SOUNDTRACS PLC

TOPAZ MAXI 24 - 4 - 2 MIXER

TOPAZ MAXI 32 - 4 - 2 MIXER

TECHNICAL INFORMATION

Issue B Sept. 95

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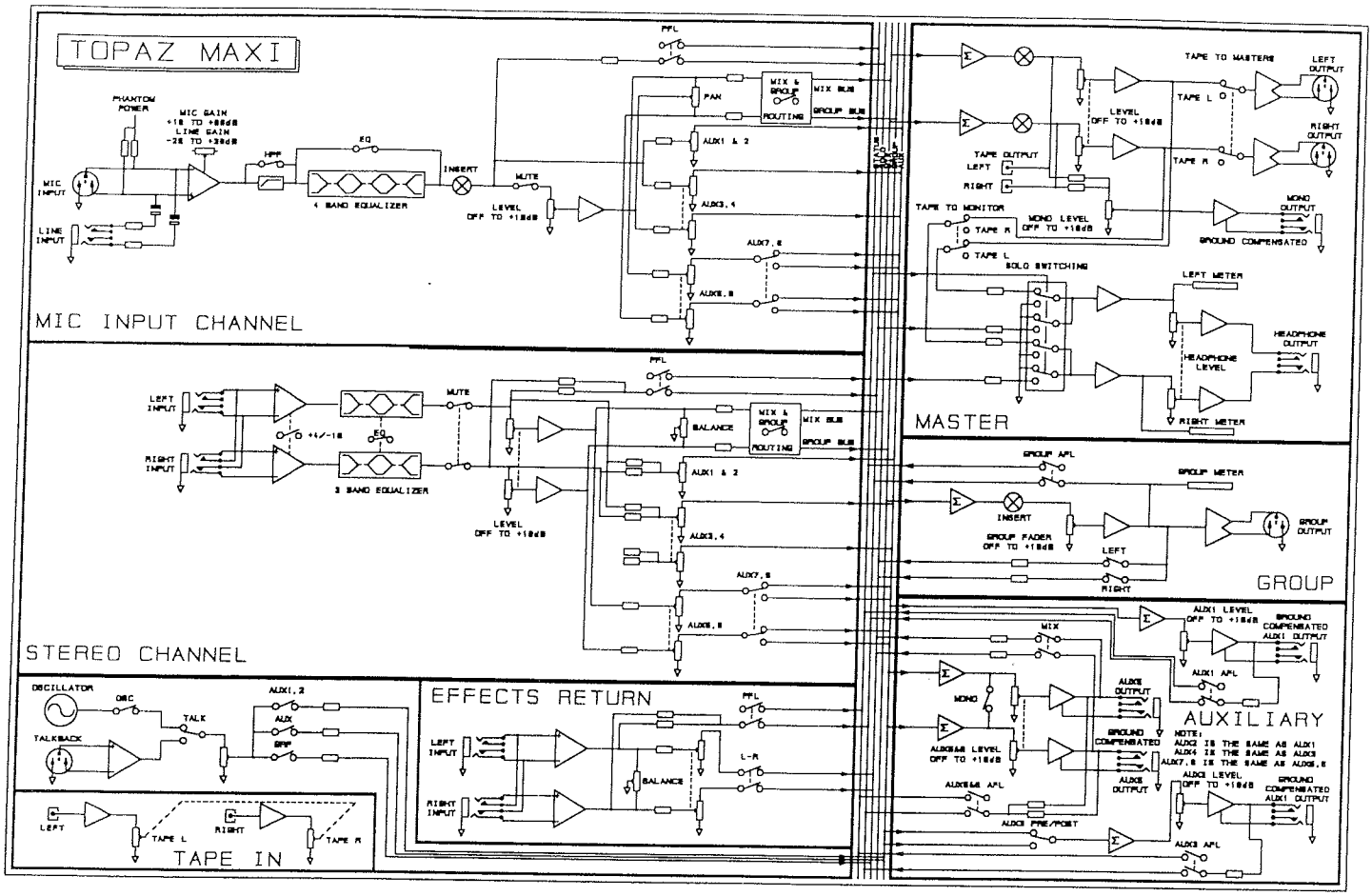
Technical Information



Specifications

INPUT & OUTPUT IMPEDANCES

Microphone Inputs	1k2 ohms
Line Inputs	>20k ohms
Outputs	<70 ohms

OUTPUT LEVELS

Master Outputs (Balanced)	+26dBu
Aux Outputs (Ground Comp)	+21dBu
Headphones (per side)	140mW into 600 ohms

FREQUENCY RESPONSE

Channel	20Hz - 30kHz ±1dB

E.I.N.

Source 150ohms	-128dBu

MIX NOISE (Master Fader at 0dB)

Input Faders Down (24 Ch)	<-86dB
Input Faders Down (32 Ch)	<-84dB

DISTORTION

Line	<0.007% at 1kHz

AUX NOISE

Input Sends Down (24 Ch)	<-86dBu
Input Sends Down (32 Ch)	<-84dBu

SIGNAL CROSSTALK (1kHz)

Input Fader Attenuation	>95dB
Aux Send Attenuation	>90dB
Adjacent Channel	>85dB
Stereo Channel Separation	>75dB

DIMENSIONS

24 Ch Weight (Unpacked)	25Kgs
24 Ch Width	980mm
32 Ch Weight (Unpacked)	30Kgs
32 Ch Width	1218mm
24 & 32 Height at Front	60mm
24 & 32 Height at Rear	120mm
24 & 32 Overall Depth	712mm
24 & 32 Overall Height	125mm

SUB AND FINAL ASSEMBLY PARTS LISTS FOR SOUNDTRACS PRODUCTS

INTRODUCTION

Soundtracs parts lists are printed according to the stages of assembly of the final product. Parts lists included in user manuals normally refer to the initial printed circuit board construction and correspond to the schematic circuit diagrams to aid in fault diagnostics during repairs.

In order to find part numbers for items used later in the construction of a product the relevant parts list must be consulted.

PARTS LISTS

In general the following applies to the reference number which are given to the various groups of lists:

Complete PCB's begin P
This will show resistors, IC's etc. PCB part lists may be further sub divided with a "VCD" part number. This is a list of small components fitted by the automatic insertion machine.

Module assemblies begin MOD-
This will show knobs, panels, fixing screws etc. The

MOD- prefix also refers to the complete electronics assembly of a single plate mixer such as Solo or Topaz. *

Chassis/frame assemblies begin FRM-
This will show the parts of large separate mechanical housings used on larger mixers such as Jade. (There are no FRM- lists for Solo, for example) *

Final assembly begins X-
This shows rear panels, end cheek mouldings, accessory cables etc. This will also include packing materials etc.

EXAMPLE: Topaz 24 in line recording mixer:
Input PCB component parts are listed under P-12979
Knobs are listed under MOD-TPZ-REC24
End cheeks are listed under X-TPZ-REC24

* For Topaz Mini, Macro, Macro+ and Maxi, these are reversed i.e. MOD- is the completed assembly and FRM is the assembled front panel with PCB's.

PCB Suffix Codes
On all recent Soundtracs PCB's the number shown will be in the form of P12345/01 ISS A.
The P code will be the same as the drawing number which begins S. e.g. S12345. If there several pages these will be S12345A, S12345B etc. but all refer to 1 PCB.

The suffix /01, /02 etc. which is seen on the PCB refers to the "layer" of the PCB e.g.. component side copper, solder mask etc. The most common code seen is /01 which is copper layout on the non component side and /05 which is the component ident printing on the component side. The issue version maybe relevant and is the "ISS A" adjacent to the P12345 and NOT the hand written ISSUE elsewhere on the PCB (this is the component kit issue).

(3)

CONFIRMATION OF PERFORMANCE FOR SOUNDTRACS MIXERS

INTRODUCTION

The following is a condensed version of test procedures for checking Soundtracs consoles to original factory published specifications. Refer to the figures given in product user manual or brochure when performing the following tests.

Any tests should be carried out with the mixer operated in isolation with NO external equipment connected except the measurement instrument. (monitor using headphones or battery powered loudspeakers if required).

The correct use and setup of audio measurement systems is an art in itself and a failure of an otherwise fault free mixer to meet specifications is invariably due to incorrect setup or procedure. Please contact the factory for further advice on our procedures and your test system supplier for advice on the optimum use of your test system.

01/96

DISTORTION

1. Set the fader on the channel to be tested to "0" i.e.. 10 dB below the top of fader movement and route the channel to the left output. Make sure no other channels are routed to the left output (if the mixer has no routing switches, the published specification allows for this) and that all other faders, monitors and effects returns are turned down.

2. Set the master faders to zero. (This is 10dB below the top of the fader movement on some mixers).

3. Connect a low distortion signal generator to the line input of a channel, and set to give +10dBu on the Left output.

4. Measure distortion at the left output of the console. The Distortion meter should be average responding and have a LP filter at 80kHz.

ADJACENT CHANNEL CROSSTALK

1. Input a reference + 4 dBu sine wave to the line input of one channel. Set the fader on the channel to 0 (10 dB below max.), route the channel to L/R and set the pan to centre.

2. Connect audio level meter to the line output of an adjacent channel. The meter should be average responding, with 22Hz -22kHz bandwidth. Set the fader on the second channel to 0, route the channel to L/R and set the pan to centre.

3. Connect a 150 Ohm resistor to the line input of the second channel , set the gain to zero and select line in.

4. Take two readings from the meter, one at 1kHz and one at 10kHz.

5. Where there is no line output from an adjacent channel, DO NOT pan one channel left, the other right and measure the left - right difference. This is NOT channel separation (and is NOT the stereo separation either!). This gives the pan control performance which is limited by the pan control pots, usually to about 65 dB.

MIX NOISE

1. Set Master L & R faders or other outputs (e.g. groups or Aux.'s) to be measured to "0" . (This is 10dB below the top of the fader movement on some mixers).

2. Set all channel faders and monitor pots (if fitted) to the bottom of their movement (no output from channel). This ensures we are looking at only the mix noise and not any contributed from channels themselves.

3. Set all pan controls to the centre position.

4. Route the required number of channels to MIX / L-R or other output as required. This is indicated in the brochure. i.e. If the brochure states 32 inputs routed then 32 inputs must be routed. This could be 24 monitors and 8 effects returns, 16 channels and 16 monitors, etc. Remember to include any FX returns etc. that are permanently selected. Note that all Aux sends are usually all routed at all times.

5. Connect test instrument to either L or R master output or other output of interest.

6. Set instrument to measure amplitude, average detector, 22Hz - 22kHz bandwidth, unweighted. 0 dBr = +4 dBu (0 dBu = 775mV). (Using RMS will make the reading about 1 dB worse).

7. Switch ground lift switch on PSU to ensure you do not have ground loops in your test set-up. Noise should be as per our published figures (usually around -80dBr) or better. If it is worse, look at this with an oscilloscope or better, a spectrum analyser to determine what it is that you can hear. This often turns out to be hum, either due to bad earthing or induction.

Soundtracs use Audio Precision instruments to obtain the published results but any regular Audio mV meter should work.

MICROPHONE EQUIVALENT INPUT NOISE

If you are comparing a Soundtracs with a different mixer, be careful not to be deceived by different gain structures (in particular the +10dB gain in the mix master faders which if pushed to the top will show 10dB "extra" noise).

1. Un-route all channels groups and returns except channel under test. Route this to MIX / L-R. (if the mixer has no routing switches, the published specification allows for this)

2. Set channel fader to "0" i.e.. 10 dB below the top of fader movement.

3. Set Master L faders to "0" as per mix noise, above.

4. Input -60dB sine wave reference level signal to the channel under test, pan full left.

5. Set channel gain to maximum and measure L mix output, this shows the channel gain.

6. Disconnect input signal and replace with 150ohm dummy load.

7. Measure output noise on left master output with the same set up as for mix noise.

8. Channel noise is gain + measured noise e.g.: -60dBr gain and -69dBr noise gives -129dBr noise for the mic input.

(5)

SOUNDTRACS POTENTIOMETER DECODER

Revised 30th April 96

Because of the huge number of pots in use we use a number based system. Whilst circuit diagrams show most component values, the pots are called up by their part number. This "decoder" is to give service engineers a handy reference as to what the value and type these pots are. In addition, some other useful information follows.

Linear, Logarithmic and Reverse- or Anti-Log law & Values in Ohms

In general pots are marked with the value e.g. 10K and a letter giving the law.

There are however 2 different sets of codes.

Japanese manufacturers (notably Alps) use a different code from European types

A = Log (i.e. = audio) B = Linear C = RLog

Pots are either marked in simple 10K (=10,000 ohm) form or the more recent style (as used on many capacitors) showing the number of zero's e.g. 10K = 103 (10 followed by 3 zero's)

In general the part number defines the type for a particular application.

POT000104	22K RLOG	POT000106	5K RLOG (use POT000147)
POT000107	10K LIN CD	POT000108	50K LOG
POT000109	100K+100K RLOG	POT000110	10K+10K LIN CD
POT000111	50K+50K LOG	POT000112	use POT000114
POT000113	10K LOG STEREO FDR	POT000114	10K LOG side pcb FDR
POT000115	use POT000123	POT000116	10K LOG CD
POT000117	2X100K RLOG	POT000118	2X100K LOG
POT000119	10K LOG	POT000120	2X10K LIN CD
POT000121	2X10K LOG	POT000122	10K LOG FDR
POT000123	2X20K RLOG	POT000124	4X100K RLOG
POT000125	10K LOG FDR 60mm	POT000126	10K LOG FDR 60mm
POT000127	2X10K LOG	POT000129	4X 100K RLOG
POT000131	MOTOR FDR 10K LOG	POT000132	10K STER FDR
POT000133	MOTOR 10K LOG FDR	POT000134	use POT000121
POT000135	10K LOG FDR	POT000136	10K LOG FDR
POT000137	10K STEREO FDR	POT000138	10K MONO FDR
POT000139	5K RLOG (use POT0147)	POT000140	10K LIN CD (use POT0107)
POT000141	50K LOG (use POT0108)	POT000142	10K STEREO FDR
POT000143	10K MONO FDR	POT000144	10K STEREO FDR
POT000145	10K MONO 60mm FDR	POT000146	10K STEREO 60mm FDR
POT000147	5K D (special)	POT000148	10K MONO FDR
POT000149	10K STEREO FDR	POT000150	10K STEREO FDR 60mm
POT000151	10K MONO FDR 60mm		

Notes on listing

2x = dual (stereo) + = dual concentric

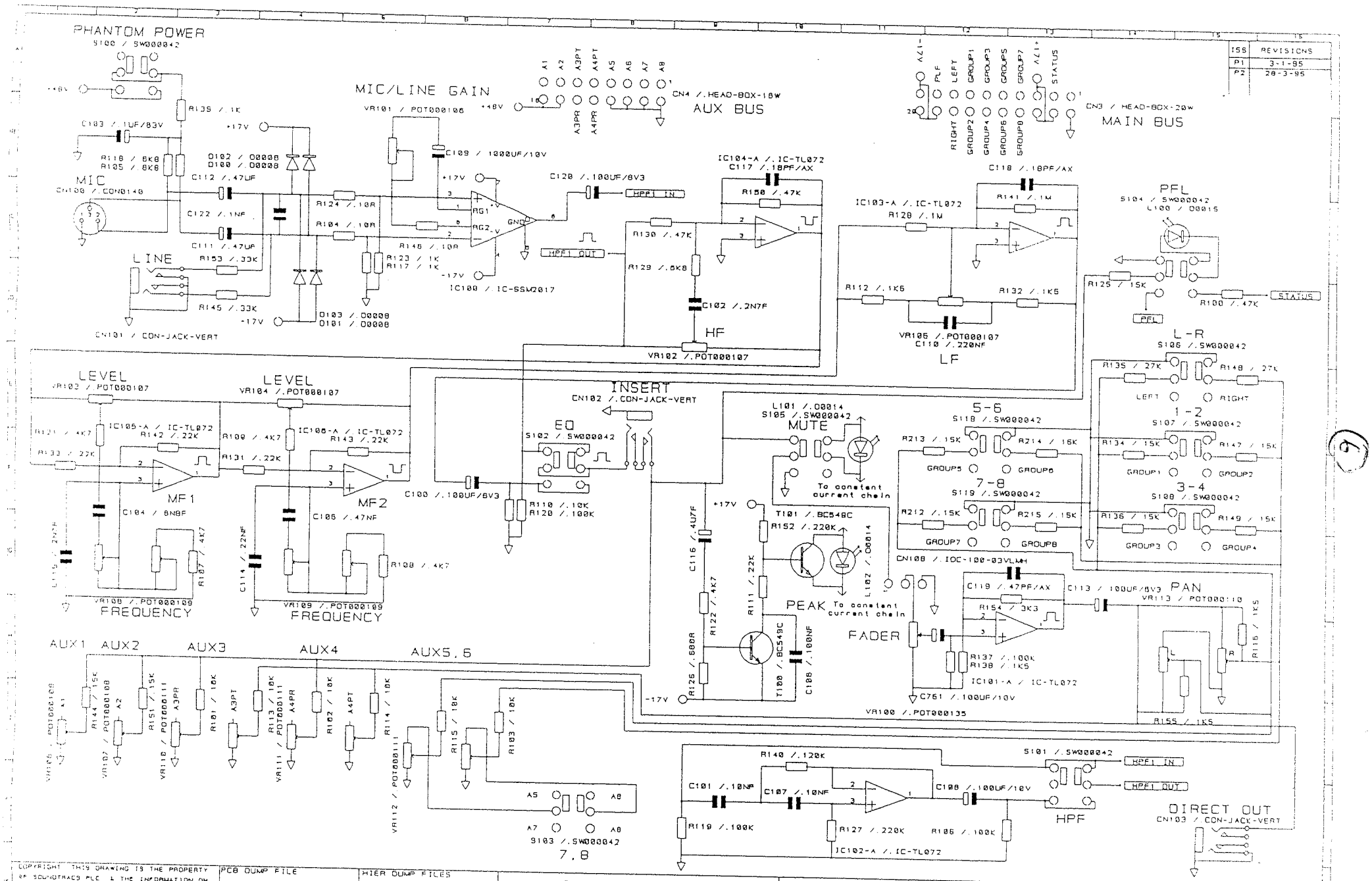
CD = Centre detent (e.g. panpots)

FDR = fader

K =1000's of ohms LIN = linear,

LOG = audio, RLOG = Reverse (or anti) Log

use.... = pot has been replaced new type



PCB DUMP FILE

CIRCUIT DUMP FILES

HIER DUMP FILES

SOUNDTRACS PLC
91, EMELL ROAD, SURBITON, SURREY, KT6 6AH.
TEL. 081-399 3392. FAX: 081-399 6821
TELEX: 8951073 STRACS G.

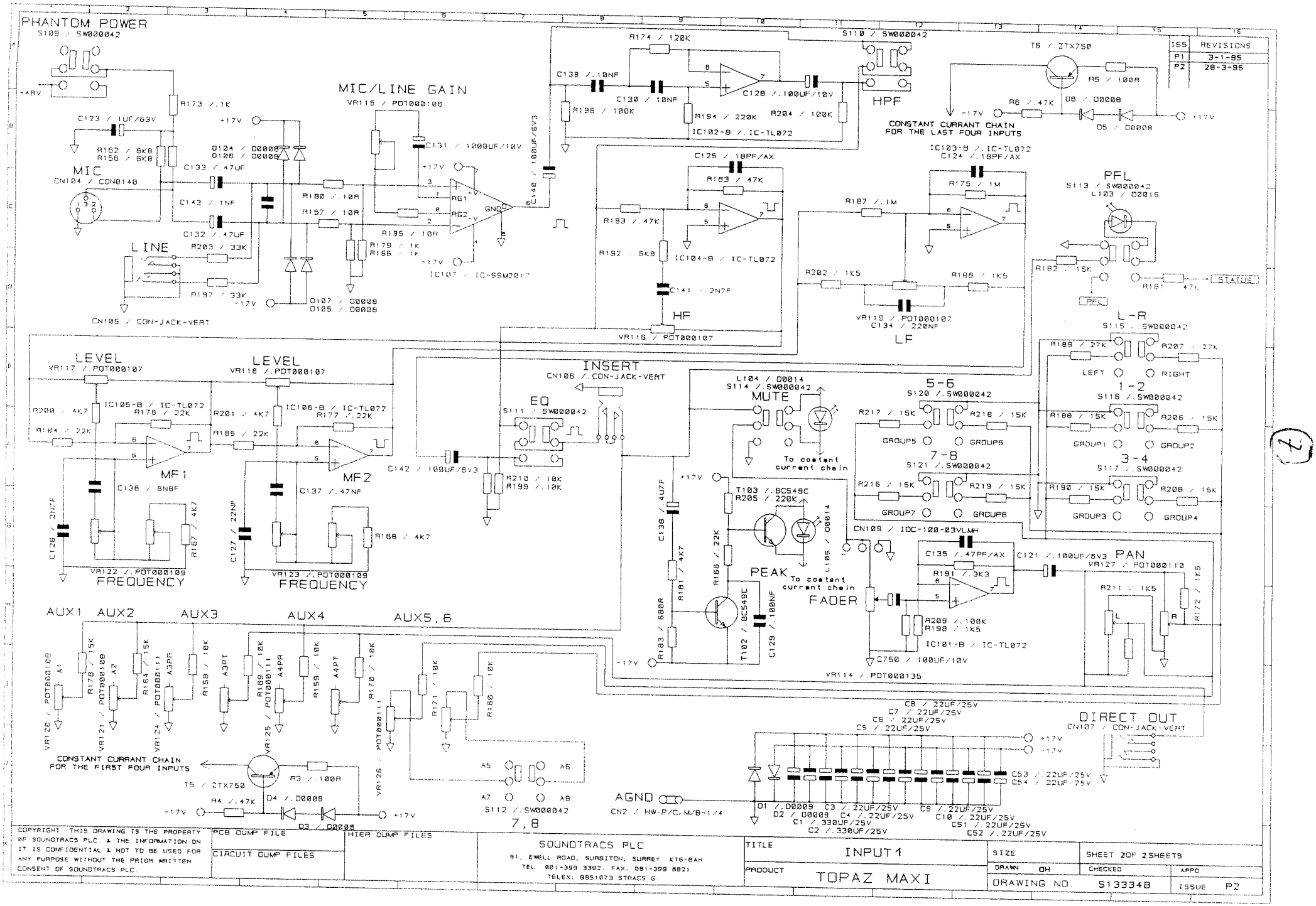
TITLE: INPUT 1

PRODUCT: TOPAZ MAXI

SIZE | SHEET 1OF 2SHEETS

DRAWN OH | CHECKED | APPD

DRAWING NO. S13334A | ISSUE P2


PHANTOM POWER
S109 / SW000042
+48V
MIC/LINE GAIN
VR115 / POT000108
MIC
CN104 / CON0140
LINE
CN105 / CON-JACK-VERT
R173 / .1K
C123 / .1UF/63V
R162 / 6K8
R156 / 6K8
C133 / .47UF
C143 / 1NF
C132 / .47UF
R203 / 33K
R197 / 33K
D104 / D0008
D105 / D0008
D107 / D0008
D105 / D0008
R180 / .10R
R157 / 10R
R195 / 10R
R179 / 1K
R166 / 1K
C131 / 1000UF/10V
C148 / 100UF/6V3
IC107 / IC-SSM2017
AG1
AG2
GND
-V
+17V
-17V
S110 / SW000042
HPF
C138 / .10NF
C130 / 10NF
C128 / .100UF/10V
R174 / 120K
R196 / 100K
R194 / 220K
R204 / 100K
IC102-B / .IC-TL072
T6 / .ZTX750
R5 / 100R
R6 / 47K
D6 / D0008
D5 / D0008
CONSTANT CURRANT CHAIN
FOR THE LAST FOUR INPUTS
IC103-B / .IC-TL072
C124 / .18PF/AX
C125 / 18PF/AX
R183 / 47K
R193 / 47K
R192 / 5K8
IC104-B / IC-TL072
C141 / 2N7F
HF
VR116 / POT000107
R187 / .1M
R175 / 1M
R202 / 1K5
R188 / 1K5
VR119 / .POT000107
C134 / 220NF
LF
PFL
S113 / SW000042
L103 / D0015
R182 / 15K
R161 / 47K
STATUS
PFL
L-R
S115 / SW000042
R189 / 27K
R207 / 27K
LEFT
RIGHT
1-2
S116 / SW000042
R188 / 15K
R206 / 15K
GROUP1
GROUP2
3-4
S117 / SW000042
R190 / 15K
R208 / 15K
GROUP3
GROUP4
5-6
S120 / SW000042
R217 / 15K
R218 / 15K
GROUP5
GROUP6
7-8
S121 / SW000042
R216 / 15K
R219 / 15K
GROUP7
GROUP8
LEVEL
VR117 / POT000107
LEVEL
VR118 / POT000107
R200 / 4K7
IC105-B / IC-TL072
R178 / 22K
R201 / 4K7
IC106-B / IC-TL072
R177 / 22K
R184 / 22K
R185 / 22K
MF1
MF2
C138 / 8N8F
C137 / 47NF
C126 / 2N7F
R167 / 4K7
C127 / 22NF
R168 / 4K7
VR122 / .POT000109
FREQUENCY
VR123 / .POT000109
FREQUENCY
INSERT
CN106 / .CON-JACK-VERT
EQ
S111 / SW000042
C142 / 100UF/6V3
R210 / 10K
R199 / .10K
MUTE
L104 / D0014
S114 / SW000042
To coatant
current chain
T103 / .BC549C
R205 / 220K
L105 / D0014
PEAK
To coatant
current chain
T102 / .BC549C
C129 / .100NF
R156 / 22K
R181 / 4K7
R183 / 680R
C136 / 4U7F
+17V
-17V
FADER
CN109 / .IDC-100-03VLMH
C135 / .47PF/AX
R191 / .3K3
R209 / .100K
R198 / 1K5
IC101-B / .IC-TL072
C750 / 100UF/10V
VR114 / .POT000135
C121 / .100UF/6V3
PAN
VR127 / POT000110
R211 / 1K5
R172 / 1K5
AUX1
AUX2
AUX3
AUX4
AUX5,6
VR120 / POT000108
A1
R178 / 15K
VR121 / POT000108
A2
R164 / 15K
VR124 / POT000111
A3PR
R158 / 10K
A3PT
R189 / 10K
VR125 / POT000111
A4PR
R159 / 10K
A4PT
R170 / 10K
VR126 / POT000111
R171 / 10K
R160 / 10K
CONSTANT CURRANT CHAIN
FOR THE FIRST FOUR INPUTS
T5 / ZTX750
R3 / .100R
R4 / .47K
D4 / D0008
D3 / D0008
A5
A6
A7
A8
S112 / SW000042
7,8
AGND
CN2 / HW-P/C,M/B-1/4
C8 / 22UF/25V
C7 / 22UF/25V
C6 / 22UF/25V
C5 / 22UF/25V
C53 / 22UF/25V
C54 / 22UF/25V
D1 / D0009
D2 / D0009
C3 / 22UF/25V
C4 / 22UF/25V
C1 / 330UF/25V
C2 / 330UF/25V
C9 / 22UF/25V
C10 / 22UF/25V
C51 / 22UF/25V
C52 / 22UF/25V
DIRECT OUT
CN107 / CON-JACK-VERT
ISS
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P1
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P2
28-3-95
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91, EWELL ROAD, SURBITON, SURREY KT6-6AH
TEL 081-399 3382, FAX. 081-399 8821
TELEX: 8851873 STRACS G
TITLE
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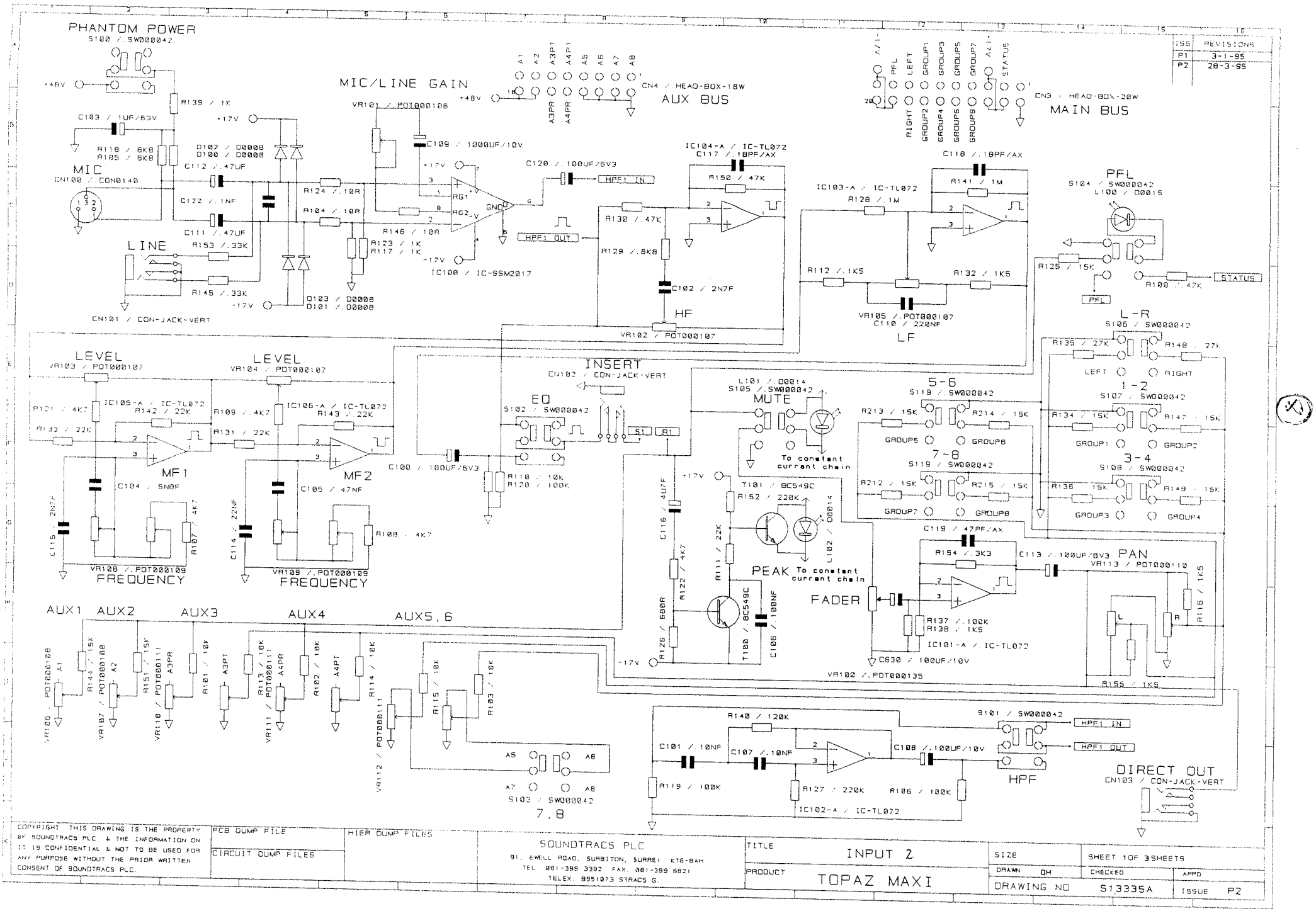
PRODUCT
TOPAZ MAXI
SIZE
SHEET 2OF 2SHEETS
DRAWN DH
CHECKED
APPD
DRAWING NO. 5133348
ISSUE P2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S100 / .SW000042
+48V
R139 / 1K
C103 / 1UF/63V
R116 / 6K8
R105 / 6K8
MIC
CN100 / CON0140
C112 / .47UF
C122 / .1NF
C111 / .47UF
LINE
R153 / .33K
R145 / .33K
CN101 / CON-JACK-VERT
+17V
-17V
D102 / D0008
D100 / D0008
D103 / D0008
D101 / D0008
MIC/LINE GAIN
VR101 / .POT000106
C109 / 1000UF/10V
R124 / .10R
R104 / .10R
R146 / .10R
R123 / 1K
R117 / 1K
IC100 / IC-SSM2017
C120 / 100UF/6V3
HPF1 IN
HPF1 OUT
R130 / .47K
R129 / .5K8
C102 / 2N7F
HF
VR102 / POT000107
IC104-A / IC-TL072
C117 / .18PF/AX
R150 / 47K
IC103-A / IC-TL072
C118 / .18PF/AX
R141 / 1M
R128 / 1M
R112 / .1K5
R132 / 1K5
VR105 / .POT000107
C110 / 220NF
LF
CN4 / HEAD-BOX-18W
AUX BUS
A1
A2
A3PR
A4PR
A3PT
A4PT
A5
A6
A7
A8
CN3 / HEAD-BOX-28W
MAIN BUS
PFL
LEFT
RIGHT
GROUP1
GROUP2
GROUP3
GROUP4
GROUP5
GROUP6
GROUP7
GROUP8
STATUS
PFL
S104 / SW000042
L100 / 00015
R125 / 15K
R100 / 47K
L-R
S105 / SW000042
R135 / 27K
R148 / 27K
1-2
S107 / SW000042
R134 / 15K
R147 / 15K
3-4
S108 / SW000042
R135 / 15K
R149 / 15K
5-6
S118 / SW000042
R213 / 15K
R214 / 15K
7-8
S119 / SW000042
R212 / 15K
R215 / 15K
LEVEL
VR103 / POT000107
LEVEL
VR104 / POT000107
IC105-A / IC-TL072
R121 / 4K7
R142 / 22K
R133 / 22K
MF1
C104 / 6N8F
C115 / 2N7F
R107 / 4K7
VR106 / .POT000109
FREQUENCY
IC106-A / IC-TL072
R109 / 4K7
R143 / 22K
R131 / 22K
MF2
C105 / 47NF
C114 / 22NF
R108 / 4K7
VR109 / .POT000109
FREQUENCY
INSERT
CN102 / CON-JACK-VERT
EQ
S102 / SW000042
S1
S2
C100 / 100UF/6V3
R110 / 10K
R120 / 100K
MUTE
L101 / 00014
S105 / .SW000042
To constant current chain
T101 / BC549C
R152 / 220K
L102 / 00014
C116 / 4U7F
R111 / 22K
R122 / 4K7
R125 / 680R
T100 / BC549C
C106 / .100NF
PEAK
To constant current chain
C119 / 47PF/AX
R154 / 3K3
C113 / .100UF/6V3
PAN
VR113 / POT000110
R116 / 1K5
FADER
R137 / .100K
R138 / 1K5
IC101-A / IC-TL072
C630 / 100UF/10V
VR100 / .POT000135
R155 / 1K5
AUX1
AUX2
AUX3
AUX4
AUX5, 6
VR105 / POT000108
R144 / 15K
VR107 / POT000108
R151 / 15K
VR110 / POT000111
R101 / 10K
R113 / 10K
VR111 / POT000111
R102 / 10K
R114 / 10K
VR112 / POT000111
R115 / 10K
R103 / 10K
A5
A6
A7
A8
S103 / SW000042
7,8
R140 / 120K
S101 / SW000042
HPF1 IN
HPF1 OUT
C101 / .10NF
C107 / .10NF
C108 / .100UF/10V
R119 / 100K
R127 / 220K
R106 / 100K
IC102-A / IC-TL072
HPF
DIRECT OUT
CN103 / CON-JACK-VERT
ISS
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TEL 081-399 3392. FAX. 081-399 6821
TELEX: 8951073 STRACS G.
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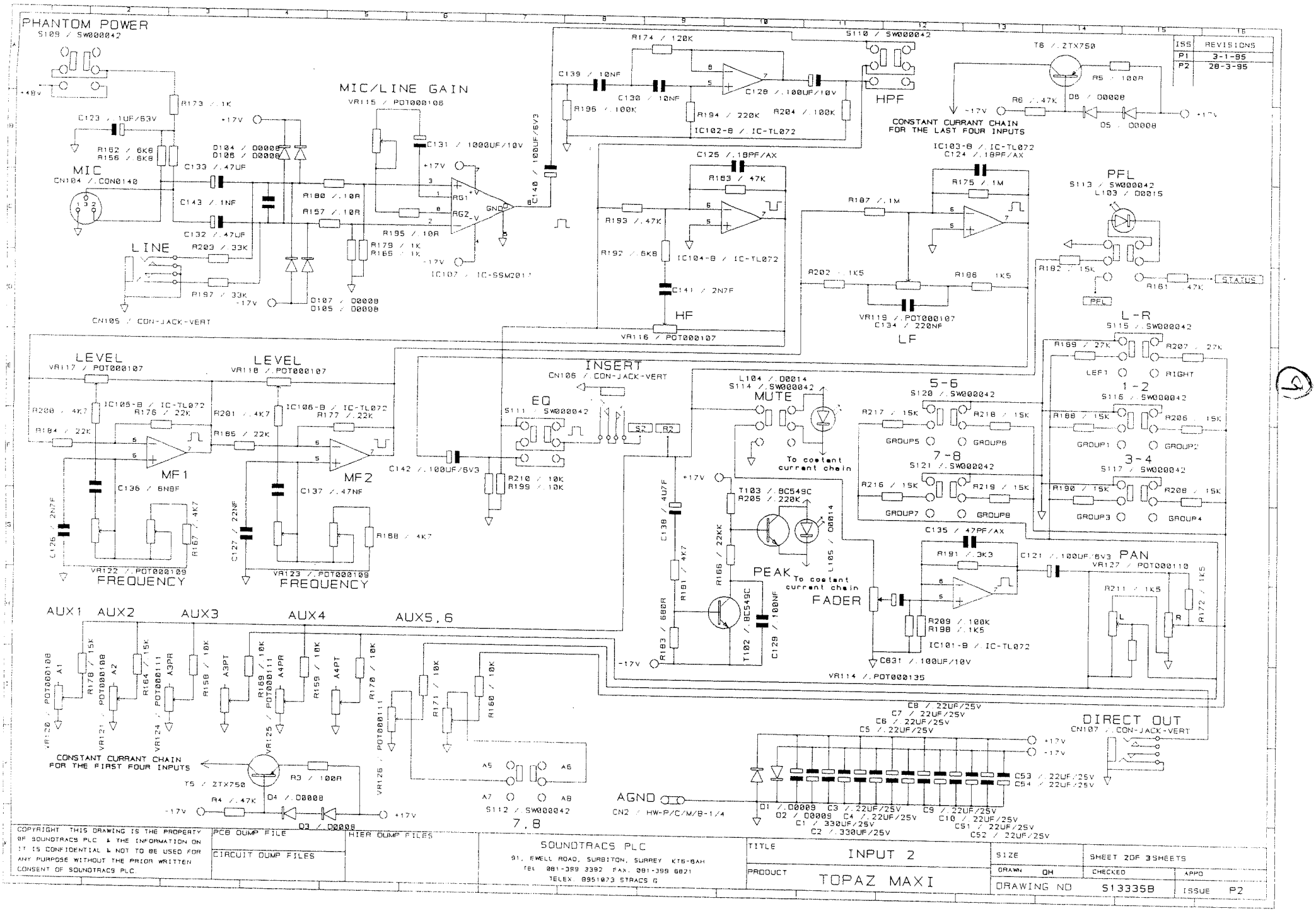
DRAWN QH
CHECKED
APPD
DRAWING NO S13335A
ISSUE P2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S109 / SW000042
+48V
R173 / 1K
C123 / 1UF/63V
R162 / 6K8
R156 / 6K8
MIC
CN104 / CON8140
C133 / .47UF
C143 / 1NF
C132 / .47UF
LINE
R203 / 33K
R197 / 33K
CN105 / CON-JACK-VERT
MIC/LINE GAIN
VR115 / POT000106
C131 / 1000UF/10V
+17V
-17V
D104 / D0008
D106 / D0008
D107 / D0008
D105 / D0008
R180 / .10R
R157 / .10R
R195 / .10R
R179 / 1K
R165 / 1K
IC107 / IC-SSM2017
C140 / 100UF/6V3
S110 / SW000042
HPF
R174 / 120K
C139 / 10NF
C130 / 10NF
C128 / .100UF/10V
R196 / 100K
R194 / 220K
R204 / 100K
IC102-B / IC-TL072
T6 / ZTX750
R5 / 100R
R6 / .47K
D6 / D0008
D5 / D0008
CONSTANT CURRANT CHAIN
FOR THE LAST FOUR INPUTS
ISS REVISIONS
P1 3-1-95
P2 28-3-95
C125 / .18PF/AX
R183 / 47K
R193 / .47K
R192 / 6K8
IC104-B / IC-TL072
C141 / 2N7F
HF
VR116 / POT000107
IC103-B / IC-TL072
C124 / .18PF/AX
R175 / 1M
R187 / 1M
R202 / 1K5
R186 / 1K5
VR119 / POT000107
C134 / 220NF
LF
PFL
S113 / SW000042
L103 / D0015
R182 / 15K
R161 / 47K
STATUS
PFL
L-R
S115 / SW000042
R189 / 27K
R207 / 27K
LEFT
RIGHT
1-2
S116 / SW000042
R188 / 15K
R206 / 15K
GROUP1
GROUP2
3-4
S117 / SW000042
R190 / 15K
R208 / 15K
GROUP3
GROUP4
LEVEL
VR117 / POT000107
LEVEL
VR118 / POT000107
R200 / 4K7
IC105-B / IC-TL072
R176 / 22K
R201 / 4K7
IC106-B / IC-TL072
R177 / 22K
R184 / 22K
R185 / 22K
MF1
MF2
C136 / 6N8F
C137 / .47NF
C125 / 2N7F
R167 / 4K7
C127 / 22NF
R168 / 4K7
VR122 / POT000109
FREQUENCY
VR123 / POT000109
FREQUENCY
INSERT
CN106 / CON-JACK-VERT
EQ
S111 / SW000042
S2
R2
C142 / .100UF/6V3
R210 / 10K
R199 / 10K
L104 / D0014
S114 / SW000042
MUTE
To coolant current chain
5-6
S120 / SW000042
R217 / 15K
R218 / 15K
GROUP5
GROUP6
7-8
S121 / SW000042
R216 / 15K
R219 / 15K
GROUP7
GROUP8
+17V
T103 / BC549C
R205 / 220K
L105 / D0014
C138 / 4U7F
R165 / 22KK
R181 / 4K7
R183 / 680R
T102 / BC549C
C129 / 100NF
PEAK
To coolant current chain
FADER
C135 / 47PF/AX
R191 / 3K3
C121 / .100UF/6V3
PAN
VR127 / POT000110
R211 / 1K5
R172 / 1K5
L
R
R209 / 100K
R198 / 1K5
IC101-B / IC-TL072
C831 / .100UF/10V
-17V
VR114 / POT000135
AUX1
AUX2
AUX3
AUX4
AUX5, 6
VR120 / POT000108
A1
R178 / 15K
VR121 / POT000108
A2
R164 / 15K
VR124 / POT000111
A3PR
R158 / 10K
A3PT
R169 / 10K
VR125 / POT000111
A4PR
R159 / 10K
A4PT
R170 / 10K
VR126 / POT000111
R171 / 10K
R160 / 10K
A5
A6
A7
A8
S112 / SW000042
7,8
CONSTANT CURRANT CHAIN
FOR THE FIRST FOUR INPUTS
T5 / ZTX750
R3 / 100R
R4 / .47K
D4 / D0008
D3 / D0008
-17V
+17V
C8 / 22UF/25V
C7 / 22UF/25V
C6 / 22UF/25V
C5 / 22UF/25V
C53 / 22UF/25V
C54 / 22UF/25V
D1 / D0009
D2 / D0009
C3 / 22UF/25V
C4 / 22UF/25V
C1 / 330UF/25V
C2 / 330UF/25V
C9 / 22UF/25V
C10 / 22UF/25V
C51 / 22UF/25V
C52 / 22UF/25V
AGND
CN2 / HW-P/C/M/B-1/4
DIRECT OUT
CN107 / CON-JACK-VERT
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PCB DUMP FILE
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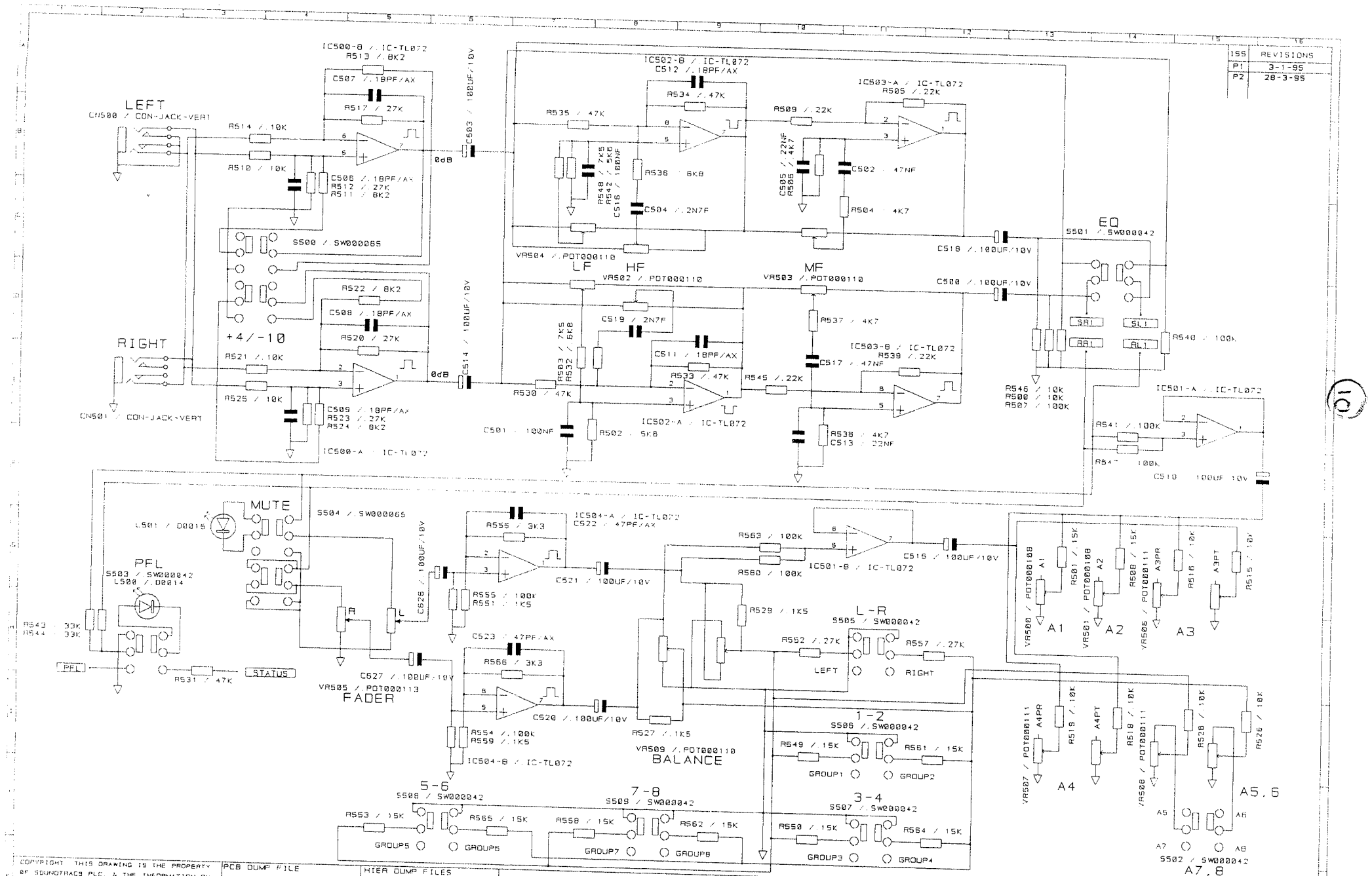
HIER DUMP FILES
SOUNDTRACS PLC
91, EWELL ROAD, SURBITON, SURREY KT6 6AH
TEL 081-399 3392 FAX. 081-399 6821
TELEX 8951073 STRACS G
TITLE
INPUT 2
PRODUCT
TOPAZ MAXI
SIZE
SHEET 2OF 3SHEETS
DRAWN OH
CHECKED
APPD
DRAWING NO S13335B
ISSUE P2



ISS	REVISIONS
P1	3-1-95
P2	28-3-95

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CIRCUIT DUMP FILES

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TELEX 895073 STRACS G

TITLE STEREO 1

PRODUCT TOPAZ MAXI

SIZE

SHEET 3OF 3SHEETS

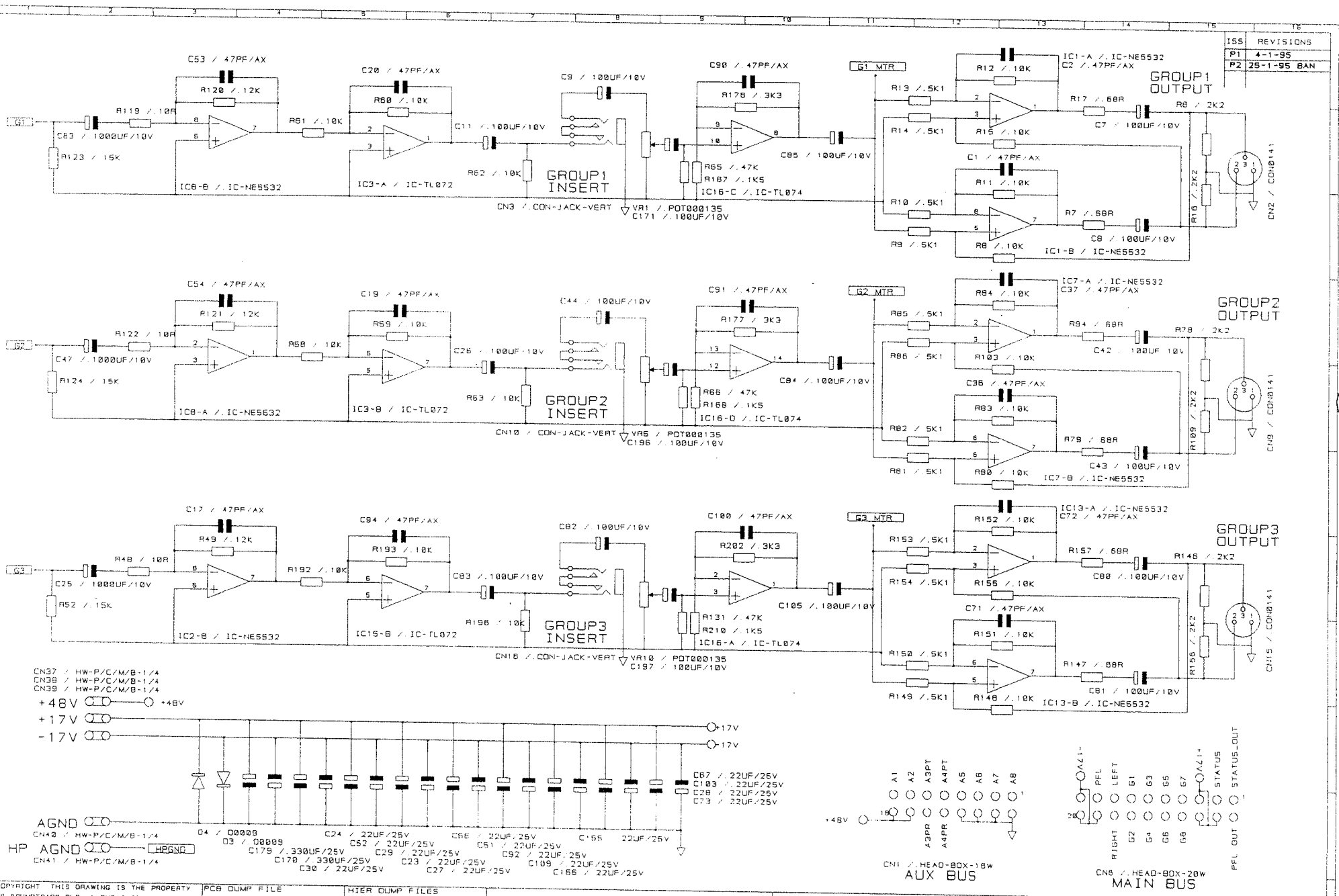
DRAWN DH

CHECKED

APPD

DRAWING NO S133350

ISSUE P2



ISS	REVISIONS
P1	4-1-95
P2	25-1-95 BAN

PCB DUMP FILE

CIRCUIT DUMP FILES

HIER DUMP FILES

SOUNDTRACS PLC
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TEL 081-399 3392, FAX. 081-399 8021
TELEX: 8951073 STRACS G.

TITLE: GROUPS 1-3

PRODUCT: TOPAZ MAXI

SIZE

SHEET 10F 7SHEETS

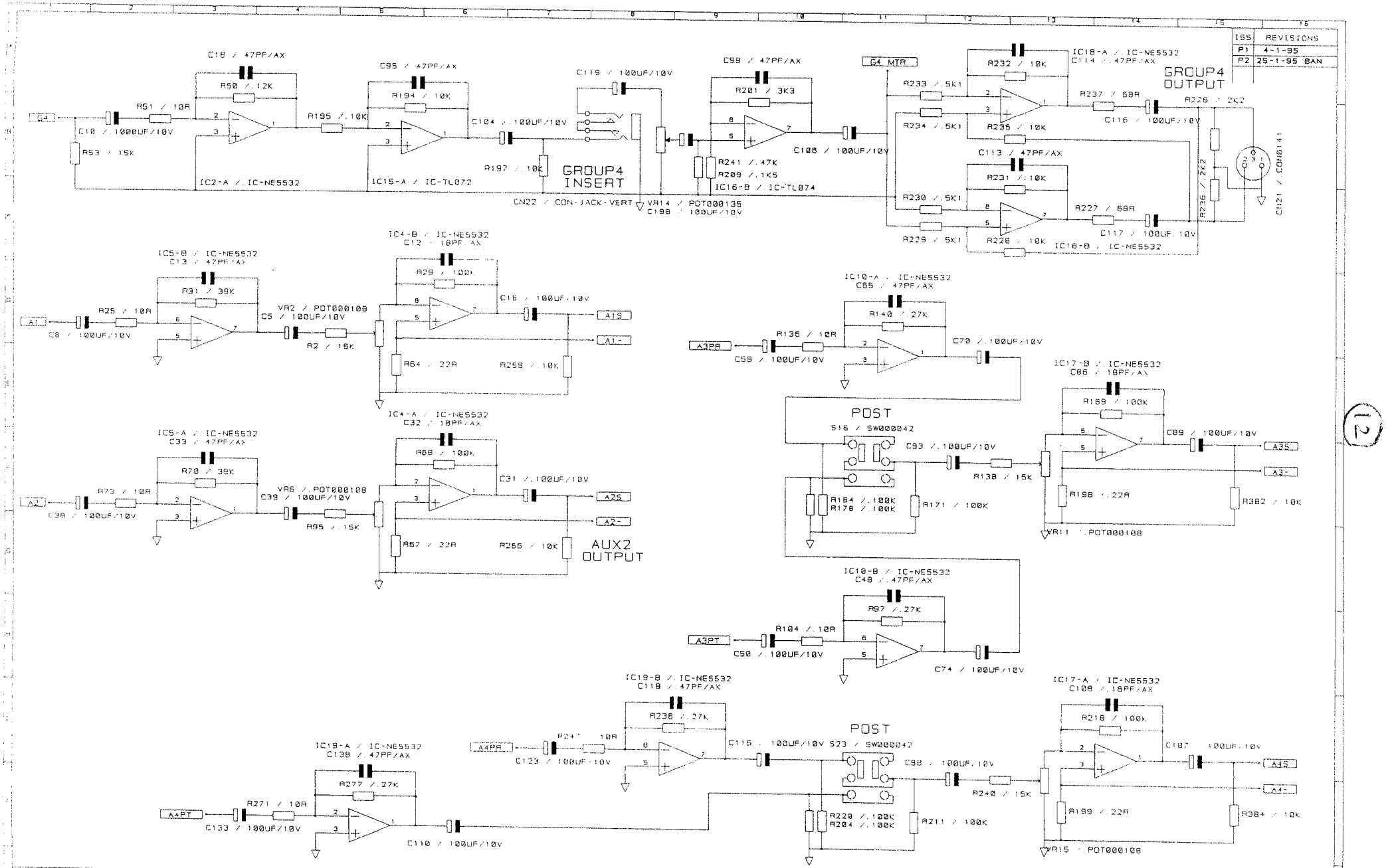
DRAWN QH

CHECKED

APPRO

DRAWING NO S13336A

ISSUE P2



PCB DUMP FILE

CIRCUIT DUMP FILES

HIER DUMP FILES

SOUNDTRACS PLC
91, EWELL ROAD, SURBITON, SURREY KT6-6AH
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TELEX: 8951073 STRACS G.

TITLE GROUP4 AND AUX 1-4

PRODUCT TOPAZ MAXI

SIZE

SHEET 2OF 7SHEETS

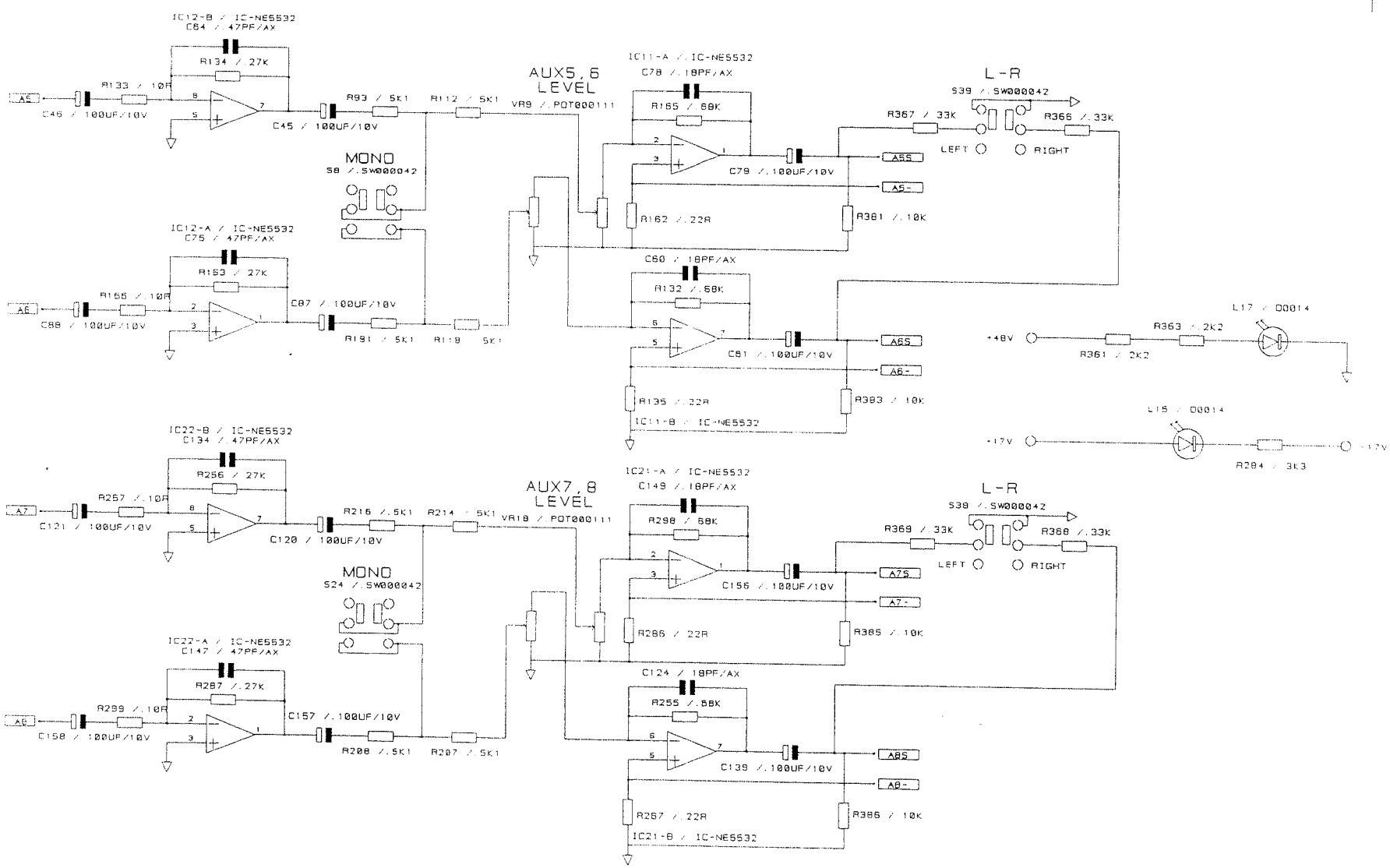
DRAWN DH

CHECKED

APPD

DRAWING NO S133368

ISSUE P2



ISS	REVISIONS
P1	4-1-95
P2	25-1-95 BAN

(13)

PCB DUMP FILE

CIRCUIT DUMP FILES

HIER DUMP FILES

SOUNDTRACS PLC
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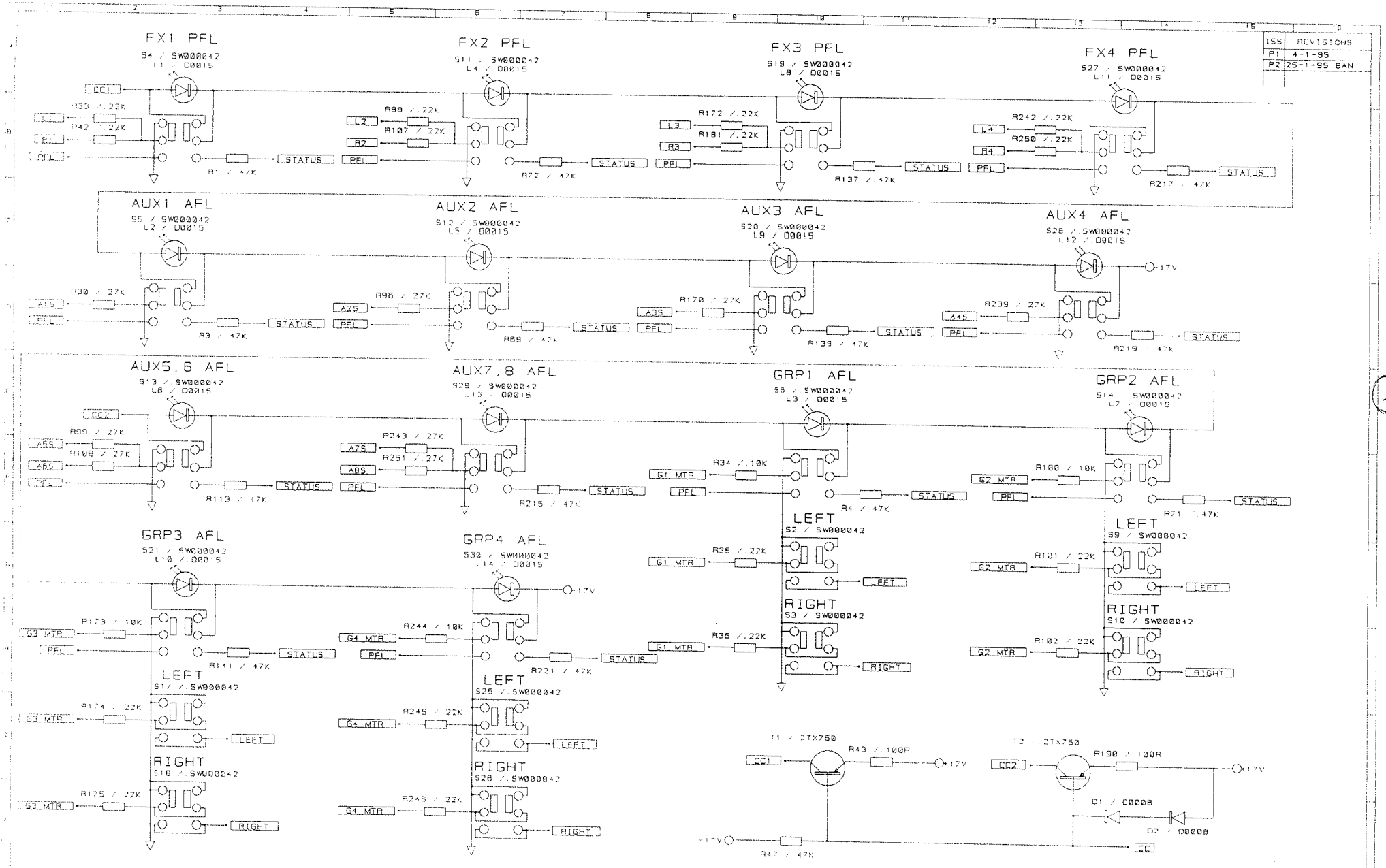
TELEX 8951073 STRACS G

TITLE	AUX 5-8
PRODUCT	TOPAZ MAXI
SIZE	SHEET 3OF 7SHEETS
DRAWN QH	CHECKED / APPD
DRAWING NO	S13336C
ISSUE	P2



ISS	REVISIONS
P1	4-1-95
P2	25-1-95 BAN

PCB DUMP FILE

CIRCUIT DUMP FILES

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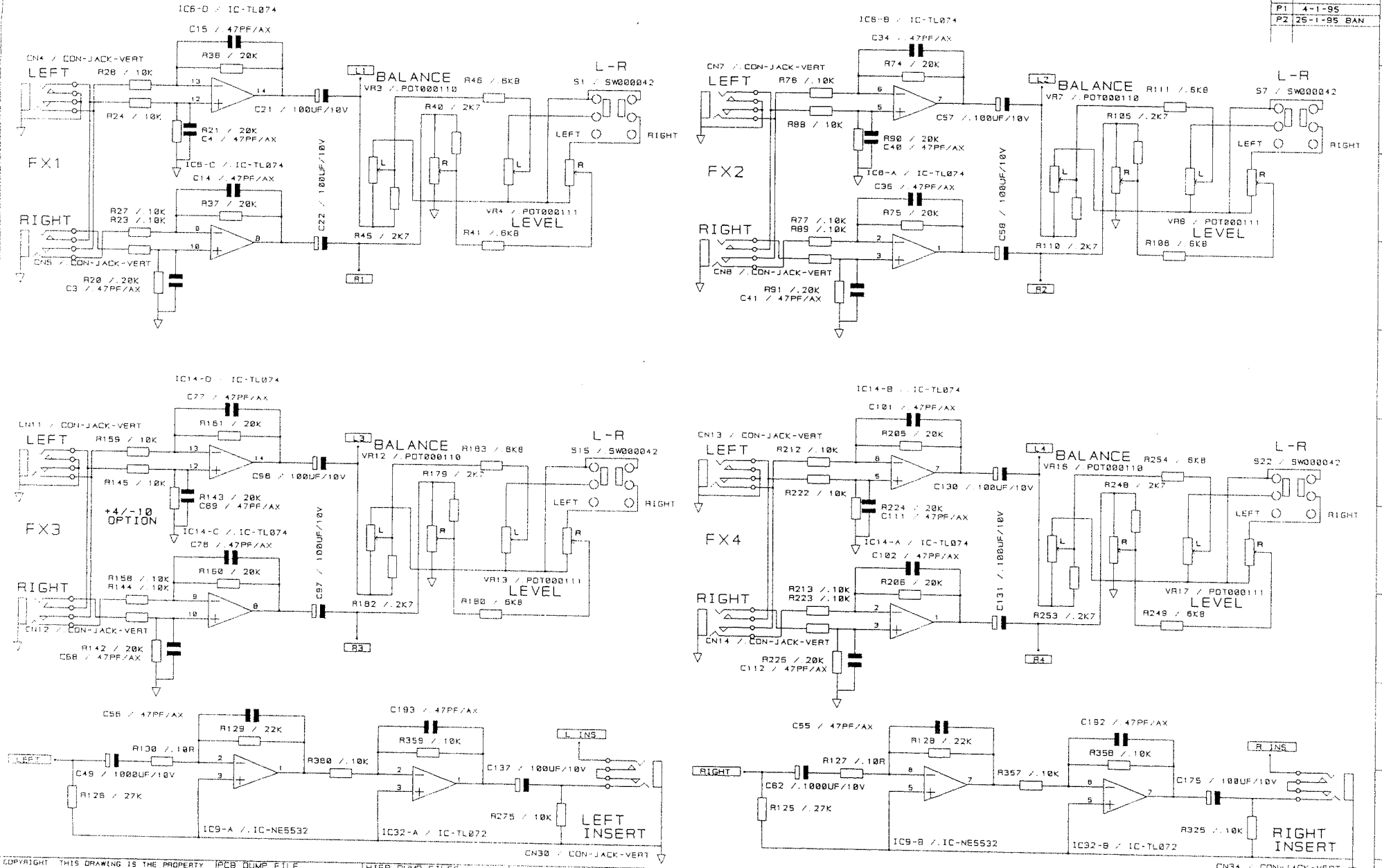
SOUNDTRACS PLC
91, EWELL ROAD, SURBITON, SURREY KT6 6AH
TEL 081-399 3392. FAX. 081-399 6821
TELEX: 8951073 STRACS G.

TITLE	MASTER SOLOs	SIZE	SHEET 4OF 7SHEETS
PRODUCT	TOPAZ MAXI	DRAWN QH	CHECKED / APPD
		DRAWING NO	S133360 ISSUE P2



ISS	REVISIONS
P1	4-1-95
P2	25-1-95 BAN

PCB DUMP FILE

CIRCUIT DUMP FILES

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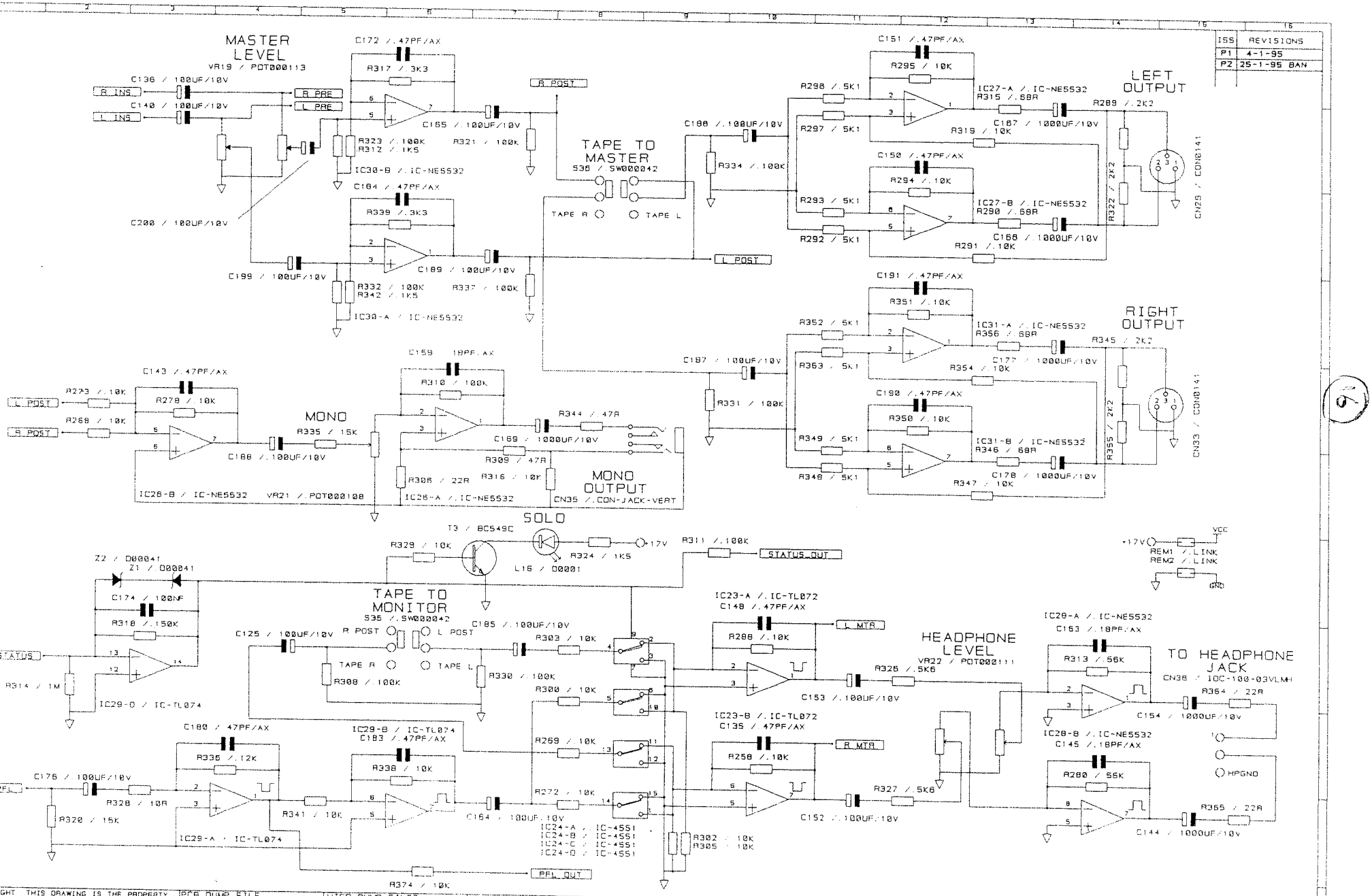
SOUNDTRACS PLC
91, EWELL ROAD, SURBITON, SURREY KT6 6AH.
TEL 081-399 3392. FAX. 081-399 6021
TELEX: 8951073 STRACS G

TITLE	FX AND MASTER BUS AMPs
PRODUCT	TOPAZ MAXI
SIZE	SHEET 5OF 7SHEETS
DRAWN QH	CHECKED
APPD	
DRAWING NO	S13336E
ISSUE	P2



ISS	REVISIONS
P1	4-1-95
P2	25-1-95 BAN

PCB DUMP FILE

CIRCUIT DUMP FILES

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SOUNDTRACS PLC
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TEL. 081-399 3392. FAX. 081-399 6821
TELEX: 8951073 STRACS G.

TITLE: MIX/ MONO / MONITOR

PRODUCT: TOPAZ MAXI

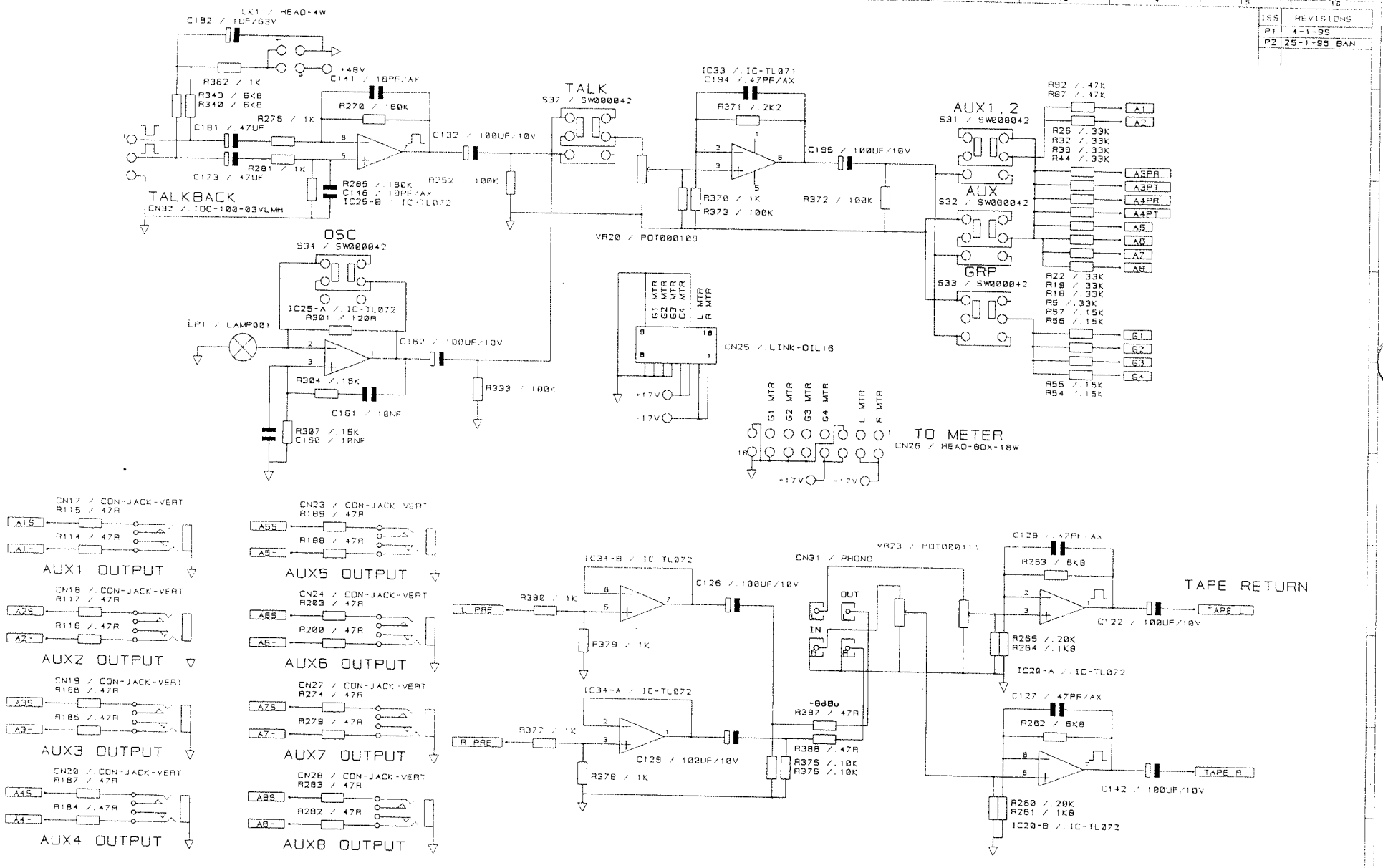
SIZE

SHEET 6OF 7SHEETS

DRAWN DH | CHECKED | APPD

DRAWING NO S13336F

ISSUE P2



ISS	REVISIONS
P1	4-1-95
P2	25-1-95 BAN

PCB DUMP FILE

CIRCUIT DUMP FILES

HIER DUMP FILES

SOUNDTRACS PLC
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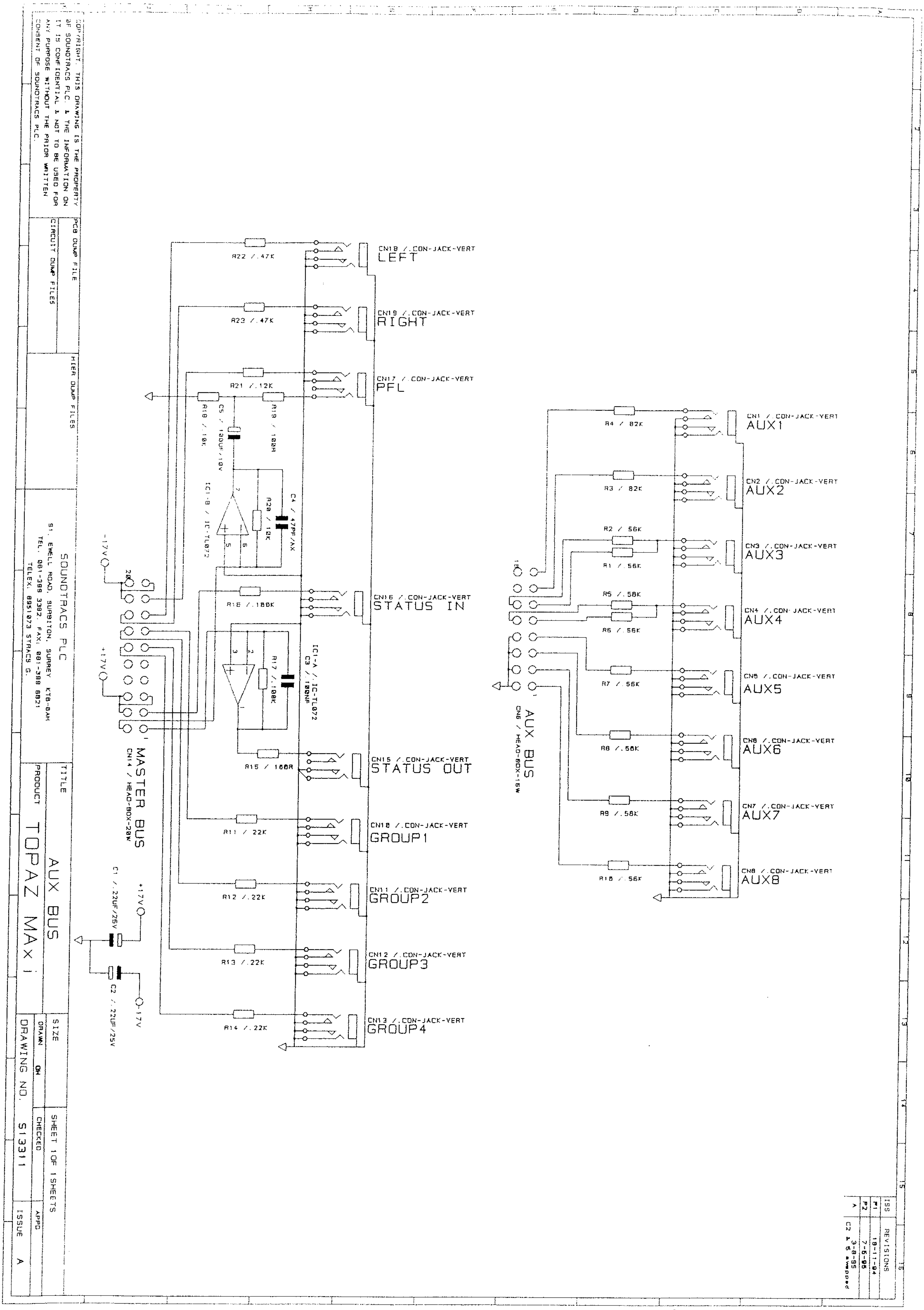
TELEX 8951073 STRACS G

TITLE	HEADPHONE/ TAPE RETURN	SIZE	SHEET 7OF 7SHEETS
PRODUCT	TOPAZ MAXI	DRAWN OH	CHECKED / APPD
		DRAWING NO 513336G	ISSUE P2



CN18 / CON-JACK-VERT
LEFT
R22 / 47K
CN19 / CON-JACK-VERT
RIGHT
R23 / 47K
CN17 / CON-JACK-VERT
PFL
R21 / 12K
R18 / 10K
C5 / 100UF/10V
R19 / 100R
IC1-B / IC-TL072
R20 / 10K
C4 / 47PF/AX
CN16 / CON-JACK-VERT
STATUS IN
R16 / 100K
IC1-A / IC-TL072
C3 / 100NF
R17 / 100K
CN15 / CON-JACK-VERT
STATUS OUT
R15 / 100R
CN10 / CON-JACK-VERT
GROUP1
R11 / 22K
CN11 / CON-JACK-VERT
GROUP2
R12 / 22K
CN12 / CON-JACK-VERT
GROUP3
R13 / 22K
CN13 / CON-JACK-VERT
GROUP4
R14 / 22K
MASTER BUS
CN14 / HEAD-BOX-20W
-17V
+17V
C1 / 22UF/25V
C2 / 22UF/25V
CN1 / CON-JACK-VERT
AUX1
R4 / 82K
CN2 / CON-JACK-VERT
AUX2
R3 / 82K
CN3 / CON-JACK-VERT
AUX3
R2 / 56K
R1 / 56K
CN4 / CON-JACK-VERT
AUX4
R5 / 56K
R6 / 56K
CN5 / CON-JACK-VERT
AUX5
R7 / 56K
CN6 / CON-JACK-VERT
AUX6
R8 / 56K
CN7 / CON-JACK-VERT
AUX7
R9 / 56K
CN8 / CON-JACK-VERT
AUX8
R10 / 56K
AUX BUS
CN9 / HEAD-BOX-16W
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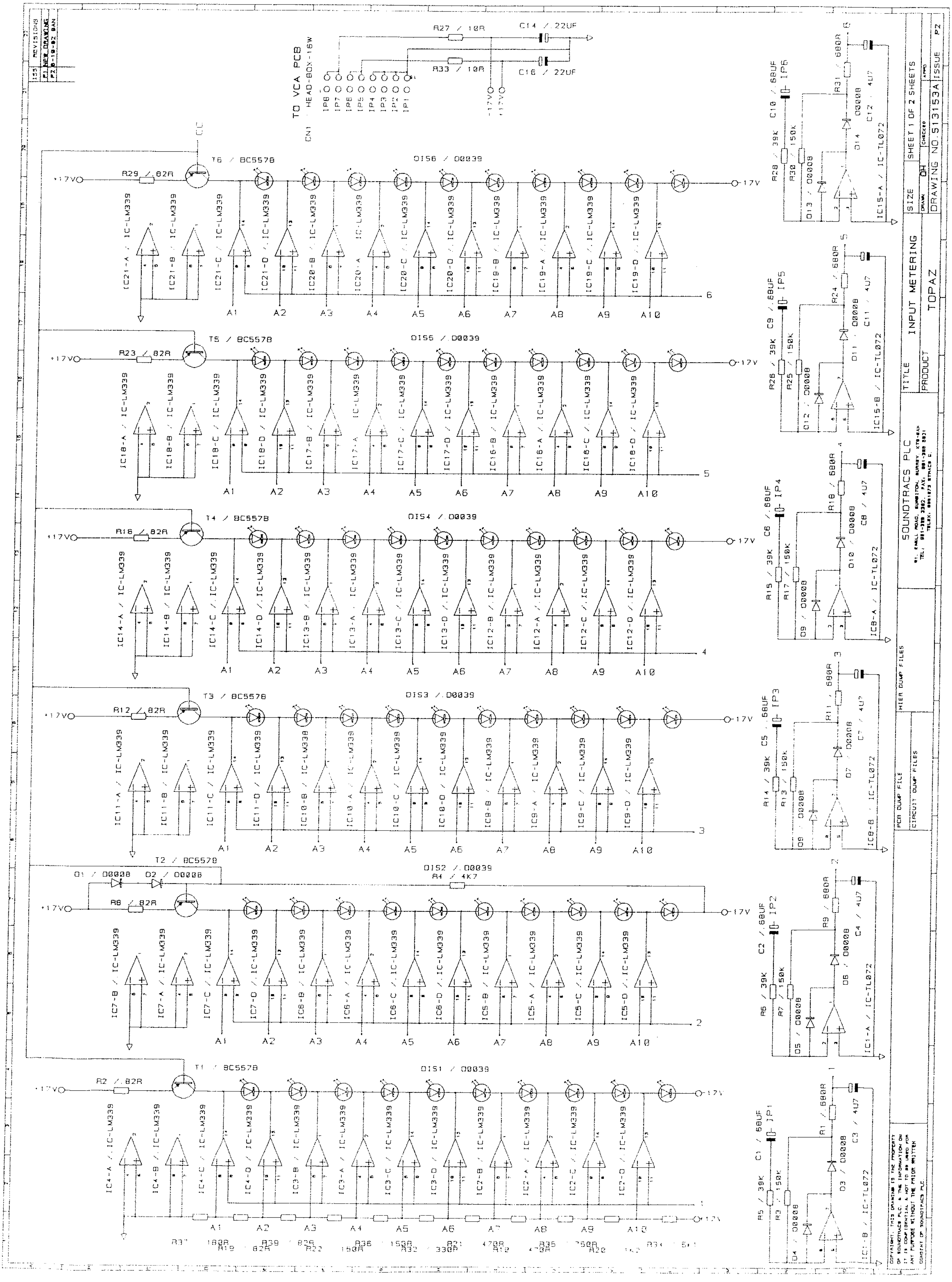
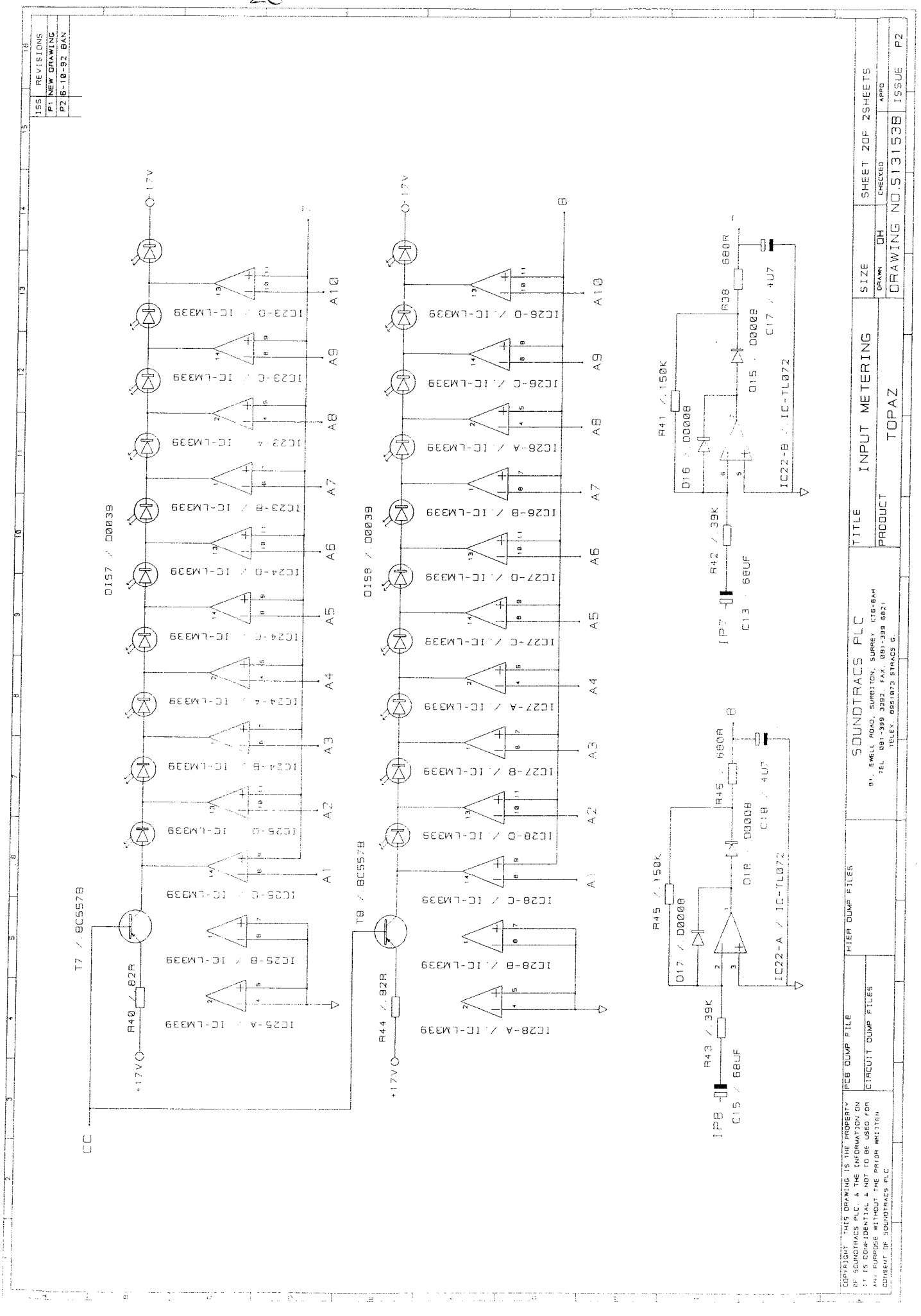
TELEX. 8951073 STRACS G.
TITLE AUX BUS
PRODUCT TOPAZ MAxi
SIZE
SHEET 1OF 1SHEETS
DRAWN CH
CHECKED
APPD
DRAWING NO. SI3311
ISSUE A
ISS REVISIONS
P1 10-11-94
P2 7-6-95
A 3-8-95 C2 & 5 swapped

81

19



TO VCA PCB
CN1 HEAD-BOX-16W
R27 / 10R
C14 / 22UF
R33 / 10R
C16 / 22UF
T6 / BC557B
DIS6 / D0039
T5 / BC557B
DIS5 / D0039
T4 / BC557B
DIS4 / D0039
T3 / BC557B
DIS3 / D0039
T2 / BC557B
DIS2 / D0039
R4 / 4K7
T1 / BC557B
DIS1 / D0039
+17V
-17V
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
SOUNDTRACS PLC
TITLE
INPUT METERING
PRODUCT
TOPAZ
SIZE
SHEET 1 OF 2 SHEETS
DRAWING NO. S13153A
ISSUE
P2
REVISIONS
NEW DRAWING


REVISIONS
ISS
P1 NEW DRAWING
P2 6-10-92 BAN
+17V
D157 / 00039
D158 / 00039
IC23-D / IC-LM339
IC23-C / IC-LM339
IC23-A / IC-LM339
IC23-B / IC-LM339
IC24-D / IC-LM339
IC24-C / IC-LM339
IC24-A / IC-LM339
IC24-B / IC-LM339
IC25-D / IC-LM339
IC25-C / IC-LM339
IC25-B / IC-LM339
IC25-A / IC-LM339
IC26-D / IC-LM339
IC26-C / IC-LM339
IC26-A / IC-LM339
IC26-B / IC-LM339
IC27-D / IC-LM339
IC27-C / IC-LM339
IC27-A / IC-LM339
IC27-B / IC-LM339
IC28-D / IC-LM339
IC28-C / IC-LM339
IC28-B / IC-LM339
IC28-A / IC-LM339
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
T7 / BC557B
T8 / BC557B
R40 / 82R
R44 / 82R
R41 / 150K
R42 / 39K
R43 / 39K
R45 / 150K
R38 680R
R45 680R
D15 / D0008
D16 / D0008
D17 / D0008
D18 / D0008
C17 / 4U7
C18 / 4U7
C13 / 68UF
C15 / 68UF
IC22-B / IC-TL072
IC22-A / IC-TL072
IP7
IP8
CC
SOUNDTRACS PLC
81, EMELL ROAD, SURBITON, SURREY KT6 6AH
TEL 081-399 3392 FAX 081-399 6821
TELEX 895173 STRACS G
TITLE INPUT METERING
PRODUCT TOPAZ
SIZE
DRAWN QH
CHECKED
APPD
SHEET 2OF 2SHEETS
DRAWING NO.513538 ISSUE P2
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CIRCUIT DUMP FILES
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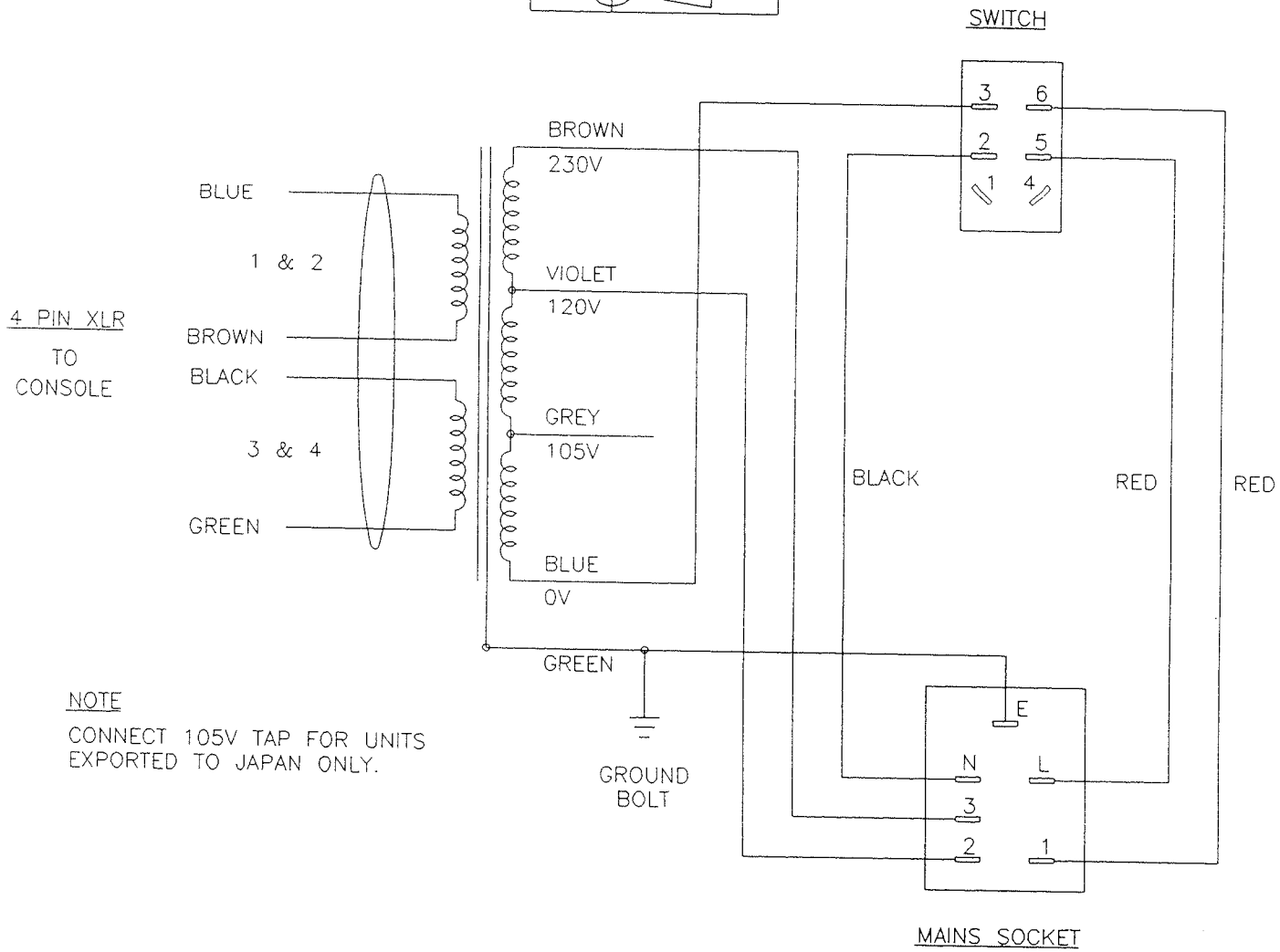
THIRD ANGLE PROJECTION

ALTERATIONS.	
ISSUE	ORIGINAL
A	NEW DRAWING

External PSU as fitted to early Topaz Maxi



NOTE

CONNECT 105V TAP FOR UNITS EXPORTED TO JAPAN ONLY.

TOLERANCES UNLESS STATED

NO DECIMAL	+-0.50	HOLES UP TO DIA 6	+0.1-0
ONE DECIMAL	+-0.30	DIA 6 TO 12	+0.2-0
TWO DECIMAL	+-0.10	DIA 12 TO 24	+0.3-0
ANGULAR	+-30'	ABOVE DIA 24	AS STATED

REMOVE ALL BURRS & SHARP EDGES
ALL DIMS. IN MM – DO NOT SCALE
LIMITS APPLY AFTER PLATING
MACHINE WHERE MARKED ∀

ORIGINAL FRAME SIZE 297 x 420

MATERIAL

FINISH

SOUNDTRACS plc
91 Ewell Road, Surbiton, Surrey. KT6-6AH.
Tel: 081-399 3392. Fax: 081-399 6821.
Telex: 8951073 STRACS G.

TITLE
PSU CIRCUIT

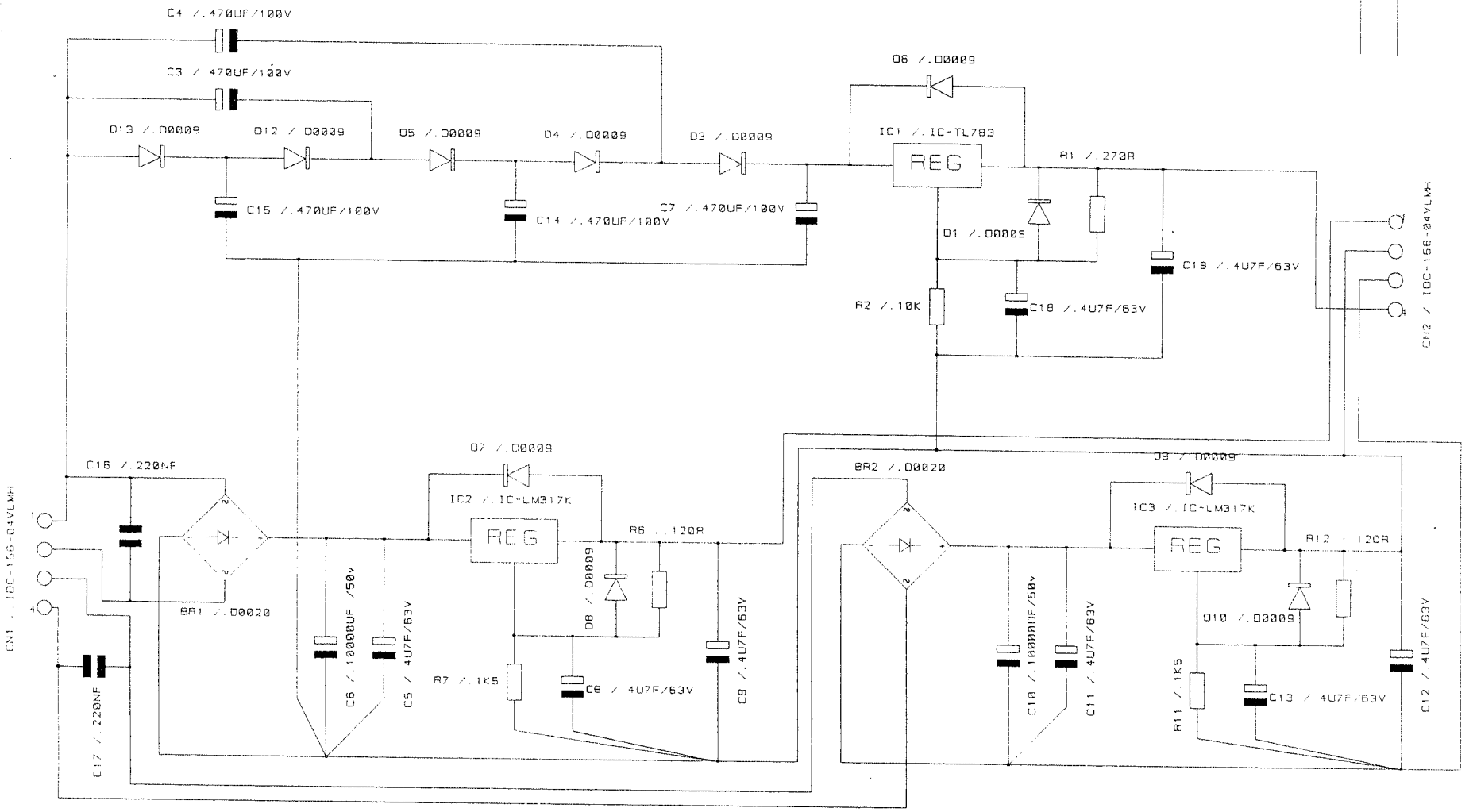
PRODUCT
TOPAZ MIXING CONSOLE

PART No.	DESCRIPTION

DRAWN	BWL	DATE	27.10.94	CHECKED	

DRAWING No. S13282 issue A

ISS	REVISIONS
A	3-11-93



NOTE: IC2 and IC3 are LM338K regulators for Topaz Record 32 Channel Console.

D0009 - 1N4003
D0020 - KBPC2502

PCB DUMP FILE
CIRCUIT DUMP FILES
HIER DUMP FILES

SOUNDTRACS PLC
UNIT 21-D, BLENHEIM ROAD, LONGMEAD IND.EST., EPSOM, SURREY, KT19 9XN, ENGLAND
TEL: 0181-388-5000. FAX: 0181-388-5050
FAX / EMAIL: 01372-726-180

TITLE	POWER SUPPLY	SIZE	SHEET 1 OF 1SHEETS
PRODUCT	TOPAZ RANGE	DRN JRS	CKD / APPD
		ORG NO. S13003	ISSUE A