

RIO-47100, MULTISTACK DOME CHILLER MONITOR (SEE EL-3522)

Automatic Planet Finder Multistack RIO-47100 DIGITAL INPUTS					
BIT	I/O	LABEL	SIGNAL	FUNCTION	CONN PIN
1	DI0	Digital Input 0	PUMP_ON	ALARM , COOLANT CIRCULATING PUMP	44 D-SUB 7
2	DI1	Digital Input 1			44 D-SUB 22
3	DI2	Digital Input 2	COMP.#2 ON	RUN STATUS OF COMPRESSOR # 2	44 D-SUB 36
4	DI3	Digital Input 3			44 D-SUB 6
5	DI4	Digital Input 4			44 D-SUB 21
6	DI5	Digital Input 5	COMP.#1 ON	RUN STATUS OF COMPRESSOR # 1	44 D-SUB 35
7	DI6	Digital Input 6	CAR	FAULT CONDITION: LOW FLOW, COMPRESSION , PHASE	44 D-SUB 5
8	DI7	Digital Input 7			44 D-SUB 20
9	DI8	Digital Input 8	FLOW_IN	CHILLER, PROCESS INLET, SPECTROGRAPH, OK	44 D-SUB 33
10	DI9	Digital Input 9	FLOW_BYPASS	CHILLER, MANIFOLD BYPASS FLOW	44 D-SUB 3
11	DI10	Digital Input 10			44 D-SUB 18
12	DI11	Digital Input 11			44 D-SUB 32
13	DI12	Digital Input 12			44 D-SUB 2
14	DI13	Digital Input 13	DOOR_2_OPEN	LEVEL TWO DOOR OPEN	44 D-SUB 17
15	DI14	Digital Input 14	CLEAR	CLEAR OPEN-DOOR WARNING	44 D-SUB 31
16	DI15	Digital Input 15	DOOR_OPEN	FRONT DOOR LIMIT SWITCH	44 D-SUB 1

Automatic Planet Finder Multistack RIO-47100 DIGITAL OUTPUTS					
BIT	I/O	LABEL	SIGNAL	FUNCTION	CONN PIN
1	DO0	Digital Output 0			44 D-SUB 44
2	DO1	Digital Output 1			44 D-SUB 14
3	DO2	Digital Output 2			44 D-SUB 29
4	DO3	Digital Output 3			44 D-SUB 43
5	DO4	Digital Output 4			44 D-SUB 13
6	DO5	Digital Output 5			44 D-SUB 28
7	DO6	Digital Output 6			44 D-SUB 42
8	DO7	Digital Output 7	DOOR_WARNING	FRONT DOOR WARNING DEVICE	44 D-SUB 12
9	DO8	Digital Output 8			44 D-SUB 26
10	DO9	Digital Output 9			44 D-SUB 40
11	DO10	Digital Output 10			44 D-SUB 10
12	DO11	Digital Output 11			44 D-SUB 25
13	DO12	Digital Output 12			44 D-SUB 39
14	DO13	Digital Output 13			44 D-SUB 9
15	DO14	Digital Output 14			44 D-SUB 14
16	DO15	Digital Output 15			44 D-SUB 38

Automatic Planet Finder Spectrograph RIO-47100 ANALOG INPUTS					
ININPUT	LABEL	SIGNAL	FUNCTION	CONN	PIN
1	ANALOG IN 0	AI0	CHILLER PROCESS INLET FLOW, SPECTROGRAPH	26 D-SUB	23
2	ANALOG IN 1	AI1	CHILLER, MANIFOLD BYPASS FLOW	26 D-SUB	5
3	ANALOG IN 2	AI2	(UNASSIGNED)	26 D-SUB	14
4	ANALOG IN 3	AI3	(UNASSIGNED)	26 D-SUB	22
5	ANALOG IN 4	AI4	(UNASSIGNED)	26 D-SUB	4
6	ANALOG IN 5	AI5	(UNASSIGNED)	26 D-SUB	13
7	ANALOG IN 6	AI6	(UNASSIGNED)	26 D-SUB	21
8	ANALOG IN 7	AI7	TEMP MOINTOR TCC COMPUTER. 10/Mv Deg.C	26 D-SUB	3

Automatic Planet Finder Spectrograph RIO-47100 ANALOG OUTPUTS					
ININPUT	LABEL	SIGNAL	FUNCTION	CONN	PIN
1	ANALOG OUT 0	A00	(UNASSIGNED)	26 D-SUB	18
2	ANALOG OUT 1	A01	(UNASSIGNED)	26 D-SUB	26
3	ANALOG OUT 2	A02	(UNASSIGNED)	26 D-SUB	8
4	ANALOG OUT 3	A03	(UNASSIGNED)	26 D-SUB	17
5	ANALOG OUT 4	A04	(UNASSIGNED)	26 D-SUB	25
6	ANALOG OUT 5	A05	(UNASSIGNED)	26 D-SUB	7
7	ANALOG OUT 6	A06	(UNASSIGNED)	26 D-SUB	16
8	ANALOG OUT 7	A07	(UNASSIGNED)	26 D-SUB	24

***Also update web: APF/electronics/EL3510.html

***Also update EL-3523 and web EL3523

REVISIONS 2007

04-23-07 ADDED STATUS (INPUTS 13-16) AND INHIBIT SIGNALS (OUTPUT 13) FOR 48V SERVO SUPPLY
 05-01-07 ADDED SECOND SERVO SUPPLY DISABLE BIT 14
 05-02-07 CORRECTED SHUTTER SIGNAL ASSIGNMENTS

REVISIONS

http://loel.ucolick.org/manual/Apf/schematics/APF_in_out_sh_5.pdf

04-23-08 RENAMED SHUTTER 1 SCIENCE SHUTTER, SHUTTER 2 CUBE SHUTTER AND SHUTTER 3 SCIENCE SENSOR
 05-24-11 MOVED PROTEUS CHILLER INLET & OUTLET FLOW SWITCH FROM EXTERNAL RIO TO MULTISTACK MONITOR RIO
 06-3-11 MOVED DI1 to DI0 AND CHANGED DI1 & DI2 TO A NORMAL STATE (HIGH or a 1) ON THE EXTERNAL RIO MULTISTACK MONITOR.
 06-27-11 ADDED ANALOG SPECTROGRAGH FLOW METERS TO AI0 & AI1
 08-19-11 ADDED FRONT ENTRANCE LIMIT AND WARNING I/O
 03-2-12 MOVED FRONT ENTRANCE LIMIT AND WARNING I/O FROM DI07 TO DI15. ADDED DI13 & DI14 LOCAL OBSERVING WARNING
 09-11-12 ADDED CHILLER MANIFOLD FLOW METER IN PLACE OF CHILLER OUTLET PROCESS.
 01-25-13 ADDED TEMP SENSOR TO ANALOG IN 7. TCC COMPUTER

06-07-13 RECONFIGURED INPUTS DI0, DI2, & DI5
 09-11-13 ADDED ENTRANCE DOOR OPEN WARNING LEVEL 2 TO DI13

UNIVERSITY OF CALIFORNIA LICK OBSERVATORY		DOME CHILLER RIO SIGNAL ASSIGNMENTS APF SPECTROMETER	
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