

Service Manual

Model: AMX-120



www.altoproaudio.com

Version: .2

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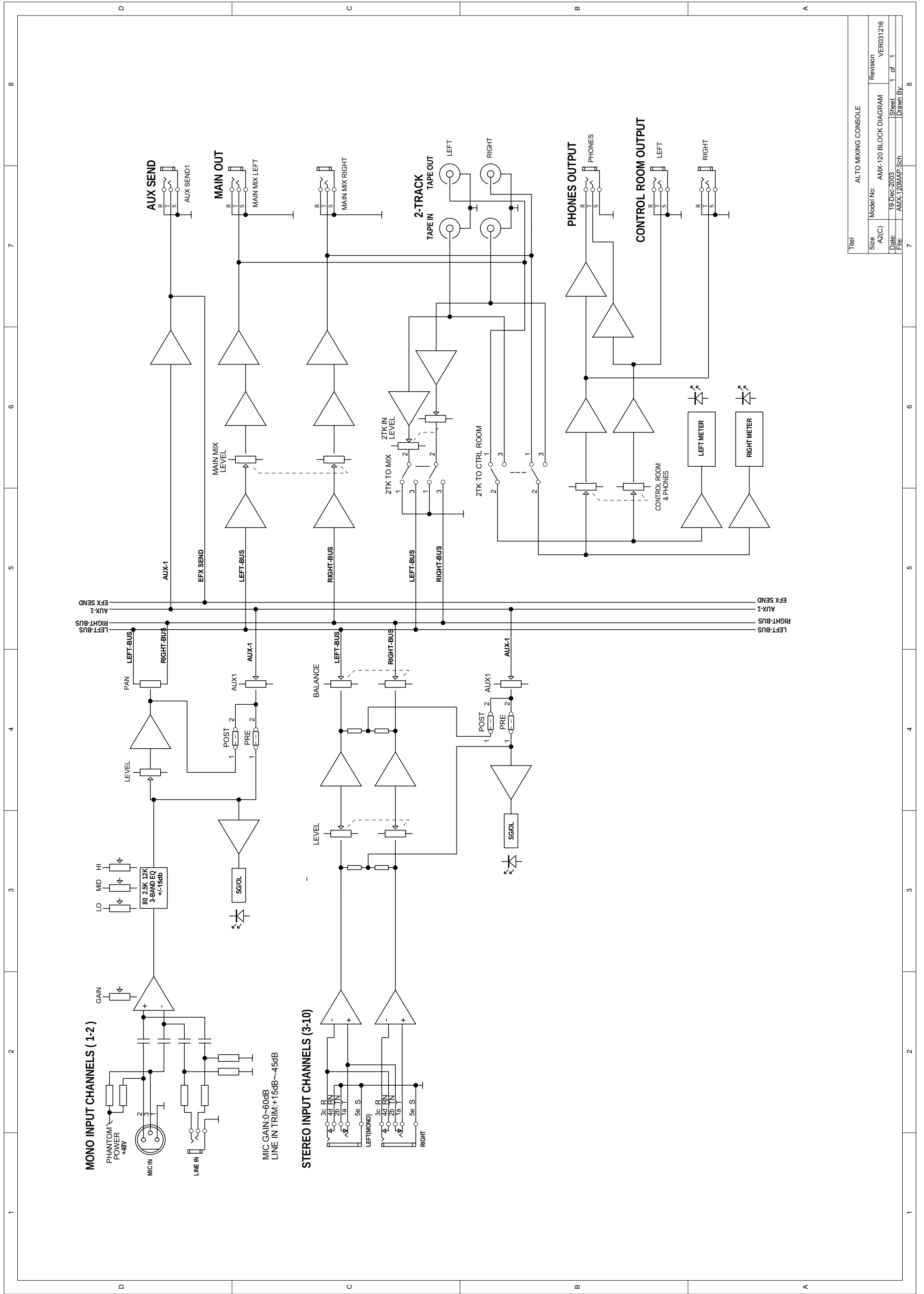
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1. Specification

| Mono input channels | | |
|-------------------------------------|-----------------------------|--|
| | Microphone input | electronically balanced, discrete input configuration |
| | Frequency response | 10Hz to 55kHz, +/- 3dB |
| | Distortion (THD & N) | 0.005% at +4dBu, 1kHz |
| | Gain range | 0dB to 44dB (MIC) |
| | SNR (Signal to Noise Ratio) | 115dB |
| | Line input | electronically balanced |
| | Frequency response | 10Hz to 55kHz, +/- 3dB |
| | Distortion (THD & N) | 0.005% at +4dBu, 1kHz |
| | Sensitivity range | +15dBu to - 30dBu |
| Stereo input channels | | |
| | Line input | Unbalanced |
| | Frequency response | 10Hz to 55kHz, +/- 3dB |
| | Distortion (THD & N) | 0.005% at +4dBu, 1kHz |
| Impedances | | |
| | Microphone input | 1.4kOhm |
| | Channel Insert return | 2.5kOhm |
| | All other inputs | 10kOhm or greater |
| | Tape out | 1kOhm |
| | All other output | 120Ohm |
| Equalization | | |
| | Hi shelving | +/- 15dB @12kHz |
| | Mid bell | +/- 12dB @2.5kHz |
| | Low shelving | +/- 15dB @80Hz |
| | Low Cut filter | 75Hz, 18dB/oct. |
| Main Mix Section | | |
| | Noise (Bus noise) | Fader 0 dB, channels muted: - 100dBr (ref.:+4dBu) Fader 0dB, all input channels assigned and set to UNITY gain: - 90dBr (ref.:+4dBu) |
| | Max output | +22dBu unbalanced, 1/4" jacks |
| | AUX Sends max out | +22dBu |
| Power supply (AC/AC Adaptor) | | |
| | Main voltage | USA/Canada 100 - 120V~, 60Hz |
| | | Europe 210 - 240V~, 50Hz |
| | | U.K./Australia 240V~, 50Hz |
| | Power Consumption | 11 watts |
| Physical | | |
| | Dimension (W×D×H) | 208mm×275.5mm×35/43mm (6.06"×7.81"×1.01"/1.30") |
| | | Net weight |
| | Shipping weight | 2.3Kg (5.11lb) |

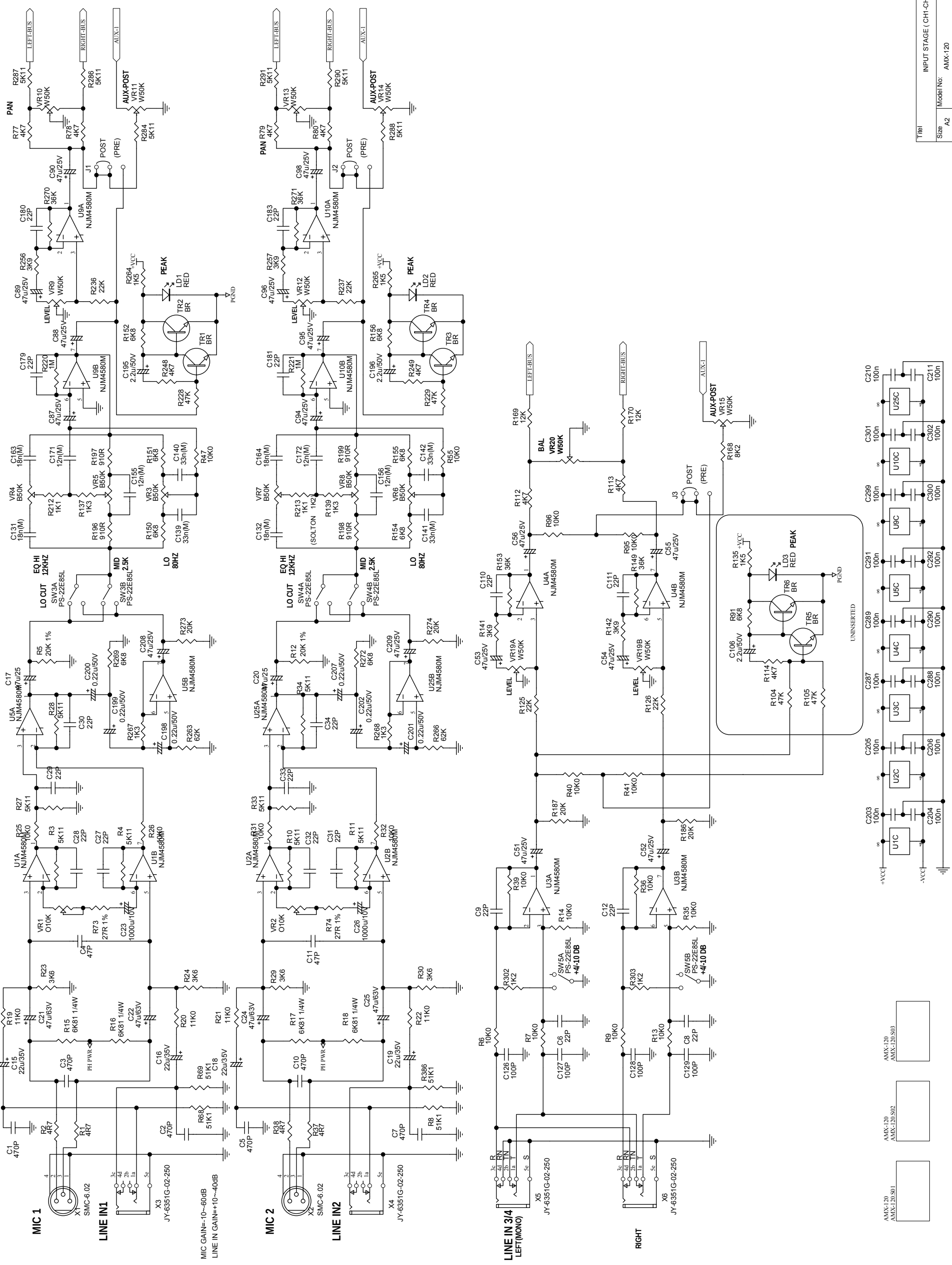
2. Block Diagram



| | |
|----------------------------|---------------------------------|
| Title: ALTO MIXING CONSOLE | |
| Size: A2(C) | Model No: AMX-120 BLOCK DIAGRAM |
| Date: 19 Dec 2003 | Revision: VER031216 |
| File: AMX-120(IMP).Sch | Sheet: 1 of 1 |
| | Drawn By: |

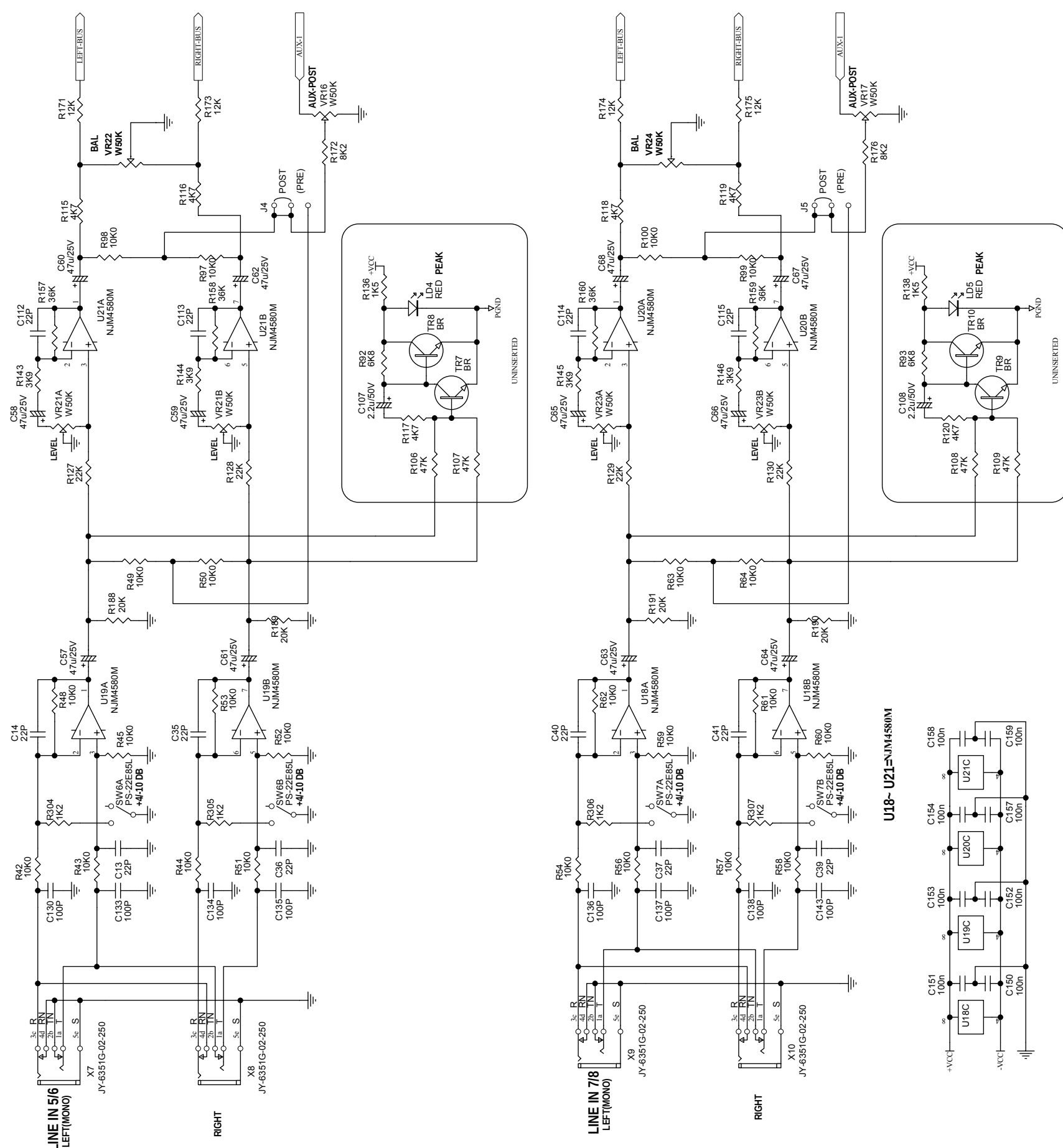
3. Schematic Diagram

AMX-120 (1/4)

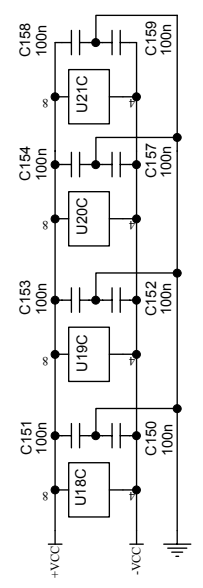


| | | | |
|----------|-----------------------|-----------|-----------|
| File | INPUT STAGE (CH1-CH4) | | |
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| Date | 3-Jan-2004 | Sheet | 1 of 4 |
| File | AMX-120 Sch | Drawn By | REV/N LIN |
| Revision | VER031229 | | |

AMX-120 (2/4)



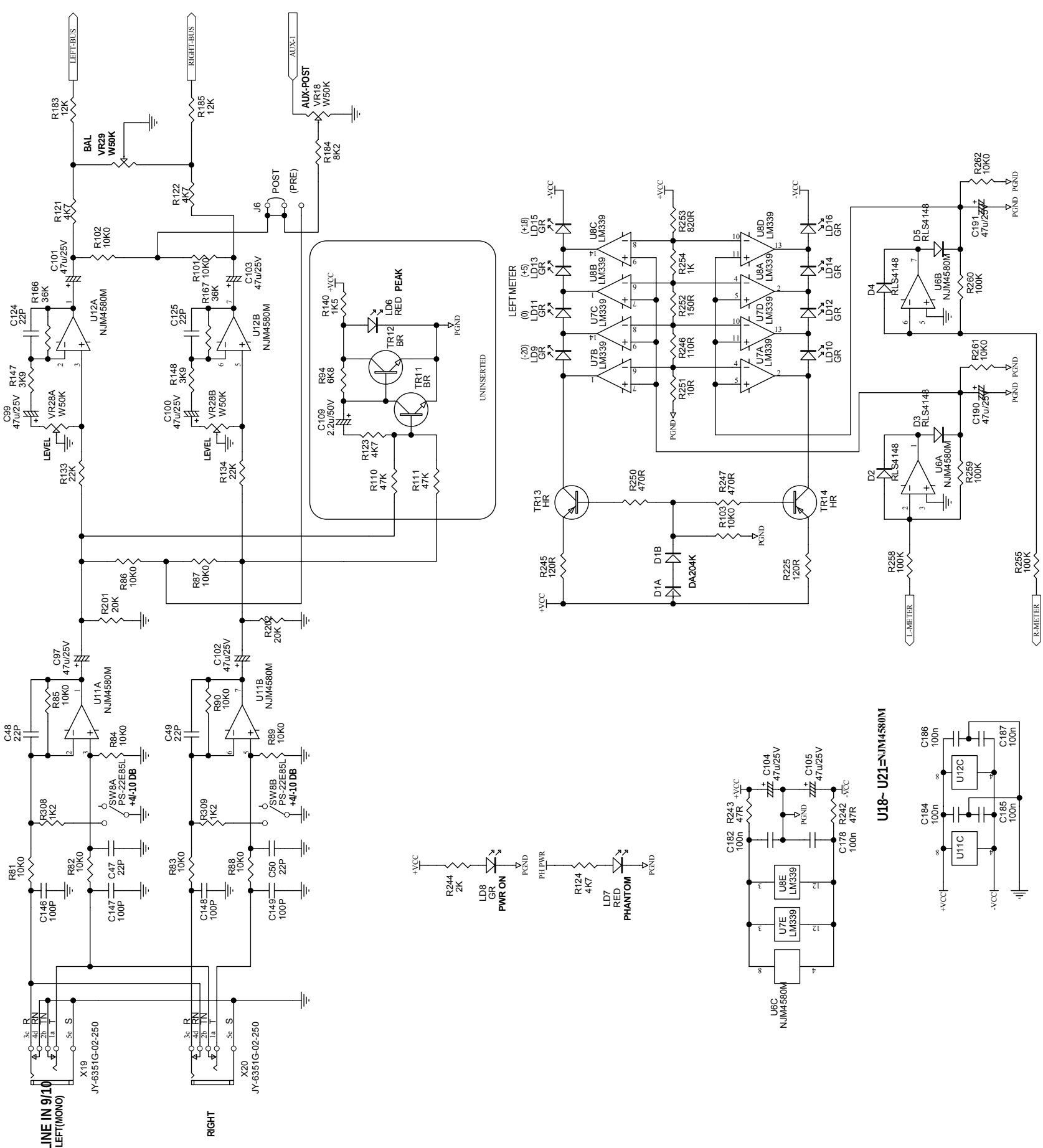
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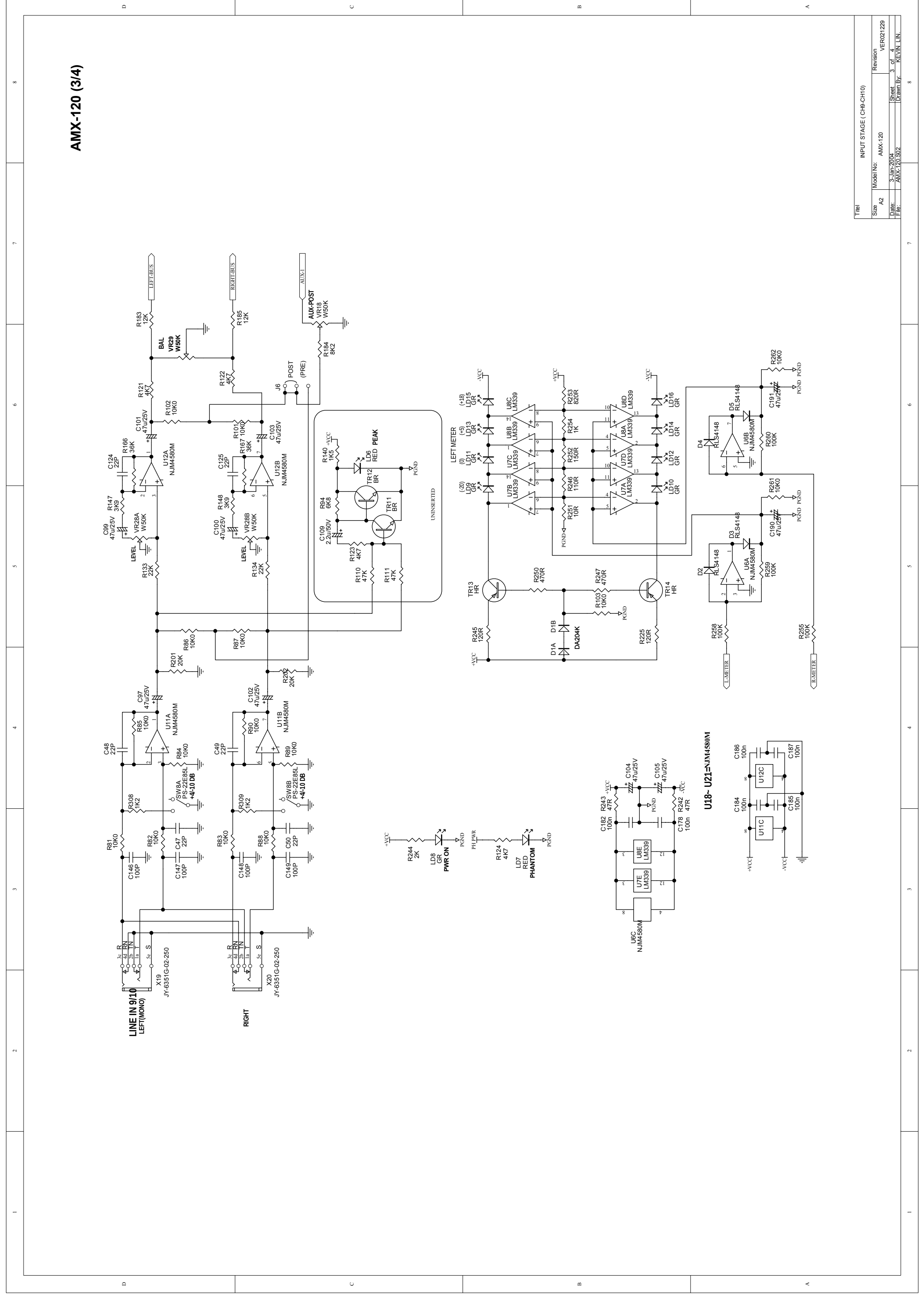
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| Size | Model No. | Revision | VER021229 |
| A2 | AMX-120 | | |
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| Rev. | AMX-120 S01 | Drawn By | REVJN LIN |

INPUT STAGE (CH6-CH8)

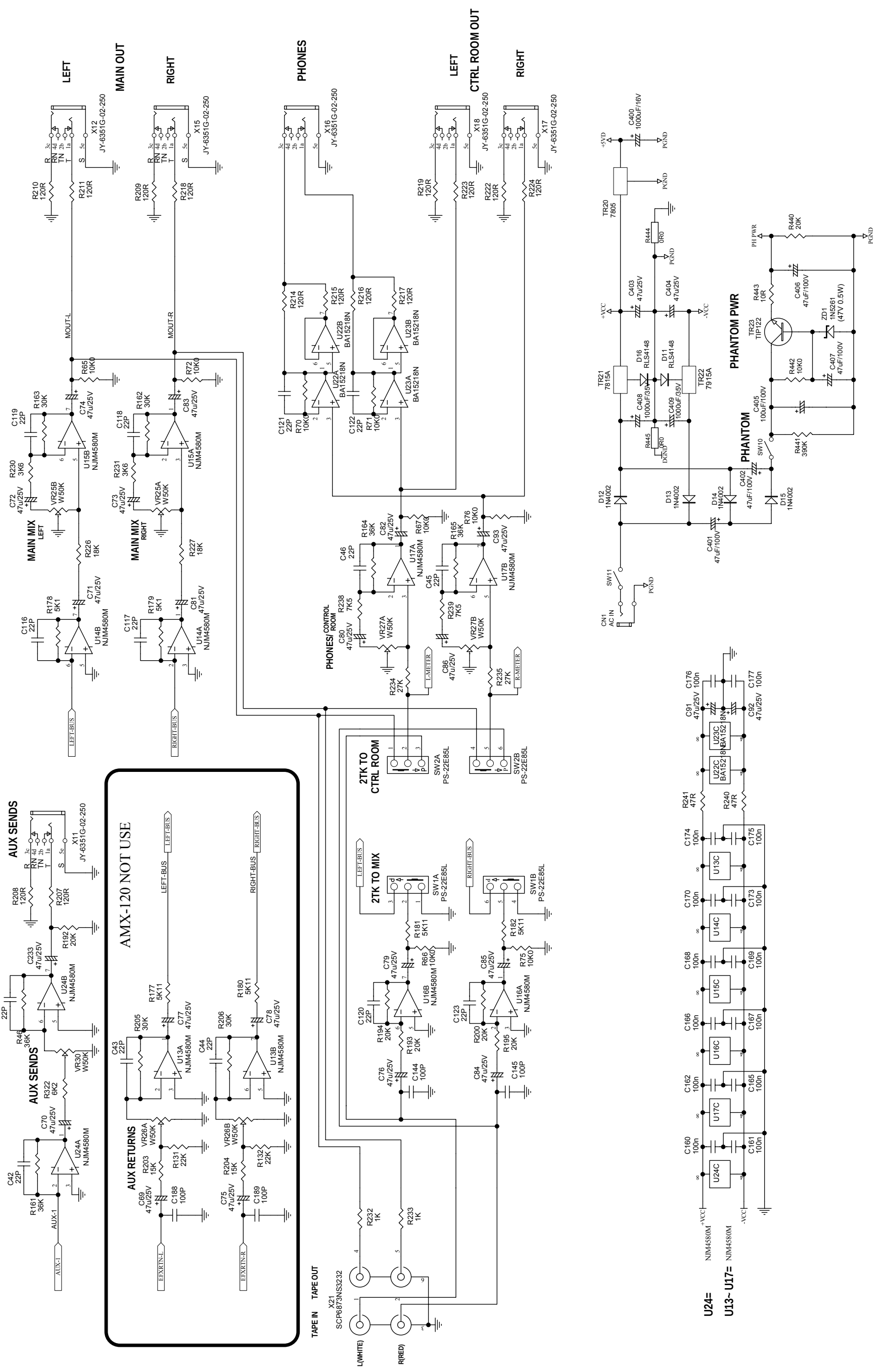
AMX-120 (3/4)



| | | | |
|-------|-------------|-------------------------|-----------|
| Title | | INPUT STAGE (CH9-CH10) | |
| Size | A2 | Model No. | AMX-120 |
| Date | 3-Jan-2004 | Revision | VER021229 |
| Page | 3 of 4 | Sheet | 3 of 4 |
| Rev. | AMX-120 S02 | Drawn By | REV/N LIN |



AMX-120 (4/4)



| Title | | STEREO AUX & SENDS & MAIN OUT & CTRL R & PHONES | |
|-------|------------|---|-----------|
| Size | A2 | Model No. | AMX-120 |
| Date | 3-Jan-2004 | Revision | VER031229 |
| File | AMX-120.S3 | Sheet | 4 of 4 |
| | | Drawn By | REV/LIN |

| Title | | STEREO AUX & SENDS & MAIN OUT & CTRL R & PHONES | |
|-------|------------|---|-----------|
| Size | A2 | Model No. | AMX-120 |
| Date | 3-Jan-2004 | Revision | VER031229 |
| File | AMX-120.S3 | Sheet | 4 of 4 |
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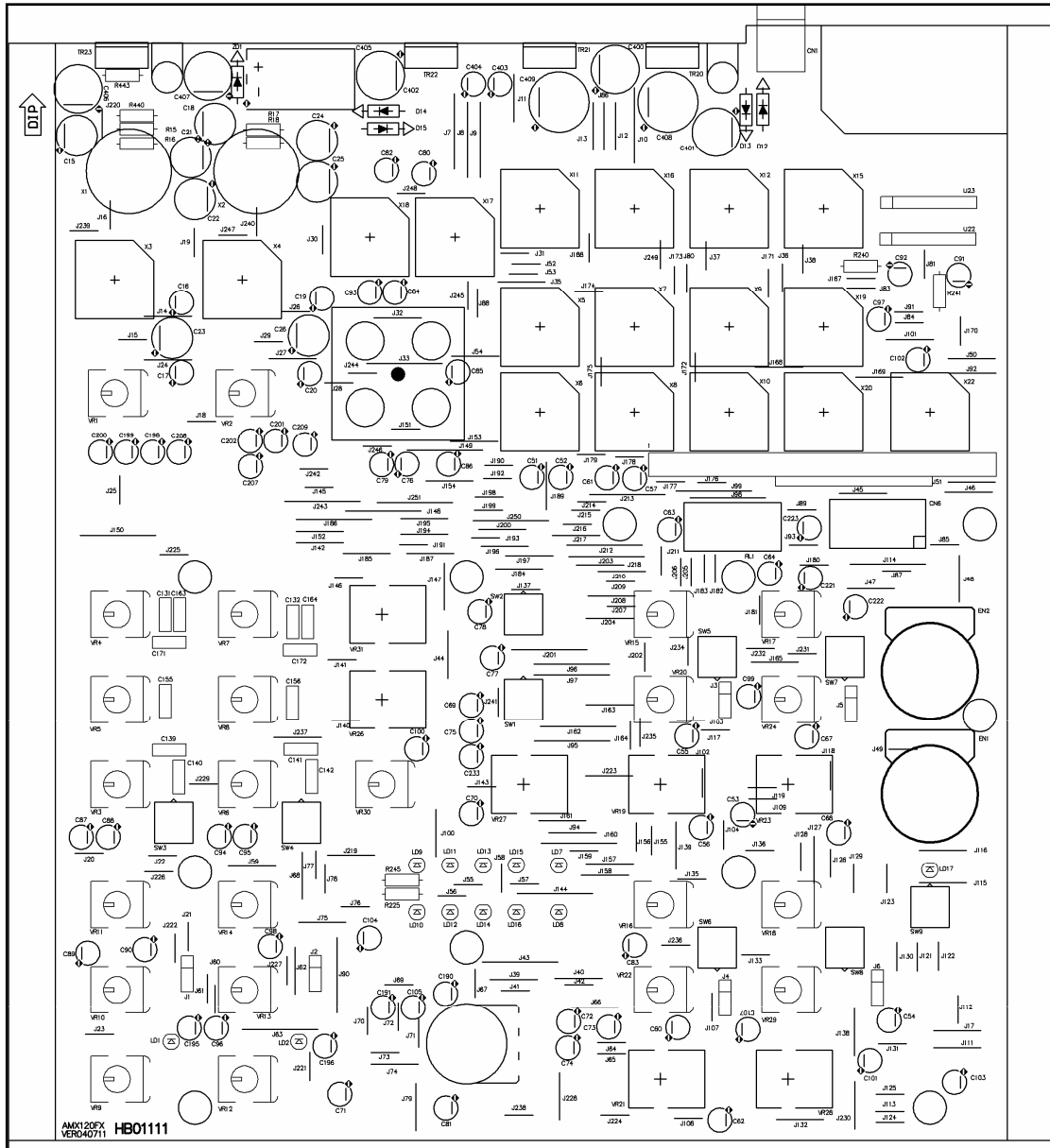
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| | | Drawn By | REV/LIN |

| Title | | STEREO AUX & SENDS & MAIN OUT & CTRL R & PHONES | |
|-------|------------|---|-----------|
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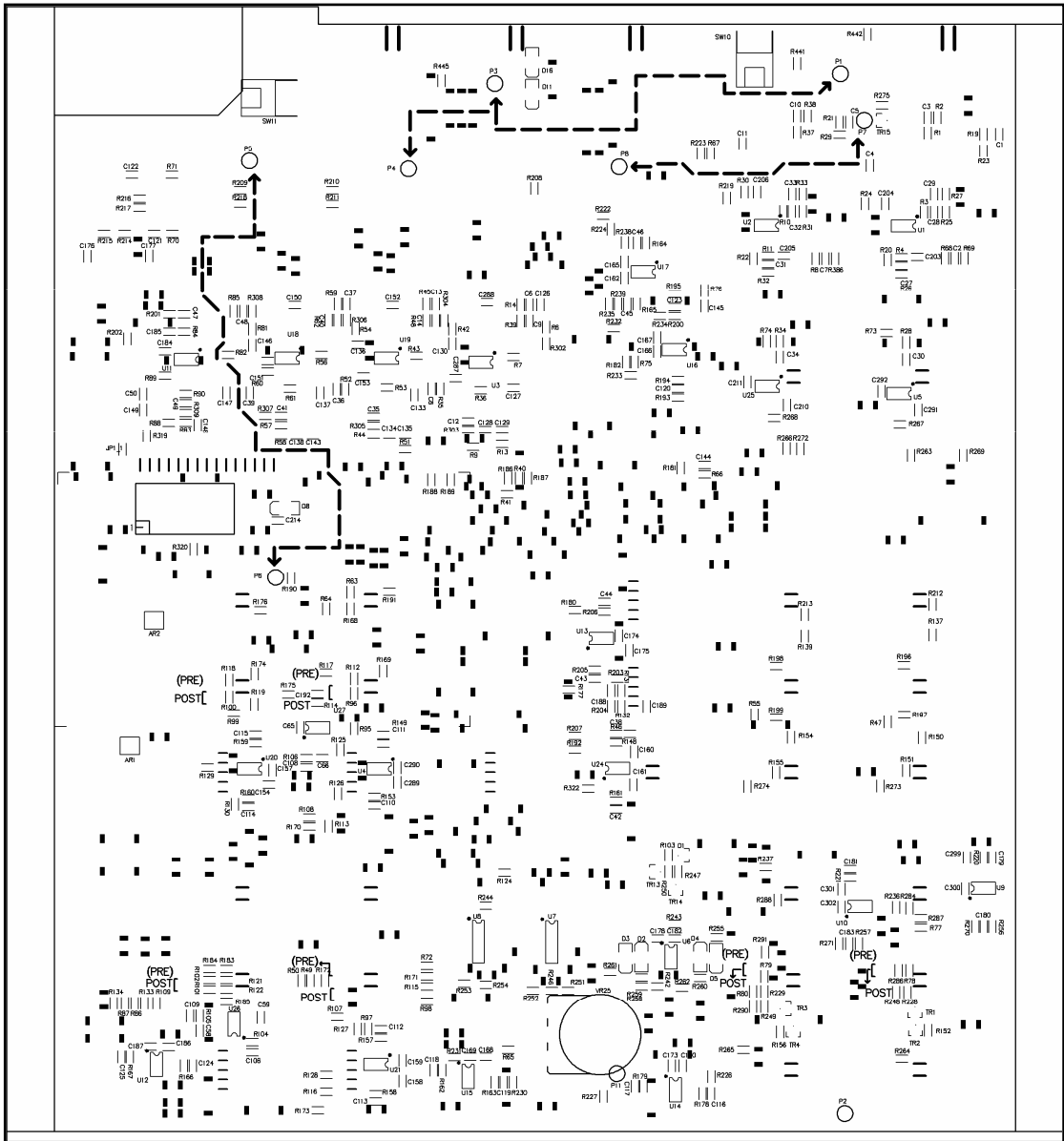
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| | | Drawn By | REV/LIN |

| Title | | STEREO AUX & SENDS & MAIN OUT & CTRL R & PHONES | |
|-------|------------|---|-----------|
| Size | A2 | Model No. | AMX-120 |
| Date | 3-Jan-2004 | Revision | VER031229 |
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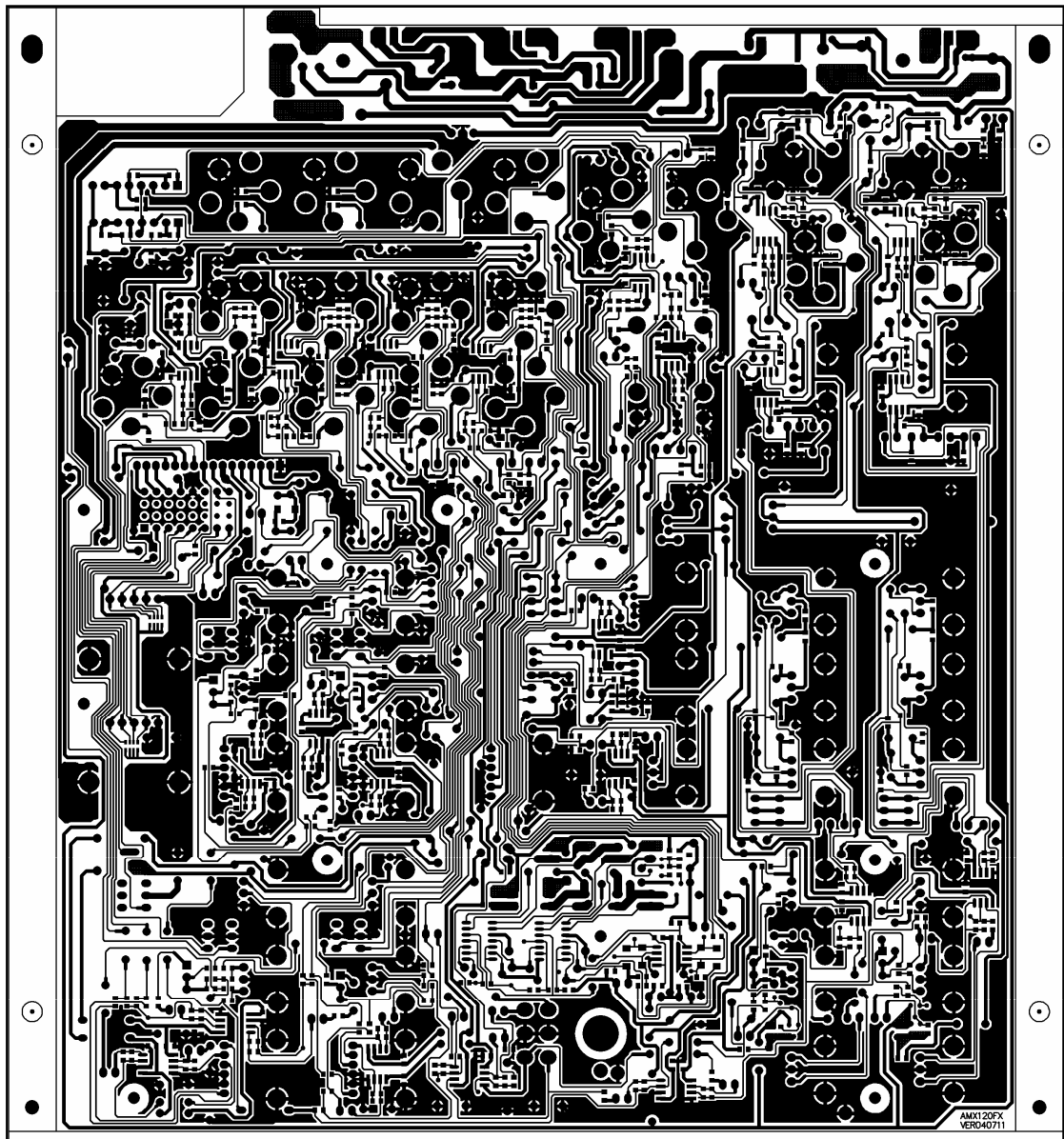
4. Printed Circuit Board



PCB : AMX-120FX Top Overlay



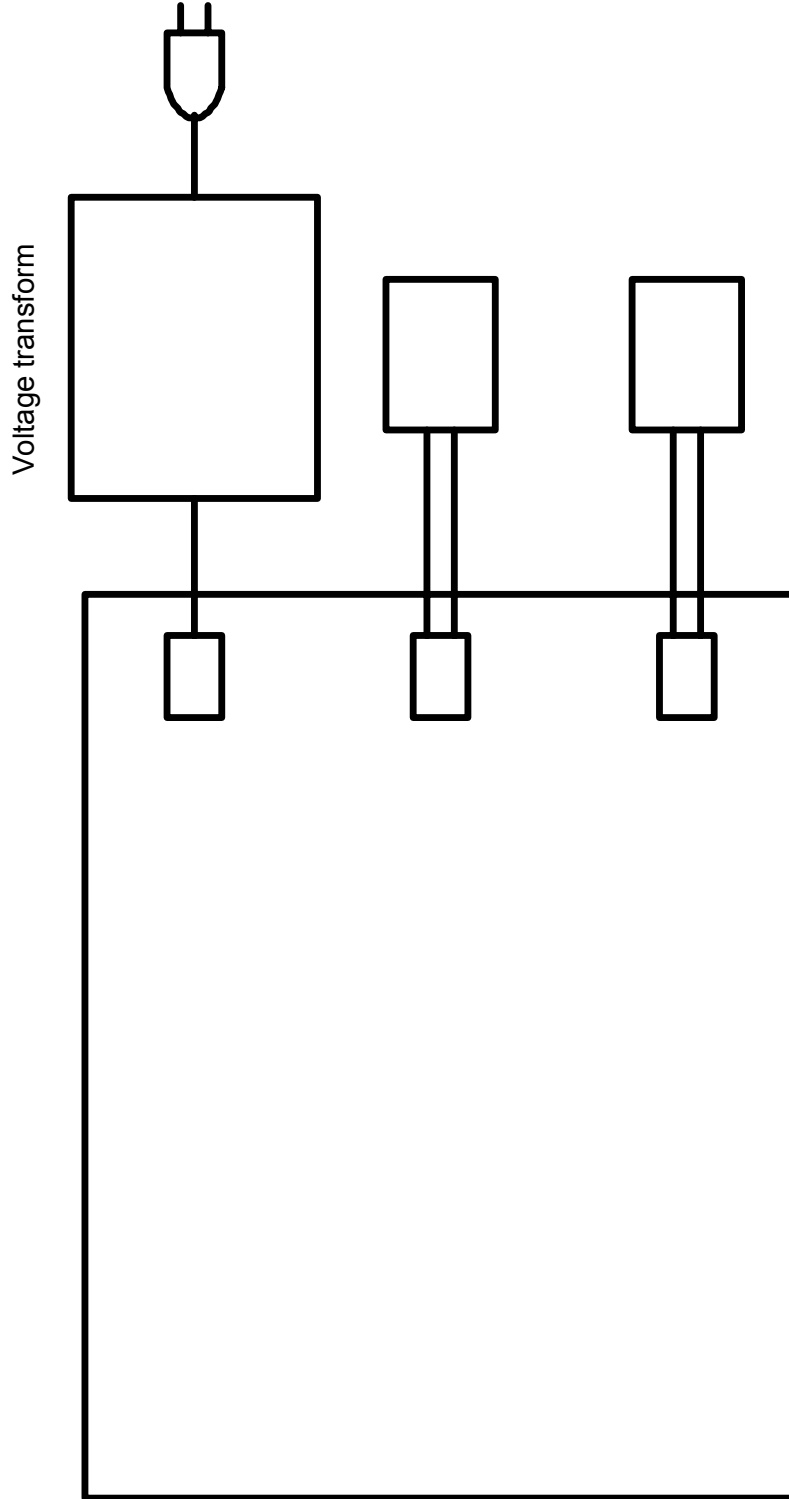
PCB : AMX-120FX Bottom Overlay



PCB : AMX-120FX Bottom Layer

5.Wiring Diagram

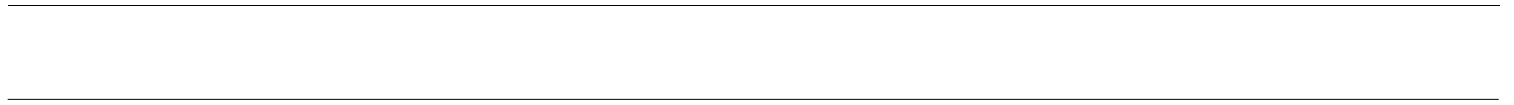
Wiring Diagram

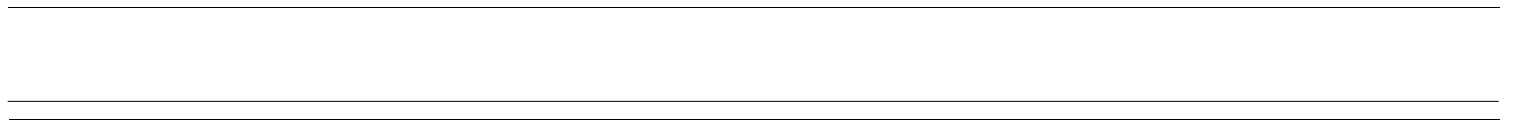


| Title | | Number | | Revision | |
|-------|-------------------------------------|---|---|------------|--|
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7.Electrical Parts List

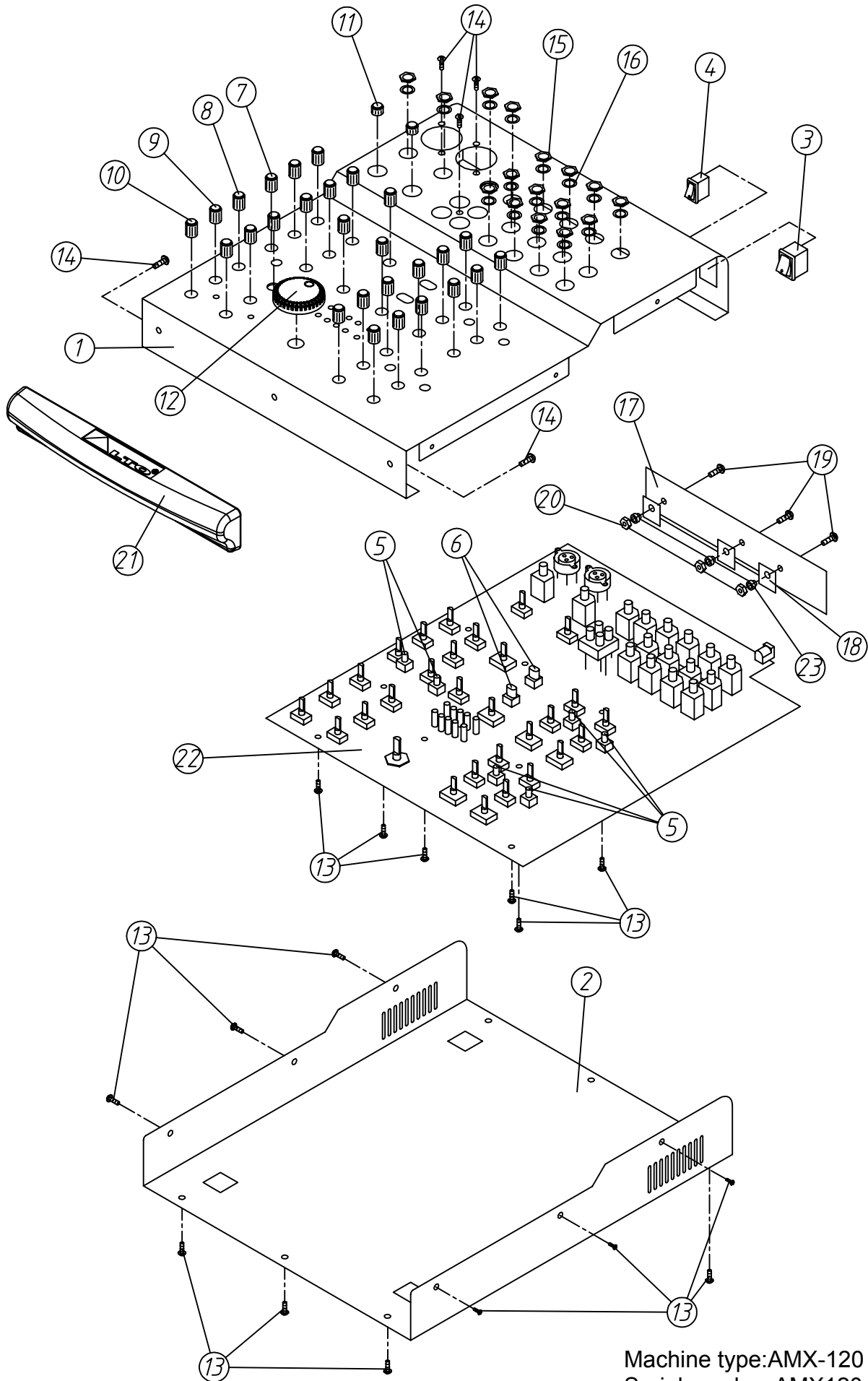






8.Exploded Views & Mechanical Parts List

SEKAKU



Machine type:AMX-120
Serial number:AMX120-00
Date:2004/01/03

Mechanical Parts List

| Model No. | | ALTO AMX-120 | | |
|-----------|---------|--------------------|---------------------------|-----|
| NO | Item No | Item Description | | pcs |
| 1 | MA04536 | panel | AMX-120 ALTO | 1 |
| 2 | MB03080 | rear board | AMX-120 | 1 |
| 3 | HI00026 | power switch | RA12KKATOF 2P | 1 |
| 4 | HI00171 | power switch | R612KKATOF1 | 1 |
| 5 | NI02377 | knob | φ5.5*7.5mm(3.3*3.3mm) | 6 |
| 6 | NI01863 | key | φ5.5*W10*7.5 | 2 |
| 7 | NI02083 | knob | φ10.5*18mm | 6 |
| 8 | NI02081 | knob | φ10.5*18mm | 7 |
| 9 | NI02082 | knob | φ10.5*18mm | 6 |
| 10 | NI02817 | knob | φ10.5*18mm | 8 |
| 11 | NI02714 | knob | φ10*13.5mm | 2 |
| 12 | NI02837 | knob | φ35*11mm 534C | 1 |
| 13 | MG00041 | screw | M3*6 | 20 |
| 14 | MG00061 | screw | M3*10 | 8 |
| 15 | ME00060 | nut | JY-6351G-02-250 | 16 |
| 16 | MF00061 | washer | JY-6351G-02-250 | 16 |
| 17 | MI01906 | heat sink | AMX-120_V1.1 | 1 |
| 18 | NC00005 | silicone insulator | TO-220 square type | 3 |
| 19 | MG00162 | screw | M3*8 | 3 |
| 20 | ME00015 | nut | 3m/m | 3 |
| 21 | NI02834 | handle | 208*33*26mm AMX-120 black | 1 |
| 22 | HK00813 | PC board | P-AMX-120FX-DIP(AMX-120) | 1 |
| 23 | NI02249 | insulate bean | TW-1(TO-220) | 3 |
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