

# ELECTRONICS RACK CONNECTIONS

## ENCODER CABLE (Jn)

CIRCUIT BOARD MOUNT: DB15P  
CABLE END: DB15S

J2	TO	SIGNAL	FUNCTION
1	—	AI+	AUX ENCODER INDEX+
2	—	B+	MAIN ENCODER B+
3	—	A+	MAIN ENCODER A+
4	—	AB+	AUX ENCODER B+
5	LOGIC SUPPLY	GND	GND
6	—	AI-	AUX ENCODER INDEX-
7	—	B-	MAIN ENCODER B-
8	—	A-	MAIN ENCODER A-
9	—	AA-	AUX ENCODER A-
10	—	—	—
11	—	AA+	AUX ENCODER A+
12	—	AB-	AUX ENCODER B-
13	—	—	—
14	—	—	—
15	LOGIC SUPPLY	+5V	+5V

## GENERAL I/O CABLE (Jn)

CIRCUIT BOARD MOUNT: DB9P  
CABLE END: DB9S

J3	TO	SIGNAL	FUNCTION
1	IOM TERM-1 OR 3	GND	GND
2	—	—	—
3	—	—	—
4	LOGIC SUPPLY	GND	GND
5	LOGIC SUPPLY	GND	GND
6	IOM	MOTOR_ENCND_CONN	MOTOR ENCODER CABLE CONNECTED
7	IOM	STAGE_LIMITS_CONN	STAGE LIMITS CONNECTED SIGNAL
8	IOM	STAGE_CABLE_CONN	STAGE CABLE CONNECTED SIGNAL
9	IOM	LOAD_ENCND_CONN	LOAD ENCODER CABLE CONNECTED

## STAGE I/O CABLE (Jn)

CIRCUIT BOARD MOUNT: HI-DENSITY DB15S  
CABLE END: HI-DENSITY DB15P

J4	TO	SIGNAL	FUNCTION
1	LOGIC SUPPLY	GND	GND
2	AMP J3	nnn_REV_PRIMARY	STAGE REVERSE LIMIT
3	AMP J3	nnn_FWD_PRIMARY	STAGE FORWARD LIMIT
4	AMP J3	nnn_HOME	STAGE HOME SIGNAL
11	LOGIC SUPPLY	GND	GND
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

UNIVERSITY OF CALIFORNIA LICK OBSERVATORY		APF STAGE CABLES	
DES'N BY: B. Alcott	ORIGIN DATE: 04-01-05	DWG. NO.	NUM. 4 OF 12
Last SN	MODIFY DATE: 05-06-10	<b>EL-3506</b>	REV. <b>A</b>
PRINT TIME: 14:39:49	PRINT DATE: Fri Jan 21, 2011		
PATH: APF\		APF_stage_cables.sch	

**REVISIONS** [http://loel.ucolick.org/manual/APF/schematics/APF\\_stage\\_cable\\_sh\\_4.pdf](http://loel.ucolick.org/manual/APF/schematics/APF_stage_cable_sh_4.pdf)

- 08-12-05 UPDATED PIN NUMBERS FOR BETTER LAYOUT OF TERMINATION BOARDS
- 08-12-05 ADDED FOURTH SHEET TO GIVE PICTORIAL VIEW OF STAGE CABLING
- 02-21-06 ASSIGNED PIN NUMBERS TO J2, J3, AND J4
- 04-22-10 REMOVED REFERENCES TO HALL EFFECT SENSORS
- 05-06-10 RENAMED VARIOUS SIGNALS FOR UNIFORMITY ON ALL SCHEMATICS