

HIFO Y wrap up items
Updated on August 7th

Feel free to edit the list

good
fine
intermediate
not good
bad

tips: You can look up the past revision from 'See Revision History' in the 'File' pull down tab above

To sort a range by priority, select it and from the Data menu choose 'Sort range by column C, Z->A'

Software							
priority	task	description	assignment	status	comments	last update	
For a list of TwinCat Libraries with status of the library, documntation and medm screens see https://docs.google.com/spreadsheets/ccc?key=0AvmF51RF4ZJvdGJ0UkYxa2xZEGISZnBkZ3cxYlgwSnc#gid=0							
★★★★	medm cleanup	fix broken links and submit all in to SVN	everyone		let us know if something is missing	8/15/2013	
★★★★	PZT readbacks	PSL upper periscope PZT needs readbacks	MT			8/7/2013	
★★★★	ALS autolocker design	a global design	SD		may need to wait for gaurdian	8/7/2013	
★★★★	polarization correction at EY		MF		installed, software needed	some time ago	
★★★★	dither alignment servo	Implement a dither alignment servo either by the realtime lockers or TDS-type scripts	SB		h1asc model and medm screens ready, except for IPC links. Also we might need a camera for ITM centering, alog 7530	8/25/2013	
★	common mode servo screen	needs to distinguish them by colors. They look too similar.	MF			8/7/2013	
★★	Cleaning of Noise Budget codes	Needs to clean up some unnecessary files	AS		https://alogs.ligo-wa.caltech.edu	8/26/2013	
Electronics							
priority	task	description	assignment	status	comments	last update	
★★★★★★	Common mode boards, ECR E1200907	Modifications to the common mode board			which CMB ?	8/7/2013	
★★★★★★	IMC compensation, issue tracker ID 102	https://services.ligo-wa.caltech.edu			what is this ?	8/7/2013	
★★★★★★	PLL locking for VCOs, ECR pending	make a design for the PLL.	SD, DS			8/7/2013	
★★★★★★	Summing node board	Design a summing board for the REFL and ALS-CARM signals	KI, DS			8/7/2013	
★★★★	COMAMFF/REFL cabling, ECR E1300402		DS			8/7/2013	
★★★★	Demodulator board replacement	EY ?	RM, FC			8/7/2013	
★★★★	Modulation frequency, issue tracker ID 18	https://services.ligo-wa.caltech.edu				8/7/2013	
★★★★	HAM2 Faraday mighty mice connector	Install it and check the functionality				8/7/2013	
★★★★	3rd LSC ADC, model updates	give some description				8/7/2013	
★★★★	EtherCAT/RT communication, ECR E1300403	add a direct wire connection between the real-time front end and EtherCAT				8/7/2013	
★★★★	HAM 1 ISC electronics, optics path	Check the item list and install the stuff.				8/7/2013	
★★★★	HAM1 beam diverter	Install HAM1 beam diverter				8/7/2013	
★★★★	Remove the whitening-less QPD amplifier	Whitening-less units are only meant for testing.	RM, FC			8/7/2013	
★★★★	TEC PID fix	double check if it is optimized	KI			8/7/2013	
★★★★	Replacement of a reed switch in the beam diverter at EY	one of the reed switches is broken	KK		https://alogs.ligo-wa.caltech.edu	8/7/2013	
★★	strain relief of all the cables at the corner	no more RF troubles.	FC			8/7/2013	
★★	ISCT1 picomotors	check the cabling and functionalities			controller boxes are installed	8/7/2013	
★★	ISCT1 mechanical shutters	check the cabling and functionalities			controller boxes are installed	8/7/2013	
★★	ISCT1 cameras	Determine the plan and install them	RM?			8/7/2013	
Optics							
priority	task	description	assignment	status	comments	last update	
★★★★★★	ISCT1 periscopes, ECR pending	Determine what to do with the periscope	RS and everyone		Common mode reduction of 10 seems plausible	8/7/2013	
★★★★	ISCT1 drawing updates	make sure the drawing is up-to-date	KI		need to remove two lenses for HIFO-Y mode matching	8/26/2013	
★★	IOT2L double check	double check if the table needs some further care. It needed, do it	U of Florida ?		missing items: two high power beam dumps, RFPD1181, IO-MCR_M8, OSA, two gigEs	8/26/2013	
★★	beam profile of SHG beam at ISCT1	just for a record.	KI			8/7/2013	
★★	PSL fiber pick off saturation	The signal has been saturating all the time. Put some sort of attenuator				8/16/2013	
★	prepare OPDs for ALS signals on ISCT1	we might need two OPDs for sensing the X and Y green light angular motions			where is this ?	8/7/2013	
Interferometer							
priority	task	description	assignment	status	comments	last update	
★★★★★★★	noise budget		AS		becoming more accurate	8/7/2013	
★★★★★★	IMC WFS characterization	Do it before the vertex gets vented	SB		LHO alog 7490, all UGFs are about 0.68Hz	8/20/2013	
★★★★★★	CARM hand off simulation	simulate the CARM hand off in time domain. This let us detemin the summing board design	KI		started	11/26/2013	
★★★★★★	HIFO Y summary document	For the point of view of the control model and noise analysis	AS		in progress	9/18/2013	
★★★★★★	HIFO Y summary document	write a summary document quantitatively summarize what we observed and maybe document them	SD		draft T1300712	8/19/2013	
★★★★★★	Angular drift investigation at EY	Make a plan for an automated alignment which can be used during the full lock acquisition	SB		low priority	8/7/2013	
★★★★	initial alignment plan	Make a plan for an automated alignment which can be used during the full lock acquisition	SD, SB		a first draft made	8/7/2013	
★★★★	RMS vs UGF plot	estimate the CARM RMS as a function of CARM UGF	AS, KI		see alog 7408	8/12/2013	