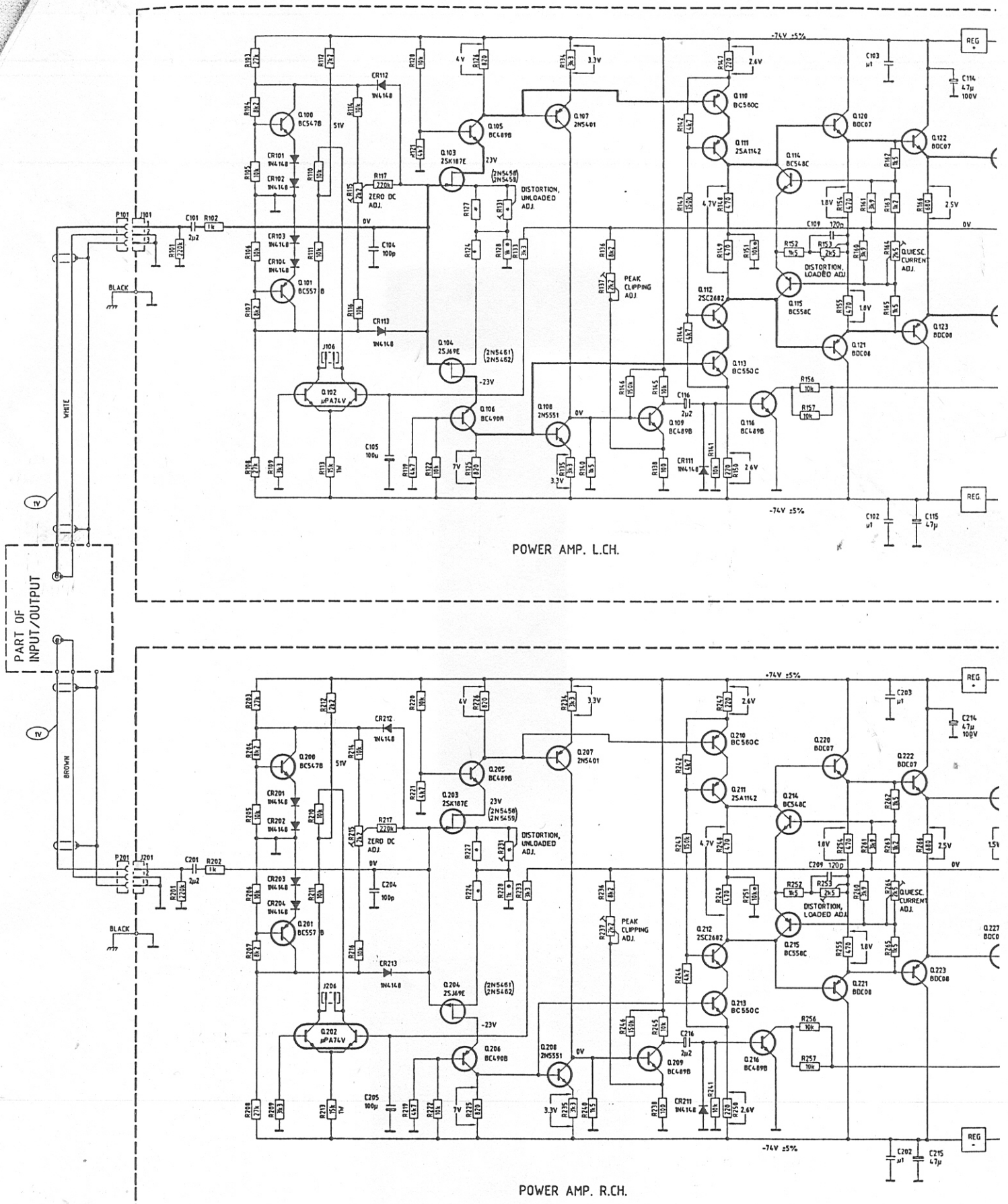
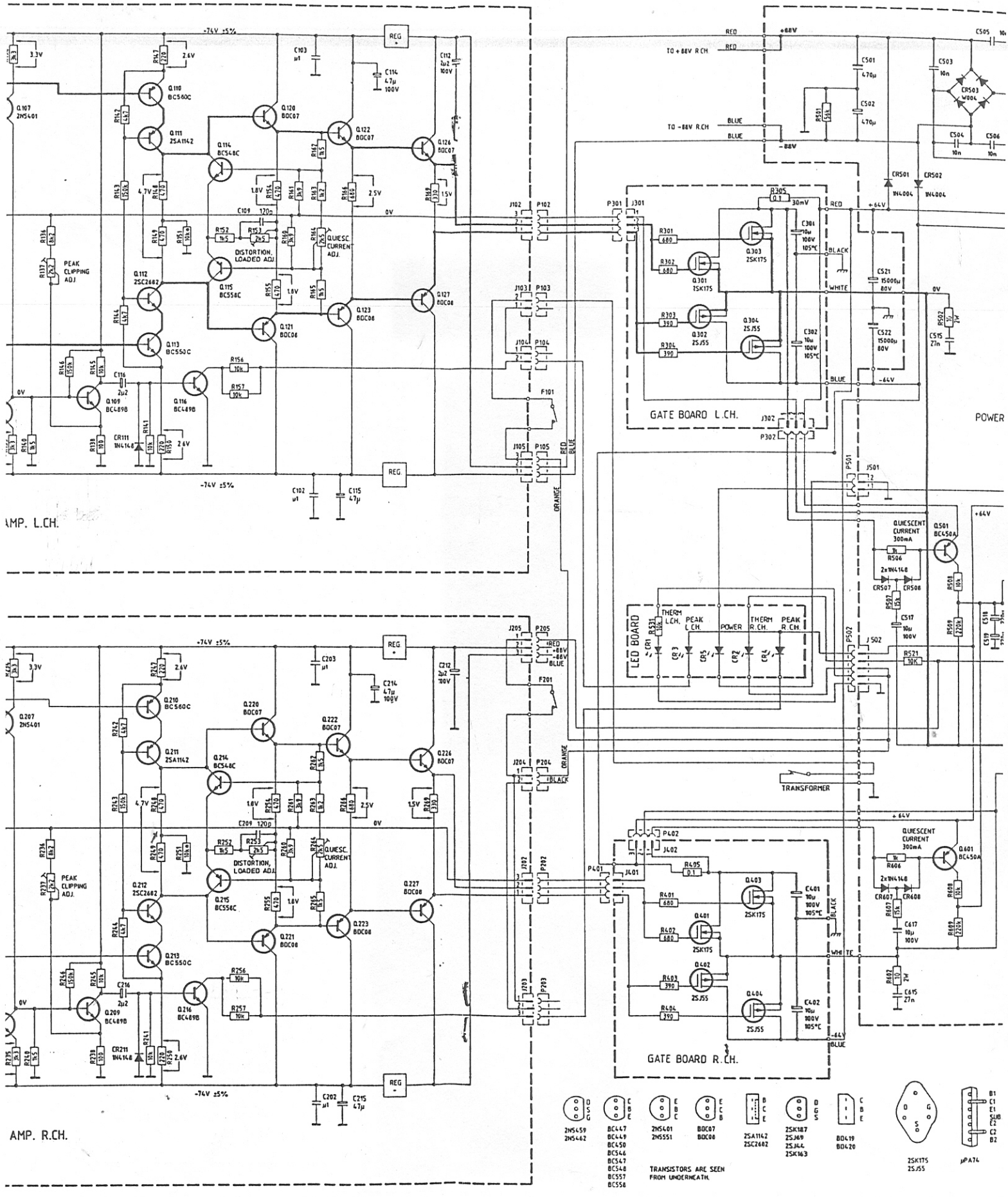
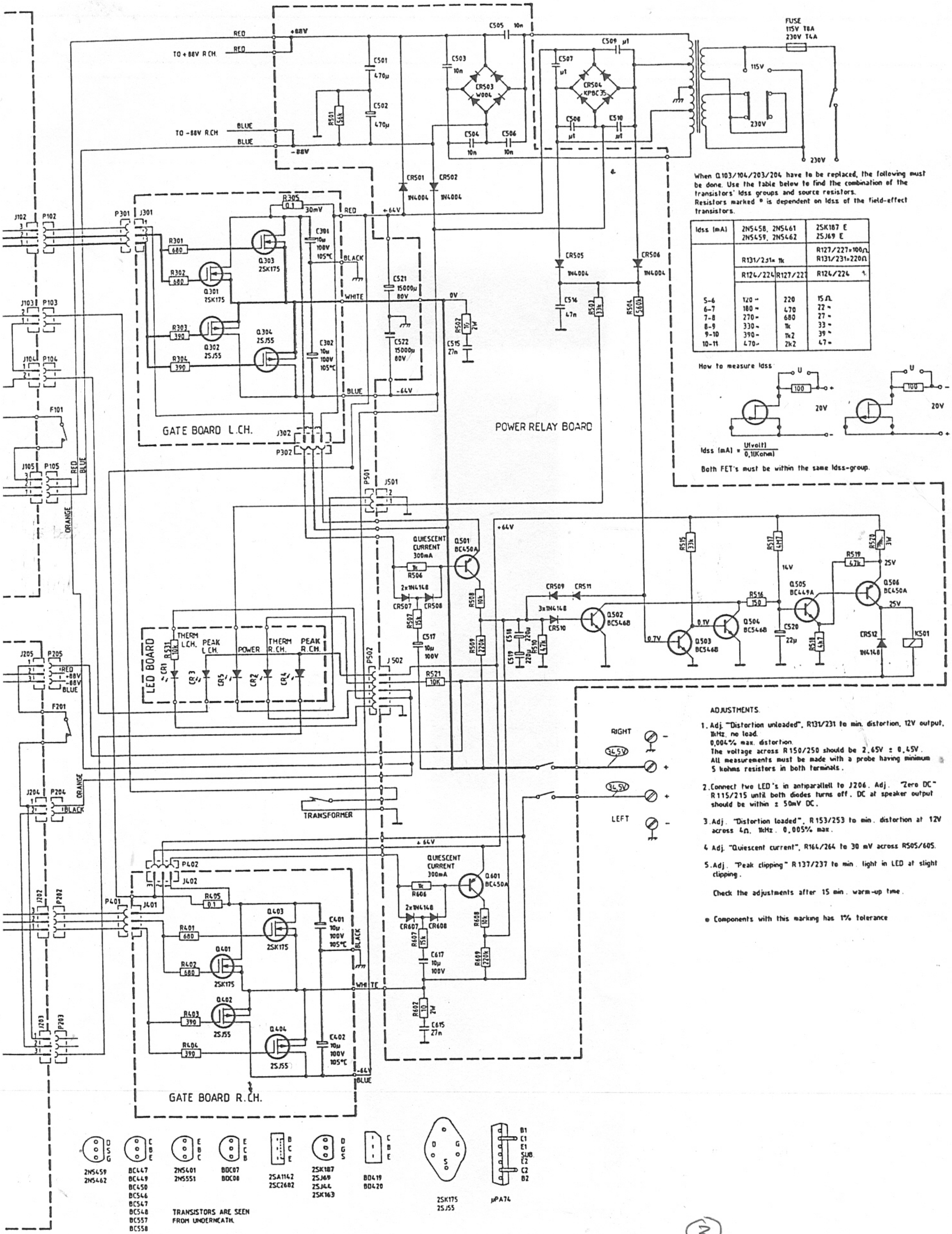


Circuit diagram


AMP. L.CH.
AMP. R.CH.
GATE BOARD L.CH.
GATE BOARD R.CH.
LED BOARD
POWER
TRANSFORMER
PEAK CLIPPING ADJ.
DISTORTION, LOADED ADJ.
QUIESC. CURRENT ADJ.
QUIESCENT CURRENT 300mA
-74V ±5%
+64V
-64V
+88V
-88V
0V
TO +88V R.CH
TO -88V R.CH
2N5459 2N5462
BC447 BC449 BC450 BC546 BC547 BC548 BC557 BC558
2N5401 2N5551
BDC07 BDC08
2SA1142 2SC2682
2SK187 2SJ49 2SJ44 2SK163
BD419 BD420
2SK175 2SJ55
μPA74
TRANSISTORS ARE SEEN FROM UNDERNEATH



When Q103/104/203/204 have to be replaced, the following must be done. Use the table below to find the combination of the transistors' Idss groups and source resistors.
Resistors marked * is dependent on Idss of the field-effect transistors.

Idss (mA)	2N5458, 2N5461 2N5459, 2N5462		2SK187 E 2SJ69 E
	R131/231= 1k		R127/227=100Ω R131/231=220Ω
	R124/224	R127/227	R124/224
5-6	120 -	220	15Ω
6-7	180 -	470	22 -
7-8	270 -	680	27 -
8-9	330 -	1k	33 -
9-10	390 -	1k2	39 -
10-11	470 -	2k2	47 -

How to measure Idss

$$Idss\ (mA) = \frac{U(volt)}{0,1(Kohm)}$$

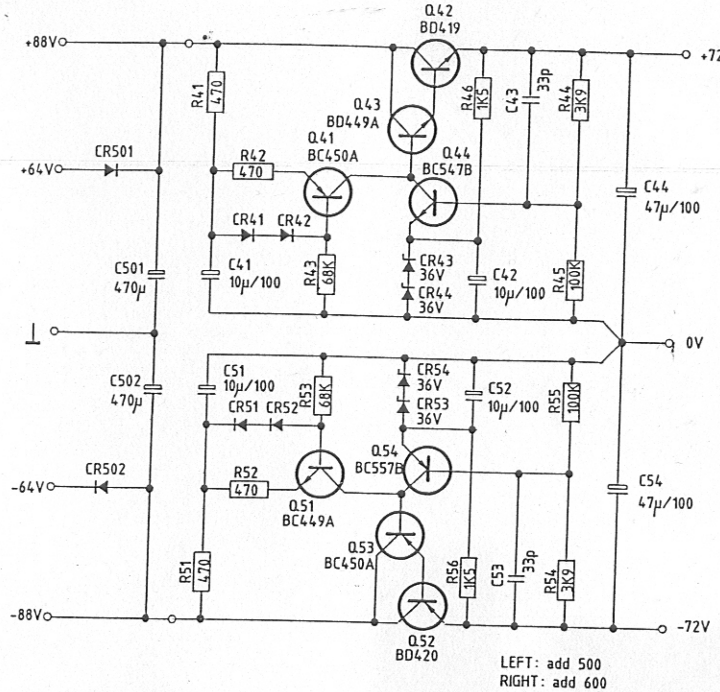
Both FET's must be within the same Idss-group.

ADJUSTMENTS.

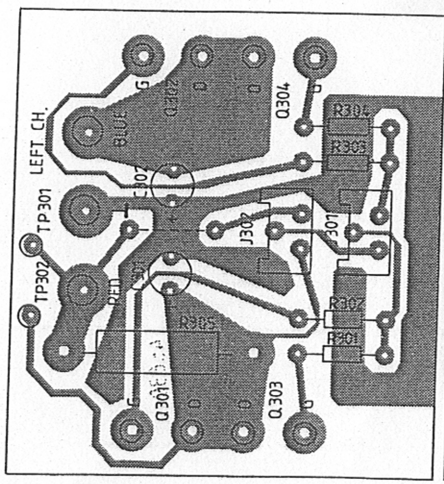
1. Adj. "Distortion unloaded", R131/231 to min. distortion, 12V output, 1kHz, no load.
   0,004% max. distortion.
   The voltage across R150/250 should be 2,65V ± 0,45V.
   All measurements must be made with a probe having minimum 5 kohms resistors in both terminals.
2. Connect two LED's in antiparallell to J206. Adj. "Zero DC" R115/215 until both diodes turns off. DC at speaker output should be within ± 50mV DC.
3. Adj. "Distortion loaded", R153/253 to min. distortion at 12V across 4Ω, 1kHz. 0,005% max.
4. Adj. "Quiescent current", R164/264 to 30 mV across R505/605.
5. Adj. "Peak clipping" R137/237 to min. light in LED at slight clipping.

Check the adjustments after 15 min. warm-up time.

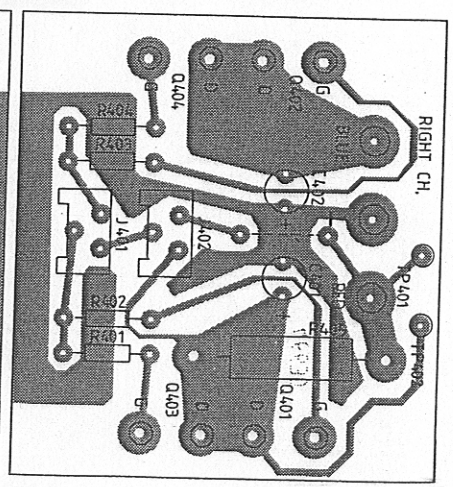
• Components with this marking has 1% tolerance



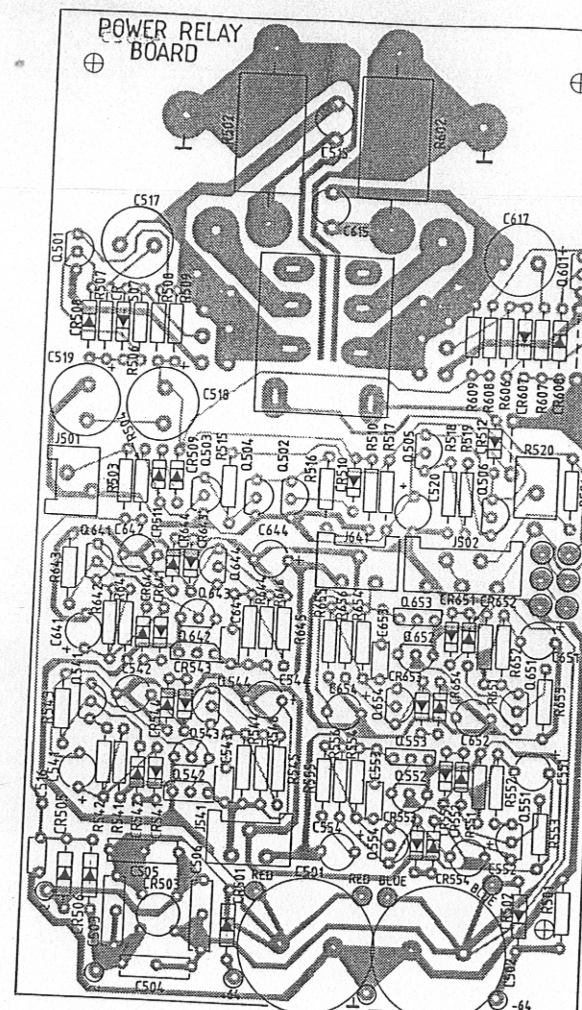
Power supply diagram



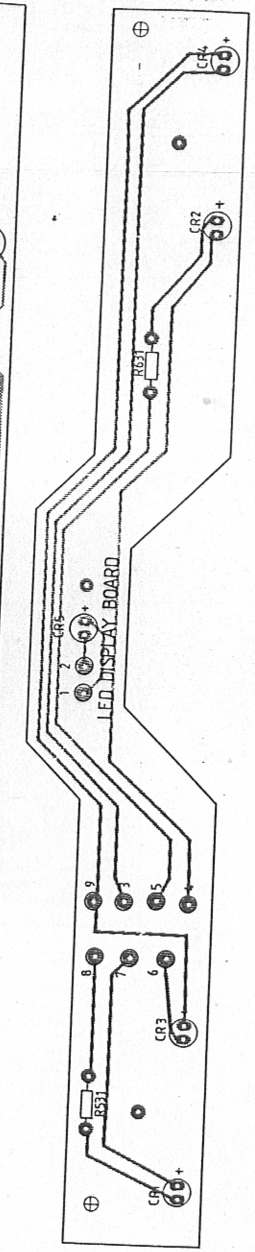
Gate board, left channel, component side



Gate board, right channel, component side



Power relay board, component side



LED display board, component side