

# **SERVICE MANUAL VOX AC100CPH**



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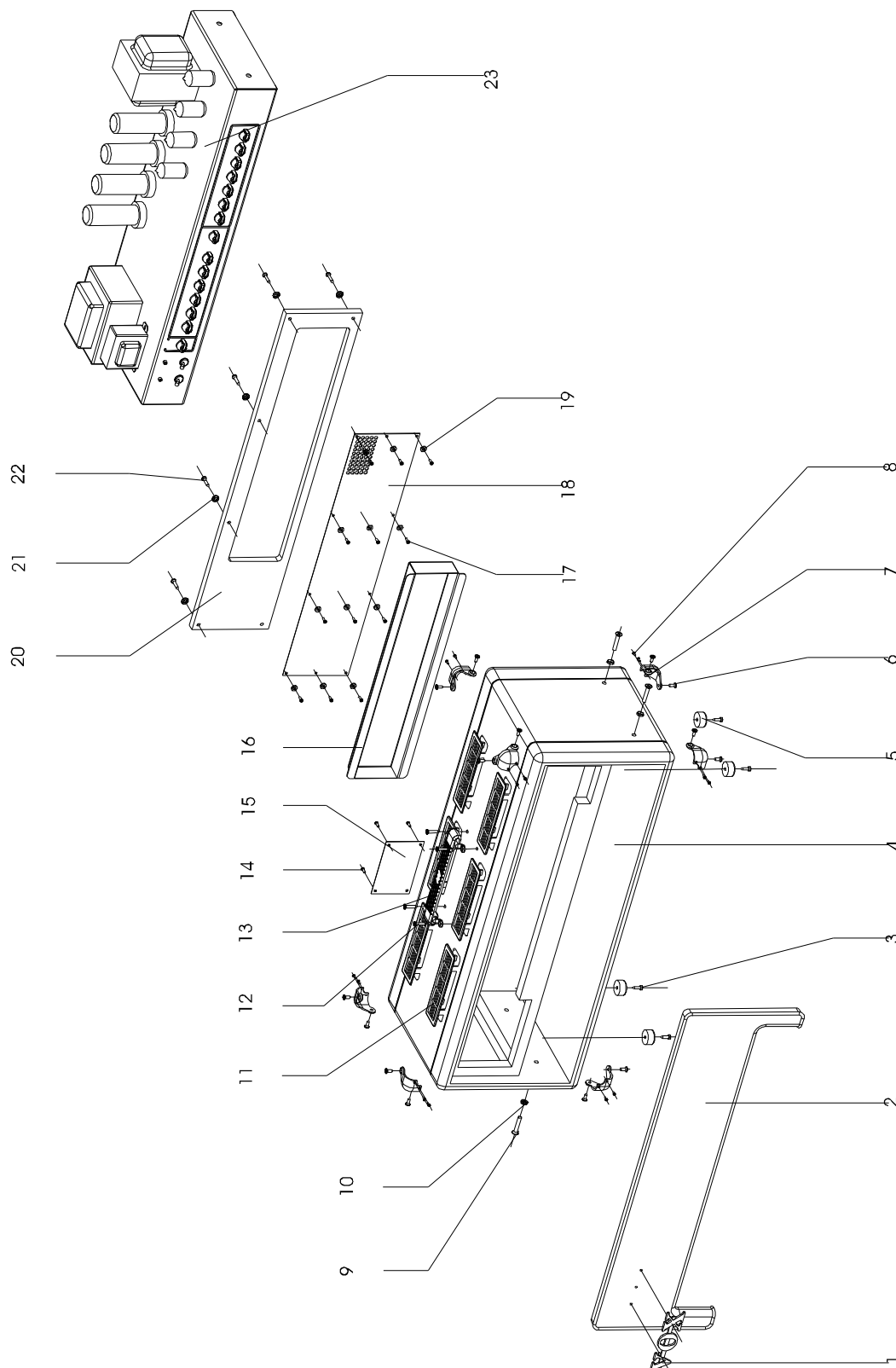
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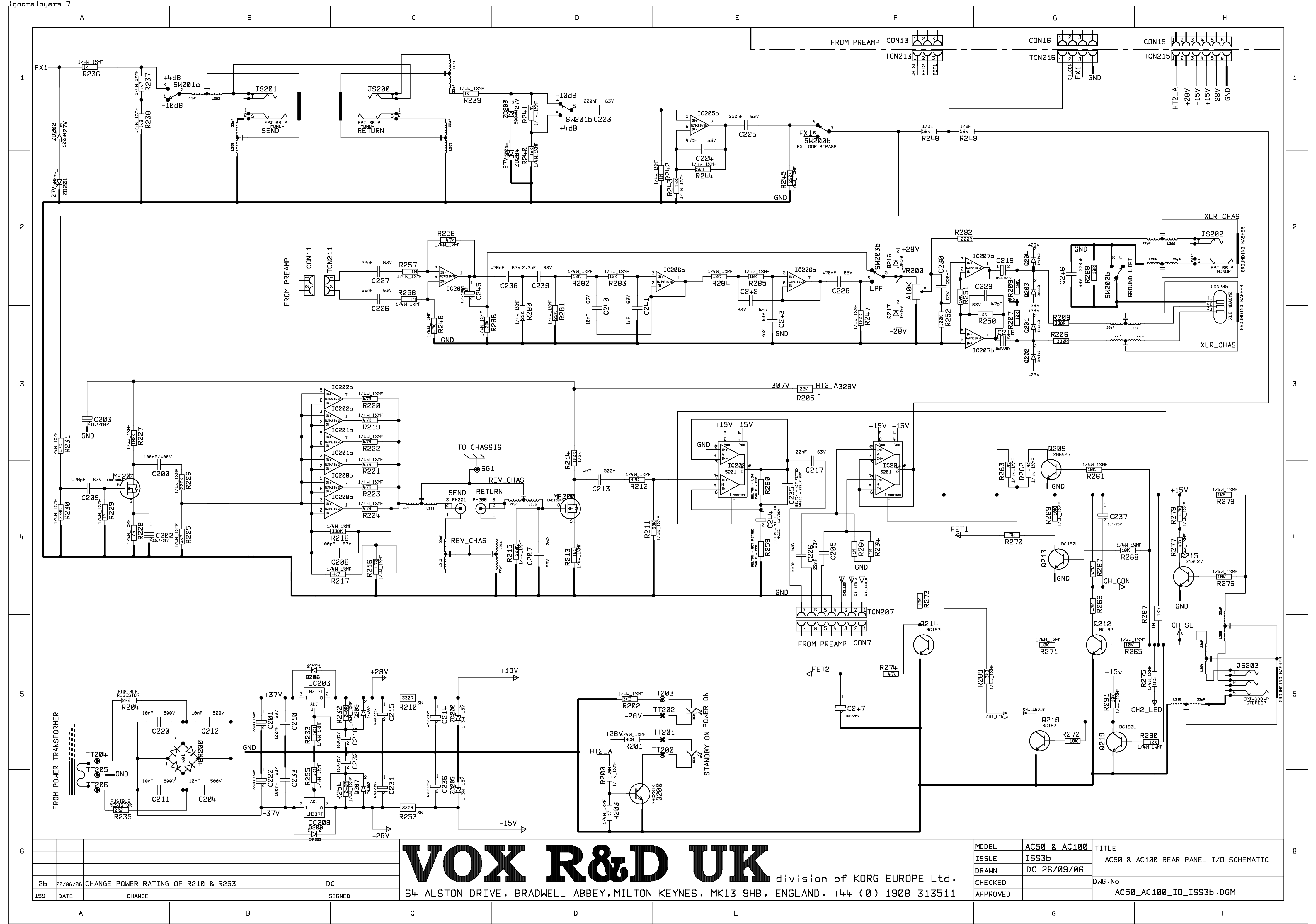


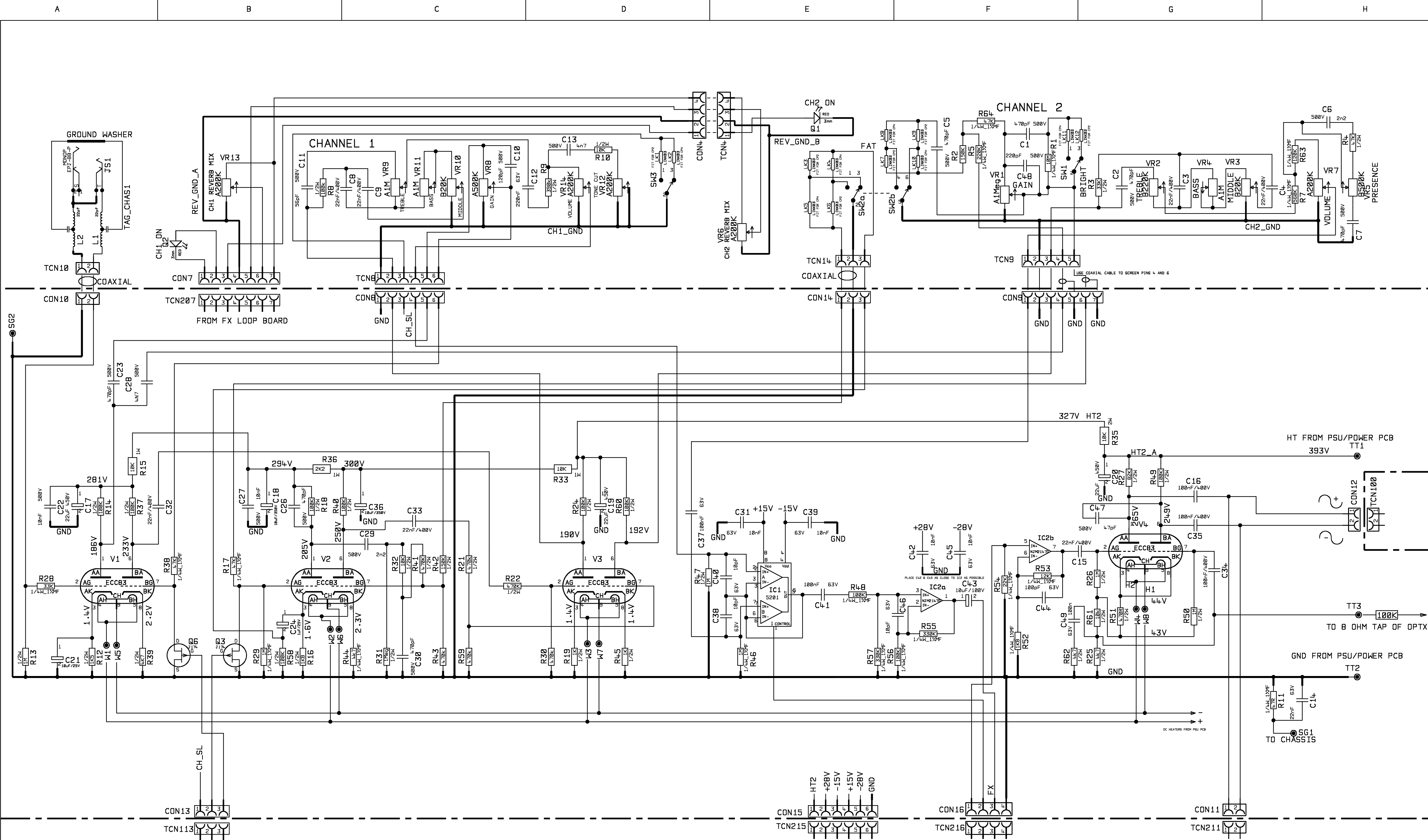
**Issued: Apr.18, 2007**  
**Ver.1**

# ★ ASSEMBLY SKETCH

AC100CPH







LV PWR, REVERB AND FX LOOP PCB

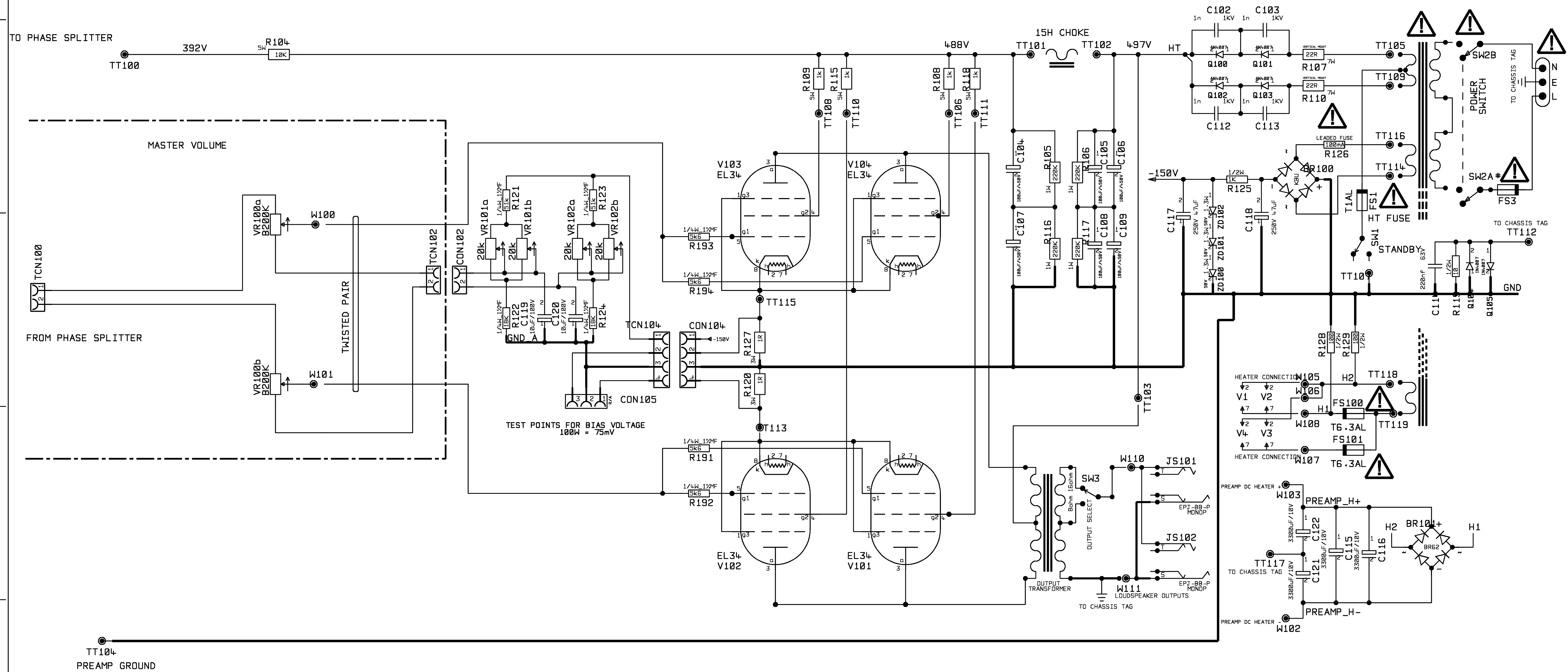
|     |          |                                     |        |
|-----|----------|-------------------------------------|--------|
| 3   | 29/08/06 | ADD LINKS FOR AC50CP2 COMPATIBILITY | DC     |
| ISS | DATE     | CHANGE                              | SIGNED |

# VOX R&D UK

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|          |              |        |                          |
|----------|--------------|--------|--------------------------|
| MODEL    | AC50 & AC100 | TITLE  | AC50 & 100 MODERN PREAMP |
| ISSUE    | ISS3         | DRAWN  | DC 29/08/06              |
| CHECKED  |              | DWG.No |                          |
| APPROVED |              |        | AC50_100_PREAMP_ISS3.DGM |



SAFETY CRITICAL COMPONENT  
REPLACE ONLY WITH SAME  
TYPE & RATING  
IF IN DOUBT CONTACT SUPPLIER

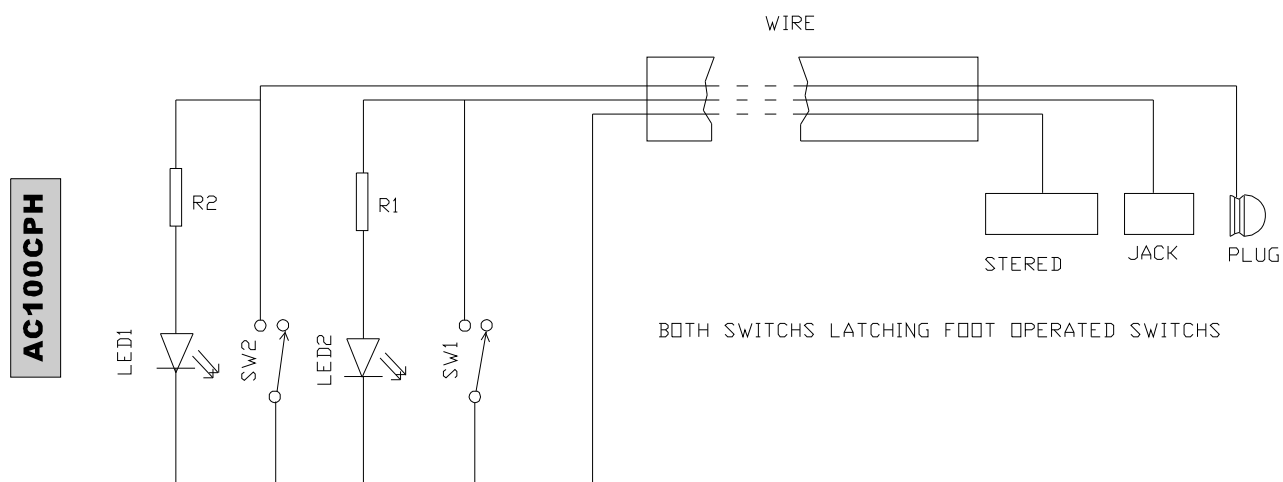
|     |          |                                                    |        |
|-----|----------|----------------------------------------------------|--------|
| 2c  | 01/09/05 | CHANGE R125 to 1K 1/2 W, CHANGE R126 TO 100mA FUSE | DC     |
| 2b  | 07/08/05 | CHANGE R122 & R124 TO 10K                          | DC     |
| 2a  | 24/05/05 | ADD VOLTAGES AND WARNINGS                          | DC     |
| ISS | DATE     | CHANGE                                             | SIGNED |

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|          |             |                             |
|----------|-------------|-----------------------------|
| MODEL    | AC100       | TITLE                       |
| ISSUE    | ISS2c       | AC100 POWER OUTPUT          |
| DRAWN    | DC 01/09/06 |                             |
| CHECKED  |             | DWG.No                      |
| APPROVED |             | AC100_POWER_STAGE_ISS2c.DGM |

## ★ SCHEMATICS DIAGRAM(FOOT SWITCH)

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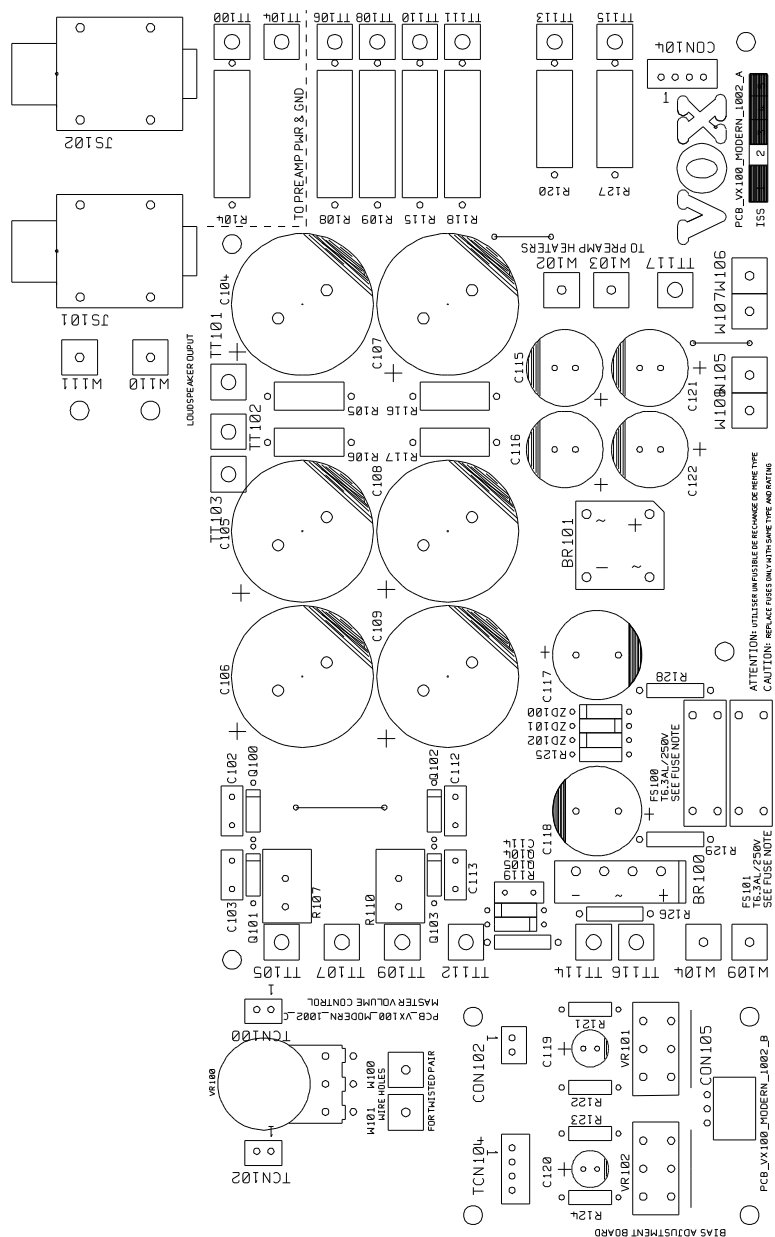
LAYER 7 (SILK SCREEN ARTWORK)  
ISSUE – ISS3





## LAYER 7 (SILK SCREEN ARTWORK)

251 - EN51



**VOX AC100CPH Parts List**

| Part Number  | Part Name                      | Description/Reference                  | QTY |
|--------------|--------------------------------|----------------------------------------|-----|
| 530000000717 | CABINET AC100CPH               | VOX vinyl, black sprayed inside        | 1   |
| 530000000708 | FRONT BAFFLE AC100CPH          | diamond veneer, PU paint, white piping | 1   |
| 530000000710 | BACKBOARD                      | VOX vinyl, black sprayed inside        | 1   |
| 530000000716 | REAR GRILL                     | Φ6 hole, black sprayed                 | 1   |
| 530000000574 | GOLDEN STRINGS                 | Set in the cabinet                     | 3.8 |
| 530000000057 | LOGO PLATE 217-1327000001      | golden "VOX"                           | 1   |
| 530000000063 | RUBBER FOOT 25*12.5 W CUSHION  | Φ25×12.5,with steel washer inside      | 4   |
| 530000000573 | VENT GRILLE                    | be made from ABS                       | 6   |
| 530000000064 | HANDLE AC15CC1                 | PVC&Al-alloy                           | 1   |
| 530000000060 | PLASTIC CORNER 406-1308000000  | be made from Nylon6                    | 8   |
| 530000000705 | EVA SPONGE 15.0W*2.0T          | self adhesive 15.0W*2.0T               | 1.2 |
| 530000000645 | REVERB PRVL3EB2C1B LONG SPRING | PRVL3EB2C1B,Long 3 Spring,RUBY         | 1   |
| 530000000072 | FOOT SWITCH VF002              | VF002                                  | 1   |
| 530000000725 | AC100 AMPLIFIER                | MAINS INPUT 230V                       | 1   |
| 530000000679 | FUSE WIRE (US)                 | US,EX,JP                               | (1) |
| 530000000678 | FUSE WIRE T2.5AL/250(UK)       | UK,AU,GE                               | (1) |
| 530000000670 | TRANSFORMER022-1114042288R(US) | US,EX                                  | (1) |
| 530000000671 | TRANSFORMER022-1114042289R(UK) | UK                                     | (1) |
| 530000000668 | TRANSFORMER022-1114042286R(AU) | AU                                     | (1) |
| 530000000672 | TRANSFORMER022-1114042290R(GE) | GE                                     | (1) |
| 530000000669 | TRANSFORMER022-1114042287R(JP) | JP                                     | (1) |
| 530000000611 | POWER CABLE (120V US/EX)       | US,EX                                  | (1) |
| 530000000081 | POWER CABLE AC15(230V UK)      | UK,GE                                  | (1) |
| 530000000695 | POWER CORD (AU)                | AU                                     | (1) |
| 530000000078 | POWER CABLE AC15(100V JP)      | JP                                     | (1) |
| 530000000700 | REVERB POP PCB                 |                                        | (1) |
| 530000000113 | PHONE SOCKET LS-2031-6         | JS203                                  | 1   |
| 530000000692 | PHONE JACK(SOCKET WHITE)       | PH200                                  | 1   |
| 530000000691 | PHONE JACK (SOCKET RED)        | PH201                                  | 1   |
| 530000000112 | PHONE SOCKET LS-2031-4         | JS200,JS201, JS202                     | 3   |
| 530000000688 | MALE XLR (RIGHT PCB MOUNT)     | CON205                                 | 1   |
| 530000000651 | IC LM317T                      | IC203                                  | 1   |
| 530000000652 | IC LM337T                      | IC208                                  | 1   |
| 530000000103 | IC NJM2120D                    | IC204,209                              | 2   |
| 530000000104 | IC NJM2147D                    | IC200,201,202,205,206,207              | 6   |
| 530000000674 | EMI FILTER DSS6NC52A271        | L200-210                               | 11  |
| 530000000685 | SSW DPDT RA SV710100202        | SW200-203                              | 4   |
| 530000000579 | FUSIBLE RESISTOR 2R2/1WATT     | R204,235                               | 2   |
| 530000000657 | STRAIGHT POT MONO A10K         | VR200                                  | 1   |
| 530000000684 | BRIDGE RECTIFIER W01           | BR200                                  | 1   |
| 530000000696 | DIODE 1N4148                   | Q201,202,203,204,216,217               | 6   |
| 530000000697 | DIODE 1N4002                   | Q205,206,207,208                       | 4   |
| 530000000106 | FET LND150N3                   | MF200, 201                             | 2   |
| 530000000653 | TRANSISTOR 2N6427              | Q209,215                               | 2   |
| 530000000105 | TR 2SC2910 AUDION              | Q200                                   | 1   |
| 530000000427 | TR BC182L                      | Q212,213,214,218,219                   | 5   |
| 530000000120 | MANOSTAT IN4744A 15V-1W        | ZD200,205                              | 2   |
| 530000000121 | MANOSTAT 27V 1/2W IN5254       | ZD201,202,203,204                      | 4   |
| 530000000116 | CONNECTOR (TO JS-1001-02)      | TCN211                                 | 1   |
| 530000000117 | CONNECTOR DJ2802-3P            | TCN213                                 | 1   |
| 530000000693 | 0.1" PITCH CONNECTOR 4WAY      | TCN216                                 | 1   |

| Part Number  | Part Name                      | Description/Reference | QTY |
|--------------|--------------------------------|-----------------------|-----|
| 530000000694 | 0.1" PITCH CONNECTOR 6WAY      | TCN215                | 1   |
| 530000000115 | GROUP PIN 7P 2.5MM             | TCN207                | 1   |
| 530000000701 | PREAMP POP PCB                 |                       | (1) |
| 530000000112 | PHONE SOCKET LS-2031-4         | JS1                   | 1   |
| 530000000103 | IC NJM2120D                    | IC1                   | 1   |
| 530000000104 | IC NJM2147D                    | IC2                   | 1   |
| 530000000687 | PCB TOGGLE SWITCH DPDT00B1N01  | SW2                   | 1   |
| 530000000686 | PCB TOGGLE SWITCH SPDT00B1N01  | SW1,SW3               | 2   |
| 530000000426 | FET J174                       | Q3,Q6                 | 2   |
| 530000000654 | LED 234HD RED                  | Q1                    | 1   |
| 530000000655 | LED 234GD/E-A GREEN            | Q2                    | 1   |
| 530000000723 | VT9 PCB MOUNT VALVE BASE       | V1,V2,V3,V4           | 5   |
| 530000000108 | POTENTIOMETER A1M AC30         | VR1,VR4,VR9,VR11      | 4   |
| 530000000661 | POT RA ALPHA RV16A 41#A200K    | VR7,VR12,VR14,V6,V13  | 5   |
| 530000000110 | POTENTIOMETER A500K AC30       | VR8                   | 1   |
| 530000000663 | POT RA ALPHA RV16A 41#B500K    | VR5                   | 1   |
| 530000000659 | POT RA MONO ALPHA RV16A41#B20K | VR3,VR10              | 2   |
| 530000000662 | POT RA ALPHA RV16A 41#B220K    | VR2                   | 1   |
| 530000000116 | CONNECTOR (TO JS-1001-02)      | CON10,CON11,CON12     | 3   |
| 530000000117 | CONNECTOR DJ2802-3P            | CON13,CON14           | 2   |
| 530000000693 | 0.1" PITCH CONNECTOR 4WAY      | CON16,CON4            | 2   |
| 530000000694 | 0.1" PITCH CONNECTOR 6WAY      | CON8,CON15            | 2   |
| 530000000115 | GROUP PIN 7P 2.5MM             | CON9                  | 1   |
| 530000000703 | PSU POP PCB                    |                       | (1) |
| 530000000112 | PHONE SOCKET LS-2031-4         | JS101,JS102           | 2   |
| 530000000114 | FUSE BASE                      | FS100,101             | 4   |
| 530000000680 | FUSE WIRE T6.3A/250V           | FS100,101             | 2   |
| 530000000675 | FUSE WIRE T100MA 205V          | R126                  | 1   |
| 530000000660 | POT RA ST ALPHA RV16A 41#B200K | VR100                 | 1   |
| 530000000658 | STRAIGHT STEREO POT 20K        | VR101,102             | 2   |
| 530000000689 | 0.1" PITCH CONNECTOR 3WAY      | CON105                | 1   |
| 530000000683 | BRIDGE RECTIFIRE BR62(KBPC602) | BR101                 | 1   |
| 530000000682 | BRIDGE RECTIFIRE KBU(KBU8D)    | BR100                 | 1   |
| 530000000119 | DIODE IN4007                   | Q100-105              | 6   |
| 530000000698 | ZENER DIODE 51V1.3W            | ZD100, 101, 102       | 3   |
| 530000000116 | CONNECTOR (TO JS-1001-02)      | CON102                | 1   |
| 530000000693 | 0.1" PITCH CONNECTOR 4WAY      | TCN104,CON104         | 2   |
| 530000000699 | CHOKE COIL 15H                 |                       | 1   |
| 530000000673 | OUTPUT TRANS 022-1114042291R   |                       | 1   |
| 530000000089 | FUSE BASE R3-11 5*20           |                       | 1   |
| 530000000642 | SW 6021-K1C1T2(100/230/240V)   |                       | 2   |
| 530000000677 | FUSE WIRE T1AL/250V            |                       | 1   |
| 530000000678 | FUSE WIRE T2.5AL/250(UK)       |                       | 1   |
| 530000000073 | RED LED 333HD/E-A              | POWER                 | 1   |
| 530000000656 | LED GREEN 333GD/E-A            | STANDBY               | 1   |
| 530000000724 | VALVE HOLDER                   |                       | 4   |
| 530000000721 | VALVE EL34                     | V101,V102,V103,V104   | 4   |
| 530000000097 | VALVE ECC83(12AX7)             | V1,V2,V3,V4           | 4   |
| 530000000690 | POWER SOCKET                   |                       | 1   |
| 530000000715 | MAIN CHASSIS AC100CPH          |                       | 1   |
| 530000000707 | ANODISED PANEL AC100CPH        |                       | 1   |
| 530000000720 | ADJUSTMENT PLATE               |                       | 1   |
| 530000000704 | VOX MINI KNOB                  |                       | 18  |

| Part Number  | Part Name                   | Description/Reference        | QTY |
|--------------|-----------------------------|------------------------------|-----|
| 530000000705 | EVA SPONGE 15.0W*2.0T       |                              | 1   |
| 530000000712 | TAPPED METAL SPACER(M3×5.5) | Support preamp PCB、Power PCB | 10  |
| 530000000711 | TAPPED METAL SPACER(M3×6)   | Support adjustment PCB       | 4   |
| 530000000713 | TAPPED METAL SPACER(M3×40)  | Support reverb board         | 4   |
| 530000000719 | SPRING FINGER               | Touch aluminum foil          | 2   |