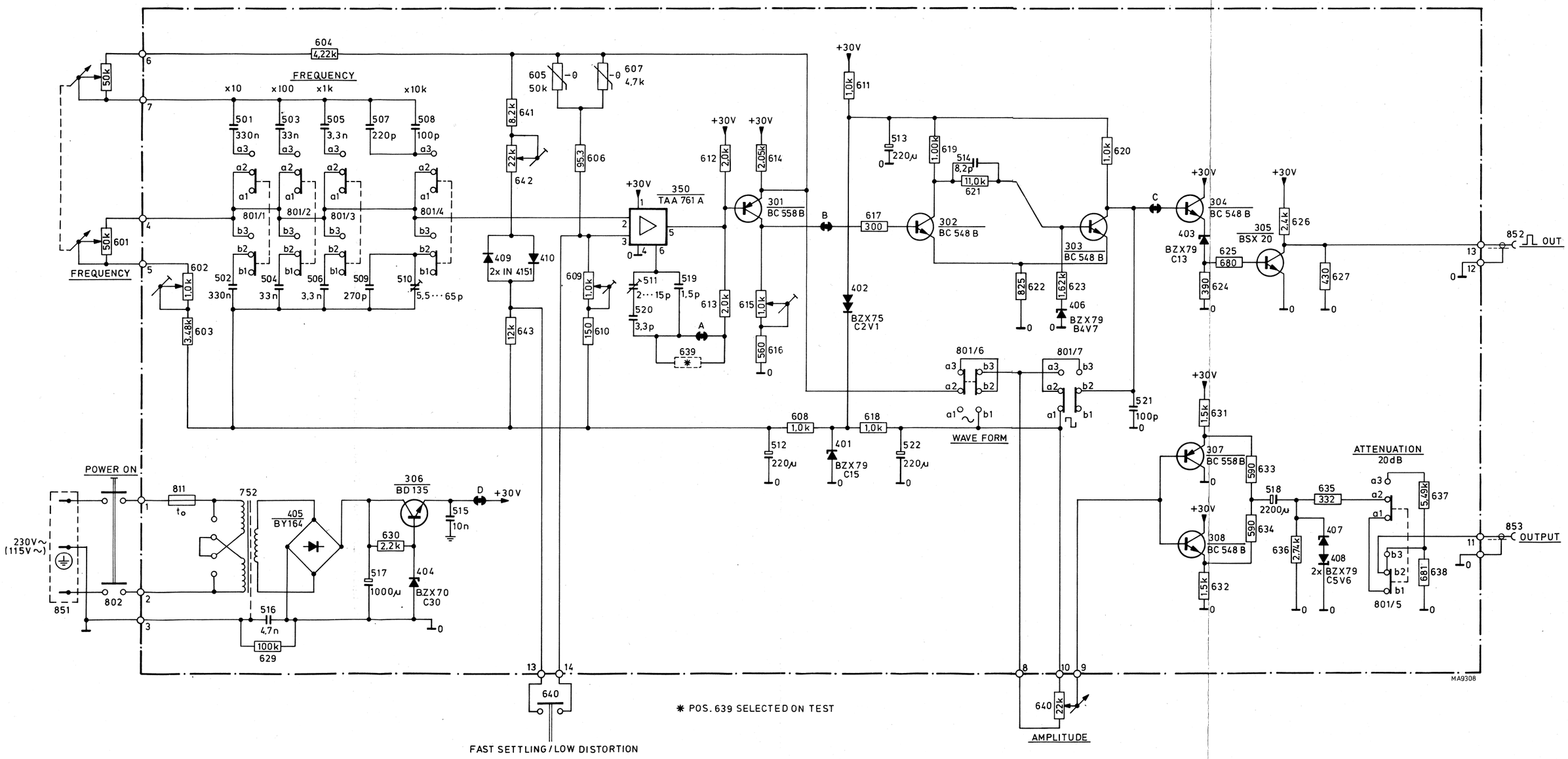

Fig. 11. Circuit diagram.

Seq.	SETTING								MEASURING			ADJUSTMENT
	PUSH-BUTTONS				CONTROLS		SOCKETS		Measuring point	Measured value	Explanation	Position no.
	FREQ. Hz	ATTEN 20 dB	WAVE FORM ~	WAVE FORM ⊓	FREQ.	AMPLI-TUDE	OUT TTL	OUTPUT Z_o 600 Ω				
II	801/1...4	801/5	801/6	801/7	601	640	852	853				
1									Soldering joint D	$U_{\_}$ = (29,3 ± 2) V	V (d.c.)	
2	x100	0 dB	x		1	max.		V (a.c.)	OUTPUT	U_{rms} = (2 – 0,02) V		609
3	x100	0 dB	x		1	max.		C	OUTPUT	T = (10 ± 0,02) ms	If required, readjust the dial on the potentiometer axis	dial FREQ.
4	x100	0 dB	x		10	max.		C	OUTPUT	T = (1 ± 0,005) ms		602
5	x100	0 dB	x		1,2...10	max.		V (a.c.)	OUTPUT	$\frac{U_{f2\ ...\ 10}}{U_{f1}} = \pm < 0{,}01 \triangleq \frac{\Delta U}{U} < 1\,\%$	If required, repeat adjustment 3 and 4	–
6	x10	0 dB	x		10	max.		C	OUTPUT	T = (10 ± 0,2) ms		–
7	x1k	0 dB	x		10	max.		C	OUTPUT	f = (10 ± 0,2) kHz		–
8											Turn trimmer 510 half-way in Turn trimmer 511 fully in	510 511
9	x10k	0 dB	x		10	max.		D	OUTPUT	D < 0,25 %	If D < 0,25 % → seq. 16 If D ⩾ 0,25 % → seq. 10	–
10	x10k	0 dB	x		10	max.		D	OUTPUT	D ⩽ 0,25 %		511
11	x10k	0 dB	x		4	max.		C	OUTPUT	f = (40 ± 0,2) kHz		510
12	x10k	0 dB	x		1 10	max.		C	OUTPUT	f_1 = (10 ± 0,3) kHz f_{10} = (100 ±3) kHz	If necessary adjust frequency at scale-ends to equal deviation. If adjustment possible → seq. 19 If adjustment not possible → seq. 13	510
13	x100	0 dB	x		10	max.		D	OUTPUT	D	Turn trimmer 511 to minimum until D increases (oscillation starting point). Note distortion value (D) measured at that point.	511
14	x10k	0 dB	x		10	max.		D	OUTPUT	D < 0,3 %	Turn trimmer 511 to maximum until D < 0,3 %. This setting must be different from that noted under seq. 13	511
15	x10k	0 dB	x		2 10	max.		D	OUTPUT	D_2 < 0,025 % D_{10} < 0,5 %	If adjustment possible → seq. 19 If adjustment not possible → open Soldering joint A (Fig. 10) and increase value of resistor 639 → seq. 16	511
16	x10k	0 dB	x		4	max.		C	OUTPUT	f = (40 ± 0,2) kHz		510
17	x10k	0 dB	x		1 10	max.		C	OUTPUT	f_1 = (10 ± 0,3) kHz f_{10} = (100 ± 3) kHz	If necessary adjust frequency at scale-ends to equal deviation	510
18	x10k	0 dB	x		10	max.		D	OUTPUT	D < 0,3 %	If D ⩾ 0,3 % → seq. 13	–
19	x100	0 dB	x		10	max.		D	OUTPUT	D < 0,025 %		–
20	x10	0 dB	x		1	max.		D	OUTPUT	D < 0,7 %		–
21	x10k	0 dB	x		1,2 ... 10	max.		V (a.c.)	OUTPUT	$\frac{U_{f1\ ...\ 10}}{U_{1\ kHz}} = 1 \pm < 0{,}015 \triangleq \frac{\Delta U}{U_{1\ kHz}} < 1{,}5\,\%$	Reference value: amplitude at 1 kHz. If required, adjust trimmer 510 → seq. 13	–
22	x100	0 dB		x	10	max.		C	OUTPUT	duty cycle = 0,5 ± 0,025		615
23	x1k	0 dB		x	1,2 ... 10	max.		C	OUTPUT	$\frac{\Delta f}{f} < 3\,\%$		–
24	x100	0 dB	x		10	min.		V (a.c.)	OUTPUT	U_{pp} < 0,02 V		–
25	x100	0 dB 20 dB	x		10	max.		V (a.c.)	OUTPUT	$\frac{U_{0\ dB}}{U_{20\ dB}}$ = (20 ± 0,3) dB		–
26	x100	0 dB	x		10	max.		V (a.c.) only 600 Ω V (a.c.)	OUTPUT	$\frac{U_{600\ \Omega}}{U_o}$ = 0,5 ± 0,0075		–
27	x100	0 dB	x		10	min.		600 Ω V (d.c.)	OUTPUT	U_{offset} < 30 mV		–
28	x100	0 dB		x	10	max.		Osc.	OUTPUT	Upp = (4,0 ... 5,5) V		–
29	x10k	0 dB		x	10	max.		600 Ω Osc.	OUTPUT	t_{rise} < 350 ns t_{fall}		–
30	x10k	0 dB		x	10	max.		600 Ω Osc.	OUTPUT	ringing < 1,5 %		–
31	x10	0 dB		x	5	max.		600 Ω Osc.	OUTPUT	tilt < 1 %		–
32	x1k				10		Osc.		⊓ OUT	U_{HIGH} = +(4,5 ± 0,7) V U_{LOW} < 0,4 V		–
33	x10k				10		Osc.		⊓ OUT	t_{rise} < 40 ns		–
34	x100	0 dB	x		10	max.		600 Ω D	OUTPUT	D = (0,5 ± 0,025) %	Switch "LOW DISTORTION/FAST SETTLING" in position "FAST SETTLING"	642
35	x10k	0 dB	x		8	max.		Osc.	OUTPUT	m < 0,6 %	m = envelope modulation = < 0,2 div. oscilloscope setting: –0,2 V/div. –50 ns/div.	