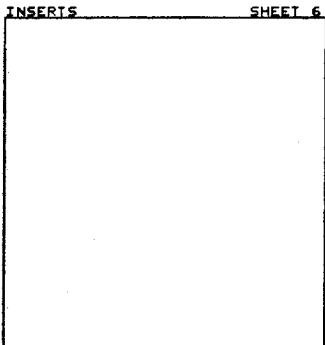
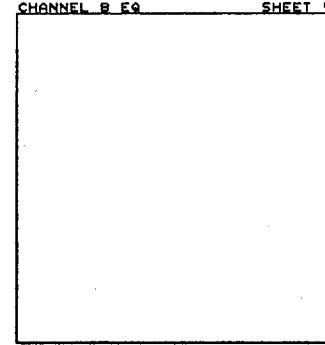
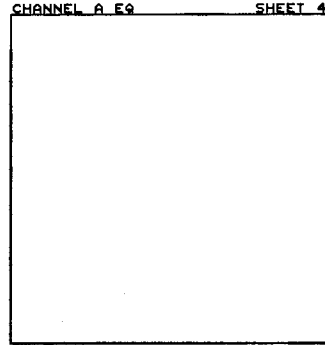
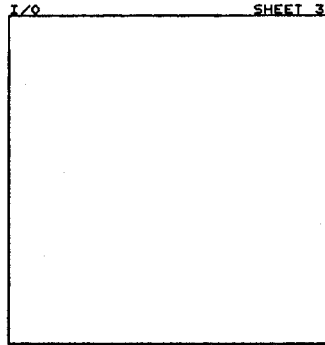
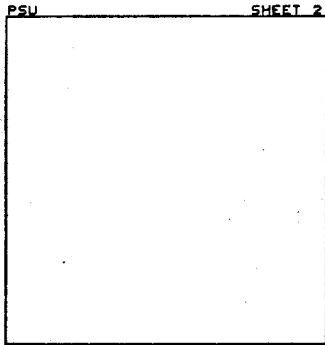


EQ1 SCHEMATICS

Serial No: 100001 onwards

8

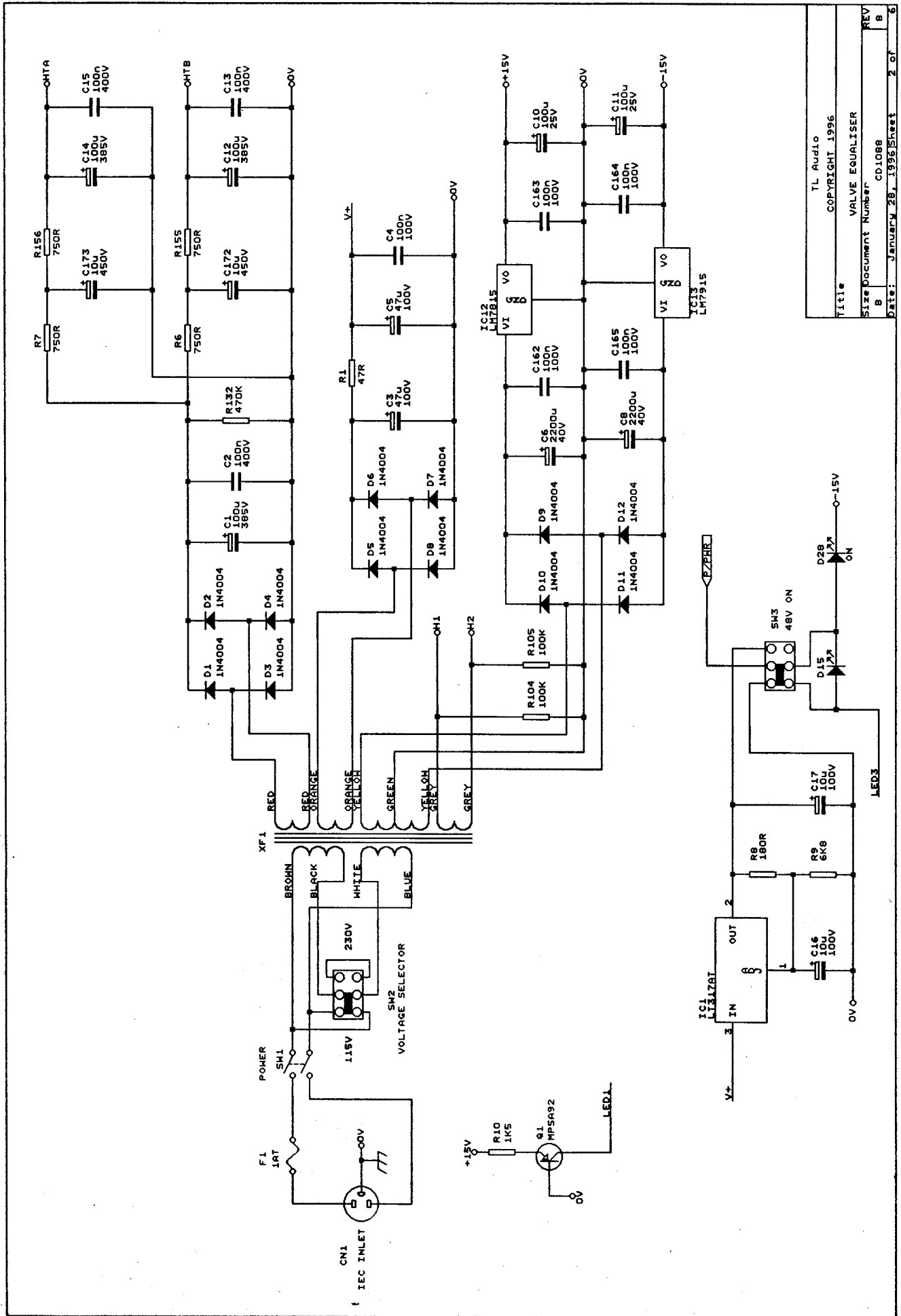


EQ1 SCHEMATICS

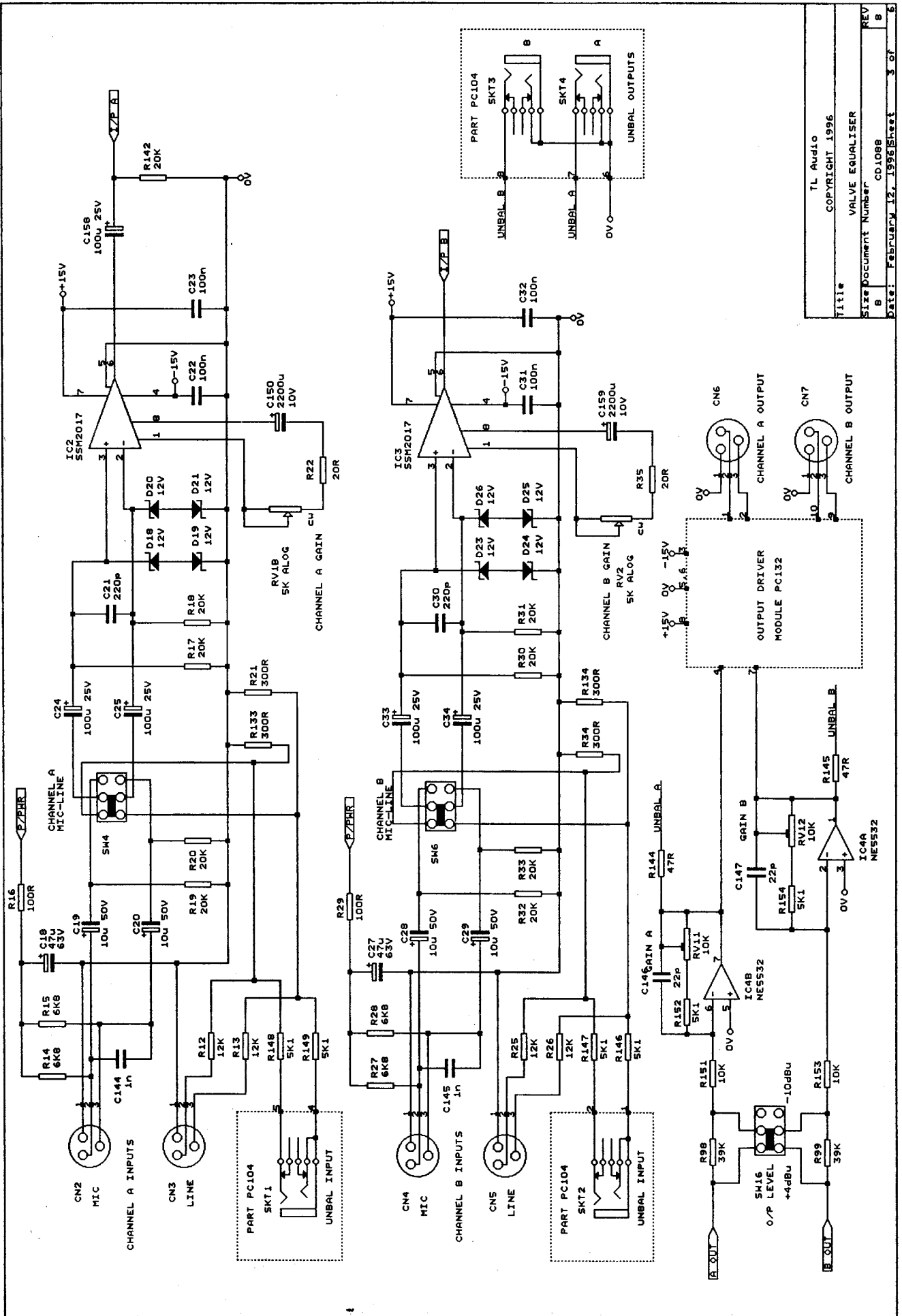
Applies to serial numbers
100001 onwards.

NOTE: THIS ISSUE CIRCUIT DIAGRAM REFERS TO SERIAL NUMBERS 10 0001 ONWARDS.

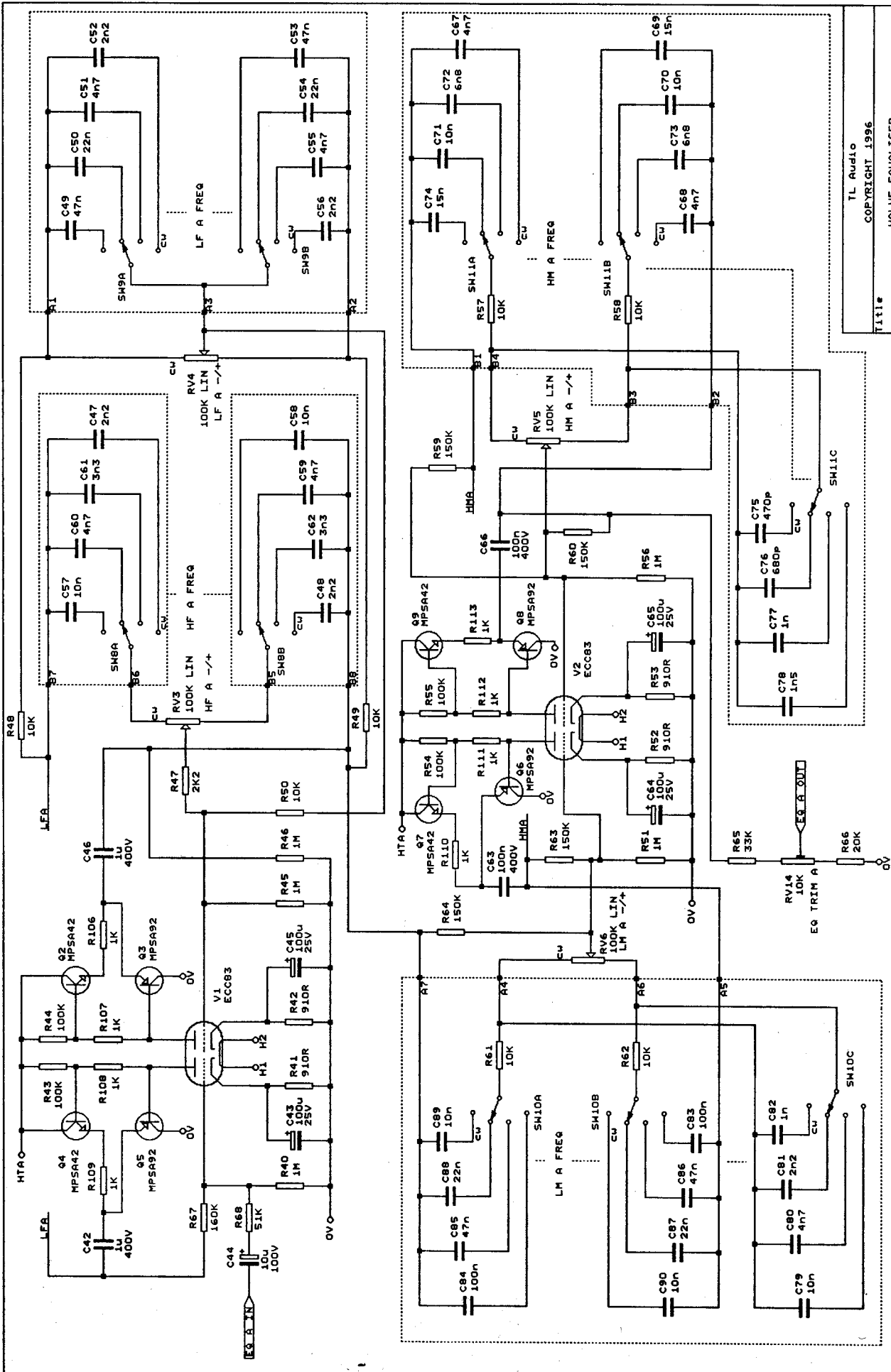
TL Audio	
COPYRIGHT 1996	
Title	
VALVE EQUALISER	
Size	Document Number
B	CD1088
REV	8
Date:	January 28, 1996 Sheet 1 of 6



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 Size Document Number CD1088
 REV B
 Date: January 28, 1996 Sheet 2 of 6

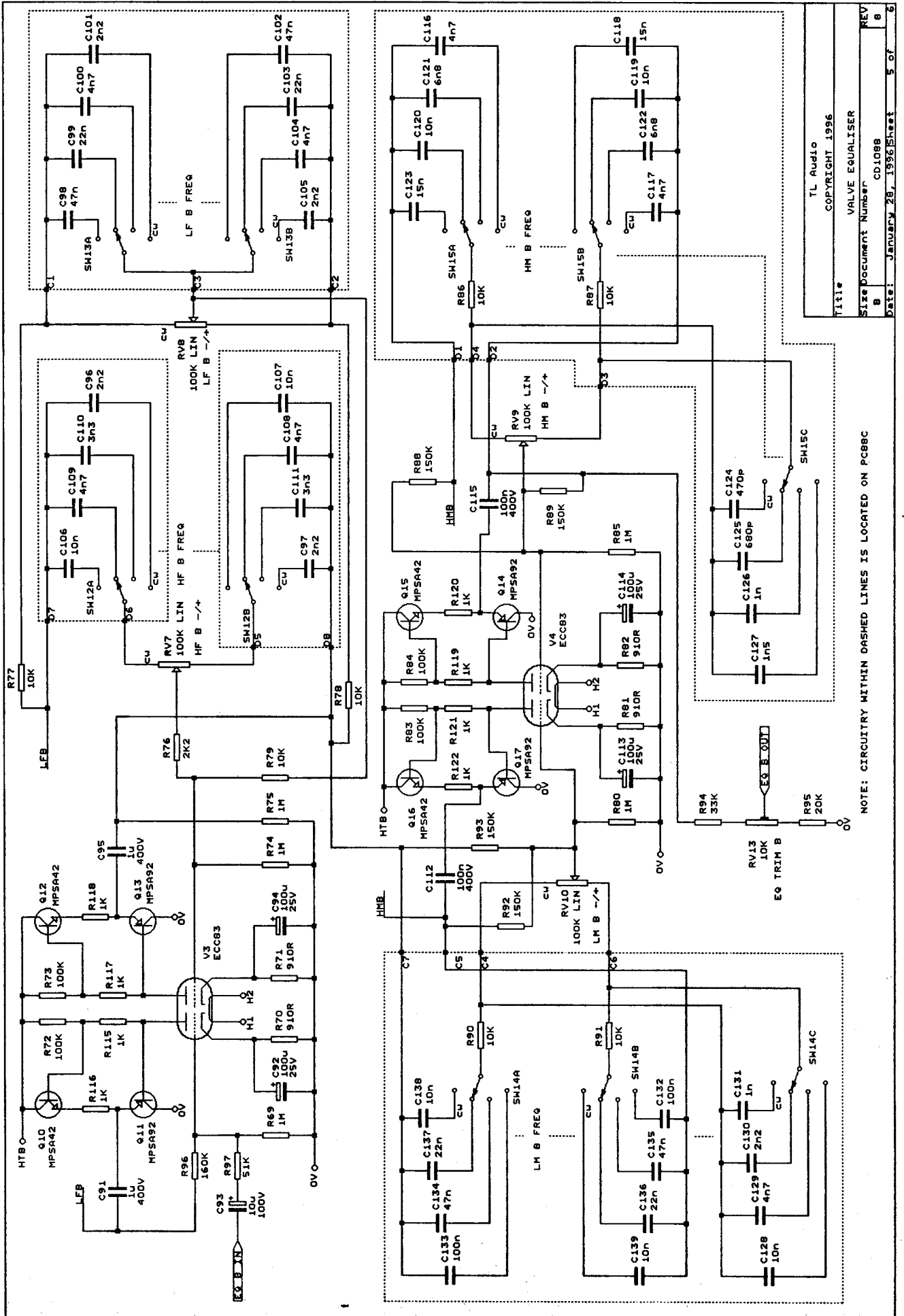


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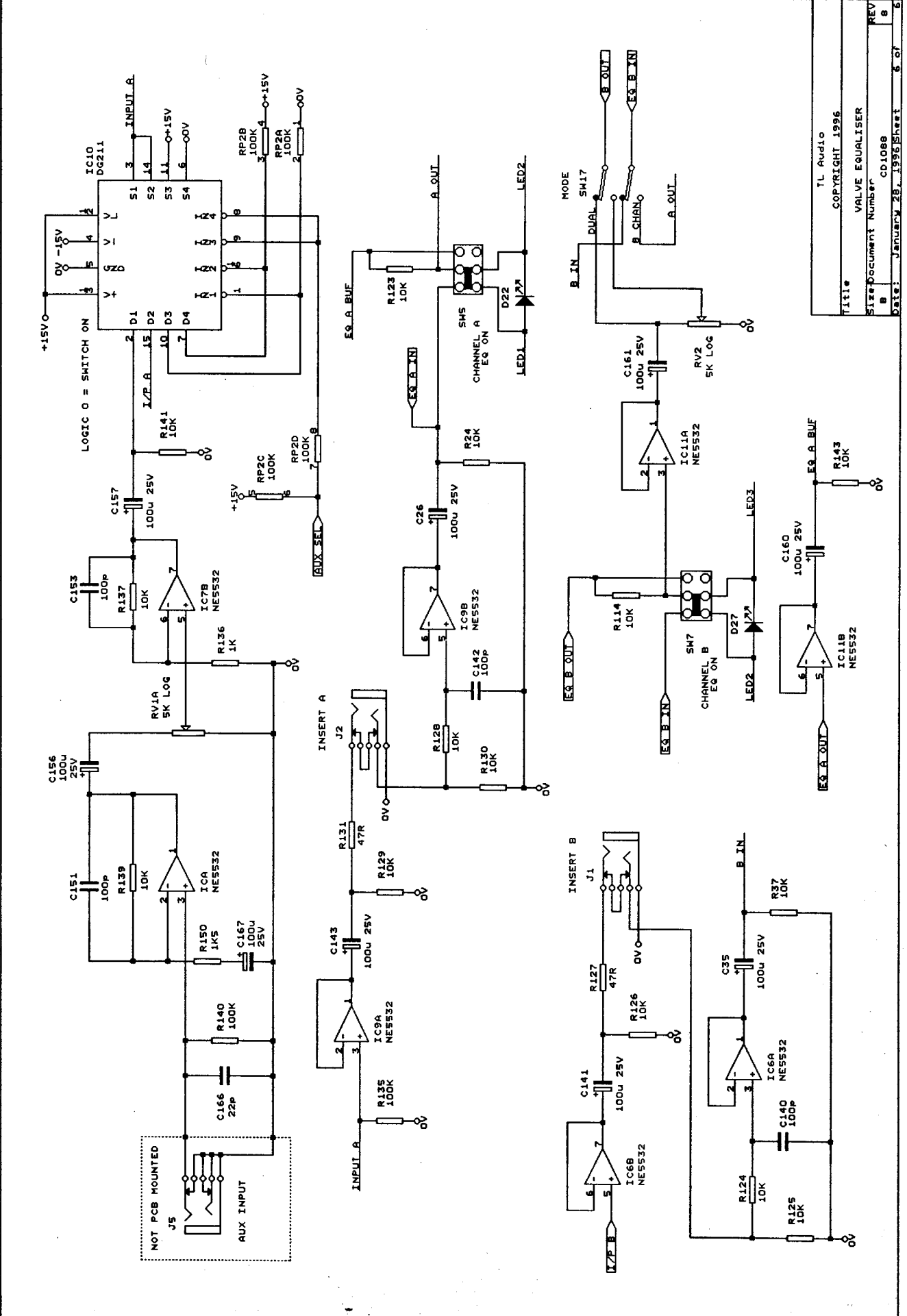
NOTE: CIRCUITRY WITHIN DASHED LINES IS LOCATED ON PCB8B

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 Date: JANUARY 28, 1996 Sheet 4 of 6

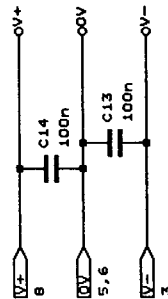
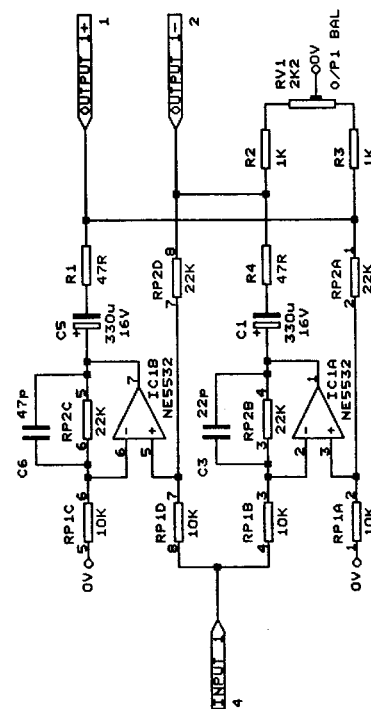
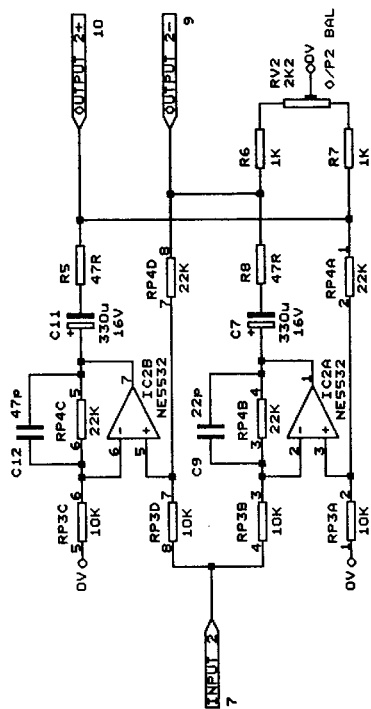


NOTE: CIRCUITRY WITHIN DASHED LINES IS LOCATED ON PCB8C

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Date	January 28, 1996
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 Size Document Number CD1068
 REV B
 Date: JANUARY 29, 1996 Sheet 6 of 6



Technical Bulletin 3 - Reducing the sensitivity of the Valve EQ auxiliary input.

To accommodate higher level signal sources such as active guitars , the sensitivity of the auxiliary input can be reduced by 12dB. Simply change the value of R150 from 330 Ω to 1.5k Ω .

Technical Bulletin 4 - Reducing the line input sensitivity of the Valve Compressor and Valve EQ

The sensitivity of the balanced line inputs of the Compressor and EQ can be reduced by 15dB to accommodate very high level signal sources - i.e from multitrack tape machines.

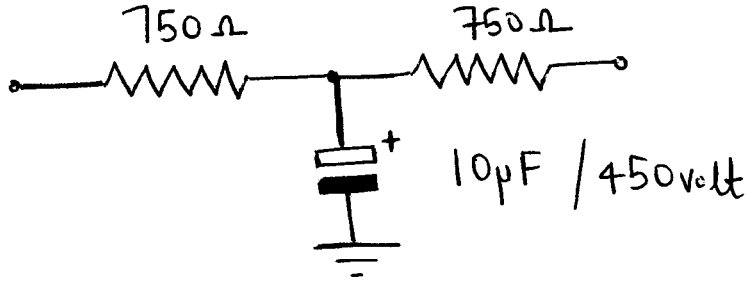
On the Compressor , change R1 , R2 , R16 and R17 from 3.3k Ω to 18k Ω .
On the EQ , change R12 , R13 , R25 and R26 from 3.3k Ω to 18k Ω .

TL AUDIO SERVICE BULLETIN

IMPROVEMENT OF HUM PERFORMANCE - DUAL VALVE EQ (Serial No.s up to 952143)

This modification to the power supply reduces the degree of low level mains hum on the audio outputs of the Valve EQ.

Simply replace resistor R7 ($1k\Omega$) with the following resistor / capacitor network :



Units numbered 952143 onwards will have this change already implemented as standard.

UK Company registration number 2380220

TL AUDIO SERVICE BULLETIN

IMPROVEMENT OF NOISE PERFORMANCE - DUAL VALVE EQ (Serial No.s up to 952143)

This modification improves the balancing of the ac tube heaters , and results in a reduction in the harshness of the low level background noise on the audio outputs.

The modification simply involves changing R104 and R105 (situated next to the mains transformer) from 100k Ω to 1k Ω .

Units numbered 952143 onwards will have this change already implemented as standard.

UK Company registration number 2380220

TL AUDIO SERVICE INFORMATION

Input Gain Pots - Dual Equaliser

EQ1 Dual Equaliser - Input Gain pots

We are now fitting 5kA/5kC 5% law input gain pots to the TL Audio EQ1.

When retro-fitting this pot to earlier EQ1s, the following resistor changes need to be made to ensure that the centre position of the pot travel corresponds to 0dB unity gain:

a) EQ1s with 4.7k Ω linear single gang gain pot.

Change: NOT PRACTICAL TO RETROFIT. ↙

b) EQ1s with 5kA/5kC gain pot

Change:

R12, R13, R25,
R26 = 3k Ω .

c) EQ1s with 5kA/5kRD gain pot

Change:

R21, R34, R133,
R134 = 100R.



I've -
can you let
me have
this
info.
Thanks
H.

UK Company registration number 2380220

Comp:

TL AUDIO SERVICE INFORMATION

Input Gain Pot Replacement - Valve EQ, Valve Compressor, 8/2 Mixer

In response to customer requests , a new type of input gain pot (5kA / 5k reverse D law) has been introduced on the above units which gives a smoother increase in gain throughout the travel of the pot. Earlier units used a 5kA/5kC pot , and on very early EQs a 4.7k linear single gang pot was used. The result was a sudden and large increase in volume as the gain pot approached the maximum position. The new type pot also has a centre click at the unity gain position. Details of how to retro-fit the new pot to older units follows. The changes in resistor values ensure that the unity gain position still falls in the centre of the pot's travel.

Dual Valve EQ

- a) Very early units (before the mono cascade mode was introduced) used a single gang 4.7k Ω linear gain pot. To replace this with the new 5kA/5k reverse D type, use the rear set of pins on the new pot , and attach short flying leads between the pot and the relevant holes on the pcb.

- b) When the mono cascade mode was introduced to the Dual EQ , a 5kA/5kC pot replaced the 4.7k linear gain pot. The new 5kA/5k reverse D pot is a direct plug in replacement for this pot , but to ensure unity gain falls in the centre position , change R

EQ1 TEST SPEC

TEST SPECIFICATION: TL Audio**Issue 2: 5th December 1994.****Tolerance on inputs +/-0.3dB, outputs +/-1dB, unless stated otherwise.**

1. **MAINS VOLTAGE:** Set to 240V.

2. **GROUND CONTINUITY:** Limit 0.01 ohms.
 - 2.1 Measure the resistance between the ground pin of the IEC inlet to the chassis ground screw.

3. **VISUAL INSPECTION:**
 Inspect the unit, paying particular attention to the following items:
 - 3.1 - the orientation of power supply diodes and capacitors,
 - 3.2 - the orientation of Ics,
 - 3.3 - all mains wiring,
 - 3.4 - check the solder side of the PCB for unsoldered joints and solder splashes,
 - 3.5 - the quality of external paint and silk screening,
 - 3.6 - check all knobs and switches operate freely and are uniformly spaced from the panel,
 - 3.7 - all XLR connectors are locked,
 - 3.8 - LED alignment with front panel.

Tests 4 and 5 should be performed on each channel:

4. **PHANTOM POWER:** +48V.
 Equaliser: 48V On, measure on pins 2 and 3 of Mic input socket.

- 5. INPUTS:**
- 5.1 MIC INPUT: Output 0dBu.**
 Equaliser: Mic Input, Gain Max, EQ out, EQ flat, O/P level switch +4dBu, Dual Channel.
 A2: 1KHz, Sine, -60dBu, 22-22k Filter, Meter.
- 5.2 EQUALISER IN: Output 0dBu.**
- 5.3 MIC INPUT NOISE: Limit -67dBu (EIN = -127dBu).**
 Equaliser: Disconnect input and replace with 150R termination.
- 5.4 AUX INPUT: Output -15dBu.**
 Equaliser: Input to Aux.
- 5.5 LINE INPUT: Output 0dBu.**
 Equaliser: Input to Line, Line Input, Gain 0dB.
- 5.6 OUTPUT LEVEL SWITCH: Output -14dBu.**
 Equaliser: O/P Level switch -10dBu.
- 5.7 UNBALANCED INPUT: Output -6dBu.**
 Equaliser: Input to Unbal, O/P Level switch +4dBu.
- 6. 8 BAND MONO MODE: Output 0dBu.**
 Equaliser: 8 Band Mono, Ch B Gain @ Max, Ch B output, Ch A Line input.
- 7. HUM AND NOISE: -77dBu.**
 A2: Output Mute.
- 8. DISTORTION: Limit 0.05%**
 A2: 22-22K Filter out, THD, Output On.

9. EQ CONTROLS:

A2: ALT, Scope.

9.1 FLAT RESPONSE:

Check square wave response at the 4 frequencies for all 8 bands.

9.2 CUT/BOOST:

Check the square wave response varies at the 4 frequencies for all 8 bands.

10. SOAK TEST.

11. AUDIO/QA TEST.