AOM Driver	INSTALLED 1 - MAR 28	Installed - APR 16
D1201062 - Slow BO	Installed - - MAR 28	Installed - APR 16
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 - APR 16
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 - APR 16
CNR BO POWER	Insert installed: Mar 24	Installed - APR 16
CNR BO ETHERCAT SPLITTER	Insert installed: Mar 24	Installed - APR 16
MOTOR POWER	Insert installed: Mar 24	Installed - APR 16
CTRL TO ROT STAGE	Insert installed: Mar 24	Installed - APR 16
ROT STAGE SUPPLY	Insert installed: Mar 24	Installed - APR 16
D1300766	Panel installed - Mar 7	Panel installed - Mar 5
RF TO LASER	Insert installed: Mar 24	Installed - APR 16
CO2 LASER RTD	Insert installed, cables connected: Mar 26	Installed - APR 16
CO2 LASER RF1	Insert installed, cables connected: Mar 26	Installed - APR 16

CO2 LASER RF2	Insert installed, cables connected: Mar 26	Installed - APR 16
D1300765	Panel installed - Mar 5	Panel installed - Mar 5
AOM DRIVE	Insert installed: Mar 24	Installed - APR 16
AOM INTERLOCK	Insert installed: Mar 24	Insert installed: Mar 24
HV SUPPLY TO PZT	Insert installed: Mar 24	Installed - APR 16
POWER TO ISS	Insert installed, cables connected: Mar 26	Installed - APR 16
ISS ANALOG INPUTS	Insert installed, cables connected: Mar 26	Installed - APR 16
ISS ANALOG OUTPUTS	Insert installed, cables connected: Mar 26	Installed - APR 16
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, cables connected: Apr 17	Panel installed and cable connected Apr18
OTHERS	Panel installed - Mar 25	Panel installed - APR16
AOM DRIVE POWER	Insert installed: Mar 25	Installed, NC to AOM: APR 16
CAT5 NETWORK CABLE - IMAGER	Insert installed: Mar 25 NC to rack	DOES NOT EXIST
CO2 LASER POWER	Insert installed: Mar 25	Installed: APR 16

OPTICS - PHASE1&2	**Installed and aligned?**	
Optic name	**X - NEEDS ALIGNING**	**Y**
M1	Installed - Apr 8 and aligned, Apr 23	Installed - Mar 5
POL1	Installed - Apr 8 and aligned, Apr 23	Installed - Mar 5
AOM	Installed - Apr 8 and aligned, Apr 23	Not installed - Phase 2 - Mar 5
AOM FOLD M1 (DM1)	Installed - Apr 8 and aligned, Apr 23	Not installed - Phase 2 - Mar 5
AOM DUMP (D2)	Installed - Apr 8 and aligned, Apr 23	Not installed - Phase 2 - Mar 5
DUMP1 (D1)	Installed - Apr 8 and aligned, Apr 23	Installed - Mar 5
PO1	Installed - Apr 8 and aligned, Apr 23	Installed - to be replaced in phase 2 - Mar 5
ISS BS (IBS)	Installed - Apr 8 and aligned, Apr 23	Not installed - Phase 2 - Mar 5
PD1 LENS (IL1)	Installed - Apr 8 and aligned, Apr 23	Not installed - Phase 2 - Mar 5
PD1 M1 (IM2)	Installed - Apr 8 and aligned, Apr 23	Not installed - Phase 2 - Mar 5
PD1	Not installed	Not installed - Phase 2 - Mar 5
PD2 M1 (IM1)	Installed - Apr 8 and aligned, Apr 23	Not installed - Phase 2 - Mar 5
PD2 LENS (IL1)	Installed - Apr 8 and aligned, Apr 23	Not installed - Phase 2 - Mar 5
PD2	Not installed	Not installed - Phase 2 - Mar 5
PM1	Installed - Apr 8 and aligned, Apr 23	Installed - Mar 5
LENS1 (L1)	Installed - Apr 8 and aligned, Apr 23	Installed - Mar 5
PM2	Installed - Apr 8 and aligned, Apr 23	Installed - Mar 5
PO2	Installed - Apr 8 and aligned, Apr 23	Installed - to be replaced in phase 2 - Mar 5
QPD BS (QBS)	Installed - Apr 8 and aligned, Apr 23	Not installed - Phase 2 - Mar 5
QPD1 LENS (LQPD)	Installed - Apr 8 and aligned, Apr 23	Not installed - Phase 2 - Mar 5
QPD1	Installed - Apr 8 and aligned, Apr 23	Not installed - Phase 2 - Mar 5
QPD2 M1 (QM1)	Installed - Apr 8 and aligned, Apr 23	Not installed - Phase 2 - Mar 5
QPD2	Installed - Apr 8 and aligned, Apr 23	Not installed - Phase 2 - Mar 5
HWP & MOTORIZED ROT STAGE	Installed - Apr 8	Installed - Mar 5
POL2 (P2)	Installed - Apr 8	Installed - Mar 5
POL3 (P3)	Installed - Apr 8	Installed - Mar 5
DUMPWC (D3)	Installed - Apr 14	Installed - Mar 5
DUMP2 (D4)	Installed - Apr 14	Installed - Mar 5
FLIPPER 1 (FM1)	Installed - Apr 8	Installed - to be replaced in phase 2 - Mar 5
FLIPPER 1 SENS (PROX1)	Not installed - no post	Not installed - Phase 2 - Mar 5
LENS2 (CL1)	Installed - Apr 14	Installed - Mar 5
M5 (CM1)	Installed - Apr 8	Installed - Mar 5
CENT MASK (CMASK)	Not installed	Installed - currently an iris - Mar 5
CENT MASK DUMP (D6)	Installed - Apr 14	Installed - Mar 5
FLIPPER 2 (FM2)	Installed - Apr 8	Installed fixed mirror - to be replaced in phase 2 - Mar 5
FLIPPER 2 SENS (PROX2)	Not installed - no post	Not installed - Phase 2 - Mar 5
ANN M1 (M2)	Installed - Apr 8	Not installed - Phase 2 - Mar 5
ANN LENS1 (L2)	Installed - Apr 14	Not installed - Phase 2 - Mar 5
ANN M2 (M3)	Installed - Apr 8	Not installed - Phase 2 - Mar 5
ANN M3 (M4)	Installed - Apr 8	Not installed - Phase 2 - Mar 5
ANN MASK (AMASK)	Not installed	Not installed - Phase 2 - Mar 5
ANN MASK DUMP (D5)	Installed - Apr 14	Not installed - Phase 2 - Mar 5
BS1 (OBS)	Installed - Apr 8	Installed - Mar 5
IMG LENS 1 (LIMG)	Installed - Apr 14	Not installed - Phase 2 - Mar 5
IMG LENS BS (MBS)	Installed - Apr 8	Not installed - Phase 2 - Mar 5
PWR METER HEAD (POW)	Installed - Apr 14	Not installed - Phase 2 - Mar 5
IMG M1 (GM1)	Installed - Apr 8	Not installed - Phase 2 - Mar 5
IMG M2 (GM2)	Installed - Apr 14	Not installed - Phase 2 - Mar 5
IMG M3 (GM3)	Installed - Apr 14	Not installed - Phase 2 - Mar 5
IMG SCREEN	Not installed	Not installed - Phase 2 - Mar 5
FLIR CAMERA	Not installed	Not installed - Phase 2 - Mar 5
LENS3 (L3)	Installed - Apr 14	Installed - Mar 5
DCBS/FINAL MIRROR (DBS)	Installed - Apr 14 (mount only)	Installed - Mirror - change in design - Mar 5
AIML (VL)	Not Installed	Installed - Mar 5
AIMM1 (VM1)	Installed - Apr 14 (mount only)	Installed - Mar 5
AIMM2 (VM2)	Installed - Apr 14 (mount only)	Not Installed - change in design - Mar 5
OUTPUT IRIS 1	Not Installed	Installed - Mar 5
OUTPUT IRIS 2	Not Installed	Installed - Mar 5
PERISCOPE	Installed - Apr 18 (mounts only, mirrors not mounted)	Installed - Mar 5
LPM	Not Installed	Installed - Mar 5
UPM	Not Installed	Installed - Mar 5
PERISCOPE - RANGE CHECK (actuator range covers test mass?)	To be confirmed	Checked - mar 5

PLUMBING	**X**	**Y**

CO2 Laser on-table hoses x2	Installed - Mar 5	Installed - Apr 16
Feeds to manifolds x2	Installed - Mar 5	Installed - Apr 16
Manifolds x 2	Installed - Mar 5	Installed - Apr 16
RF driver hoses x 8	Installed - RF driver not connected - Mar 5	Installed - Apr 16
WC beam dump x 2	Installed - Mar 5	Installed - Mar 5
AOM Driver x2	Not installed - Mar 5	Installed - Apr 16
AOM x2	Not installed - Mar 5	Installed - Apr 16

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