

KAST MAIN I/O

CONTROLLER #1

CONTROLLER #2

KAST Spectrograph Onboard I/O						
BIT	I/O	LABEL	SIGNAL	FUNCTION	FROM	TO
1	I	LATCH X/INPUT 1	-	-	-	-
2	I	LATCH Y/INPUT 2	-	-	-	-
3	I	LATCH Z/INPUT 3	-	-	-	-
4	I	LATCH W/INPUT 4	-	-	-	-
5	I	INPUT 5	GRISM MAN FWD	MANUAL FWD PUSHBUTTON ON STAGE	J2-33	J2-18
6	I	INPUT 6	GRISM MAN REV	MANUAL REV PUSHBUTTON ON STAGE	J2-19	J2-20
7	I	INPUT 7	-	-	-	-
8	I	INPUT 8	-	-	-	-
9	I	INPUT 9	X IN LIMIT	X DICHOIC IN LIMIT SEE EL-3610	J2-2	J27-6
10	I	INPUT 10	X OUT LIMIT	X DICHOIC OUT LIMIT	J2-32	J27-8
11	I	INPUT 11	Y IN LIMIT	Y DICHOIC IN LIMIT	J2-18	J28-6
12	I	INPUT 12	Y OUT LIMIT	Y DICHOIC OUT LIMIT	J2-3	J27-8
13	I	INPUT 13	-	-	-	-
14	I	INPUT 14	-	-	-	-
15	I	INPUT 15	-	-	-	-
16	I	INPUT 16	TOP_CONTROLLER	TELLS SOFTWARE WHICH CONTROLLER THIS IS	-	-
1	O	HI PWR OUTPUT 1	-	-	-	-
2	O	HI PWR OUTPUT 2	-	-	-	-
3	O	HI PWR OUTPUT 3	-	-	-	-
4	O	HI PWR OUTPUT 4	-	-	-	-
5	O	HI PWR OUTPUT 5	-	-	-	-
6	O	HI PWR OUTPUT 6	-	-	-	-
7	O	HI PWR OUTPUT 7	-	-	-	-
8	O	HI PWR OUTPUT 8	-	-	-	-
9	O	HI PWR OUTPUT 9	X DICHOIC SOLENOID ON	INSERT X DICHOIC	J2-41	J27-2
10	O	HI PWR OUTPUT 10	Y DICHOIC SOLENOID ON	INSERT Y DICHOIC	J2-27	J28-2
11	O	HI PWR OUTPUT 11	-	-	-	-
12	O	HI PWR OUTPUT 12	-	-	-	-
13	O	HI PWR OUTPUT 13	-	-	-	-
14	O	HI PWR OUTPUT 14	-	-	-	-
15	O	HI PWR OUTPUT 15	-	-	-	-
16	O	HI PWR OUTPUT 16	-	-	-	-

KAST Spectrograph Onboard I/O						
BIT	I/O	LABEL	SIGNAL	FUNCTION	FROM	TO
1	I	LATCH X/INPUT 1	-	-	-	-
2	I	LATCH Y/INPUT 2	-	-	-	-
3	I	LATCH Z/INPUT 3	-	-	-	-
4	I	LATCH W/INPUT 4	-	-	-	-
5	I	INPUT 5	-	-	-	-
6	I	INPUT 6	-	-	-	-
7	I	INPUT 7	-	-	-	-
8	I	INPUT 8	-	-	-	-
9	I	INPUT 9	SELECT MAN FWD	Grating select manual FWD pushbutton	J2-2	J13-18
10	I	INPUT 10	SELECT MAN REV	Grating select manual REV pushbutton	J2-32	J13-20
11	I	INPUT 11	SELECT BRAKE IS ON	Grating select brake indicator switch	J2-18	J13-27
12	I	INPUT 12	TILT BRAKE IS ON	Grating tilt brake indicator switch	J2-3	J14-27
13	I	INPUT 13	WAVEPLATE IN	Waveplate in use bit. Low = waveplate	J2-33	J10-27
14	I	INPUT 14	-	-	-	-
15	I	INPUT 15	BOTTOM_CONTROLLER	TELLS SOFTWARE WHICH CONTROLLER THIS IS	-	-
16	I	INPUT 16	-	-	-	-
1	O	HI PWR OUTPUT 1	-	-	-	-
2	O	HI PWR OUTPUT 2	-	-	-	-
3	O	HI PWR OUTPUT 3	-	-	-	-
4	O	HI PWR OUTPUT 4	-	-	-	-
5	O	HI PWR OUTPUT 5	-	-	-	-
6	O	HI PWR OUTPUT 6	-	-	-	-
7	O	HI PWR OUTPUT 7	-	-	-	-
8	O	HI PWR OUTPUT 8	-	-	-	-
9	O	HI PWR OUTPUT 9	RELEASE SELECT BRAKE		J2-41	J13-24
10	O	HI PWR OUTPUT 10	RELEASE TILT BRAKE		J2-27	J14-24
11	O	HI PWR OUTPUT 11	-	-	-	-
12	O	HI PWR OUTPUT 12	-	-	-	-
13	O	HI PWR OUTPUT 13	-	-	-	-
14	O	HI PWR OUTPUT 14	-	-	-	-
15	O	HI PWR OUTPUT 15	-	-	-	-
16	O	HI PWR OUTPUT 16	-	-	-	-

REVISIONS	http://loel.ucolick.org/manual/KAST/schematics/KAST_Grating_Select_sh_1.pdf
<small> 08-14-07 CHANGED OUTPUT LABELS TO HI PWR, ADDED EXTENDED I/O ON SHEET2, AND MOVED FID ENABLES TO EXTENDED I/O 03-11-08 ADDED J2 PIN NUMBERS FOR CONTROLLER #2 03-13-08 MOVED GRISM MANUAL PUSHBUTTON INPUTS TO IN5 AND IN6 SO THAT THEY ARE IN THE SAME INTERNAL CABLE AS STAGE SIGNALS 02-02-09 REMOVED NOTE ABOUT TEMPORARY CONNECTIONS OF BRAKE SIGNALS TO RELAYS. REWIRED AS PER SCHEMATIC. 02-03-09 ADDED TOP AND BOTTOM CONTROLLER SIGNALS 02-13-09 ADDED SOFTWARE DEADMAN SWITCH AT BIT 25 ON EACH CONTROLLER (SHEET 2) 02-19-09 RENAMED BRAKE SIGNALS TO RELEASE SELECT AND TILT BRAKE 03-17-09 CORRECTED GRATING SELECT AND TILT BRAKE INPUT LABEL </small>	

UNIVERSITY OF CALIFORNIA LICK OBSERVATORY		INPUT/OUTPUT SIGNAL ASSIGNMENTS KAST SPECTROGRAPH	
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