

# KAST MAIN I/O

## CONTROLLER #1

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	--	--	--	--
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	--	--	--	--

## 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	--	--	--	--
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 OFF	Grating select brake indicator switch	J2-18	J13-27
12	I	INPUT 12	TILT BRAKE IS OFF	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	--	--	--	--
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	APPLY SELECT BRAKE	***Temporarily connected to relays	J2-41	J13-24
10	O	HI PWR OUTPUT 10	APPLY TILT BRAKE	***Temporarily connected to relays	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](http://loel.ucolick.org/manual/KAST/schematics/KAST_Grating_Select_sh_1.pdf)

- 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

<b>UNIVERSITY OF CALIFORNIA LICK OBSERVATORY</b>		<b>INPUT/OUTPUT SIGNAL ASSIGNMENTS KAST SPECTROGRAPH</b>	
DES'N BY: B. Alcott	ORIGIN DATE: 06-28-06	DWG. NO.	NUM. 1 OF 2
Last SN	MODIFY DATE: 03-12-08	<b>EL-3706</b>	REV. <b>A</b>
PRINT TIME: 07:39:03	PRINT DATE: Fri Jan 09, 2009		
PATH: KAST\		Kast_in_out.sch	

