

CONTROLLER 1

AXIS	STAGE	STEPPER MOTOR RELATED COMMANDS									SPEED					LIMITS		MISC.	
		KS	LC	MT	QS	YA	YB	YC	YR	YS	AC	DC	SP	HV	MO	FL	BL	ER	OE
1A	GUIDE CAMERA FOCUS	1.313	NA	-2.5	0	1	200	NA	NA	NA	TBD	TBD	TBD(512)	256(???)	0	TBD	TBD	TBD	-
1B	DEWAR HEIGHT	1.313	NA	-2.5	0	1	200	NA	NA	NA	TBD	TBD	TBD(512)	256(???)	0	TBD	TBD	TBD	-
1C	GUIDE CAMERA FILTER	1.313	NA	-2.5	0	1	200	NA	NA	NA	TBD	TBD	TBD(512)	256(???)	0	TBD	TBD	TBD	-
1D	SLIT	1.313	NA	-2.5	0	1	200	NA	NA	NA	TBD	TBD	TBD(512)	256(???)	0	TBD	TBD	TBD	-
1E	DECKER	1.313	NA	-2.5	0	1	200	NA	NA	NA	TBD	TBD	TBD(512)	256(???)	0	TBD	TBD	TBD	-
1F	SCIENCE FILTER WHEEL	1.313	NA	-2.5	0	1	200	NA	NA	NA	TBD	TBD	TBD(512)	256(???)	0	TBD	TBD	TBD	-
1G	CALIBRATION LAMPS	1.313	NA	-2.5	0	1	200	NA	NA	NA	TBD	TBD	TBD(512)	256(???)	0	TBD	TBD	TBD	-
1H	(UNASSIGNED)	1.313	NA	-2.5	0	1	200	NA	NA	NA	TBD	TBD	TBD(512)	256(???)	0	TBD	TBD	TBD	-
GALIL DEFAULT:		1.313	0	1	0	2	200	4000	0	0	256000	256000	25000	256	0	2147483647	-214783648	16384	0

PARAMETER	VALUE	
DH	1	KS (STEP MOTOR SMOOTHING) SMOOTHES MOTION BUT INCREASES MOTION TIME
IA	192,168,11,1	MT(MOTOR TYPE) SET -2.5 FOR STEPPERS
SM	???,???,???,???	YA (STEP DRIVE RESOLUTION) DETERMINES FULL (1), HALF (2), 1/4 (4) STEP RESOLUTION
IK	0	YB (STEP MOTOR RESOLUTION) STEPS PER REVOLUTION FOR MAINTENANCE MODE
CN	1, -1	HV (HOMING VELOCITY) SPEED FOR FINAL SPEED IN FIND INDEX FINAL MOVE
CO	12	
OP	.,\$FFFF	LC (LOW CURRENT) NOT APPLICABLE FOR HAMILTON SPECTROGRAPH
		QS (ERROR MAGNITUDE) NOT APPLICABLE FOR HAMILTON SPECTROGRAPH
		YC (ENCODER RESOLUTION) NOT APPLICABLE FOR HAMILTON SPECTROGRAPH
		YR (ERROR CORRECTION) NOT APPLICABLE FOR HAMILTON SPECTROGRAPH
		YS (STEP POSITION MAINTENANCE MODE ENABLE, STATUS) NOT APPLICABLE

NOTES: USE MC (MOTION COMPLETE) WITH STEPPERS DUE TO MOTION PROFILER
 AM (AFTER MOTION) DOES NOT WAIT FOR PROFILER
 MT MUST BE SET BEFORE AG COMMAND IS ISSUED.

REVISIONS http://loel.ucolick.org/manual/Hamilton_II/schematics/Ham_II_Programming_Notes_sh_1.pdf

11-01-10 SWAPPED GRATING TILT & DEWAR FOCUS WITH GUIDE CAMERA FOCUS AND FILTER STAGES TO ALLOW USE OF CN1,-1 ON HARDY AND CN1,1 ON LAUREL.

UNIVERSITY OF CALIFORNIA LICK OBSERVATORY		PROGRAMMING NOTES HAMILTON SPECTROGRAPH II	
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