# Automatic Planet Finder Spectrograph Amplifier I/O Connectors

## Amplifier A (AUX I/O J3)

| PIN | LABEL | SIGNAL | FUNCTION |
|---|---|---|---|
| 1 | PWM/MCMD Z | – | – |
| 2 | Output 6 | AMUX2B | 2st ANALOG MUX ADDR: 2 |
| 3 | Output 8 | – | (UNASSIGNED) |
| 4 | Output 5 | AMUX1B | 2st ANALOG MUX ADDR: 1 |
| 5 | Output 2 | AMUX1A | 1st ANALOG MUX ADDR: 1 |
| 6 | Abort* | – | – |
| 7 | Input 6 | SLT_SEC_LIM | SLIT DECKER STAGE SECONDARY LIMIT |
| 8 | Latch Z/Input 3 | CMR_SEC_LIM | CALIBRATION MIRROR STAGE SECONDARY LIMIT |
| 9 | SIGN/AEN Y | – | – |
| 10 | Encoder compare | – | – |
| 11 | Reverse limit X | ADC_REV_PRIMARY | – |
| 12 | Reverse limit Y | CAM_REV_PRIMARY | – |
| 13 | Reverse limit Z | CMR_REV_PRIMARY | – |
| 14 | Reverse limit W | CAL_REV_PRIMARY | – |
| 15 | Forward limit W | CAL_FWD_PRIMARY | – |
| 16 | SIGN/AEN W | – | – |
| 17 | SIGN/AEN Z | – | – |
| 18 | Output 7 | – | (UNASSIGNED) |
| 19 | Output 4 | AMUX0B | 2st ANALOG MUX ADDR: 0 |
| 20 | Output 1 | AMUX0A | 1st ANALOG MUX ADDR: 0 |
| 21 | Output 3 | AMUX2A | 1st ANALOG MUX ADDR: 2 |
| 22 | Input 7 | DEW_SEC_LIM | DEWAR FOCUS STAGE SECONDARY LIMIT |
| 23 | Latch W/Input 4 | CAL_SEC_LIM | CALIBRATION SOURCE STAGE SECONDARY LIMIT |
| 24 | Latch X/Input 1 | ADC_SEC_LIM | ADC STAGE SECONDARY LIMIT |
| 25 | PWM/MCMD X | – | – |
| 26 | Home X | ADC_HOME | – |
| 27 | Home Y | CAM_HOME | – |
| 28 | Home Z | CMR_HOME | – |
| 29 | Home W | CAL_HOME | – |
| 30 | Error Output*/INCOM | – | – |
| 31 | PWM/MCMD W | – | – |
| 32 | 5V | – | – |
| 33 | 5V | – | – |
| 34 | Ground | – | – |
| 35 | Ground | – | – |
| 36 | Input 8 | (RESERVED) | (UNASSIGNED STAGE SECONDARY LIMIT) |
| 37 | Input 5 | IOD_SEC_LIM | IODINE CELL STAGE SECONDARY LIMIT |
| 38 | Latch Y/Input 2 | CAM_SEC_LIM | GUIDE CAMERA FOCUS STAGE SECONDARY LIMIT |
| 39 | PWM/MCMD Y | – | – |
| 40 | SIGN/AEN X | – | – |
| 41 | Forward limit X | ADC_FWD_PRIMARY | – |
| 42 | Forward limit Y | CAM_FWD_PRIMARY | – |
| 43 | Forward limit Z | CMR_FWD_PRIMARY | – |
| 44 | Reset*/LSCOM | – | – |

## Amplifier B (AUX I/O J3)

| PIN | LABEL | SIGNAL | FUNCTION |
|---|---|---|---|
| 1 | PWM/MCMD G | – | – |
| 2 | Output 14 | | (RESERVED) |
| 3 | Output 16 | SET_48V_OFF | 48V SUPPLY #1, INHIBIT 48V SUPPLY'S OUTPUT |
| 4 | Output 13 | | (RESERVED) |
| 5 | Output 10 | CUBE_SHUTTER_OPEN | CORNER CUBE SHUTTER OPEN/CLOSE |
| 6 | Abort* | – | – |
| 7 | Input 14 | 48V_OUTPUT_OK | 48V SUPPLY OUTPUT IS FUNCTIONING OK |
| 8 | Latch G/Input 11 | | (UNASSIGNED) |
| 9 | SIGN/AEN F | – | – |
| 10 | Encoder compare | – | – |
| 11 | Reverse limit E | – | – |
| 12 | Reverse limit F | – | – |
| 13 | Reverse limit G | – | – |
| 14 | Reverse limit H | – | – |
| 15 | Forward limit H | – | – |
| 16 | SIGN/AEN H | – | – |
| 17 | SIGN/AEN G | – | – |
| 18 | Output 15 | SET_48V_OFF | 48V SUPPLY #2, INHIBIT 48V SUPPLY'S OUTPUT |
| 19 | Output 12 | – | (UNASSIGNED) |
| 20 | Output 9 | SCI_SHUTTER_OPEN | SCIENCE SHUTTER OPEN/CLOSE |
| 21 | Output 11 | SCI_SHUT_SENSOR | SCIENCE SHUTTER LED LIGHT SOURCE ON |
| 22 | Input 15 | 48V_FANS_OK | FANS ARE RUNNING OK IN POWER SUPPLY |
| 23 | Latch H/Input 12 | | (UNASSIGNED) |
| 24 | Latch E/Input 9 | SHUTTER 1 IS OPEN | 1st SHUTTER OPEN FEEDBACK SIGNAL |
| 25 | PWM/MCMD E | – | – |
| 26 | Home E | – | – |
| 27 | Home F | – | – |
| 28 | Home G | – | – |
| 29 | Home H | – | – |
| 30 | Error Output*/INCOM | – | – |
| 31 | PWM/MCMD H | – | – |
| 32 | 5V | – | – |
| 33 | 5V | – | – |
| 34 | Ground | – | – |
| 35 | Ground | – | – |
| 36 | Input 16 | 48V_TEMPERATURE OK | 48V SUPPLY OVER TEMPERATURE IS OK |
| 37 | Input 13 | 48V_AC_POWER_OK | AC INTO POWER SUPPLY IS OK |
| 38 | Latch F/Input 10 | SHUTTER 2 IS OPEN | 2nd SHUTTER OPEN FEEDBACK SIGNAL |
| 39 | PWM/MCMD F | – | – |
| 40 | SIGN/AEN E | – | – |
| 41 | Forward limit E | – | – |
| 42 | Forward limit F | – | – |
| 43 | Forward limit G | – | – |
| 44 | Reset*/LSCOM | – | – |

B

http://loel.ucolick.org/manual/APF/schematics/APF_galil_connector_wiring_sh_1.sch.pdf

### REVISIONS

04-27-07 ADDED SERVO SUPPLY (+48V) STATUS AND CONTROL SIGNALS – OUTPUT BIT 13, INPUT BITS 13, 14, 15 ,16
04-15-08 ADDED SCIENCE SHUTTER # 1 LED LIGHT SOURCE SIGNAL TO OUTPUT 11. REASIGNED SHUTTER # 2 LABLES TO MATCH INTERCONECTIONS SCHEMATIC.
04-23-08 RENAMED SHUTTERS
10-14-08 UPDATED OUTPUT 15 & 16, 48V SUPPLY TO INHIBIT 48V SUPPLY'S OUTPUT

UNIVERSITY OF CALIFORNIA
LICK OBSERVATORY

APF SPECTROGRAPH
GALIL CONNECTOR
WIRING

| | | | |
|---|---|---|---|
| DES'N BY: B. Alcott | ORIGIN DATE: 09-08-05 | DWG. NO. EL-3509 | NUM. 1 OF 3 / REV. C |
| Last SN | MODIFY DATE: 10-14-08 | | |
| PRINT TIME: 11:29:34 | PRINT DATE: Wed Oct 15, 2008 | | |
| PATH: APF/ | APF_galil_connector_wiring.sch | | |

NUM. 1 OF 3

GALIL CONNECTOR WIRING

EL-3509