Taratura effettuata

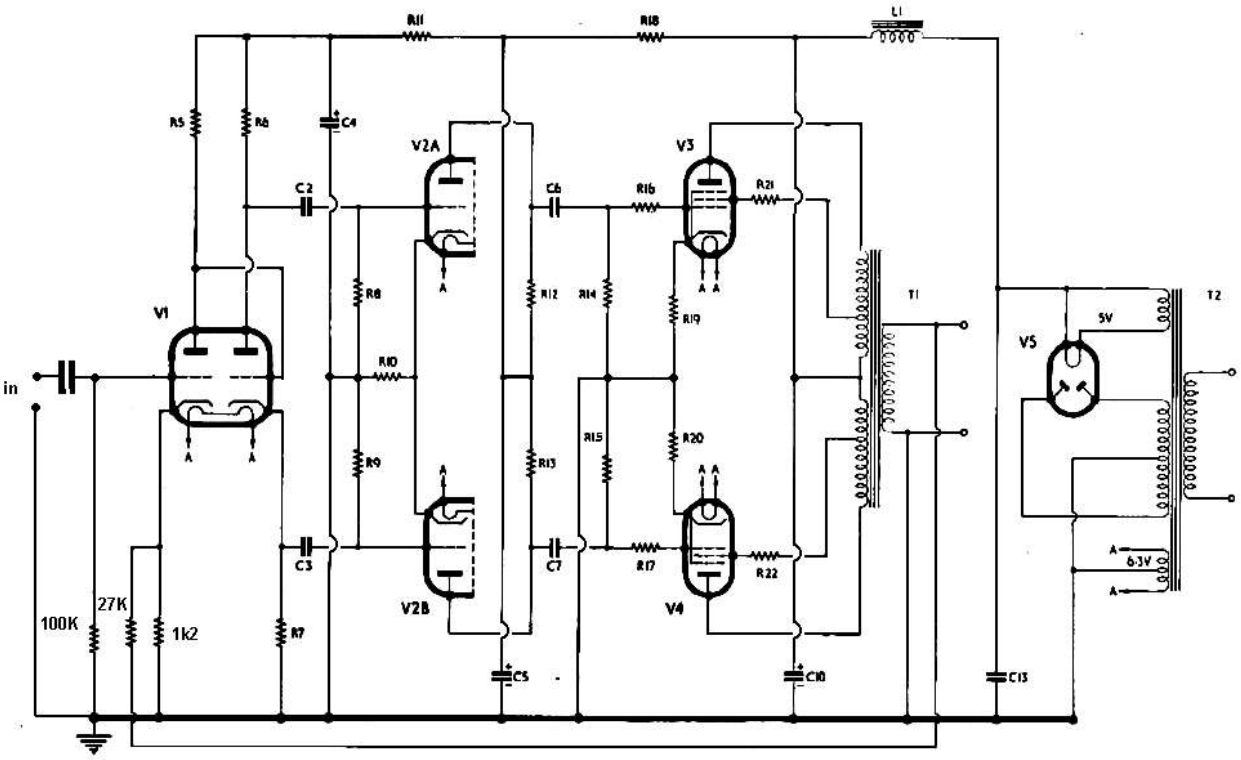

Fig. 4-4. Circuit of a 30W ultra-linear amplifier using KT66 or KT88 valves in the output stage. The component values and circuit conditions differ : see the components list opposite.

COMPONENT VALUES FOR FIG. 4-4

KT88 30W ULTRA-LINEAR AMPLIFIER

Values required for KT66 valves are indicated where necessary

G.E.C. VALVES

V1 B65/6SN7
V2 B65/6SN7
V3 KT88 (KT66)
V4 KT88 (KT66)
V5 U54

CAPACITORS

C1 50µF 12V
C2 0·05µF
C3 0·05µF
C4 8µF 350V
C5 8µF 450V
C6 0·05µF
C7 0·05µF

C10 8µF 500V

C13 8µF 500V (KT66 : 600V‡)

RESISTORS

(20% 0·25W *unless otherwise shown*)

R5 100kΩ
R6 15kΩ 0·5W } Matched to 5%
R7 15kΩ 0·5W }
R8 470kΩ 10%
R9 470kΩ 10%
R10 1kΩ
R11 22kΩ 1W
R12 33kΩ 10% 1W
R13 33kΩ 10% 1W
R14 220kΩ
R15 220kΩ
R16 10kΩ
R17 10kΩ
R18 4·7kΩ 1W
R19 400Ω (KT66 : 560Ω) 5% 5W
R20 400Ω (KT66 : 560Ω) 5% 5W
R21 270Ω 0·5W
R22 270Ω 0·5W

MISCELLANEOUS

L1 10H 200mA
T1 35W Ultra-linear transformer
6kΩ anode-anode (KT66 : 7kΩ)
‡Primary inductance : ≮ 50H
Leakage inductances :
‡Prim.—sec. : ≯ 10mH
‡½ prim.—UL tap : ≯ 10mH
T2 Mains transformer
Secondaries :
375-0-375V 200mA
(KT66 : 450-0-450V 150mA)
6·3V 5A CT (KT66 : 4A)
5V 3A

†*Or two 16µF 350V in series.*
‡*With these values, R23, R24 and C11, C12 may be omitted.*

TABLE 4-II

OPERATING CONDITIONS OF THE OUTPUT STAGE OF FIG. 4-4

	KT66 Valves	*KT88 Valves*	
V_a (b)	450	375	V
V_{g_2}	400	335	V
I_a+I_{g2} (o)	2×62·5	2×80	mA
I_a+I_{g2} (max sig)	2×72·5	2×85	mA
P_a+P_{g2} (o)	2×25	2×27	W
P_a+P_{g2} (max sig)	2×15	2×12	W
R_k	2×560	2×400	Ω
V_g (approx)	−36	−32	V
P_{out}	32	30	W
$R_{L\ (a-a)}$	7	5	kΩ
z_{out}	1·8	1	kΩ
D	0·5	0·25	%
V_{in} (rms) (approx) (to first stage)	600	500	mV

If negative feedback is omitted, the last three values are as follows :

z_{out}	9	4·5 kΩ