

| Squeezer Controls Chassis 3 | | | Left Rail | | | | | |
|--------------------------------------|--------|------|-----------|--------|---------|-------|---------|-----|
| Name | Color | Rail | Module | Number | Channel | Type | Adapter | Pin |
| Power | | | | | | | | |
| 24V | violet | L | OMRON | DC_1 | 24V | P | TBLOCK | |
| 0V | gray | L | OMRON | DC_1 | 0V | P | TBLOCK | |
| 24V | violet | L | EK1101 | 0 | 24V | P | TBLOCK | |
| 0V | gray | L | EK1101 | 0 | 0V | P | TBLOCK | |
| 5V_1 | red | L | EK1101 | 0 | + | P | DC_1 | +V |
| 5VRET_1 | black | L | EK1101 | 0 | - | P | DC_1 | -V |
| 5V_2 | red | L | EL9190 | 4 | + | P | DC_2 | +V |
| 5VRET_2 | black | L | EL9190 | 4 | - | P | DC_2 | -V |
| 24V | violet | L | EL9410 | 11 | 24V | P | TBLOCK | |
| 0V | gray | L | EL9410 | 11 | 0V | P | TBLOCK | |
| 5V_3 | red | L | EL9410 | 11 | + | P | DC_3 | +V |
| 5VRET_3 | black | L | EL9410 | 11 | - | P | DC_3 | -V |
| 24V | violet | L | OMRON | DC_2 | 24V | P | TBLOCK | |
| 0V | gray | L | OMRON | DC_2 | 0V | P | TBLOCK | |
| 24V | violet | L | OMRON | DC_3 | 24V | P | TBLOCK | |
| 0V | gray | L | OMRON | DC_3 | 0V | P | TBLOCK | |
| Coupler | | | | | | | | |
| Input | CAT5 | L | EK1101 | 0 | X2 | Comm. | IN | |
| Output | CAT5 | L | EK1101 | 0 | X2 | Comm. | M/O | X1 |
| Laser Diagnostics | | | | | | | | |
| Laser diode 1 power monitor + | green | L | EL3104 | 1 | +I1 | AI | 11 | 1 |
| Laser diode 1 power monitor - | white | L | EL3104 | 1 | -I1 | AI | 11 | 14 |
| Laser diode 2 power monitor + | green | L | EL3104 | 1 | +I2 | AI | 11 | 2 |
| Laser diode 2 power monitor - | white | L | EL3104 | 1 | -I2 | AI | 11 | 15 |
| Laser crystal, TEC error signal + | green | L | EL3104 | 1 | +I3 | AI | 11 | 3 |
| Laser crystal, TEC error signal - | white | L | EL3104 | 1 | -I3 | AI | 11 | 16 |
| Doubling crystal, TEC error signal + | green | L | EL3104 | 1 | +I4 | AI | 11 | 4 |
| Doubling crystal, TEC error signal - | white | L | EL3104 | 1 | -I4 | AI | 11 | 17 |
| Laser diode 1, TEC error signal + | green | L | EL3104 | 2 | +I1 | AI | 11 | 6 |
| Laser diode 1, TEC error signal - | white | L | EL3104 | 2 | -I1 | AI | 11 | 19 |
| Laser diode 2, TEC error signal + | green | L | EL3104 | 2 | +I2 | AI | 11 | 7 |
| Laser diode 2, TEC error signal - | white | L | EL3104 | 2 | -I2 | AI | 11 | 20 |
| Noise eater monitor + | green | L | EL3104 | 2 | +I3 | AI | 11 | 12 |
| Noise eater monitor - | white | L | EL3104 | 2 | -I3 | AI | 11 | 25 |
| | green | L | EL3104 | 2 | +I4 | AI | 11 | |
| | white | L | EL3104 | 2 | -I4 | AI | 11 | |
| 5V_1 | red | L | EL1124 | 3 | + | P | 11 | VCC |
| 5VRET_1 | black | L | EL1124 | 3 | - | P | 11 | GND |
| Laser diode 1, temp guard | brown | L | EL1124 | 3 | I1 | BI | 11 | 8 |
| Laser diode 2, temp guard | brown | L | EL1124 | 3 | I2 | BI | 11 | 9 |
| Interlock | brown | L | EL1124 | 3 | I3 | BI | 11 | 13 |
| | brown | L | EL1124 | 3 | I4 | BI | 11 | |
| DC PDs SQZ (concentrator 8) | | | | | | | | |
| 5VRET_2 | black | L | EL2124 | 5 | - | P | 10 | 19 |
| DC PD1 GAIN0 | orange | L | EL2124 | 5 | O1 | BO | 10 | 15 |
| DC PD1 GAIN1 | orange | L | EL2124 | 5 | O2 | BO | 10 | 34 |
| DC PD2 GAIN0 | orange | L | EL2124 | 5 | O3 | BO | 10 | 16 |
| DC PD2 GAIN1 | orange | L | EL2124 | 5 | O4 | BO | 10 | 35 |
| DC PD3 GAIN0 | orange | L | EL2124 | 6 | O1 | BO | 10 | 11 |
| DC PD3 GAIN1 | orange | L | EL2124 | 6 | O2 | BO | 10 | 30 |
| DC PD4 GAIN0 | orange | L | EL2124 | 6 | O3 | BO | 10 | 12 |
| DC PD4 GAIN1 | orange | L | EL2124 | 6 | O4 | BO | 10 | 31 |
| DC PD5 GAIN0 | orange | L | EL2124 | 7 | O1 | BO | 10 | 7 |
| DC PD5 GAIN1 | orange | L | EL2124 | 7 | O2 | BO | 10 | 26 |
| DC PD6 GAIN0 | orange | L | EL2124 | 7 | O3 | BO | 10 | 8 |
| DC PD6 GAIN1 | orange | L | EL2124 | 7 | O4 | BO | 10 | 27 |
| DC PD7 GAIN0 | orange | L | EL2124 | 8 | O1 | BO | 10 | 3 |
| DC PD7 GAIN1 | orange | L | EL2124 | 8 | O2 | BO | 10 | 22 |
| DC PD8 GAIN0 | orange | L | EL2124 | 8 | O3 | BO | 10 | 4 |
| DC PD8 GAIN1 | orange | L | EL2124 | 8 | O4 | BO | 10 | 23 |
| DC PD1 + | green | L | EL3104 | 9 | +I1 | AI | 10 | 13 |

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|------------------------------------|--------|---|--------|----|------|----|-----|-----|
| DC PD1 – | white | L | EL3104 | 9 | –I1 | AI | 10 | 32 |
| DC PD2 + | green | L | EL3104 | 9 | +I2 | AI | 10 | 14 |
| DC PD2 – | white | L | EL3104 | 9 | –I2 | AI | 10 | 33 |
| DC PD3 + | green | L | EL3104 | 9 | +I3 | AI | 10 | 9 |
| DC PD3 – | white | L | EL3104 | 9 | –I3 | AI | 10 | 28 |
| DC PD4 + | green | L | EL3104 | 9 | +I4 | AI | 10 | 10 |
| DC PD4 – | white | L | EL3104 | 9 | –I4 | AI | 10 | 29 |
| DC PD5 + | green | L | EL3104 | 10 | +I1 | AI | 10 | 5 |
| DC PD5 – | white | L | EL3104 | 10 | –I1 | AI | 10 | 24 |
| DC PD6 + | green | L | EL3104 | 10 | +I2 | AI | 10 | 6 |
| DC PD6 – | white | L | EL3104 | 10 | –I2 | AI | 10 | 25 |
| DC PD7 + | green | L | EL3104 | 10 | +I3 | AI | 10 | 1 |
| DC PD7 – | white | L | EL3104 | 10 | –I3 | AI | 10 | 20 |
| DC PD8 + | green | L | EL3104 | 10 | +I4 | AI | 10 | 2 |
| DC PD8 – | white | L | EL3104 | 10 | –I4 | AI | 10 | 21 |
| DC PDs SQZ (concentrator 7) | | | | | | | | |
| 5VRET_2 | black | L | EL2124 | 12 | – | P | 9 | 19 |
| DC PD1 GAIN0 | orange | L | EL2124 | 12 | O1 | BO | 9 | 11 |
| DC PD1 GAIN1 | orange | L | EL2124 | 12 | O2 | BO | 9 | 30 |
| DC PD2 GAIN0 | orange | L | EL2124 | 12 | O3 | BO | 9 | 12 |
| DC PD2 GAIN1 | orange | L | EL2124 | 12 | O4 | BO | 9 | 31 |
| DC PD3 GAIN0 | orange | L | EL2124 | 13 | O1 | BO | 9 | 7 |
| DC PD3 GAIN1 | orange | L | EL2124 | 13 | O2 | BO | 9 | 26 |
| DC PD4 GAIN0 | orange | L | EL2124 | 13 | O3 | BO | 9 | 8 |
| DC PD4 GAIN1 | orange | L | EL2124 | 13 | O4 | BO | 9 | 27 |
| DC PD5 GAIN0 | orange | L | EL2124 | 14 | O1 | BO | 9 | 3 |
| DC PD5 GAIN1 | orange | L | EL2124 | 14 | O2 | BO | 9 | 22 |
| DC PD6 GAIN0 | orange | L | EL2124 | 14 | O3 | BO | 9 | 4 |
| DC PD6 GAIN1 | orange | L | EL2124 | 14 | O4 | BO | 9 | 23 |
| DC3_RET | black | L | EL3102 | 15 | COM | P | DC3 | –V |
| DC PD1 + | green | L | EL3102 | 15 | +I1 | AI | 9 | 9 |
| DC PD1 – | white | L | EL3102 | 15 | –I1 | AI | 9 | 28 |
| DC PD2 + | green | L | EL3102 | 15 | +I2 | AI | 9 | 10 |
| DC PD2 – | white | L | EL3102 | 15 | –I2 | AI | 9 | 29 |
| DC PD3 + | green | L | EL3104 | 16 | +I1 | AI | 9 | 5 |
| DC PD3 – | white | L | EL3104 | 16 | –I1 | AI | 9 | 24 |
| DC PD4 + | green | L | EL3104 | 16 | +I2 | AI | 9 | 6 |
| DC PD4 – | white | L | EL3104 | 16 | –I2 | AI | 9 | 25 |
| DC PD5 + | green | L | EL3104 | 16 | +I3 | AI | 9 | 1 |
| DC PD5 – | white | L | EL3104 | 16 | –I3 | AI | 9 | 20 |
| DC PD6 + | green | L | EL3104 | 16 | +I4 | AI | 9 | 2 |
| DC PD6 – | white | L | EL3104 | 16 | –I4 | AI | 9 | 21 |
| PD Monitor 1 + | green | L | EL3104 | 17 | +I1 | AI | 9 | 16 |
| PD Monitor 1 – | white | L | EL3104 | 17 | –I1 | AI | 9 | 35 |
| PD Monitor 2 + | green | L | EL3104 | 17 | +I2 | AI | 9 | 15 |
| PD Monitor 2 – | white | L | EL3104 | 17 | –I2 | AI | 9 | 34 |
| PD Monitor 3 + | green | L | EL3104 | 17 | +I3 | AI | 9 | 14 |
| PD Monitor 3 – | white | L | EL3104 | 17 | –I3 | AI | 9 | 33 |
| PD Monitor 4 + | green | L | EL3104 | 17 | +I4 | AI | 9 | 13 |
| PD Monitor 4 – | white | L | EL3104 | 17 | –I4 | AI | 9 | 32 |
| Temperature Sensors | | | | | | | | |
| Temperature Supply 1 + | red | L | EL3692 | 18 | +R1 | AI | 8 | 1-2 |
| Temperature Supply 1 – | black | L | EL3692 | 18 | –R1 | AI | 8 | 1-4 |
| Temperature Readback 1 + | green | L | EL3692 | 18 | +RL1 | AI | 8 | 1-1 |
| Temperature Readback 1 – | white | L | EL3692 | 18 | –RL1 | AI | 8 | 1-3 |
| Temperature Supply 2 + | red | L | EL3692 | 18 | +R2 | AI | 8 | 2-2 |
| Temperature Supply 2 – | black | L | EL3692 | 18 | –R2 | AI | 8 | 2-4 |
| Temperature Readback 2 + | green | L | EL3692 | 18 | +RL2 | AI | 8 | 2-1 |
| Temperature Readback 2 – | white | L | EL3692 | 18 | –RL2 | AI | 8 | 2-3 |
| Temperature Supply 3 + | red | L | EL3692 | 19 | +R1 | AI | 8 | 3-2 |
| Temperature Supply 3 – | black | L | EL3692 | 19 | –R1 | AI | 8 | 3-4 |
| Temperature Readback 3 + | green | L | EL3692 | 19 | +RL1 | AI | 8 | 3-1 |
| Temperature Readback 3 – | white | L | EL3692 | 19 | –RL1 | AI | 8 | 3-3 |
| Temperature Supply 4 + | red | L | EL3692 | 19 | +R2 | AI | 8 | 4-2 |
| Temperature Supply 4 – | black | L | EL3692 | 19 | –R2 | AI | 8 | 4-4 |

| | | | | | | | | |
|--------------------------|-------|---|--------|----|------|----|---|-----|
| Temperature Readback 4 + | green | L | EL3692 | 19 | +RL2 | AI | 8 | 4-1 |
| Temperature Readback 4 - | white | L | EL3692 | 19 | -RL2 | AI | 8 | 4-3 |

| Squeezer Controls Chassis 3 | | | Middle Rail | | | | | |
|------------------------------------|--------|------|-------------|--------|---------|-------|---------|-----|
| Name | Color | RaiM | Module | Number | Channel | Type | Adapter | Pin |
| Power | | | | | | | | |
| 24V | violet | M | OMRON | DC_4 | 24V | P | TBLOCK | |
| 0V | gray | M | OMRON | DC_4 | 0V | P | TBLOCK | |
| 24V | violet | M | EK1101 | 0 | 24V | P | TBLOCK | |
| 0V | gray | M | EK1101 | 0 | 0V | P | TBLOCK | |
| 5V_4 | red | M | EK1101 | 0 | + | P | DC_4 | +V |
| 5VRET_4 | black | M | EK1101 | 0 | - | P | DC_4 | -V |
| 24V | violet | M | EL9410 | 7 | 24V | P | TBLOCK | |
| 0V | gray | M | EL9410 | 7 | 0V | P | TBLOCK | |
| 5V_5 | red | M | EL9410 | 7 | + | P | DC_5 | +V |
| 5VRET_5 | black | M | EL9410 | 7 | - | P | DC_5 | -V |
| 24V | violet | M | EL9410 | 16 | 24V | P | TBLOCK | |
| 0V | gray | M | EL9410 | 16 | 0V | P | TBLOCK | |
| 5V_6 | red | M | EL9410 | 16 | + | P | DC_6 | +V |
| 5VRET_6 | black | M | EL9410 | 16 | - | P | DC_6 | -V |
| 24V | violet | M | OMRON | DC_5 | 24V | P | TBLOCK | |
| 0V | gray | M | OMRON | DC_5 | 0V | P | TBLOCK | |
| 24V | violet | M | OMRON | DC_6 | 24V | P | TBLOCK | |
| 0V | gray | M | OMRON | DC_6 | 0V | P | TBLOCK | |
| Coupler | | | | | | | | |
| Output | CAT5 | M | EK1100 | 0 | X2 | Comm. | R/0 | X1 |
| Motorized Flipper/TTL IO | | | | | | | | |
| 5VRET_4 | black | M | EL1124 | 1 | - | P | 7 | 13 |
| IN 1 | brown | M | EL1124 | 1 | I1 | BI | 7 | 14 |
| IN 2 | brown | M | EL1124 | 1 | I2 | BI | 7 | 15 |
| IN 3 | brown | M | EL1124 | 1 | I3 | BI | 7 | 16 |
| IN 4 | brown | M | EL1124 | 1 | I4 | BI | 7 | 17 |
| IN 5 | brown | M | EL1124 | 2 | I1 | BI | 7 | 18 |
| IN 6 | brown | M | EL1124 | 2 | I2 | BI | 7 | 19 |
| IN 7 | brown | M | EL1124 | 2 | I3 | BI | 7 | 20 |
| IN 8 | brown | M | EL1124 | 2 | I4 | BI | 7 | 21 |
| RELAY 1 MON | brown | M | EL1124 | 3 | I1 | BI | 7 | 22 |
| RELAY 2 MON | brown | M | EL1124 | 3 | I2 | BI | 7 | 23 |
| RELAY 3 MON | brown | M | EL1124 | 3 | I3 | BI | 7 | 24 |
| OK | brown | M | EL1124 | 3 | I4 | BI | 7 | 25 |
| OUT 1 | orange | M | EL2124 | 4 | O1 | BO | 7 | 1 |
| OUT 2 | orange | M | EL2124 | 4 | O2 | BO | 7 | 2 |
| OUT 3 | orange | M | EL2124 | 4 | O3 | BO | 7 | 3 |
| OUT 4 | orange | M | EL2124 | 4 | O4 | BO | 7 | 4 |
| OUT 5 | orange | M | EL2124 | 5 | O1 | BO | 7 | 5 |
| OUT 6 | orange | M | EL2124 | 5 | O2 | BO | 7 | 6 |
| OUT 7 | orange | M | EL2124 | 5 | O3 | BO | 7 | 7 |
| OUT 8 | orange | M | EL2124 | 5 | O4 | BO | 7 | 8 |
| RELAY 1 COIL | orange | M | EL2124 | 6 | O1 | BO | 7 | 9 |
| RELAY 2 COIL | orange | M | EL2124 | 6 | O2 | BO | 7 | 10 |
| RELAY 3 COIL | orange | M | EL2124 | 6 | O3 | BO | 7 | 11 |
| Extra | orange | M | EL2124 | 6 | O4 | BO | 7 | 12 |
| TTFSS | | | | | | | | |
| 5VRET_5 | black | M | EL1124 | 8 | - | P | 6 | 19 |
| Common excitation state | brown | M | EL1124 | 8 | I1 | BI | 6 | 6 |
| Fast excitation state | brown | M | EL1124 | 8 | I2 | BI | 6 | 25 |
| PFD sign state | brown | M | EL1124 | 8 | I3 | BI | 6 | 7 |
| Supply OK | brown | M | EL1124 | 8 | I4 | BI | 6 | 26 |
| Additive offset enable | orange | M | EL2124 | 9 | O1 | BO | 6 | 1 |
| Boost 1 enable | orange | M | EL2124 | 9 | O2 | BO | 6 | 20 |
| Commen excitation enable | orange | M | EL2124 | 9 | O3 | BO | 6 | 2 |
| Fast excitation enable | orange | M | EL2124 | 9 | O4 | BO | 6 | 21 |
| Ramp enable | orange | M | EL2124 | 10 | O1 | BO | 6 | 3 |
| EOM path enable | orange | M | EL2124 | 10 | O2 | BO | 6 | 22 |
| Phase-frequency discriminator sign | orange | M | EL2124 | 10 | O3 | BO | 6 | 4 |
| Fast path sign | orange | M | EL2124 | 10 | O4 | BO | 6 | 23 |
| Boost 2 enable | orange | M | EL2124 | 11 | O1 | BO | 6 | 5 |

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|-----------------|--------|---|--------|----|-----|----|-----|----|
| Boost 3 enable | orange | M | EL2124 | 11 | O2 | BO | 6 | 24 |
| Spare 1 | orange | M | EL2124 | 11 | O3 | BO | 6 | 8 |
| Spare 2 | orange | M | EL2124 | 11 | O4 | BO | 6 | 27 |
| LO power + | green | M | EL3104 | 12 | +I1 | AI | 6 | 9 |
| LO power - | white | M | EL3104 | 12 | -I1 | AI | 6 | 28 |
| RF power + | green | M | EL3104 | 12 | +I2 | AI | 6 | 10 |
| RF power - | white | M | EL3104 | 12 | -I2 | AI | 6 | 29 |
| Mixer + | green | M | EL3104 | 12 | +I3 | AI | 6 | 11 |
| Mixer - | white | M | EL3104 | 12 | -I3 | AI | 6 | 30 |
| EOM RMS value + | green | M | EL3104 | 12 | +I4 | AI | 6 | 12 |
| EOM RMS value - | white | M | EL3104 | 12 | -I4 | AI | 6 | 31 |
| DC6_RET | black | M | EL3102 | 13 | COM | P | DC6 | V- |
| Fast output + | green | M | EL3102 | 13 | +I1 | AI | 6 | 13 |
| Fast output - | white | M | EL3102 | 13 | -I1 | AI | 6 | 32 |
| | green | M | EL3102 | 13 | +I2 | AI | | |
| | white | M | EL3102 | 13 | -I2 | AI | | |
| Common gain + | blue | M | EL4134 | 14 | O1 | AO | 6 | 14 |
| Common gain - | yellow | M | EL4134 | 14 | COM | AO | 6 | 33 |
| Common offset + | blue | M | EL4134 | 14 | O2 | AO | 6 | 15 |
| Common offset - | yellow | M | EL4134 | 14 | COM | AO | 6 | 34 |
| Fast gain + | blue | M | EL4134 | 14 | O3 | AO | 6 | 16 |
| Fast gain - | yellow | M | EL4134 | 14 | COM | AO | 6 | 35 |
| Fast offset + | blue | M | EL4134 | 14 | O4 | AO | 6 | 17 |
| Fast offset - | yellow | M | EL4134 | 14 | COM | AO | 6 | 36 |
| Slow + | blue | M | EL4132 | 15 | O1 | AO | 6 | 18 |
| Slow - | yellow | M | EL4132 | 15 | COM | AO | 6 | 37 |
| | blue | M | EL4132 | 15 | O2 | AO | | |
| | yellow | M | EL4132 | 15 | COM | AO | | |

AM Modulated AOM Amplifier

| | | | | | | | | |
|-------------------|--------|---|--------|----|-----|----|---|----|
| Monitor 1 + | green | M | EL3104 | 17 | +I1 | AI | 4 | 1 |
| Monitor 1 - | white | M | EL3104 | 17 | -I1 | AI | 4 | 14 |
| Temp 1 + | green | M | EL3104 | 17 | +I2 | AI | 4 | 4 |
| Temp 1 - | white | M | EL3104 | 17 | -I2 | AI | 4 | 17 |
| Modulation + | green | M | EL3104 | 17 | +I3 | AI | 4 | 10 |
| Modulation - | white | M | EL3104 | 17 | -I3 | AI | 4 | 23 |
| | green | M | EL3104 | 17 | +I4 | AI | | |
| | white | M | EL3104 | 17 | -I4 | AI | | |
| Bias + | blue | M | EL4132 | 18 | O1 | AO | 4 | 11 |
| Bias - | yellow | M | EL4132 | 18 | COM | AO | 4 | 24 |
| | blue | M | EL4132 | 18 | O2 | AO | | |
| | yellow | M | EL4132 | 18 | COM | AO | | |
| SVRET_6 | black | M | EL1124 | 19 | - | P | 4 | 20 |
| Excitation switch | brown | M | EL1124 | 19 | I1 | BI | 4 | 9 |
| OK | brown | M | EL1124 | 19 | I2 | BI | 4 | 7 |
| | brown | M | EL1124 | 19 | I3 | BI | | |
| | brown | M | EL1124 | 19 | I4 | BI | | |
| Excitation enable | orange | M | EL2124 | 20 | O1 | BO | 4 | 8 |
| FSW_A+B | orange | M | EL2124 | 20 | O2 | BO | 4 | 12 |
| FSW_A | orange | M | EL2124 | 20 | O3 | BO | 4 | 25 |
| | orange | M | EL2124 | 20 | O4 | BO | | |

| Squeezer Controls Chassis 3 | | | Right Rail | | | | | |
|-----------------------------|-------|------|------------|--------|---------|------|---------|-----|
| Name | Color | Rail | Module | Number | Channel | Type | Adapter | Pin |