

ISS	REVISION	BY	DATE	NOTES	UNIT TITLE	MANUFACTURE BY
4400-1	1	DR	1970-10-20	5. EXCEPT WHERE SHOWN OTHERWISE ALL DIMENSIONS ARE IN MILLIMETERS	L3B	ALLEN & HEATH
				6. CHECKLISTS OPERATE AS SHOWN	DRAWING TITLE	
					INPUT-8 CIRCUIT DIAGRAM	
					PCB TYPE AG229	DRAWING No. C2329 ISSUE 4

CHANNEL 8

CHANNEL 7

CHANNEL 6

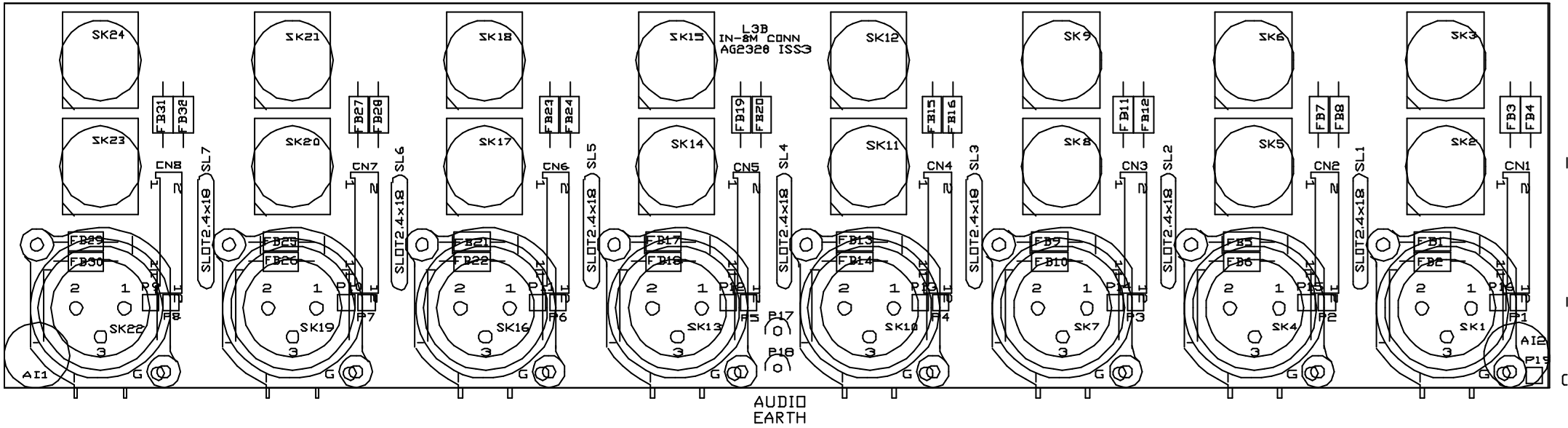
CHANNEL 5

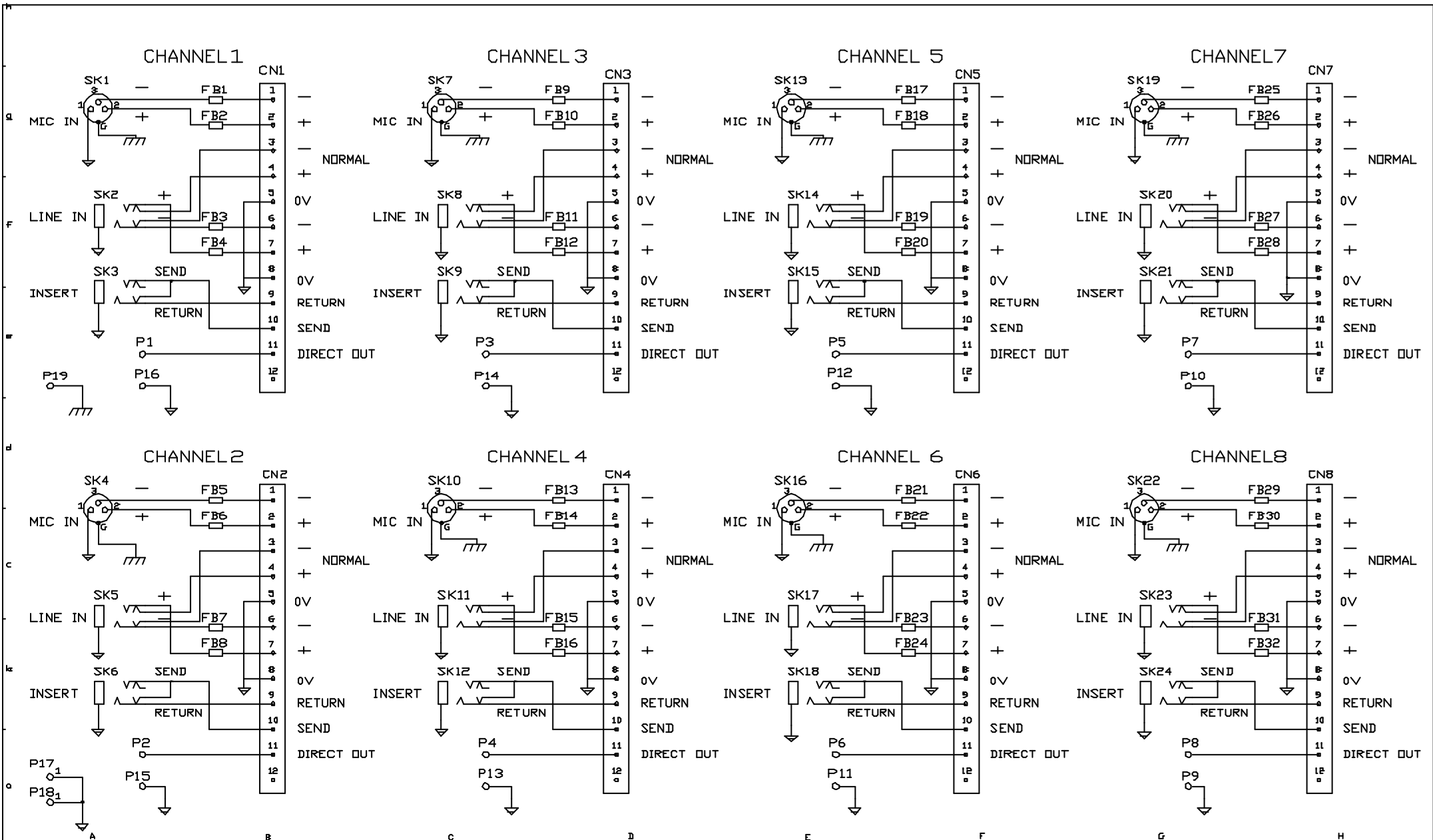
CHANNEL 4

CHANNEL 3

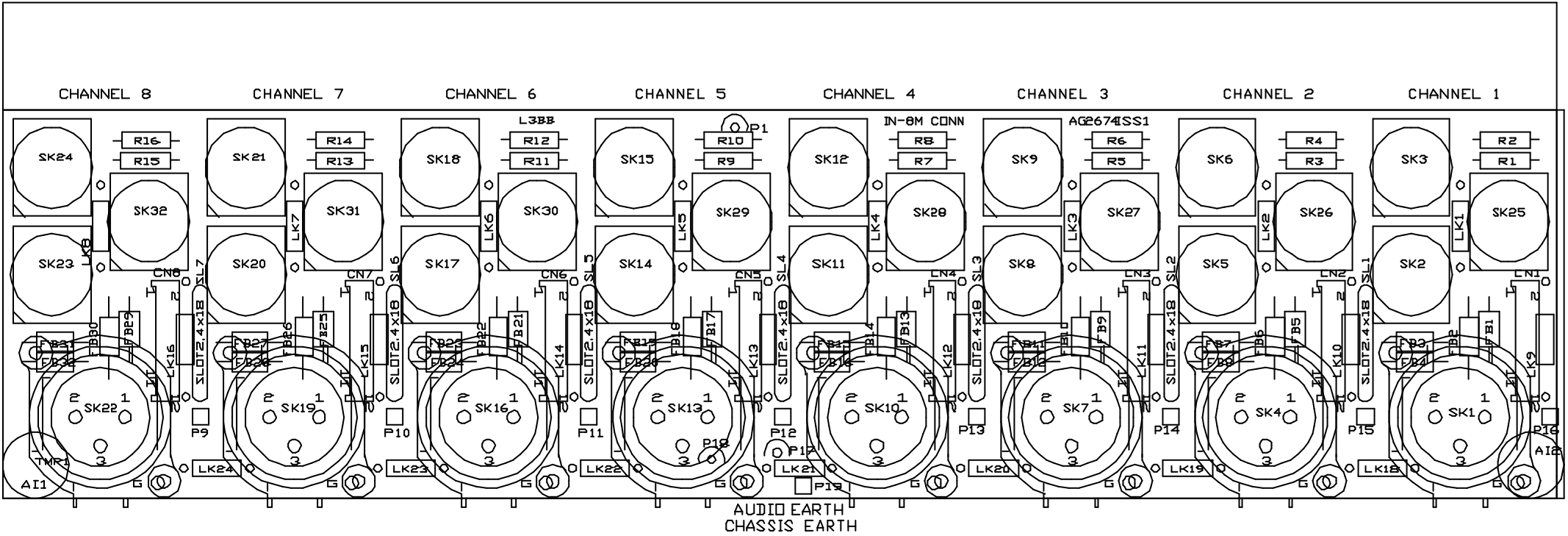
CHANNEL 2

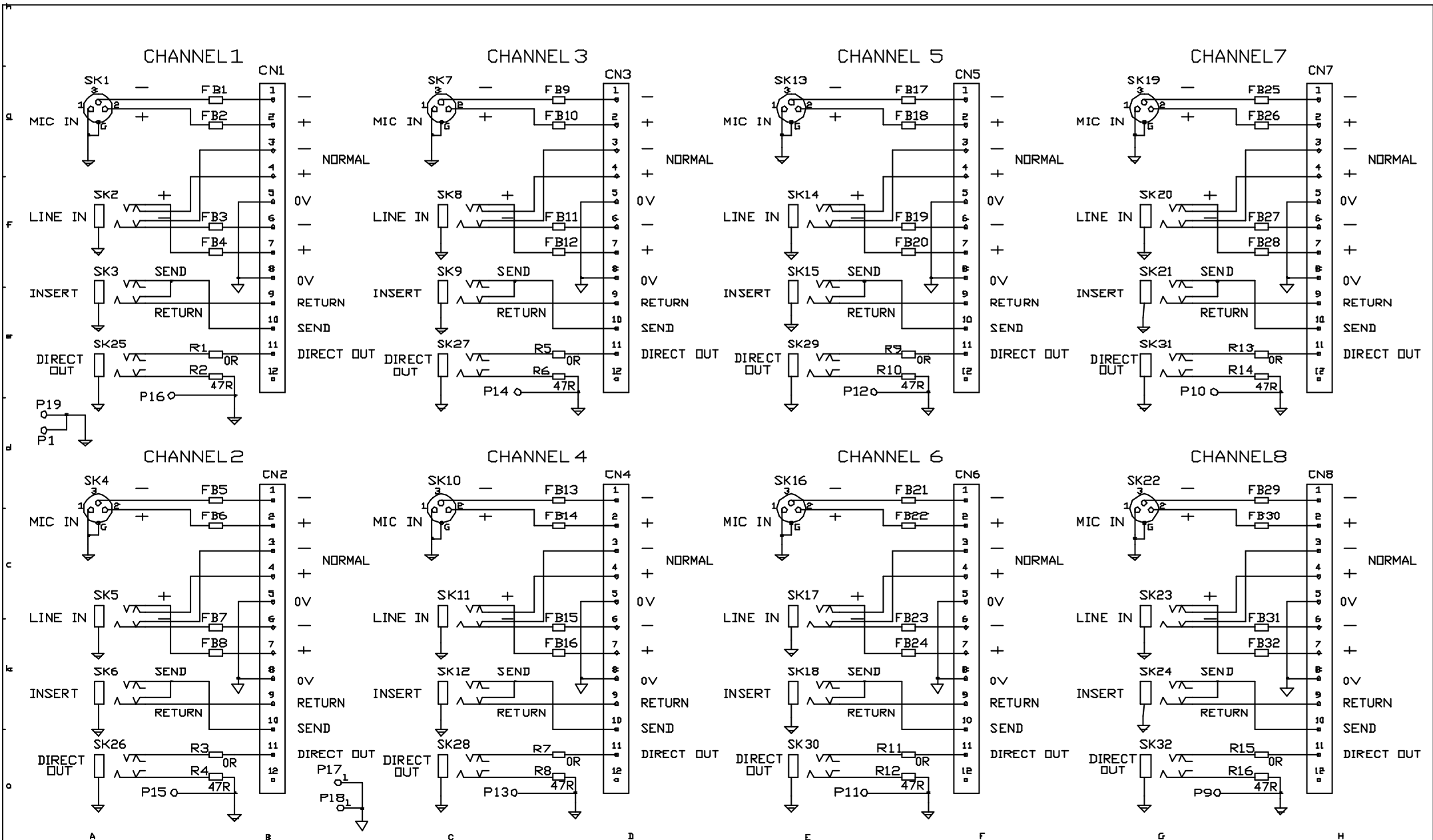
CHANNEL 1



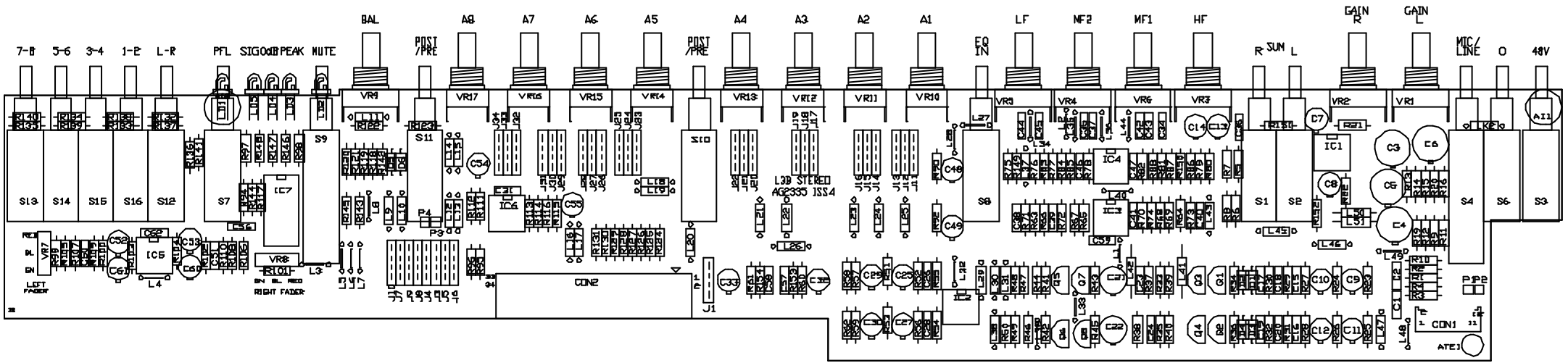


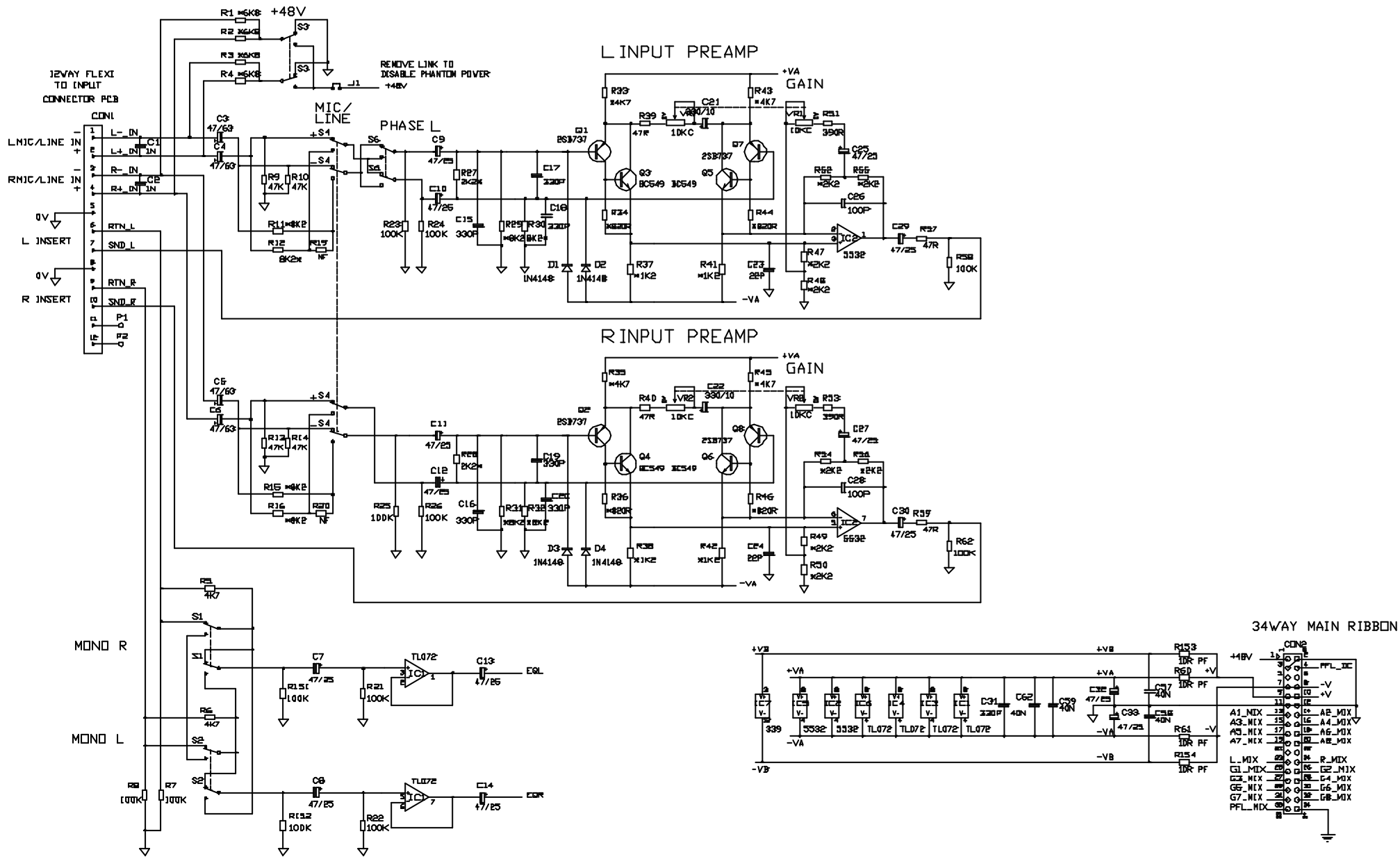
ISS	REVISION	BY	DATE	NOTES	UNIT TITLE	MANUFACTURED IN ENGLAND BY	
A	ORIGIN	DRP	16-8-95	1. RESISTORS MARKED \times ARE 5%. ALL OTHERS ARE 5% 1/4W UNLESS OTHERWISE MARKED. 2. ELECTROLYTIC CAPACITORS ARE 50V/10%	L3B	ALLEN & HEATH	
1	XLR CHANGE	DRP	25-10-95		DRAWING TITLE		IN-8M CONN PCB CIRCUIT DIAGRAM
2	0V ROUTING CHANGE	AA	15-12-95		P11	PCB TYPE AG2328	
						DRAWING No. C2328	ISSUE 2





ISS	REVISION	BY	DATE	NOTES	UNIT TITLE	MANUFACTURED IN ENGLAND BY
A	ORIGIN	AAT	20-06-98	1. RESISTORS MARKED \times ARE 5%. ALL OTHERS ARE 5% 1/4W UNLESS OTHERWISE MARKED. 2. ELECTROLYTIC CAPACITORS ARE 50V/10%	L3BB	ALLEN & HEATH
					DRAWING TITLE	DRAWING No.
					IN-8M CONN PCB CIRCUIT DIAGRAM PCB TYPE AG2674	C2674 ISSUE A
						A2

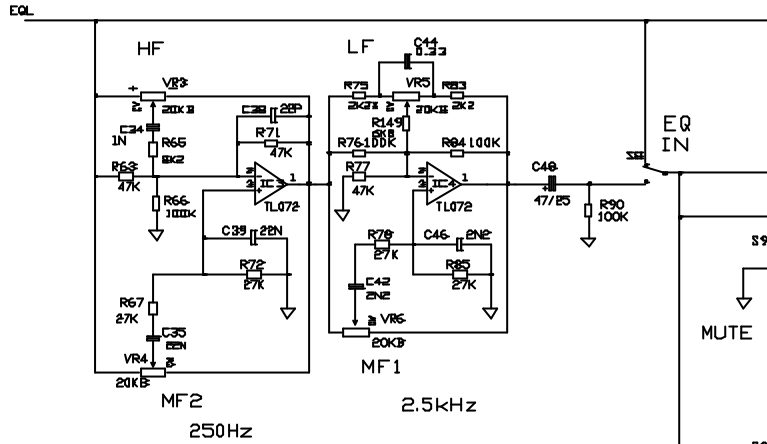




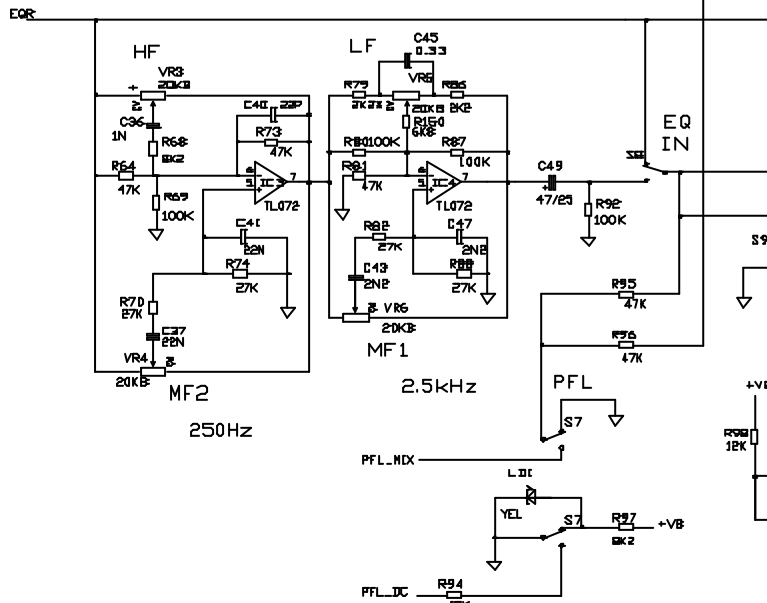
ISS	REVISION	BY	DATE	NOTES
1	ORIGIN	DRP21	11-99	1. RESISTORS MARKED * ARE 5%
2	VALUE CHANGES	DL	28-11-99	ALL OTHERS ARE 1% 1/4W UNLESS OTHERWISE MARKED
3	PRODUCTION	AA129	11-99	2. ELECTROLYTIC CAPACITORS ARE 10V/VOLTS
	R17,18 DELETED	AR	29-11-99	
	MFI-VALUE CHANGES	DRP22	3-96	

UNIT TITLE	L3B		MANUFACTURED IN ENGLAND BY
DRAWING TITLE	STEREO CIRCUIT DIAGRAM FOR PCB TYPE AG2936		ALLEN & HEATH
	PAGE 1 OF 2	DRAWING NO	C2335
		ISSUE	3

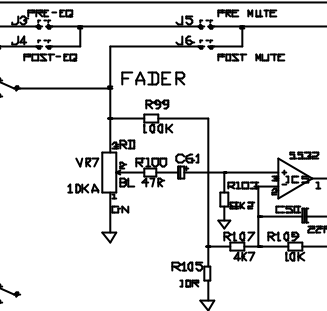
4-BAND EQUALISER



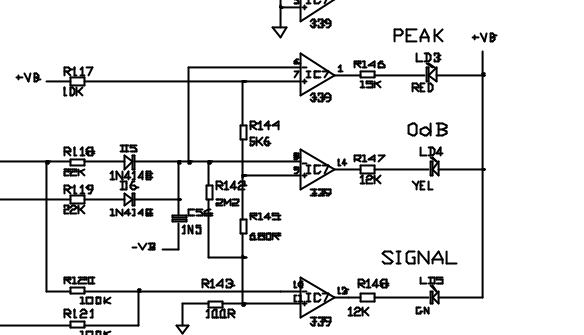
4-BAND EQUALISER



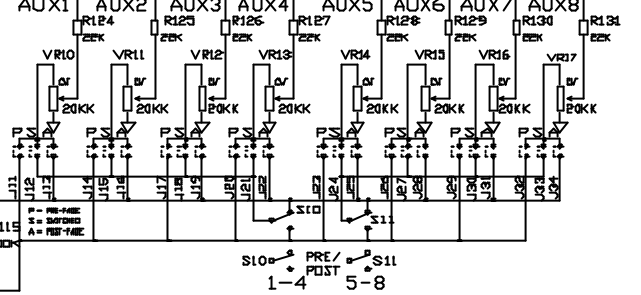
PRE FADE AUX LINK OPTIONS



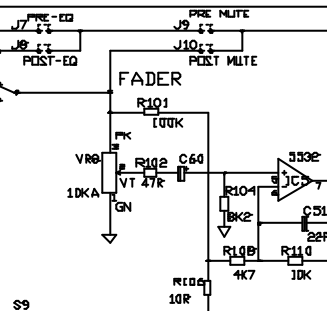
SIGNAL METER



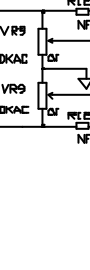
AUX1 AUX2 AUX3 AUX4 AUX5 AUX6 AUX7 AUX8



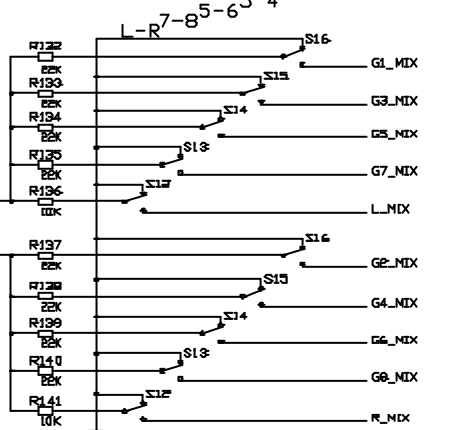
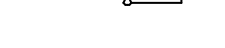
PRE FADE AUX LINK OPTIONS



BAL



OPTION FOR DIRECT OUT



ISS	REVISION	BY	DATE	NOTES	UNIT TITLE	MANUFACTURED IN ENGLAND BY
1	ORIGIN	DRP21	11-95	1. RESISTORS MARKED * ARE 5%	L3B	ALLEN & HEATH
2	VALUE CHANGES	DL	12-95	ALL OTHERS ARE 1% 1/4V UNLESS OTHERWISE MARKED	STEREO	
3	PRODUCTION	AA	12-95	2. ELECTROLYTIC CAPACITORS ARE 10V/VOLTS	CIRCUIT DIAGRAM	
4	R17,18 DELETED	AR	12-95		FUR PCB TYPEAG2936	DRAWING NO: C2335
5	MF1-VALUE CHANGES	DRP22	3-96			ISSUE 3

CHANNEL 8

CHANNEL 7

CHANNEL 6

CHANNEL 5

CHANNEL 4

CHANNEL 3

CHANNEL 2

CHANNEL 1

INSERT

LINE IN

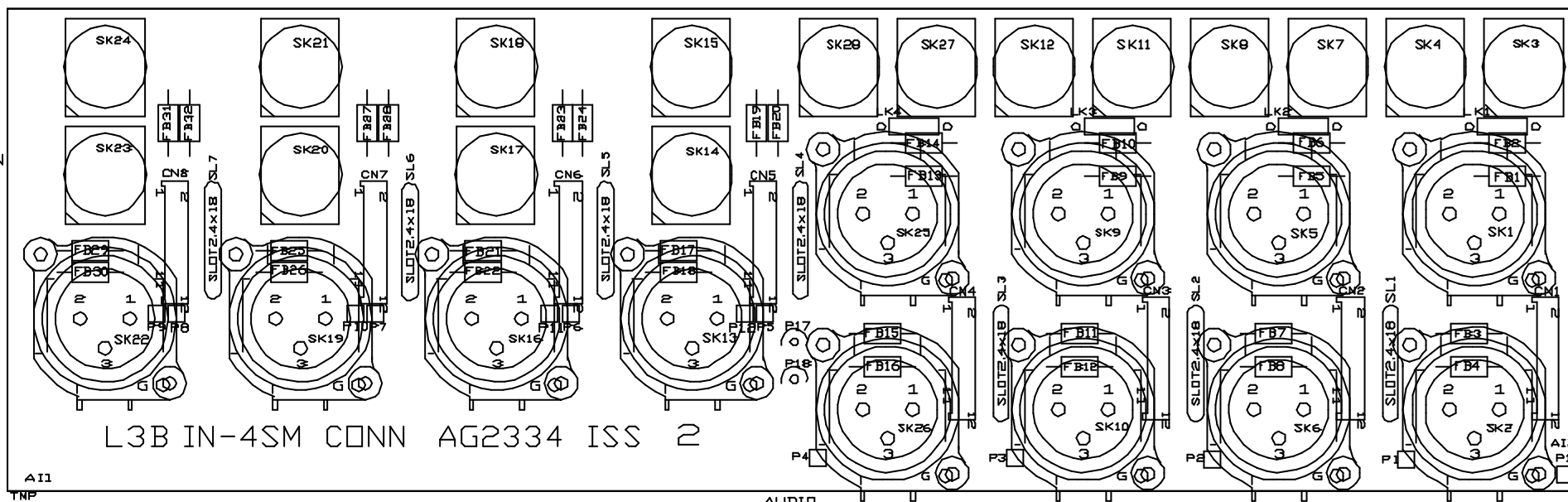
MIC IN

INSERT R/L

L IN

R IN

CHASSIS EARTH



L3B IN-4SM CONN AG2334 ISS 2

AUDIO EARTH

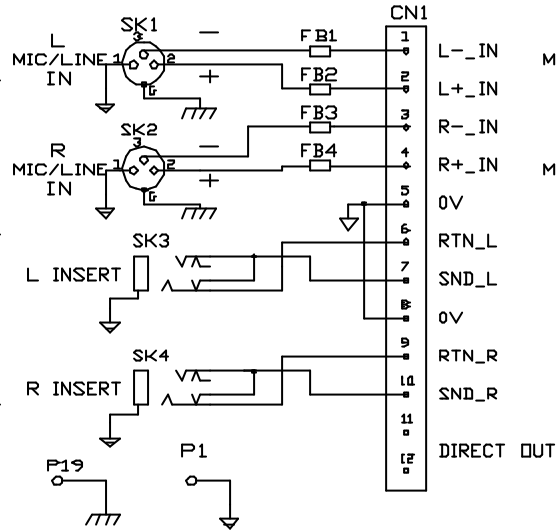
A11

TNP

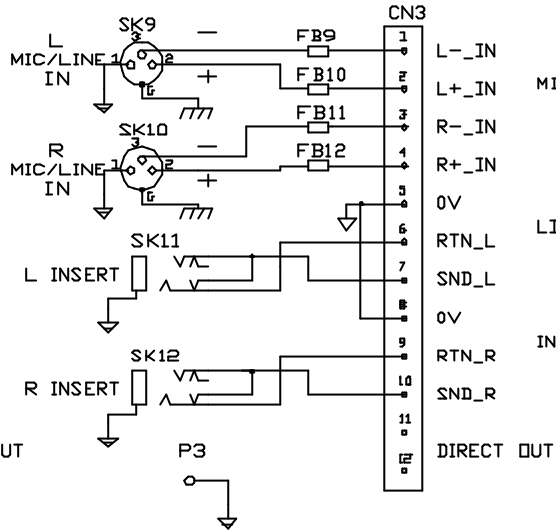
A12

P19

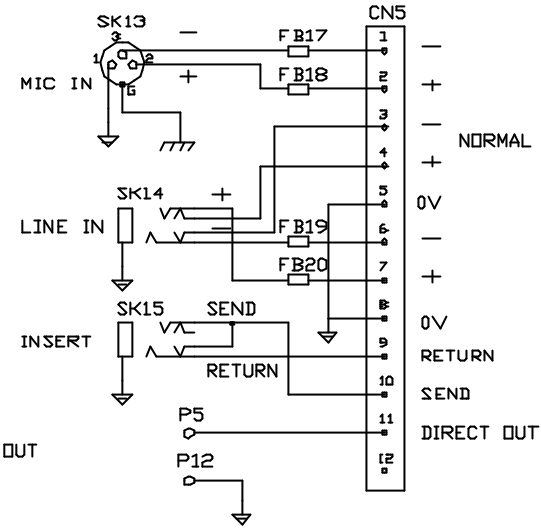
STEREO CHANNEL 1



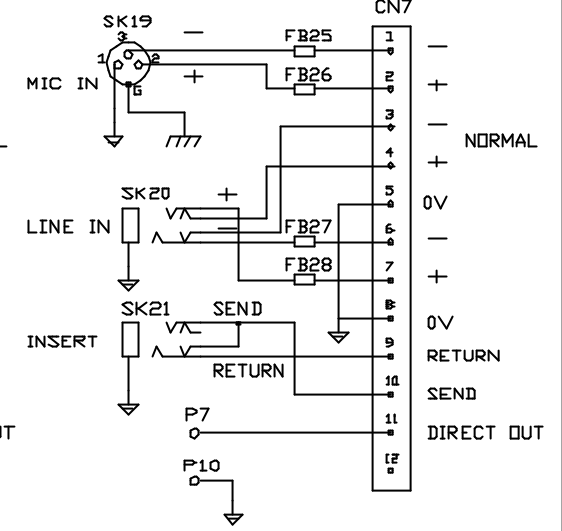
STEREO CHANNEL 3



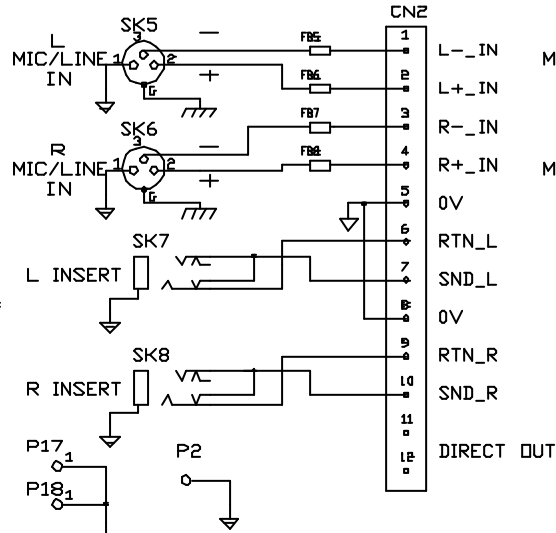
CHANNEL 5



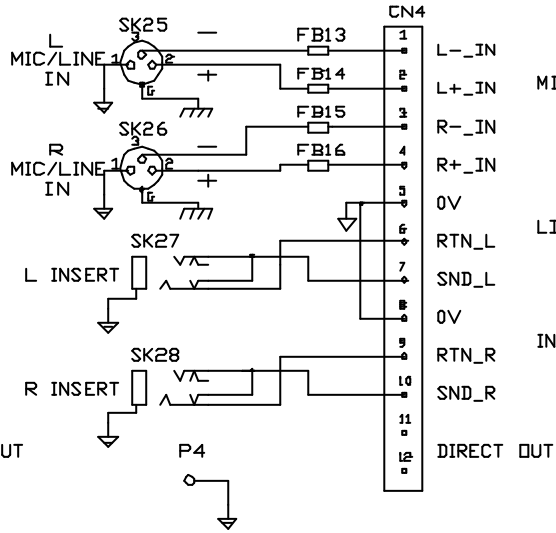
CHANNEL 7



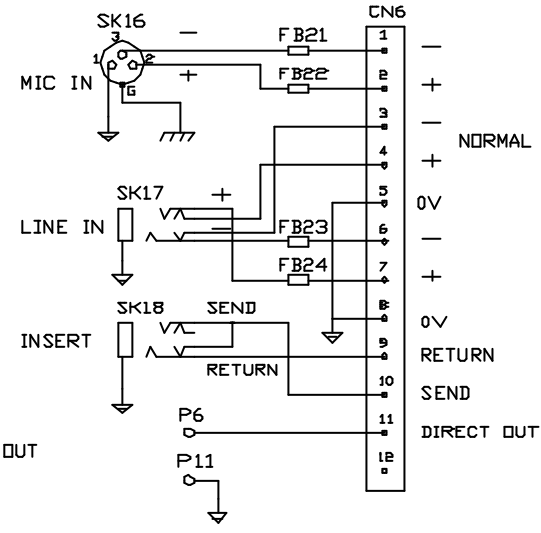
STEREO CHANNEL 2



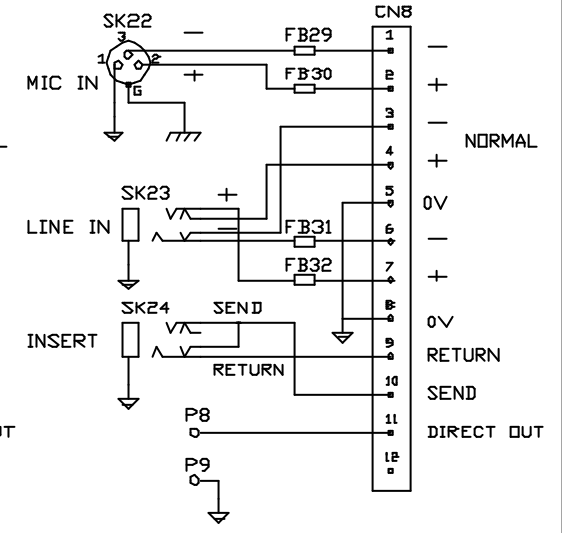
STEREO CHANNEL 4



CHANNEL 6



CHANNELS 8

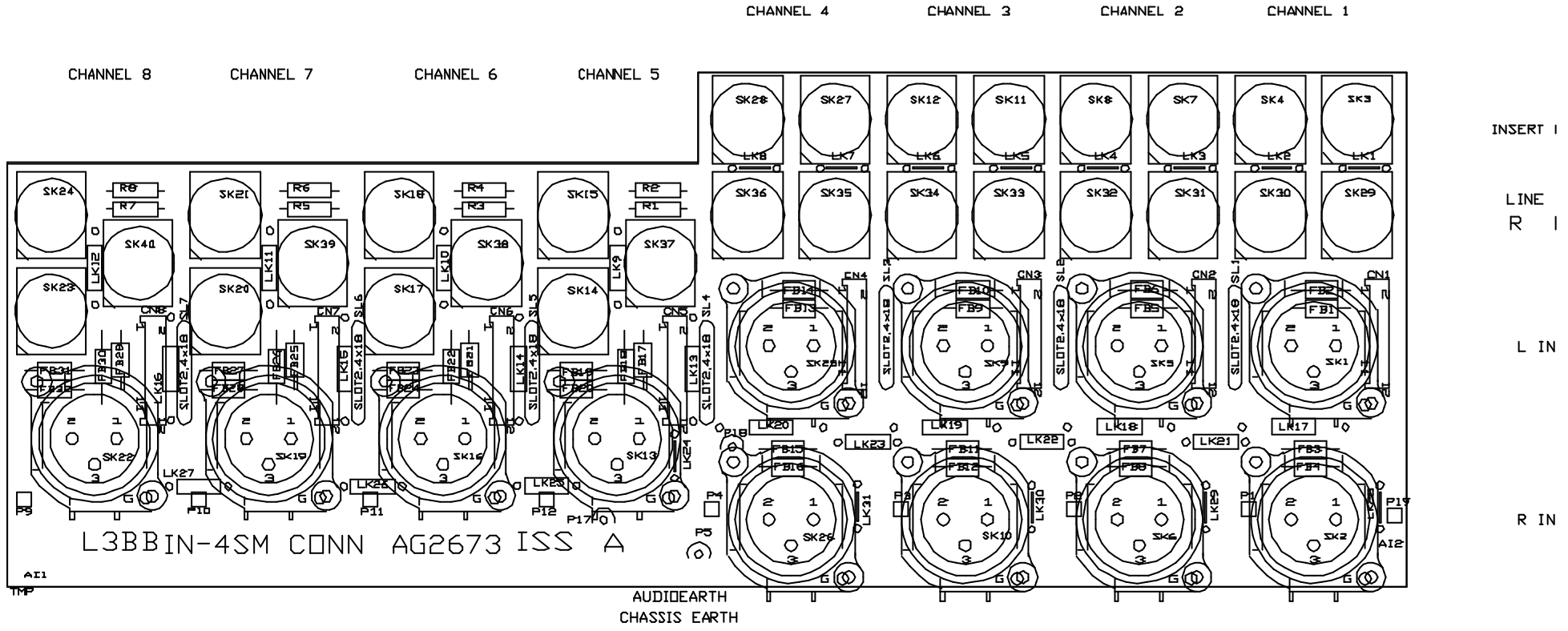


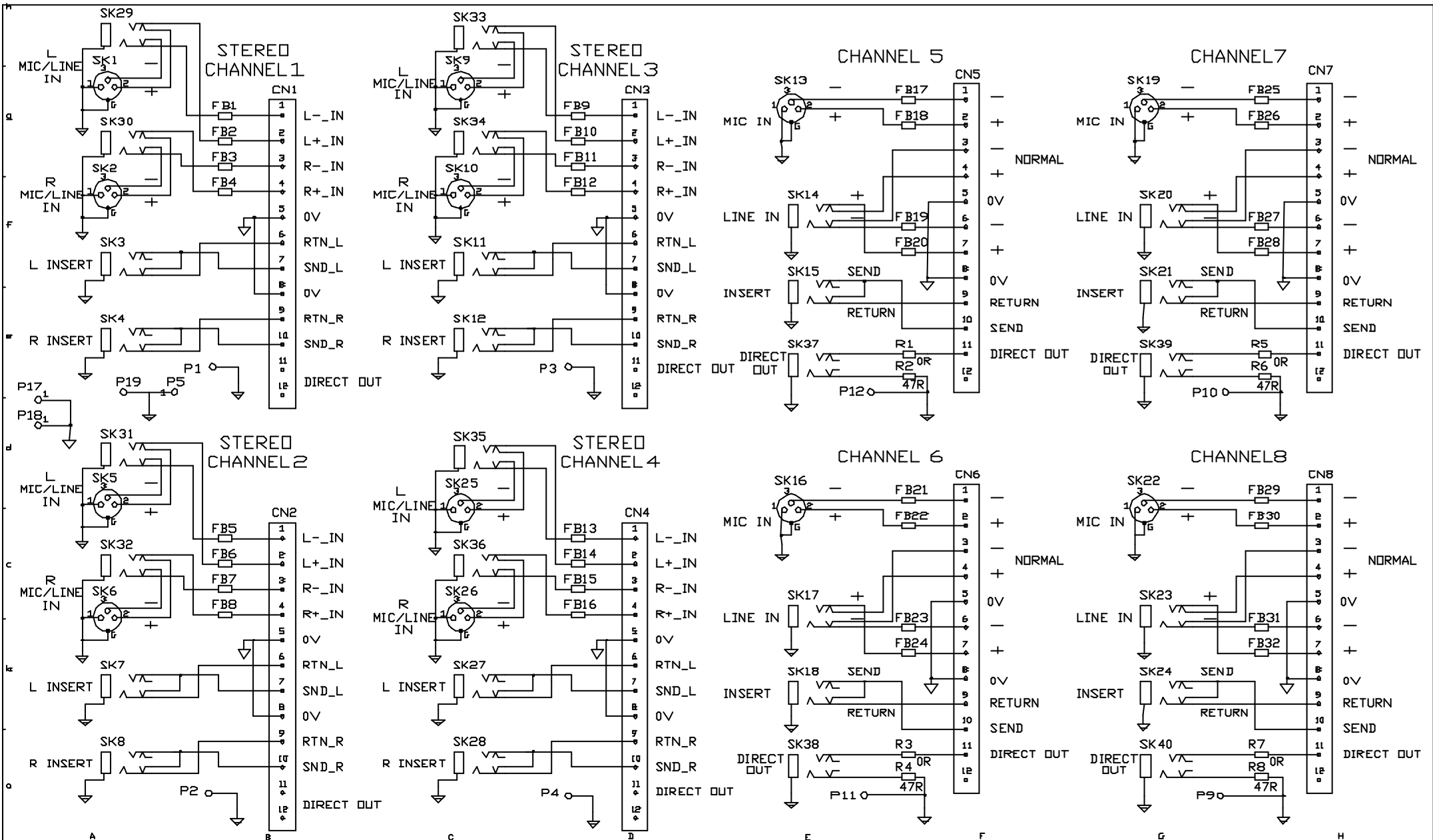
ISS	REVISION	BY	DATE
1	ORIGIN	AAT	10-11-95
2	0V ROUTING CHANGE	AAT	15-12-95

- NOTES
- RESISTORS MARKED * ARE 5%.
 - ALL OTHERS ARE 5% 1/4W UNLESS OTHERWISE MARKED.
 - ELECTROLYTIC CAPACITORS ARE 50V/10%.

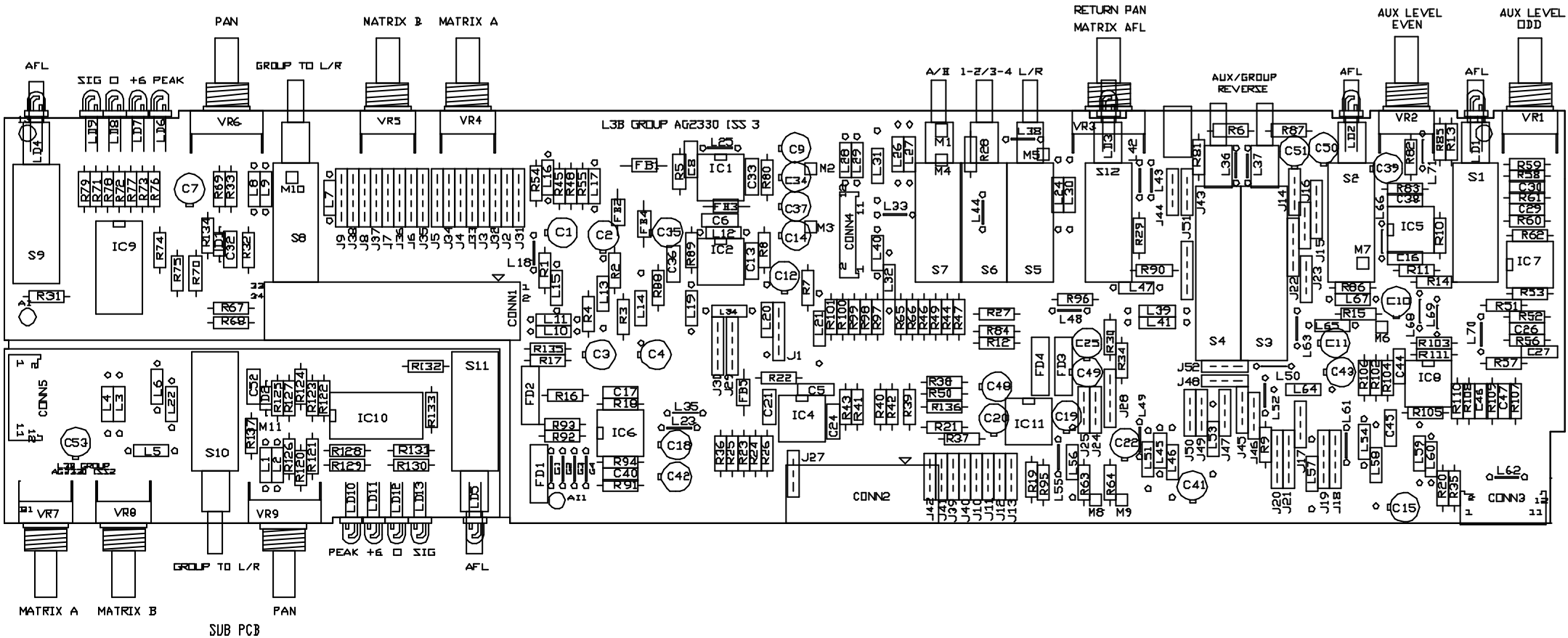
UNIT TITLE	L3B
DRAWING TITLE	IN-4SM CONN PCB CIRCUIT DIAGRAM PCB TYPE AG2334

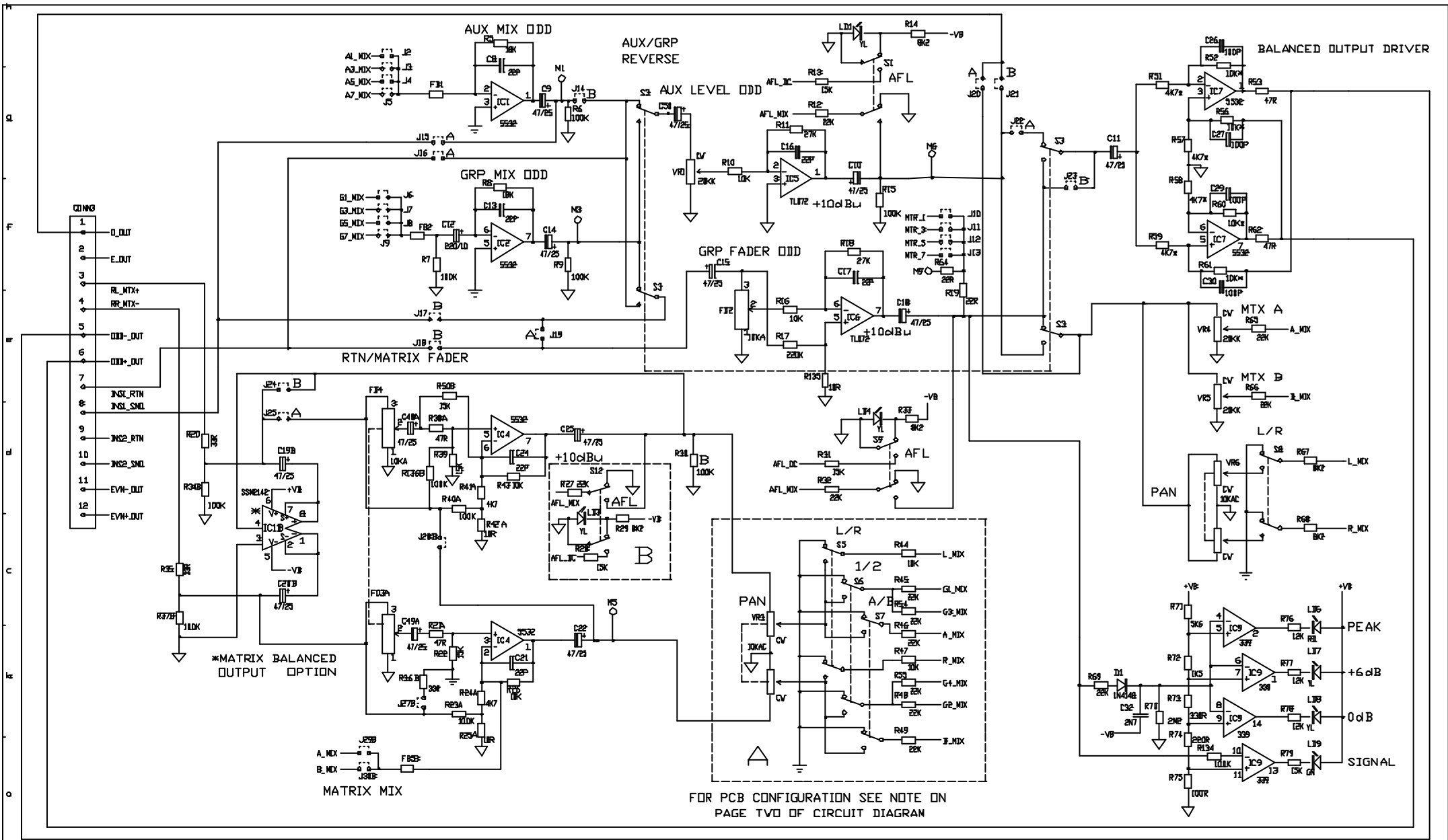
MANUFACTURED IN ENGLAND BY	
ALLEN & HEATH	
DRAWING No.	C2334
ISSUE	2
	A2



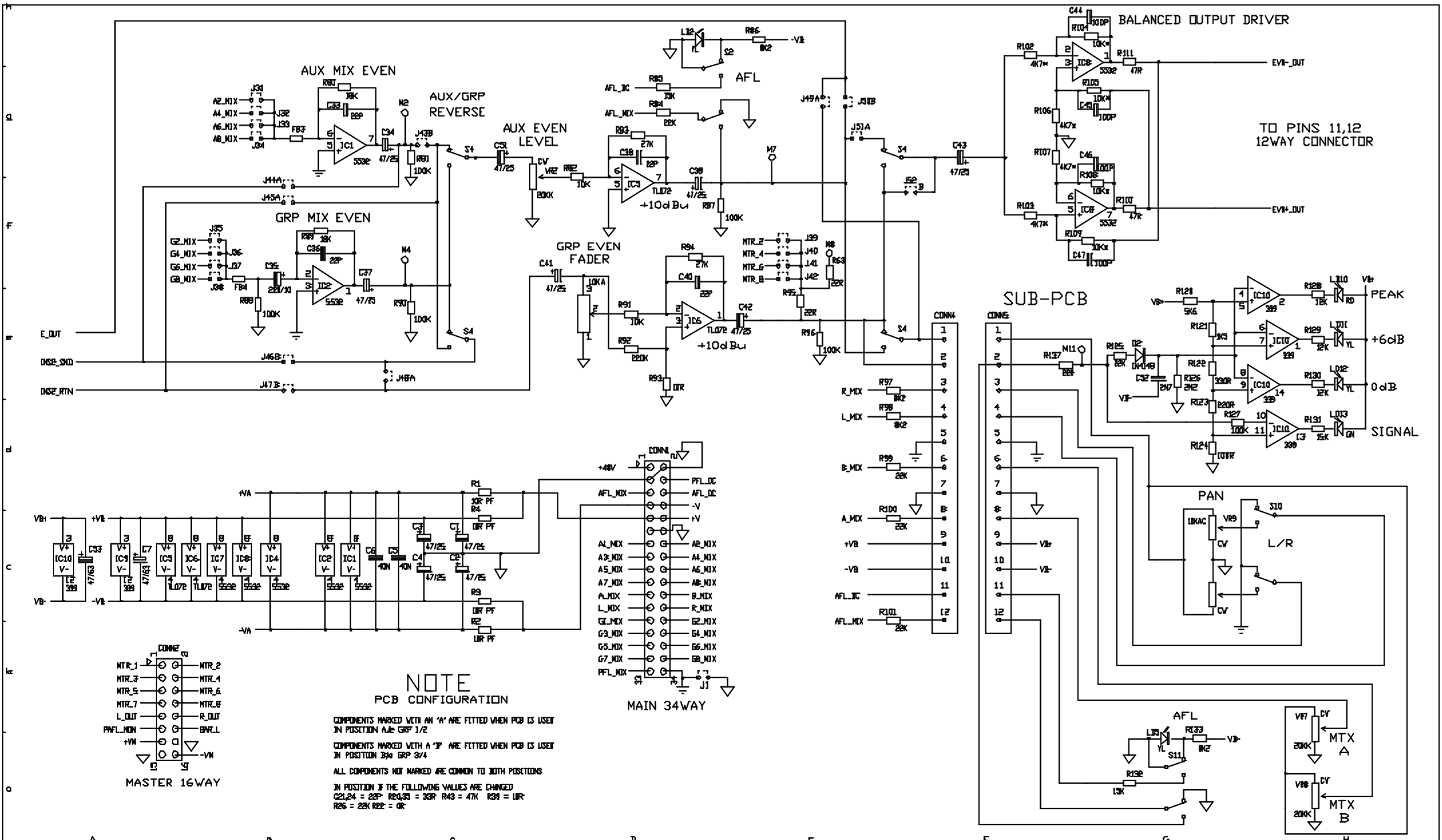


ISS	REVISION	BY DATE	NOTES	UNIT TITLE	MANUFACTURED IN ENGLAND BY
A	ORIGIN	AAT25-06-96	1. RESISTORS MARKED \times ARE 5%. ALL OTHERS ARE 5% UNLESS OTHERWISE MARKED. 2. ELECTROLYTIC CAPACITORS ARE 5% VOLTS.	L3BB	ALLEN & HEATH
				DRAWING TITLE	DRAWING No.
				IN-4SM CONN PCB CIRCUIT DIAGRAM PCB TYPE AG2673	C2673
					ISSUE A
					A2



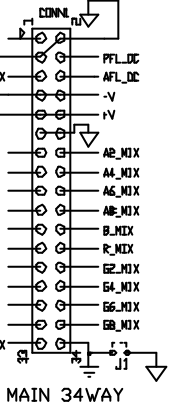
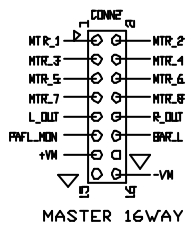


ISS	REVISION	BY DATE	NOTES	UNIT TITLE	MANUFACTURED IN ENGLAND BY
2	REVISED 8 BUSS	AR J18-12-95	1. RESISTORS MARKED * ARE 5%. ALL OTHERS ARE 5% L/V UNLESS OTHERWISE MARKED. 2. ELECTROLYTIC CAPACITORS ARE 5% V.O.L.S.	L3B PAGE 1 OF 2 DRAWING TITLE GROUP CIRCUIT PCB AG2330	ALLEN & HEATH DRAWING No. C2330 ISSUE 2

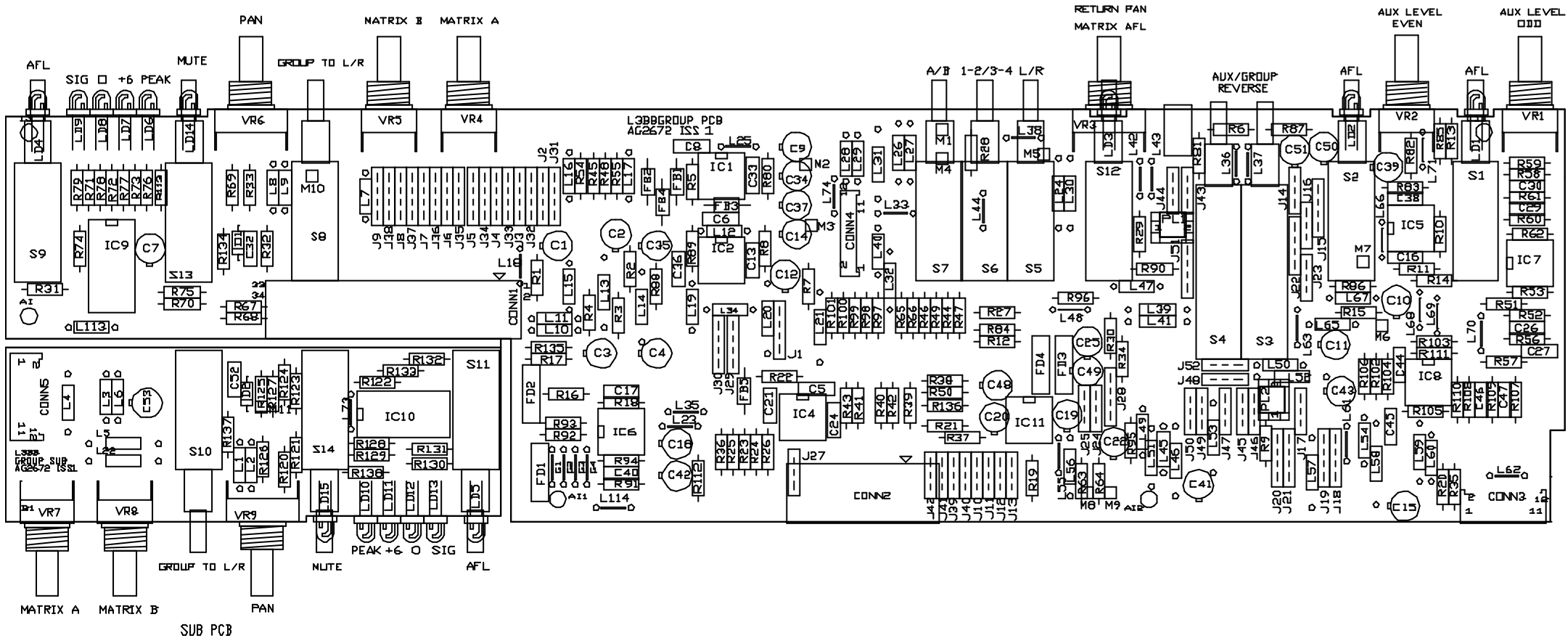


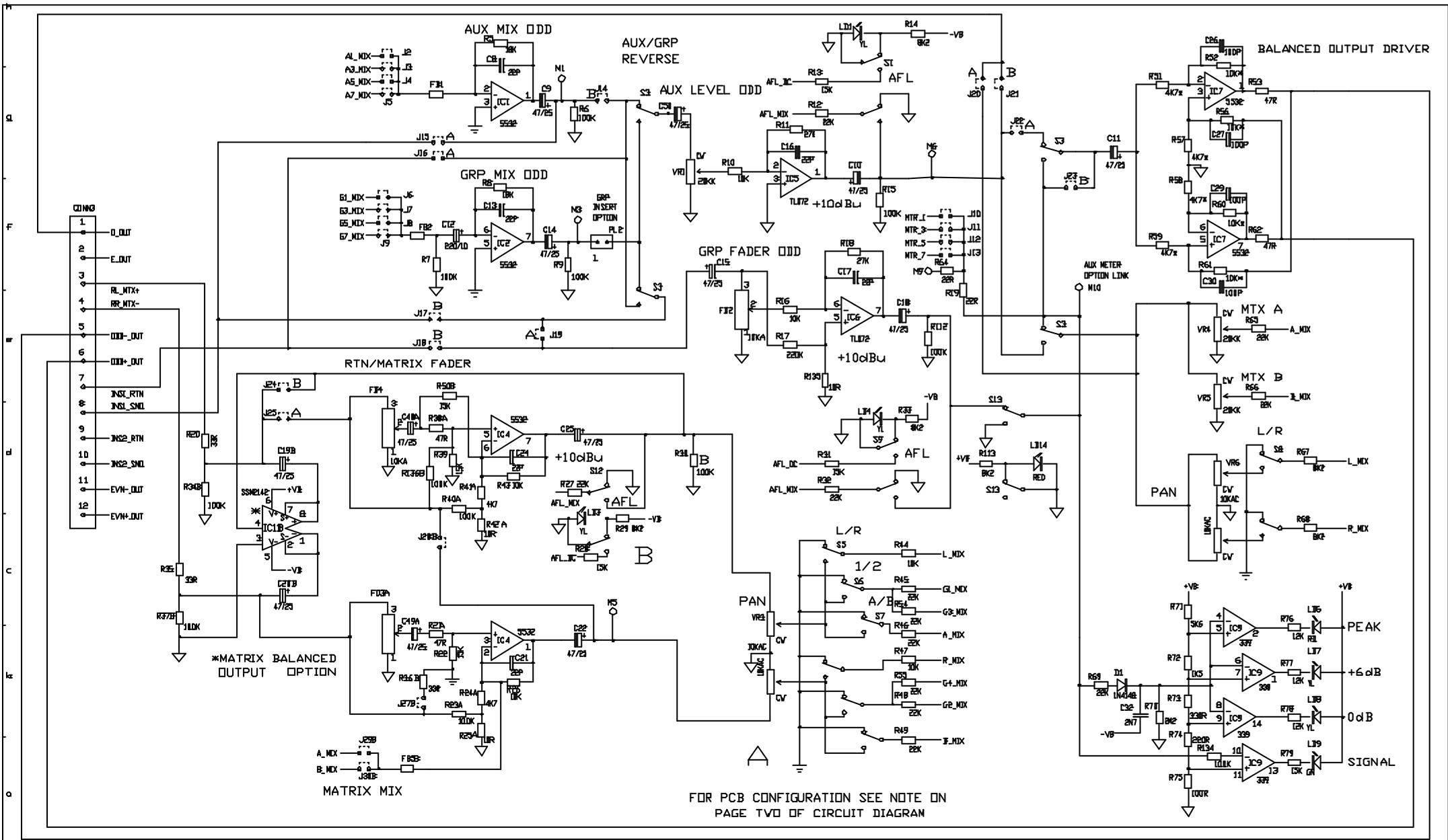
**NOTE
PCB CONFIGURATION**

COMPONENTS MARKED WITH AN "A" ARE FITTED WHEN PCB IS USED IN POSITION 1&2 GRP 1/2
 COMPONENTS MARKED WITH A "B" ARE FITTED WHEN PCB IS USED IN POSITION 3&4 GRP 3/4
 ALL COMPONENTS NOT MARKED ARE COMMON TO BOTH POSITIONS
 IN POSITION IF THE FOLLOWING VALUES ARE CHANGED
 C21,24 = 22P R20,33 = 33R R43 = 47K R38 = LWR
 R25 = 22K R22 = 0R

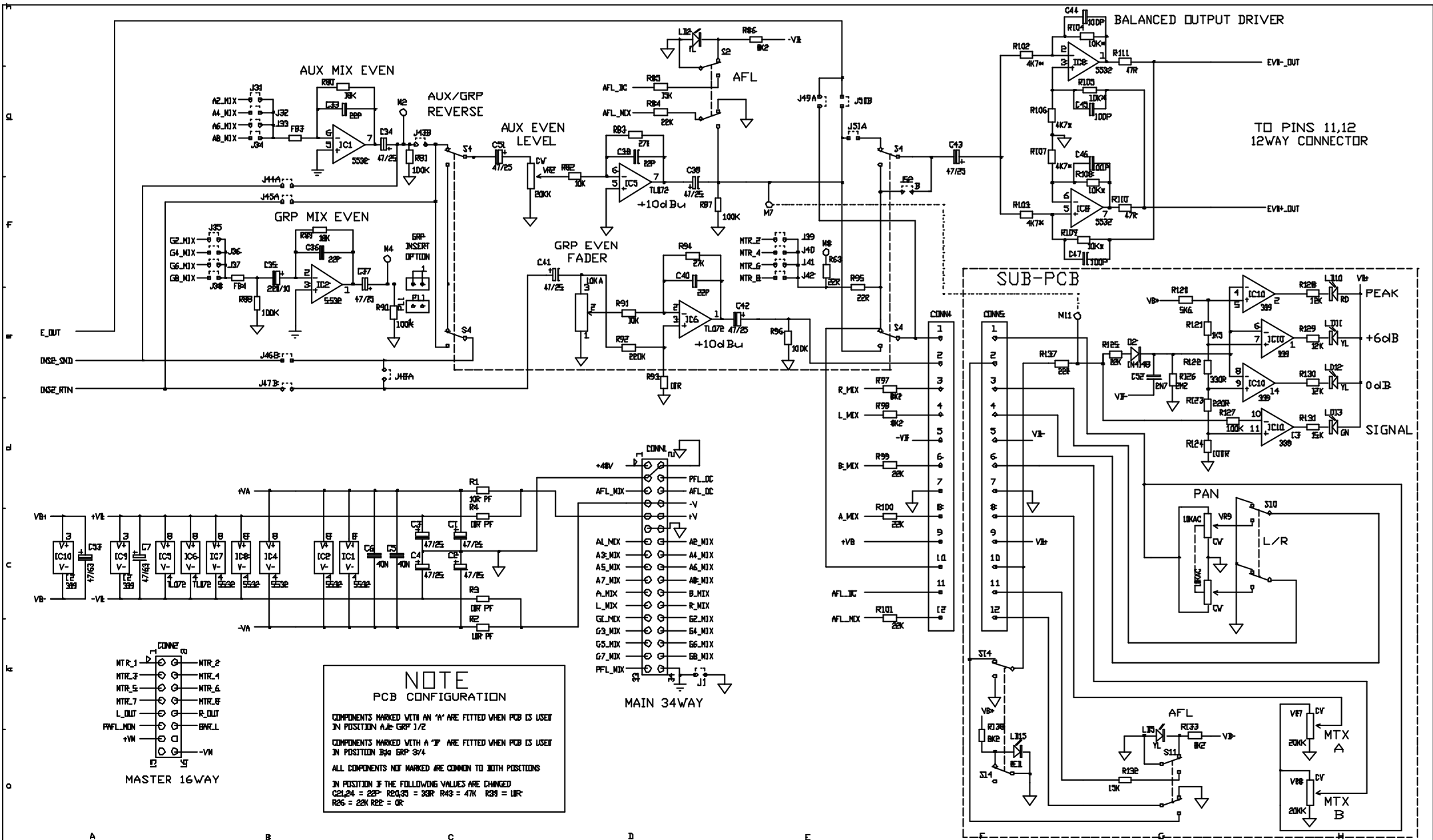


ISS	REVISION	BY DATE	NOTES	UNIT TITLE	MANUFACTURED IN ENGLAND BY
2	REVISED 8 BUSS	AR J18-12-95	1. RESISTORS MARKED * ARE 1%. ALL OTHERS ARE 5% 1/4W UNLESS OTHERWISE MARKED 2. ELECTROLYTIC CAPACITORS ARE 50V/10%	L3B GROUP CIRCUIT PCB AG2330	ALLEN & HEATH DRAWING No. C2330 ISSUE 2





ISS	REVISION	BY DATE	NOTES	UNIT TITLE	MANUFACTURED IN ENGLAND BY
A	ORIGIN	DRP30-5-96	1. RESISTORS MARKED * ARE 5%. ALL OTHERS ARE 5% L/V UNLESS OTHERWISE MARKED. 2. ELECTROLYTIC CAPACITORS ARE 5% V.O.L.S.	L3BB GROUP CIRCUIT PCB AG2672	ALLEN & HEATH DRAWING No. C2672 ISSUE A



NOTE
PCB CONFIGURATION

COMPONENTS MARKED WITH AN "A" ARE FITTED WHEN PCB IS USED IN POSITION 1 & 2 GRP 1/2

COMPONENTS MARKED WITH A "B" ARE FITTED WHEN PCB IS USED IN POSITION 3 & 4 GRP 3/4

ALL COMPONENTS NOT MARKED ARE COMMON TO BOTH POSITIONS

IN POSITION IF THE FOLLOWING VALUES ARE CHANGED
C21,24 = 22P R20,33 = 33R R43 = 47K R38 = 10R
R25 = 22K R22 = 0R

ISS	REVISION	BY DATE	NOTES	UNIT TITLE	MANUFACTURED IN ENGLAND BY
A	ORIGIN	DRP30-5-96	1. RESISTORS MARKED * ARE 5%. ALL OTHERS ARE 1% UNLESS OTHERWISE MARKED. 2. ELECTROLYTIC CAPACITORS ARE 5% TOLERANCE.	L3BB PAGE 2 OF 2 GROUP CIRCUIT PCB AG2672	ALLEN & HEATH DRAWING No. C2672 ISSUE A

MONO
LEVEL

LR SUM/
AFL/PFL

MTXB MTXA

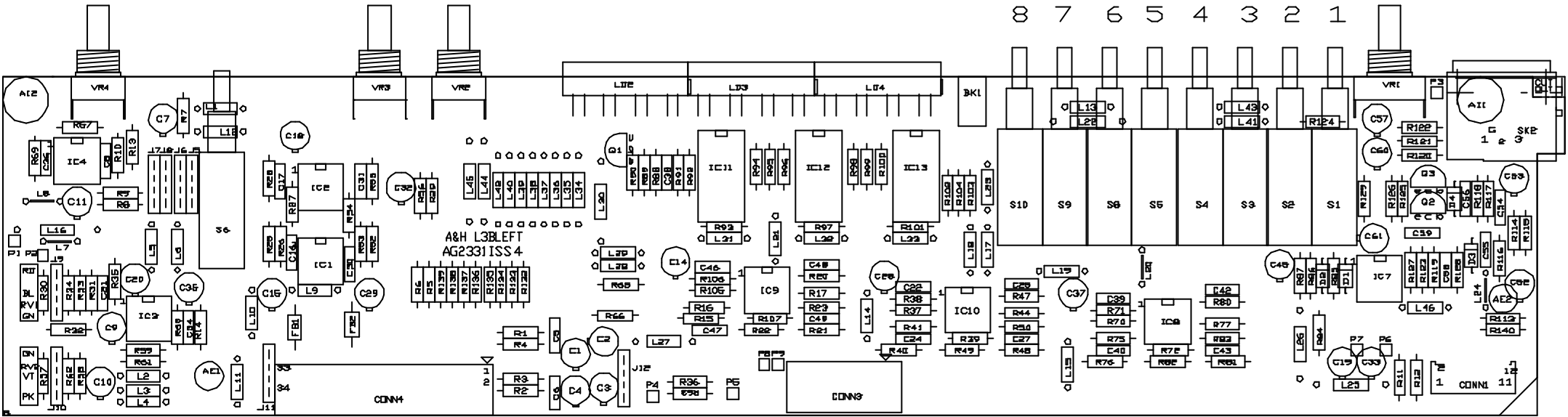
L METER

TB TO AUX :

TB
LEVEL

TB
MIC

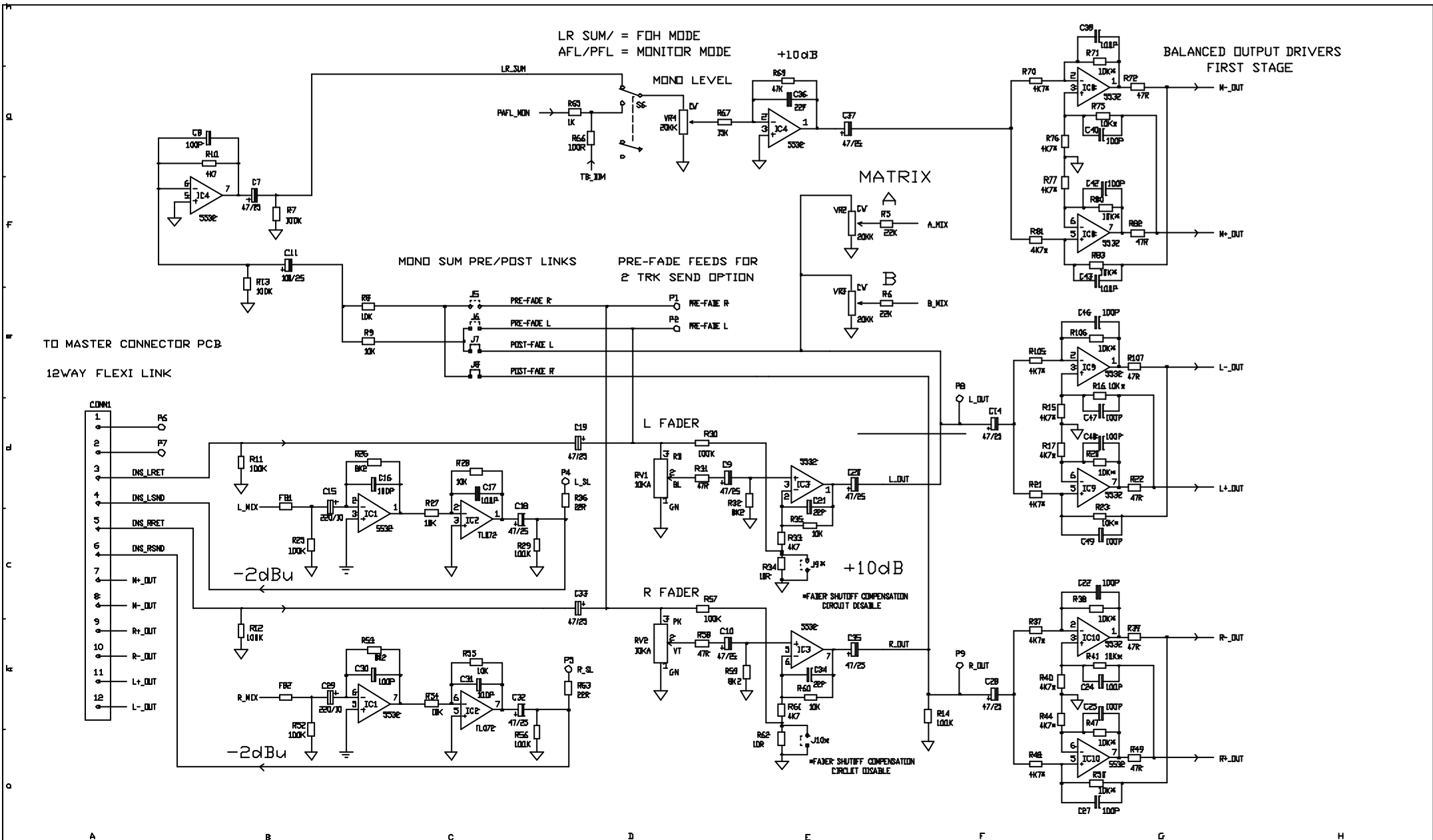
8 7 6 5 4 3 2 1



MAIN IDC

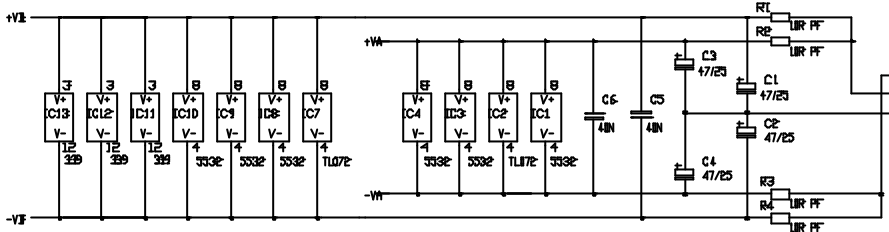
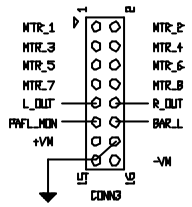
MASTER IDC

FLEXI LINK

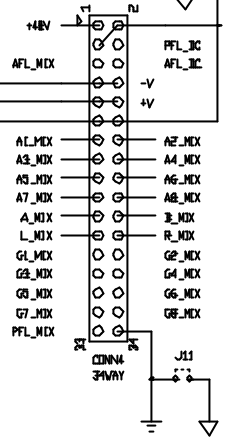


ISS	REVISION	BY DATE	NOTES	UNIT TITLE	MANUFACTURED IN ENGLAND BY
A	ORIGIN	ARJ13-10-95	1. RESISTORS MARKED * ARE 5%. ALL OTHERS ARE 5% UNLESS OTHERWISE MARKED. 2. ELECTROLYTIC CAPACITORS ARE 5% VOLTS.	L3B	ALLEN & HEATH
B	UPDATES	DLP24-10-95		DRAWING TITLE	
C	8 BUS VERSION	DLP14/11/95		LEFT PCB	
D	PRODUCTION	DLP23/11/95			
				DRAWING No.	ISSUE
				C2331	1
					A2

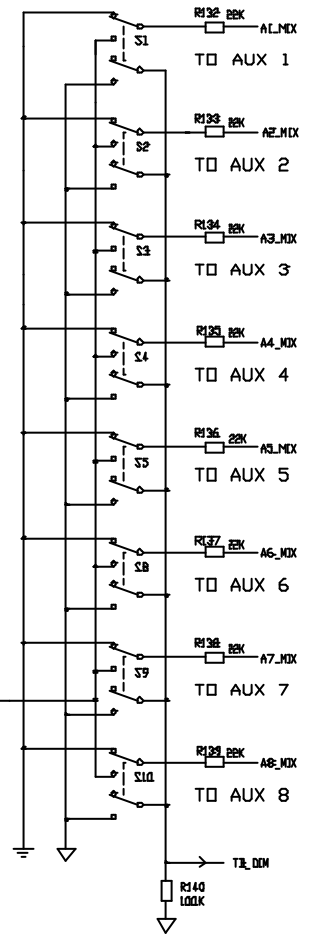
MASTER 16WAY



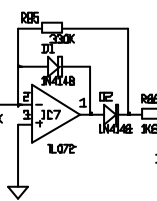
MAIN 34WAY



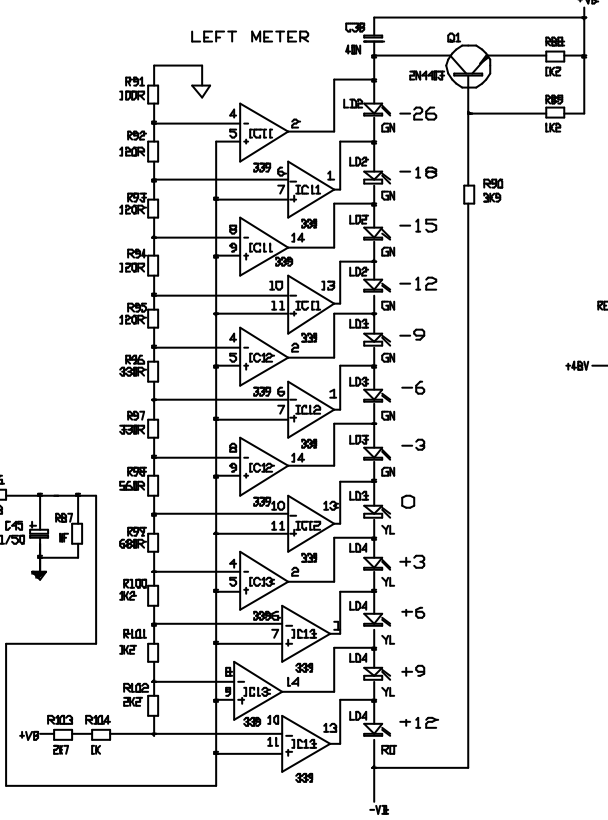
PUSH TO TALK TALKBACK



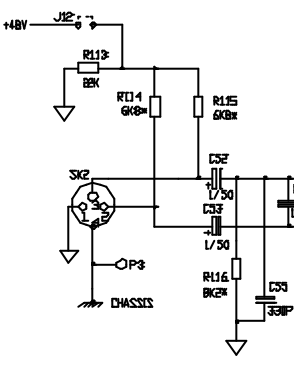
LEFT METER RECTIFIER



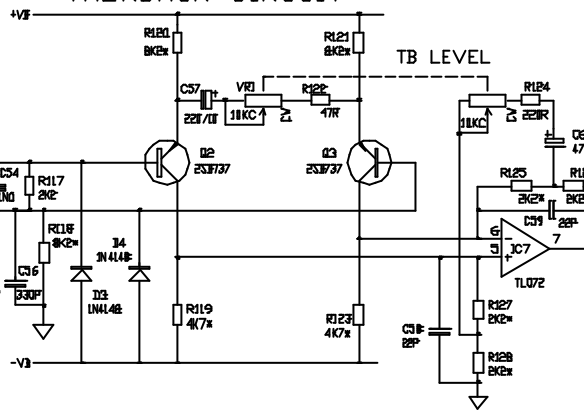
LEFT METER



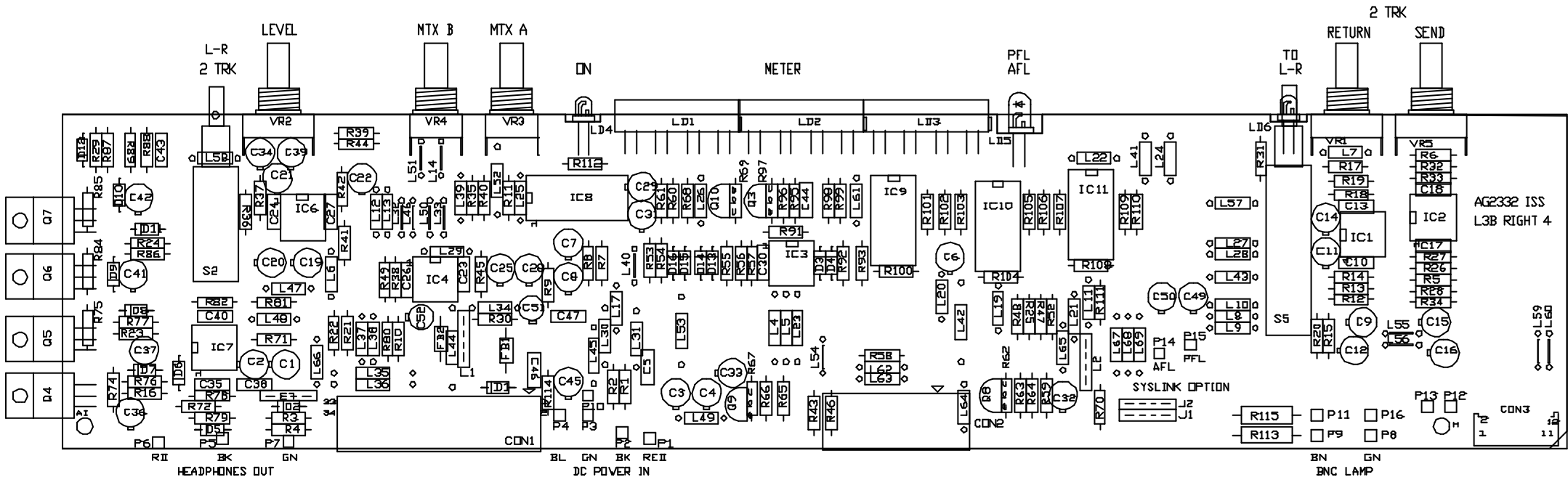
REMOVE LINK TO DISABLE PHANTOM POWER

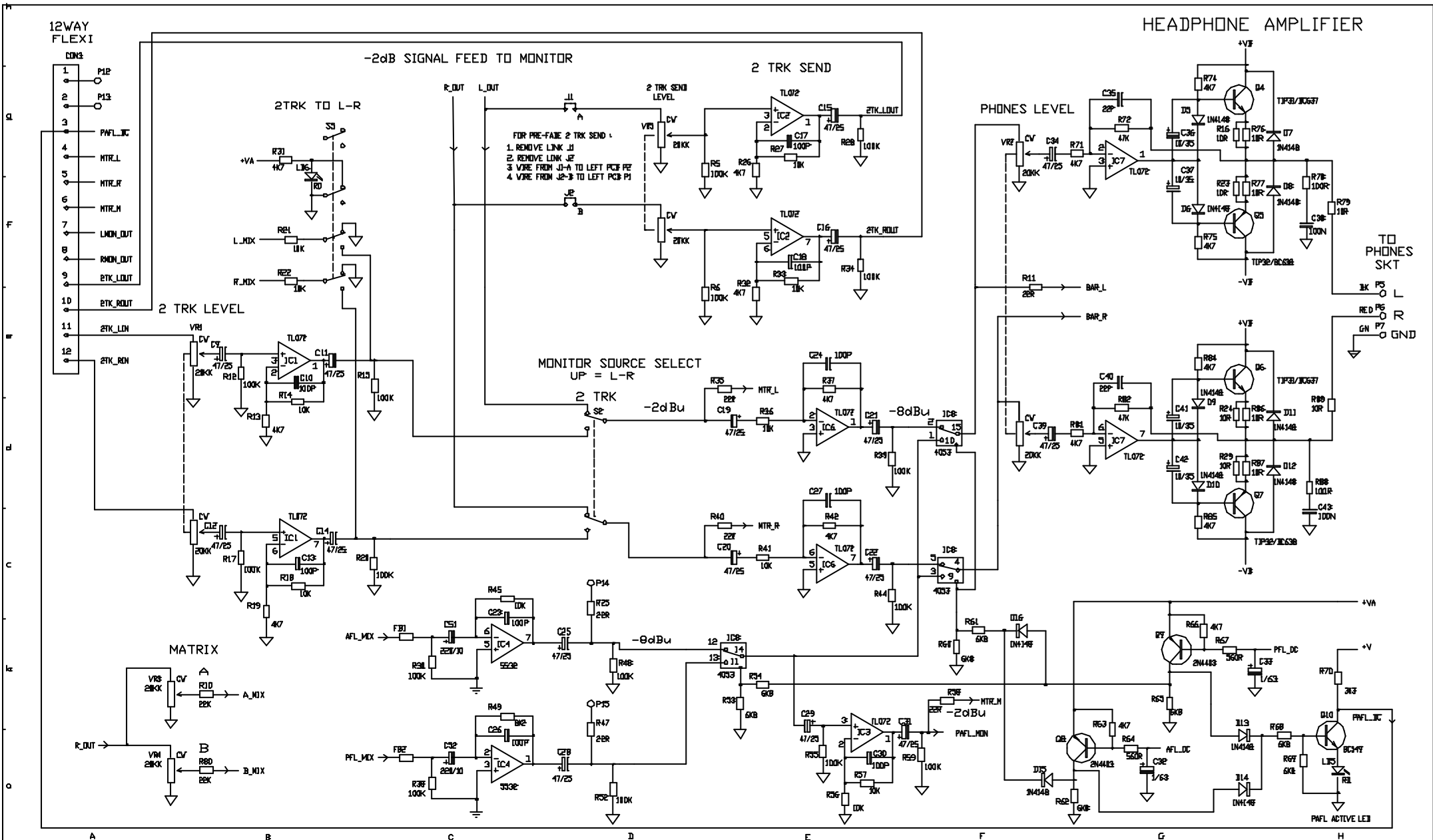


TALKBACK CIRCUIT



ISS	REVISION	BY DATE	NOTES	UNIT TITLE	MANUFACTURED IN ENGLAND BY
A	ORIGIN	ARJ13-10-95	1. RESISTORS MARKED * ARE 5% ALL OTHERS ARE 1% UNLESS OTHERWISE MARKED	L3B	ALLEN & HEATH
B	UPDATES	DLP24-10-95		DRAWING TITLE	
C	8 BUS VERSION	DLP14/11/95	2. ELECTROLYTIC CAPACITORS ARE 50V/10%.	SHEET 2 OF 2	DRAWING No.
D	PRODUCTION	DLP23/11/95		LEFT PCB	ISSUE
					1
					A2



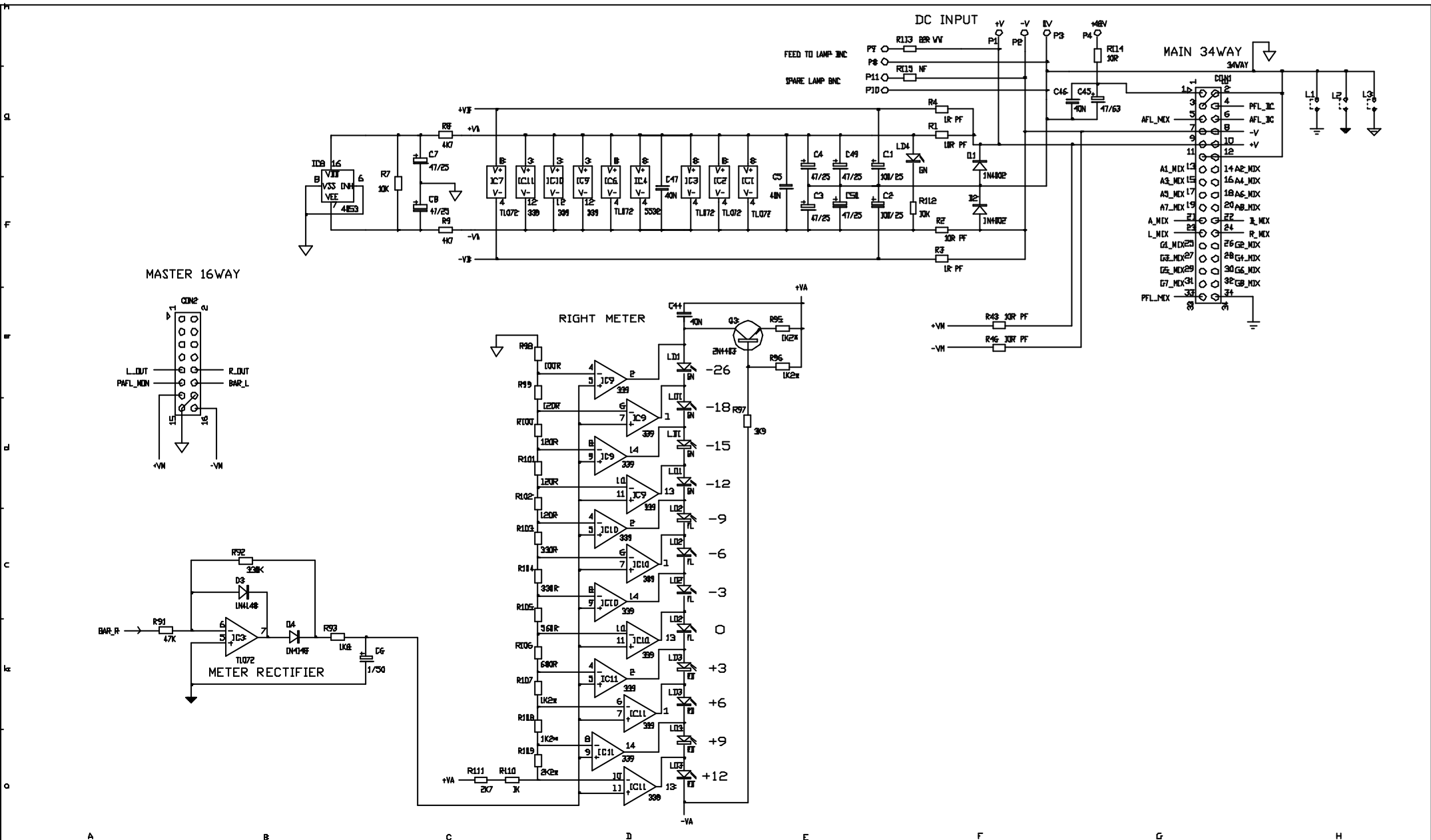


ISS	REVISION	BY	DATE
B	8 BUS VERSION	DLP	21-11-95
C	PRODUCTION	DRP	27-11-95
1		DRP	29-11-95
2	C47 ADDED R70 WAS +VA SUPPLY	DRP	18-12-95
3	R25,R47 WERE 22K	DRP	29-1-96

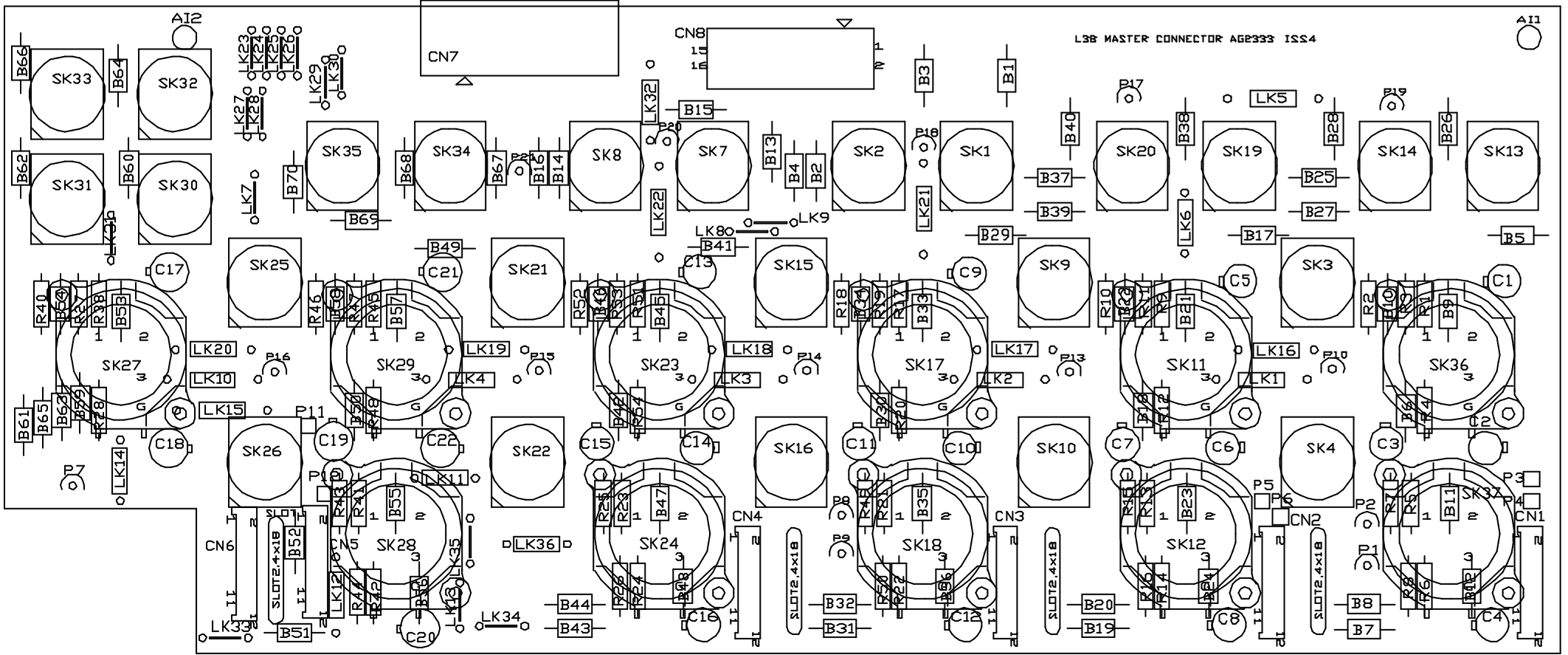
NOTES
1. RESISTORS MARKED * ARE 5% ALL OTHERS ARE 1% UNLESS OTHERWISE MARKED
2. ELECTROLYTIC CAPACITORS ARE 50V/10% UNLESS OTHERWISE MARKED

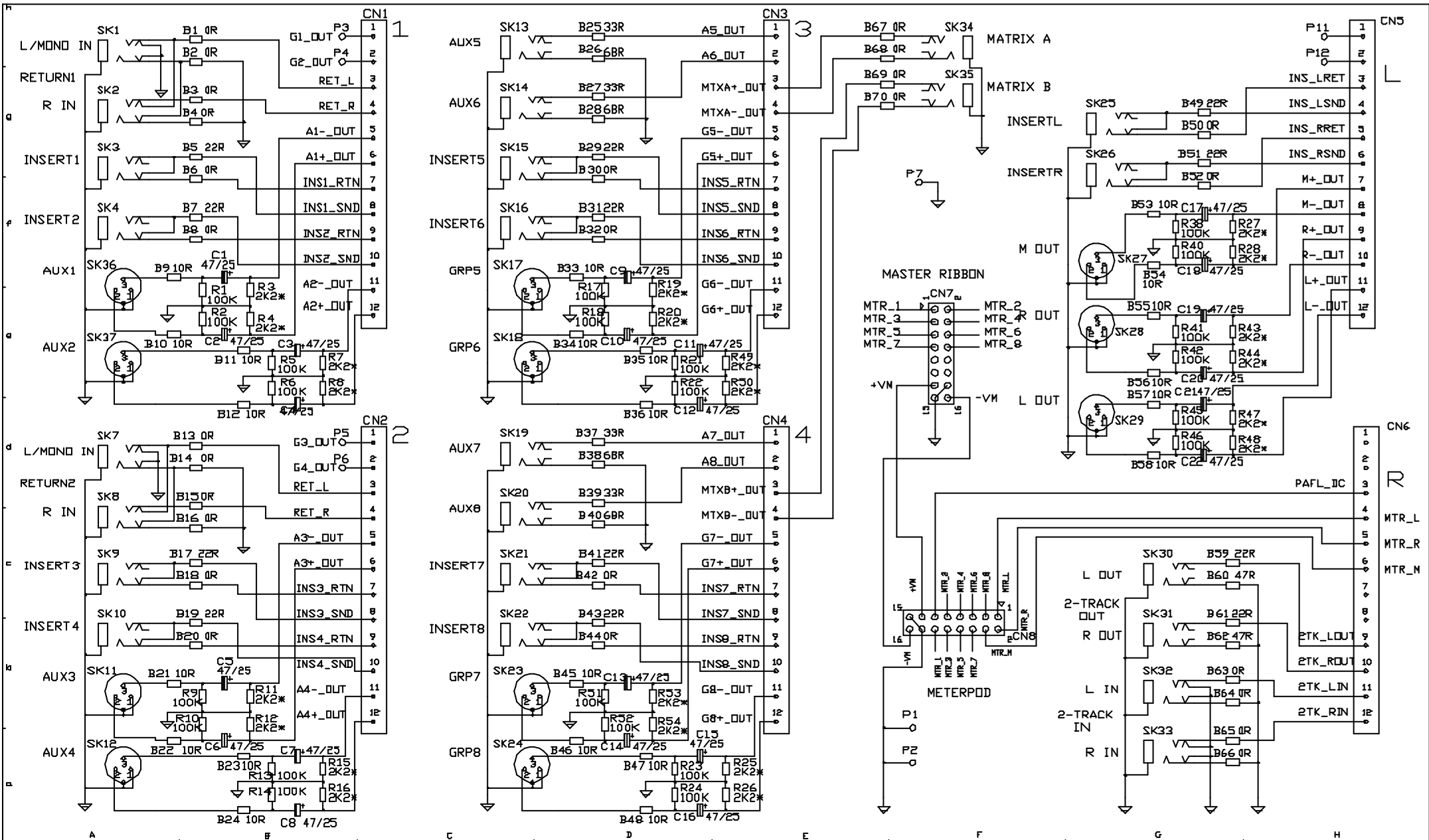
UNIT TITLE	L3B
DRAWING TITLE	RIGHT PCB
SHEET 1 OF 2	

MANUFACTURED IN ENGLAND BY	ALLEN & HEATH
DRAWING No.	C2332
ISSUE	3

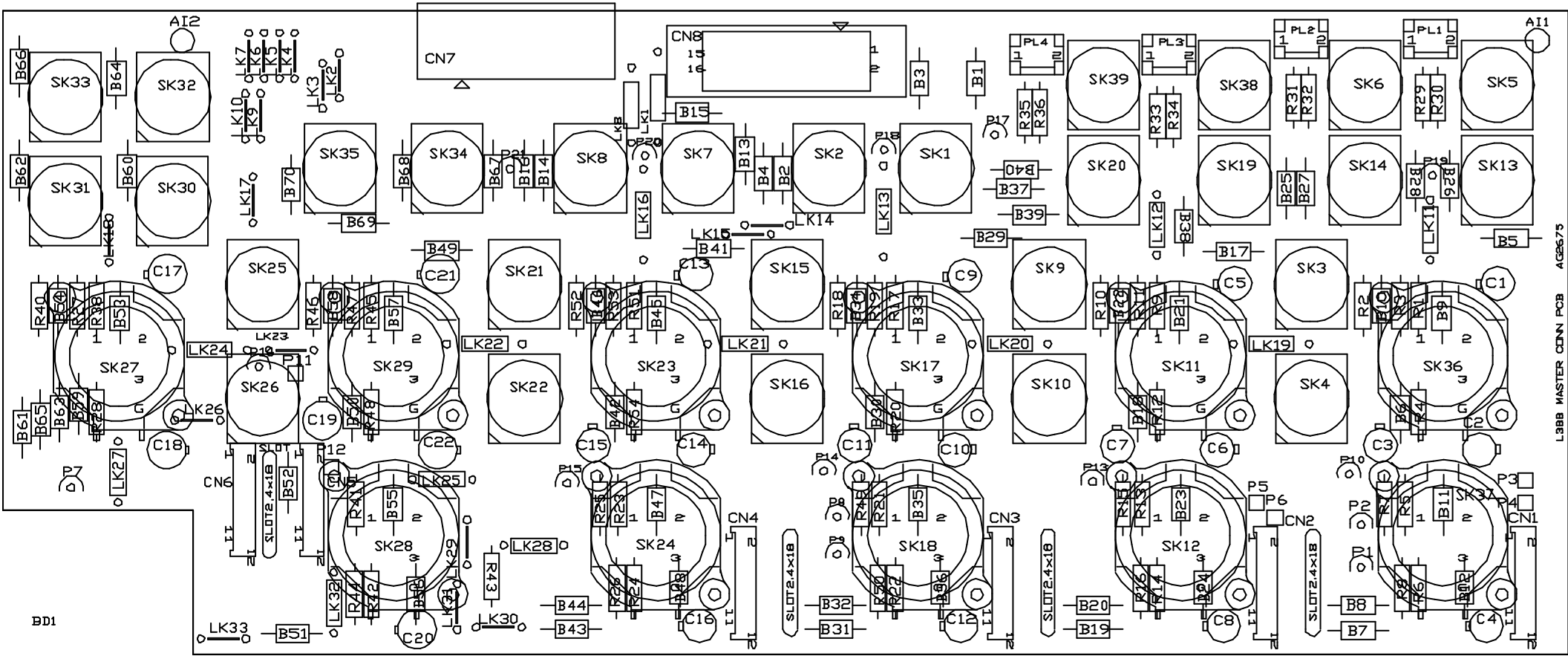


ISS	REVISION	BY	DATE	NOTES	UNIT TITLE	MANUFACTURED IN ENGLAND BY
1	8 BUS VERSION PRODUCTION	DLP21-11-95		1. RESISTORS MARKED * ARE 5% ALL OTHERS ARE 5% 1/4W UNLESS OTHERWISE MARKED	L3B	ALLEN & HEATH
2	C47 ADDED R70 WAS +VA SUPPLY	DRP27-11-95		2. ELECTROLYTIC CAPACITORS ARE 5% VOLTS	DRAWING TITLE	DRAWING No. C2332 ISSUE 3
3	R25, R47 WERE 22K	DRP18-12-95			RIGHT PCB	
		DRP 29-1-96				A2

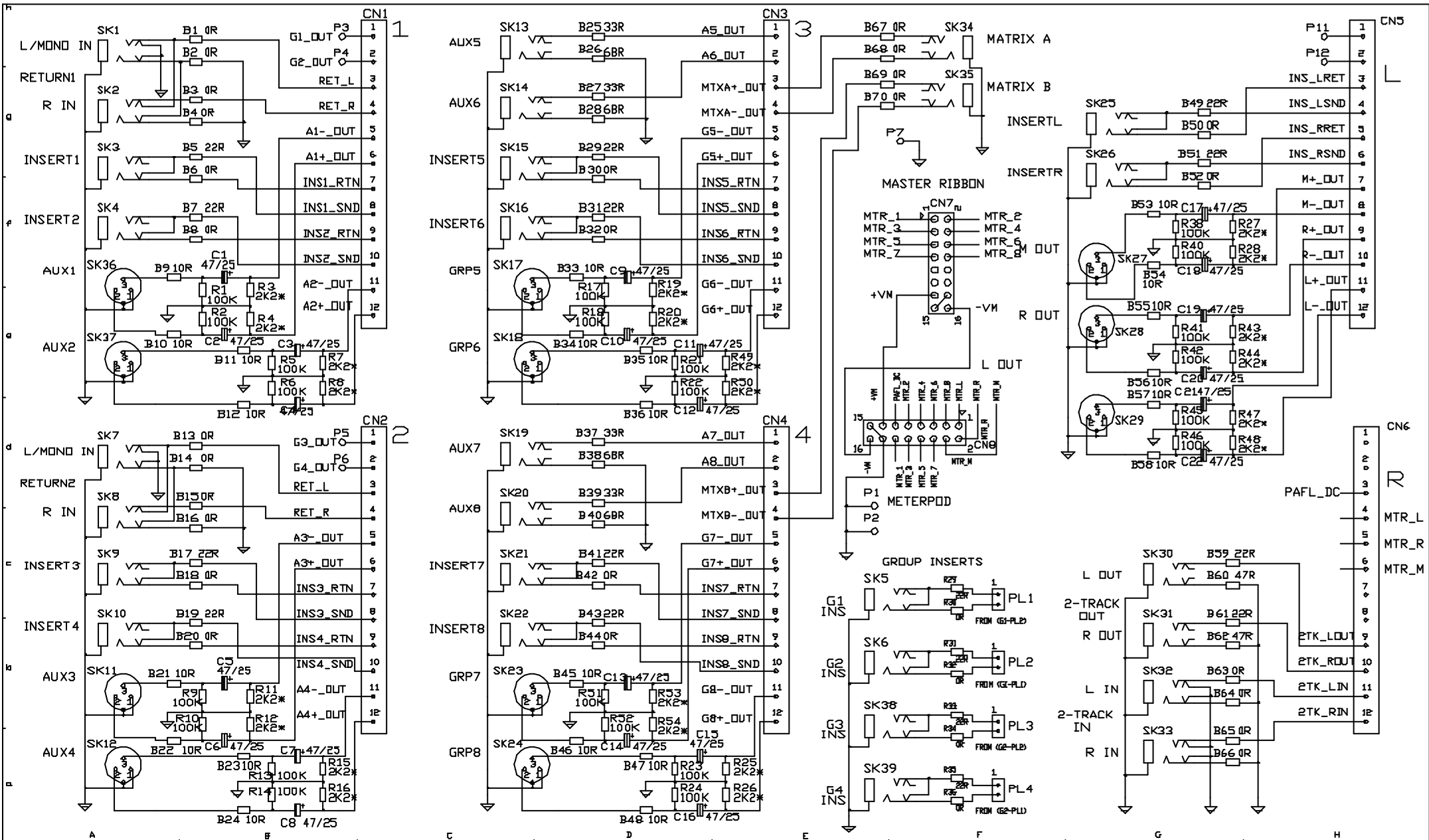




ISS	REVISION	BY	DATE	NOTES	UNIT TITLE	MANUFACTURED IN ENGLAND BY
A	ORIGIN	DRP	25-8-95	1 RESISTORS MARKED = ARE 5% ALL OTHERS ARE 1% UNLESS OTHERWISE MARKED 2 ELECTROLYTIC CAPACITORS ARE 10V/10%	L3B	ALLEN & HEATH
1	4BUSS	DRP	3-10-95		DRAWING TITLE	DRAWING No. C2333
2	8BUSS	CD	10-11-95		MASTER CONNECTOR PCB	
3	VALUE CHANGES	AA	27-11-95		CIRCUIT DIAGRAM	A2
4	EARTHING CHANGES	AA	29-12-95			



BD1



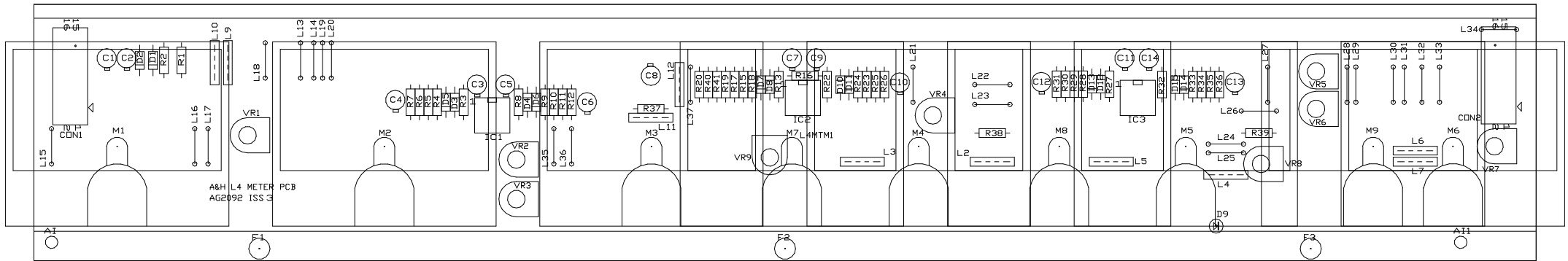
ISS	REVISION	BY	DATE	NOTES
A	ORIGIN	AAT	27-06-96	1. RESISTORS MARKED = ARE 5% ALL OTHERS ARE 1% UNLESS OTHERWISE MARKED 2. ELECTROLYTIC CAPACITORS ARE 16V/105

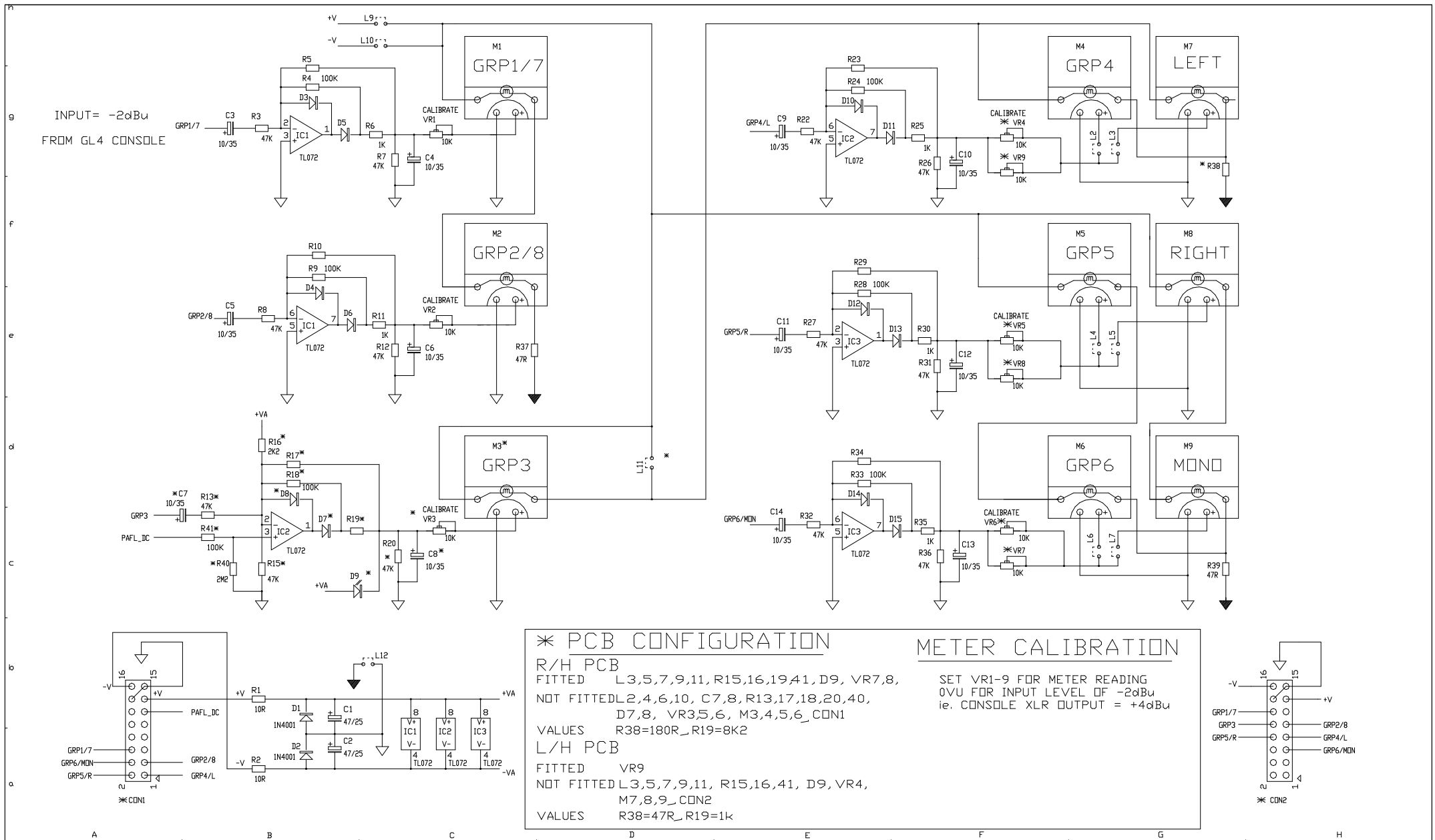
UNIT TITLE
L3BB

DRAWING TITLE
MASTER CONNECTOR PCB
CIRCUIT DIAGRAM
PCB TYPE AG2675

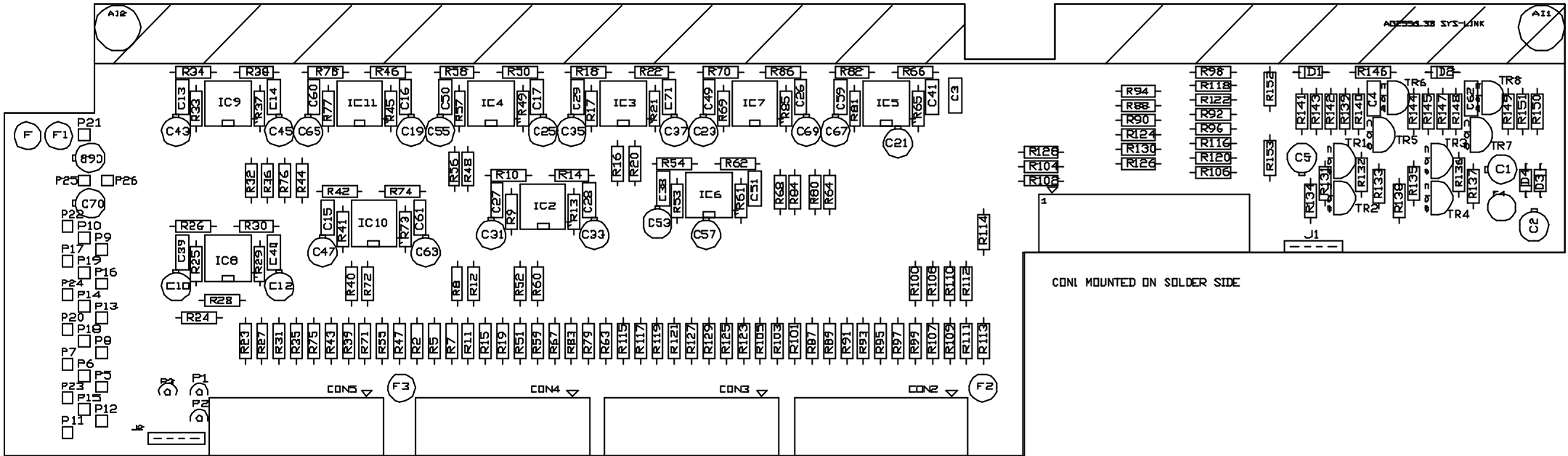
MANUFACTURED IN ENGLAND BY
ALLEN & HEATH

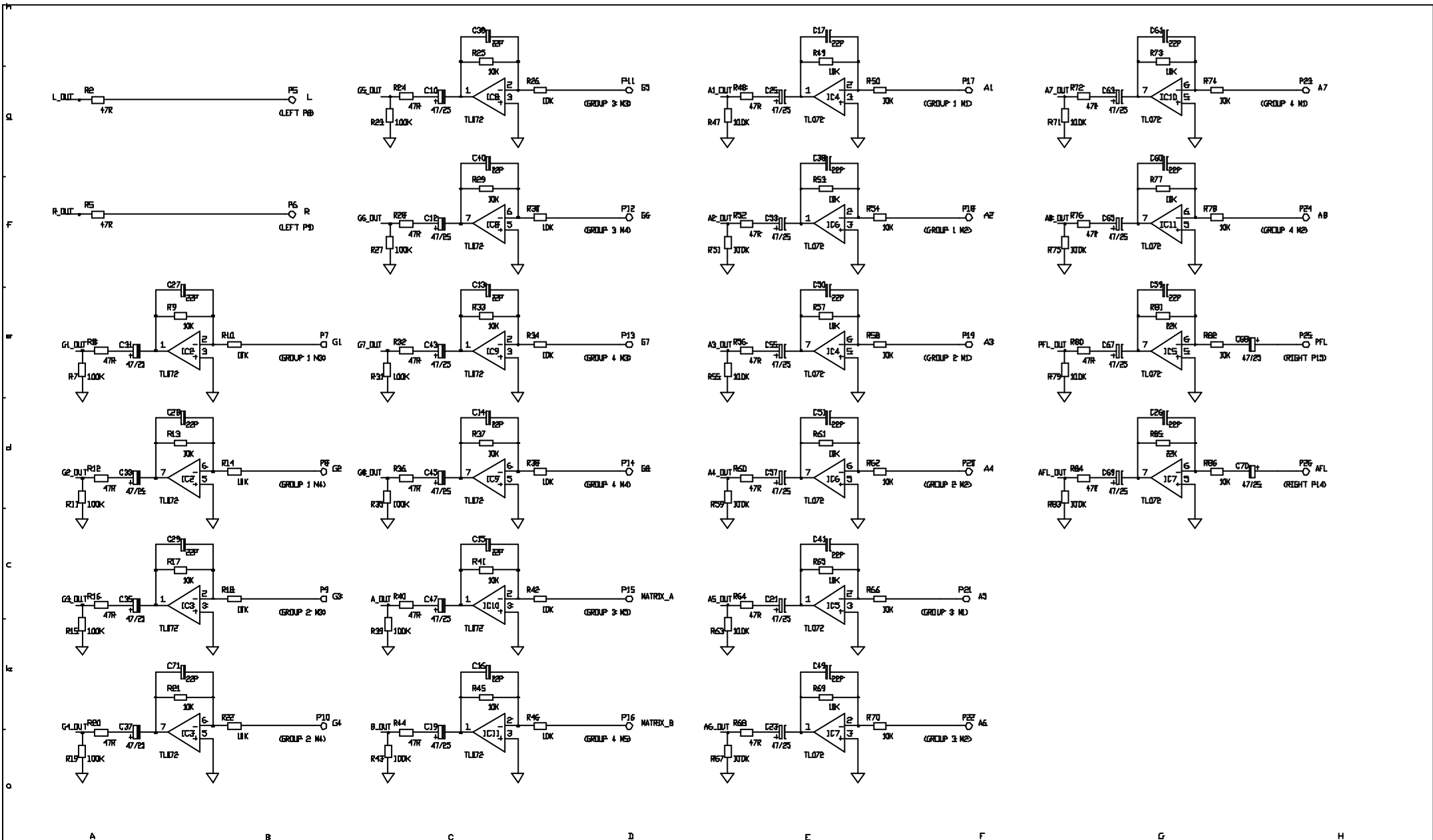
DRAWING No. C2675 ISSUE A A2



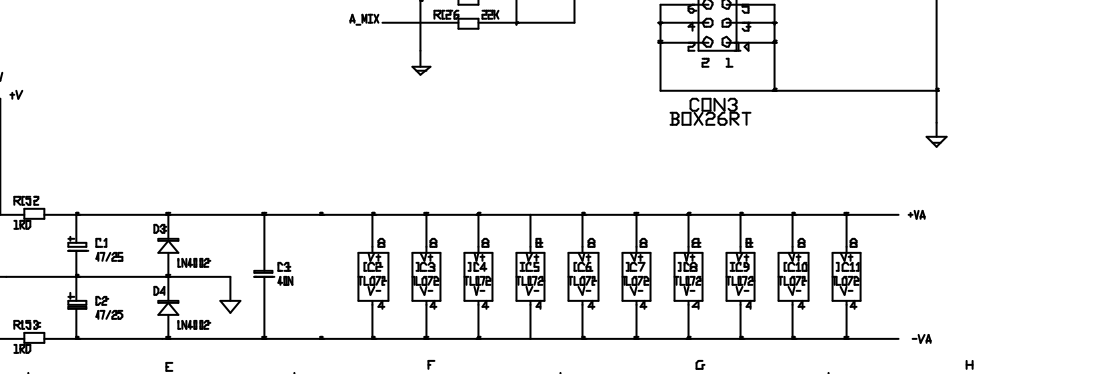
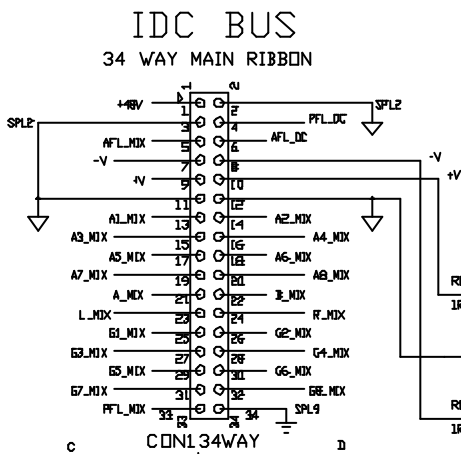
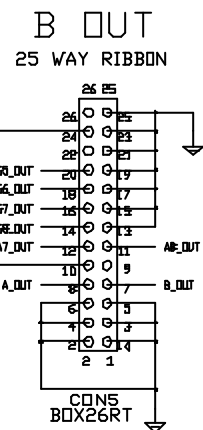
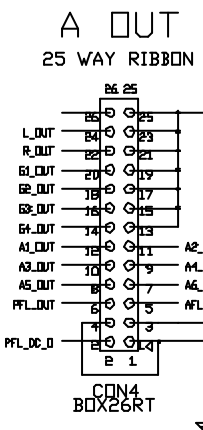
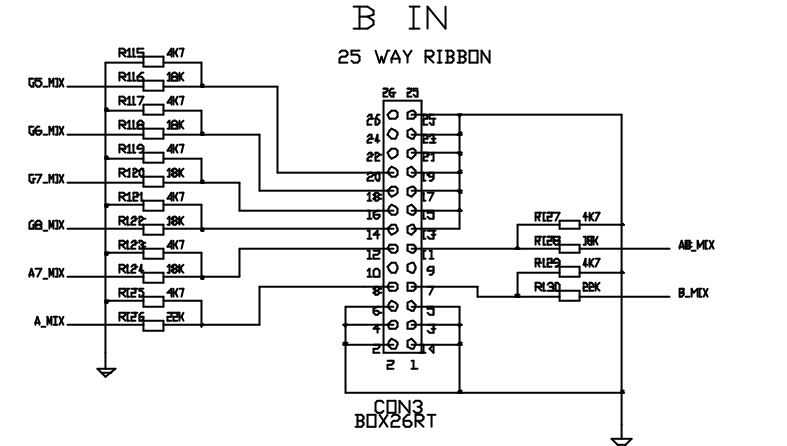
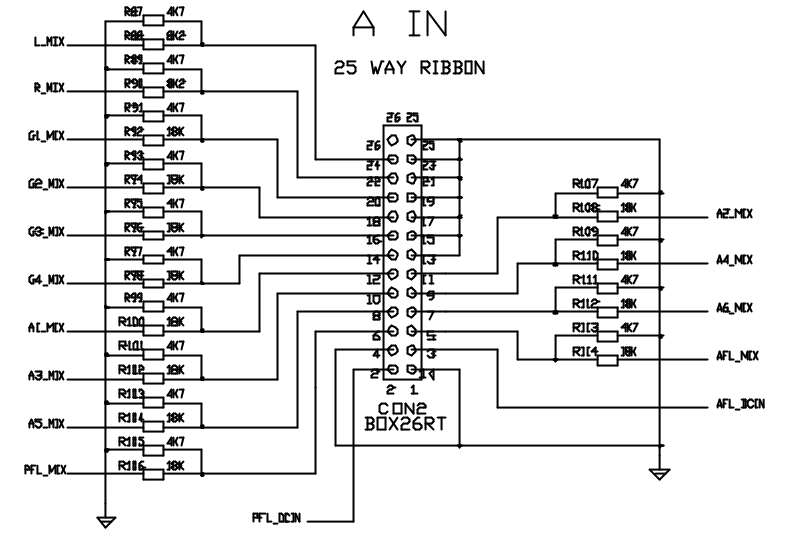
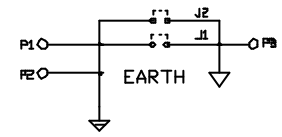
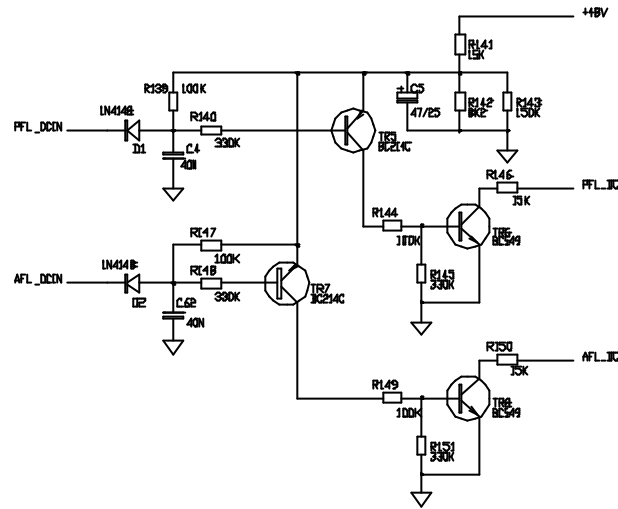
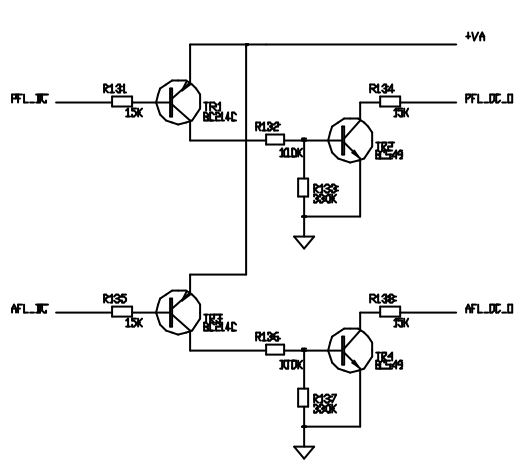


ISS.	REVISION	BY DATE	NOTES	UNIT TITLE	MANUFACTURED IN ENGLAND BY
1	ORIGIN PRODUCTION	ARJ1-8-94 DRP16-9-94	1. ALL RESISTORS ARE 5% 1/4W UNLESS OTHERWISE MARKED 2. ELECTROLYTIC CAPACITORS ARE 7F/VOLTS 3. ALL DIODES 1N4148 UNLESS OTHERWISE MARKED	GL4 CIRCUIT DIAGRAM METER PCB FOR PCB AG2092	ALLEN & HEATH DRAWING No. C2092 ISSUE 1





ISS	REVISION	BY DATE	NOTES	UNIT TITLE	MANUFACTURED IN ENGLAND BY
A	ORIGIN	AAT05-02-96	1. RESISTORS MARKED * ARE 5%. ALL OTHERS ARE 1% UNLESS OTHERWISE MARKED. 2. ELECTROLYTIC CAPACITORS ARE 5% VOLTAGE.	L3B PAGE 1 OF 2	ALLEN & HEATH
1	COMP VALUE CHANGES	AAT07-03-96		DRAWING TITLE	
2	COMPS ADDED OV MOD	AAT03-05-96		SYS-LINK PCB AG2556	A2



ISS	REVISION	BY	DATE
A	ORIGIN	AAT	05-02-96
1	COMP VALUE CHANGES	AAT	07-03-96
2	COMPS ADDED OV MOD	AAT	03-05-96

NOTES
1. RESISTORS MARKED * ARE 5% ALL OTHERS ARE 5% UNLESS OTHERWISE MARKED
2. ELECTROLYTIC CAPACITORS ARE 50V/10%.

UNIT TITLE	L3B
DRAWING TITLE	SYS-LINK PCB AG2556

MANUFACTURED IN ENGLAND BY	ALLEN & HEATH
DRAWING No.	C2556
ISSUE	2
	A2

ORDERING SPARE PARTS

ORDERING A CONSOLE

To order a new console please specify the model number and AC mains voltage required. Refer to the section: Standard Consoles for more detail

MODEL	DESCRIPTION	ORDER CODE
<i>GL3000-816</i>	16 Mono Channel console + Power Supply	GL3000-816/volts
<i>GL3000-824S</i>	20 Mono + 4 Stereo Input channels + Power Supply	GL3000-824S/volts
<i>GL3000-832S</i>	28 Mono + 4 Stereo Input channels + Power Supply	GL3000-832S/volts
<i>GL3000-840S</i>	36 Mono + 4 Stereo Input channels + Power Supply	GL3000-840S/volts

ORDERING AN OPTION

To order an option please specify the model number and AC mains voltage required:

<i>GL3000-M24</i>	Meterpod to fit 24 channel console	GL3000-M24
<i>GL3000-M32</i>	Meterpod to fit 32 channel console	GL3000-M32
<i>GL3000-M40</i>	Meterpod to fit 40 channel console	GL3000-M40
<i>GL3000-8M</i>	8 Mono Input channel Expander kit	GL3000-8M
<i>GL3000-4SM</i>	4 Mono & 4 Stereo Input channel Expander kit	GL3000-4SM
<i>GL3000-SL1</i>	GL3000 <i>SYS-LINK</i> kit	GL3000-SL1
<i>RPSD</i>	Dual supply Combiner / Monitor	RPSD

MANUALS AND SUPPORT DOCUMENTATION

DESCRIPTION	ORDER CODE
<i>GL3000</i> User Guide	AP2366
<i>GL3000</i> Service Manual	AP2368
<i>GL3000</i> Brochure	AP2367
<i>GL4 / GL3000</i> Meterpod Fitting Instructions	AP2126
<i>GL3000</i> <i>SYS-LINK</i> Fitting Instructions	AP2564
<i>GL3000</i> <i>SYS-LINK</i> Application Note	AP2565
<i>GL3000-8M / 4SM</i> Fitting Instructions	AP2376
<i>RPS9</i> User Manual	AP2142
<i>RPSD</i> User Manual	AP2263

SERVICE TOOLS

The tools required to service the *GL3000* are standard to an electronics service workshop and are easily obtainable. The following items are necessary for disassembly and service access:

4mm Hexagon (Allen) key (M6 side trim)	AT0033
1-point Crosshead screwdriver (M3, 4AB)	AT0004
2-point Crosshead screwdriver (M4, 6AB)	AT0004
10mm Nutdriver	
15mm Nutdriver (jack nuts, potentiometer nuts)	

POWER SUPPLY:

Mains Fuse 20mm T1A (UK, EC)	AL0305	5
Mains Fuse 20mm T3.15A (USA)	AL0464	5
Transformer 135VA	AM0919	-
Bridge Rectifier 4A 200V	AE0351	1
IC Adjustable Regulator 783 (+48V DC)	AE0214	2
IC Regulator 7815 (+15V DC)	AE0047	2
IC Regulator 7915 (-15V DC)	AE0048	2
Insulating kit TO220	AA0693	2
Fusedrawer / voltage selector	AL0588	1
LED lens power supply panel	AL0585	2

RPSD:

Mains Fuse 20mm T5.0A	AL2270	-
Mains Filter IEC 6A	AL2260	-
Mains Outlet IEC 3 Pin	AL2261	-
Mains Switch Rocker 0-1	AL0587	-
LED 5mm T1¼ Tri-colour	AE2258	-
Zener Diode BZX85 5V6	AE0012	-
RPSD Packing assembly	002-058	-
RPSD DC Supply cable	002-060	-
RPSD IEC to IEC Mains Lead	AH2262	-

METERPOD:

Preset 10K (calibrate)	AC0250	-
Meter VU+bulb	AD0011	2
Bulb (VU meter)	AD0013	5
Spacer PCB M3	AB0331	-
Screw 6B x 5/16" Pan Pozi Black	AB2084	5
Screw M6 x 12mm SKT Hex Black (Grub)	AB2087	3
Screw M4 x 12mm CSK Hex Black	AB2086	10

Miscellaneous:

GL3000-824/816 Packing assembly	002-098	-
GL3000-840 /32 Packing assembly	002-100	-
Flex cable 12 way 90mm	AH2228	5
Flex socket 12 way 90deg	AL2226	-
Flex socket 12 way straight	AL2227	-
Ferrite Bead Axial	AF0610	-

ORDERING AN ASSEMBLY

The following assemblies are supplied fully tested. Please note that several of these need to be assigned according to their position in the console. This is done by soldering wire links or assignment pads. It is best to check the assignment settings of the assembly you are replacing before removing it from the console. Please quote the description and order code for the part required.

Printed circuit (PCB) assemblies:

* specify position of PCB assembly

Mono Input-8 Connector PCB assembly	002-080
Mono Input PCB assembly	002-081
Mono/Stereo Input-4SM Connector PCB assembly	002-086
Stereo Input PCB assembly	002-087
* Group PCB assembly	002-082 / 134
Left PCB assembly	002-083
Right PCB assembly	002-084
Master connector PCB assembly	002-085
RPS9 PCB assembly	000-327
Meterpod PCB assembly LEFT	002-039
Meterpod PCB assembly RIGHT	002-040

IDC connector harnesses:

GL3000-816	34 way Main harness	AL2347
GL3000-824	34 way Main harness	AL2351
GL3000-832	34 way Main harness	AL2355
GL3000-840	34 way Main harness	AL2359
GL3000	16 way Master harness	AL2343

THE CHASSIS TRIM

GL3000 (all formats)	Left & Right Chassis side trims	AA2363L/R
	Write-on strip 10'	AK0327
GL3000-816	Ident strip CHAN 1-16 + Master	AK2364
GL3000-824	Ident strip CHAN 1-16 + Master + CHAN 17-24	AK2365
	Ident strip CHAN 25-40	AK2398
	Ident strip CHAN 1- 24 + Master	AK2542
GL3000 Meterpod	Left & Right Meterpod side trims	AA2090L/R

ORDERING A SPARES KIT

It is recommended that the spares kit order code **002-096** is held and maintained by the service agent to enable in-field service repairs to the **GL3000** independent of the ALLEN & HEATH factory. Commonly available items such as resistors, capacitors, tools and soldering equipment are not included. The contents of the kit is listed below and is supplied in a cabinet of drawers. Individual spare parts may be ordered. Please quote the description and order code for the part required.

DESCRIPTION

ORDER CODE

QTY

Fixings:

Screw 4AB x 5/16" Pan Pozi Black	AB0057	10
Screw 4AB x 5/16" CSK Pozi Black	AB0059	10
Screw 6B x 5/16" Pan Pozi Black	AB2084	10
Screw 8B x 5/16" CSK Pozi Black	AB2085	10
Screw 6B x 1/4" CSK Pozi zinc	AB2083	10
Screw 6B x 3/8" CSK Pozi zinc	AB2082	10
Screw M6 x 20mm CSK Allen Black	AB0310	5

Screw M3 x 5mm CSK Pozi Black	AB0070	10
Screw M3 x 8mm Pan Pozi Black	AB0073	10
Screw M3 x 8mm CSK Pozi Black	AB0074	5
Nylock Nut M3	AB0102	5
Fixing for D type connector	AB2189	10

Knobs and caps:

Knob Yellow & Grey 11mm D	AJ2079	10
Knob Dark Grey & Grey 11mm D	AJ2078	10
Knob Green & Grey 11mm D	AJ2077	10
Knob Blue & Grey 11mm D	AJ2075	10
Knob Brown & Grey 11mm D	AJ2080	10
Knob Red & Grey 11mm D	AJ2074	10
Fader Knob 11mm White+Black line	AJ8078	10
Fader Knob 11mm Red+White line	AJ8079	5
Fader Knob 11mm Yellow+White line	AJ8080	5
Fader Knob 11mm Blue+White line	AJ8081	5
Button 5.5mm Square Grey	AJ0363	10
Button 5.5mm Square Red	AJ0364	10
Button 5.5mm Square White	AJ0373	10
Button 10x5mm Rectangular Grey	AJ0093	10
Button 10x5mm Rectangular White	AJ0094	10

Faders, Potentiometers, switches, and connectors:

10KA fader 100mm	AI8001	10
10KA x 2 fader 100mm (stereo)	AI8002	5
10KA fader 60mm	AI8054	5
20KK (203K)	AI8003	5
20KB (203B) centre click	AI8004	5
20KB x 2 (203B 14mm wide) centre click	AI8064	3
10KC x 2 (103C 14mm wide)	AI0150	5
10KAC x 2 (103AC 14mm wide)	AI8008	5
200KC x 2 (204C)	AI8005	5
200KC x 2 (204C 14mm wide)	AI8009	5
Pot Nut 9mm	AB8050	10
Switch 2PCO Latching	AL0162	5
Switch 2PCO Momentary	AL0374	5
Switch 4PCO Latching	AL0333	5
Jack Socket Vertical PCB Mount + Hex nut	AL8082	5
Jack Socket Headphone	AL0328	1
XLR 3 Pin Female Vertical PCB Mount	AL2410	5
XLR 3 Pin Male Vertical PCB Mount	AL2411	5

AI8054
Stereo 60mm

LEDs and Semiconductors:

LED 3mm T1 Green	AE0085	5
LED 3mm T1 Yellow	AE0084	5
LED 3mm T1 Red	AE0086	5
LED Bar Rectangular Green 4way	AE0303	2
LED Bar Rectangular 3Yellow/1Red 4way	AE2419	2
LED Bar Rectangular 3Green/1Yellow 4way	AE2418	2
Transistor 2SB737 PNP	AE8069	5
Transistor BC549 NPN	AE0020	3
Transistor 2N4403 PNP	AE0273	5
Transistor BC638 PNP	AE0037	2
Transistor BC637 NPN	AE0068	2
IC NE5532N Dual Op Amp	AE0221	5
IC TL072CP Dual Op Amp	AE0046	5
IC LM339N Quad Comparator	AE0071	2
IC CMOS 4053B	AE0117	1

STANDARD CONSOLES

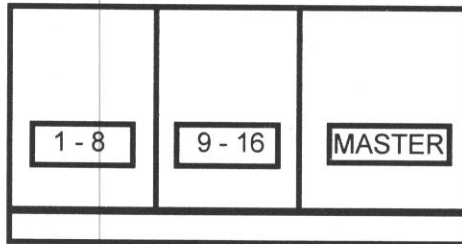
All consoles supplied with separate RPS9 rack mount power unit.

Optional RPSD dual supply combiner / monitor.

Optional VU meterpod and optional SYS-LINK expander system.

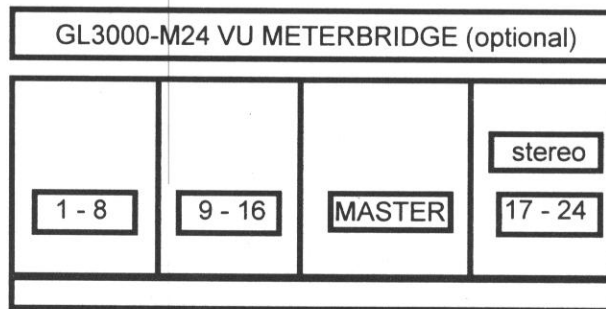
GL3000-816

16 mono inputs



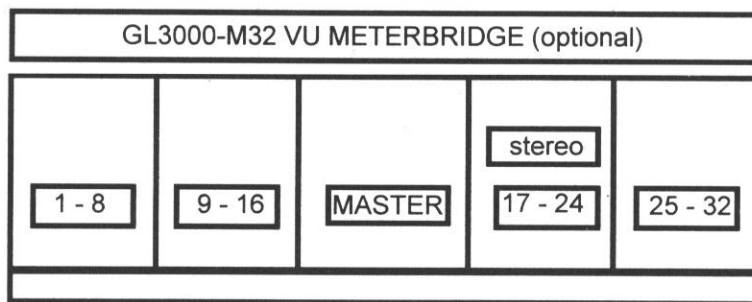
GL3000-824S

20 mono inputs, 4 stereo inputs



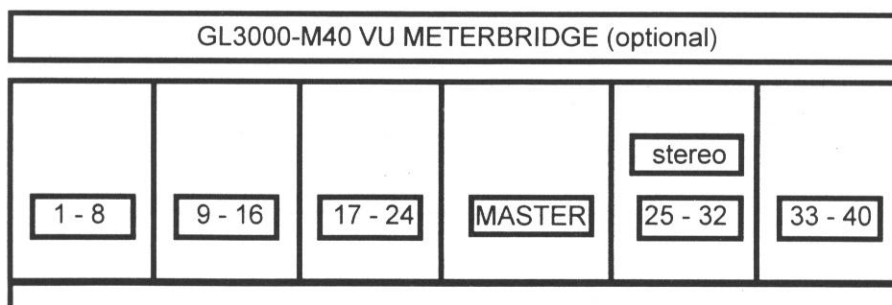
GL3000-832S

28 mono inputs, 4 stereo inputs



GL3000-840S

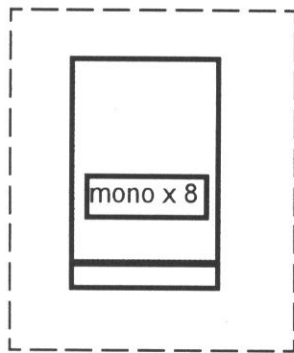
36 mono inputs, 4 stereo inputs



OPTIONS:

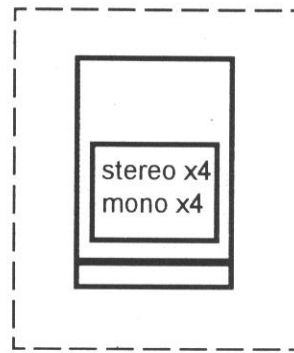
Details on how to order the options are given in the spare parts and assemblies section.

GL3000 - 8M



**8 mono input
expander kit**

GL3000 - 4SM

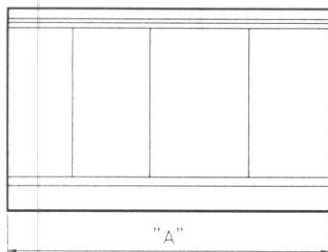


**4 stereo input &
4 mono input
expander kit**

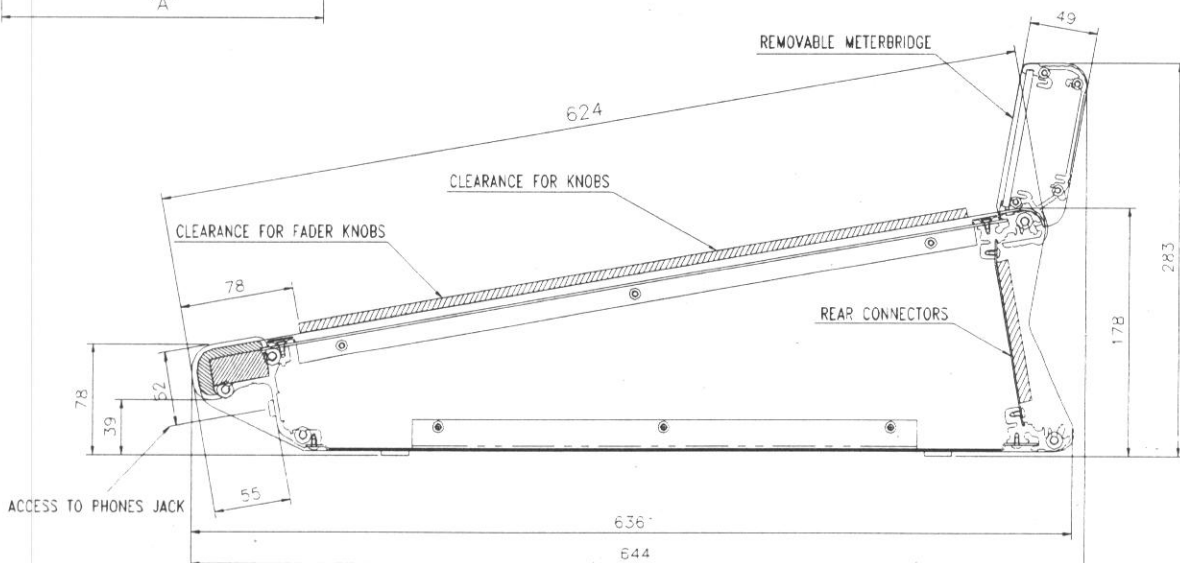
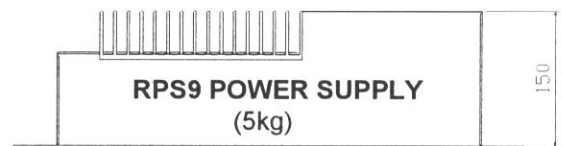
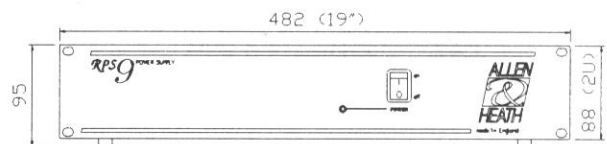
GL3000 - SL1 SYS-LINK expander kit

DIMENSIONS

The diagrams below give the dimensions for flightcasing the console and power supply unit.



OVERALL DIMENSION "A"		
GL3000-816	771mm	(21kg)
GL3000-824	1026mm	(29kg)
GL3000-832	1281mm	(37kg)
GL3000-840	1536mm	(45kg)
GL3000-8M	255mm	(8kg)



SPECIFICATION

0 dBu = 0.775 Volts RMS
 0 dBV = 1 Volt RMS

INTERNAL OPERATING LEVEL: -2 dBu
INTERNAL HEADROOM: +21dB channels, +23dB mix to output.
MAX OUTPUTS: balanced +27dBu 600 ohm max load
 unbalanced +21dBu 2kohm max load

METERS: L, R peak reading 12 segment LED
 Groups 1-8 peak reading 4 segment LED
 Channels peak reading 3 segment LED
PEAK LEDs: Turn on 5dB before clipping

OPTIONAL METERPOD: Illuminated VU meters
 Groups 1-8, L, R, PFL/AFL
 PFL/AFL active indicator

POWER SUPPLY: RPS9 2U x 19" rack mount
AC Mains input: range 100V to 240V.AC
 50/60Hz

Set with 4 position fuse insert
Power consumption 200W max
Mains Fuse rating: 100-120V.AC use T3.15A 20mm
 220-240V.AC use T1.0A 20mm

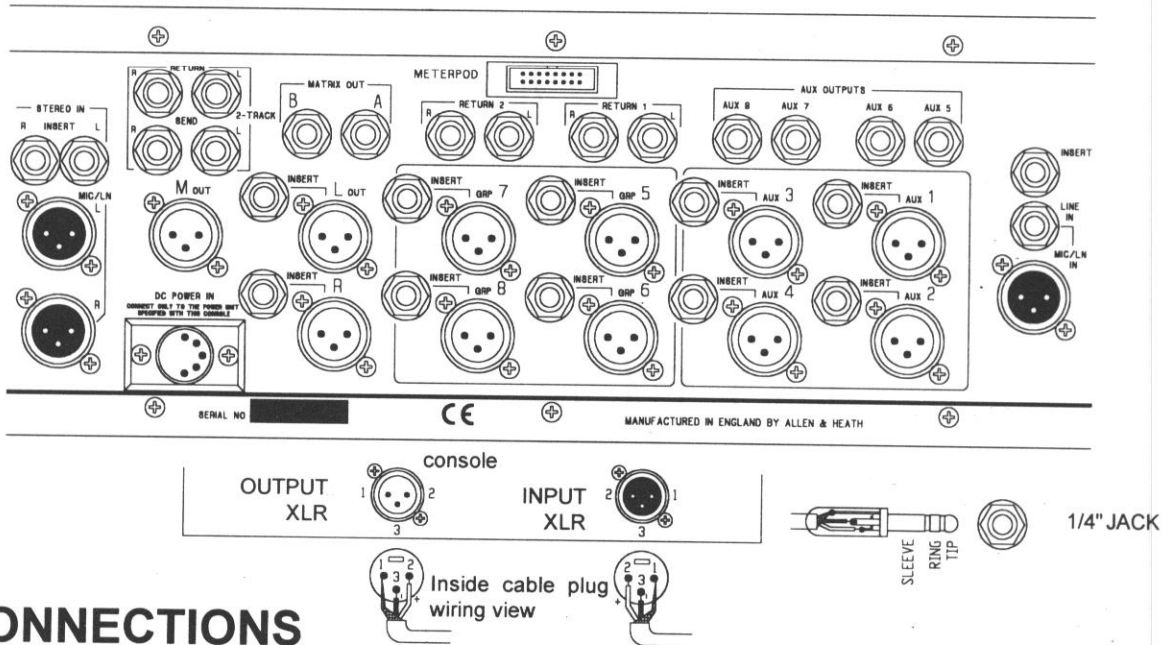
DC output: +/-16V 2.5A max, +48V 100mA max

FREQUENCY RESPONSE: 20Hz to 30kHz +/-1dB

DISTORTION: THD + Noise at +14dBu 1kHz
 Mic in to LR out at +40dB gain 0.006%
 Line in to LR out at 0dB gain 0.006%

CROSSTALK: Referred to driven channel at 1kHz
 Adjacent channel <-100dB
 Fader shutoff <-90dB
 Mute shutoff <-80dB
 Panpot shutoff <-72dB

NOISE: Measured RMS 22Hz to 22kHz bandwidth
 Mic input EIN referred to 150 ohm source <-128dB
 Line input pre-amp at 0dB gain <-93dBu
 LR output residual noise <-98dBu 102dB S/N
 LR faders '0' no channels routed <-90dBu 94dB S/N
 LR mix noise with 16 channels routed <-86dBu 90dB S/N
 Group mix noise with 16 channels routed <-87dBu 91dB S/N



CONNECTIONS

INPUTS:

MIC IN	XLR	pin 2 hot, 3 cold, balanced	2 kohms	variable -60 to -10dBu
LINE IN	XLR	pin 2 hot, 3 cold, balanced	10 kohms	variable -40 to +10 dBu
	or 1/4" JACK	tip hot, ring cold, balanced	10 kohms	variable -40 to +10 dBu
STEREO RETURN	1/4" JACK	tip sig, ring gnd, unbalanced	>6 kohms	-10dBV min
2-TRACK RETURN	1/4" JACK	tip sig, ring gnd, unbalanced	>16 kohms	variable -10 dBV min
INSERT RETURN	1/4" JACK	tip send, ring ret, unbalanced	>6 kohms	0dBu (chan), -2dBu (out)

OUTPUTS:

L, R, MONO OUT	XLR	pin 2 hot, 3 cold, balanced	<75 ohms	+4 dBu +27 dBu max
GROUP OUT 5-8	XLR	pin 2 hot, 3 cold, balanced	<75 ohms	+4 dBu +27 dBu max
AUX OUT 1-4	XLR	pin 2 hot, 3 cold, balanced	<75 ohms	+4 dBu +27 dBu max
AUX OUT 5-8	1/4" JACK	tip hot, ring cold, ground comp	<75 ohms	variable +21 dBu max
MATRIX OUT A-B	1/4" JACK	tip hot, ring cold, ground comp	<75 ohms	-2 dBu +21 dBu max
(balance option)	1/4" JACK	tip hot, ring cold, balanced	<75 ohms	+4 dBu +27 dBu max
2-TRACK SEND	1/4" JACK	tip hot, ring cold, ground comp	<75 ohms	variable +21 dBu max
INSERT SEND	1/4" JACK	tip send, ring ret, unbalanced	<75 ohms	0dBu (chan), -2dBu (out)
PHONES OUT	1/4" JACK	tip left, ring right		for stereo headphones 150 to 600 ohms

REMOVING A CHANNEL, GROUP, LEFT or RIGHT CIRCUIT BOARD

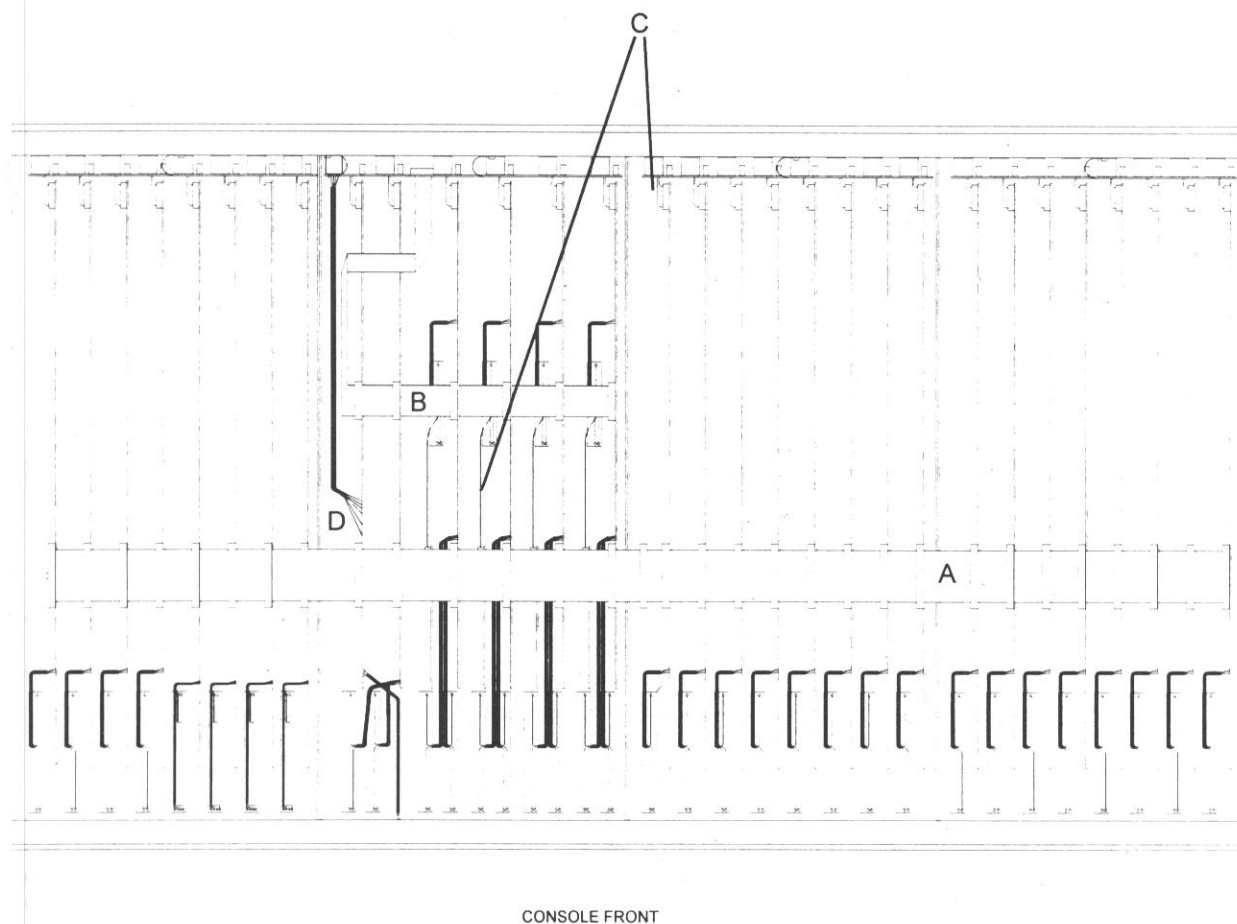
Before beginning any service work, remove all power to the console and disconnect any signal cables where necessary. Service work is best carried out with the console inverted or positioned upright on its rear with the connectors removed. Ensure adequate lighting and use the correct tools. Access to the CHANNEL, GROUP, LEFT or RIGHT circuit board is as follows:

- 1.) Before inverting the console, pull off the knobs and remove the pot nuts from the circuit assembly to be removed. The switch caps can remain in place.
- 2.) With the console inverted or on its rear, remove the base, identify the circuit board to be removed and then disconnect the harness (A) plugged into the connectors mounted along the edge of the circuit board. If removing a GROUP, LEFT or RIGHT circuit assembly, the 16 way MASTER HARNESS (B) will have to be removed as well. The flat ribbon cables (C) plugged into the circuit boards can be carefully unplugged if it is necessary to completely remove the board.

When removing the RIGHT circuit assembly, take care not to stress the power wiring (D) soldered to the circuit board.

- 3.) The circuit board can now be removed, take care not to stretch the fader wires that are still connected.

When all service work is complete, remove all debris such as solder, component legs and wire clippings from inside the console and check your work carefully before reassembly. To refit the circuit assembly follow the above procedure in reverse order. Make sure all harnesses are correctly aligned and plugged on. Test for correct operation.



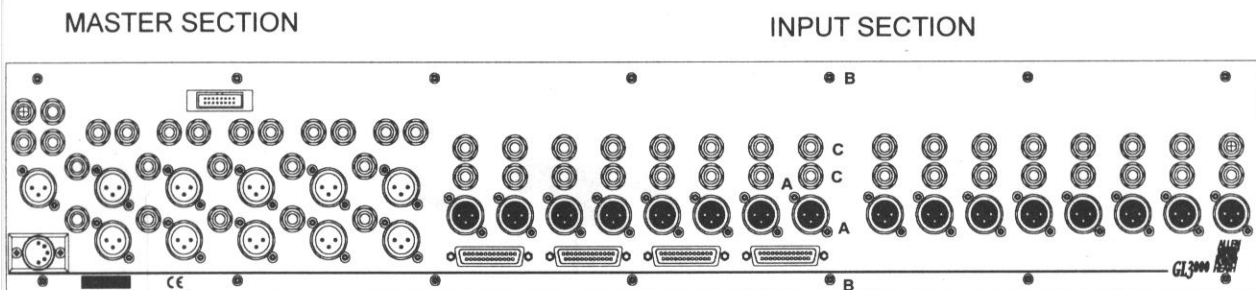
GL3000-824 inverted with the base cover removed.

REMOVING A CONNECTOR CIRCUIT BOARD

Before beginning any service work, remove all power to the console and disconnect any signal cables where necessary. Service work is best carried out with the console inverted on a clean work surface suitably covered to protect the console cosmetics. Ensure adequate lighting and use the correct tools. Access to the connector circuit boards is as follows:

- 1.) With the console inverted, remove the base. Identify which connector board is to be removed and then carefully unplug the flat ribbon cables connected to the channel circuit assemblies.
- 2.) Unscrew the green earth wire from the rear extrusion.
- 3.) Working from the rear of the console remove the screws (A) fixing the XLR connectors to the panel but do not remove the screws (B) fixing the panel to the chassis. Using a 12mm Nutdriver, remove the jack nuts (C).
- 4.) The circuit board can now be freed from the rear panel.

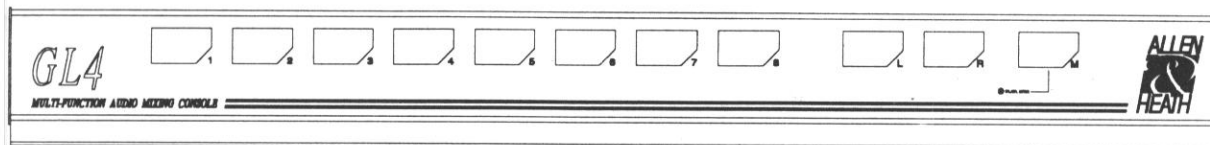
When all service work is complete, remove all debris such as solder, component legs and wire clippings from inside the console and check your work carefully before reassembly. To refit the connector circuit assembly follow the above procedure in reverse order. Make sure all harnesses are correctly aligned and plugged on. Test for correct operation.



GL3000 Rear Panel View.

GL3000 / GL4

METERPOD FITTING INSTRUCTIONS



GL4 METERPOD SHOWN

The meterpod has been designed to compliment the Allen & Heath *GL3000* and *GL4* series of Live consoles. Its purpose is to monitor the programme signal at the console main outputs; groups 1 to 8, Left, Right and Mono on the *GL4* and groups 1 to 8, Left and Right only on the *GL3000*. The meterpod is available in 3 sizes to fit each console size and runs full length.

Connecting the meterpod to a console is very easy and only requires plugging in the meterpod harness and tightening the three "grub" screws in the lower lip of the meterpod. Refer to the following section.

The PFL LED indicator illuminates when any PFL is selected with the PFL signal level displayed on the **M** (mono) meter. Note on the *GL3000* the **M** (mono) meter only displays the PFL signal level.

To fit the meterpod:

- 1.) Carefully unpack the meterpod and fit it over the console rear extrusion (A) as shown in fig 1. Make sure all of the grub screws (B) are fully withdrawn from the meterpod extrusion (C) before fitting.
- 2.) Once the meterpod is in place, tighten the grub screws (B) to secure the meterpod in place.
- 3.) Plug in the meterpod harness (D) into the connector marked **METERPOD** on the rear panel of the console. See fig. 2.

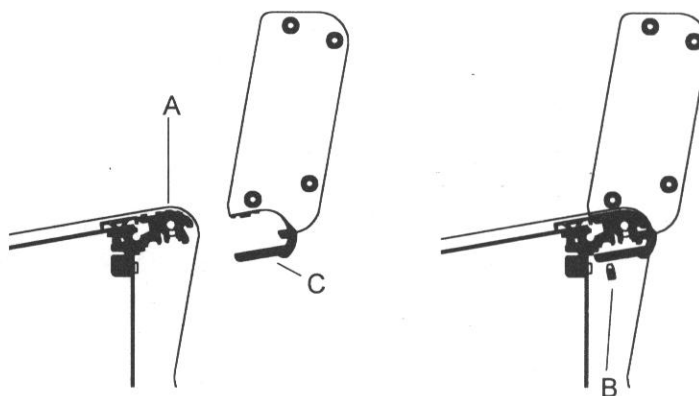


FIG. 1

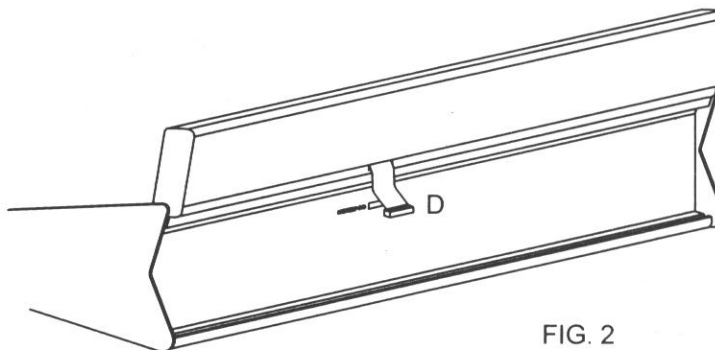


FIG. 2

GL3000 8M / 4SM EXPANDER OPTION

8 Mono Input Expander kit - Part No: GL3000-8M
4 Mono Input + 4 Stereo Input Expander kit - Part No: GL3000-4SM

The GL3000 Expander kit enables the standard console to be expanded by a further 8 full function input channels. Two option types are available, one with 8 mono input channels and one with a combined 4 mono and 4 stereo input channels. Fitting the expander requires attaching an 8 channel wide block to the main console.

The option is available as a kit of parts for fitting to standard unmodified consoles. This work should be carried out by authorised *ALLEN & HEATH* service agents or competent technical personnel only.

GL3000 8M / 4SM EXPANDER FITTING INSTRUCTIONS AP2376

GL3000 SYS-LINK OPTION

GL3000 SYS-LINK OPTION - Part No: GL3000-SL1

The **SYS-LINK OPTION** option is a kit of parts which may be fitted into the *GL3000* console to allow two or more consoles to be linked in a master / slave arrangement to increase the number of channels feeding the mix. This allows a second *GL3000* to become an expander to the first by adding further mono and stereo input channels. Note that the option should be fitted to all *GL3000* consoles connected in this way. A pair of multipin cable are required to connect the consoles.

Fitting the option requires access, removal and soldering of the console internal circuit assemblies. A piggyback circuit assembly is mounted on a Group circuit assembly and the connected cable harness soldered to wiring pads on the Group, Left and Right assemblies. The console buss inputs and outputs are taken to four 25-pin D-type multipin connectors which align with the pre-punched slots in the console rear panel. These slots are accessed by removing the metal blanking cover.

The option is available as a kit of parts for fitting to standard unmodified consoles. This work should be carried out by authorised *ALLEN & HEATH* service agents or competent technical personnel only.

GL3000 SYS-LINK FITTING INSTRUCTIONS.. AP2564

GL3000 SYS-LINK APPLICATIONS NOTE..... AP2565