



Service Documents

HU1605

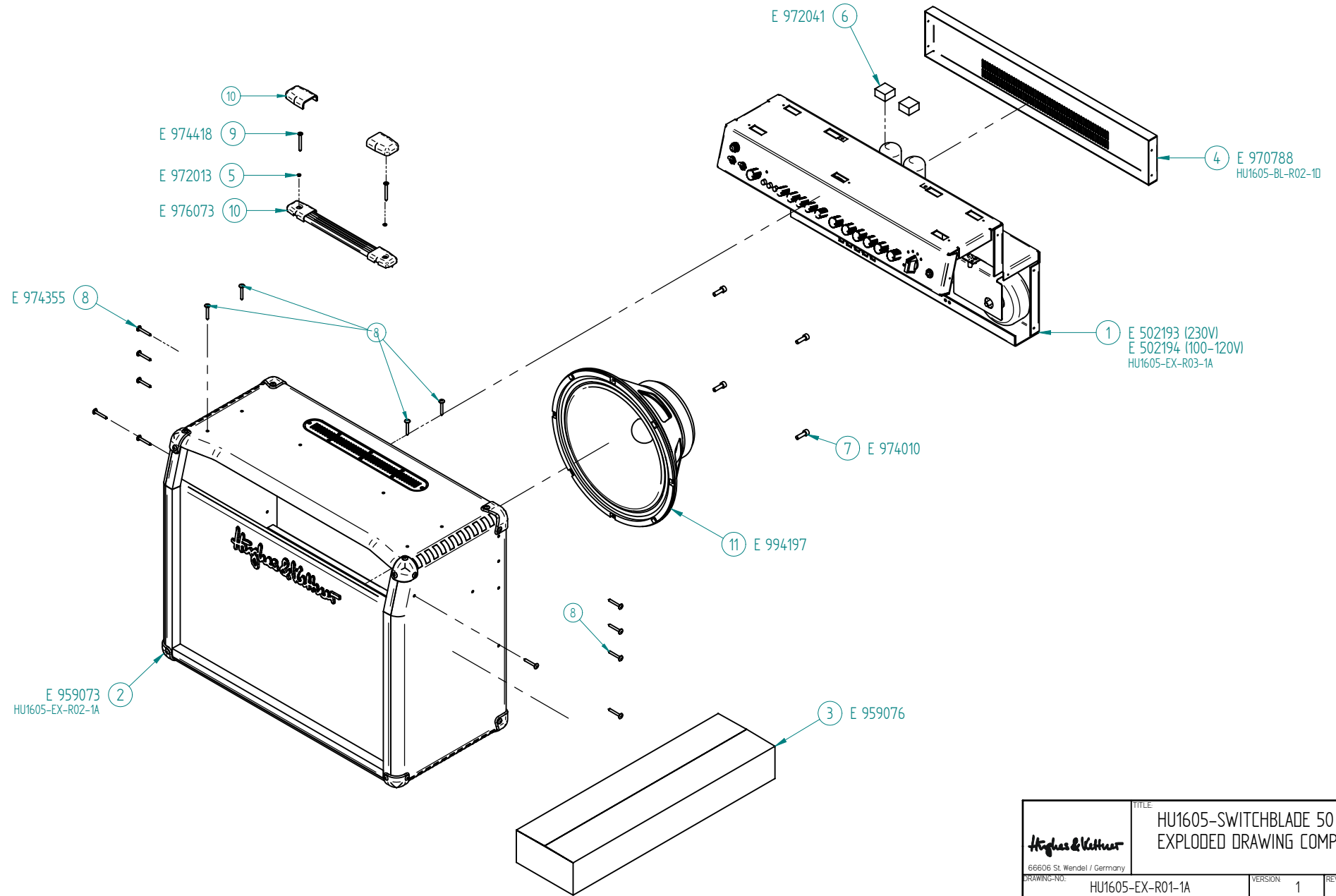
SwitchBlade 50 Combo

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TECHNICAL SERVICE:

**Stamer Musikanlagen GmbH • Magdeburger Str. 8 • 66606 St.Wendel • Germany
Music & Sales P.E. GmbH • Leipziger Str. 3 • 66606 St.Wendel • Germany**




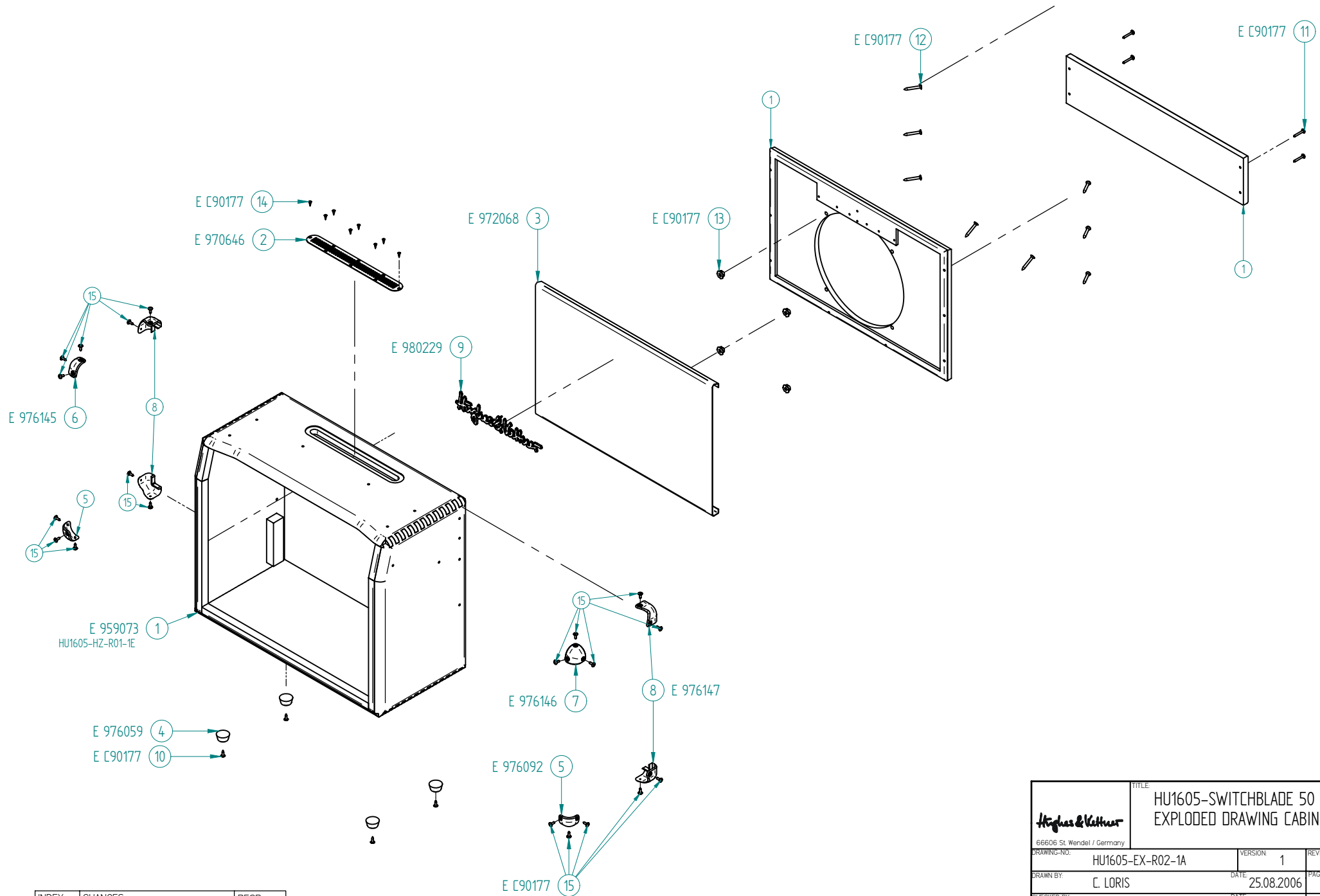
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| | | TITLE HU1605-SWITCHBLADE 50 EXPLODED DRAWING COMPLETE | |
| | | 66606 St. Wendel / Germany DRAWING-NO. HU1605-EX-R01-1A | VERSION 1 |
| DRAWN BY: C. LORIS | DATE: 25.08.2006 | PAGE: 1 | |
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| FILENAME: HU1605-EX-R01-1A-COMPLETE | | | |

| pos. | part-no. 1 | part-no. 2 | part-no. 3 | description | Beschreibung | quantity |
|------|---------------|-------------------|------------|---|--|----------|
| 1 | 502193 (230V) | 502194 (100-120V) | | SWITCHBLADE 50 chassis | SWITCHBLADE 50 Chassis | 1 |
| 2 | 959073 | | | SWITCHBLADE 50 wooden cabinet complete | SWITCHBLADE 50 Holzgehäuse komplett | 1 |
| 3 | 959076 | | | MIDI Footswitch FSM-432 | MIDI Footswitch FSM-432 | 1 |
| 4 | 970788 | | | sheet metal SWITCHBLADE 50 rear panel | Blech SWITCHBLADE 50 Rückwand | 1 |
| 5 | 972013 | | | Insulation Sleeve IB6 | Isolierbuchse IB6 | 2 |
| 6 | 972041 | | | rubber punching 25x25x15 | Zellkaut. -Stanzteil 25x25x15mm | 2 |
| 7 | 974010 | | | hexagon socket head cap screw, M6x20, black | Inbusschraube M6*20 sw | 4 |
| 8 | 974355 | | | cross recessed panhead tapping screw with collar, 3,9x30, black | Blechschr. KFR-Kopf 3,9* 30 sw | 14 |
| 9 | 974418 | | | cross recessed countersunk tapping screw, 4,2x38, zinc plated | Blechschrabe Flachsenk. 4,2*38 vz | 2 |
| 10 | 976073 | | | strap handle 'Hughes & Kettner' | Bandgriff 'Hughes & Kettner' | 1 |
| 11 | 994197 | | | Eminence 12" Guitar Speaker, Switchblade (Ref: 05-12-037) | Eminence 12"Guitar Speaker, Switchblade (Ref: 05-12-037) | 1 |

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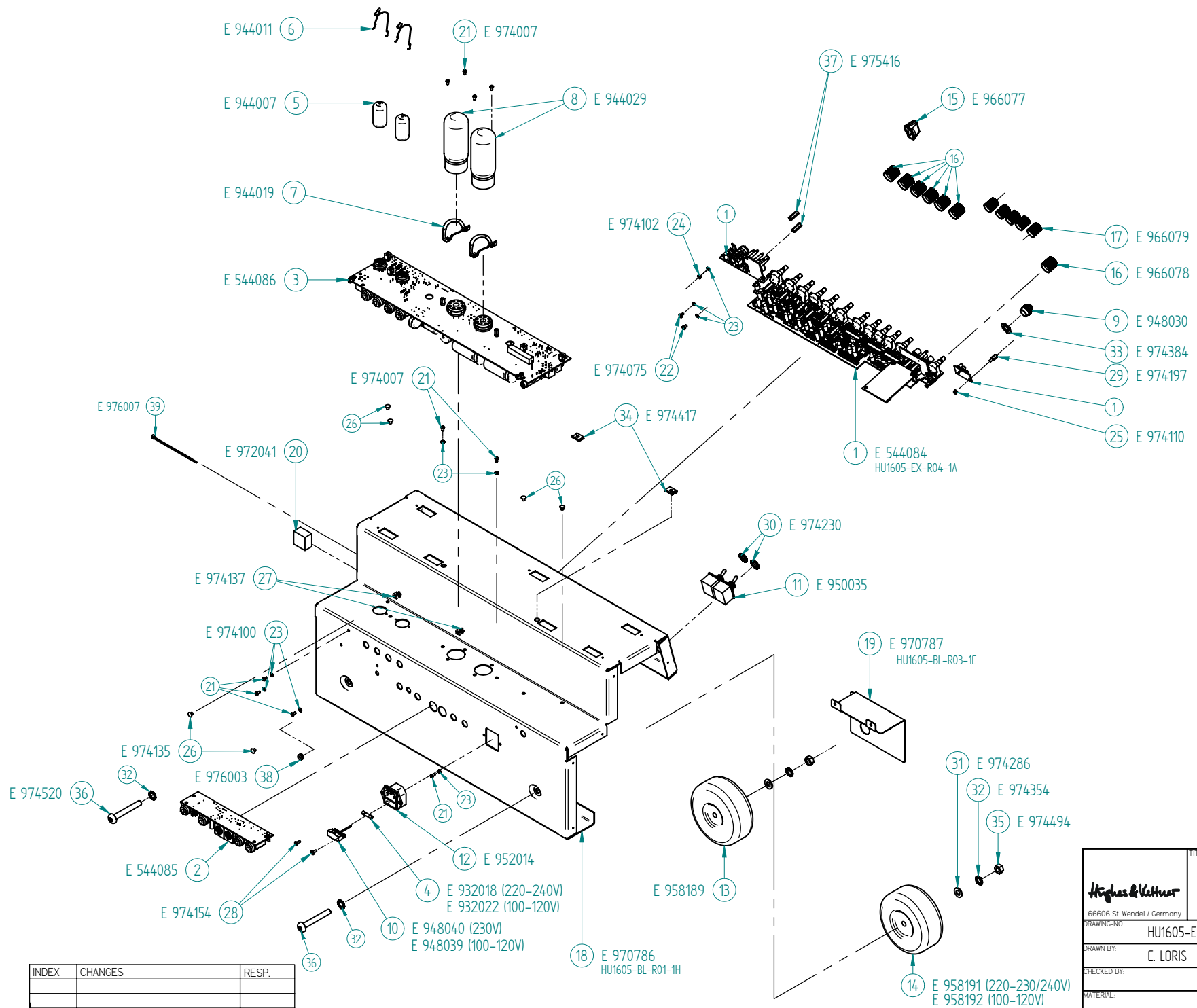
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| HU1605-EX-R02-1A-CABINET | | | |

| pos. | part-no. 1 | part-no. 2 | part-no. 3 | description | Beschreibung | quantity |
|------|------------|------------|------------|---|--------------------------------------|----------|
| 1 | 959073 | | | wooden cabinet Matrix 50 Combo | Holzgehäuse Matrix 50 Combo | 1 |
| 2 | 970646 | | | sheet metal Warp X ventilation grille RAL 9005 | Blech Warp X Lüftungsgitter RAL 9005 | 1 |
| 3 | 972068 | | | clothing black/silver | Bespannstoff schwarz/silber | 1 |
| 4 | 976059 | | | rubber foot conical D30-23/H15mm | Gummifuss konisch D30-23/H15mm | 4 |
| 5 | 976092 | | | corner CR-4 | Ecke Corner CR-4 | 2 |
| 6 | 976145 | | | corner CR-6 left | Ecke CR-6 Links | 1 |
| 7 | 976146 | | | corner CR6 right | Ecke CR-6 Rechts | 1 |
| 8 | 976147 | | | corner CR-7 | Ecke Corner CR-7 f. 15mm Mat.par | 4 |
| 9 | 980229 | | | logo silver, 3 parts | Logo 3-teilig Silber | 1 |
| 10 | C90177 | | | ABC-Spax-S screws for backwall, 4x20, black | Rückwandschraube, 4*20 sw | 4 |
| 11 | C90177 | | | cross recessed panhead tapping screw with collar, 3.9x30, black | Blechschr. KFR-Kopf 3,9* 30 sw | 4 |
| 12 | C90177 | | | ABC-Spax S, countersunk head, Pozidrive, 5x40, zinc plated | Spax Senkkopf, 5*40 vz | 8 |
| 13 | C90177 | | | pronged T-nut, M6x9, black | Einschlagmutter Stahl schwarz M6x9mm | 4 |
| 14 | C90177 | | | ABC-Spax S, countersunk head, Pozidrive, 3x12, black | Spax Senkkopf, 3*12 sw | 8 |
| 15 | C90177 | | | cross recessed panhead tapping screw with collar, 3.9x13, black | Blechschr. KFR-Kopf 3,9*13 sw | 20 |

part-no. C90177 is a screw-set with all fittings used in HU1605-SWITCHBLADE 50 wooden cabinet

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| HUGLAS & KATHNER | | 66606 St. Wendel / Germany | | TITLE | |
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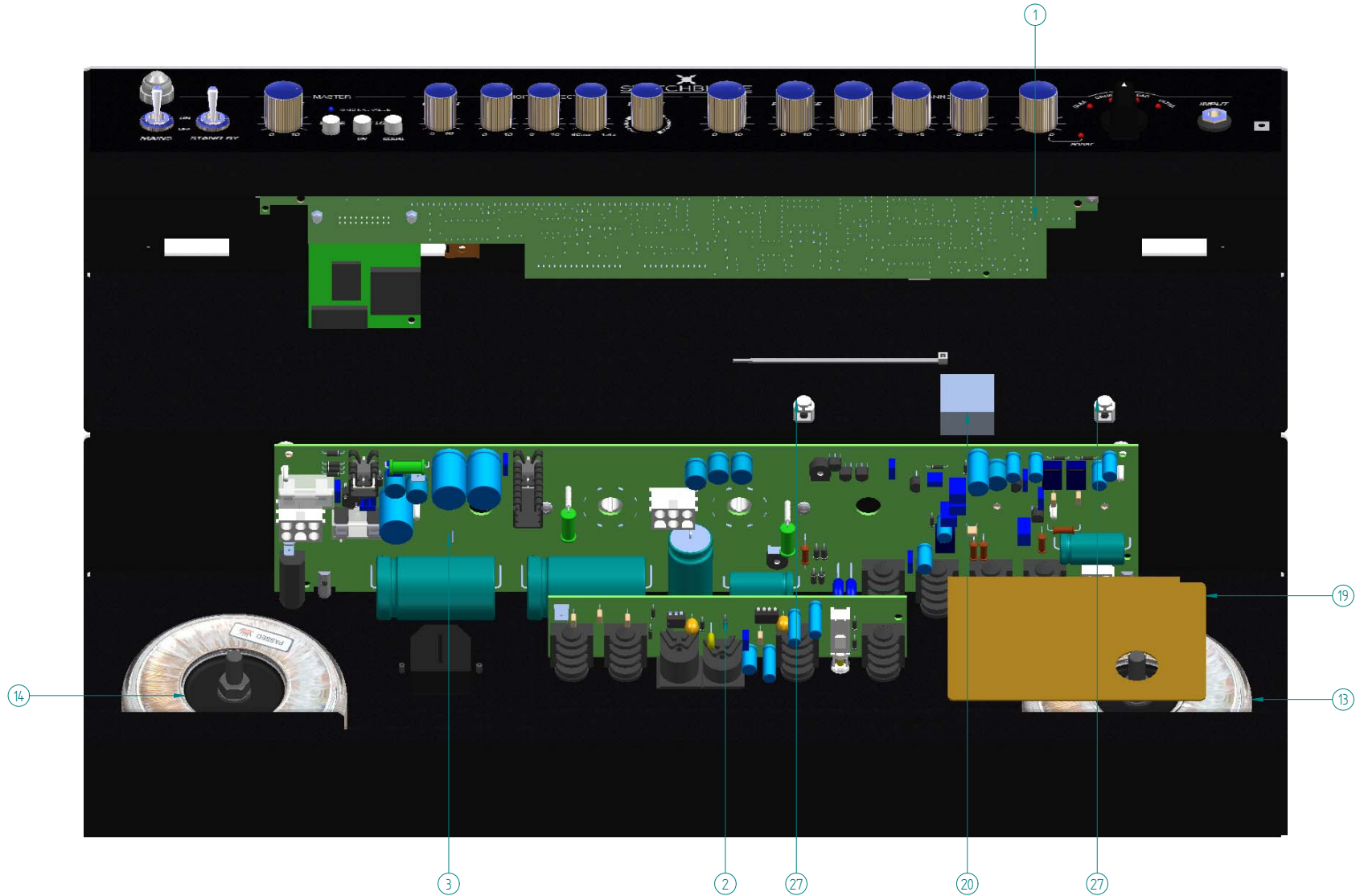
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| pos. | part-no. 1 | part-no. 2 | description | Beschreibung | quantity |
|------|------------------------------|----------------------|---|--|----------|
| 1 | 544084 | | Switchblade 50 Preamp 1x12" | Switchblade 50 Preamp 1x12" | 1 |
| 2 | 544085 | | SwitchBlade 50 FX board | SwitchBlade 50 FX Board | 1 |
| 3 | 544086 | | SwitchBlade 50 Power Amp 1x12" | SwitchBlade 50 Power Amp 1x12" | 1 |
| 4 | 932018 (220-240V) | 932022 (100-120V) | microfuse slowblow 5*20 IEC 127; 1,0A (for 220-240V); 2,0A (for 100-120V) | Feinsicherung 5*20 IEC 127; 1,0A Trage (fur 220-240V); 2,0A Trage (fur 100-120V) | 1 |
| 5 | 944007 | | tube ECC83-CZ Tesla | Rohre ECC83-CZ Tesla | 2 |
| 6 | 944011 | | Tubeclamp | Rohrenhalte Draht VRA 10.01 | 2 |
| 7 | 944019 | | Tube Bracket 6L6GC | Rohrenhalteklammer 6L6GC | 2 |
| 8 | 944029 | | power tube EL34B China | Endst. Rohre EL34B STR China | 2 |
| 9 | 948030 | | FPLR lens for PilotLight blue | FPLR Linse fur PilotLight blau | 1 |
| 10 | 948040 (230V) | 948039 (100-120V) | fuse case for power inlet | SI-Einsatz Netzbuchse | 1 |
| 11 | 950035 | | mains switch, rocker, on-on | Netzschalter-Kipphebel-on-on | 2 |
| 12 | 952014 | | power inlet MS3 SKT MS-3 | Euronetzbuchse MS3 SKT MS-3 | 1 |
| 13 | 958189 | | power audio transformer TI-053474 50W | Ubertrager TI-053474 50W | 1 |
| 14 | 958191 (220-230/240 V) | 958192 (100-120V) | mainstransformer TI-0532270 EU/UK; TI053271 US/JP | Ringkerntrafo TI-0532270 EU/UK; TI053271 US/JP | 1 |
| 15 | 966077 | | knob Modern Tube | Knopf-Poti Modern Tube | 1 |
| 16 | 966078 | | Chrome Knob big 18mm, straight knurled with dot | Knopf Chrome Knob big 18mm | 7 |
| 17 | 966079 | | Knopf Chrome Knob small 15mm, straight knurled with dot | Knopf Chrome Knob small 15mm | 5 |
| 18 | 970786 | | sheet metal SwitchBlade 50 chassis | Blech SwitchBlade 50 Chassis | 1 |
| 19 | 970787 | | sheet metal SwitchBlade 50 shielding plate | Blech SwitchBlade 50 Schirmblech plate | 1 |
| 20 | 972041 | | rubber punching 25x25x15 | Zellkaut. -Stanzteil 25x25x15mm | 1 |
| 21 | 974007 | | hexagon socket oval head screw, M3x6, black | Linsenschr.m.Innens. M3*6 sw | 10 |
| 22 | 974075 | | cross recessed panhead screw, M3x5, zinc plated | Linsenschraube M3x5 vz | 2 |
| 23 | 974100 | | toothed lock washer, D=3,2, AZ, black zinc plated | Facher-Scheibe az, 3,2 sw vz | 9 |


| pos. | part-no. 1 | part-no. 2 | description | Beschreibung | quantity |
|------|------------|------------|--|-----------------------------------|----------|
| 24 | 974102 | | hexagon nut, class 8, M3, zinc plated | Sechskantmutter M3 vz | 1 |
| 25 | 974110 | | self locking hexagon nut with plastic insert, M3, zinc plated | Stopmutter M3 vz | 1 |
| 26 | 974135 | | spread rivet, polyamid PA6, 4x5, black | PA-Spreizniet D=4mm L=5mm | 6 |
| 27 | 974137 | | RICHCO, PCB spacer, snap in, H=11.1mm | Dist.Halter RICHCO H=11,1mm | 2 |
| 28 | 974154 | | blind rivet steel standard, 3,0x8, black | Blindniete Stahl schw. 3,0*8 | 2 |
| 29 | 974197 | | hexagon PCB spacer, type B, M3x8, zinc plated | Dist. Bol Innen/Auengew. M3*8 vz | 1 |
| 30 | 974230 | | knurled nut M12x1 | Randelmutter M12*1 | 1 |
| 31 | 974286 | | washer, form A, D=8.4mm, black | Unterleg-Scheibe 8,4 sw | 2 |
| 32 | 974354 | | toothed lock washer, D=8.4, AZ, black zinc plated | Facher-Scheibe az, 8,4 sw | 4 |
| 33 | 974384 | | nut M14 brass | Mutter FPLR Linse geschliffen | 1 |
| 34 | 974417 | | sheet metal nut, D=4.2mm, yellow chromated | Blechmutter 4,2mm vz | 2 |
| 35 | 974494 | | hexagon nut, class 8, M8, black | Sechskantmutter M8 sw | 2 |
| 36 | 974520 | | hexagon socket oval head screw, M8x60, black | Linsenschr.m.Innens. M8*60 sw | 2 |
| 37 | 975416 | | hexagon PCB spacer, M3x17, zinc plated | Dist. Bol 2"innengew. M3*17 vz | 2 |
| 38 | 976003 | | cable bushing 4*6*9 (mm) | Kabeltulle 4*6*9 (mm) | 1 |
| 39 | 976007 | | cable tie 2,5x100 (mm) | Kabelbinder natur 2,5x100 (mm) | 13 |

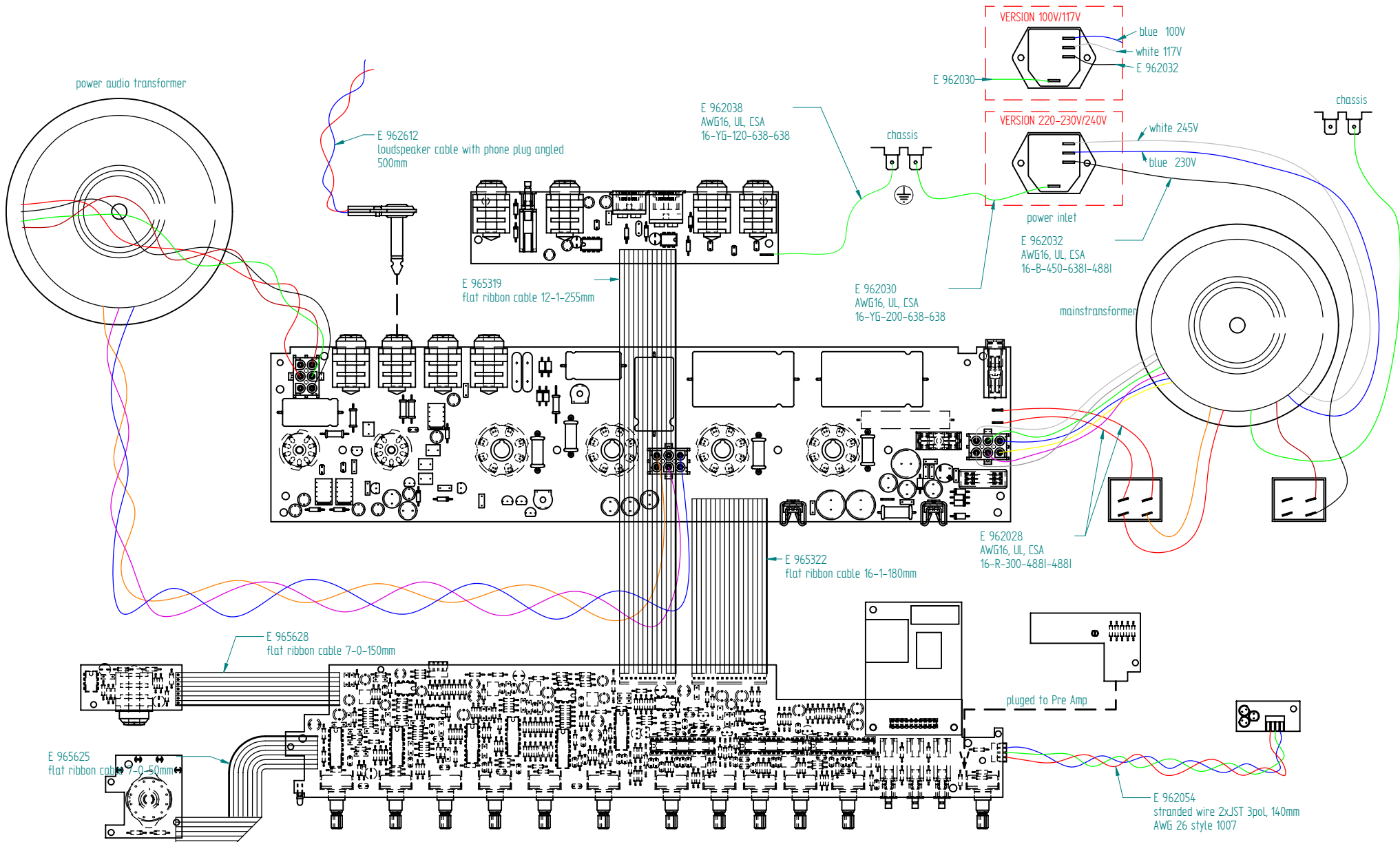
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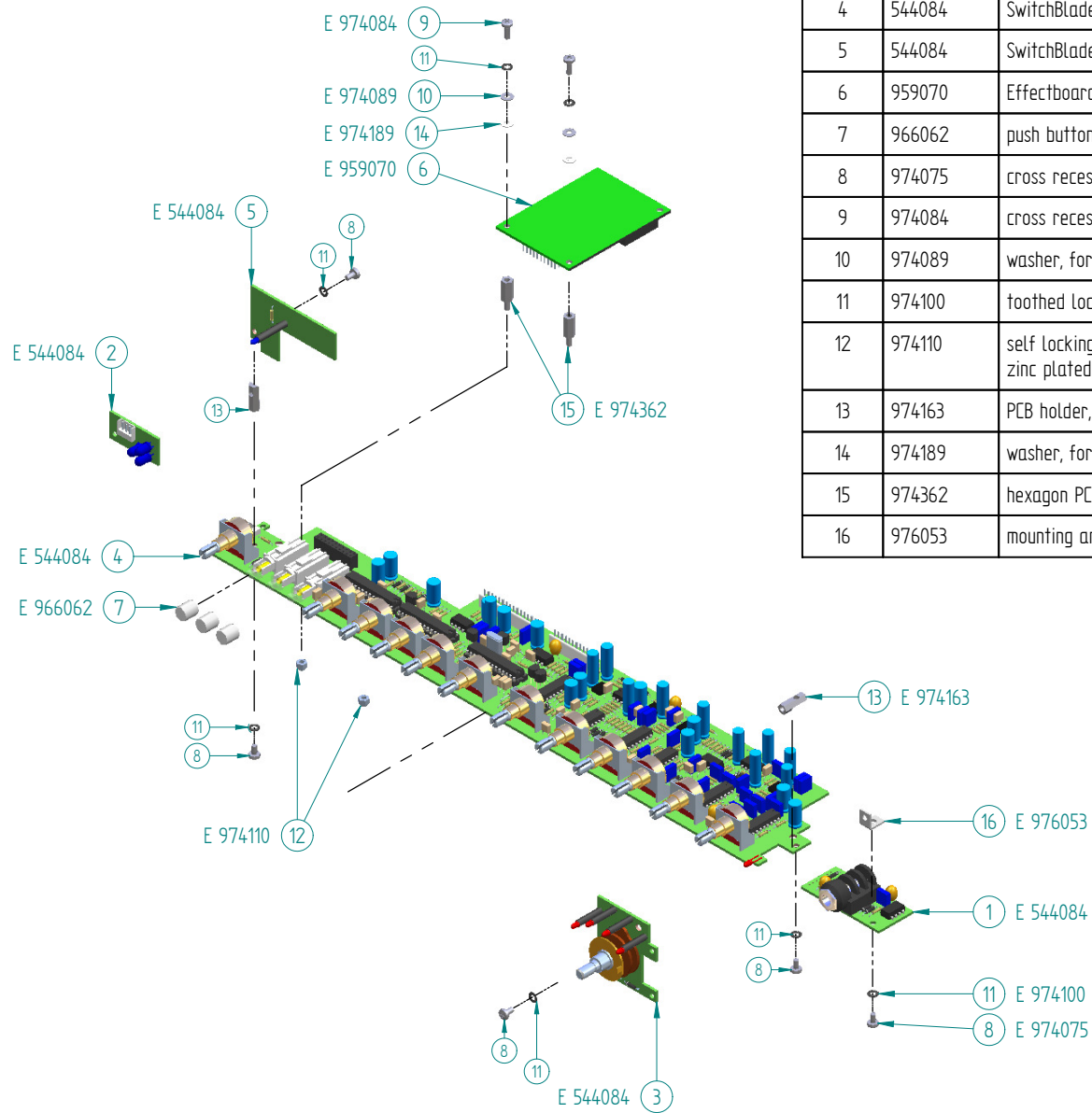
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| pos. | part-no.1 | part-no.2 | part-no.3 | description | Beschreibung | quantity |
|------|-----------|-----------|-----------|---|---------------------------------------|----------|
| 1 | 962028 | | | stranded wire 16-R-300-4881-4881 AWG, UL, CSA | Litze 16-R-300-4881-4881 AWG, UL, CSA | 2 |
| 2 | 962030 | | | stranded wire 16-YG-200-638-638 AWG, UL, CSA | Litze 16-YG-200-638-638 AWG, UL, CSA | 1 |
| 3 | 962032 | | | stranded wire 16-B-450-6381-4881 AWG, UL, CSA | Litze 16-B-450-6381-4881 AWG, UL, CSA | 1 |
| 4 | 962038 | | | stranded wire 16-YG-120-638-638 AWG, UL, CSA | Litze 16-YG-120-638-638 AWG, UL, CSA | 1 |
| 5 | 962054 | | | stranded wire 2xJST 3pol 140mm | Litze 2xJST 3pol 140mm | 1 |
| 6 | 962612 | | | loudspeaker cable with phone plug angled | Lautsprecherkabel mit W-Klinke | 1 |
| 7 | 965319 | | | flat ribbon cable 12-1-255mm | Flachbandkabel 12-1-255mm | 1 |
| 8 | 965322 | | | flat ribbon cable 16-1-180mm | Flachbandkabel 16-1-180mm | 1 |
| 9 | 965625 | | | flat ribbon cable 7-0-50mm | Flachbandkabel 7-0-50mm | 1 |
| 10 | 965628 | | | flat ribbon cable 7-0-150mm | Flachbandkabel 7-0-150mm | 1 |

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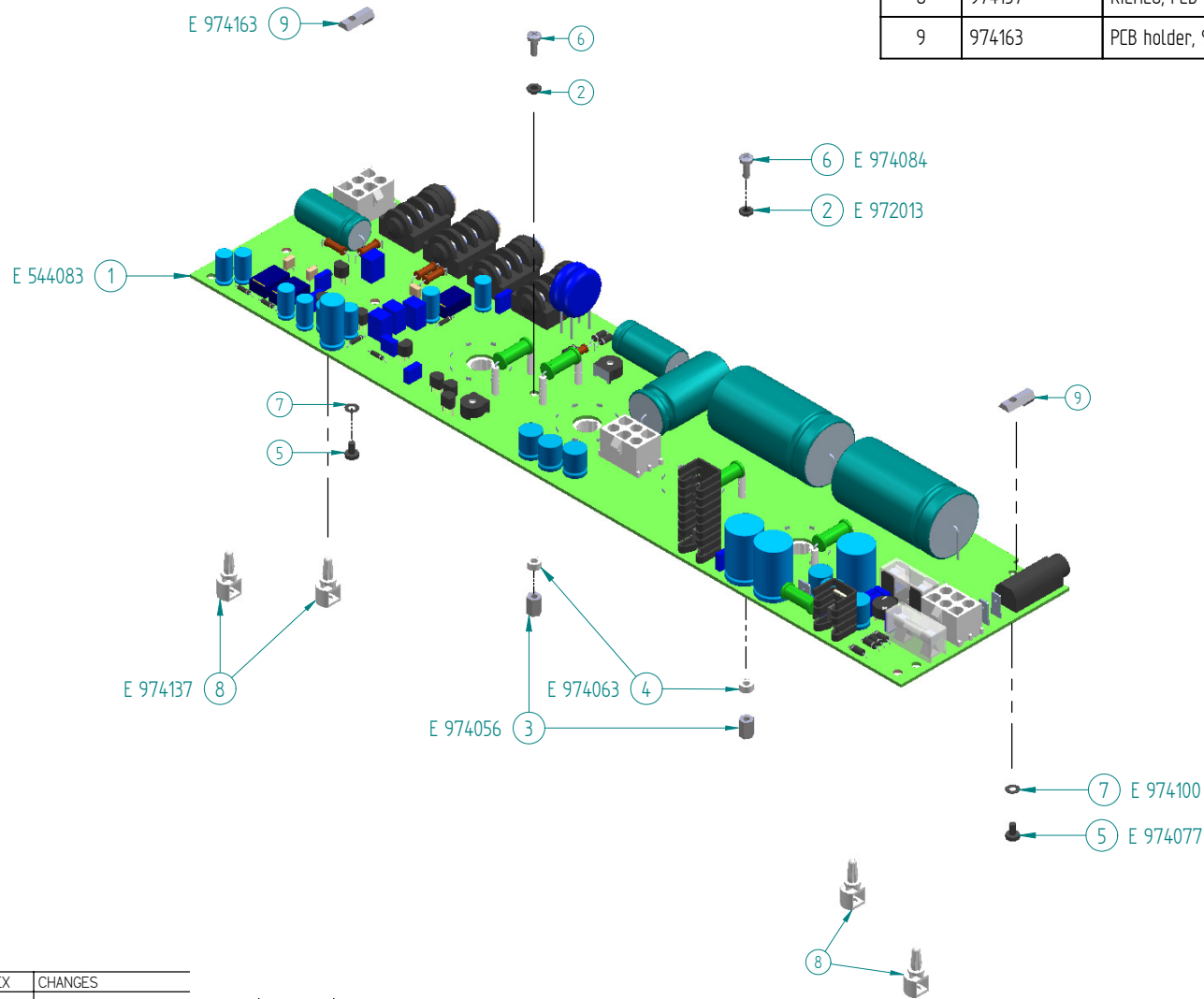


| pos. | part-no. 1 | description | Beschreibung | quantity |
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| 1 | 544084 | SwitchBlade Input board (part of Pre Amp) | SwitchBlade Inputboard (Teil von Pre Amp) | 1 |
| 2 | 544084 | SwitchBlade Lamp (part of Pre Amp) | SwitchBlade Lamp (Teil von Pre Amp) | 1 |
| 3 | 544084 | SwitchBlade Switch (part of Pre Amp) | SwitchBlade Switch (Teil von Pre Amp) | 1 |
| 4 | 544084 | SwitchBlade Pre Amp | SwitchBlade Pre Amp | 1 |
| 5 | 544084 | SwitchBlade Catcheye (part of Pre Amp) | SwitchBlade Catcheye (Teil von Pre Amp) | 1 |
| 6 | 959070 | Effectboard Modern Tube | Effectboard Modern Tube | 1 |
| 7 | 966062 | push button knob clear for CIC-WPML | Knopf-Taster/Schalter transp. f. CIC-WPML Clear | 3 |
| 8 | 974075 | cross recessed panhead screw, M3x5, zinc plated | Linsenschraube M3x5 vz | 5 |
| 9 | 974084 | cross recessed panhead screw, M3x8, zinc plated | Linsenschraube M3 x 8 vz | 2 |
| 10 | 974089 | washer, form A, D=3.2mm, zinc plated | Unterleg-Scheibe 3,2 vz | 2 |
| 11 | 974100 | toothed lock washer, D=3,2, AZ, black zinc plated | Fächer-Scheibe az, 3,2 sw vz | 7 |
| 12 | 974110 | self locking hexagon nut with plastic insert, M3, zinc plated | Stopmutter M3 vz | 2 |
| 13 | 974163 | PCB holder, 90°, nickel plated | Befestigungselement M3x15 NI | 2 |
| 14 | 974189 | washer, form A, D=3.2mm, Polyamid | Unterleg-Scheibe 3,2 Kun | 2 |
| 15 | 974362 | hexagon PCB spacer, type B, M3x12, zinc plated | Dist. Bol Innen/Außengew. M3*12 vz | 2 |
| 16 | 976053 | mounting angle M3 11x10 | Montagewinkel M3 11x10 | 1 |

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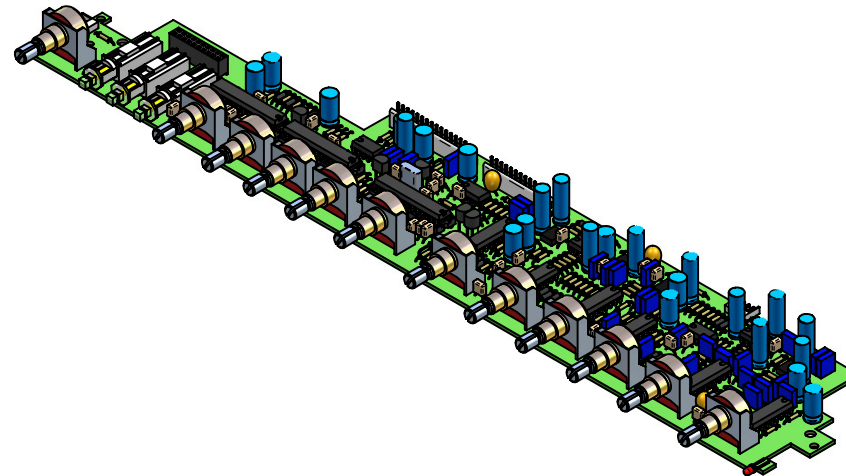
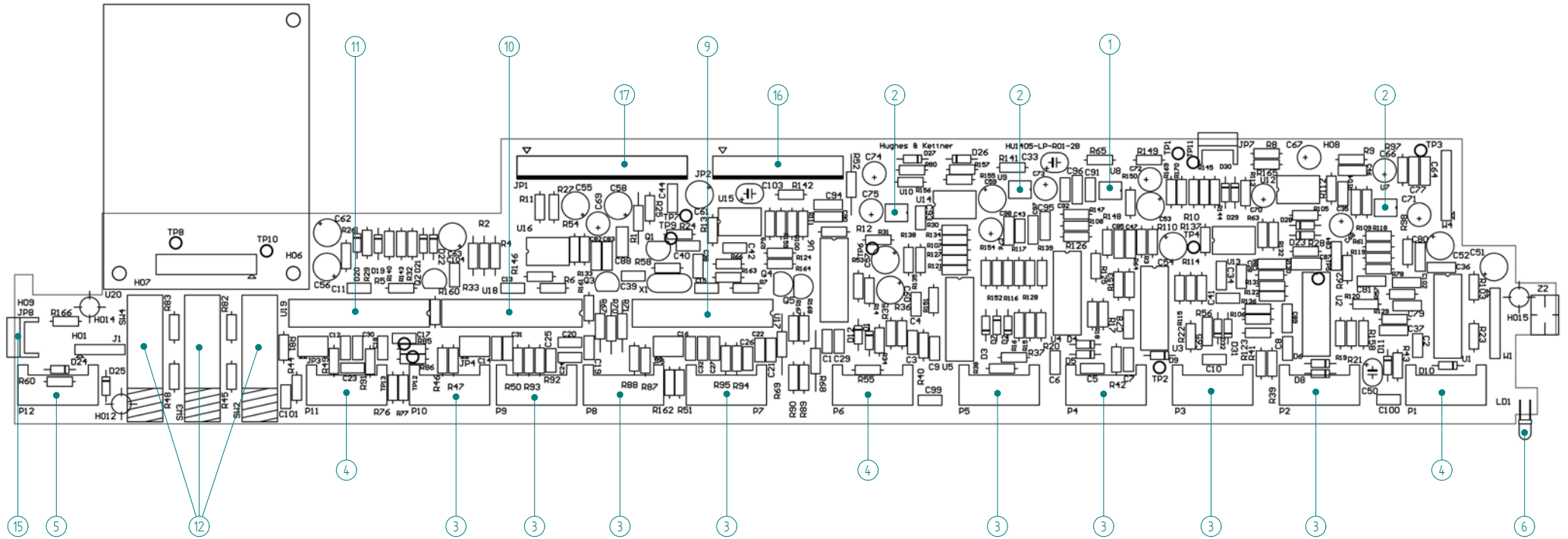
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| HU1605-EX-R04-1A-PREAMP | | | |

| pos. | part-no. 1 | description | Beschreibung | quantity |
|------|------------|---|--------------------------------|----------|
| 1 | 544083 | SwitchBlade Power Amp | SwitchBlade Power Amp | 1 |
| 2 | 972013 | Insulation Sleeve IB6 | Isolierbuchse IB6 | 2 |
| 3 | 974056 | hexagon PCB spacer, M3x8, brass, nickel plated | Dist. Bol. 2xInnengew. M3'8 vn | 2 |
| 4 | 974063 | plastic PCB spacer, 3.2x6x3, Polyamid white | Dist.Hülse PE 3,2'6'3 (mm) | 2 |
| 5 | 974077 | cross recessed panhead screw, M3x5, black | Linsenschraube M3x5 sw | 2 |
| 6 | 974084 | cross recessed panhead screw, M3x8, zinc plated | Linsenschraube M3 x 8 vz | 2 |
| 7 | 974100 | toothed lock washer, D=3,2, AZ, black zinc plated | Fächer-Scheibe az, 3,2 sw vz | 2 |
| 8 | 974137 | RICHCO, PCB spacer, snap in, H=11.1mm | Dist.Halter RICHCO H=11,1mm | 4 |
| 9 | 974163 | PCB holder, 90°, nickel plated | Befestigungselement M3x15 NI | 2 |



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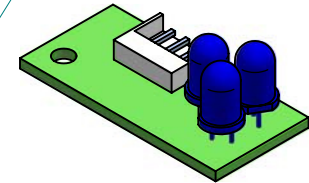
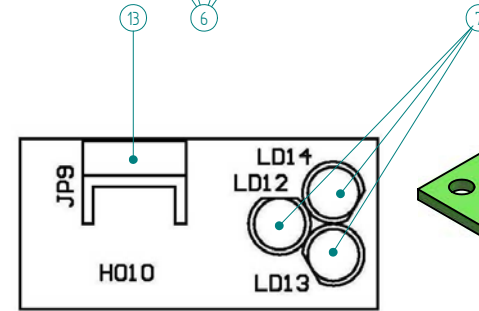
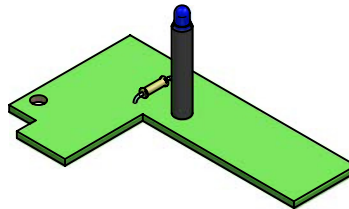
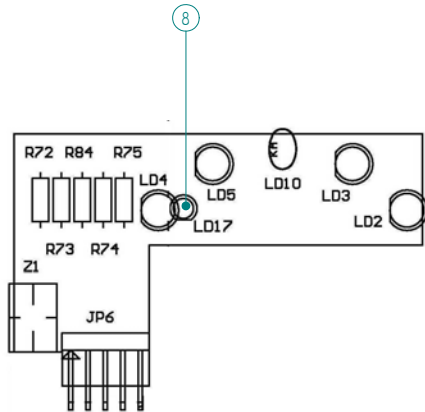
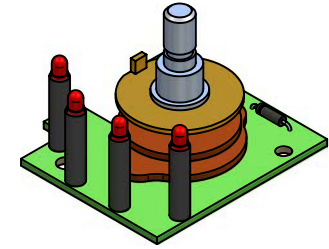
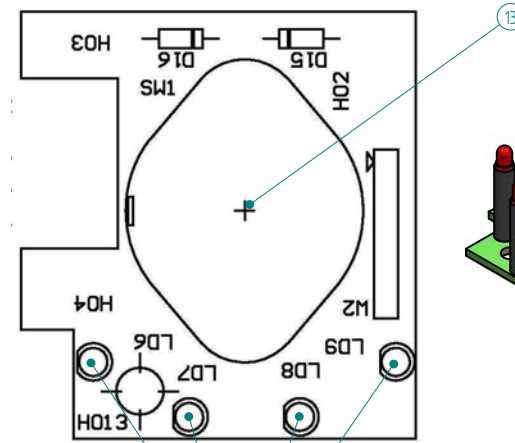
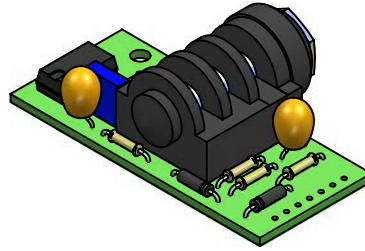
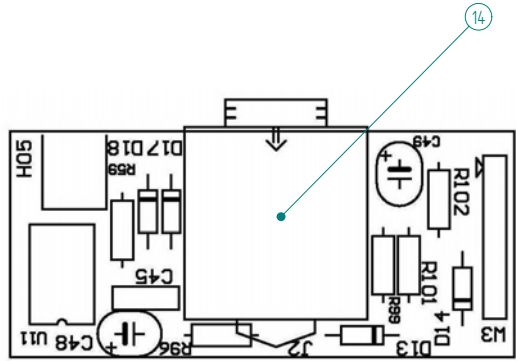


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TITLE
Hughes & Kettner
 SWITCHBLADE COMBO 50W HU1605
 PREAMP

66606 St. Wendel / Germany



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| HU1605-LP-R01-2B | | 1 | A |
| DRAWN BY: | | DATE: | PAGE: |
| ubaris | | 25.07.2006 | 2 |
| CHECKED BY: | | DATE: | PAGES: |
| | | | 3 |
| MATERIAL: | | FINISH: | |
| | | OBERFLÄCHE | |
| FILENAME: | | | |
| HU1605-LP-R01-2B_PREAMP_SB50 | | | |


SWITCHBLADE COMBO 50W HU1605 PREAMP
 66606 St. Wendel / Germany

Spare Parts List for:


HU1405-LP-R01-2B

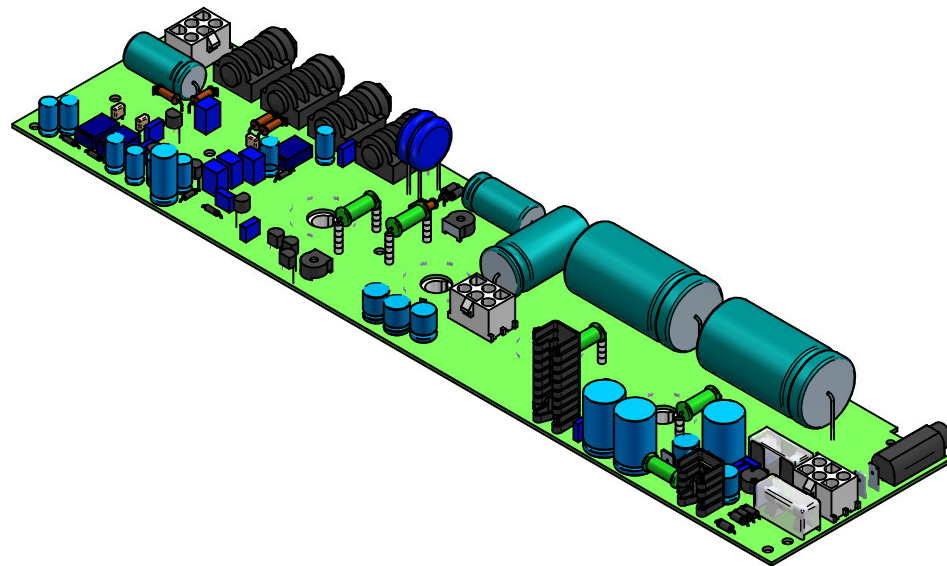
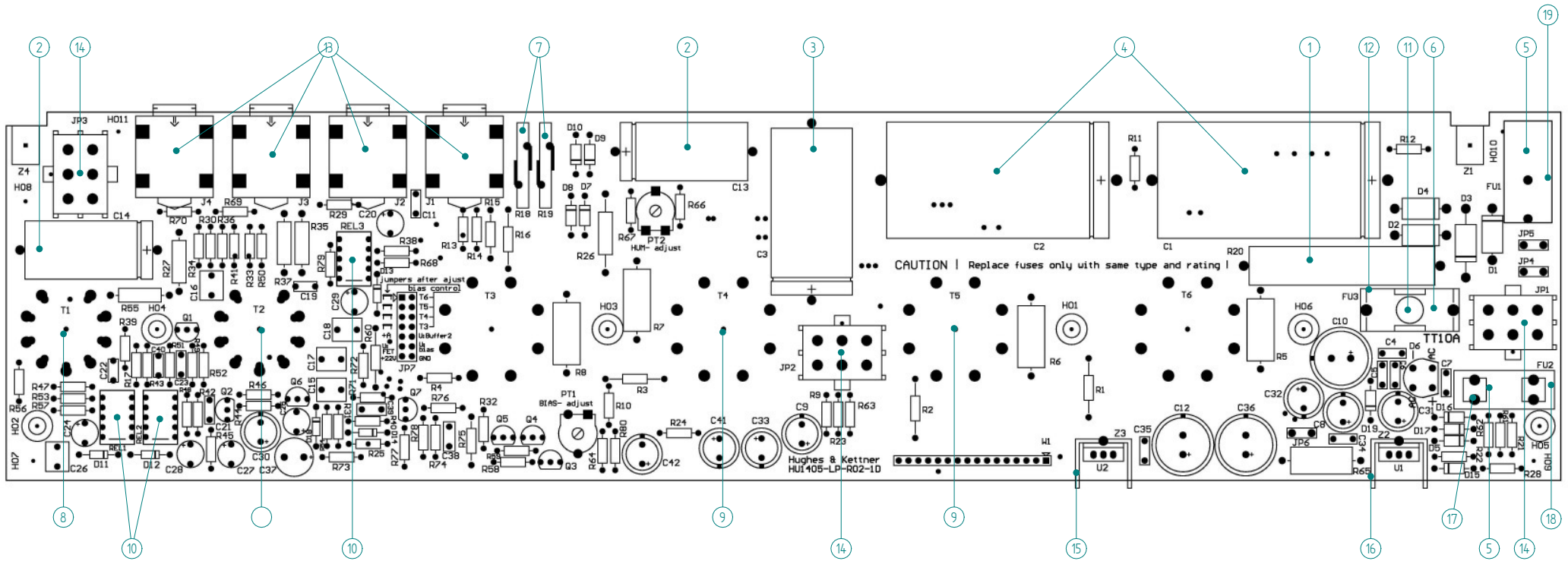
Project: Sw itchblade Head
 Project Number: HU1405
 Assembly: Preamp

| pos. | part no. | description | Bezeichnung | reference designators | quantity |
|------|----------|---|---|---------------------------------|----------|
| 1 | 892001 | SMD digital poti 200kOhm | SMD Digital Poti 200kOhm | U8 | 1 |
| 2 | 892002 | SMD digital poti 20kOhm | SMD Digital Poti 20kOhm | U7, U9, U10 | 3 |
| 3 | 914033 | poti B10K lin mono RK16 | Poti B10K lin mono RK16 | P2, P3, P4, P5, P7, P8, P9, P10 | 8 |
| 4 | 914033 | poti B10K lin mono RK16 | Poti B10K lin mono RK16 | P11, P1, P6 | 3 |
| 5 | 914044 | poti A250K log mono RK16 | Poti A250K log mono RK16 | P12 | 1 |
| 6 | 936003 | LED 3mm red standard | LED 3mm rot standard | LD1, LD6, LD7, LD8, LD9 | 5 |
| 7 | 936017 | LED 5mm blue standard diffused | LED 5mm blau standard diffused | LD12, LD13, LD14 | 3 |
| 8 | 936030 | LED 3mm blue standard diffused | LED 3mm blau standard diffused | LD17 | 1 |
| 9 | 942074 | 8 Bit AVR-RISC MC, programmed (Master10) | 8 Bit AVR-RISC MC, programmiert (Master10) | U17 | 1 |
| 10 | 942074 | 8 Bit AVR-RISC MC, programmed (Slave1-10) | 8 Bit AVR-RISC MC, programmiert (Slave1-10) | U18 | 1 |
| 11 | 942074 | 8 Bit AVR-RISC MC, programmed (Slave2-10) | 8 Bit AVR-RISC MC, programmiert (Slave2-10) | U19 | 1 |
| 12 | 950053 | push button CIC WPML-2BL-NL | Drucktaster CIC WPML-2BL-NL | SW2, SW3, SW4 | 3 |
| 13 | 950068 | sw itch 3x4xUM vertical | DrehSchalter 3x4xUM vertikal | SW1 | 1 |
| 14 | 952038 | jack Rean NMJ 4 HCD 2 | Klinkenbuchse Rean NMJ 4 HCD 2 | J2 | 1 |
| 15 | 952052 | header, JST, 3pol horizontal | Stiftleiste JST 3pol Wprint | JP8, JP9 | 2 |
| 16 | 952065 | header, AMP, 12pol, vertical | Stiftleiste 12pol Gprint | JP2 | 1 |
| 17 | 952071 | header, AMP, 16pol, vertical | Stiftleiste 16pol Gprint | JP1 | 1 |

pushbutton cab not included

| INDEX | CHANGES | RESP. |
|-------|---------|-------|
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|---|--|---|---------|
|  66606 St. Wendel / Germany | | TITLE: SWITCHBLADE COMBO 50W HU1605 PREAMP | |
| | | DRAWING-NO. | VERSION |
| DRAWN BY: ubaris | | DATE: 25.07.2006 | PAGE: 3 |
| CHECKED BY: | | DATE: | 3 PAGES |
| MATERIAL: | | FINISH: OBERFLÄCHE | |
| FILENAME: HU1605-LP-R01-2B_PREAMP_SB50 | | | |



| INDEX | CHANGES | RESP. |
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| | | |

Hughes & Kettner

| | | | |
|--|--------------------|---------------------------------------|-------------|
| 66606 St. Wendel / Germany | | TITLE | |
| DRAWING-NO. HU1605-LP-R02-1D | | SWITCHBLADE COMBO 50W HU1605 POWERAMP | |
| DRAWN BY: ubaris | DATE: 25.07.2006 | VERSION: 1 | REVISION: A |
| CHECKED BY: | DATE: | 2 PAGES | |
| MATERIAL: | FINISH: OBERFLÄCHE | | |
| FILENAME: HU1605-LP-R02-1D_POWERAMP_SB50 | | | |

Spare Parts List for:

HU1405-LP-R02-1D

Project:
Project Number:
Assembly:

Switchblade Head
HU1405
Poweramp

| pos. | part no. | description | Bezeichnung | reference designators | quantity |
|------|----------|---|-------------------------------|-----------------------|----------|
| 1 | 911129 | resistor axial 680 Ohm 11W | Drahtwiderstand ax 680R/11W | R20 | 1 |
| 2 | 926006 | electrolytic capacitor axial 15µF 450V | Elko axial 15u/450V | C13, C14 | 2 |
| 3 | 926014 | electrolytic capacitor axial 33µF 500V | Elko axial 33u/500V | C3 | 1 |
| 4 | 926016 | electrolytic capacitor axial 220µF 350V | Elko axial 220u/350V | C2, C1 | 2 |
| 5 | 932028 | microfuse 630mA time-lag | Feinsicherung T630mA | FU1, FU2 | 2 |
| 6 | 932071 | microfuse 10,0A super-time-lag | Feinsicherung TT10.0A | FU3 | 1 |
| 7 | 932084 | varistor SIOV-S20K50 50V | Varistor SIOV-S20K50 50V | R19, R18 | 2 |
| 8 | 944003 | tubesocket 9pol PC-Mont. | Röhrensockel 9pol prn | T1, T2 | 2 |
| 9 | 944004 | tubesocket 8pol Print-Mont. | Röhrensockel 8pol prn | T4, T5 | 2 |
| 10 | 946011 | relais NAIS TQ2-24V DC print | Relais NAIS TQ2-24V DC prn | REL1, REL2, REL3 | 3 |
| 11 | 948008 | fuse holder print Typ OGN | SI-Halter prn Typ OGN | FU3 | 1 |
| 12 | 948033 | fuse cover Typ OGN | Abdeckhaube SI-Halter Typ OGN | FU3 | 1 |
| 13 | 952038 | jack Rean NMJ 4 HCD 2 | Klinkenbuchse Rean NMJ4HCD 2 | J4, J3, J2, J1 | 4 |
| 14 | 952303 | plug connector MATE-N-LOK vert | Steckv. MATE-N-LOK 6pol, Gprn | JP3, JP2, JP1 | 3 |
| 15 | 968009 | heatsink FK 240 SA 220 VL | Kühlkörper FK 240 SA 220 VL | Z3 | 1 |
| 16 | 968010 | heatsink FK 237 SA 220 VL | Kühlkörper FK 240 SA 220 VL | Z2 | 1 |
| 17 | 948006 | fuse holder Typ OG | SI-Halter Clip Typ OG | FU2 | 2 |
| 18 | 932048 | fuse cover | Sicherungs-Abdeckhaube | FU2 | 1 |
| 19 | 948003 | SI-Holder hor. Prn Type FAB | SI-Halter hor. prn Typ FAB | FU1 | 1 |

| INDEX | CHANGES | RESP. |
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| | | |

H. Kellner

| | | | |
|----------------------------|--------------------------------|--|------------|
| 66606 St. Wendel / Germany | | TITLE: SWITCHBLADE COMBO 50W HU1605 POWERAMP | |
| DRAWING-NO. | HU1605-LP-R02-1D | VERSION | 1 |
| DRAWN BY: | ubaris | DATE: | 25.07.2006 |
| CHECKED BY: | | DATE: | |
| | | 2 PAGES | |
| MATERIAL: | | FINISH: | OBERFLÄCHE |
| FILENAME: | HU1605-LP-R02-1D_POWERAMP_SB50 | | |

Spare Parts List for:

HU1405-LP-R03-1C

Project:

Sw itchblade Head

Project Number:

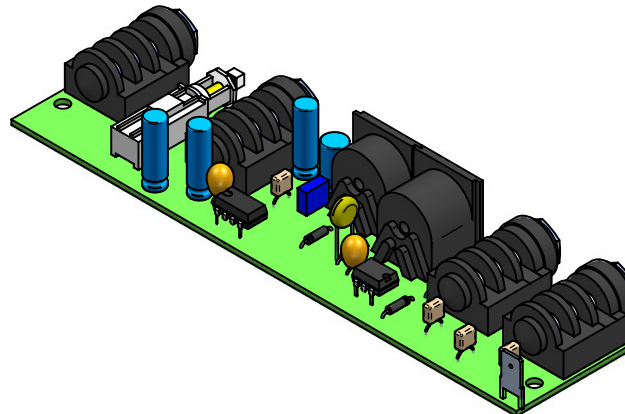
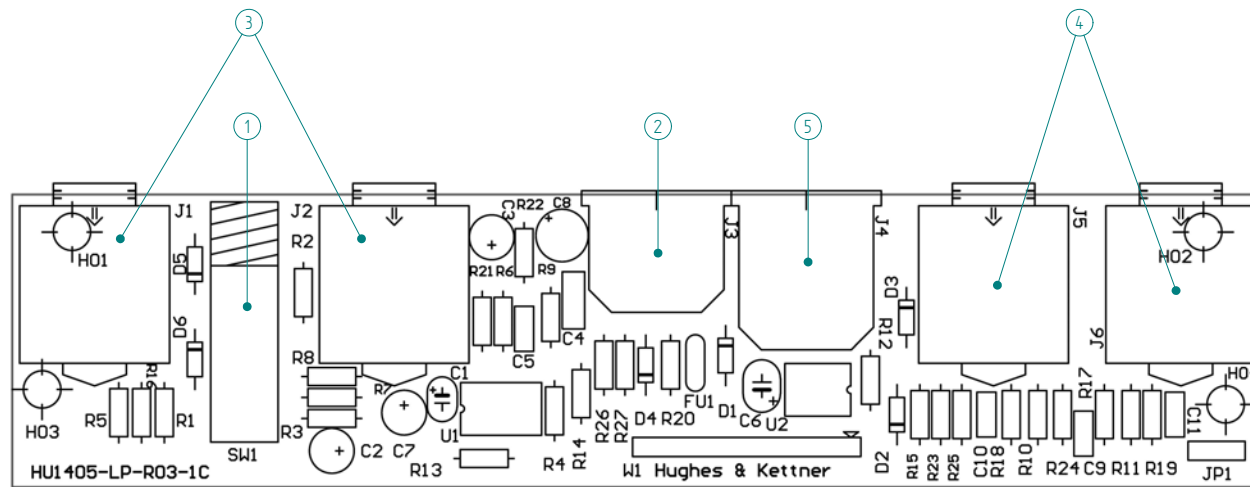
HU1405

Assembly:

FX-Board

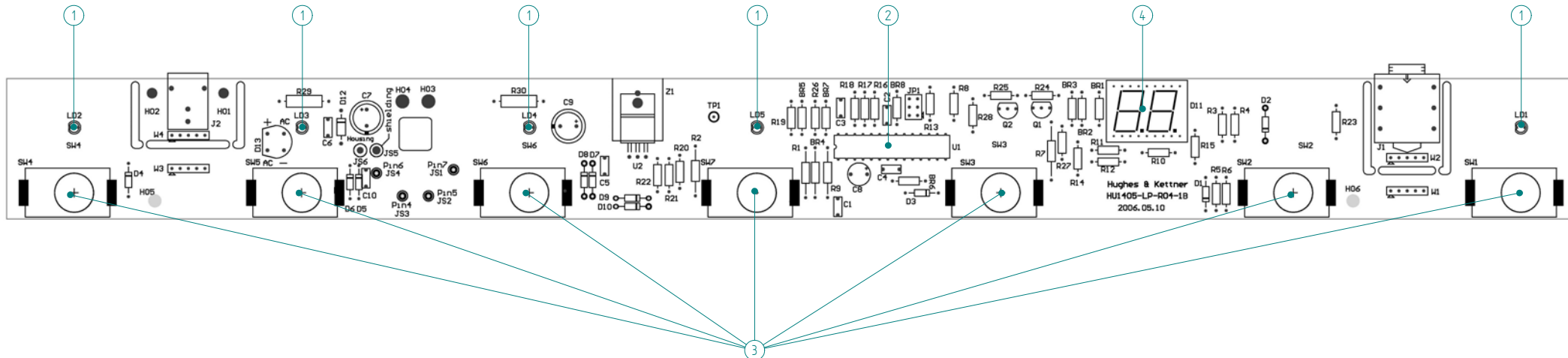
| pos. | part no. | description | Beschreibung | reference designators | quantity |
|------|----------|------------------------------|--------------------------------|-----------------------|----------|
| 1 | 950048 | push button CIC WPML-2Y-SL | Drucktaster CIC WPML-2Y-SL | SW1 | 1 |
| 2 | 952012 | diode jack MAB 5 SH Wprint | Diodenbuchse MAB 5 SH Wprint | J3 | 1 |
| 3 | 952038 | jack Rean NMJ 4 HCD 2 | Klinkenbuchse Rean NMJ 4 HCD 2 | J2, J1 | 2 |
| 4 | 952041 | jack Rean NMJ 6 HCD 2 | Klinkenbuchse Rean NMJ 6 HCD 2 | J6, J5 | 2 |
| 5 | 952138 | diode jack MAB 7 SH-L Wprint | Diodenbuchse MAB 7 SH-L Wprint | J4 | 1 |

Sw itchcab not included (see page xx)



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| DRAWING-NO. | | VERSION | REVISION |
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| HU1605-LP-R03-1C | | 1 | A |
| DRAWN BY: | | DATE: | PAGE: |
| ubaris | | 27.07.2006 | 1 |
| CHECKED BY: | | DATE: | PAGES: |
| | | | 1 |
| MATERIAL: | | FINISH: | |
| | | OBERFLÄCHE | |
| FILENAME: | | | |
| HU1605-LP-R03-1C_FXBOARD | | | |



Spare Parts List for:


HU1405-LP-R04-1B

Project:
Project Number:
Assembly:

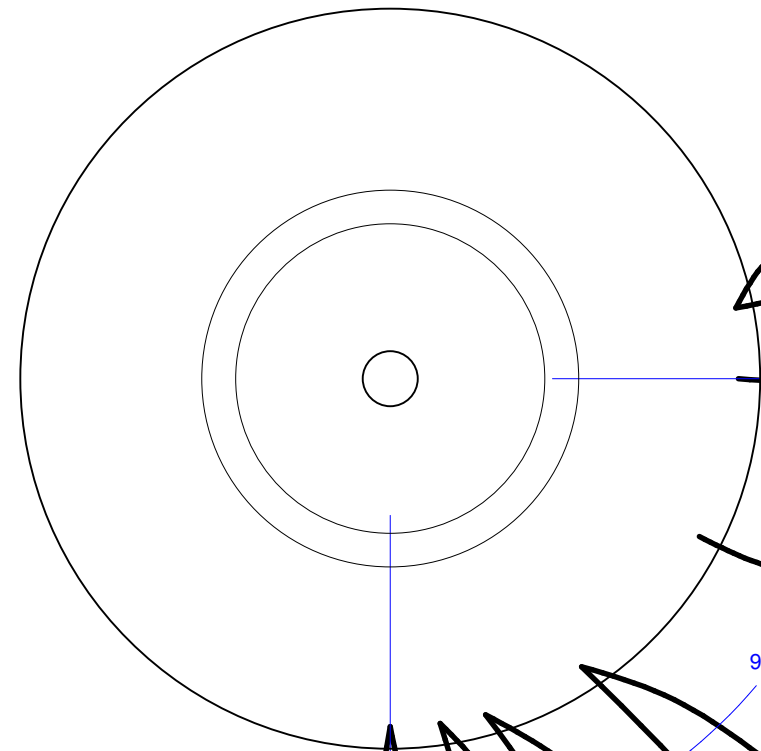
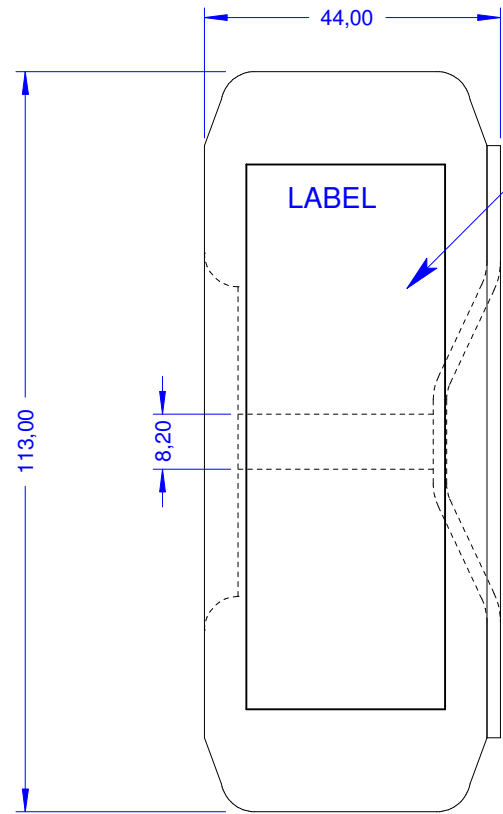
Sw itchblade Head
HU1405
Footsw itch FSM432

| pos. | part no. | description | Bezeichnung | reference designators | quantity |
|------|----------|--|-----------------------------------|-----------------------------------|----------|
| 1 | 936003 | LED 3mm red standard diffused | LED 3mm rot Standard diffused | LD5, LD4, LD3, LD2, LD1 | 5 |
| 2 | 942074 | IC ATmega8L-8PU MC for FSM-432 | IC ATmega 8L-8PU MC für FSM-432 | U1 | 1 |
| 3 | C90174 | pushbutton 1pol. for FSM-432 | Taster 1pol.für FSM-432 | SW7, SW6, SW5, SW4, SW3, SW2, SW1 | 7 |
| 4 | C90175 | dual digit numeric LED-display for FSM-432 | LED-Display 2-stellig für FSM-432 | D11 | 1 |

| INDEX | CHANGES | RESP. |
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|---|-------------------------------------|---|------------|
|  66606 St. Wendel / Germany | | TITLE | |
| | | Switchblade HU1405 FSM432 Footswitch | |
| DRAWING-NO. | HU1405-LP-R04-1B | VERSION | 1 |
| REVISION | | REVISION | A |
| DRAWN BY: | ubaris | DATE: | 25.07.2006 |
| CHECKED BY: | | DATE: | |
| | | 1 PAGES | |
| MATERIAL: | Fehler: Keine Referenz | FINISH: | OBERFLÄCHE |
| FILENAME: | HU1605-LP-R04-1B_FSM432_Switchboard | | |

In and output terminals have to be marked with secondary and primary and a connection identification!



230/245V (245V)
Color: White
Faston: 6,3X0,8 insulates
Length: 250mm

230/245V (230V)
Color: Blue
Faston: 6,3X0,8 insulates
Length: 250mm

230/245V (0V)
Color: Brown
Faston: 4,8X0,8 insulates
Length: 250mm

Shield winding GND
Color: Yello/Green
Faston: 6,3X0,8
Length: 250mm

Primary

Secondary

340V (340V)
Color: Red
Faston: 4,8X0,8
Length: 250mm

340V (0)
Color: Orange
Faston: 4,8X0,8
Length: 250mm

52V (52V), Yello, 180mm, Pin 3

52V (0V), Blue, 180mm, Pin 6

17V (17V), Violet, 180mm, Pin 2

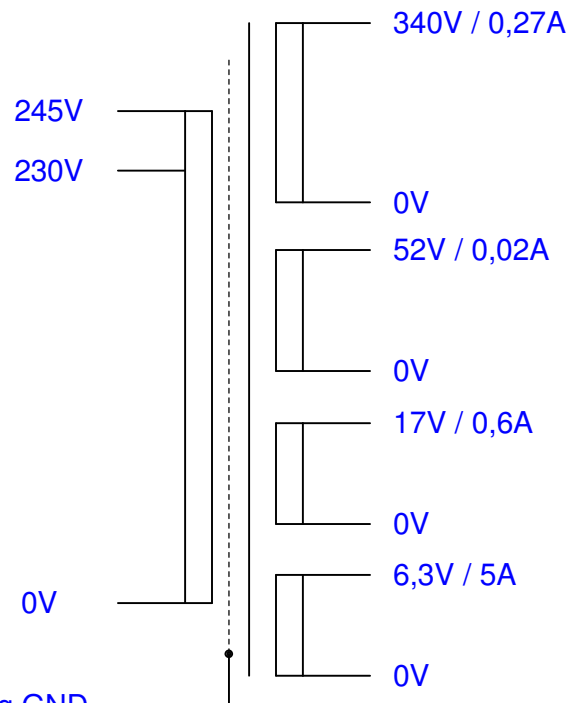
17V (0V), Green, 180mm, Pin 5

6,3V (6,3V), Gray, 180mm, Pin 1

6,3V (0V), White, 180mm, Pin 4

AMP,
Universal Mate-N-Lok, 6pol.
Case: 0-350715-1


Power: 135VA



Secondary

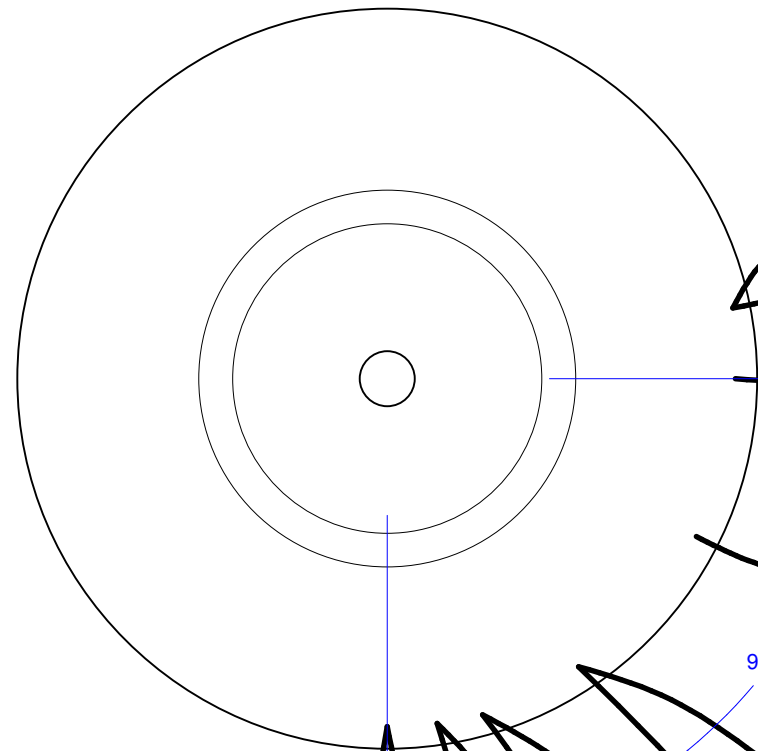
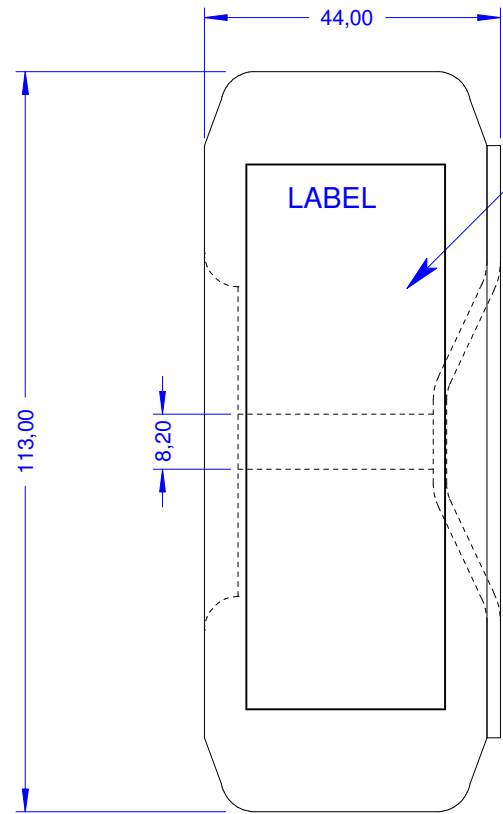
Starting from the version "HU1605-TR-R01-1C" got additionally a copper screen whereby the magnetic stray field decreases !

Declaration that an isolationsystem according to UL508 is used and that all used materials are UL-listed and according to the thermal class declared for the transformer. The transformers have to be marked with the UL sign, manufacturers name or trademark !

| | | | |
|---|----------------|--|-------------|
|  | | Titel: Tube RECALL 1x12" 50W Combo Mains transformer 230V / 245V | |
| Zeichnungsnummer: HU1605-TR-R01-1C | | Version: 1 | Revision: C |
| Erstellt von: Bernd Schneider | am: 27.05.2007 | Blatt 1 | |
| Geprüft / freigegeben von: Bernd Schneider | am: 27.05.2007 | 1 Blätter | |
| Werkstoff: ----- | | Oberfläche: ----- | |
| Dateiname: HU1605-TR-R01-1C_mains-transformer_230-245 | | | |

Primary

In and output terminals have to be marked with secondary and primary and a connection identification!



100/117V (117V)
Color: White
Faston: 6,3X0,8 insulates
Length: 250mm

100/117V (100V)
Color: Blue
Faston: 6,3X0,8 insulates
Length: 250mm

100/117V (0V)
Color: Brown
Faston: 4,8X0,8 insulates
Length: 250mm

Shield winding GND
Color: Yello/Green
Faston: 6,3X0,8
Length: 250mm

Primary

Secondary

340V (340V)
Color: Red
Faston: 4,8X0,8
Length: 250mm

340V (0)
Color: Orange
Faston: 4,8X0,8
Length: 250mm

52V (52V), Yello, 180mm, Pin 3

52V (0V), Blue, 180mm, Pin 6

17V (17V), Violet, 180mm, Pin 2

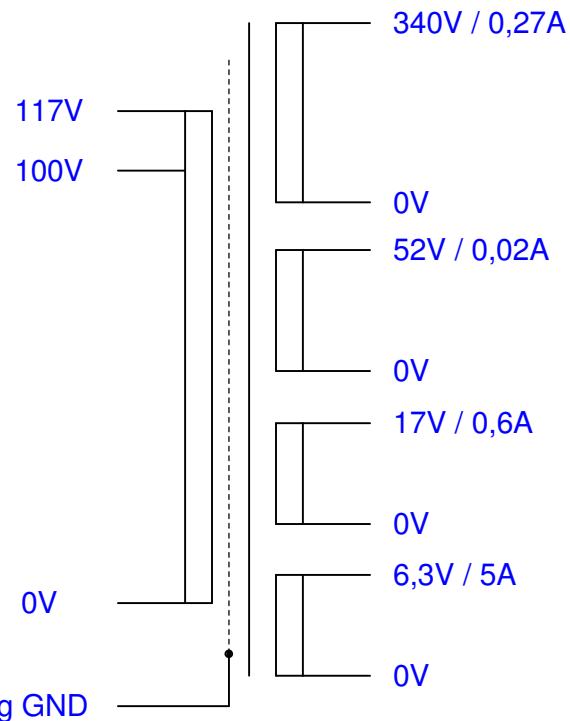
17V (0V), Green, 180mm, Pin 5

6,3V (6,3V), Gray, 180mm, Pin 1

6,3V (0V), White, 180mm, Pin 4

AMP,
Universal Mate-N-Lok, 6pol.
Case: 0-350715-1

Power: 135VA

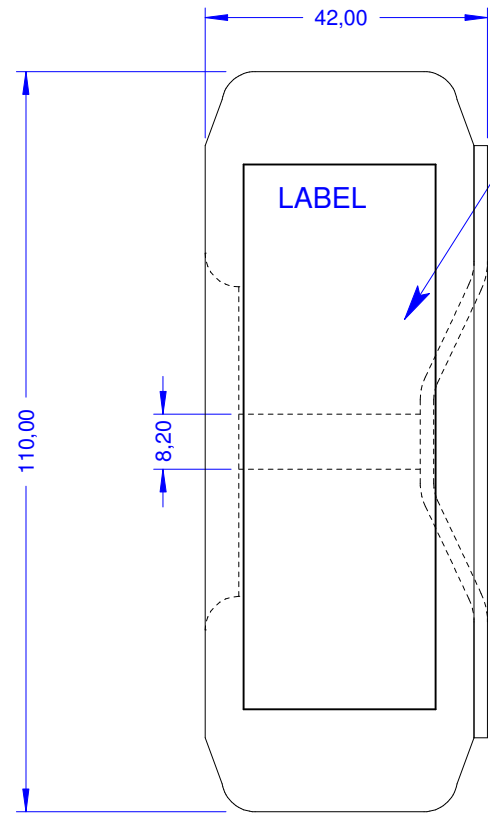


Starting from the version "HU1605-TR-R03-1C" got additionally a copper screen whereby the magnetic stray field decreases!

Declaration that an isolationsystem according to UL508 is used and that all used materials are UL-listed and according to the thermal class declared for the transformer. The transformers have to be marked with the UL sign, manufacturers name or trademark !

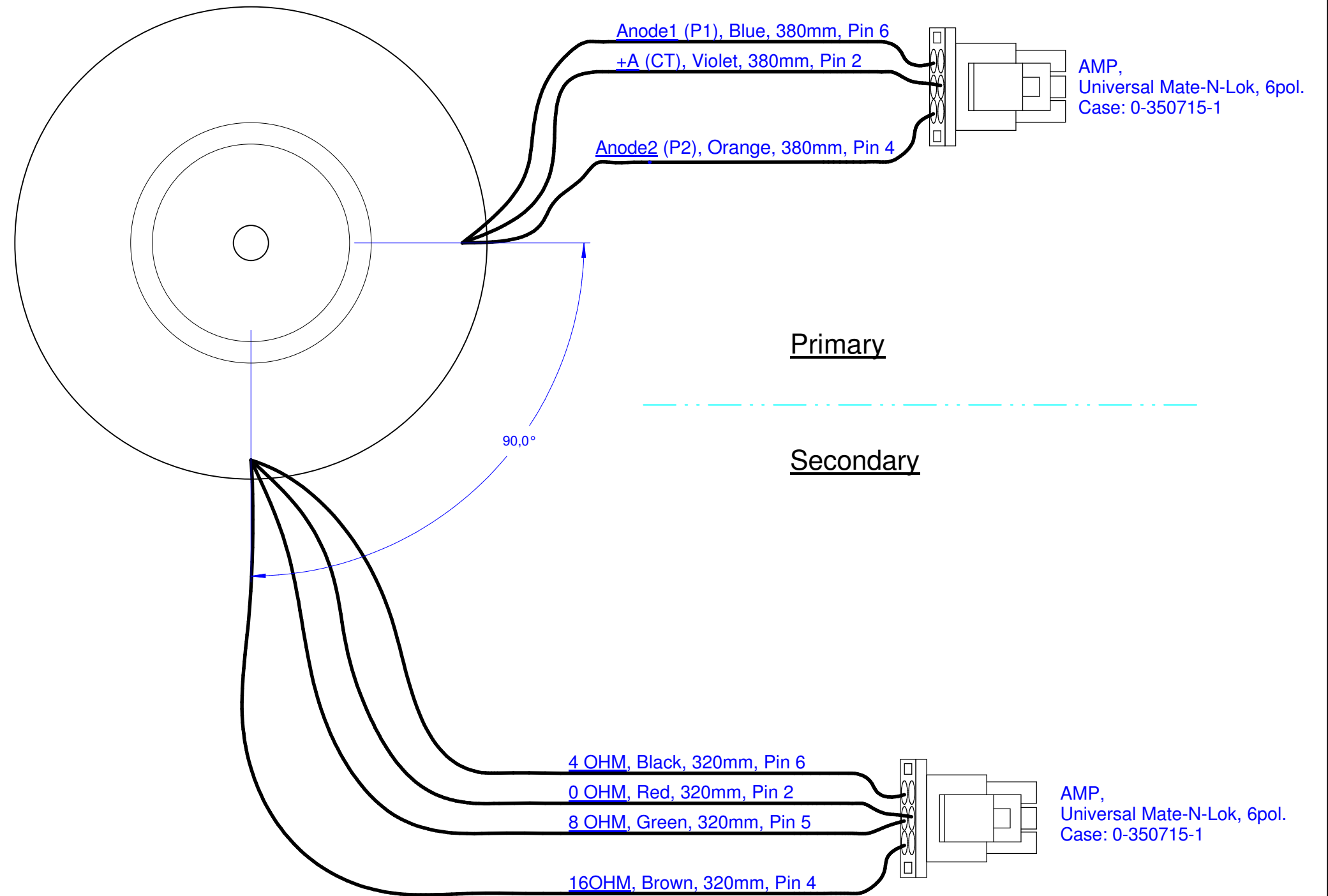
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| | | Titel: Tube RECALL 1x12" 50W Combo Mains transformer 100V / 117V | |
| Zeichnungsnummer: HU1605-TR-R03-1C | | Version: 1 | Revision: C |
| Erstellt von: Bernd Schneider | am: 27.05.2008 | Blatt 1 | |
| Geprüft / freigegeben von: Bernd Schneider | am: 27.05.2008 | 1 Blätter | |
| Werkstoff: ----- | | Oberfläche: ----- | |
| Dateiname: HU1605-TR-R03-1C_mains-transformer_100-117 | | | |

In and output terminals have to be marked with secondary and primary and a connection identification!



Starting from the version "HU1605-TR-R02-1D" the isolation system was improved in relation to earlier models !

Details:
1x50% insulation layer between the 3rd and 4th layers of windings of both the primaries.



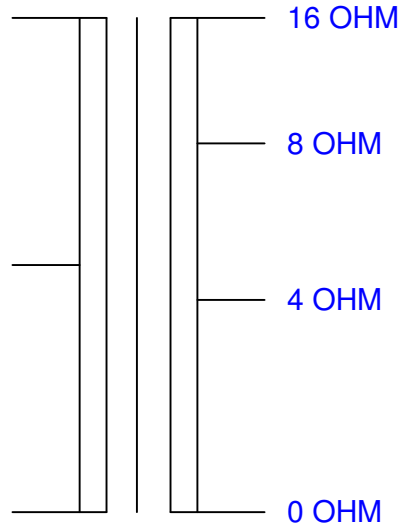
Audio- Power: 50RMS

Anode 2 (P2)
Danger! :
peak voltage= 4000V

Primary


+A 470V
(CT)

Anode 1 (P1)
Danger! :
peak voltage= 4000V



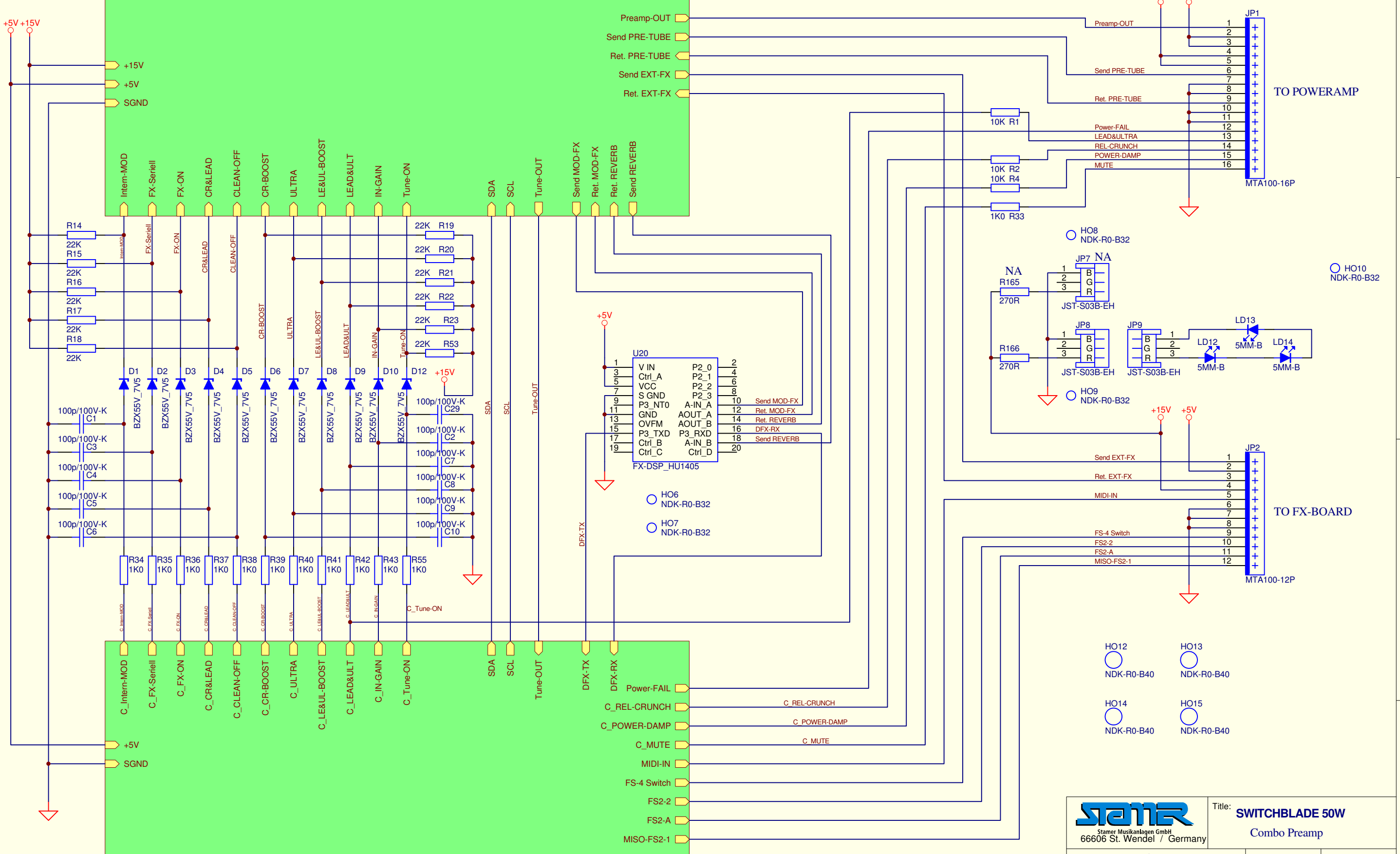
Secondary


Declaration that an isolation system according to UL508 is used and that all used materials are UL-listed and according to the thermal class declared for the transformer. The transformers have to be marked with the UL sign, manufacturers name or trademark !

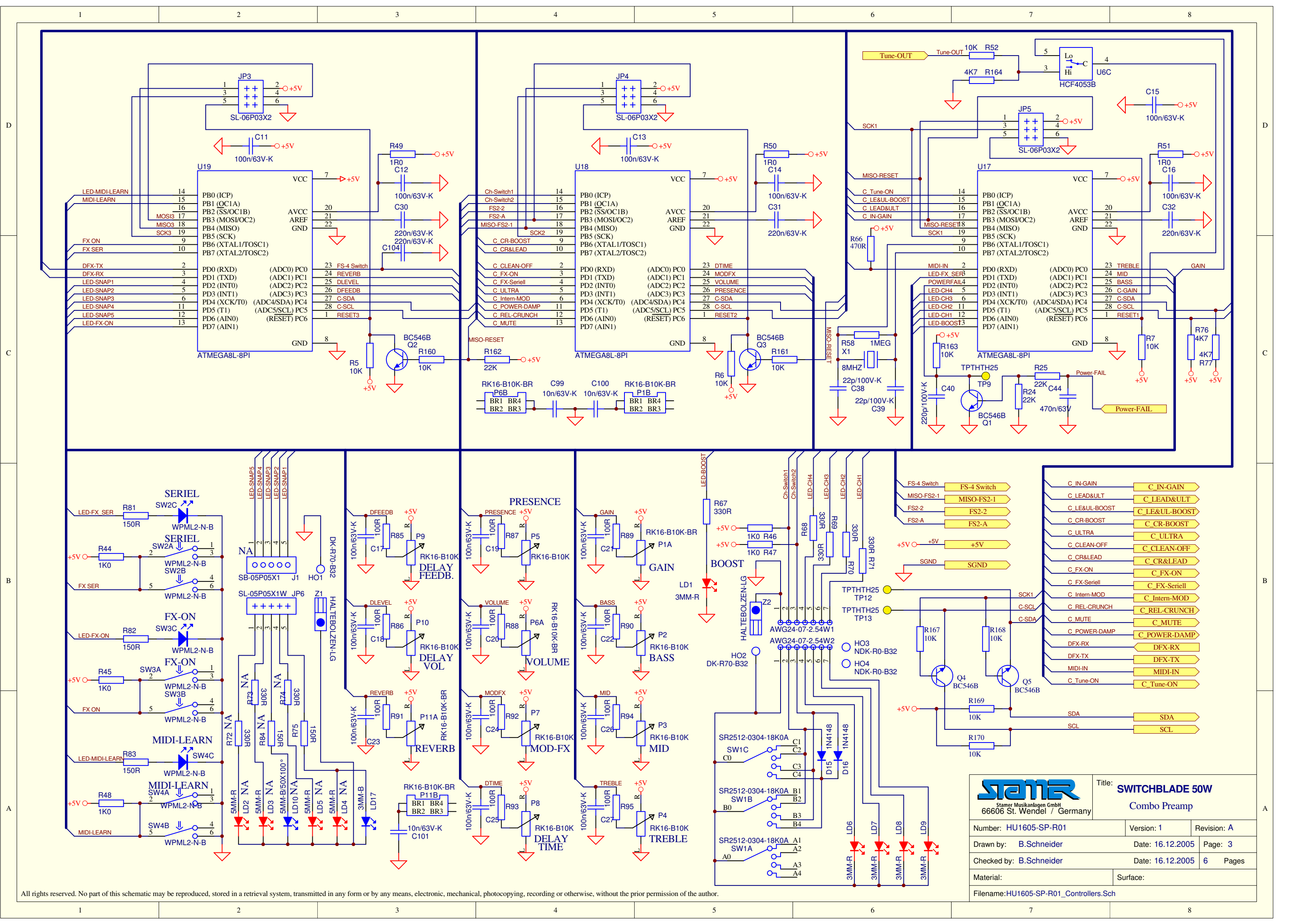
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| Zeichnungsnummer: HU1605-TR-R02-1D | Version: 1 | Revision: D | |
| Erstellt von: Bernd Schneider | am: 27.05.2008 | Blatt 1 | |
| Gepüft / freigegeben von: Bernd Schneider | am: 27.05.2008 | 1 Blätter | |
| Werkstoff: ----- | Oberfläche: ----- | | |
| Dateiname: HU1605-TR-R01-1D_audio-transformer | | | |

HU1605-SP-R01_Preamplifier
HU1605-SP-R01_Preamplifier

HU1605-SP-R01_Controllers
HU1605-SP-R01_Controllers



| | | | |
|---|------------------|--|------------|
|  Stamer Musikanlagen GmbH 66606 St. Wendel / Germany | | Title: SWITCHBLADE 50W Combo Preamp | |
| | | Number: HU1605-SP-R01 | Version: 1 |
| Drawn by: B.Schneider | Date: 16.12.2005 | Page: 1 | |
| Checked by: B.Schneider | Date: 16.12.2005 | 6 Pages | |
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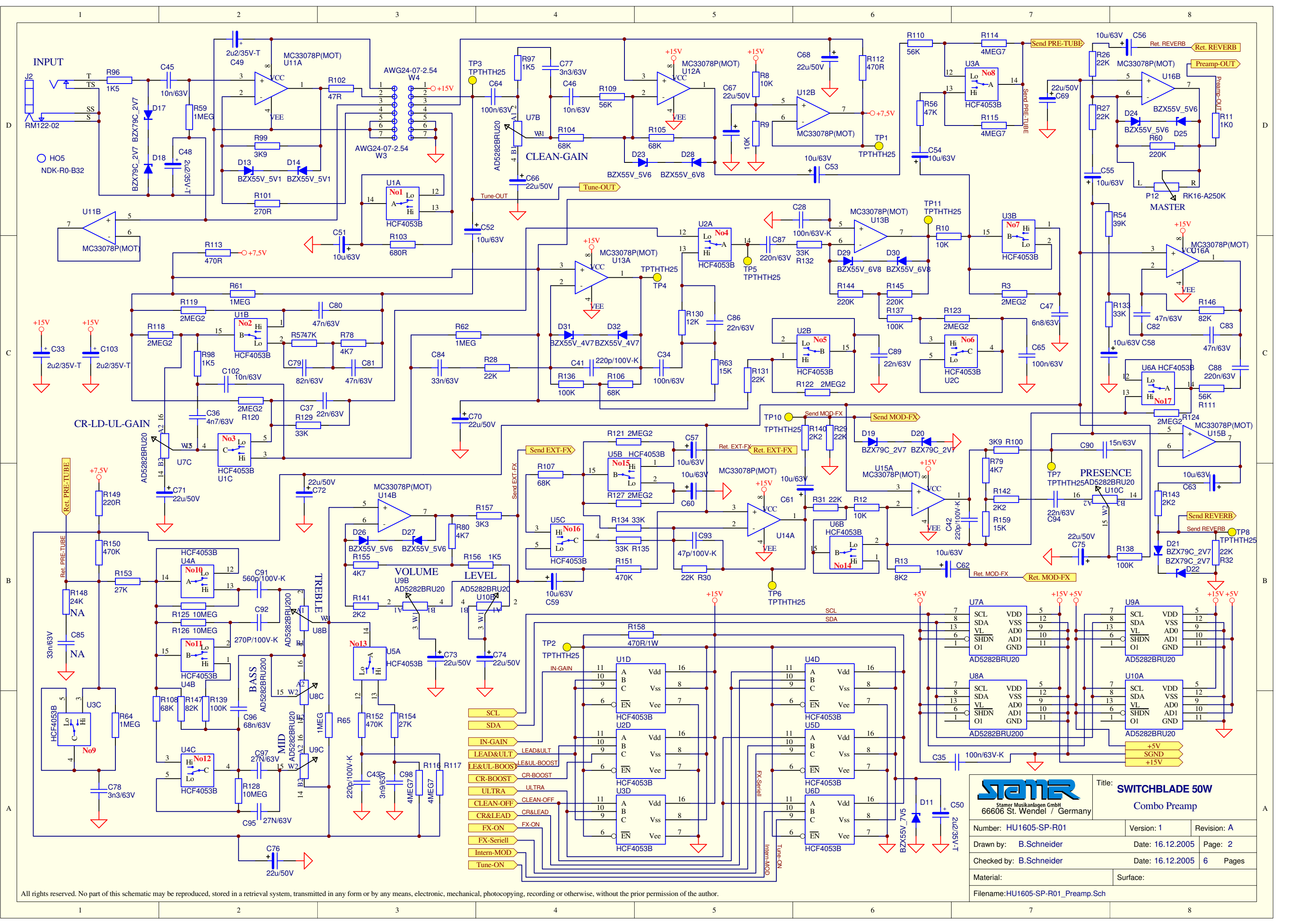


STAMER
Stamer Musikanlagen GmbH
66606 St. Wendel / Germany


Title: **SWITCHBLADE 50W**
Combo Preamp

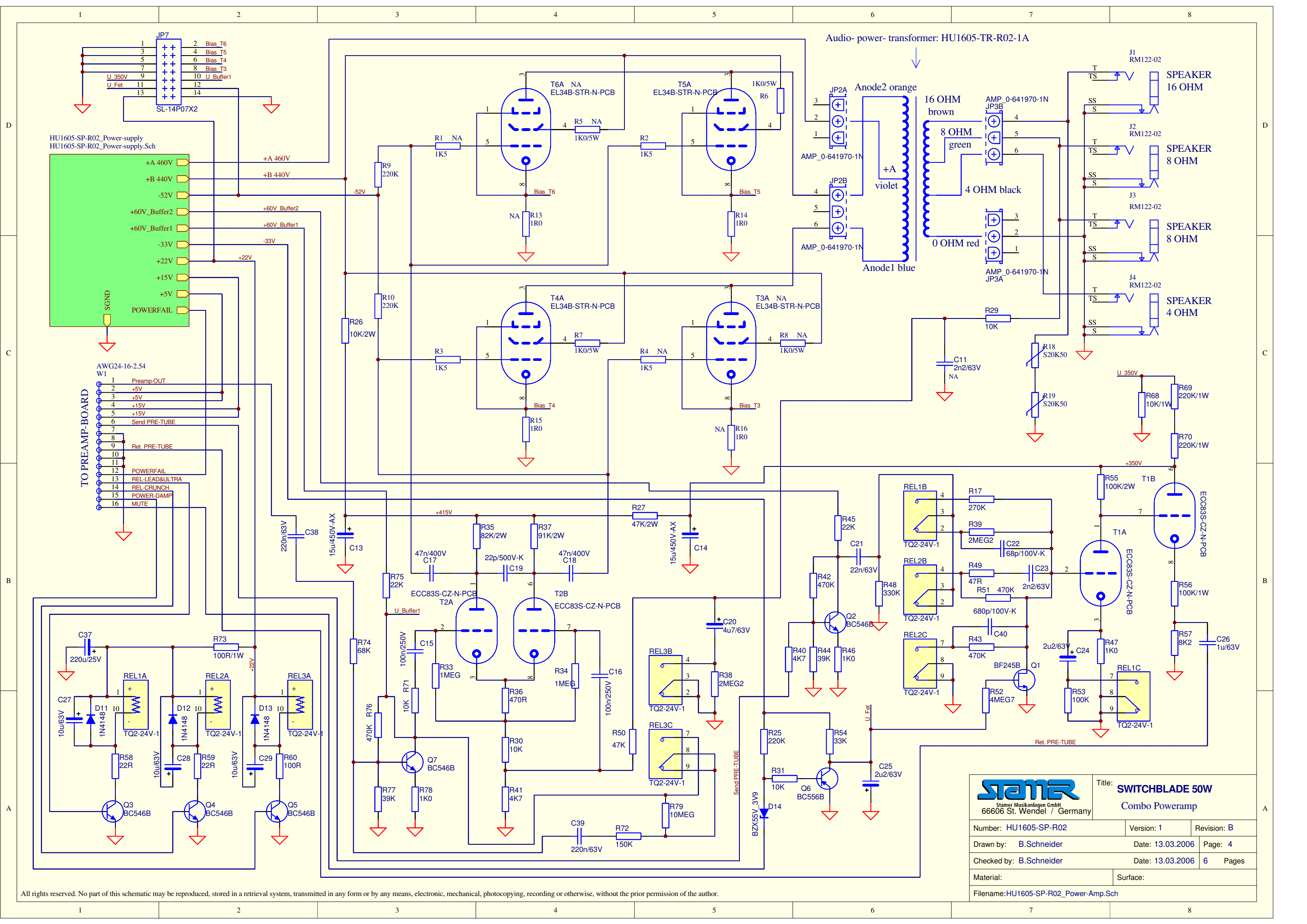
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| Checked by: B.Schneider | Date: 16.12.2005 | 6 Pages |
| Material: | Surface: | |
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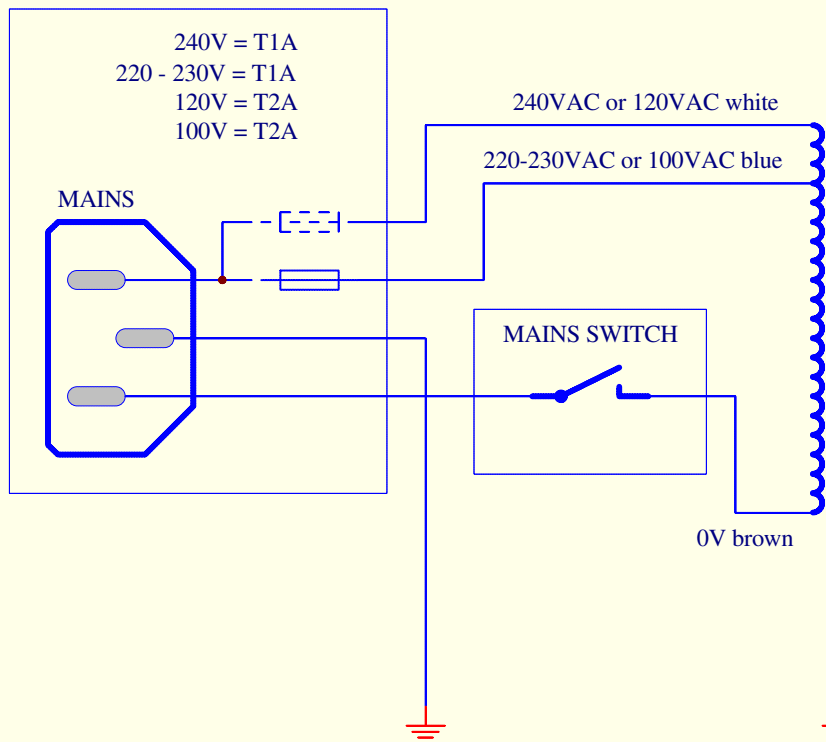
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| | | Combo Preamp | |
| Stamer Musikanlagen GmbH 66606 St. Wendel / Germany | | Number: HU1605-SP-R01 | Version: 1 |
| Revision: A | | Drawn by: B.Schneider | Date: 16.12.2005 |
| Page: 2 | | Checked by: B.Schneider | Date: 16.12.2005 |
| 6 Pages | | Material: | Surface: |
| Filename: HU1605-SP-R01_Preamplifier.Sch | | | |



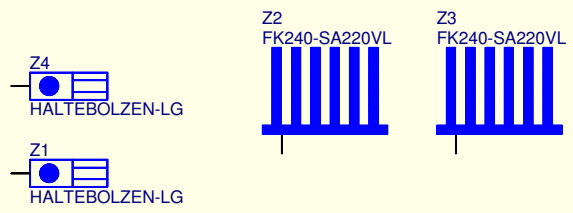
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| | | Combo Poweramp | |
| Number: HU1605-SP-R02 | Version: 1 | Revision: B | |
| Drawn by: B.Schneider | Date: 13.03.2006 | Page: 4 | |
| Checked by: B.Schneider | Date: 13.03.2006 | 6 Pages | |
| Material: | Surface: | | |
| Filename: HU1605-SP-R02_Power-Amp.Sch | | | |

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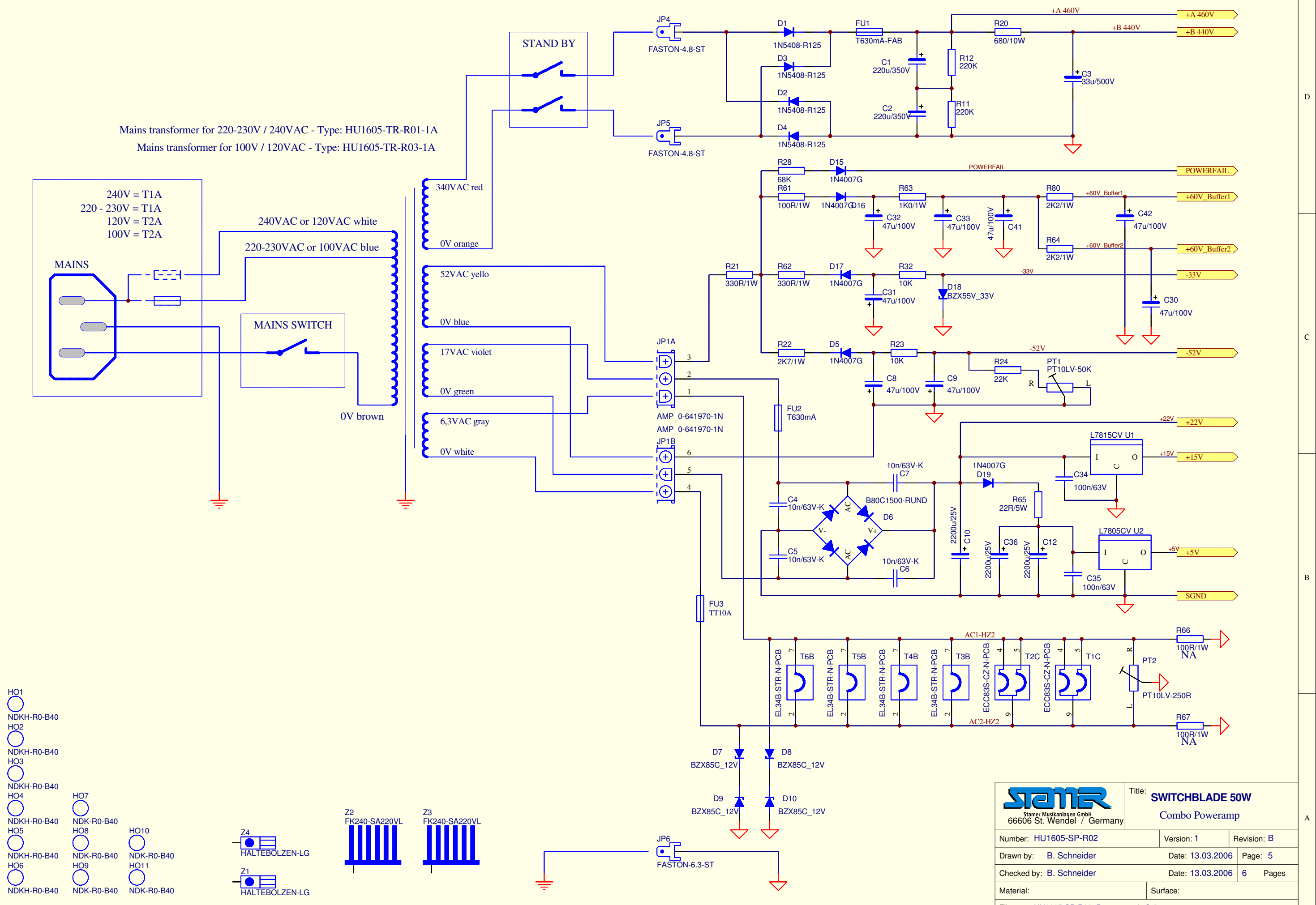
Mains transformer for 220-230V / 240VAC - Type: HU1605-TR-R01-1A
 Mains transformer for 100V / 120VAC - Type: HU1605-TR-R03-1A



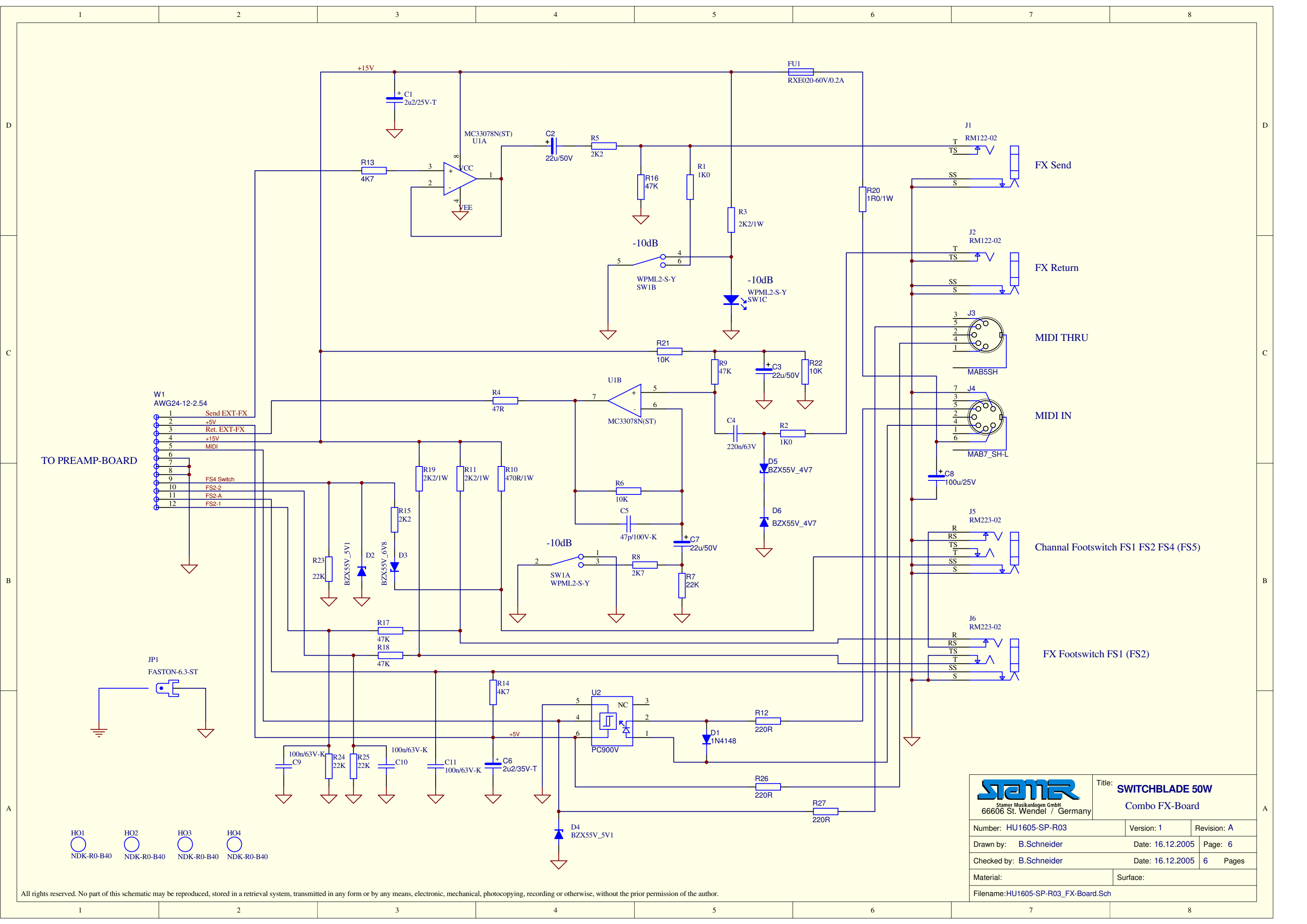
- HO1
- NDKH-R0-B40
- HO2
- NDKH-R0-B40
- HO3
- NDKH-R0-B40
- HO4
- NDKH-R0-B40
- HO5
- NDKH-R0-B40
- HO6
- NDKH-R0-B40
- HO7
- NDK-R0-B40
- HO8
- NDK-R0-B40
- HO9
- NDK-R0-B40
- HO10
- NDK-R0-B40
- HO11
- NDK-R0-B40



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| | | | |
|--|------------------|-------------------------------|--|
| Stamer Musikanlagen GmbH 66606 St. Wendel / Germany | | Title: SWITCHBLADE 50W | |
| | | Combo Poweramp | |
| Number: HU1605-SP-R02 | Version: 1 | Revision: B | |
| Drawn by: B. Schneider | Date: 13.03.2006 | Page: 5 | |
| Checked by: B. Schneider | Date: 13.03.2006 | 6 Pages | |
| Material: | Surface: | | |
| Filename: HU1605-SP-R02_Power-supply.Sch | | | |



TO PREAMP-BOARD

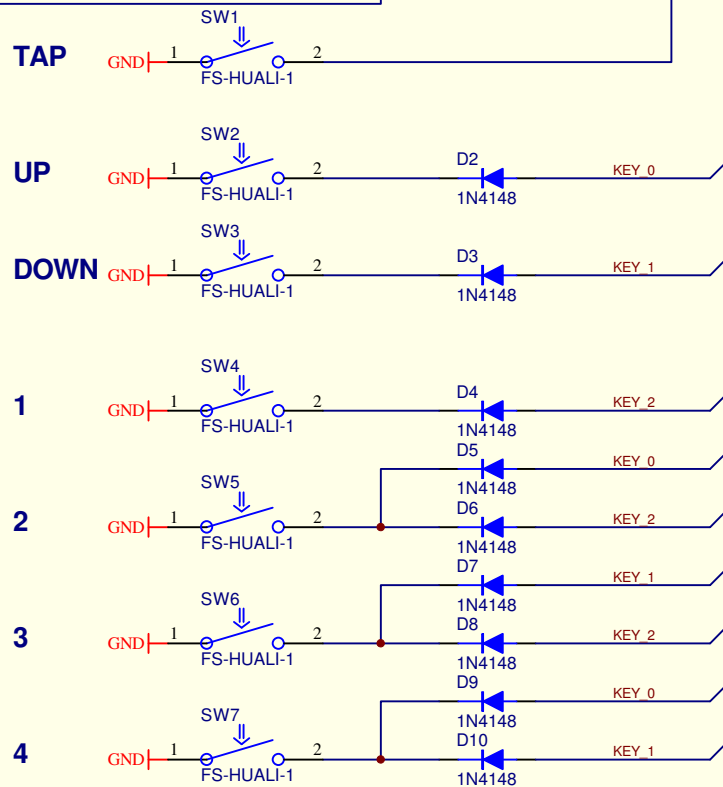
- W1
AWG24-12-2.54
- 1 Send EXT-FX
 - 2 +5V
 - 3 Ret. EXT-FX
 - 4 +15V
 - 5 MIDI
 - 6
 - 7
 - 8
 - 9 FS4 Switch
 - 10 FS2-2
 - 11 FS2-A
 - 12 FS2-1

- HO1 NDK-R0-B40
- HO2 NDK-R0-B40
- HO3 NDK-R0-B40
- HO4 NDK-R0-B40

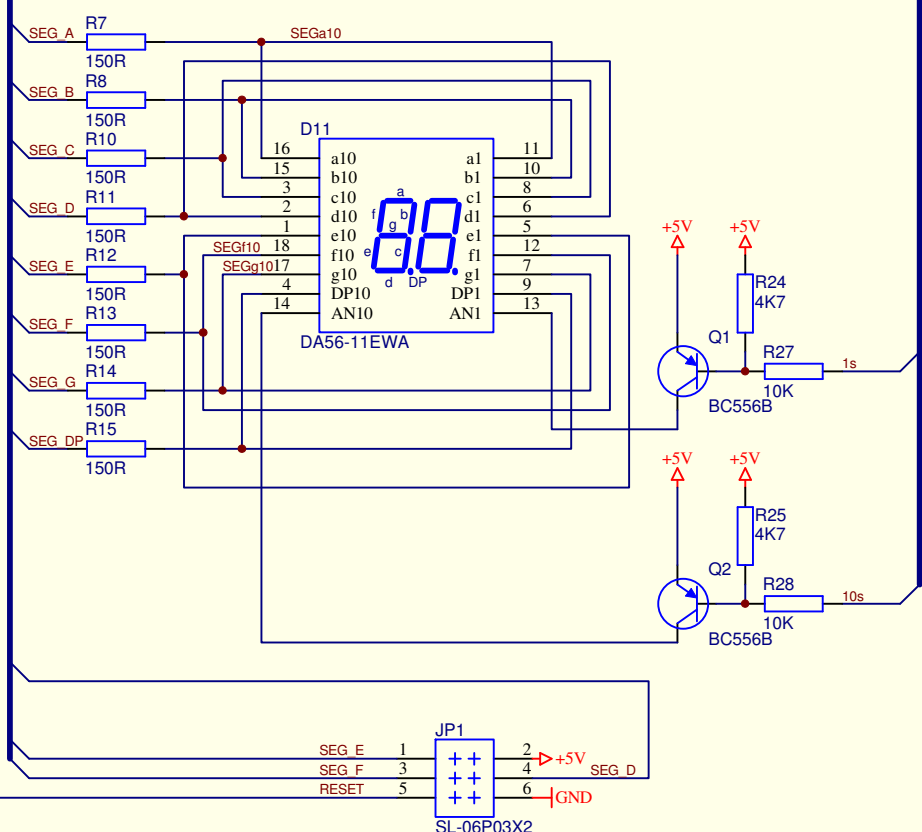
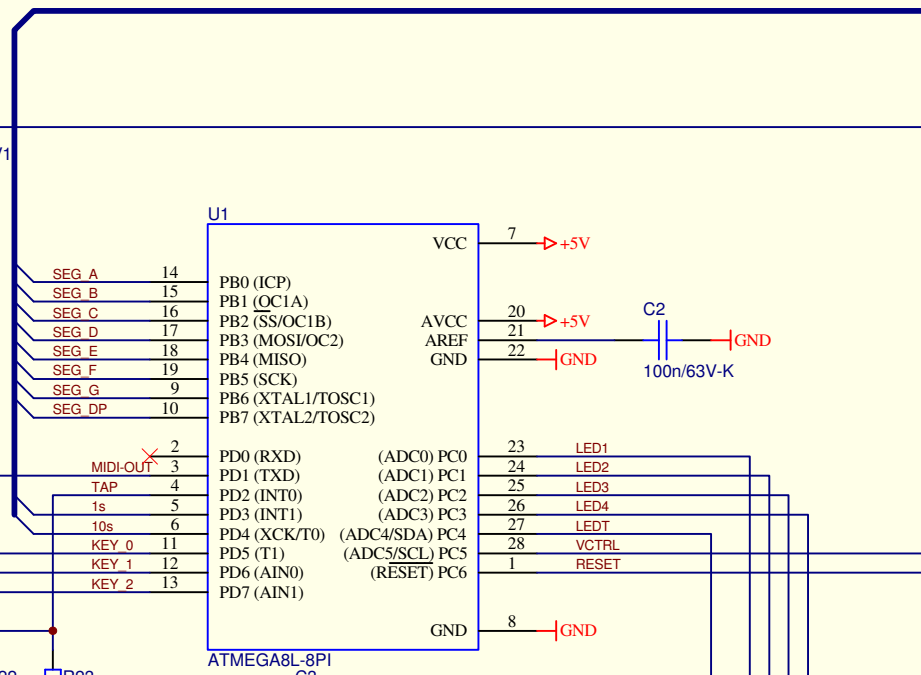
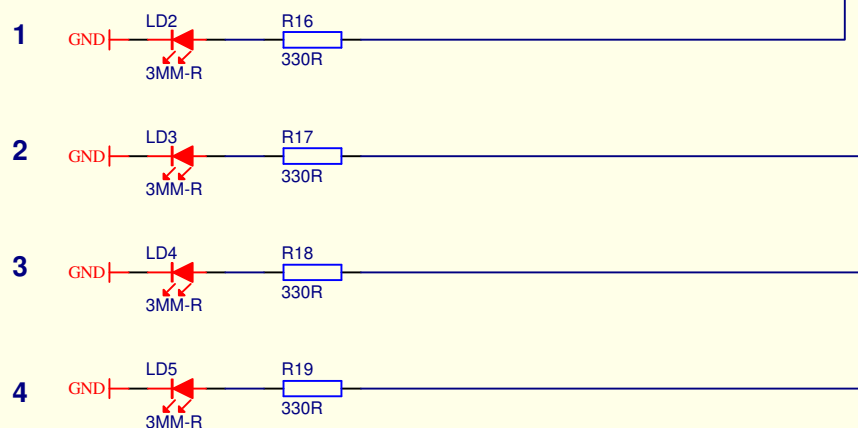
| | | | |
|---|------------------|------------------------|--|
|  Stamer Musikanlagen GmbH 66606 St. Wendel / Germany | | Title: SWITCHBLADE 50W | |
| | | Combo FX-Board | |
| Number: HU1605-SP-R03 | Version: 1 | Revision: A | |
| Drawn by: B.Schneider | Date: 16.12.2005 | Page: 6 | |
| Checked by: B.Schneider | Date: 16.12.2005 | 6 Pages | |
| Material: | Surface: | | |
| Filename: HU1605-SP-R03_FX-Board.Sch | | | |

CTRL IN

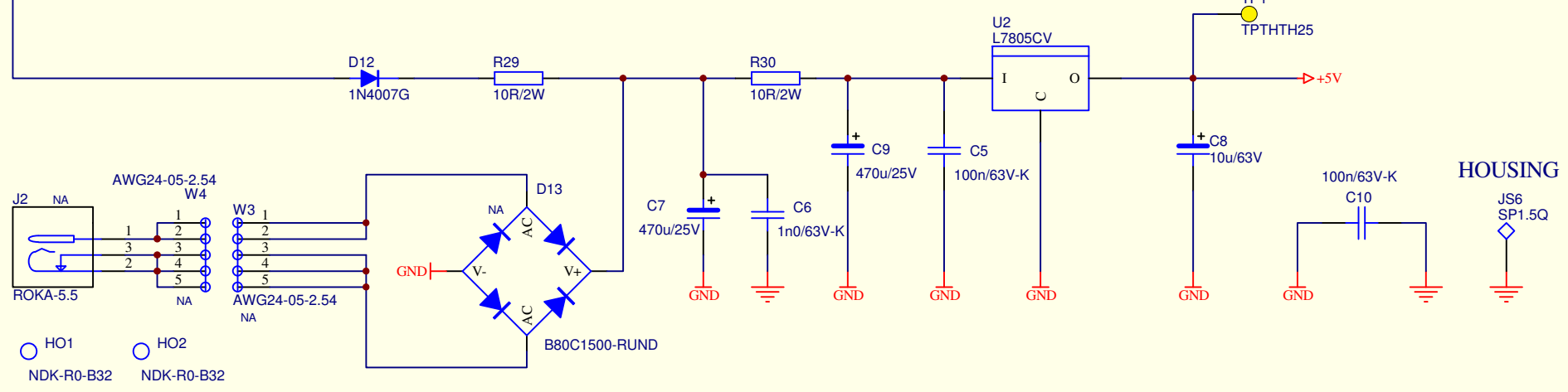
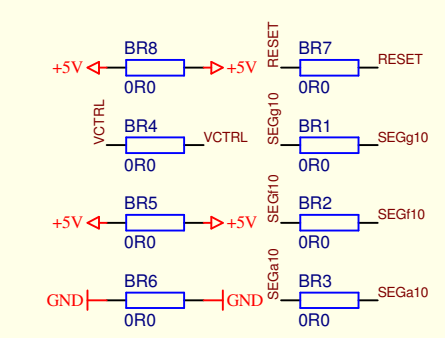
MIDI OUT



TAP LED

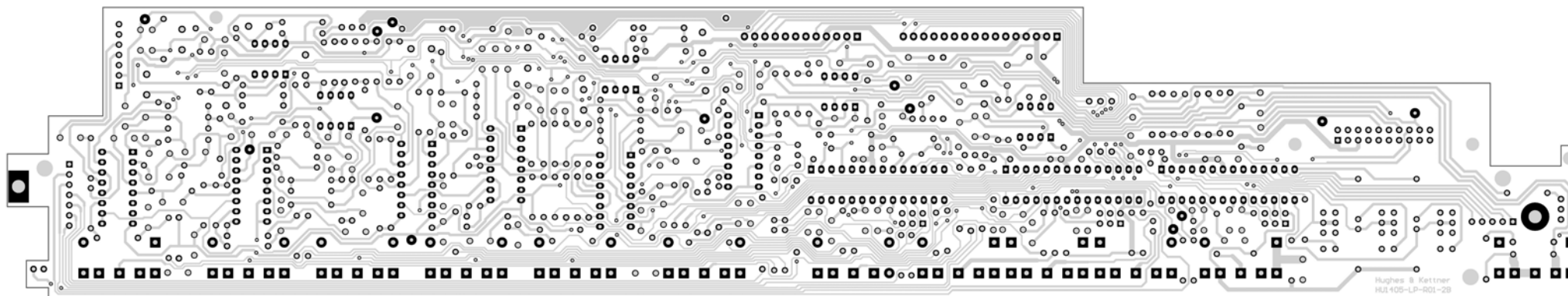
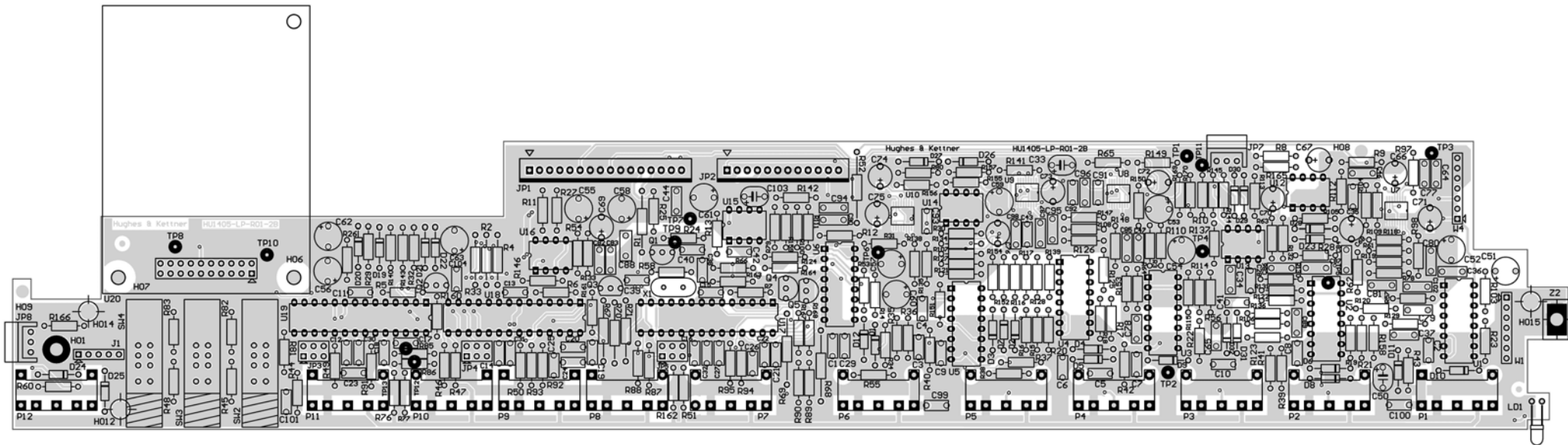


ISP



NA = not assembled part ----- EX = exclusive part, no alternative allowed
HT = high temperature part, assemble with distance from PCB

| | | | |
|---|------------------|-------------------------------------|--|
| Hughes & Kettner TECHNOLOGY OF TONE | | Title: Footswitch - FSM 4/32 | |
| 66606 St. Wendel / Germany | | | |
| Number: HU1405-SP-R04-1A | Version: 1 | Revision: A | |
| Drawn by: B. Schneider | Date: 06.12.2005 | Page: 1 | |
| Checked by: A. Peter | Date: 06.12.2005 | 1 Pages | |
| PCB No.: | | | |
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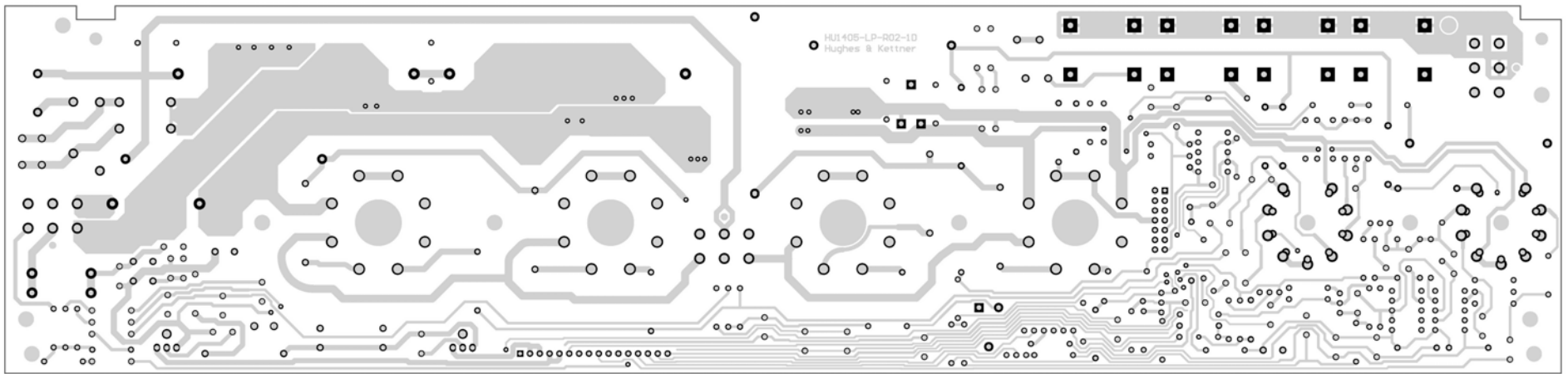
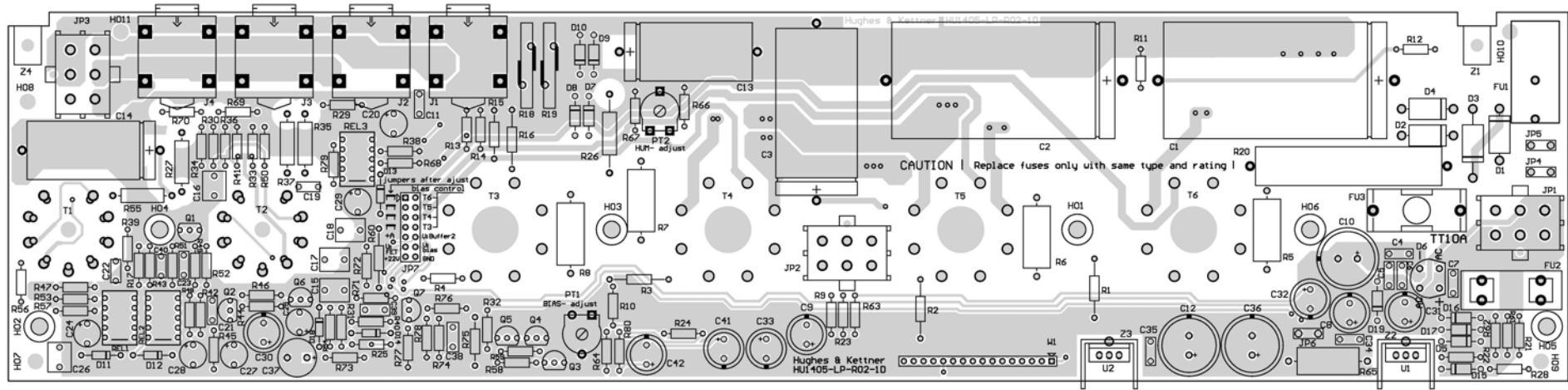


| INDEX | CHANGES | RESP. |
|-------|---------|-------|
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| DRAWING-NO. | | VERSION | REVISION |
|------------------------------|--|------------|----------|
| HU1605-LP-R01-2B | | 1 | A |
| DRAWN BY: | | DATE | PAGE |
| ubaris | | 25.07.2006 | 1 |
| CHECKED BY: | | DATE | PAGES |
| | | | 3 |
| MATERIAL: | | FINISH: | |
| | | OBERFLÄCHE | |
| FILENAME: | | | |
| HU1605-LP-R01-2B_PREAMP_SB50 | | | |

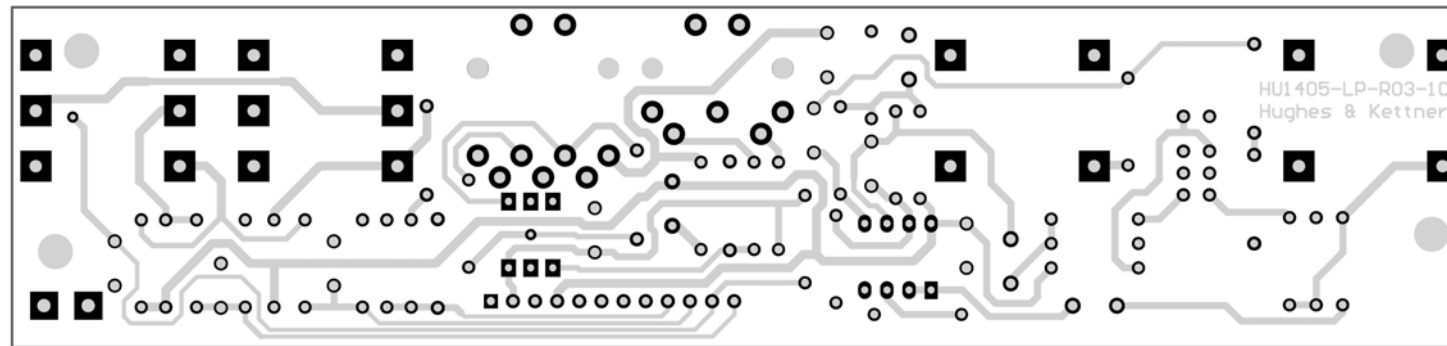
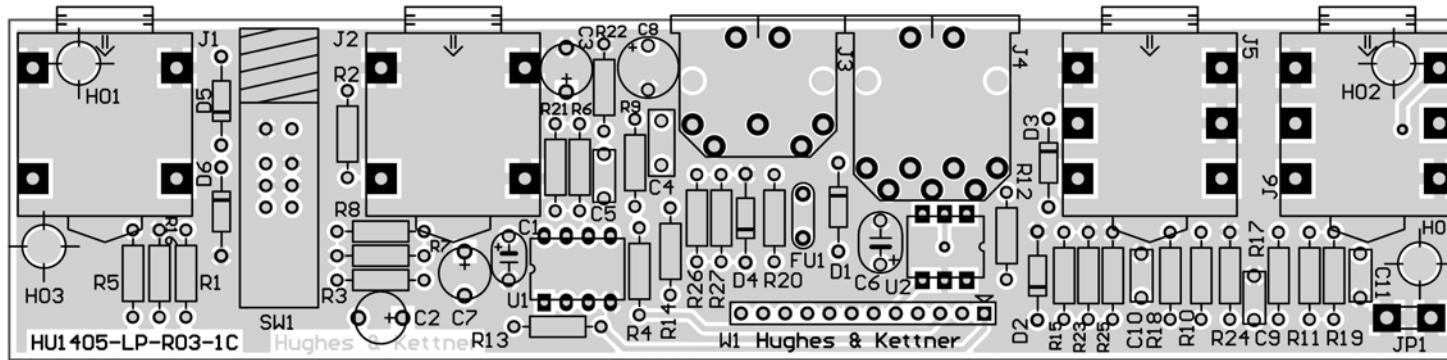
TITLE
HUGHES & KETNER
 SWITCHBLADE COMBO 50W HU1605
 PREAMP

66606 St. Wendel / Germany



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|--------------------------------|------------|------------|----------|
| HU1605-LP-R02-1D | | 1 | A |
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| HU1605-LP-R02-1D_POWERAMP_SB50 | | | |

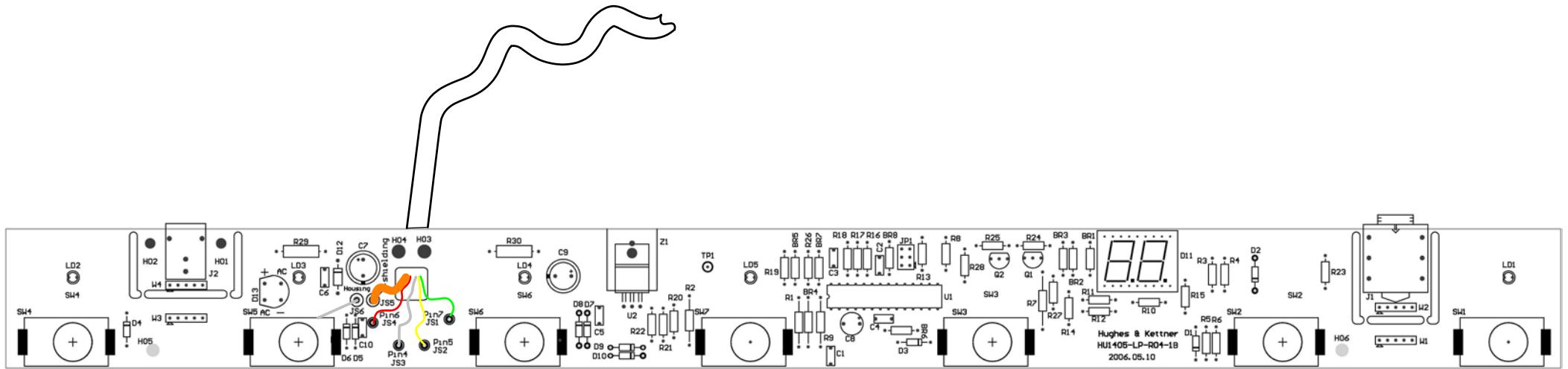


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| DRAWING-NO. | | VERSION | REVISION |
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| HU1605-LP-R03-1C | | 1 | A |
| DRAWN BY: | | DATE | PAGE |
| ubaris | | 27.07.2006 | 1 |
| CHECKED BY: | | DATE | PAGES |
| | | | 1 |
| MATERIAL: | | FINISH: | |
| | | OBERFLÄCHE | |
| FILENAME: | | | |
| HU1605-LP-R03-1C_FXBOARD | | | |

TITLE
Hughes & Kettner
 SWITCHBLADE COMBO 50W HU1605
 FX-BOARD

66606 St. Wendel / Germany



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| | | | |
|----------------------------------|-------------------------------------|---|------------|
| | | TITLE Switchblade HU1405 FSM432 Footswitch | |
| 66606 St. Wendel / Germany | | 66606 St. Wendel / Germany | |
| DRAWING-NO. | HU1405-LP-R04-1B | VERSION | 1 |
| REVISION | A | DATE | 25.07.2006 |
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| CHECKED BY: | | DATE: | |
| MATERIAL: Fehler: Keine Referenz | | FINISH: OBERFLÄCHE | |
| FILENAME: | HU1605-LP-R04-1B_FSM432_Switchboard | | |
| 1 PAGES | | 1 PAGES | |