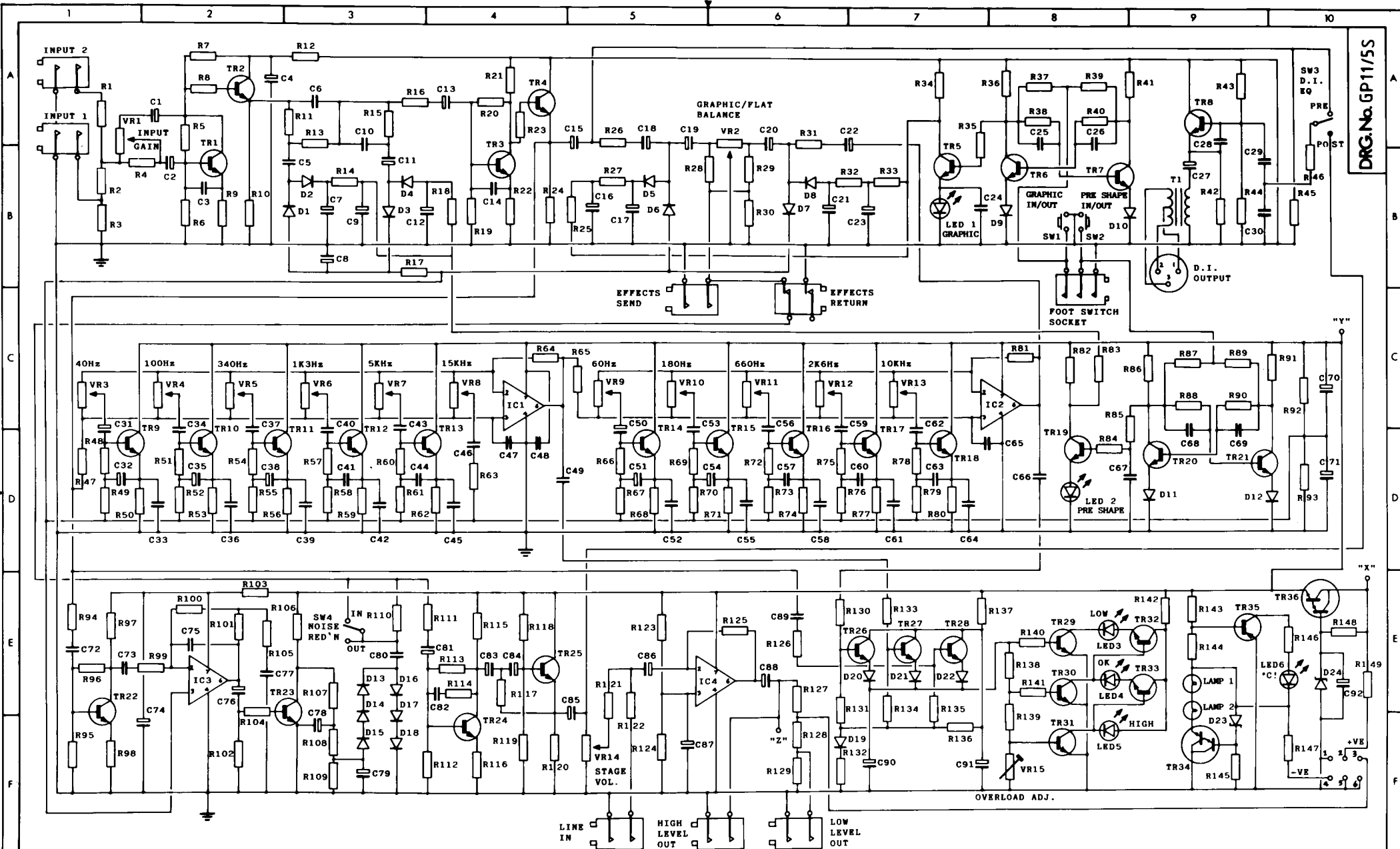


TRACE ELLIOT

SERVICE MANUAL

DATE : December 29, 1999
Product Code: N/A
Model Number : MK V Bass Amplifiers

Issued by:
Trace Elliot Limited
Blackwater Trading Estate
The Causeway
Maldon
Essex
England
CM4 4GG



DRG. No. GP11/55

ISSUE	PCB No	DESCRIPTION
2	GP11F5A	FRONT BOARD
2	GP11B5A	BACK BOARD

UNIT 4&7. 49 BRAINTREE RD.
WITHAM. ESSEX. CM8 2BZ. ENGLAND.
TEL: (0376) 517237. TELEX:
FAX: (0376) 518527.

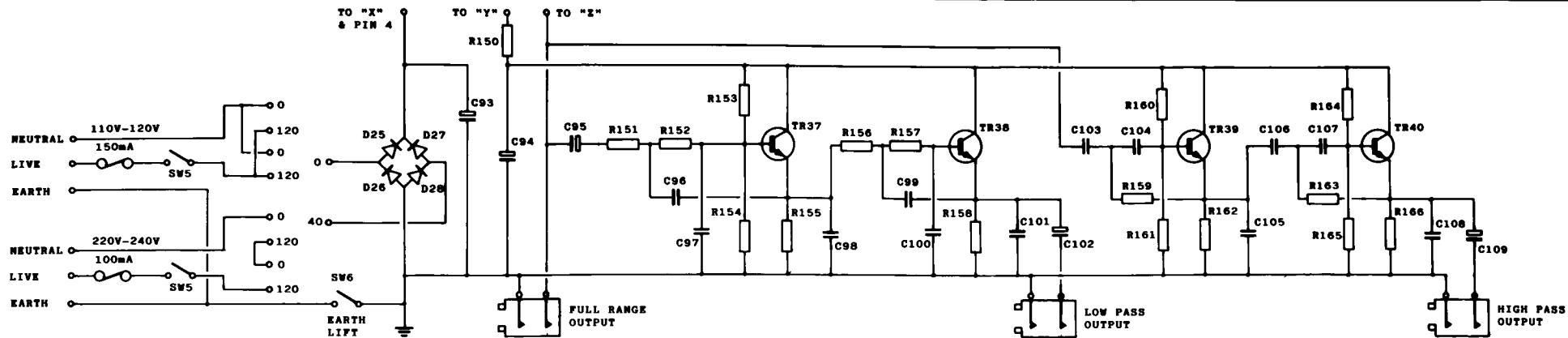
**TRACE
ELLIOT**

TRACE ELLIOT RESERVE THE RIGHT TO
ALTER SPECIFICATIONS WITHOUT NOTICE

TRACE ELLIOT
GP11 MK5
PRE AMPLIFIER

DRAWN	TRACED	CHECKED	APPROVED	DATE
STUART WATSON	RICHARD HOPKINS	MARK GOODY	FRED FRIEDLEIN	2.12.86

DRAWING No. GP11S mk5 SEE DRG. No. GP11/R
FOR SELF-POWERED UNIT.



DRG. No. GP11/5R

CAPACITORS REF. No.

C1	1.5uF
C2	0.47uF
C3	1000pF
C4	15uF
C5	0.068uF
C6	3300pF
C7	1.5uF
C8	15uF
C9	15uF
C10	6800pF
C11	0.33uF
C12	1.5uF
C13	0.22uF
C14	1000pF
C15	2.2uF
C16	15uF
C17	1.5uF
C18	0.47uF
C19	0.47uF
C20	0.47uF
C21	1.5uF
C22	0.47uF
C23	15uF
C24	0.1uF
C25	0.1uF
C26	0.1uF
C27	15uF
C28	1000pF
C29	0.1uF
C30	3300pF

PARTS LIST FOR GP11/5S & GP11/5R

STARRED ITEMS NOT FITTED TO GP11/5R MODEL

C31	0.47uF
C32	2.2uF
C33	220pF
C34	0.1uF
C35	1uF
C36	220pF
C37	0.033uF
C38	0.33uF
C39	220pF
C40	7270pF
C41	0.1uF
C42	220pF
C43	2200pF
C44	0.022uF
C45	220pF
C46	680pF
C47	47pF
C48	0.1uF
C49	0.1uF
C50	0.22uF
C51	1.5uF
C52	220pF
C53	0.057uF
C54	0.57uF
C55	220p
C56	0.015uF
C57	0.22uF
C58	220p
C59	3300p
C60	0.0377uF

C61	220p
C62	1000p
C63	0.01uF
C64	220pF
C65	47pF
C66	0.1uF
C67	0.1uF
C68	0.1uF
C69	0.1uF
C70	1000uF
C71	220uF
C72	0.047uF
C73	0.1uF
C74	15uF
C75	47pF
C76	15uF
C77	1000pF
C78	15uF
C79	1.5uF
C80	0.047uF
C81	0.47uF
C82	1000pF
C83	0.22uF
C84	0.22uF
C85	2.2uF
C86	0.47uF
C87	1.5uF
C88	1.5uF
C89	0.1uF
C90	15uF

TRANSFORMERS

T1	D.I. TRANSFORMER
T2	240/120V TO 40V TRANSFORMER

SWITCHES

SW1-SW2	SPST. MOMENTARY ACTION
SW3-SW4	SPDT. MINIATURE TOGGLE
SW5	SPST. 3A. 240V ROCKER
SW6	DPDT. SLIDE ACTION

MISCELLANEOUS REF. No.

TRANSISTORS

TR1-TR33	BC549C
TR34	BD677
TR35	BC212L
TR36	BD677
TR37-TR40	BC549C

DIODES

D1-D22	1N4148
D23	BZY88C27
D24	BZY88C33
D25-D28	1N4002

POTS SLIDERS PRESETS

VR1	500K LN
VR2-VR13	100K LN
VR14	50K LN
VR15	10K PRESET

IC.S

IC1-IC4	TL071
(IC4 GP11/5R CA3140E)	

RESISTORS REF. No.

R1	6K8
R2	6K8
R3	1M
R4	220K
R5	1M
R6	100K
R7	27K
R8	6K8
R9	560R
R10	6K8
R11	330K
R12	1K5
R13	33K
R14	56K
R15	56K
R16	15K
R17	15K
R18	56K
R19	180K
R20	1M
R21	15K
R22	1K5
R23	6K8
R24	3K3
R25	33K
R26	56K
R27	33K
R28	33K
R29	33K
R30	10K

R31	56K
R32	33K
R33	33K
R34	4K7
R35	100K
R36	27K
R37	15K
R38	100K
R39	15K
R40	100K
R41	27K
R42	15K
R43	180K
R44	180K
R45	100K
R46	100K
R47	100K
R48	4K7
R49	4K7
R50	4K7
R51	4K7
R52	4K7
R53	4K7
R54	4K7
R55	4K7
R56	4K7
R57	4K7
R58	4K7
R59	4K7
R60	4K7
R61	4K7
R62	4K7
R63	10K
R64	100K
R65	100K

R66	4K7
R67	4K7
R68	4K7
R69	4K7
R70	4K7
R71	4K7
R72	4K7
R73	4K7
R74	4K7
R75	4K7
R76	4K7
R77	4K7
R78	4K7
R79	4K7
R80	4K7
R81	100K
R82	4K7
R83	56K
R84	56K
R85	56K
R86	27K
R87	15K
R88	100K
R89	15K
R90	100K
R91	27K
R92	3K3
R93	3K3
R94	180K
R95	100K
R96	1M
R97	27K
R98	560R
R99	56K
R100	560K

R101	560K
R102	56K
R103	560R
R104	6K8
R105	6K8
R106	180K
R107	560R
R108	33K
R109	68K
R110	1M
R111	6K8
R112	100K
R113	1M
R114	220K
R115	15K
R116	560R
R117	10K
R118	180K
R119	180K
R120	6K8
R121	22K
R122	33K
R123	100K
R124	100K
R125	33K
R126	56K
R127	1K5
R128	4K7
R129	220R
R130	56K
R131	100K
R132	6K8
R133	56K
R134	100K
R135	100K

R136	220K
R137	560R
R138	6K8
R139	4K7
R140	15K
R142	1K5
*R143	1K5
*R144	100K
*R145	15K
*R146	4K7
*R147	220R 4W
R148	15K
*R149	220R 4W
R150	220R
R151	6K8
R152	6K8
R153	100K
R154	100K
R155	6K8
R156	12K
R157	12K
R158	3K3
R159	12K
R160	27K
R161	27K
R162	6K8
R163	27K
R164	56K
R165	56K
R166	3K3

RESISTORS
KΩ UNLESS
STATED

ISSUE	PCB No	DESCRIPTION
2	GP11X0	CROSSOVER

UNIT 4&7. 49 BRAINTREE RD.
WITHAM. ESSEX. CM8 2BZ. ENGLAND.
TEL: (0376) 517237.
FAX: (0376) 518527.

TRACE ELLIOT

TRACE ELLIOT RESERVE THE RIGHT TO
ALTER SPECIFICATIONS WITHOUT NOTICE

TRACE ELLIOT
GP11 MK5
RACK MOUNTING
PRE AMPLIFIER

DRAWN
STUART
WATSON

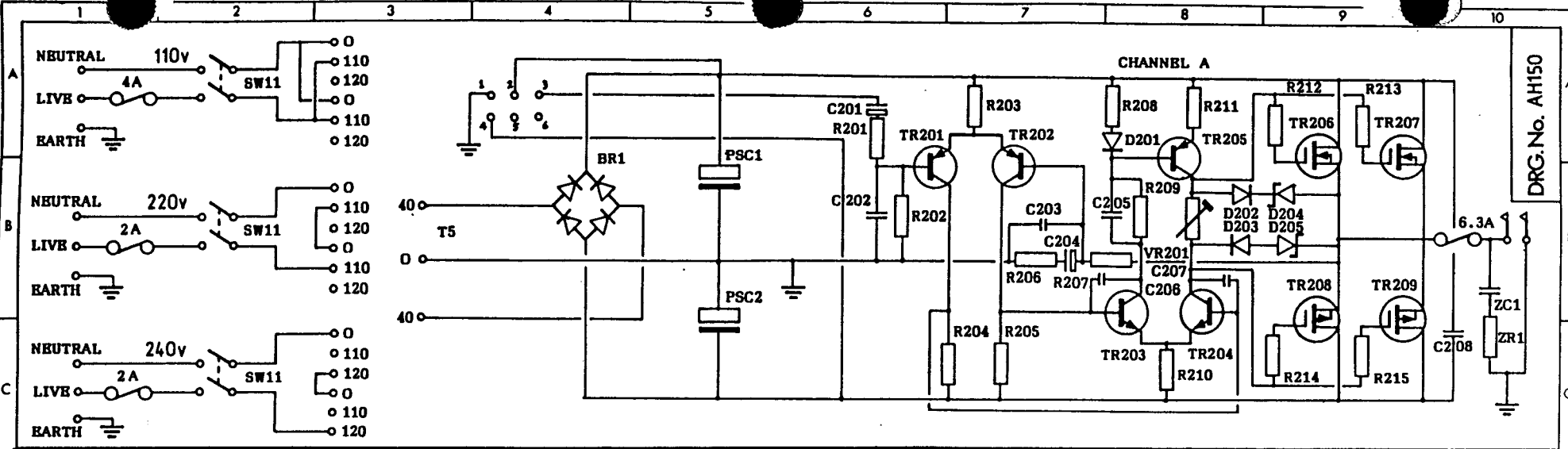
TRACED
RICHARD
HOPKINS

CHECKED
MARK
GOODAY

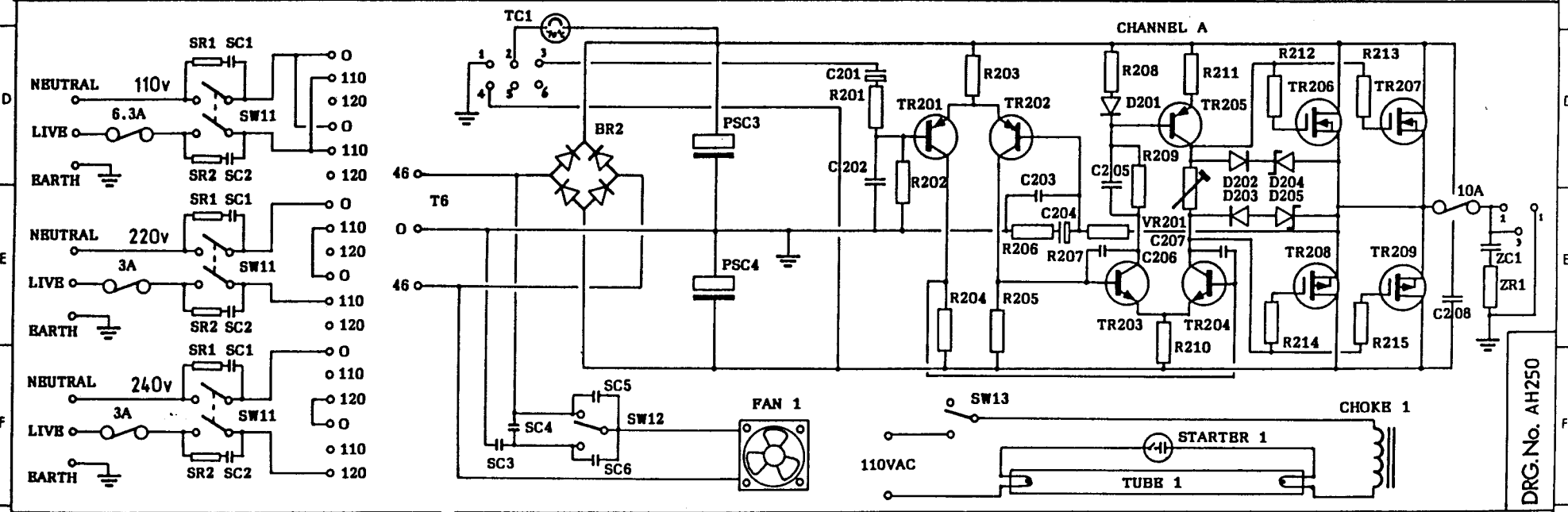
APPROVED
FRED
FRIEDLEIN

DATE
2.12.86

DRAWING No. GP11R mk5 ADDITIONAL CIRCUITRY
FOR SELF-POWERED UNIT.



DRG.No. AH150



DRG.No. AH250

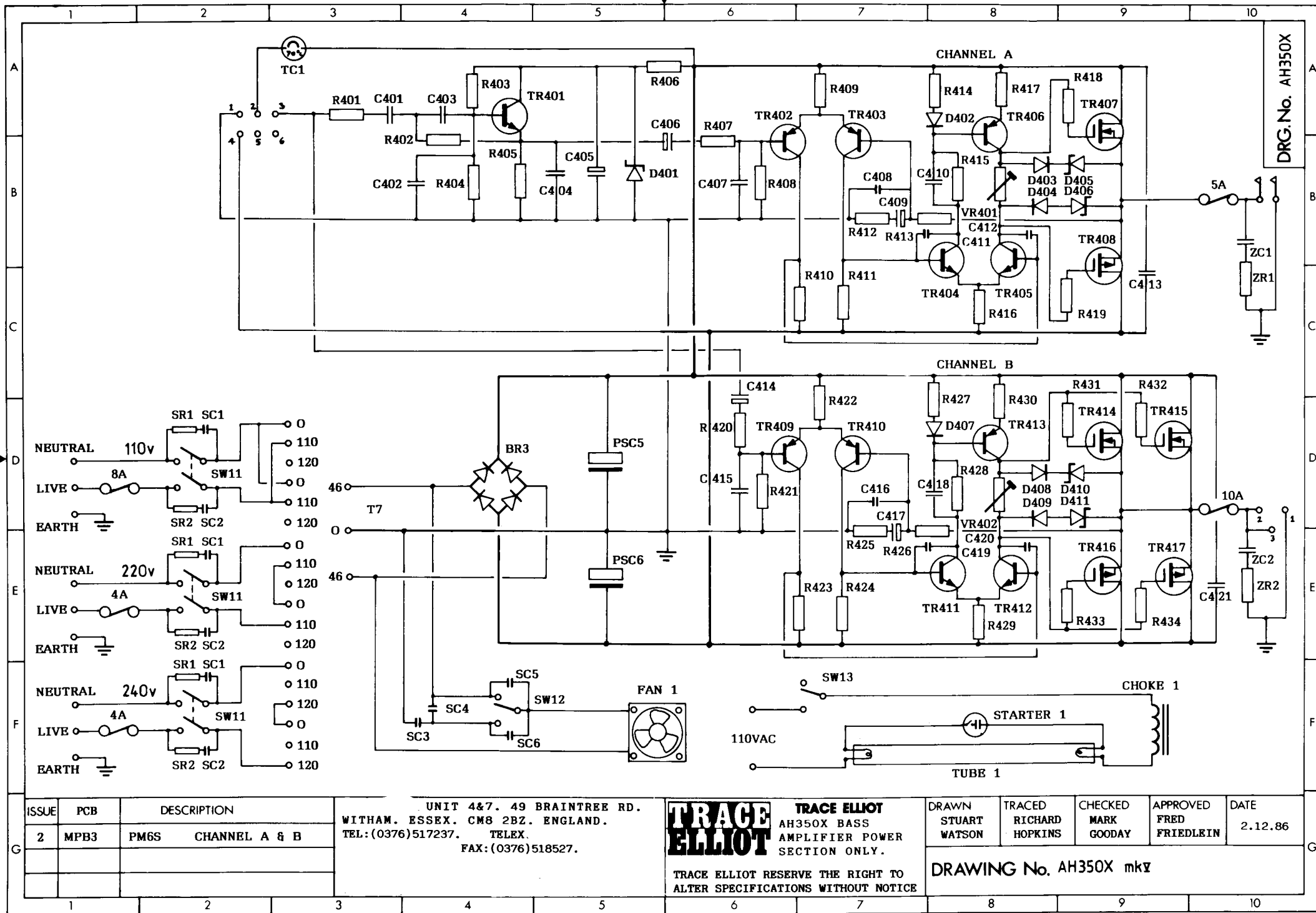
ISSUE	PCB	DESCRIPTION
4	MPB2	PM4S CHANNEL A

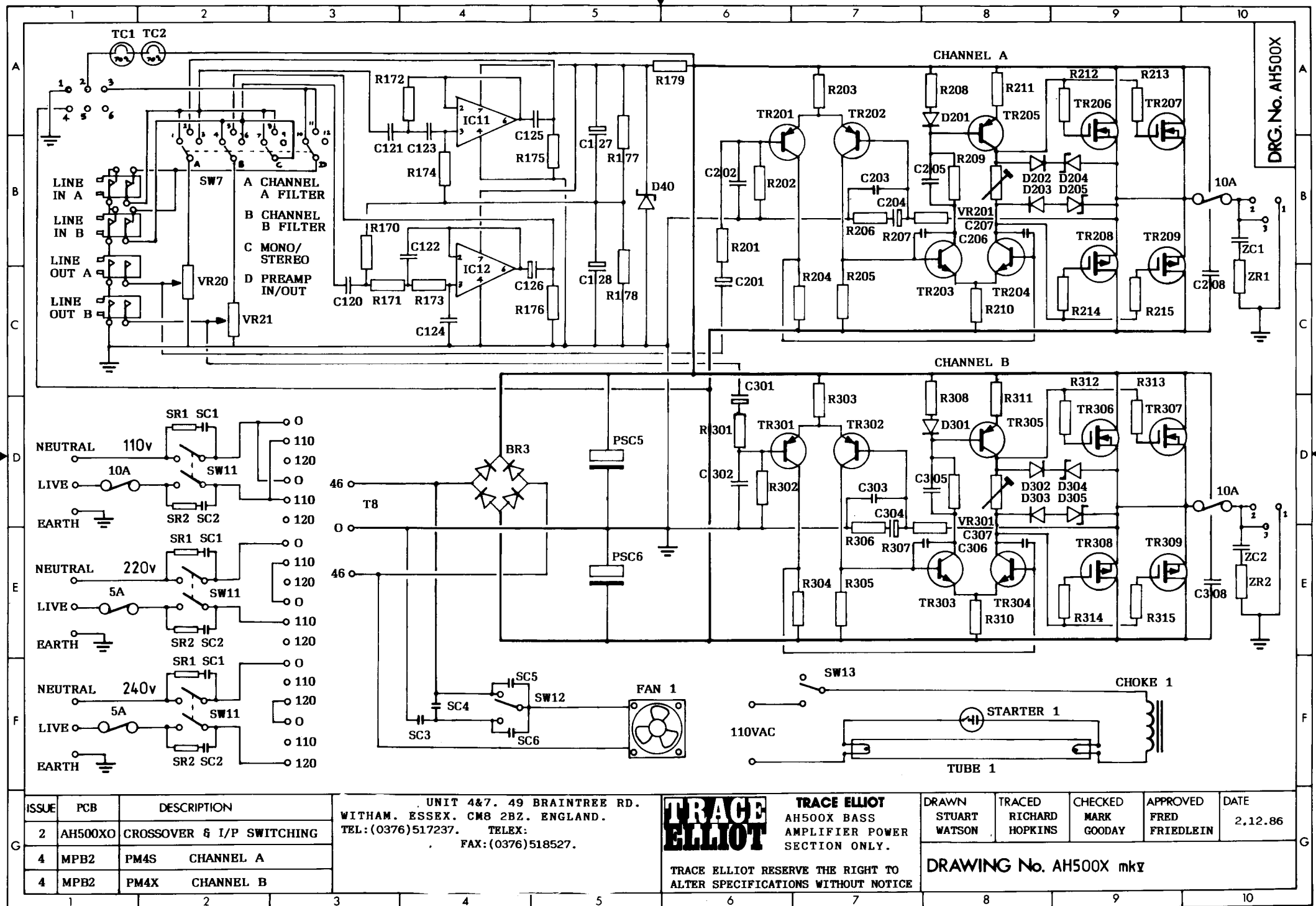
UNIT 447. 49 BRAINTREE RD.
WITHAM. ESSEX. CM8 2BZ. ENGLAND.
TEL: (0376) 517237. TELEX:
FAX: (0376) 518527.

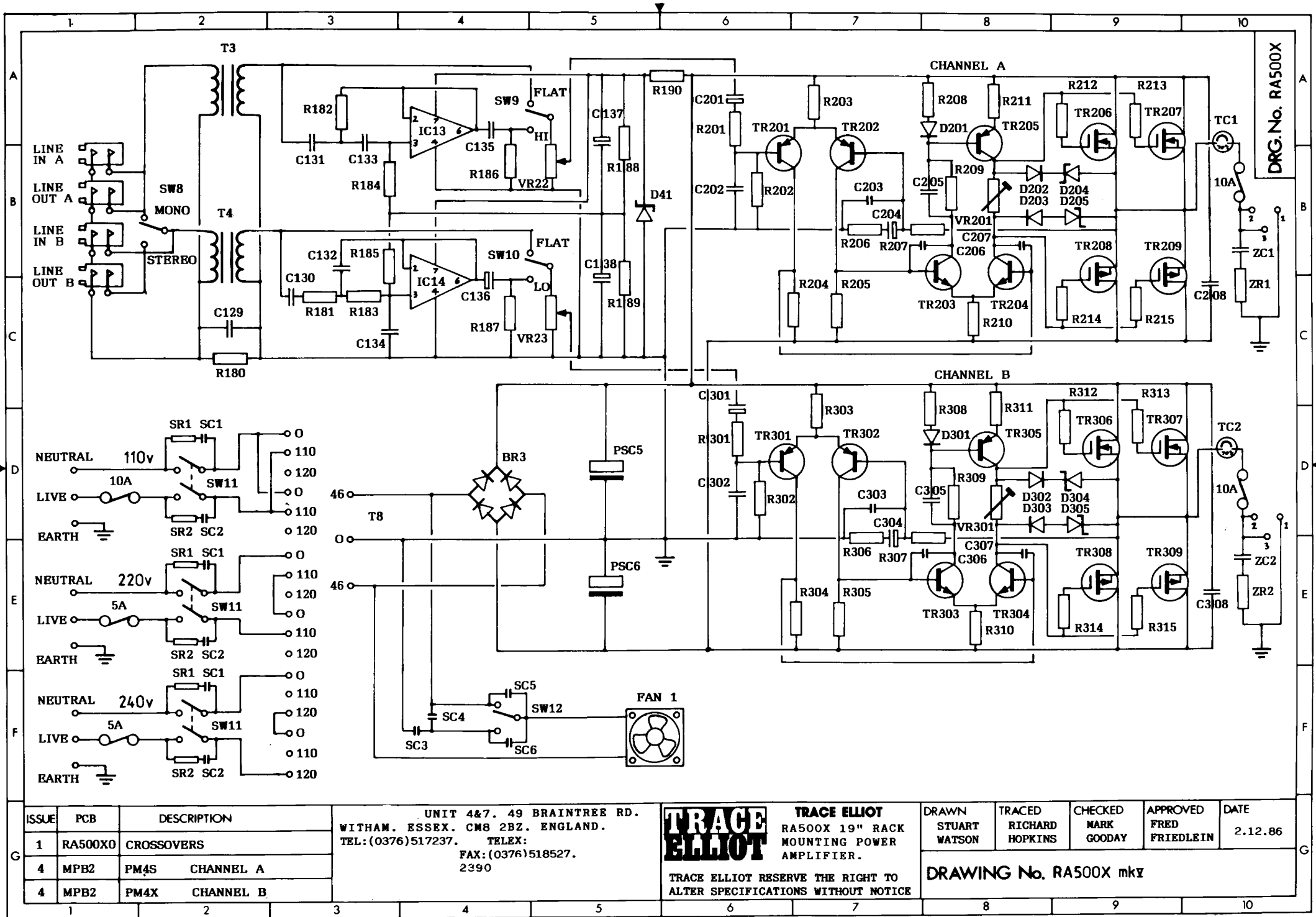
TRACE ELLIOT
AH150 & AH250 BASS
AMPLIFIER POWER
SECTION ONLY.
TRACE ELLIOT RESERVE THE RIGHT TO
ALTER SPECIFICATIONS WITHOUT NOTICE

DRAWN	TRACED	CHECKED	APPROVED	DATE
STUART WATSON	RICHARD HOPKINS	MARK GOODY	FRED FRIEDLEIN	2.12.86

DRAWING No. AH150 & AH250 mkY







ISSUE	PCB	DESCRIPTION
1	RA500X0	CROSSOVERS
4	MPB2	PM4S CHANNEL A
4	MPB2	PM4X CHANNEL B

UNIT 4&7, 49 BRAINTREE RD.
 WITHAM, ESSEX. CM8 2BZ, ENGLAND.
 TEL: (0376) 517237. TELEX:
 2390
 FAX: (0376) 518527.

TRACE ELLIOT

TRACE ELLIOT
 RA500X 19" RACK
 MOUNTING POWER
 AMPLIFIER.

DRAWN
STUART
WATSON

TRACED
RICHARD
HOPKINS

CHECKED
MARK
GOODAY

APPROVED
FRED
FRIEDLEIN

DATE
2.12.86

DRAWING No. RA500X mkY

TRACE ELLIOT RESERVE THE RIGHT TO
 ALTER SPECIFICATIONS WITHOUT NOTICE

1	2	3	4	5	6	7	8	9	10																				
PM4S PCB No. MPB2 REF. No. RESISTORS R201 4K7 R202 56K R203 68K R204 4K7 R205 4K7 R206 560R R207 56K R208 220R R209 15K R210 220R R211 220R R212 220R R213 220R R214 220R R215 220R DIODES D201 1N4148 D202 1N4148 D203 1N4148 D204 BZY88C12 D205 BZY88C12 CAPACITORS C201 1.5uF C202 220pF C203 47pF C204 47uF C205 0.01uF C206 47pF C207 47pF C208 0.22uF TRANSISTORS TR201 BF423 TR202 BF423 TR203 BF422 TR204 BF422 TR205 BF423 TR206 2SK135 TR207 2SK135 TR208 2SJ50 TR209 2SJ50 PRESETS VR201 220R ½W					PM4X PCB No. MPB2 REF. No. RESISTORS R301 4K7 R302 56K R303 68K R304 4K7 R305 4K7 R306 560R R307 56K R308 220R R309 15K R310 220R R311 220R R312 220R R313 220R R314 220R R315 220R DIODES D301 1N4148 D302 1N4148 D303 1N4148 D304 BZY88C12 D305 BZY88C12 CAPACITORS C301 1.5uF C302 220pF C303 47pF C304 47uF C305 0.01uF C306 47pF C307 47pF C308 0.22uF TRANSISTORS TR301 BF423 TR302 BF423 TR303 BF422 TR304 BF422 TR305 BF423 TR306 2SK135 TR307 2SK135 TR308 2SJ50 TR309 2SJ50 PRESETS VR301 220R ½W					PM6S PCB No. MPB3 REF. No. RESISTORS R401 6K8 R402 27K R403 180K R404 180K R405 10K R406 15K R407 4K7 R408 56K R409 68K R410 4K7 R411 4K7 R412 560R R413 56K R414 220R R415 15K R416 220R R417 220R R418 220R R419 220R R420 4K7 R421 56K R422 68K R423 4K7 R424 4K7 R425 560R R426 56K R427 220R R428 15K R429 220R R430 220R R431 220R R432 220R R433 220R R434 220R DIODES D401 BZY88C30 D402 1N4148 D403 1N4148 D404 1N4148 D405 BZY88C12 D406 BZY88C12 D407 1N4148 D408 1N4148 D409 1N4148 D410 BZY88C12 D411 BZY88C12 CAPACITORS C401 0.01uF C402 1000pF C403 0.022uF C404 0.022uF C405 100uF C406 1.5uF C407 220pF C408 47pF C409 2.2uF C410 0.01uF C411 47pF C412 47pF C413 0.22uF C414 1.5uF C415 220pF C416 47pF C417 47uF C418 0.01uF C419 47pF C420 47pF C421 0.22uF TRANSISTORS TR401 BC549C TR402 BF423 TR403 BF423 TR404 BF422 TR405 BF422 TR406 BF423 TR407 2SK135 TR408 2SJ50 TR409 BF423 TR410 BF423 TR411 BF422 TR412 BF422 TR413 BF423 TR414 2SK135 TR415 2SK135 TR416 2SJ50 TR417 2SJ50 PRESETS VR401 220R ½W VR402 220R ½W					PARTS LIST FOR Mk5 AMPLIFIERS AH150 AH250 AH350X AH500X RA500X AH500X CROSSOVER PCB No. AH500XO REF. No. RESISTORS R170 100K R171 68K R172 68K R173 68K R174 68K R175 100K R176 100K R177 27K R178 27K R179 4K7 1W DIODES D40 BZY88C30 RA500X CROSSOVER PCB No. RA500XO REF. No. RESISTORS R180 100K R181 68K R182 68K R183 68K R184 68K R185 1M R186 68K R187 27K R188 27K R189 27K R190 4K7 1W DIODES D41 BZY88C30 CAPACITORS C120 0.1uF C121 0.01uF C122 0.01uF C123 0.01uF C124 0.01uF C125 0.1uF C126 1.5uF C127 1000uF C128 1000uF IC.S IC11 CA3140E IC12 CA3140E POTENTIOMETERS VR20 50K LN VR21 50K LN CAPACITORS C129 0.22uF C130 0.1uF C131 0.1uF C132 0.01uF C133 0.01uF C134 0.01uF C135 0.1uF C136 1.5uF C137 1000uF C138 1000uF IC.S IC13 CA3140E IC14 CA3140E POTENTIOMETERS VR22 50K LN VR23 50K LN					MISCELLANEOUS REF. No. ZOBEL NETWORK ZC1 0.1uF ZC2 0.1uF ZR1 10R 3W ZR2 10R 3W BRIDGE RECTIFIERS BR1 6A 400V BR2 10A 400V BR3 25A 400V TEMPERATURE SWITCHES TC1 70 C N/C 10A TC2 70 C N/C 10A POWER SUPPLY CAPACITORS PSC1 4700uF/63V PSC2 4700uF/63V PSC3 4700uF/100V PSC4 4700uF/100V PSC5 10000uF/100V PSC6 10000uF/100V SUPPRESSION NETWORK SC1 0.1uF/250V SR1 100R SC2 0.1uF/250V SR2 100R SC3 1uF OR 1.5uF/250V SC4 2.2uF/250V SC5 0.01uF/1KV SC6 0.01uF/1KV ULTRA VIOLET & FAN FAN 1 110VAC 20 WATT TUBE 1 15-18 WATT UV CHOKE 1 110VAC 15 WATT STARTER 1 110VAC 22 WATT SWITCHES SW7 4POLE 3WAY ROTARY SW8 SPDT MIN. TOGGLE SW9 SPDT MIN. TOGGLE SW10 SPDT MIN. TOGGLE SW11 DPST 10A ROCKER SW12 SPDT 10A ROCKER SW13 SPST 10A ROCKER TRANSFORMERS T3 1:1 RATIO 150R ISOLATING T4 1:1 RATIO 150R ISOLATING T5 110/240V TO 40-0-40 250VA T6 110/240V TO 46-0-46 300VA T7 110/240V TO 46-0-46 400VA T8 110/240V TO 46-0-46 600VA					UNIT 4&7. 49 BRAINTREE RD. WITHAM. ESSEX. CM8 2BZ. ENGLAND. TEL: (0376) 517237. TELEX: FAX: (0376) 518527. TRACE ELLIOT PARTS LIST FOR BASS AMPLIFIER POWER SECTIONS TRACE ELLIOT RESERVE THE RIGHT TO ALTER SPECIFICATIONS WITHOUT NOTICE DRAWN STUART WATSON TRACED RICHARD HOPKINS CHECKED MARK GOODAY APPROVED FRED FRIEDLEIN DATE 2.12.86 DRAWING No. PARTS LIST FOR Mk5 AMPLIFIERS				
1	2	3	4	5	6	7	8	9	10																				