# TRACE ELLIOT

#### **SERVICE MANUAL**

**DATE :** December 29, 1999

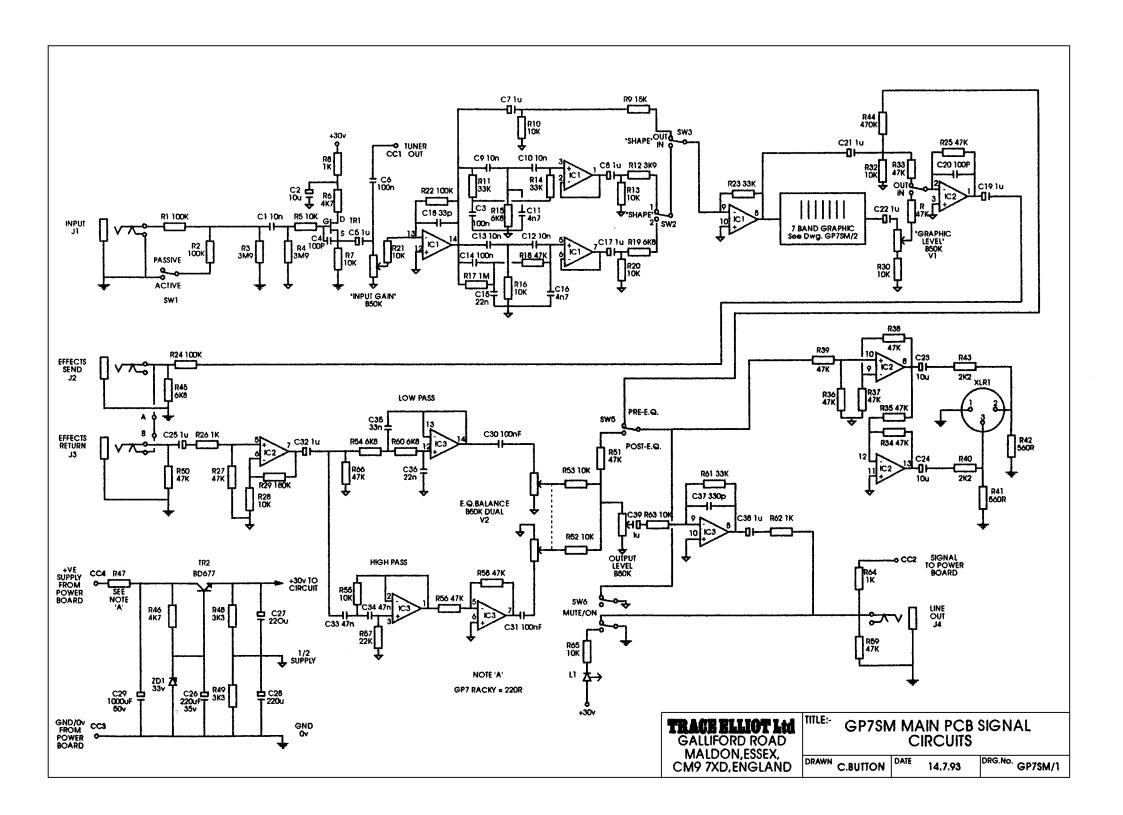
**Product Code:** N/A

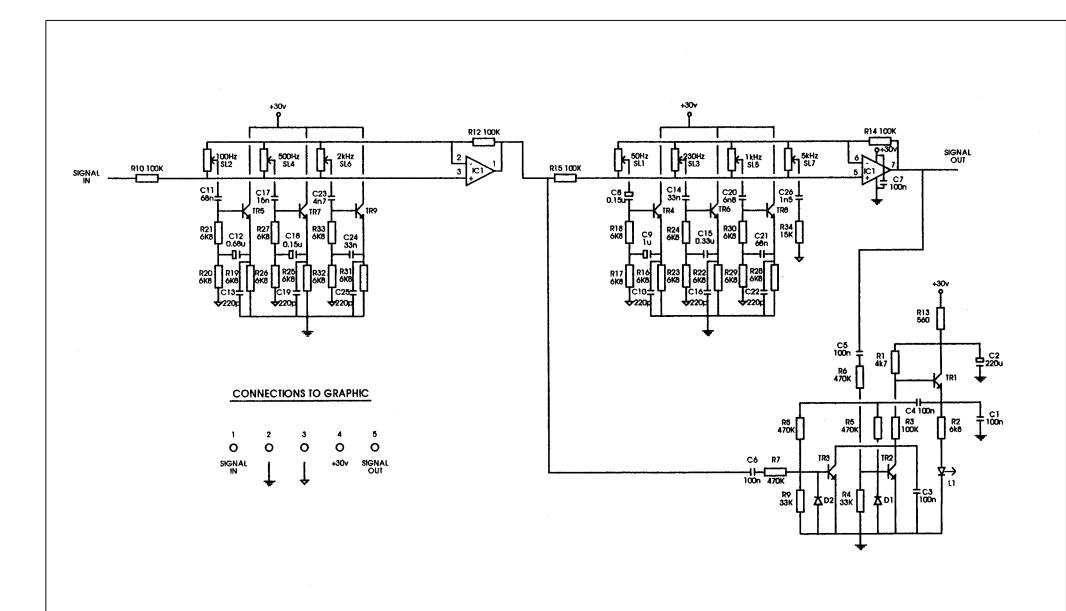
**Model Number:** GP7 200.250 WATT SM SERIES

Issued by:

**CM4 4GG** 

Trace Elliot Limited
Blackwater Trading Estate
The Causeway
Maldon
Essex
England





TRACE ELLIOT Ltd GALLIFORD ROAD MALDON,ESSEX, CM9 7XD,ENGLAND

TIITLE:- GP7SM OVE

GP7SM GRAPHIC E.Q. & OVERLOAD DISPLAY

DRAWN C.BUTTON

16.7.93

DRG.No. GP7SM/2

### PARTS LIST FOR GP7 SM MAIN PCB

Description	Part Code	Qty	Where Used
RESISTORS			
ZERO OHM LINK	72-RC-ZERO	17	444
100K 1/4 WATT	72-RM100K	4	R1 R2 R22 R24
3.9M 1/4 WATT	72-RM3M9	2	R3 R4
10K 1/4 WATT	72-RM10K	15	R5 R7 R10 R13 R16
			R20 R21 R28 R30 R32
4 = 14 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1-20-01-01-01		R52 R53 R55 R63 R65
4.7K 1/4 WATT	72-RM4K7	1	R46
1K ¼ WATT	72-RM1K	4	R8 R26 R62 R64
15K 1/4 WATT	72-RM15K	1	R9
33K 1/4 WATT	72-RM33K	4	R11 R14 R23 R61
3.9K ¼ WATT	72-RM3K9	2	R12 R6
6.8K 1/4 WATT	72-RM6K8	5	R15 R19 R45 R54 R60
1M 1/4 WATT	72-RM1M	1	R17
47K 1/4 WATT	72-RM47K	17	R18 R25 R27 R31 R33 R35-39 R50 R51 R56
			R58 R59 R66 R34
180K ¼ WATT	72-RM180K	1	R29
2.2K 1/4 WATT	72-RW160K	2	R40 R43
560R ¼ WATT	72-RM560R	$\frac{2}{2}$	R41 R42
470K ¼ WATT	72-RM470K	1	R44
22K ¼ WATT	72-RM22K	<del>-                                    </del>	R57
3K3 ¼ WATT	72-RM3K3	1/2	R48 R49
330R 4 WATT	72-RWW330R-4W	1	R47
330K 4 WATT	72-1(************************************	+'-	
CAPACITORS			
4.7nF 100V POLY	72-C4N7-100VP	2	C11 C16
10nF 100V POLY	72-C10N-100VP	5	C1 C9 C10 C12 C13
22nF 100V POLY	72-C22N-100VP	$\frac{1}{2}$	C15 C36
33nF 100V POLY	72-C33N-100VP	$\frac{1}{1}$	C35
47nF 100V POLY	72-C47N-100VP	2	C33 C34
100nF 100V POLY	72-C100N-100VP	5	C3 C6 C14 C30 C31
33pF 100V CER/DISC	72-C33P-100VCD	$\frac{3}{1}$	C18
100pF 100V CER/DISC	72-C100P-VCD2	2	C4 C20
330pF 100V CER/DISC	72-C330P-100VCD2	1	C37
1μF 35V TANT	72-C1-35VT	11	C5 C7 C8 C17 C19
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			C21 C22 C25 C32 C38 C39
10μF 63V RADIAL	72-C10-63VER	3	C2 C23 C24

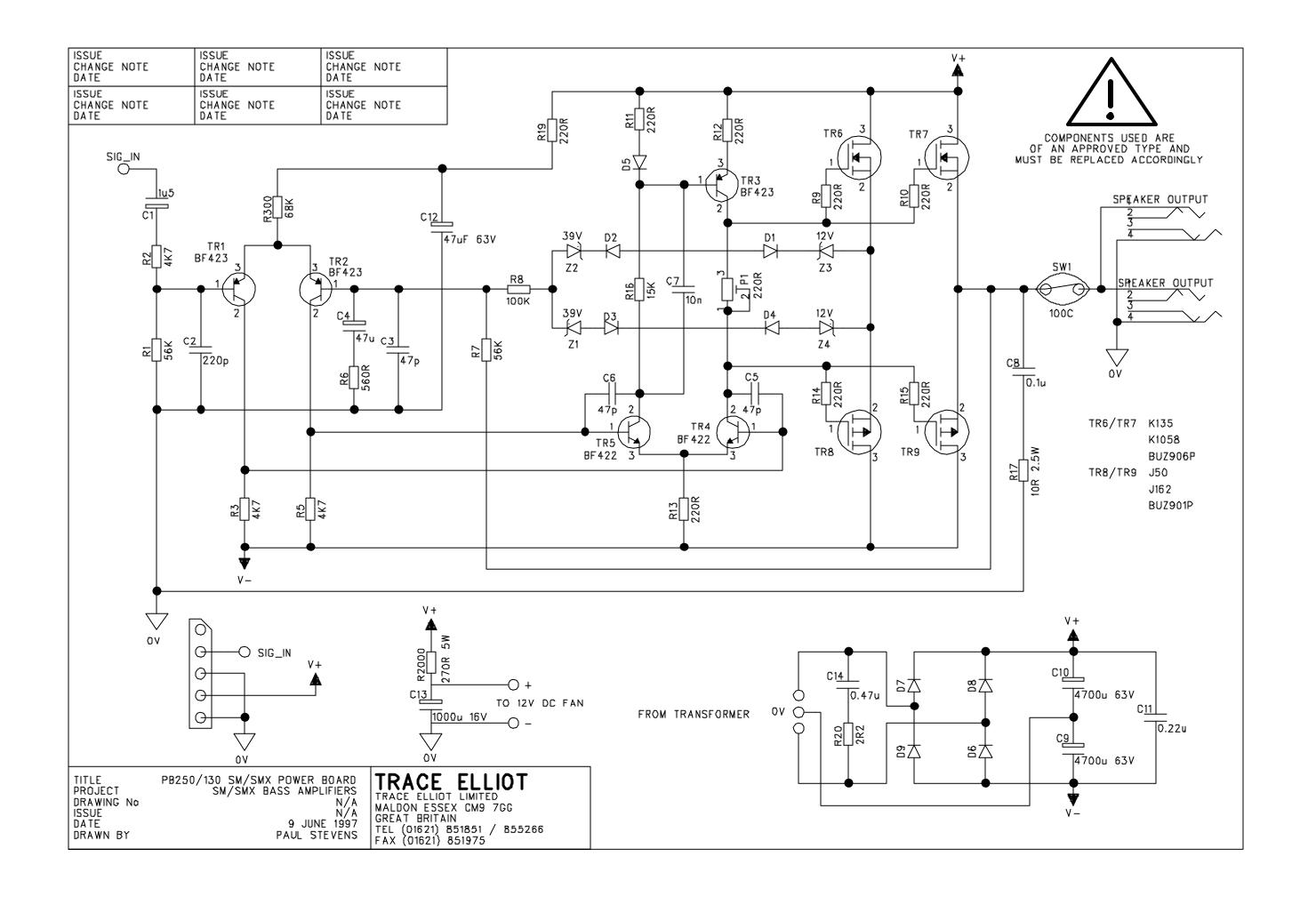
220μF 25V RADIAL	72-C220-35VER	2	C26 C28
10μF 35V AXIAL	72-C10-35VEA	1	This is to be fitted in place of the link above C15 and C16. Fitted the same way round as the rest of the radials, + at the top.
SEMI-CONDUCTORS			
TL074 OP-AMP	72-IC-TL074	3	IC1,2,3
J112 FET	72-FET-J-112	1	TR1
33V ZENER DIODE	72-D-BZX55C33V	1	ZD1
BD677	72-TBD677	1 .	TR2
HEATSINK FOR BD677	71-HS-TEG	<del>                                     </del>	TR2
TIE/TIONICE ON BBOTT	71110120	<u>'</u>	1112
SOCKETS			
3 WAY HEADER	72-HEAD-3W-2	1	СВ
4 WAY HEADER	72-HEAD-4W	1	CC
5 WAY HEADER	72-HEAD-5W	1	CA
JACK SOCKETS	72-SKT-JCKBNBG	4	J1 J2 J3 J4
POTS / SWITCHES			
50K DUAL GANG PCB	73-POT-50K-DG	1	V2
50K PCB MOUNT POT	73-POT-50KB	<del>-                                     </del>	V2
50K POTS FLYING	C00-POT-50KB	2	INPUT / OUTPUT
LATCHING PUSH SWITCH	73-SW-F2UEE	6	SW1-6
LATORING PUSH SWITCH	13-3VV-FZUEE		3771-0
OTHERS			
RED LED	72-LED-RED-TEG	1	LED 1
			L

Rik Daniels February 24, 1997

#### PARTS LIST FOR GP7SM FRONT BOARD

Description	Part Code	Qty	Where Used
RESISTORS		,	
ZERO OHM LINK	72-RCZERO	3	
100K 1/4 WATT	72-RM100K	5	R3 R10 R12 R14 R15
15K ¼ WATT	72-RM15K	1	R34
33K ¼ WATT	72-RM33K	2	R4 R9
470K ¼ WATT	72-RM470K	4	R5 R6 R7 R8
4K7 ¼ WATT	72-RM4K7	1	R1
560R ¼ WATT	72-RM560R	1	R13
6K8 ¼ WATT	72-RM6K8	19	R2 R16-33
			·
CAPACITORS		<del></del>	
0.15μF 35V TANT	72-C0.15-35VT	12	C8 C18
0.33μF 35V TANT	72-C0.33-35VT	1	C15
0.68μF 35V TANT	72-C0.68-35VT	<del>    i                                 </del>	C12
1μF 35V TANT	72-C1-35VT	+i	C9
100nF 100V POLY	72-C100N-100VP	6	C1 C3-7
15nF 100V POLY	72-C15N-100VP	1	C17
1n5 100V POLY	72-C1N5-100VP	11	C26
220μF 35V RADIAL	72-C220-35VER	1	C2
220pF 100V POLY	72-C220P-100VCD2	6	C10 C13 C16 C19 C22
22-5 4007 DOLY	70 000N 400VD	<del>                                     </del>	C25
33nF 100V POLY	72-C33N-100VP	1	C14 C24
4n7 100V POLY	72-C4N7-100VP		C23
68nF 100V POLY	72-C68N-100VP	2	C11 C21
6n8 100V POLY	72-C6N8-100VP	1	C20
SEMI-CONDUCTORS			
IN4148 DIODE	72-D-IN4148	2	D1 D2
TL072 OP-AMP	72-IC-TL072	1	IC1
RED LED	72-LED-RED	1	L1
BC212L TRANSISTOR	72-TBC212L	1	TR1
BC549C TRANSISTOR	72-TBC549C	8	TR2-9
OTHERS			
PLASTIC SPACER	71-SPA-LED-TEG2	1	L1
5 WAY JUMPER LINK	72-LK-5W100MM	1	CA
SLIDER POTS	73-SLIDER-B100KC	7	SL1-7

Rik Daniels February 24, 1997



## PARTS LIST FOR PB200 POWER MODULES

Description	Part Code	Qty	Where Used
RESISTORS			
RESISTORS			
100K 1/4 WATT	72-RM100K	1	R8
15K ¼ WATT	72-RM15K	1	R16
220R 1/4 WATT	72-RM220R	8	R9-15 R19
4K7 ¼ WATT	72-RM4K7	3	R2 R3 R5
560R ¼ WATT	72-RM560R	1	R6
56K ¼ WATT	72-RM56K	2	R1 R7
68K ¼ WATT	72-RM68K	1	R4
10R 2.5 WATT	72-RWW10R-2.5W	1	R17
1K 2W PLUGABLE	72-RWW1K	1	R18
CAPACITORS			
0.22 F.250V.POLV.POV	70 CO 20 050VD		011
0.22μF 250V POLY BOX	72-C0.22-250VP	1	C11
1.5μF 35V TANT	72-C1.5-35VT	1	C1
100nF 250V POLY BOX 10nF 100V MYLAR	72-C100N-250VP	1	C8
220pF 100V CER DISC	72-C10N-100VE	1	C7
47μF 63V RADIAL	72-C220P-100VCD2 72-C47-63VER	2	C2 C4 C12
47pF 100V CER DISC	72-C47P-100VCD	3	
4700μF 80V RADIAL	72-C47P-100VCD	2	C3 C5 C6 C9 C10
4700µF 60V RADIAL	72-CAP-470000V	_ 2	C9 C10
SEMI-CONDUCTORS			
12V ZENER DIODE	72-D-BZX55C12V	2	ZD3 ZD4
39V ZENER DIODE	72-D-BZX55C39V	2	ZD1 ZD2
GI 751 DIODE	72-D-GI751	4	D6-9
IN4148 DIODE	72-D-IN4148	5	D1-5
BUZ900 MOSFET	72-MOS-BUZ900	2	
BUZ905 MOSFET	72-MOS-BUZ905	2	
BF422 TRANSISTOR	72-TBF422	2	TR4 TR5
BF423 TRANSISTOR	72-TBF423	3	TR1-3
OTUEDO			
OTHERS			
ISOLATION BUSH	72-MOS-BUSH-WHT	8	
ISOLATION PAD	72-MOS-KOOL-PAD	4	
220R PRESET POT	72-PRESET-220R	1	P1
MAIN HEATSINK	71-HS-L200	1	

Rik Daniels April 3, 1997