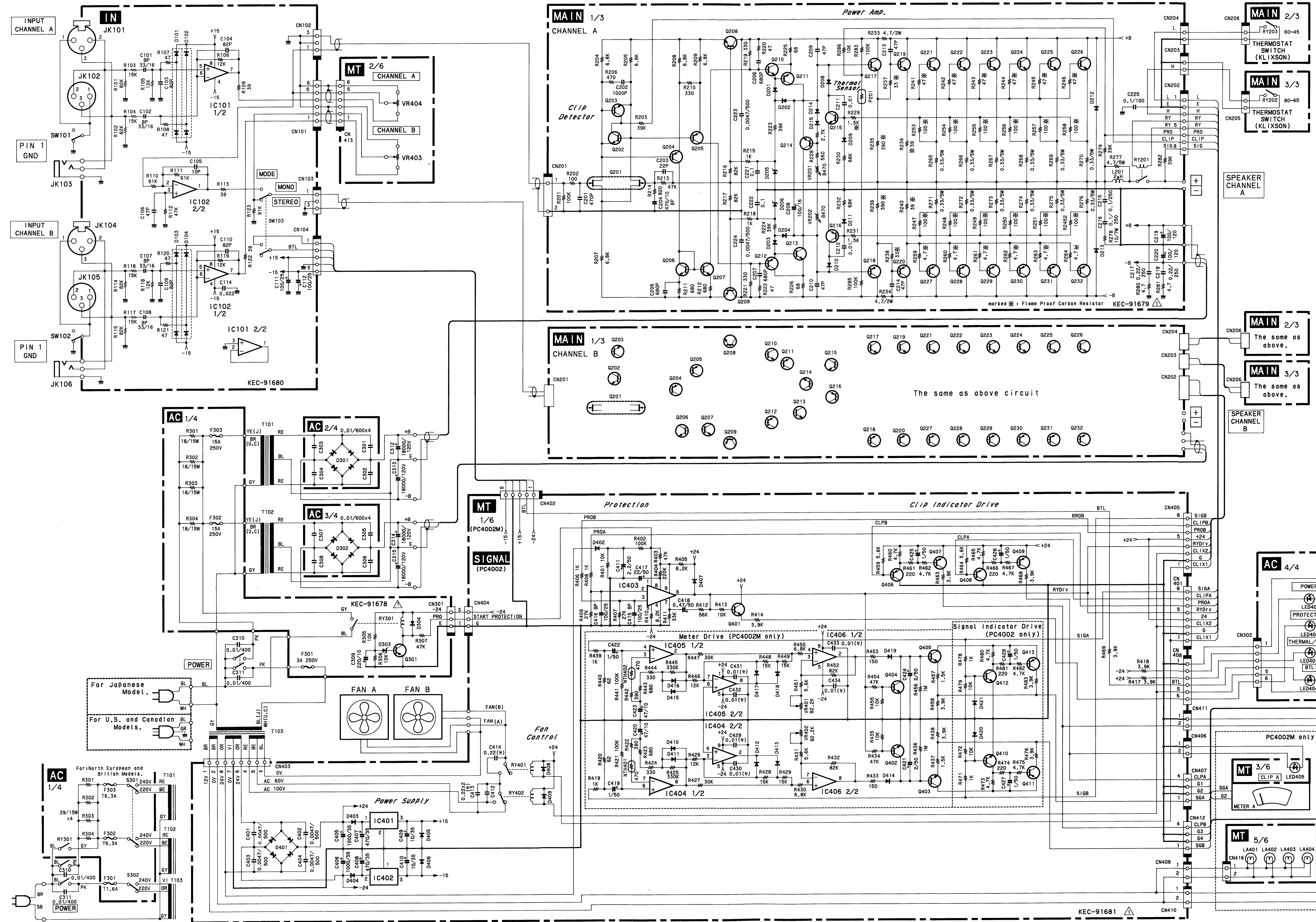


PC4002/PC4002M OVERALL CIRCUIT DIAGRAM



- Notes
- \*Circuit Board: AC (V1328200) XG72180 (J, U, C)
  - \*Circuit Board: AC (V1328800) XG72180 (U, C)
  - 1. Transistor Q301: 2S8560 E, F (I8056020)
  - 2. Diode D304: 10D1 (IH000030)
  - 3. Zener Diode D303: RD5.6E2 5.6V (IF002140)
  - 4. LED LED401-403: RE TLR220 (VE464300) POWER, PROTECTION, THERMAL/FAN GR TLG220 (VE663700) BTL
  - 4. LED LED404: RE TLR220 (VE464300) POWER, PROTECTION, THERMAL/FAN GR TLG220 (VE663700) BTL
  - 5. Wire Wound Resistor R301-304: 180 15W K (V1438300)
  - 6. Mylar Cap. C301-308: 0.01µ 630V (FZ000650)
  - 7. Relay RY301: JN1A (V1345800) Primary
  - 8. Fuse F301: T 3A 250V (K800360) (J)
  - 8. Fuse F302: T 3A 250V (K8002650) (U, C)
  - 8. Fuse F303: T 1.5A 250V (K8001270) (J)
  - 8. Fuse F304: T 1.5A 250V (K8001360) (U, C)

- Notes
- \*Circuit Board: AC (V1328900) XH06480 (H, B)
  - 1. Transistor Q301: 2S8560 E, F (I8056020)
  - 2. Diode D304: 10D1 (IH000030)
  - 3. Zener Diode D303: RD5.6E2 5.6V (IF002140)
  - 4. LED LED401-403: RE TLR220 (VE464300) POWER, PROTECTION, THERMAL/FAN GR TLG220 (VE663700) BTL
  - 4. LED LED404: RE TLR220 (VE464300) POWER, PROTECTION, THERMAL/FAN GR TLG220 (VE663700) BTL
  - 5. Wire Wound Resistor R301-304: 390 15W K (V1438400)
  - 6. Mylar Cap. C301-308: 0.01µ 630V (FZ000650)
  - 7. Slide Switch SW301, 302: SDKGB (VE206000) Voltage Select
  - 8. Relay RY301: JN1A (V1345800) Primary
  - 9. Fuse F301: T 1.6A 250V (K8000740)
  - 9. Fuse F302: T 6.3A 250V (K8000770)

- Notes
- \*Circuit Board: MAIN (V1328200) XG72080
  - 1. Transistor Q202, 203, 206, 207, 210, 215: 25C2240 GR (IC224020)
  - 2. Diode D205, 206: RD24E2 24V (IF005670)
  - 3. Diode D201-204, D212, 213: 1S582 (IF001400)
  - 4. Zener Diode D205, 206: RD24E2 24V (IF005670)
  - 5. Metal Film Resistor R201, 283, 285: 100KΩ 1/4W F (HU078100)
  - 5. Metal Film Resistor R202, R203, 223, 224, 279, 282: 100Ω 1/4W F (HU075100)
  - 5. Metal Film Resistor R204, 205, 207-209: 6.8KΩ 1/4W F (HU076800)
  - 5. Metal Film Resistor R210, 211, 212: 470Ω 1/4W F (HU075470)
  - 5. Metal Film Resistor R213, 214: 330Ω 1/4W F (HU075330)
  - 5. Metal Film Resistor R215, 216: 680Ω 1/4W F (HU075680)
  - 5. Metal Film Resistor R217, 218: 47KΩ 1/4W F (HU07470)
  - 5. Metal Film Resistor R219, 220: 820Ω 1/4W F (HU075820)
  - 5. Metal Film Resistor R221, 222: 1KΩ 1/4W F (HU076100)
  - 5. Metal Film Resistor R223, 226: 2KΩ 1/4W F (HU074800)
  - 5. Metal Film Resistor R227: 2.7KΩ 1/4W F (HU076270)
  - 5. Metal Film Resistor R228: 560Ω 1/4W F (HU075560)
  - 5. Metal Film Resistor R230, 232: 68KΩ 1/4W F (HU076800)
  - 5. Metal Film Resistor R233, 234: 10KΩ 1/4W F (HU077100)
  - 6. Metal Oxide Film Resistor R233, 234: 4.7Ω 2W J (V755500)
  - 7. Flame Proof Carbon Resistor R229, 231: 1.5KΩ 1/4W J (HV356150)
  - 7. Flame Proof Carbon Resistor R235, 236: 390Ω 1/4W F (HV355390)
  - 7. Flame Proof Carbon Resistor R237, 238: 330Ω 1/4W J (HV454330)
  - 7. Flame Proof Carbon Resistor R239, 240: 590Ω 1/4W J (HV354390)
  - 7. Flame Proof Carbon Resistor R241-246: 259-264, 280, 281: 4.7Ω 1/4W J (HV353470)
  - 7. Flame Proof Carbon Resistor R247-258: 100Ω 1/4W J (HV354100)
  - 8. Wire Wound Resistor R245-278: 0.33Ω 5W K (V1344000)
  - 8. Wire Wound Resistor R277: 4.7Ω 5W K (V1343900)
  - 8. Wire Wound Resistor R278: 10Ω 7W J (V1344100)
  - 9. Positive Thermistor P201: PTH487A01B6G41 (V1518000)
  - 10. Trimmer Potentiometer VR201, 202: B470 3P (HT410370) BIAS ADJ.
  - 11. Ceramic Cap. C223, 224: 0.0047µ 500V M (FH223470)
  - 12. Mica Cap. C203, C208, 210, 213, 214: 22P 500V J (FU351220)
  - 12. Mica Cap. C225, 216: 0.1µ 100V K (FZ005200)
  - 12. Mica Cap. C215, 218: 0.1µ 250V J (V1346000)
  - 12. Mica Cap. C217, 218: 0.22µ 250V J (V1346100)
  - 14. Electrolytic Cap. C204: 470µ 10V (V1346500) DUOLEX
  - 14. Electrolytic Cap. C205: 100µ 16V (V1346600) DUOLEX
  - 14. Electrolytic Cap. C208, 219: 100µ 120V (V1346700) DUOLEX
  - 15. Coil L201: 3µH (G900190)
  - 16. Thermostat Switch (Klixon) RY202: INT01F0459F8015 (V1345300)
  - 16. Thermostat Switch (Klixon) RY203: INT01F0459F8015 (K907000)
  - 17. Relay RY201: DC JC24D-DC24V (KC001410)

- Notes
- \*Circuit Board: IN (V1328600) XG71980
  - 1. IC IC101, 102: NE5532P (IG102500) OP AMP.
  - 2. Diode Array D101-104: MC931 0.3A x 2 (IF005120)
  - 3. Metal Film Resistor R101, 102, 114, 115, 104, 116, 117: 82KΩ 1/4W F (HU077820)
  - 3. Metal Film Resistor R103, 104, 116, 117: 1.5KΩ 1/4W F (HU077150)
  - 3. Metal Film Resistor R105, 106, 118, 119: 1.5KΩ 1/4W F (HU077120)
  - 3. Metal Film Resistor R107, 108, 120, 121: 470Ω 1/4W F (HU074470)
  - 3. Metal Film Resistor R109, 113, 122, 123: 390Ω 1/4W F (HU074390)
  - 3. Metal Film Resistor R110, 111, 123: 91KΩ 1/4W F (HU077910)
  - 3. Metal Film Resistor R112: 47KΩ 1/4W F (HU077470)
  - 4. Mica Cap. C103, 104, 109, 110: 82P 500V J (FU351820)
  - 4. Mica Cap. C105: 10P 500V J (FU351100)
  - 4. Mica Cap. C106: 47P 500V J (FU351470)
  - 5. Slide Switch SW101-103: SSSB14 (V1665800) PIN-1 GND, MODE Switch
  - 6. Phone Jack JK103, 106: HLJ0544 STEREO (LB302070) INPUT CH A/B
  - 7. Cannon Jack JK101, 104: XLB-3-3 (LB302320) INPUT CH A/B
  - 7. Cannon Jack JK102, 105: XLB-3-3 (LB302340) INPUT CH A/B
  - \*Circuit Board: SIGNAL (PC4002)
  - 1. IC IC405 1/2, IC405 2/2, IC404 2/2, IC404 1/2: µPC7815H (IG063900) 15V 1A
  - 1. IC IC401, IC402, IC403: µPC7915H (IG077500) - 15V 1A
  - 1. IC IC404-406: TA7317P (IG034800) SP PROTECTION
  - 2. Transistor Q401, 410, 412: 25C2240 GR, BL (IC224000)
  - 2. Transistor Q403-408: 25A970 GR, BL (IA097000)
  - 3. Diode D402-409: 10D1 (IH000030)
  - 3. Diode D401: 1SS133 (IF003450)
  - 4. Diode Stack D401: 1G4B1 1.5A 400V (IH001400)
  - 5. LED LED401, 403: RE TLR220 (VE464300) CLIP CH A/B
  - 5. LED LED402, 404: GR TLG220 (VE663700) SIGNAL CH A/B
  - 6. Variable Resistor VR403, 404: 20K (V1366900) Input Att. CH A/B
  - 7. Ceramic Cap. C401-C404: 0.0047µ 500V M (FH223470)
  - 8. Electrolytic Cap. C405, 406: 1000µ 35V (UJ959100)
  - 8. Electrolytic Cap. C407, 408: 470µ 35V (VD037600) DUOLEX
  - 9. Mylar Cap. C412-414: 0.22µ 250V J (V1346100)
  - 10. Relay RY401, 402: JEX1A (V1518100) Fan control
  - 9. Ceramic Cap. C401-404: 0.0047µ 500V M (FH223470)
  - 10. Electrolytic Cap. C405, 406: 1000µ 35V (UJ959100)
  - 10. Electrolytic Cap. C407, 408: 470µ 35V (VD037600) DUOLEX
  - 11. Mylar Cap. C412-414: 0.22µ 250V J (V1346100)
  - 12. Relay RY401, 402: JEX1A (V1518100) Fan control

- Notes
- \*Circuit Board: METER (V1329000) XG72280 <PC4002M>
  - 1. IC IC401: µPC7815H (IG063900) 15V 1A
  - 1. IC IC402: µPC7915H (IG077500) - 15V 1A
  - 1. IC IC403: TA7317P (IG034800) SP PROTECTION
  - 2. Transistor Q401-405: 25C2240 GR, BL (IC224000)
  - 2. Transistor Q406-409: 25A970 GR, BL (IA097000)
  - 3. Diode D402-409: 10D1 (IH000030)
  - 3. Diode D410-419: 1SS133 (IF003450)
  - 4. Diode Stack D401: 1G4B1 1.5A 400V (IH001400)
  - 5. LED LED405, 406: LN222RP RE (IF01720) CLIP CH A/B
  - 6. Variable Resistor VR403, 404: 20K (V1366900) Input Att. CH A/B
  - 7. Thermistor NTH401, 402: NTH50 470-3500 (V1345700)
  - 8. Trimmer Potentiometer VR401, 402: B2.2K 3P (HT410400) METER A/B ADJ.
  - 9. Ceramic Cap. C401-404: 0.0047µ 500V M (FH223470)
  - 10. Electrolytic Cap. C405, 406: 1000µ 35V (UJ959100)
  - 10. Electrolytic Cap. C407, 408: 470µ 35V (VD037600) DUOLEX
  - 11. Mylar Cap. C412-414: 0.22µ 250V J (V1346100)
  - 12. Relay RY401, 402: JEX1A (V1518100) Fan control

- Notes
- \*Circuit Board: METER (V1329000) XG72280 <PC4002M>
  - 1. IC IC401: µPC7815H (IG063900) 15V 1A
  - 1. IC IC402: µPC7915H (IG077500) - 15V 1A
  - 1. IC IC403: TA7317P (IG034800) SP PROTECTION
  - 2. Transistor Q401-405: 25C2240 GR, BL (IC224000)
  - 2. Transistor Q406-409: 25A970 GR, BL (IA097000)
  - 3. Diode D402-409: 10D1 (IH000030)
  - 3. Diode D410-419: 1SS133 (IF003450)
  - 4. Diode Stack D401: 1G4B1 1.5A 400V (IH001400)
  - 5. LED LED405, 406: LN222RP RE (IF01720) CLIP CH A/B
  - 6. Variable Resistor VR403, 404: 20K (V1366900) Input Att. CH A/B
  - 7. Thermistor NTH401, 402: NTH50 470-3500 (V1345700)
  - 8. Trimmer Potentiometer VR401, 402: B2.2K 3P (HT410400) METER A/B ADJ.
  - 9. Ceramic Cap. C401-404: 0.0047µ 500V M (FH223470)
  - 10. Electrolytic Cap. C405, 406: 1000µ 35V (UJ959100)
  - 10. Electrolytic Cap. C407, 408: 470µ 35V (VD037600) DUOLEX
  - 11. Mylar Cap. C412-414: 0.22µ 250V J (V1346100)
  - 12. Relay RY401, 402: JEX1A (V1518100) Fan control

- Notes
- \*Circuit Board: METER (V1329000) XG72280 <PC4002M>
  - 1. IC IC401: µPC7815H (IG063900) 15V 1A
  - 1. IC IC402: µPC7915H (IG077500) - 15V 1A
  - 1. IC IC403: TA7317P (IG034800) SP PROTECTION
  - 2. Transistor Q401-405: 25C2240 GR, BL (IC224000)
  - 2. Transistor Q406-409: 25A970 GR, BL (IA097000)
  - 3. Diode D402-409: 10D1 (IH000030)
  - 3. Diode D410-419: 1SS133 (IF003450)
  - 4. Diode Stack D401: 1G4B1 1.5A 400V (IH001400)
  - 5. LED LED405, 406: LN222RP RE (IF01720) CLIP CH A/B
  - 6. Variable Resistor VR403, 404: 20K (V1366900) Input Att. CH A/B
  - 7. Thermistor NTH401, 402: NTH50 470-3500 (V1345700)
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  - 9. Ceramic Cap. C401-404: 0.0047µ 500V M (FH223470)
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  - 10. Electrolytic Cap. C407, 408: 470µ 35V (VD037600) DUOLEX
  - 11. Mylar Cap. C412-414: 0.22µ 250V J (V1346100)
  - 12. Relay RY401, 402: JEX1A (V1518100) Fan control