



## Service Manual

Created: 15 July 2014



## XENYX X1222USB

**Premium 16-Input 2/2-Bus Mixer with XENYX Mic Preamps & Compressors, British EQs, 24-Bit Multi-FX Processor and USB/Audio Interface**

|                        |    |
|------------------------|----|
| Specifications .....   | 2  |
| PCB Schematic .....    | 3  |
| Parts List .....       | 14 |
| Exploded Drawing ..... | 31 |

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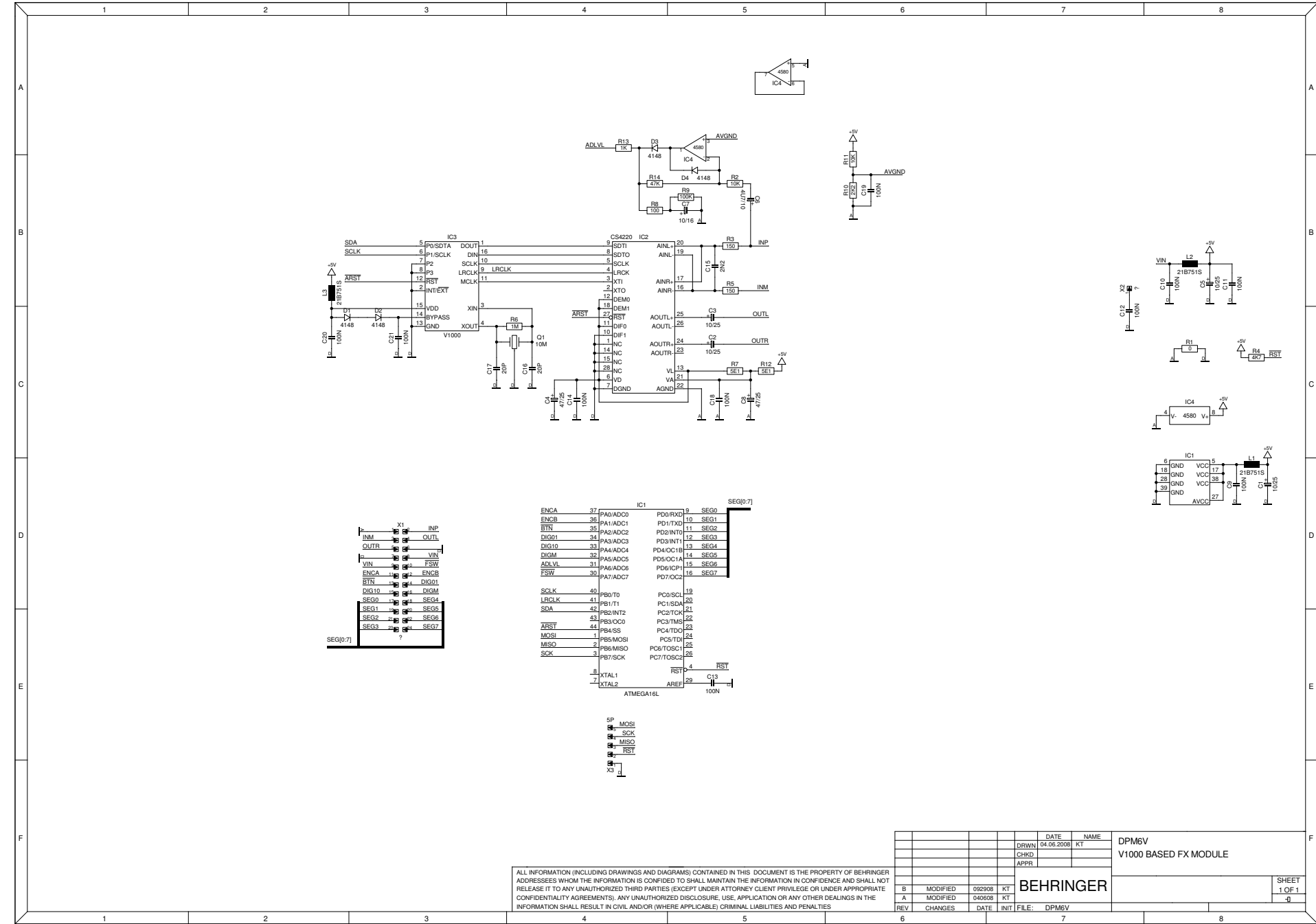


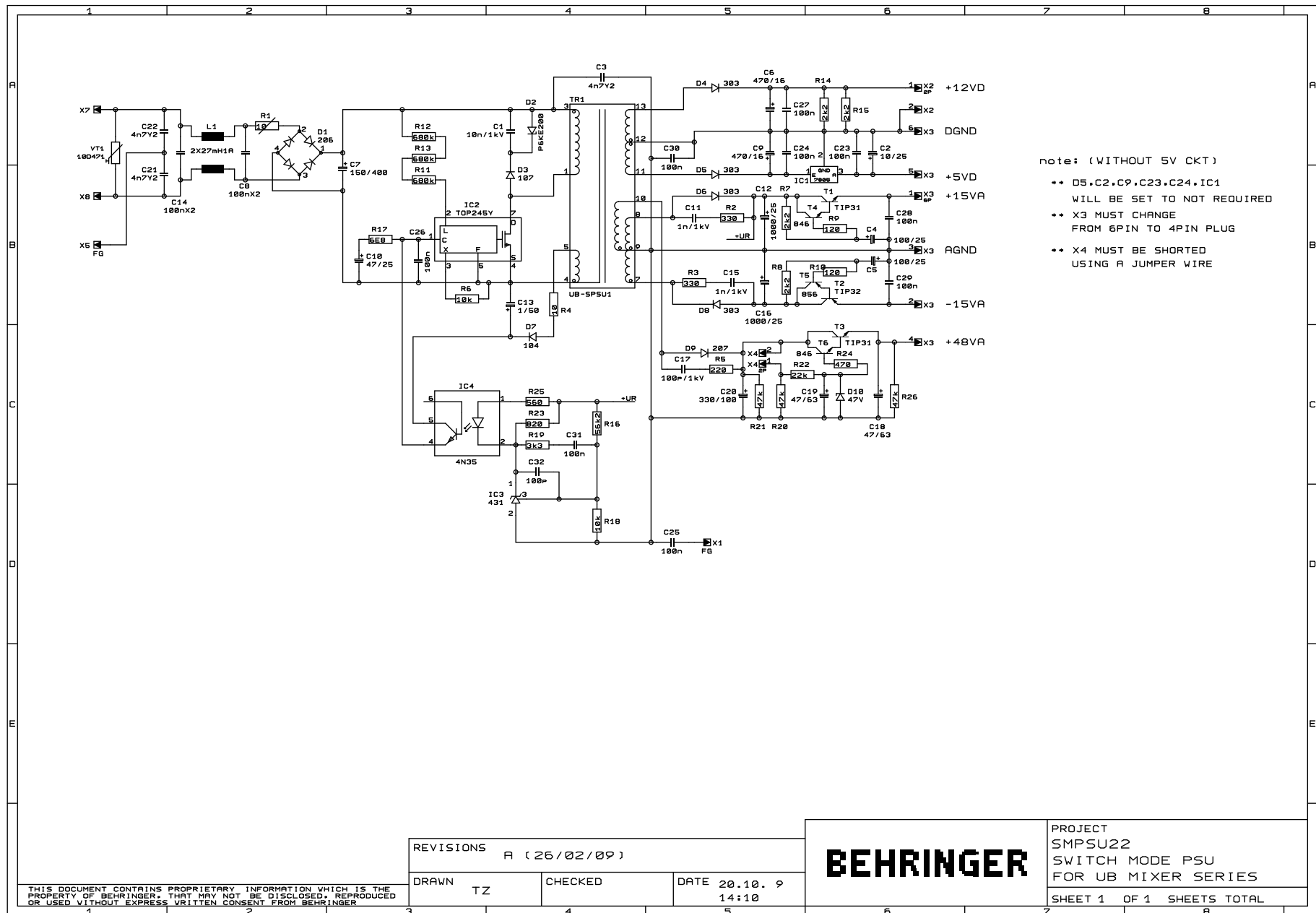
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# XENYX X1222USB

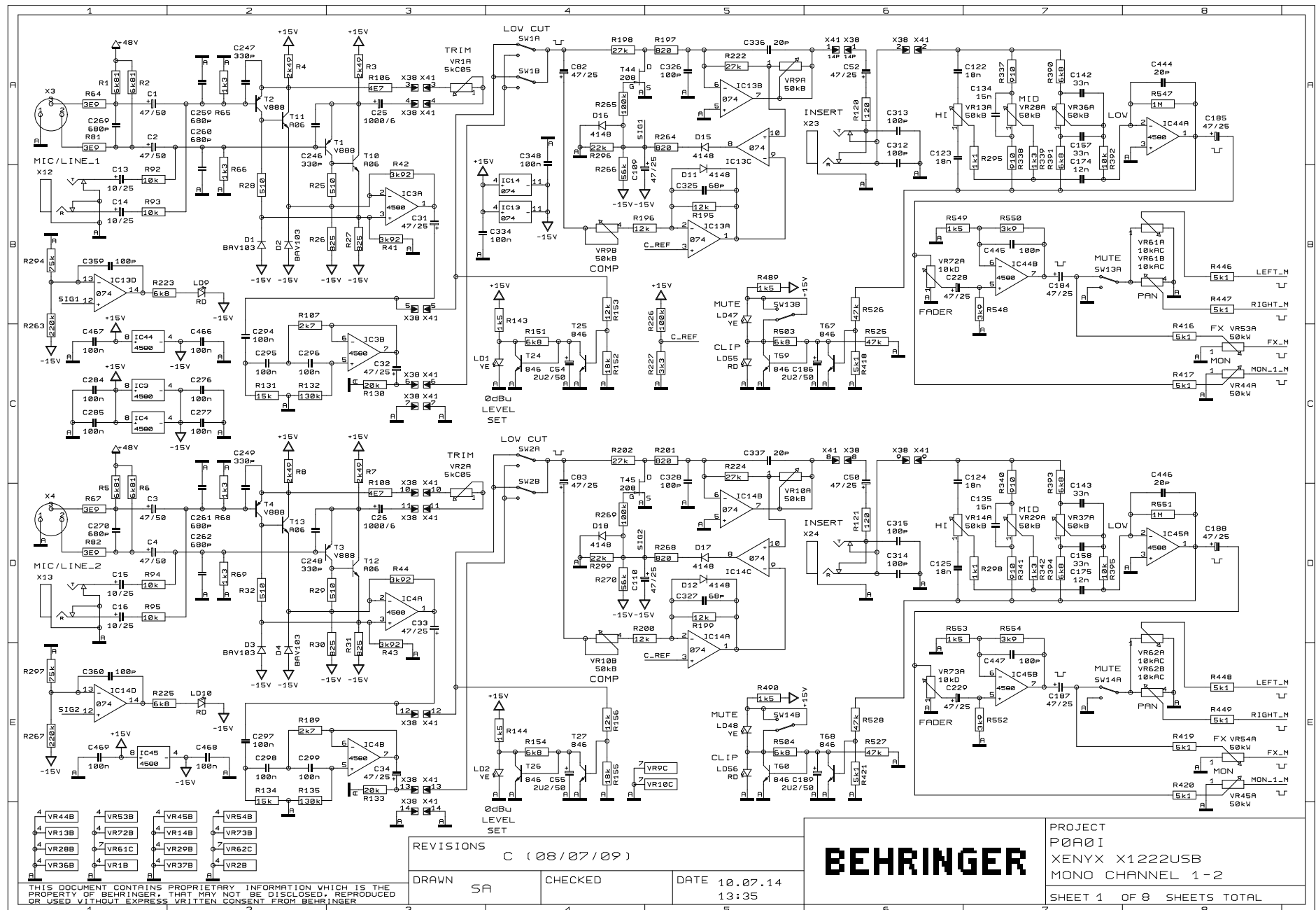
## Specifications

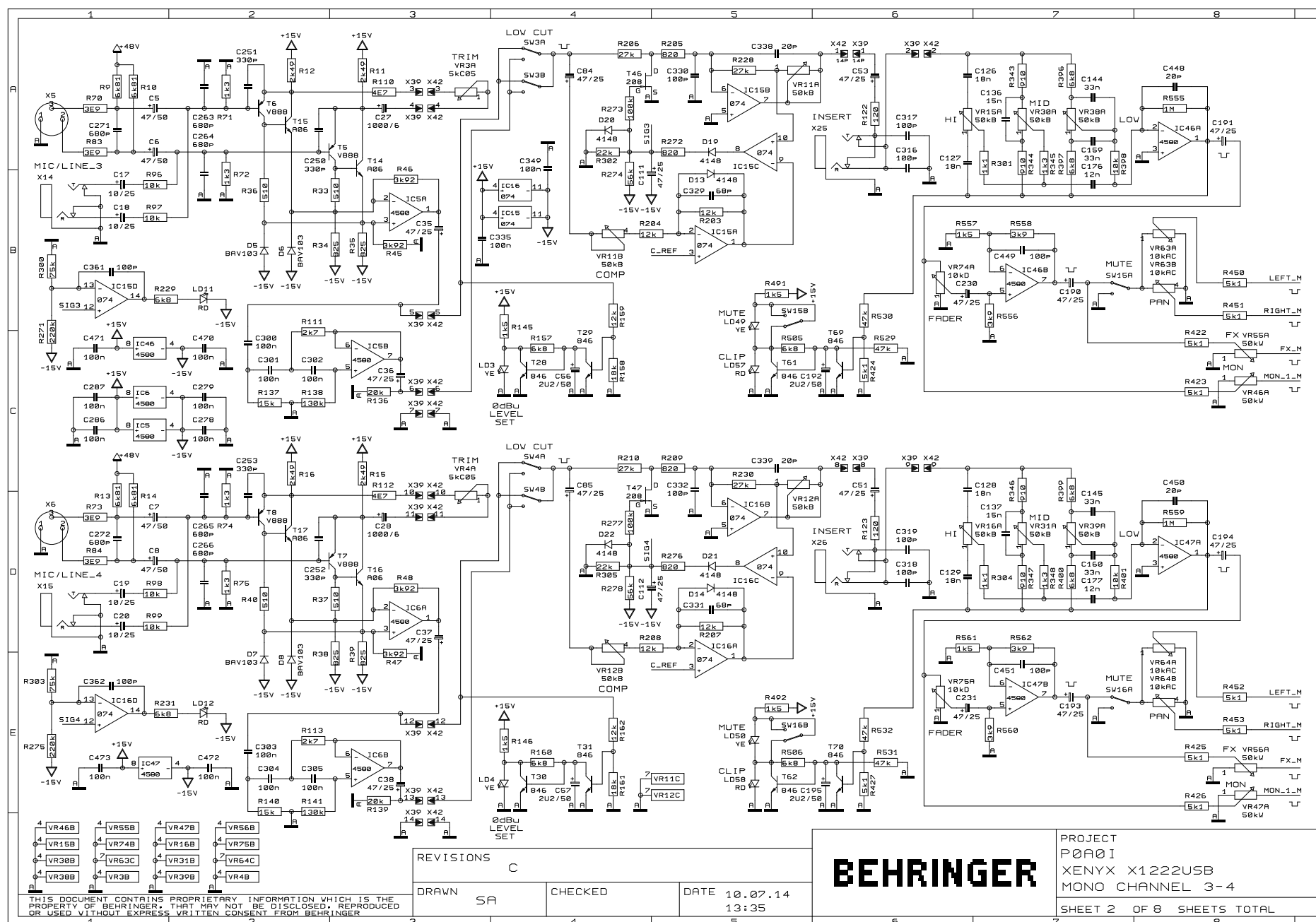
- Premium ultra-low noise, high headroom analog mixer
- 4 state-of-the-art, phantom-powered XENYX Mic Preamps comparable to stand-alone boutique preamps
- 4 studio-grade compressors with super-easy "one-knob" functionality and control LED for professional vocal and instrumental sound
- Neo-classic "British" 3-band EQs for warm and musical sound
- New studio-grade FX processor with 16 editable presets including reverb, chorus, flanger, delay, pitch shifter, multi-effects, Tap function and storable user parameter settings
- Built-in stereo USB/Audio Interface to connect directly to your computer. Free audio recording, editing and podcasting software plus 150 instrument/effect plug-ins and ultra-low latency driver downloadable at [www.behringer.com](http://www.behringer.com)
- 7-band stereo graphic EQ allows precise frequency correction of monitor or main mixes
- Revolutionary FBQ Feedback Detection System instantly reveals critical frequencies
- Breathtaking XPQ 3D stereo surround effect for more vitality and enhanced stereo image
- Voice Cancellor function for easy-to-use sing-along applications
- 4 fully equipped stereo input channels featuring 2 additional mic inputs on channels 5/6 and 7/8, 3-band EQ and input trim control
- Channel inserts on each mono channel for flexible connection of outboard equipment
- 2 aux sends per channel: 1 pre fader for monitoring, 1 post fader (for internal FX and/or as external send); 2 multi-functional stereo aux returns
- Balanced main mix outputs with gold-plated XLR connectors, headphone/control room output and stereo rec outputs
- Long-wearing 60-mm logarithmic-taper faders and sealed rotary controls
- "Planet Earth" switching power supply for maximum flexibility (100 - 240 V~), noise-free audio, superior transient response plus low power consumption for energy saving
- Rack mount brackets included for ultimate flexibility
- 3-Year Warranty Program\*
- Conceived and designed by BEHRINGER Germany

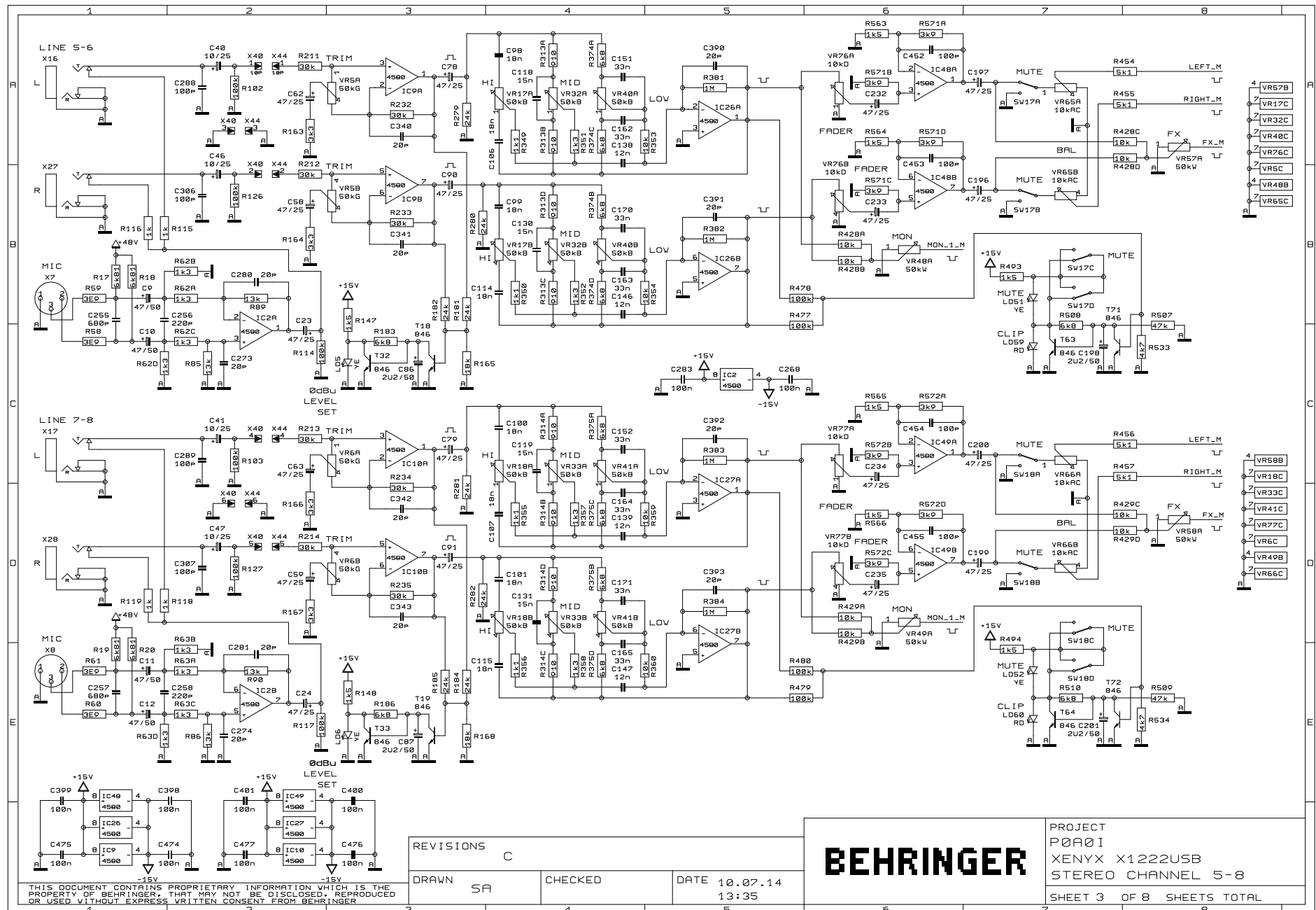


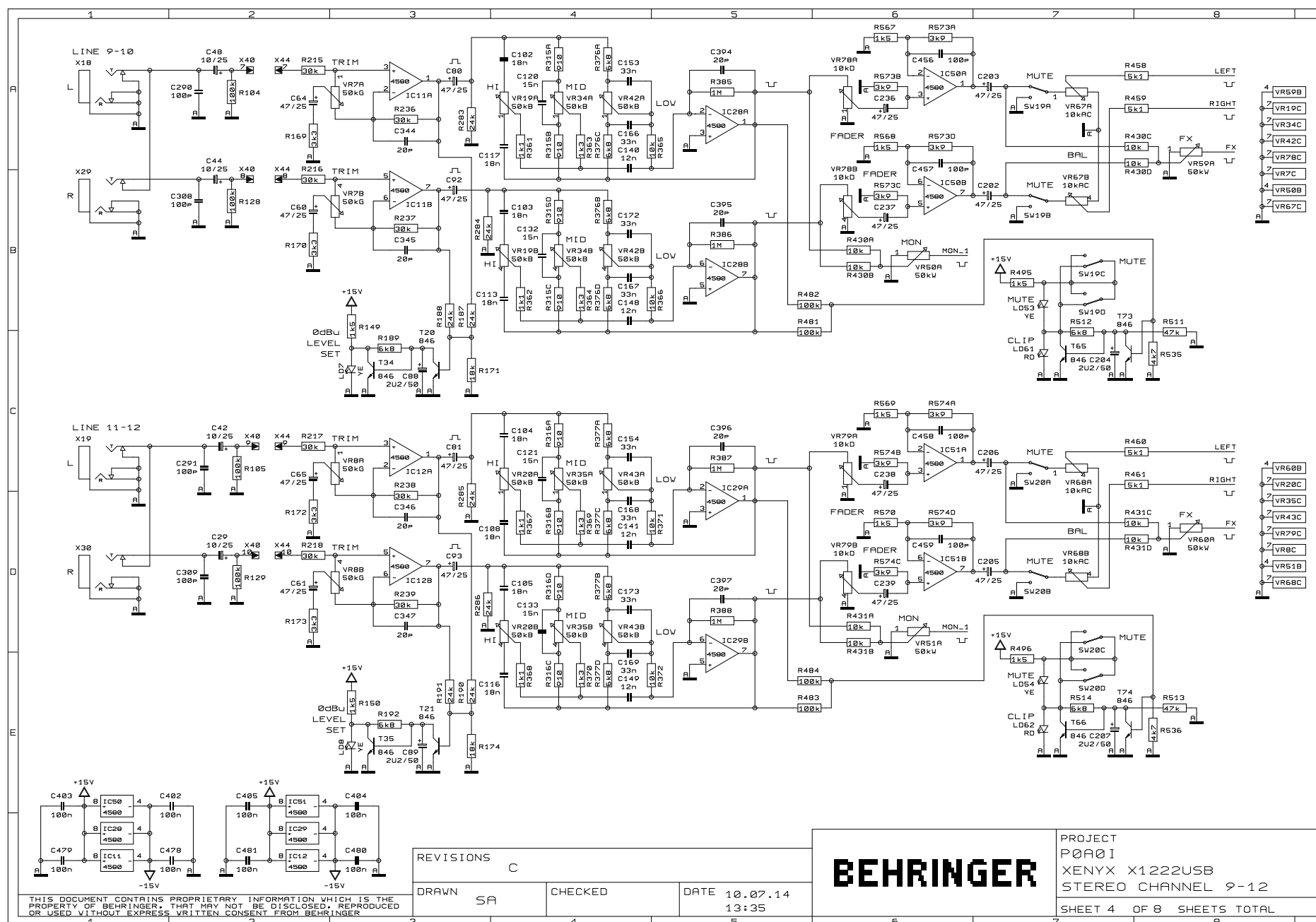


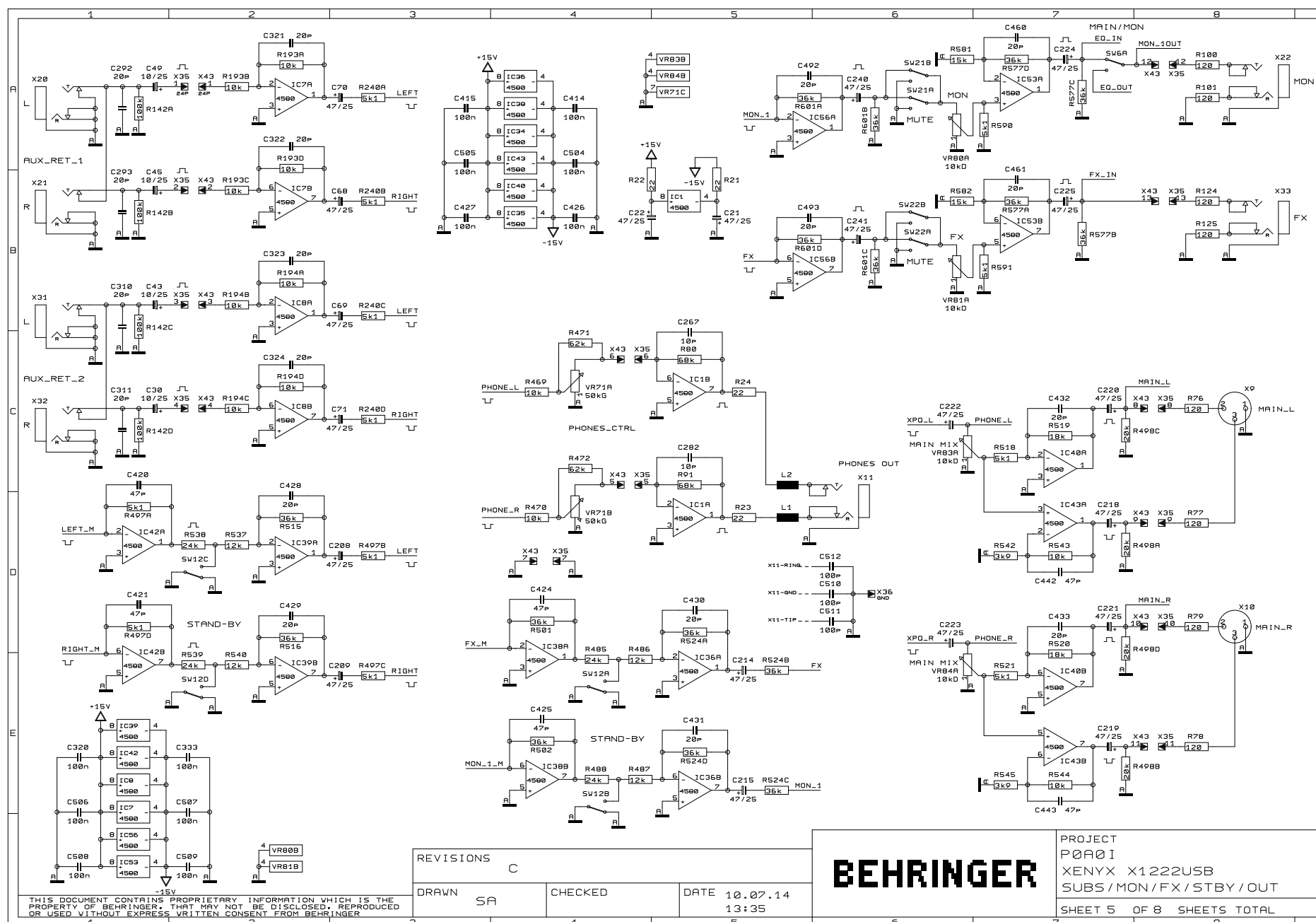


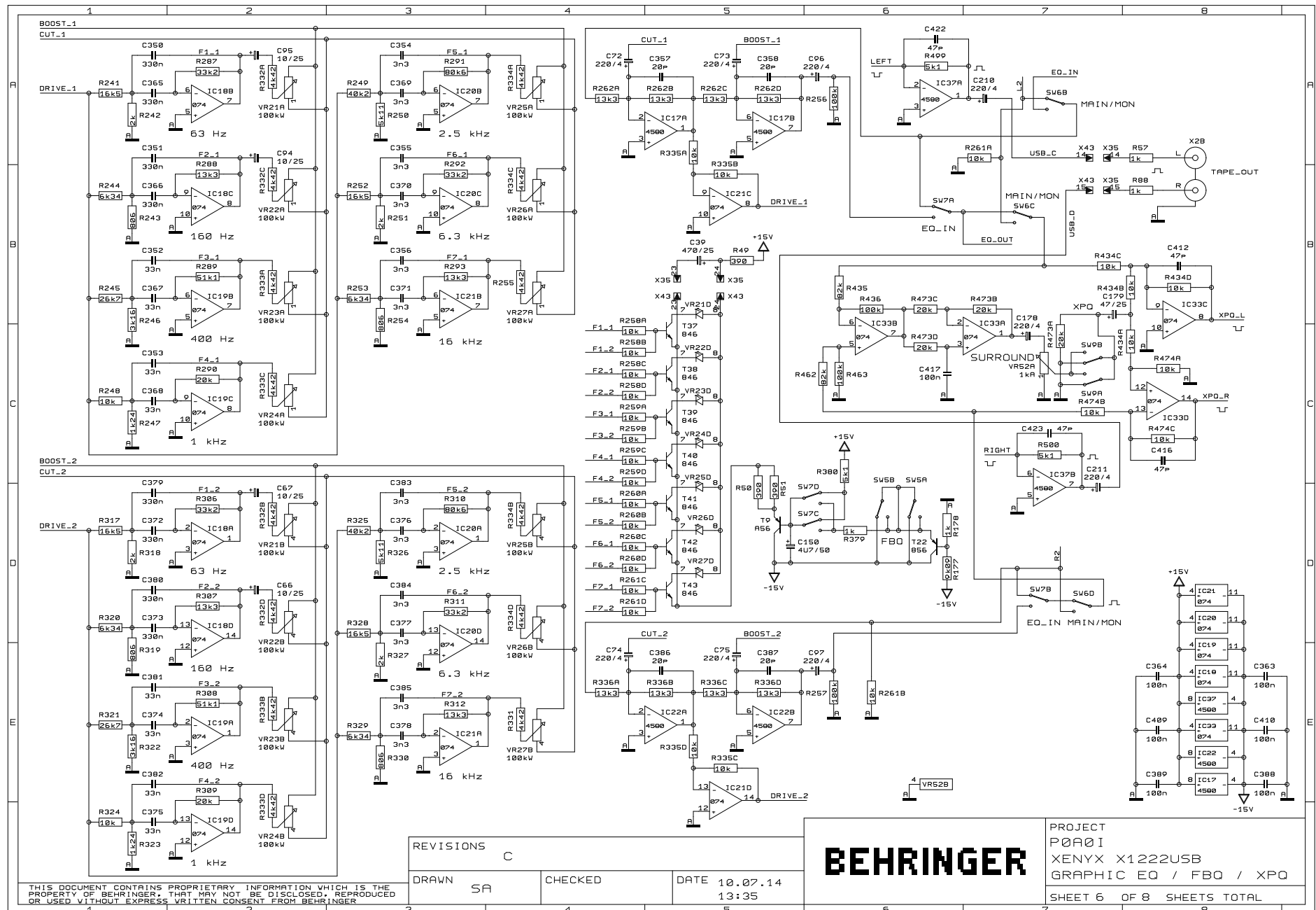
















**Hi Pcb Assemblies**

|   | Quantity | Unit | Item            | Rev | Description                                           | Reference Designators | Notes |
|---|----------|------|-----------------|-----|-------------------------------------------------------|-----------------------|-------|
| 1 | 1.0000   | PC   | A05-00000-07247 |     | PCB ASSEMBLY;DPM6V;REV:B;HAND INSERT;NO:907040        | [P0A01:01: {1.0}]     |       |
| 2 | 1.0000   | PC   | A05-00000-09291 |     | PCB ASSEMBLY;SMPSU22;REV:A;HAND INSERT;NO.926020      |                       |       |
| 3 | 1.0000   | PC   | A05-00000-09527 |     | PCB ASSEMBLY;USBIO2CH;REV:B;HAND INSERT;NO:923040     |                       |       |
| 4 | 1.0000   | PC   | A05-A0I00-01100 |     | PCB ASSEMBLY;P0A01;A;HI;SMPSU22                       |                       |       |
| 5 | 1.0000   | PC   | A05-A0I00-02100 |     | PCB ASSEMBLY;P0A01;B;HI;USBIO2CH                      |                       |       |
| 6 | 1.0000   | PC   | A05-A0I01-09973 |     | PCB ASSEMBLY;P0A01;PCB:01;REV:C;HAND INSERT;NO:908070 |                       |       |
| 7 | 1.0000   | PC   | A05-A0I02-09975 |     | PCB ASSEMBLY;P0A01;PCB:02;REV:C;HAND INSERT;NO:909070 |                       |       |

## Cable

|    | Quantity | Unit | Item            | Rev | Description                                                                                                             | Reference Designators                               | Notes |
|----|----------|------|-----------------|-----|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-------|
| 1  | 1.0000   | PC   | A71-18004-06054 |     | CABLE;USB2.0;BLACK;UL2725;COLOR:BLACK;LENGTH:1800mm +/- 40mm;DIA:4mm;CONNECTORS:USB/B TO USB/A;DOUBLE SHIELDING;MAGNET  |                                                     |       |
| 2  | 0.0950   | M    | A74-00000-00724 |     | WIRE;RAW FLAT CABLE;UL2651;AWG:28;POLES:24;GRAY;PIN1:RED;PITCH:1mm27                                                    | [P0A0I:02: {0.095}]                                 |       |
| 3  | 1.0000   | PC   | A74-00020-80724 |     | CABLE;FLAT;P2mm54;LENGTH:080mm;AWG:28;FC2/FD;+10/-0mm;POLES:24                                                          | [P0A0I:02: {1.0}]                                   |       |
| 4  | 1.0000   | PC   | A74-90040-80724 |     | CABLE;FLAT;P2mm54;LENGTH:080mm;AWG:28;ZEE;FC2/FD;+10/-0mm;POLES:24                                                      | [P0A0I:02: {1.0}]                                   |       |
| 5  | 0.2660   | M    | A77-00000-64617 |     | CABLE;STRANDWIRE;AWG:26;UL2468;1.5 MM;UL;PIN1 RED;FLAT RIBBON WIRE,POLES:9,PITCH:1mm5,PVC, 80C 300V                     |                                                     |       |
| 6  | 2.2930   | M    | A77-00010-00601 |     | WIRE;RAW CABLE;UL1007;AWG26;BK                                                                                          | [P0A0I:01: {2x0.702}]<br><b>[P0A0I:01: {0.666}]</b> |       |
| 7  | 0.4050   | M    | A77-00010-00605 |     | WIRE;RAW CABLE;UL1007;AWG26;RD                                                                                          | [P0A0I:01: {2x0.054}]<br><b>[P0A0I:01: {0.074}]</b> |       |
| 8  | 0.1430   | M    | A77-00020-72208 |     | RAW WIRE;HOOK-UP;JACKET:PVC;UL1015;CORES:1;600V;105 C;AWG:18;GREEN/YELLOW                                               |                                                     |       |
| 9  | 0.1820   | M    | A77-00030-75201 |     | RAW WIRE;HOOK-UP;DOUBLE INSULATED;JACKET:PVC;UL1672;CORES:1;300V;105 C;AWG:18;BLACK                                     |                                                     |       |
| 10 | 0.1360   | M    | A77-00030-75207 |     | RAW WIRE;HOOK-UP;DOUBLE INSULATED;JACKET:PVC;UL1672;CORES:1;300V;105 C;AWG:18;BLUE                                      |                                                     |       |
| 11 | 0.1590   | M    | A77-00080-00601 |     | RAW WIRE;MULTICORE;SHIELDED;JACKET:PVC;UL2547;CORE S:5;80V;AWG:26;BLACK;5C(RED/ORANGE/BLACK/YELLOW/BROWN)+SPIRAL SHIELD |                                                     |       |
| 12 | 2.0000   | PC   | A77-07537-79201 |     | CABLE;STRANDWIRE;LENGTH:75mm;ZEE;AWG:18;UL1672;S/T LENGTH:7mm;COLOR:BLK                                                 |                                                     |       |
| 13 | 2.0000   | PC   | A77-12037-79207 |     | CABLE;STRANDWIRE;LENGTH:120mm;ZEE;AWG:18;UL1672;S/T LENGTH:7mm;COLOR:BLU                                                |                                                     |       |
| 14 | 1.0000   | PC   | A77-13027-92208 |     | CABLE;STRANDWIRE;LENGTH:130mm;ZEE;AWG:18;UL1015;STRIP-TIN/LUG 4mm3;S/T LENGTH:7mm;COLOR:YEL/GRN                         |                                                     |       |
| 15 | 4.0000   | PC   | A81-04031-46042 |     | WIRE HARNESS;LENGTH:40mm;AWG:26;P:2mm;HOUSING-BOARD IN CONNECTOR;POLES:14;PIN1 RED/OTHERS BLK                           | [P0A0I:01: {2x2.0}]                                 |       |

|    | Quantity | Unit | Item            | Rev | Description                                                                                                            | Reference Designators      | Notes        |
|----|----------|------|-----------------|-----|------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------|
| 16 | 2.0000   | PC   | A81-04031-46842 |     | WIRE<br>HARNESS;LENGTH:40mm;ZEE;AWG:26;P:2mm;HOUSING-BOARD IN CONNECTOR;POLES:14;PIN1 RED/OTHERS BLK                   | [P0A0I:01: {2.0}(X41-X42)] |              |
| 17 | 1.0000   | PC   | A81-06031-06042 |     | WIRE<br>HARNESS;LENGTH:60mm;AWG:26;P:2mm;HOUSING-BOARD IN CONNECTOR;POLES:10;PIN1 RED/OTHERS BLK                       | [P0A0I:01: {1.0}]          |              |
| 18 | 2.0000   | PC   | A81-06031-06842 |     | WIRE<br>HARNESS;LENGTH:60mm;ZEE;AWG:26;P:2mm;HOUSING-BOARD IN CONNECTOR;POLES:10;PIN1 RED/OTHERS BLK                   | [P0A0I:01: {2x1.0}(X44)]   |              |
| 19 | 1.0000   | PC   | A81-14530-66542 |     | WIRE<br>HARNESS;LENGTH:145mm;ZEE;A2006H;AWG:26;P:2mm;HOUSING - BOARD IN CONNECTOR;POLES:6;PIN1 RED/OTHERS BLK;SHIELDED | X3]                        |              |
| 20 | 1.0000   | PC   | A81-21030-26820 |     | WIRE<br>HARNESS;LENGTH:210mm;ZEE;AWG:26;P:2mm;HOUSING-STRIPPED/TINNED 5mm;POLES:2;PIN1 RED/OTHERS BLK                  |                            |              |
| 21 | 1.0000   | PC   | A81-25030-96842 |     | WIRE<br>HARNESS;LENGTH:250mm;ZEE;AWG:26;UL2468;P:2mm;HOUSING-BOARD IN CONNECTOR;POLES:9;PIN1 RED/OTHERS BLK            | X4]                        |              |
| 22 | 1.0000   | PC   | A76-15042-05624 |     | CABLE;AC-CORD;W/POLYBAG;LENGTH:150cm;H05VV-F3G0.75MM2;VERSION;UK;SPEC.NO:05624                                         |                            | (UK)         |
| 23 | 1.0000   | PC   | A76-15032-55649 |     | CABLE;AC-CORD;CLASS II;W/POLYBAG;JAPAN;LENGTH:150cm;POLES:3;APPROVAL:PSE;JS15S3 + VCTF 3x0.75mm2 + V1528               |                            | (JP, HL, SH) |
| 24 | 1.0000   | PC   | A76-15212-03119 |     | CABLE;AC-CORD;W/POLYBAG;LENGTH:152cm;H05VV-F 3G 0.75MM2;VERSION;EU;SPEC.NO:03119                                       |                            | (EU)         |
| 25 | 1.0000   | PC   | A76-15062-45714 |     | CABLE;AC-CORD;W/POLYBAG;LENGTH:150cm;POLES:3;APPROVAL:CCC;HC103 + 227 IEC 53 (RVV) 3x0.75mm2 + HE109B                  |                            | (CCC)        |
| 26 | 1.0000   | PC   | A76-00000-05305 |     | CABLE;AC-CORD;3;BR;1500 MM;Plug + Connector:375+730;H05VV-F 3G0.75                                                     |                            | (BR)         |
| 27 | 1.0000   | PC   | A76-15222-06417 |     | CABLE;AC-CORD;W/POLYBAG;LENGTH:152cm;AWG:18;VERSION;UL;SPEC.NO:06417                                                   |                            | (UL)         |
| 28 | 1.0000   | PC   | A76-18050-47490 |     | CABLE;AC-CORD;LENGTH:180cm;VERSION:SAA;PLUG:HE105 ISOLATED;SAA H05VV-F 3x0.75mm2;CONN.HP-3;SPEC.NO:47490               |                            | (SAA)        |
| 29 | 1.0000   | PC   | A76-00000-13573 |     | CABLE;AC-CORD;3;AR;1500 MM;Plug + Connector:321+730;H05VV-F 3G0.75                                                     |                            | (AR)         |

**Circuit Protector**

|   | Quantity | Unit | Item            | Rev | Description                               | Reference Designators | Notes |
|---|----------|------|-----------------|-----|-------------------------------------------|-----------------------|-------|
| 1 | 1.0000   | PC   | B22-01513-16001 |     | FUSE;1A6;250V;SLOW BLOW;H-TYPE;5mm x 20mm |                       |       |

**Coil**

|   | Quantity | Unit | Item            | Rev | Description                                                               | Reference Designators       | Notes |
|---|----------|------|-----------------|-----|---------------------------------------------------------------------------|-----------------------------|-------|
| 1 | 1.0000   | PC   | B34-00000-43407 |     | COIL;LINE FILTER;25 mH;20 MM;UT20 L:25mH MIN1KHZ,0.25V                    | [P0794:00: {1.0}(L1)]       |       |
| 2 | 1.0000   | PC   | B37-21200-00019 |     | COIL;CHOKE SMD;SMD 3.2x1.6x1.15;COMMON-MODE;(MURATA DLP31SN121ML2L)       | [USBIO2CH:00: {1.0}(L1)]    |       |
| 3 | 3.0000   | PC   | B39-00000-03394 |     | COIL;SMD;BEAD;SMD0805;(BLM21BD751SN1D)                                    | [DPM6V:00: {3.0}(L1-L3)]    |       |
| 4 | 4.0000   | PC   | B39-21202-00018 |     | COIL;SMD BEAD;SMD1608;(MURATA BLM18BB121))                                | [USBIO2CH:00: {4.0}(L2-L5)] |       |
| 5 | 2.0000   | PC   | B44-33100-01837 |     | COIL;BEAD<br>SMD;100MH;500mA;RDC:0ohm4;SMD805;(REACH-TONE GZ2012U102T(F)) | [P0A0I:02: {2.0}(L1-L2)]    |       |

**Connector**

|   | Quantity | Unit | Item            | Rev | Description                                                      | Reference Designators                             | Notes |
|---|----------|------|-----------------|-----|------------------------------------------------------------------|---------------------------------------------------|-------|
| 1 | 1.0000   | PC   | B83-20184-37925 |     | CONNECTOR;FEMALE;ANGLED;USB;SINGLE;TYPE:B                        | [USBIO2CH:00: {1.0}(X3)]                          |       |
| 2 | 55.0000  | PC   | B84-25016-06014 |     | CRIMP TERMINAL;PITCH:2mm0;AWG24-30;A2008TOP-2                    | [P0A0I:01: {2x14.0}]<br><b>[P0A0I:01: {10.0}]</b> |       |
| 3 | 1.0000   | PC   | B84-42050-00155 |     | CRIMP CONNECTOR;LUG;INNER DIA:4mm3;AWG 14-18;WIRE MOUNT;STRAIGHT |                                                   |       |
| 4 | 2.0000   | PC   | B95-01320-03303 |     | CONNECTOR;XLR;SOCKET;MALE;STRAIGHT;POLES:3                       | [P0A0I:02: {2.0}(X9-X10)]                         |       |
| 5 | 6.0000   | PC   | B95-01340-03300 |     | CONNECTOR;XLR;SOCKET;FEMALE;STRAIGHT;POLES:3                     | [P0A0I:02: {6.0}(X3-X8)]                          |       |

**Diode**

|   | Quantity | Unit | Item            | Rev | Description                    | Reference Designators                                         | Notes |
|---|----------|------|-----------------|-----|--------------------------------|---------------------------------------------------------------|-------|
| 1 | 1.0000   | PC   | C11-03500-10404 |     | DIODE;HER104;DO41;RADIAL       | [P0794:00: {1.0}(D7)]                                         |       |
| 2 | 1.0000   | PC   | C11-03500-10704 |     | DIODE;HER107;DO41;RADIAL       | [P0794:00: {1.0}(D3)]                                         |       |
| 3 | 1.0000   | PC   | C11-03500-20704 |     | DIODE;HER207;DO15;RADIAL       | [P0794:00: {1.0}(D9)]                                         |       |
| 4 | 4.0000   | PC   | C11-03500-30304 |     | DIODE;HER303;DO27;RADIAL       | [P0794:00: {4.0}(D4-D6, D8)]                                  |       |
| 5 | 8.0000   | PC   | C11-06030-10313 |     | DIODE;BAV103;SOD80;TEMIC       | [P0A0I:02: {8.0}(D1-D8)]                                      |       |
| 6 | 26.0000  | PC   | C11-09014-14802 |     | DIODE;LL4148;LL34;TEMIC OR FC  | [DPM6V:00: {4.0}(D1-D4)]<br><b>[P0A0I:01: {22.0}(D9-D30)]</b> |       |
| 7 | 1.0000   | PC   | C11-11042-00022 |     | DIODE;P6KE;200A;DO15           | [P0794:00: {1.0}(D2)]                                         |       |
| 8 | 1.0000   | PC   | C12-02100-47043 |     | DIODE;ZPD47V0;DO35;TEMIC OR FC | [P0794:00: {1.0}(D10)]                                        |       |

**Display**

|   | Quantity | Unit | Item            | Rev | Description                                                    | Reference Designators   | Notes |
|---|----------|------|-----------------|-----|----------------------------------------------------------------|-------------------------|-------|
| 1 | 1.0000   | PC   | C28-00000-32332 |     | DISPLAY;LED;Pattern:8.8;0.4 IN;AMBER;COMMON ANODE;SIZE:20.1X16 | [P0A0I:01: {1.0}(LD36)] |       |

## Hardware

|    | Quantity | Unit | Item            | Rev | Description                                                                                          | Reference Designators | Notes |
|----|----------|------|-----------------|-----|------------------------------------------------------------------------------------------------------|-----------------------|-------|
| 1  | 1.0000   | PC   | F83-04000-00021 |     | CABLE TIE;NYLON;4in;COLOR:                                                                           |                       |       |
| 2  | 1.1000   | G    | F84-01800-09286 |     | THERM-GREASE;COLOR:WHT;SPEC.NO:09286                                                                 |                       |       |
| 3  | 3.6520   | G    | F84-03000-01090 |     | SCREWLOCK;SPEC.NO:01090                                                                              |                       |       |
| 4  | 1.0000   | PC   | F85-04000-44001 |     | HEX. NUT;INNER DIA;M4mm;SURFACE:ZINC                                                                 |                       |       |
| 5  | 23.0000  | PC   | F85-09520-44755 |     | HEX. NUT;FOR JACK;M<br>3/8in;HEXWRENCH:11mm;THICKNESS:2mm;SURFACE:N<br>ICKEL/SLV                     |                       |       |
| 6  | 1.0000   | PC   | F85-09524-44765 |     | HEX. NUT;FOR JACK;M<br>3/8in;HEXWRENCH:11mm;THICKNESS:2mm4;SURFACE:<br>NICKEL/SILVER                 |                       |       |
| 7  | 6.0000   | PC   | F88-30050-30291 |     | SCREW;M3mm*5mm;HEAD:PAN;INSERT:PHILIPS<br>REC.;SURFACE:SILVER ZINC                                   |                       |       |
| 8  | 10.0000  | PC   | F88-30050-30297 |     | SCREW;M3mm*5mm;HEAD:PAN;INSERT:PHILIPS<br>REC.;SURFACE:BLACK/ZINC                                    |                       |       |
| 9  | 3.0000   | PC   | F88-30060-30291 |     | SCREW;M3mm*6mm;HEAD:PAN;INSERT:PHILIPS<br>REC.;SURFACE:SILVER/ZINC                                   | [POA01:01: {3.0}]     |       |
| 10 | 13.0000  | PC   | F88-30060-30297 |     | SCREW;M3mm*6mm;HEAD:PAN;INSERT:PHILLIPS<br>REC.;SURFACE:BLACK/ZINC                                   | [POA01:01: {6.0}]     |       |
| 11 | 18.0000  | PC   | F88-30061-60297 |     | SCREW;M3mm*6mm;HEAD:TRUSS DIA<br>5mm2;INSERT:PHILIPS REC.;SURFACE:BLACK/ZINC                         |                       |       |
| 12 | 17.0000  | PC   | F88-30080-30247 |     | SCREW;BT3mm*8mm;HEAD:PAN;INSERT:PHILLIPS<br>REC.;SURFACE:BLACK/ZINC                                  |                       |       |
| 13 | 3.0000   | PC   | F88-30080-30291 |     | SCREW;M3mm*8mm;HEAD:PAN;INSERT:PHILIPS<br>REC.;SURFACE:ZINC                                          |                       |       |
| 14 | 12.0000  | PC   | F88-40050-30297 |     | SCREW;M4mm*5mm;HEAD:PAN;INSERT:PHILIPS<br>REC.;SURFACE:BLACK/ZINC                                    |                       |       |
| 15 | 1.0000   | PC   | F88-40100-20291 |     | SCREW;M4mm*10mm;HEAD:BINDING;INSERT:PHILIPS<br>REC.;SURFACE:SILVER/ZINC                              |                       |       |
| 16 | 2.0000   | PC   | F89-07018-00111 |     | INSULATION SHEET;SI-RUBBER;TO220<br>W/HOLE;11mm*18mm                                                 |                       |       |
| 17 | 1.0000   | PC   | F89-07022-00121 |     | INSULATION SHEET;SI-RUBBER;TO220;COVER                                                               |                       |       |
| 18 | 1.0000   | PC   | F90-00200-06841 |     | METAL;SHIELD;UB-MIXER<br>TRANSFORMER;DST.NO:002;DPT.NO:06841;(UB-MIXER-<br>TRAFO_SHIELDING-REVB.DWG) |                       |       |
| 19 | 1.0000   | PC   | F91-02020-05792 |     | SILICA GEL;MASS;20g;SPEC.NO:20QB-BB2001-4                                                            |                       |       |
| 20 | 1.0000   | PC   | F94-30110-10000 |     | STUD;THREAD-DIA;3mm;LENGTH:11mm;EXT/INT                                                              | [POA01:01: {1.0}]     |       |
| 21 | 1.0000   | PC   | F94-30110-30000 |     | STUD;THREAD-DIA;3mm;LENGTH:11mm;INT/INT                                                              | [POA01:01: {1.0}]     |       |
| 22 | 14.0000  | PC   | F94-30138-30000 |     | STUD;THREAD-DIA;3mm;LENGTH:13mm8;INT/INT                                                             | [POA01:01: {7.0}]     |       |
| 23 | 0.0500   | M    | F95-01000-43217 |     | SHRINKING TUBE;INNER DIA;1mm;SPEC.NO:43217                                                           |                       |       |
| 24 | 0.0600   | M    | F95-03000-01097 |     | SHRINKING TUBE;INNER DIA;3mm;SPEC.NO:01097                                                           |                       |       |

|    | Quantity | Unit | Item            | Rev | Description                                                                     | Reference Designators | Notes |
|----|----------|------|-----------------|-----|---------------------------------------------------------------------------------|-----------------------|-------|
| 25 | 0.2000   | M    | F95-04000-01098 |     | SHRINKING TUBE;INNER DIA;4mm;SPEC.NO:01098                                      |                       |       |
| 26 | 0.1200   | M    | F95-06000-01099 |     | SHRINKING TUBE;INNER DIA;6mm;SPEC.NO:01099                                      |                       |       |
| 27 | 1.0000   | PC   | F96-10300-60050 |     | WASHER;PLAIN;INNER DIA:3mm;OUTER DIA:6mm;THICKNESS;0mm5                         |                       |       |
| 28 | 24.0000  | PC   | F96-10961-30505 |     | WASHER;PLAIN;INNER DIA:9mm6;OUTER DIA:13mm;THICKNESS;0mm5;PLATING:NICKEL        |                       |       |
| 29 | 3.0000   | PC   | F96-40300-60100 |     | WASHER;EXTERNAL TEETH;INNER DIA:3mm;OUTER DIA:6mm;THICKNESS:1mm                 |                       |       |
| 30 | 1.0000   | PC   | F96-40300-60103 |     | WASHER;EXTERNAL TEETH;INNER DIA:3mm;OUTER DIA:6mm;THICKNESS:1mm;PLATING:CR(III) | [P0A0I:01: {1.0}]     |       |
| 31 | 2.0000   | PC   | F96-40400-70170 |     | WASHER;EXTERNAL TEETH;INNER DIA:4mm;OUTER DIA:7mm;THICKNESS;1mm7                |                       |       |
| 32 | 1.0000   | PC   | F97-00600-11827 |     | FILM;PROTECTIVE;DST.NO:006;DPT.NO:11827;(UB-SPSU-FOIL-REVF.DWG)                 |                       |       |
| 33 | 2.0000   | PC   | F98-04400-27886 |     | BUSHING;MINIATURE;NYLON;DWG.NO:27886;(R20-SC-PLA_NYLBUSHM3x1_4.DWG)             |                       |       |

## Ic

|    | Quantity | Unit | Item            | Rev | Description                                           | Reference Designators                                                                                                                                         | Notes |
|----|----------|------|-----------------|-----|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 1  | 1.0000   | PC   | C60-22422-00528 |     | IC;AD/DA;V4220M;SSOP                                  | [DPM6V:00: {1.0}(IC2)]                                                                                                                                        |       |
| 2  | 1.0000   | PC   | C60-54422-00528 |     | IC;AD/DA;CS4220;SOP                                   | [DPM6V:00: {1.0}]                                                                                                                                             |       |
| 3  | 40.0000  | PC   | C73-00000-29050 |     | IC;OPAMP;SMD;SOP;8;BA4580RF                           | [USBIO2CH:00: {1.0}(IC3)]<br><br>[P0A0I:01: {34.0}(IC7-IC12, IC17, IC22, IC26-IC29, IC34-IC40, IC42-IC51, IC53, IC56-IC59)]<br><br>[P0A0I:02: {5.0}(IC2-IC6)] |       |
| 4  | 13.0000  | PC   | C73-31007-40514 |     | IC;OPAMP OPAMP;TL074;SOP;BRAND:ST ONLY                | [P0A0I:01: {13.0}(IC13-IC16, IC18-IC21, IC33, IC41, IC52, IC54-IC55)]                                                                                         |       |
| 5  | 1.0000   | PC   | C73-59458-00408 |     | IC;OPAMP OPAMP;NJM4580L;SIP                           | [P0A0I:02: {1.0}(IC1)]                                                                                                                                        |       |
| 6  | 1.0000   | PC   | C73-59458-00508 |     | IC;OPAMP OPAMP;NJM4580;SOP                            | [DPM6V:00: {1.0}(IC4)]                                                                                                                                        |       |
| 7  | 1.0000   | PC   | C74-41024-50707 |     | IC;POWER-CONVERSION;TOP245Y;TO-220-7C                 | [P0794:00: {1.0}(IC2)]                                                                                                                                        |       |
| 8  | 1.0000   | PC   | C74-61043-10803 |     | IC;POWER-CONVERSION;VOLT.REFERENCE;TO-92;TL431ACZ     | [P0794:00: {1.0}(IC3)]                                                                                                                                        |       |
| 9  | 1.0000   | PC   | C77-00128-03001 |     | IC;VOLT.REGULATOR;ADJUSTABLE;SOT223;NCP1117ST AT3;SMD | [USBIO2CH:00: {1.0}(IC2)]                                                                                                                                     |       |
| 10 | 1.0000   | PC   | C77-05107-03110 |     | IC;VOLT.REGULATOR;7805F;FULLPACK;TO220                | IC1]                                                                                                                                                          |       |
| 11 | 6.0000   | PC   | C78-55133-90514 |     | IC;COMPARATOR;(SGS ONLY);LM339;SOP;SMD                | [P0A0I:01: {6.0}(IC23-IC25, IC30-IC32)]                                                                                                                       |       |
| 12 | 1.0000   | PC   | D12-00100-02217 |     | IC;DIG COMM.;EUROTEC;V1000;SOIC                       | [DPM6V:00: {1.0}(IC3)]                                                                                                                                        |       |
| 13 | 1.0000   | PC   | D24-18016-81844 |     | IC;MICROCONTROLLER;ATMEGA16L-8AC;TQFP44               | [DPM6V:00: {1.0}(IC1)]                                                                                                                                        |       |
| 14 | 1.0000   | PC   | D28-71290-20528 |     | IC;DIGITAL AUDIO;PCM2902;AUDIO CODEC;SOP;SMD          | [USBIO2CH:00: {1.0}(IC1)]                                                                                                                                     |       |

## Led

|   | Quantity | Unit | Item            | Rev | Description                                                   | Reference Designators                                                                | Notes |
|---|----------|------|-----------------|-----|---------------------------------------------------------------|--------------------------------------------------------------------------------------|-------|
| 1 | 1.0000   | PC   | E10-00000-28401 |     | LED HIB;3mm ROUND;AMBER;NORMAL BRIGHT;W/RING;LED;lv:Typ.60mcd | [P0A0I:01: {1.0}(LD13)]                                                              |       |
| 2 | 4.0000   | PC   | E10-33565-00578 |     | LED HIB;2mm x 5mm;GREEN                                       | [P0A0I:01: {4.0}(LD35, LD37, LD40, LD43)]                                            |       |
| 3 | 1.0000   | PC   | E10-39585-00580 |     | LED HIB;2mm x 5mm;YELLOW                                      | [P0A0I:01: {1.0}(LD32)]                                                              |       |
| 4 | 15.0000  | PC   | E10-53565-00588 |     | LED HIB;3mm ROUND;GREEN                                       | [P0A0I:01: {15.0}(LD25-LD28, LD30-LD31, LD33-LD34, LD38-LD39, LD41-LD42, LD44-LD46)] |       |
| 5 | 24.0000  | PC   | E10-59585-00592 |     | LED HIB;3mm ROUND;YELLOW                                      | [P0A0I:01: {24.0}(LD1-LD8, LD17-LD24, LD47-LD54)]                                    |       |
| 6 | 1.0000   | PC   | E12-37630-00579 |     | LED;2mm x 5mm;RD                                              | [P0A0I:01: {1.0}(LD29)]                                                              |       |
| 7 | 15.0000  | PC   | E12-57630-00590 |     | LED;3mm ROUND;RD                                              | [P0A0I:01: {15.0}(LD9-LD12, LD14-LD16, LD55-LD62)]                                   |       |

**Manual**

|   | Quantity | Unit | Item            | Rev | Description                                 | Reference Designators | Notes                     |
|---|----------|------|-----------------|-----|---------------------------------------------|-----------------------|---------------------------|
| 1 | 1.0000   | PC   | A56-00000-69282 |     | SERVICE INFORMATION SHEET;P0000;EN;REV:003  |                       |                           |
| 2 | 1.0000   | PC   | A54-00000-59486 |     | QUICK START GUIDE;P0A0I;ZH;REV:003          |                       | (CCC)                     |
| 3 | 1.0000   | PC   | A52-00000-42338 |     | WARRANTY CARD;P0000;EN;REV:001              |                       | (AR)                      |
| 4 | 1.0000   | PC   | A54-00000-59484 |     | QUICK START GUIDE;P0A0I;WW;REV:001          |                       | (EU, UL, UK, SAA, BR, AR) |
| 5 | 1.0000   | PC   | A54-00000-59488 |     | QUICK START GUIDE;P0A0I;JA;REV:004          |                       | (JP, HL, SH)              |
| 6 | 1.0000   | PC   | A52-00000-40142 |     | WARRANTY CARD;P0000;JA;DATE:01.07.2011;REVD |                       | (JP, HL, SH)              |

**Metal Part**

|   | Quantity | Unit | Item            | Rev | Description                                                                                   | Reference Designators       | Notes |
|---|----------|------|-----------------|-----|-----------------------------------------------------------------------------------------------|-----------------------------|-------|
| 1 | 1.0000   | PC   | A62-00000-50988 |     | METAL;P0A0I;SECC 1.0mm;CASE;STAMPING;GLOSS SEMI;SPRAY METALLIC;DARK GRAY;BOTTOM CABINET;REV:C |                             |       |
| 2 | 1.0000   | PC   | A62-02000-23975 |     | METAL;POWER BRACKET;UB2222FX-PRO;DWG.NO:23975;(R20-UB2222FX-POWER_BRACKET-REVE.DWG)           |                             |       |
| 3 | 1.0000   | PC   | A62-02000-27452 |     | METAL;POWER BRACKET COVER;UBSPSU;DWG.NO:27452;(R20-UB-POWER_BRACKET_COVER-REVB.DWG)           |                             |       |
| 4 | 2.0000   | PC   | A65-00000-24959 |     | METAL;P0274;SPCC 0.8mm;MOUNT;BENDING + PUNCHING;PLATING TIN;MOUNTING HELP;I00053P;REV:B       | [USBIO2CH:00: {2.0}(X1-X2)] |       |
| 5 | 2.0000   | PC   | A65-00100-07271 |     | METAL;RACKMOUNT;XENYX1222FX;DST.NO:001;DPT.N O:07271;(UB1222FX-RACKMOUNT-REVA.DWG)            |                             |       |
| 6 | 1.0000   | PC   | A65-23000-24593 |     | METAL CLIP;DSP2000;DWG.NO:24593;(R14-DSP2000-CLIP-REVC.DWG)                                   |                             |       |
| 7 | 1.0000   | PC   | J02-00000-33765 |     | METAL;P0A0I;TOP CABINET;STAMPING;SPRAYING;DARK GRAY METALLIC;A007                             |                             |       |

**Packaging Part**

|   | Quantity | Unit | Item            | Rev | Description                                                                  | Reference Designators | Notes |
|---|----------|------|-----------------|-----|------------------------------------------------------------------------------|-----------------------|-------|
| 1 | 1.0000   | PC   | G25-00200-14841 |     | POLYFOAM;P0A0H;RIGHT;DST.NO:002;DPT.NO:14841;(P0A0H-POLYFOAM_RIGHT-REVB.DWG) |                       |       |
| 2 | 1.0000   | PC   | G25-00200-14843 |     | POLYFOAM;P0A0H;DST.NO:002;DPT.NO:14843;(P0A0H-POLYFOAM_LEFT-REVB.DWG)        |                       |       |
| 3 | 1.0000   | PC   | G28-20090-14010 |     | PE BAG;SIZE:9in*14in;W/WARNING                                               |                       |       |
| 4 | 1.0000   | PC   | G28-20180-20019 |     | PE BAG;SIZE:18in*20in;09 PE;W/WARNING                                        |                       |       |
| 5 | 2.0000   | PC   | G28-60501-60019 |     | PE BAG;SIZE:5in*16in;09 PE;W/WARNING                                         |                       |       |
| 6 | 1.0000   | PC   | G32-00000-03966 |     | SHIPPING CARTON;P0000;V1000;SOP16(W) PACKAGE;FINISH-CHIP TEST                | [DPM6V:00: {1.0}]     |       |
| 7 | 0.2000   | PC   | I40-00000-36175 |     | MASTER CARTON;P0A0I;A002                                                     |                       |       |
| 8 | 1.0000   | PC   | I46-00000-36155 |     | GIFTBOX;P0A0I;A002                                                           |                       |       |

## Plastic Part

|    | Quantity | Unit | Item            | Rev | Description                                                                                     | Reference Designators | Notes |
|----|----------|------|-----------------|-----|-------------------------------------------------------------------------------------------------|-----------------------|-------|
| 1  | 4.0000   | PC   | G51-01200-01762 |     | RUBBER FOOT;STANDARD;SELF-ADHESIVE;COLOR:BLK;DWG.NO:01762                                       |                       |       |
| 2  | 7.0000   | PC   | G52-00200-08623 |     | KNOB;FADER;FAD30MMKNOB 1;BLACK;DST.NO:002;DPT.NO:08623;(FADERKNOBBLK1-REVB.DWG)                 |                       |       |
| 3  | 1.0000   | PC   | G52-00200-10210 |     | ENCODER KNOB;BLACK;DST.NO:002;DPT.NO:10210;(PMX-ENCODERKNOB-REVB.DWG)                           |                       |       |
| 4  | 8.0000   | PC   | G52-00200-11002 |     | KNOB;POT;(10);430C;CAP:BLACK;DST.NO:002;DPT.NO:11002;(PMX-POTKNOB(10)IN-REVB.DWG)               |                       |       |
| 5  | 10.0000  | PC   | G52-00200-11003 |     | KNOB;POT;(10);430C;CAP:WHITE;DST.NO:002;DPT.NO:11003;(PMX-POTKNOB(10)IN-REVB.DWG)               |                       |       |
| 6  | 8.0000   | PC   | G52-00200-11096 |     | KNOB;FADER;SMALL;BLACK;WHITE LINE;DWG.NO:30924;(FADER-KNOB-SMALL-01-REVB.DWG)                   |                       |       |
| 7  | 2.0000   | PC   | G52-00200-11108 |     | KNOB;FADER;SMALL;430C;WHITE LINE;DST.NO:001;DPT.NO:11108;(FADER-KNOB-SMALL-01-REVB.DWG)         |                       |       |
| 8  | 1.0000   | PC   | G52-00200-12087 |     | KNOB;FADER;SMALL;432C;WHITE LINE;DST.NO:2;DPT.NO:12087;(FADER-KNOB-SMALL-01-REVB.DWG)           |                       |       |
| 9  | 8.0000   | PC   | G52-00200-12257 |     | KNOB;POTENTIOMETER;(10);430C;CAP:194C;DST.NO:002;DPT.NO:12257;(PMX-POTKNOB(10)IN-REVB.DWG)      |                       |       |
| 10 | 24.0000  | PC   | G52-00200-12258 |     | KNOB;POTENTIOMETER;(10);430C;CAP:289C;DST.NO:002;DPT.NO:12258;(PMX-POTKNOB(10)IN-REVB.DWG)      |                       |       |
| 11 | 10.0000  | PC   | G52-00200-12259 |     | KNOB;POTENTIOMETER;(10);430C;CAP:151U;DST.NO:002;DPT.NO:12259;(PMX-POTKNOB(10)IN-REVB.DWG)      |                       |       |
| 12 | 4.0000   | PC   | G52-00200-12269 |     | PLASTIC;SWITCH KNOB;I00341P;PANTONE 430C;DST.NO:002;DPT.NO:12269;(I00341P-SWITCH_KNOB-REVB.DWG) |                       |       |
| 13 | 1.0000   | PC   | G52-00200-12270 |     | KNOB;FADER;SMALL;194C;WHITE LINE;DST.NO:2;DPT.NO:12270;(FADER-KNOB-SMALL-01-REVB.DWG)           |                       |       |
| 14 | 1.0000   | PC   | G52-00200-12287 |     | KNOB;FADER;SMALL;01;151U;WHITE LINE;DST.NO:2;DPT.NO:12287;(FADER-KNOB-SMALL-01-REVB.DWG)        |                       |       |
| 15 | 4.0000   | PC   | G52-00200-15614 |     | KNOB;POTENTIOMETER;(10);430C;CAP:3025C;DST.NO:002;DPT.NO:15614;(PMX-POTKNOB(10)IN-REVB.DWG)     |                       |       |
| 16 | 6.0000   | PC   | G52-00500-11000 |     | KNOB;SWITCH;UB-S;430C;DST.NO:005;DPT.NO:11000;(UB-S_SWKNOB-REVE.DWG)                            |                       |       |
| 17 | 1.0000   | PC   | G52-00500-12260 |     | KNOB;SWITCH;UB-S;194C;DST.NO:005;DPT.NO:12260;(R20-UB-S_SWKNOB-REVE.DWG)                        |                       |       |

|    | Quantity | Unit | Item            | Rev | Description                                                                                                     | Reference Designators | Notes |
|----|----------|------|-----------------|-----|-----------------------------------------------------------------------------------------------------------------|-----------------------|-------|
| 18 | 11.0000  | PC   | G52-80508-23627 |     | KNOB;SWITCH;UB-L;7mm4;BLACK;DWG.NO:23627(R20-UB-L_SWKNOB-REVB.DWG)                                              |                       |       |
| 19 | 1.0000   | PC   | G53-00000-63999 |     | PLASTIC;P0000;PP (POLYPROPYLENE);HANDLE;BLACK                                                                   |                       |       |
| 20 | 1.0000   | PC   | G53-00000-64000 |     | PLASTIC;P0000;PP (POLYPROPYLENE);BASE;BLACK;HANDLE BASE                                                         |                       |       |
| 21 | 55.0000  | PC   | G53-00200-11127 |     | PLASTIC;SPACER;MOULDING;BLACK;LENGTH:11MM;DS T.NO:002;DPT.NO:11127;(R20-ACCESSORY-LEDSPACER-REVB.DWG)           | [P0A0I:01: {55.0}]    |       |
| 22 | 1.0000   | PC   | G56-00000-46260 |     | PLASTIC;P0A0I;ABS;SIDE;MOULDING;GLOSS HIGH;PAINTING NORMAL;SILVER METALLIC;SIDE PANEL;RIGHT;SILVER;PAINT NORMAL |                       |       |
| 23 | 1.0000   | PC   | G56-00000-46261 |     | PLASTIC;P0A0I;ABS;SIDE;MOULDING;GLOSS HIGH;PAINTING NORMAL;SILVER METALLIC;SIDE PANEL;LEFT;SILVER;PAINT NORMAL  |                       |       |
| 24 | 1.0000   | PC   | G58-00100-03794 |     | SWITCH FRAME S;430C;PMH;DST.NO:001;DPT.NO:03794;(PMX-SWFRAME_S-REVA.DWG)                                        |                       |       |
| 25 | 1.0000   | PC   | G58-00100-08381 |     | PLASTIC;SHEET;P0554;PET;BLACK;DST.NO:001;DPT.NO:8381;(XENYX124FX-PET-SHEET-REVA.DWG)                            |                       |       |
| 26 | 1.0000   | PC   | G58-00100-14849 |     | PLASTIC HOLDER;7 SEGMENT,XENYX FX-SERIES;DST.NO:001;DPT.NO:14849;(I00513P-7 SEGMENT_HOLDER-REVA.DWG)            | [P0A0I:01: {1.0}]     |       |
| 27 | 1.0000   | PC   | I64-00000-32653 |     | PLASTIC;P0559;PMMA;TRANSPARENT;LED WINDOW;XENYX FX;DPM5;A003                                                    |                       |       |

## Plug Socket

|    | Quantity | Unit | Item            | Rev | Description                                                                                         | Reference Designators           | Notes |
|----|----------|------|-----------------|-----|-----------------------------------------------------------------------------------------------------|---------------------------------|-------|
| 1  | 1.0000   | PC   | G61-65224-03293 |     | BOX HEADER;POLES:24;2 ROW;STRAIGHT;PITCH:2mm54;SCM-24S                                              | [P0A0l:01: {1.0}(X43)]          |       |
| 2  | 1.0000   | PC   | G61-75224-05413 |     | CABLE HEADER;POLES:24;2 ROW;IDE;STRAIGHT;PITCH:2mm54;FC-24P                                         | [P0A0l:02: {1.0}]               |       |
| 3  | 1.0000   | PC   | G61-85224-08163 |     | TRANSITION PLUG;FLAT CABLE;POLES:24;ROWS:2;STRAIGHT;PITCH:2mm54;BLACK;FD-24P                        | [P0A0l:02: {1.0}]               |       |
| 4  | 23.0000  | PC   | G64-01211-03174 |     | PLUG;JACK STEREO 6mm3;STRAIGHT SOLDER;W/O MET.RNG.;MET.BUSH.;NO NUT/WASHER;(JY-6351G-02-250)        | [P0A0l:02: {23.0}(X1, X12-X33)] |       |
| 5  | 1.0000   | PC   | G64-16212-00005 |     | PLUG;PCB;PLUG;JACK STEREO 6mm3;STRAIGHTPCB LUGS;NO NUT/WASHER;METAL BUSHING;(CHUNSHENG PJ-632HA)    | [P0A0l:02: {1.0}(X11)]          |       |
| 6  | 1.0000   | PC   | G67-40103-01810 |     | SOCKET;AC;SCREW MOUNT;FUSED;UL94V-0;10A/250VAC;FOR AMP CONN;COLOR:BLK;POLES:03;(JACKSON JR-101-1FS) |                                 |       |
| 7  | 1.0000   | PC   | G68-04004-03284 |     | PLUG;RCA;SOCKET;RCAJACK4P/S;FEMALE;POLES:04;STRAIGHT                                                | [P0A0l:02: {1.0}(X2)]           |       |
| 8  | 1.0000   | PC   | G71-00000-03961 |     | WAFER;V1000-14B,0.35um;LOGIC-3.3V(1P4M)                                                             | [DPM6V:00: {1.0}]               |       |
| 9  | 1.0000   | PC   | G71-15224-24042 |     | PIN HEADER;POLES:24;STRAIGHT;PITCH:2.54 mm;2 ROWS;1002-24-5                                         | [DPM6V:00: {1.0}(X1)]           |       |
| 10 | 2.0000   | PC   | G71-23102-04756 |     | WAFER;POLES:2;STRAIGHT;PITCH:2 mm;1 ROW;TYPE:A2006WV-2P                                             | [P0794:00: {2.0}(X2, X4)]       |       |
| 11 | 1.0000   | PC   | G71-23106-04965 |     | WAFER;POLES:6;STRAIGHT;PITCH:2 mm;1 ROW;TYPE:A2006WV-6P                                             | [P0A0l:01: {1.0}(X45)]          |       |
| 12 | 1.0000   | PC   | G71-23109-04748 |     | WAFER;POLES:9;STRAIGHT;PITCH:2 mm;1 ROW;TYPE:A2006WV-9P                                             | [P0A0l:01: {1.0}(X47)]          |       |
| 13 | 1.0000   | PC   | G71-23110-04749 |     | WAFER;POLES:10;STRAIGHT;PITCH:2 mm;1 ROW;TYPE:A2006WV-10P                                           | [P0A0l:02: {1.0}(X40)]          |       |
| 14 | 2.0000   | PC   | G71-23114-04753 |     | WAFER;POLES:14;STRAIGHT;PITCH:2 mm;1 ROW;TYPE:A2006WV-14P                                           | [P0A0l:02: {2.0}(X38-X39)]      |       |
| 15 | 1.0000   | PC   | G71-35224-03073 |     | PLUG;PCB;PLUG;PCB SOCKET;POLES:24;2 ROWS;STRAIGHT;PITCH:2mm54;2801-24GS                             | [P0A0l:01: {1.0}(X34)]          |       |
| 16 | 1.0000   | PC   | G71-43102-05994 |     | PLUG;HOUSING;POLES:2;ROWS:1;STRAIGHT;PITCH:2mm;TYP:A2008                                            |                                 |       |
| 17 | 1.0000   | PC   | G71-43106-05998 |     | PLUG;HOUSING;POLES:6;ROWS:1;STRAIGHT;PITCH:2mm;TYP:A2008                                            |                                 |       |
| 18 | 1.0000   | PC   | G71-43109-06001 |     | PLUG;HOUSING;POLES:9;ROWS:1;STRAIGHT;PITCH:2mm;TYP:A2008                                            |                                 |       |
| 19 | 1.0000   | PC   | G71-43110-06002 |     | PLUG;HOUSING;POLES:10;ROWS:1;STRAIGHT;PITCH:2mm;TYP:A2008                                           | [P0A0l:01: {1.0}]               |       |
| 20 | 2.0000   | PC   | G71-43114-06006 |     | PLUG;HOUSING;POLES:14;ROWS:1;STRAIGHT;PITCH:2mm;TYP:A2008                                           | [P0A0l:01: {2x1.0}]             |       |

|    | Quantity | Unit | Item            | Rev | Description                                            | Reference Designators                      | Notes |
|----|----------|------|-----------------|-----|--------------------------------------------------------|--------------------------------------------|-------|
| 21 | 53.0000  | PC   | G71-80000-05663 |     | BD.-IN-CONN;TERMINAL;SAN-002T-0.8A                     | [P0A0I:01: {2x14.0}]<br>[P0A0I:01: {10.0}] |       |
| 22 | 1.0000   | PC   | G71-83106-05650 |     | BOARD-IN-CONNECTOR;POLES:6;ROWS:1;STRAIGHT;PITCH:2 mm  |                                            |       |
| 23 | 1.0000   | PC   | G71-83109-05817 |     | BOARD-IN-CONNECTOR;POLES:9;ROWS:1;STRAIGHT;PITCH:2 mm  |                                            |       |
| 24 | 1.0000   | PC   | G71-83110-05654 |     | BOARD-IN-CONNECTOR;POLES:10;ROWS:1;STRAIGHT;PITCH:2 mm | [P0A0I:01: {1.0}]                          |       |
| 25 | 2.0000   | PC   | G71-83114-05658 |     | BOARD-IN-CONNECTOR;POLES:14;ROWS:1;STRAIGHT;PITCH:2 mm | [P0A0I:01: {2x1.0}]                        |       |

### Power Supply

|   | Quantity | Unit | Item            | Rev | Description                                                                          | Reference Designators | Notes |
|---|----------|------|-----------------|-----|--------------------------------------------------------------------------------------|-----------------------|-------|
| 1 | 1.0000   | PC   | J63-09390-24046 |     | TRANSFORMER;SPSU;40 WATT;UB-SERIES;DWG:24046                                         | [P0794:00: {1.0}]     |       |
| 2 | 1.0000   | PC   | J69-00000-52510 |     | TRAFO;SWITCH MODE;P0AL3;UNIVERSAL 100 TO 240;COMMON;590uH;DA XIN PN:KB1332-15304     | [P0794:00: {1.0}]     |       |
| 3 | 1.0000   | PC   | J69-00000-52512 |     | TRAFO;SWITCH MODE;P0AL3;UNIVERSAL 100 TO 240;COMMON;590uH;SUPERWORLD PN:R17-19-01214 | [P0794:00: {1.0}]     |       |

### Quarz

|   | Quantity | Unit | Item            | Rev | Description                               | Reference Designators    | Notes |
|---|----------|------|-----------------|-----|-------------------------------------------|--------------------------|-------|
| 1 | 1.0000   | PC   | H65-40471-00000 |     | QUARZ;RESONATOR;10MHz;HC49/S;FUNDAMENTAL  | [DPM6V:00: {1.0}{Q1}]    |       |
| 2 | 1.0000   | PC   | H65-40471-20000 |     | QUARZ;RESONATOR;12MHz;HC49/4H FUNDAMENTAL | [USBIO2CH:00: {1.0}{Q1}] |       |

### Raw Material

|   | Quantity | Unit | Item            | Rev | Description                                        | Reference Designators | Notes |
|---|----------|------|-----------------|-----|----------------------------------------------------|-----------------------|-------|
| 1 | 0.3800   | M    | E40-11750-05469 |     | TAPE;UL;3M 33+;COLOR:BLK;WIDTH:0in75;SPEC.NO:05469 |                       |       |
| 2 | 84.0000  | MM   | E40-19045-03749 |     | TAPE;INSULATION;PZ-280;COLOR:YE;WIDTH:45mm         |                       |       |
| 3 | 22.6600  | G    | E41-50088-50456 |     | HOTMELT;ZL;HS-88A                                  |                       |       |
| 4 | 0.4000   | G    | E41-60116-04068 |     | GLUE;SUN-DA;SILCONE;SW-116-A                       | [P0794:00: {0.4}]     |       |
| 5 | 8.5220   | G    | E41-60268-50457 |     | GLUE;SUNYES;820                                    |                       |       |

**Fader**

|   | Quantity | Unit | Item            | Rev | Description                                                                                        | Reference Designators                              | Notes |
|---|----------|------|-----------------|-----|----------------------------------------------------------------------------------------------------|----------------------------------------------------|-------|
| 1 | 8.0000   | PC   | I00-73441-02013 |     | FADER;60mm;10Kohm;TAPER:D;MONO;W/O CC;LEVER:4mm*15mm;W/ THREADS M2;(SOUNDWELL SA6005NGA1B-HA1-007) | [P0A0I:01: {8.0}(VR72-VR75, VR80-VR81, VR83-VR84)] |       |
| 2 | 5.0000   | PC   | I00-74451-02012 |     | FADER;60mm;10Kohm;TAPER:D;STEREO;W/O CC;LEVER LENGTH 15mm;(SOUNDWELL SA6005GOA0B-HA1-005)          | [P0A0I:01: {5.0}(VR76-VR79, VR82)]                 |       |
| 3 | 7.0000   | PC   | I00-92951-02422 |     | FADER;30mm;100Kohm;TAPER:W;STEREO;W/CC;(POLYS HINE F-3092E+C+E-W100K1-L9.5(J));RED LED             | [P0A0I:01: {7.0}(VR21-VR27)]                       |       |

**Potentiometer**

|   | Quantity | Unit | Item            | Rev | Description                                                                                                          | Reference Designators                               | Notes |
|---|----------|------|-----------------|-----|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-------|
| 1 | 4.0000   | PC   | I03-00000-03788 |     | POTENTIOMETER;50 kohm;B;20 %;STEREO;NOBLE(XV012323YGPV30F1B50K/I) SHAFT 30MM                                         | [P0A0I:01: {4.0}(VR9-VR12)]                         |       |
| 2 | 12.0000  | PC   | I03-61245-06649 |     | POTENTIOMETER;50Kohm;TAPER:1B;MONO;SHAFT:30M M;W/ CC;20-100gf;NORMAL TORQUE;(NOBLE XV09213YNPV30F1B50KCC)            | [P0A0I:01: {12.0}(VR13-VR16, VR28-VR31, VR36-VR39)] |       |
| 3 | 17.0000  | PC   | I03-61245-06653 |     | POTENTIOMETER;50Kohm;TAPER:3B;MONO;SHAFT:30M M;W/ CC;20-100gf;NORMAL TORQUE;(NOBLE XV09213YNPV30F3B50KCC)            | [P0A0I:01: {17.0}(VR44-VR51, VR53-VR60, VR69)]      |       |
| 4 | 12.0000  | PC   | I03-62245-06643 |     | POTENTIOMETER;50Kohm;TAPER:1B;STEREO;W/CC;20-100gf;NORMAL TORQUE;(NOBLE XV012313YGPV30F1B50KCC)                      | [P0A0I:01: {12.0}(VR17-VR20, VR32-VR35, VR40-VR43)] |       |
| 5 | 5.0000   | PC   | I03-62245-06645 |     | POTENTIOMETER;50Kohm;TAPER:3B;STEREO;SHAFT:30 MM;W/CC;20-100gf;NORMAL TORQUE;(NOBLE XV012313YGPV30F3B50KCC)          | [P0A0I:01: {5.0}(VR5-VR8, VR70)]                    |       |
| 6 | 8.0000   | PC   | I03-62741-06642 |     | POTENTIOMETER;10Kohm 10Kohm;TAPERA/C;STEREO;SHAFT:30MM;W/ CC;20-100gf;NORMAL TORQUE;(NOBLE XV012313YGPV30F15AC10KCC) | [P0A0I:01: {8.0}(VR61-VR68)]                        |       |
| 7 | 1.0000   | PC   | I03-63131-06651 |     | POTENTIOMETER;1Kohm;TAPER:15A;MONO;SHAFT:30M M;WO/ CC;20-100gf;NORMAL TORQUE;(NOBLE XV09213YNPV30F15A1K)             | [P0A0I:01: {1.0}(VR52)]                             |       |
| 8 | 4.0000   | PC   | I03-63335-06650 |     | POTENTIOMETER;5Kohm;TAPER:C05;MONO;SHAFT:30M M;WO/ CC;20-100gf;NORMAL TORQUE;(NOBLE XV09213YNPV30F05C5K)             | [P0A0I:01: {4.0}(VR1-VR4)]                          |       |
| 9 | 1.0000   | PC   | I03-64245-06647 |     | POTENTIOMETER;50Kohm;TAPER:3B;STEREO;SHAFT:30 MM;W/O CC;20-100gf;NORMAL TORQUE;(NOBLE XV012313YGPV30F3B50K)          | [P0A0I:01: {1.0}(VR71)]                             |       |

**Encoder**

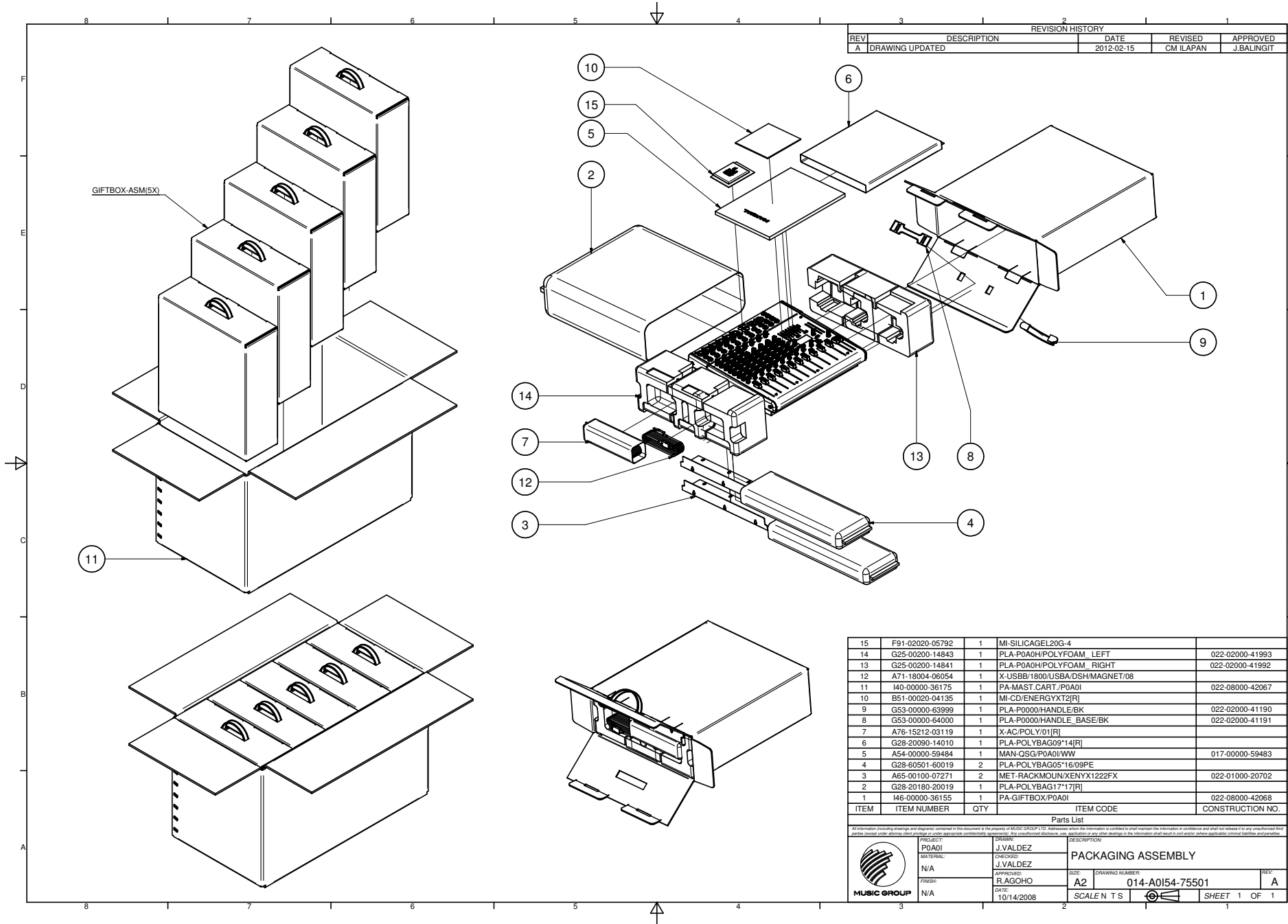
|   | Quantity | Unit | Item            | Rev | Description                                                                                          | Reference Designators  | Notes |
|---|----------|------|-----------------|-----|------------------------------------------------------------------------------------------------------|------------------------|-------|
| 1 | 1.0000   | PC   | I32-92430-02704 |     | ENCODER;12mm;DETENTS:24;PULSES:24;30mm;W/SWITCH;NO NUT/WASHER;(POLYSHINE F-12ES5H24B-P+C L30FX12(O)) | [P0A0I:01: {1.0}(SW8)] |       |

**Switch**

|   | Quantity | Unit | Item            | Rev | Description                                                                                                | Reference Designators                                        | Notes |
|---|----------|------|-----------------|-----|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-------|
| 1 | 14.0000  | PC   | I77-03422-02778 |     | SWITCH;RADIAL;2P2T;PCB<br>VERSION;LOCKING;NONSHORT;RAD2P                                                   | [P0A0I:01: {14.0}(SW1-SW5, SW9, SW11, SW13-SW16, SW21-SW23)] |       |
| 2 | 7.0000   | PC   | I77-03442-02780 |     | SWITCH;RADIAL;4P2T;PCB<br>VERSION;LOCKING;NONSHORT;RAD4P                                                   | [P0A0I:01: {7.0}(SW6-SW7, SW12, SW17-SW20)]                  |       |
| 3 | 1.0000   | PC   | I77-03822-02779 |     | SWITCH;RADIAL;2P2T;PCB<br>VERSION;NONLOCK;NONSHORT;RAD2P/NON                                               | [P0A0I:01: {1.0}(SW10)]                                      |       |
| 4 | 1.0000   | PC   | I84-02211-00140 |     | SWITCH;ROCKER;1P1T;WHITE LINE MARKING<br>RADIAL;LOCKING;NONSHORT;APPROVAL:<br>UL94V0;(SOLTEAM MR22-FBBB-F2 |                                                              |       |
| 5 | 1.0000   | PC   | I84-02211-04984 |     | SWITCH;ROCKER;POLES:1;TOGGLES:1;LOCKING;NONSHORT;SOLDER LUG;(CANAL:MR111-CVN-BBNW)                         |                                                              |       |

## Transistor

|    | Quantity | Unit | Item            | Rev | Description                                    | Reference Designators                                                                      | Notes |
|----|----------|------|-----------------|-----|------------------------------------------------|--------------------------------------------------------------------------------------------|-------|
| 1  | 8.0000   | PC   | J70-00000-35786 |     | TRANSISTOR;TO92_TAPE;PITCH:2.54;3;2SA970GR-TR  | [P0A0I:02: {8.0}]                                                                          |       |
| 2  | 2.0000   | PC   | J70-03023-90703 |     | TRANSISTOR;BD239C;TO220                        | [P0794:00: {1.0}(T3)]<br><b>T1]</b>                                                        |       |
| 3  | 1.0000   | PC   | J70-03024-00703 |     | TRANSISTOR;BD240C;TO220                        | T2]                                                                                        |       |
| 4  | 8.0000   | PC   | J70-13097-00803 |     | TRANSISTOR;2SA970-GR;TAPING;P:2.54MM;TO92      | [P0A0I:02: {8.0}(T1-T8)]                                                                   |       |
| 5  | 8.0000   | PC   | J73-00000-27783 |     | TRANSISTOR;SOT;3;MBTA06;BRAND:NXP AND INFINEON | [P0A0I:02: {8.0}(T10-T17)]                                                                 |       |
| 6  | 41.0000  | PC   | J73-02084-61703 |     | TRANSISTOR;BC846B;SOT;SMD                      | [P0A0I:01: {39.0}(T18-T21, T24-T35, T37-T43, T59-T74)]<br><b>[P0794:00: {2.0}(T4, T6)]</b> |       |
| 7  | 2.0000   | PC   | J73-02085-61703 |     | TRANSISTOR;BC856B;SOT;SMD                      | [P0A0I:01: {1.0}(T22)]<br><b>[P0794:00: {1.0}(T5)]</b>                                     |       |
| 8  | 1.0000   | PC   | J73-07005-60803 |     | TRANSISTOR;MPSA56;TO92;TAPING                  | [P0A0I:01: {1.0}(T9)]                                                                      |       |
| 9  | 14.0000  | PC   | J73-08005-61703 |     | TRANSISTOR;MBTA56;SOT                          | [P0A0I:01: {14.0}(T23, T36, T48-T58, T75)]                                                 |       |
| 10 | 4.0000   | PC   | J73-58220-88603 |     | TRANSISTOR;2SK208;TO-236MOD;SMD                | [P0A0I:01: {4.0}(T44-T47)]                                                                 |       |

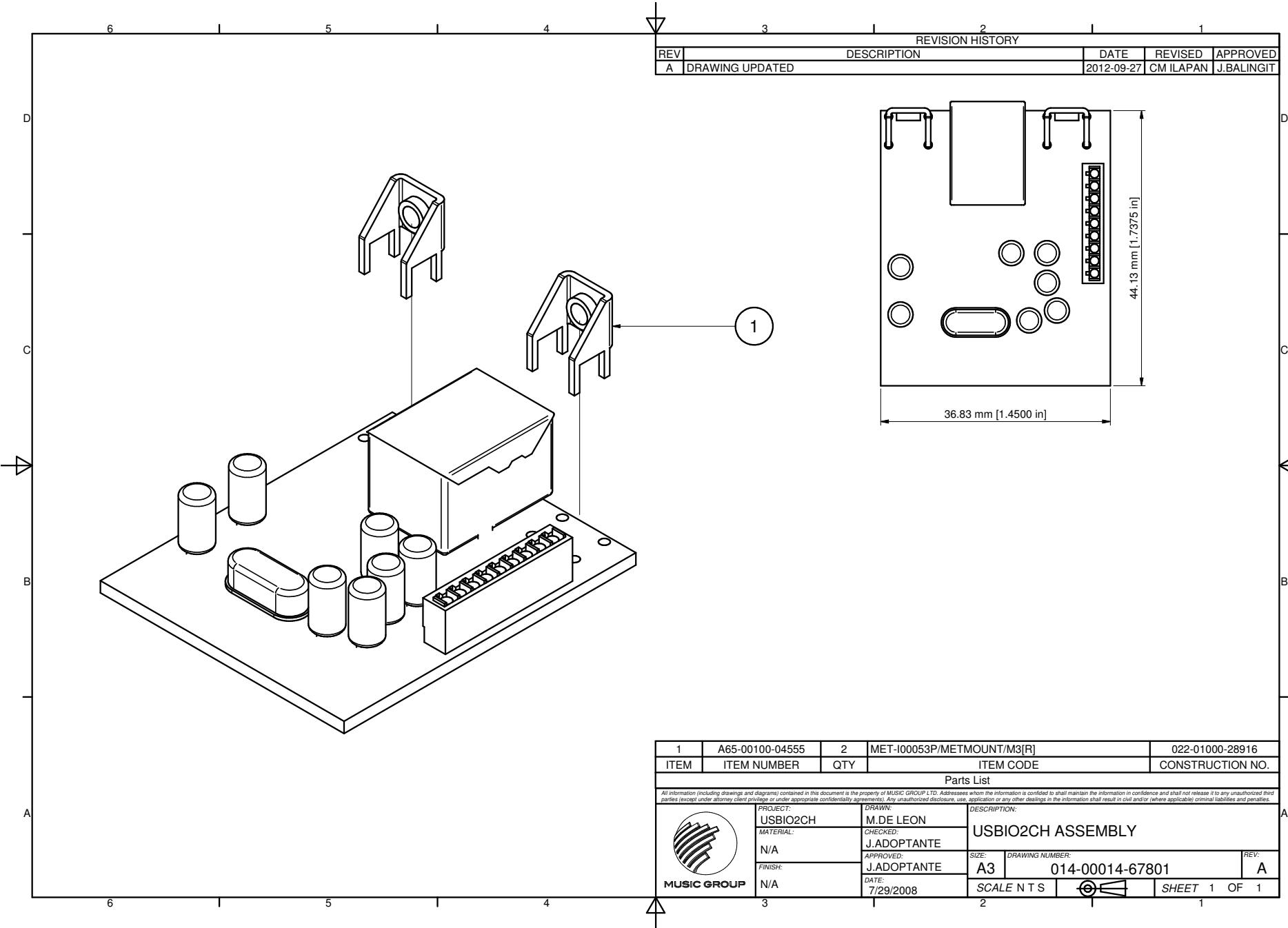


| REV | DESCRIPTION     | DATE       | REVISED   | APPROVED   |
|-----|-----------------|------------|-----------|------------|
| A   | DRAWING UPDATED | 2012-02-15 | CM ILAPAN | J.BALINGIT |

| ITEM | ITEM NUMBER     | QTY | ITEM CODE                     | CONSTRUCTION NO. |
|------|-----------------|-----|-------------------------------|------------------|
| 15   | F91-02020-05792 | 1   | MI-SILICAGEL20G-4             |                  |
| 14   | G25-00200-14843 | 1   | PLA-P0A0H/POLYFOAM_LEFT       | 022-02000-41993  |
| 13   | G25-00200-14841 | 1   | PLA-P0A0H/POLYFOAM_RIGHT      | 022-02000-41992  |
| 12   | A71-18004-06054 | 1   | X-USB/1800/USBA/DSH/MAGNET/08 |                  |
| 11   | I40-00000-36175 | 1   | PA-MAST.CART./P0A0I           | 022-08000-42067  |
| 10   | B51-00020-04135 | 1   | MI-CD/ENERGYXT2[R]            |                  |
| 9    | G53-00000-63999 | 1   | PLA-P0000/HANDLE/BK           | 022-02000-41190  |
| 8    | G53-00000-64000 | 1   | PLA-P0000/HANDLE_BASE/BK      | 022-02000-41191  |
| 7    | A76-15212-03119 | 1   | X-AC/POLY/01[R]               |                  |
| 6    | G28-20090-14010 | 1   | PLA-POLYBAG09*14[R]           |                  |
| 5    | A54-00000-59484 | 1   | MAN-QSG/P0A0I/WW              | 017-00000-59483  |
| 4    | G28-60501-60019 | 2   | PLA-POLYBAG05*16/09PE         |                  |
| 3    | A65-00100-07271 | 2   | MET-RACKMOUN/XENYX1222FX      | 022-01000-20702  |
| 2    | G28-20180-20019 | 1   | PLA-POLYBAG17*17[R]           |                  |
| 1    | I46-00000-36155 | 1   | PA-GIFTBOX/P0A0I              | 022-08000-42068  |

| ITEM | ITEM NUMBER     | QTY | ITEM CODE                     | CONSTRUCTION NO. |
|------|-----------------|-----|-------------------------------|------------------|
| 15   | F91-02020-05792 | 1   | MI-SILICAGEL20G-4             |                  |
| 14   | G25-00200-14843 | 1   | PLA-P0A0H/POLYFOAM_LEFT       | 022-02000-41993  |
| 13   | G25-00200-14841 | 1   | PLA-P0A0H/POLYFOAM_RIGHT      | 022-02000-41992  |
| 12   | A71-18004-06054 | 1   | X-USB/1800/USBA/DSH/MAGNET/08 |                  |
| 11   | I40-00000-36175 | 1   | PA-MAST.CART./P0A0I           | 022-08000-42067  |
| 10   | B51-00020-04135 | 1   | MI-CD/ENERGYXT2[R]            |                  |
| 9    | G53-00000-63999 | 1   | PLA-P0000/HANDLE/BK           | 022-02000-41190  |
| 8    | G53-00000-64000 | 1   | PLA-P0000/HANDLE_BASE/BK      | 022-02000-41191  |
| 7    | A76-15212-03119 | 1   | X-AC/POLY/01[R]               |                  |
| 6    | G28-20090-14010 | 1   | PLA-POLYBAG09*14[R]           |                  |
| 5    | A54-00000-59484 | 1   | MAN-QSG/P0A0I/WW              | 017-00000-59483  |
| 4    | G28-60501-60019 | 2   | PLA-POLYBAG05*16/09PE         |                  |
| 3    | A65-00100-07271 | 2   | MET-RACKMOUN/XENYX1222FX      | 022-01000-20702  |
| 2    | G28-20180-20019 | 1   | PLA-POLYBAG17*17[R]           |                  |
| 1    | I46-00000-36155 | 1   | PA-GIFTBOX/P0A0I              | 022-08000-42068  |

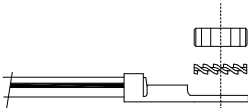
| ITEM | ITEM NUMBER     | QTY | ITEM CODE                     | CONSTRUCTION NO. |
|------|-----------------|-----|-------------------------------|------------------|
| 15   | F91-02020-05792 | 1   | MI-SILICAGEL20G-4             |                  |
| 14   | G25-00200-14843 | 1   | PLA-P0A0H/POLYFOAM_LEFT       | 022-02000-41993  |
| 13   | G25-00200-14841 | 1   | PLA-P0A0H/POLYFOAM_RIGHT      | 022-02000-41992  |
| 12   | A71-18004-06054 | 1   | X-USB/1800/USBA/DSH/MAGNET/08 |                  |
| 11   | I40-00000-36175 | 1   | PA-MAST.CART./P0A0I           | 022-08000-42067  |
| 10   | B51-00020-04135 | 1   | MI-CD/ENERGYXT2[R]            |                  |
| 9    | G53-00000-63999 | 1   | PLA-P0000/HANDLE/BK           | 022-02000-41190  |
| 8    | G53-00000-64000 | 1   | PLA-P0000/HANDLE_BASE/BK      | 022-02000-41191  |
| 7    | A76-15212-03119 | 1   | X-AC/POLY/01[R]               |                  |
| 6    | G28-20090-14010 | 1   | PLA-POLYBAG09*14[R]           |                  |
| 5    | A54-00000-59484 | 1   | MAN-QSG/P0A0I/WW              | 017-00000-59483  |
| 4    | G28-60501-60019 | 2   | PLA-POLYBAG05*16/09PE         |                  |
| 3    | A65-00100-07271 | 2   | MET-RACKMOUN/XENYX1222FX      | 022-01000-20702  |
| 2    | G28-20180-20019 | 1   | PLA-POLYBAG17*17[R]           |                  |
| 1    | I46-00000-36155 | 1   | PA-GIFTBOX/P0A0I              | 022-08000-42068  |



C

option: only for projects with PE-cable to PCB !

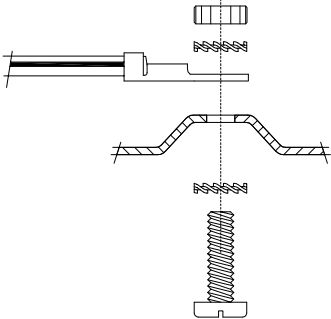
ASSEMBLED CABLE  
(Yellow/Green) to PCB



HEX NUT SC-NUHEXM04  
WASHER TEETH EXTERNAL SC-WATEEXT4×7×1.7  
ASSEMBLED CABLE WITH LUG 4.3mm WI-00/07/xxxx/07/05/00/18/34/00

B C D

ASSEMBLED CABLE  
(Yellow/Green) to Power Conn.



HEX NUT SC-NUHEXM04  
WASHER TEETH EXTERNAL SC-WATEEXT4×7×1.7  
ASSEMBLED CABLE WITH LUG 4.3mm WI-00/07/xxxx/07/05/00/18/34/00

B C D

METAL CASE

WASHER TEETH EXTERNAL SC-WATEEXT4×7×1.7

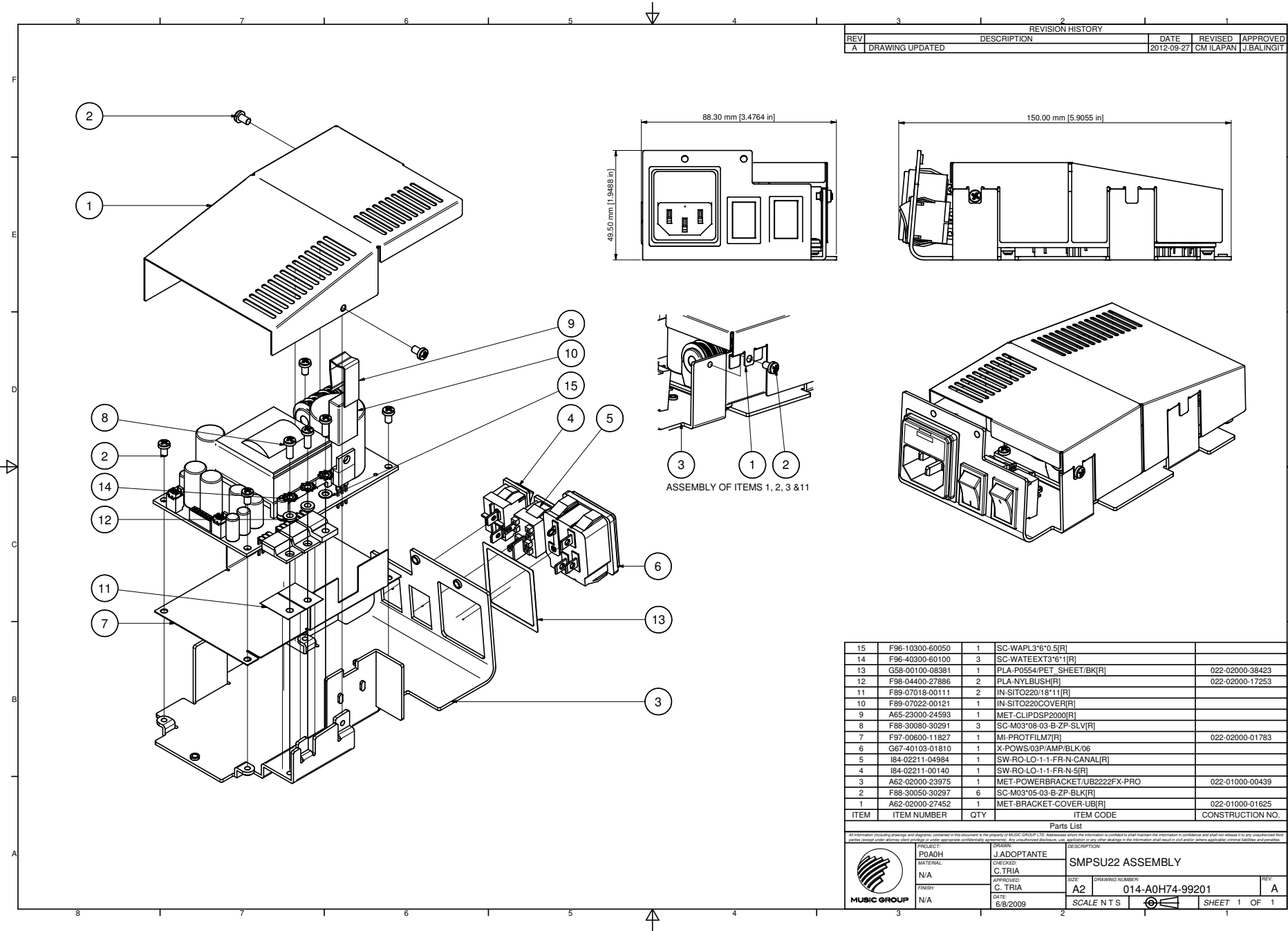
B C D

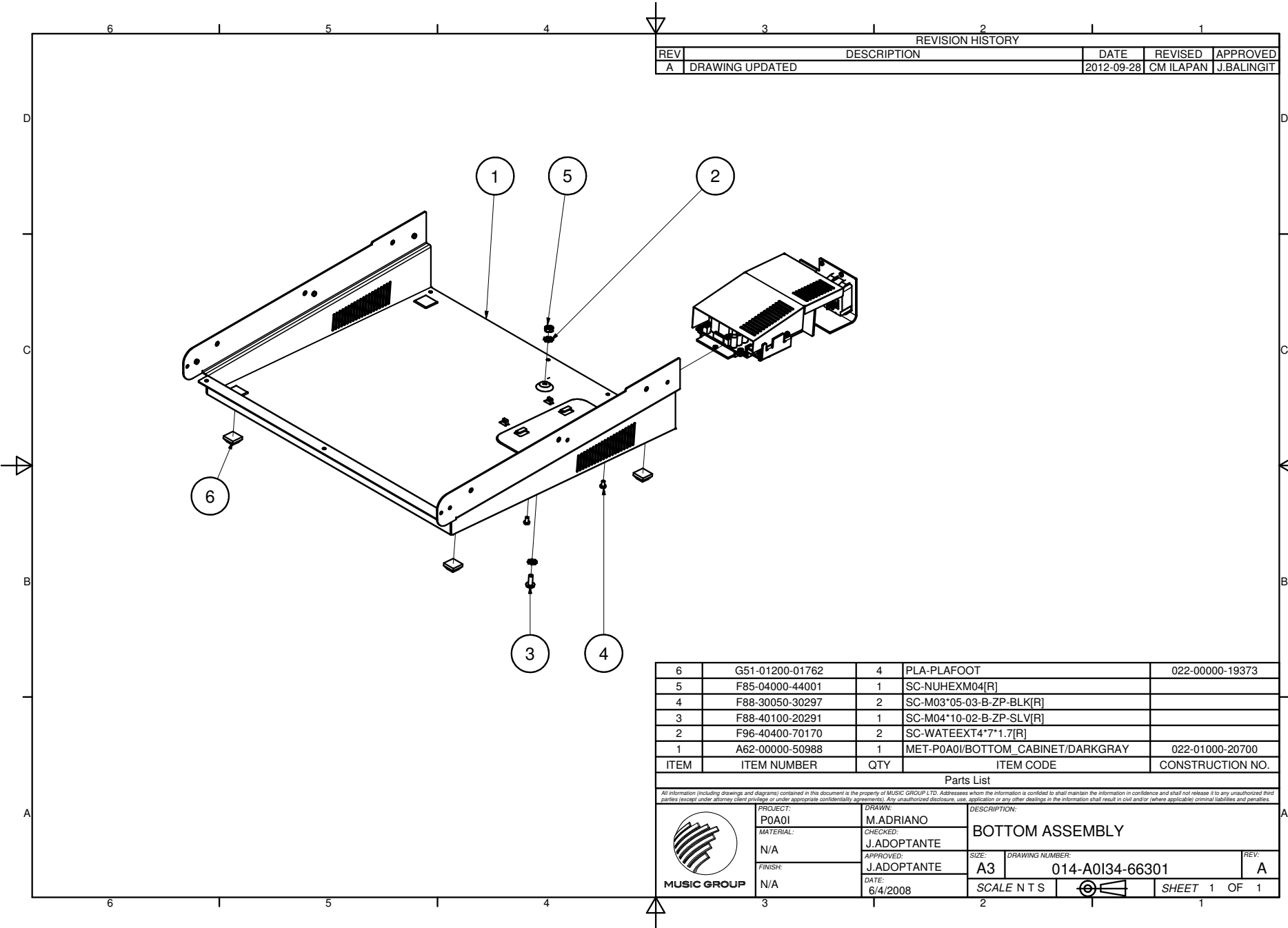
SCREW SC-M04×16-02-B-ZP-SLV  
(standard length, can be variable if required)

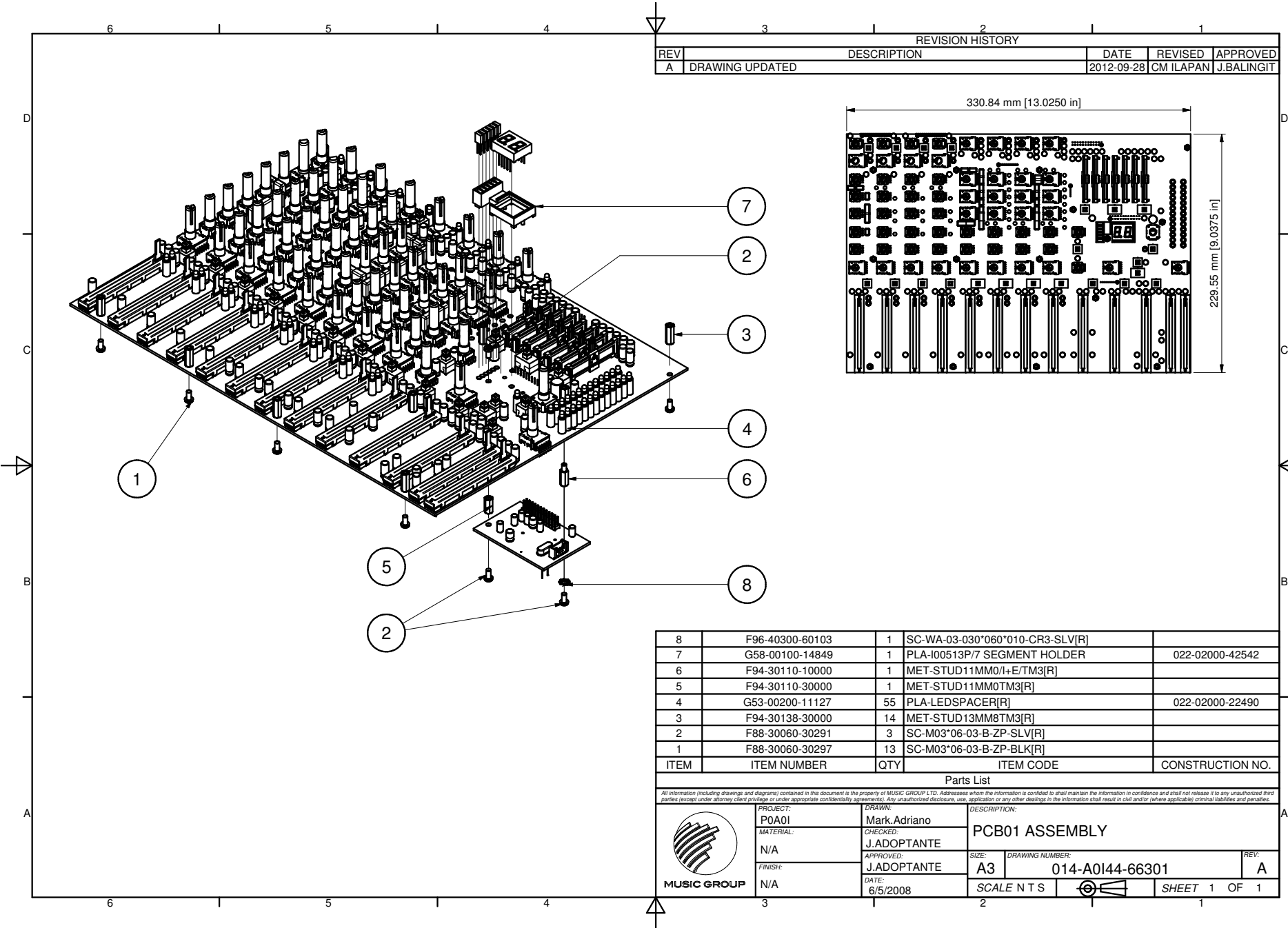
B C D

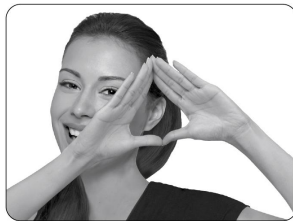
| Part:                              |  |  |  | Name          |                                | Date                  | Project: |   |
|------------------------------------|--|--|--|---------------|--------------------------------|-----------------------|----------|---|
| ASSEMBLE DRAWING                   |  |  |  | Drawn         | PEUSE                          | 08.01.1996            |          |   |
|                                    |  |  |  | File          | R14-ASSEMBLE-PE-SCREW-REVD.DWG |                       |          |   |
| Drawing-No.: X                     |  |  |  | Part-No.:     |                                |                       |          |   |
|                                    |  |  |  | Color of Part |                                |                       |          |   |
|                                    |  |  |  | Printing      |                                |                       |          |   |
|                                    |  |  |  | Surface       |                                |                       |          |   |
| D changed from M3 to M4            |  |  |  | Scale         |                                |                       |          |   |
| C add optional block, delete P-IDs |  |  |  | Material      |                                |                       |          |   |
| B adjust Part-IDs                  |  |  |  | Units         |                                |                       |          |   |
| A                                  |  |  |  | Behringer     |                                |                       |          |   |
| Rev. Modification Date Name        |  |  |  | Part-ID.:     |                                | DRA-ASSEMBLE/PE-SCREW |          |   |
|                                    |  |  |  |               |                                |                       | Page     | 1 |
|                                    |  |  |  |               |                                |                       | of       | 1 |











We Hear You