

| 8 | | | | | | 7 | | | | | | 6 | | | | | | 5 | | | | | | 4 | | | | | | 3 | | | | | | 2 | | | | | | 1 | | | | | | | | | | | | | | | | | |
|-----------------------------|--|--|--|--|--|---|--|--|--|--|--|-------------------------------|--|--|--|--|--|-----------------------------|--|--|--|--|--|----------------------|--|--|--|--|--|-------------------------------------|--|--|--|--|--|------|--|--|--|--|--|--------------------------|--|--|--|--|--|--------|--|--|--|--|--|------|--|--|--|--|--|
| Cable Number | | | | | | Descriptive Cable Name | | | | | | Jack ID | | | | | | Plug ID | | | | | | Plug ID | | | | | | Jack ID | | | | | | Rev. | | | | | | Description | | | | | | Date | | | | | | None | | | | | |
| HI-M02-01 | | | | | | AC FC Power to Patch Panel | | | | | | FC INPUT | | | | | | HIPO FC Power | | | | | | HIPO FC Pwr P1 | | | | | | J1 | | | | | | 1 | | | | | | Initial Release | | | | | | Dunham | | | | | | | | | | | |
| HI-M02-02 | | | | | | AC UPS Power to Patch Panel | | | | | | UPS INPUT | | | | | | HIPO UPS Power | | | | | | HIPO UPS Pwr P2 | | | | | | J2 | | | | | | 2 | | | | | | Delete MADS Cables | | | | | | Dunham | | | | | | | | | | | |
| HI-M02-03-1 | | | | | | AC Power Cable to SI | | | | | | UPS 3 | | | | | | HIPO Blue Power | | | | | | P128 HIPO Blue Power | | | | | | J128 | | | | | | 3 | | | | | | Changes for Mac Minis | | | | | | Dunham | | | | | | | | | | | |
| HI-M02-03-2 | | | | | | AC Power Cable to SI | | | | | | UPS 4 | | | | | | HIPO Red Power | | | | | | P129 HIPO Red Power | | | | | | J129 | | | | | | 4 | | | | | | Correct ground point ICD | | | | | | Dunham | | | | | | | | | | | |
| HI-M02-04-1 | | | | | | AC Power Strip Cable | | | | | | UPS 2 | | | | | | HIPO Rack Power Strip P-A10 | | | | | | NA | | | | | | J-A25 through J-A30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-04-2 | | | | | | AC Power Strip Cable | | | | | | FC 1 | | | | | | HIPO Rack Power Strip P-A05 | | | | | | NA | | | | | | J-A13 through J-A18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-04-3 | | | | | | AC Power Strip Cable | | | | | | UPS 1 | | | | | | HIPO Rack Power Strip P-A09 | | | | | | NA | | | | | | J-A19 through J-A24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-05-1 (Table Note 2) | | | | | | Hipo Netra AC Power Cable | | | | | | J-A19 | | | | | | P-A19 | | | | | | P-A37 | | | | | | AC Pwr J-A37 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-05-3 (Table Note 2) | | | | | | Blue Netra AC Power Cable | | | | | | J-A22 | | | | | | P-A22 | | | | | | P-A39 | | | | | | AC Pwr J-A39 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-05-4 (Table Note 2) | | | | | | Red Netra AC Power Cable | | | | | | J-A23 | | | | | | P-A23 | | | | | | P-A40 | | | | | | AC Pwr J-A40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-05-5 | | | | | | Blue GPS Clock AC Power Cable | | | | | | J-A26 | | | | | | P-A26 | | | | | | P-A42 | | | | | | Blue Trak 8821 85 to 265 VAC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-05-6 | | | | | | Red GPS Clock AC Power Cable | | | | | | J-A25 | | | | | | P-A25 | | | | | | P-A41 | | | | | | Red Trak 8821 85 to 265 VAC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-05-7 (Table Note 1) | | | | | | Network Switch AC Power Cable | | | | | | J-A27 | | | | | | P-A27 | | | | | | P-A43 | | | | | | J-A43 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-05-14 | | | | | | Blue Dell Disp AC Pwr | | | | | | J-A13 | | | | | | P-A13 | | | | | | P-A31 | | | | | | J-A31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-05-15 | | | | | | Red Dell Disp AC Pwr | | | | | | J-A15 | | | | | | P-A15 | | | | | | P-A32 | | | | | | J-A32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-05-10 (Table Note 2) | | | | | | Croc Netra AC Power Cable | | | | | | J-A21 | | | | | | P-A21 | | | | | | P-A44 | | | | | | AC Pwr J-A44 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-05-12 (Table Note 1) | | | | | | Spare Network Switch AC Power Cable Replaces HI-M02-05-7 in J-A27 if network switch fails | | | | | | J-A27 | | | | | | P-A27 | | | | | | P-A46 | | | | | | J-A46 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-07-1 | | | | | | Blue Media Converter DC Power Cable | | | | | | J-A30 | | | | | | Transformer P-A30 | | | | | | Blue MC DC Power | | | | | | 12 VDC (Blue Media Converter) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-07-2 | | | | | | Red Media Converter DC Power Cable | | | | | | J-A28 | | | | | | Transformer P-A28 | | | | | | Red MC DC Power | | | | | | 12 VDC (Red Media Converter) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-08-1 | | | | | | Blue 1 Hz Coax/BNC | | | | | | 1 PPS Blue Trak 8821 | | | | | | Blue 1 Hz | | | | | | Blue 1 Hz | | | | | | 1 PPS J3 Blue GPS Intfc. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-08-2 | | | | | | Blue 1 MHz Coax/BNC | | | | | | LOW RATE Blue Trak 8821 | | | | | | Blue 1 MHz | | | | | | Blue 1 MHz | | | | | | Lo Rate J4 Blue GPS Intfc. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-08-3 | | | | | | Blue 10 MHz Coax/BNC | | | | | | HI RATE Blue Trak 8821 | | | | | | Blue 10 MHz | | | | | | Blue 10 MHz | | | | | | Hi Rate J5 (10 MHz) Blue GPS Intfc. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-08-4 | | | | | | Red 1 Hz Coax/BNC | | | | | | 1 PPS Red Trak 8821 | | | | | | Red 1 Hz | | | | | | Red 1 Hz | | | | | | 1 PPS J3 Red GPS Intfc. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-08-5 | | | | | | Red 1 MHz Coax/BNC | | | | | | LOW RATE Red Trak 8821 | | | | | | Red 1 MHz | | | | | | Red 1 MHz | | | | | | Lo Rate J4 Red GPS Intfc. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-08-6 | | | | | | Red 10 MHz Coax/BNC | | | | | | HI RATE Red Trak 8821 | | | | | | Red 10 MHz | | | | | | Red 10 MHz | | | | | | Hi Rate J5 (10 MHz) Red GPS Intfc. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-09-1 (Table Note 1) | | | | | | Fiber Network to MCCS | | | | | | Primary J-I01 or Backup J-I01 | | | | | | P-I01 | | | | | | P4 | | | | | | J4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-09-2 (Table Note 1) | | | | | | Fiber Network to MCCS | | | | | | Primary J-I02 or Backup J-I02 | | | | | | P-I02 | | | | | | P6 | | | | | | J6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-09-3 | | | | | | Red Network fiber | | | | | | TX (Red MC) | | | | | | P-I05 | | | | | | P88 | | | | | | J88 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-09-4 | | | | | | Red Network fiber | | | | | | RX (Red MC) | | | | | | P-I06 | | | | | | P89 | | | | | | J89 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-09-5 | | | | | | Blue Network fiber | | | | | | TX (Blue MC) | | | | | | P-I03 | | | | | | P90 | | | | | | J90 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-09-6 | | | | | | Blue Network fiber | | | | | | RX (Blue MC) | | | | | | P-I04 | | | | | | P91 | | | | | | J91 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-09-7 | | | | | | Blue Leach fiber (Table Note 2) | | | | | | J-I07 | | | | | | P-I07 | | | | | | P80 | | | | | | J80 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-09-8 | | | | | | Blue Leach fiber (Table Note 2) | | | | | | J-I08 | | | | | | P-I08 | | | | | | P81 | | | | | | J81 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-09-9 | | | | | | Blue 1 MHz fiber | | | | | | 1/10 MHz J9 Blue GPS Intfc. | | | | | | P-I09 | | | | | | P82 | | | | | | J82 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-09-10 | | | | | | Blue 1 PPS fiber | | | | | | 1 PPS J7 Blue GPS Intfc. | | | | | | P-I10 | | | | | | P83 | | | | | | J83 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-09-11 | | | | | | Red Leach fiber (Table Note 2) | | | | | | J-I11 | | | | | | P-I11 | | | | | | P84 | | | | | | J84 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-09-12 | | | | | | Red Leach fiber (Table Note 2) | | | | | | J-I12 | | | | | | P-I12 | | | | | | P85 | | | | | | J85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-09-13 | | | | | | Red 1 MHz fiber | | | | | | 1/10 MHz J9 Red GPS Intfc. | | | | | | P-I13 | | | | | | P86 | | | | | | J86 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-09-14 | | | | | | Red 1 PPS fiber | | | | | | 1 PPS J7 Red GPS Intfc. | | | | | | P-I14 | | | | | | P87 | | | | | | J87 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-10-1 (Table Note 1) | | | | | | Cat 5 for instrument blue side media converter | | | | | | Switch 1 or 13 | | | | | | Blue MC Cat 5 | | | | | | Blue MC Cat 5 | | | | | | Blue Media Converter 10Base-T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-10-2 (Table Note 1) | | | | | | Cat 5 for instrument red side media converter | | | | | | Switch 2 or 14 | | | | | | Red MC Cat 5 | | | | | | Red MC Cat 5 | | | | | | Red Media Converter 10Base-T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-10-3 (Table Note 1) | | | | | | Cat 5 for hipo network 1 | | | | | | Switch 3 or 15 | | | | | | hipo Cat5 1 | | | | | | hipo Cat5 1 | | | | | | hipo NET 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-10-4 (Table Note 1) | | | | | | Cat 5 for hipo network 2 | | | | | | Switch 4 or 16 | | | | | | hipo Cat5 2 | | | | | | hipo Cat5 2 | | | | | | hipo NET 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-10-5 (Table Note 1) | | | | | | Cat 5 for ibis network 1 | | | | | | Switch 5 or 17 | | | | | | ibis Cat5 1 | | | | | | ibis Cat5 1 | | | | | | ibis NET 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI-M02-10-6 (Table Note 1) | | | | | | Cat 5 for ibis network 2 | | | | | | Switch 6 or 18 | | | | | | ibis Cat5 2 | | | | | | ibis Cat5 2 | | | | | | ibis NET 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

4/1/13

Notes:
Note 1: The primary switch power cable, HI-M02-05-7, has P-A27 connected to J-A27 in normal operation. If the primary switch fails P-A27 on HI-M02-05-7 is unplugged and P-A27 on HI-M02-05-12 is connected to J-A27 in its place to activate the backup switch. All the network connections must also be moved.

Note 2: The two control computers and the user interface computer have powered-off spares mounted in the rack as follows:

| Primary | Backup | Cables to Move from Primary to Backup Computer |
|---------|--------|---|
| ibis | hipo | Leach fibers, GPS serial A |
| egret | croc | Leach fibers, GPS serial A |
| grebe | jacana | DVI1, DVI2, both GPS serial B, and Keyboard/Mouse |

In the event of a failure of one of the primary computers the interface cables indicated in this table can be moved to the backup computer which may then be turned on. The backup computer will be set up to be identical to the primary computer it is replacing and will come up with the same name and IP address. Because of this the primary and backup computers should not be powered up simultaneously.

Notes:
1. Shaded boxes are for HIPO connections to MCCS or TA patch panels. See HI-G00-00 for the PI rack assembly drawing and HI-P00-00 for the HIPO installation drawing.
3. Most cables have one or two spares that may be used in case of failure of a primary cable.

| Item | Qty | Description | Specification |
|---|-----|----------------------|---------------|
| HIPO High-Speed Imaging Receiver for Observations Lovell Observatory Flagstaff, AZ 86001 | | | |
| Dwg. No. HI-M00-03 | | Size: D | Sheet 1 of 1 |
| Scale: N/A | | Next Assy: HI-M00-00 | Calc. Wt. N/A |
| Drawn: Dunham | | Date: 4/1/13 | Approved: BND |
| Checked: DCO | | Date: 4/1/2013 | Date: 4/1/13 |