

GL²²⁰⁰

Audio mixing console

**ALLEN
&
HEATH**

SERVICE MANUAL

PUBLICATION: AP3389

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Warning to the Service Engineer

Allen & Heath warns that any unauthorised changes or modifications to the **GL2200** unit may invalidate the legal compliance of the unit and could void the user's authority to operate the equipment.

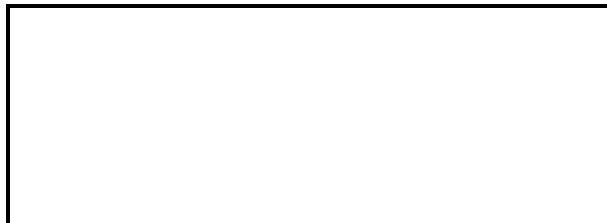
GL2200 Service Manual AP3389 Issue 1. Copyright © 1999 Allen & Heath. All rights reserved

MANUFACTURED IN ENGLAND BY:

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H A DIVISION OF HARMAN INTERNATIONAL INDUSTRIES Ltd

ALLEN & HEATH AGENT:



Introduction

The information presented in this manual is intended for competent technical personnel to carry out service and product support for the **GL2200** range of consoles. We assume that the reader is familiar with the related electronic theory and audio terminology, and is able to carry out servicing, faultfinding and repair of audio equipment of this type. Service personnel should also be familiar with audio systems, mains earthing and power requirements, as well as handling precautions.

For information on the configuration, operation and application of the GL2200 range, please refer to GL2200 User Guide (A&H Part no: AP3388).

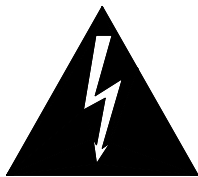
Whilst we believe the information in this manual to be reliable we do not assume responsibility for inaccuracies. We also reserve the right to make changes in the interest of further product development.

Service and Technical Support

Under normal conditions the **GL2200** does not require user maintenance or internal calibration. Any service work required should be carried out by qualified service personnel only.

We are able to offer further product support through our world-wide network of approved dealers and service agents. You can also access our Web site on the Internet for information on our product range, assistance with your technical queries or simply to chat about audio matters. To help us provide the most efficient service please keep a record of the console serial number, the date and place of purchase to be quoted in any communication regarding this product.

SAFETY WARNING!



Mains electricity is dangerous and can kill. Mains voltage is present within the console power supply unit.

Do not remove the power supply cover with mains electricity connected. To ensure your safety, mains earth is connected to the chassis through the power lead. Do not remove this mains earth connection.

To avoid the risk of fire, replace the mains fuse only with the correct value and type as indicated on the power supply unit.



The internal power supply unit contains no serviceable components and must be replaced as a complete unit if a failure occurs.

General Precautions

Your **GL2200** is ruggedly constructed to give many years of reliable operation. However, you will extend the life of the console and preserve its cosmetics by applying these simple common sense precautions.

- Avoid storing or using the mixing console in conditions of excessive heat or cold, or in positions where it is likely to be subject to vibration, dust, dirt or moisture.
- Do not use any liquids to clean the control surface of the console, a soft dry brush or dry lint-free cloth is ideal.
- Use only water or ethyl alcohol to clean the trim and scribble strips. Other solvents may cause damage to paint or plastic parts.
- The faders, switches and potentiometers are lubricated for life. The use of electrical lubricants on these parts is not recommended.
- Avoid using the console close to strong sources of electromagnetic radiation (e.g. video monitors, high power electric cabling): this may cause degradation of the audio quality due to induced voltages in connecting leads and chassis. For the same reason, always site any external power supply away from the unit.

The *GL2200* Range

12, 16, 24 and 32 channel models

GL2200-412	10 mono, 2 stereo, 4 groups, 6 aux, 2 stereo returns, L, R, Mono sum
GL2200-416	14 mono, 2 stereo, 4 groups, 6 aux, 2 stereo returns, L, R, Mono sum
GL2200-424	22 mono, 2 stereo, 4 groups, 6 aux, 2 stereo returns, L, R, Mono sum
GL2200-432	30 mono, 2 stereo, 4 groups, 6 aux, 2 stereo returns, L, R, Mono sum

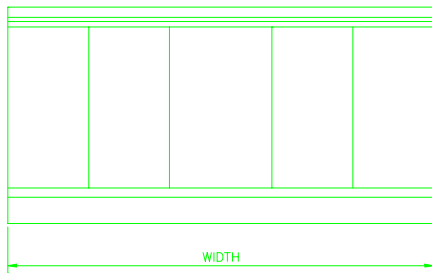
Options

GL2200-SL1	Sys-link buss expander, one kit per console
RPS9	2U rack mount power supply for backup

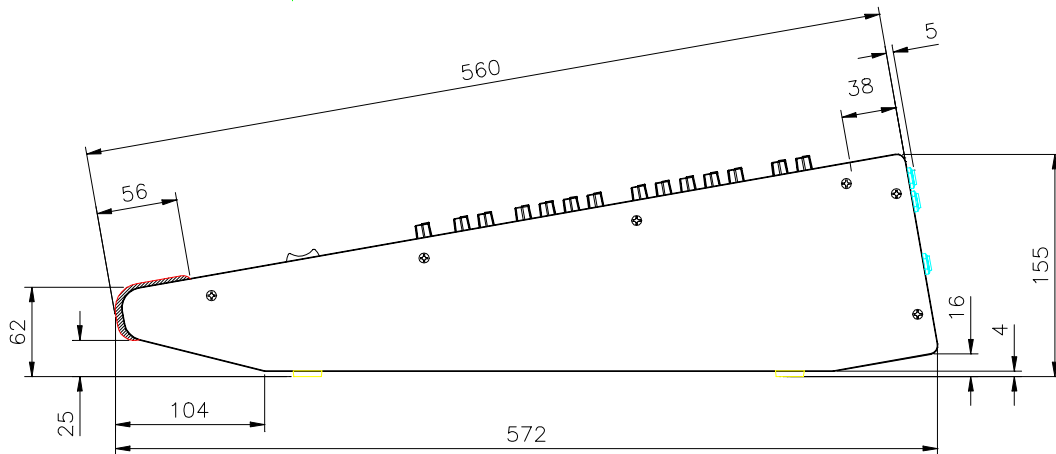
Flightcasing The Console

If the console is to be regularly moved we recommend that it is installed in a foam-lined flightcase. At all times avoid applying excessive force to any knobs, switches or connectors.

Dimensions for flightcasing the console are shown below:



<i>GL2200</i> - 412	.....width 548mm
<i>GL2200</i> - 416	.....width 668mm
<i>GL2200</i> - 424	.....width 920mm
<i>GL2200</i> - 432	.....width 1160mm



Dimensions

	Unpacked				Packed			
	Width	depth	height	weight(kg)	Width	depth	height	weight(kg)
GL2200-412	548	572	155	16	700	750	280	20
GL2200-416	668	572	155	18	815	750	280	23
GL2200-424	920	572	155	24	1065	750	280	29
GL2200-432	1160	572	155	30	1325	750	280	35
RPS9 power supply	483	140	96	6	540	270	180	8

Specifications

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

HEADROOM:..... +21dB

MAX OUTPUT:XLR +25dBu 2kohm max load
.....JACK +21dBu 2kohm max load

METERS: L, R.....peak reading 12 bar LED
Groups 1-4.....peak reading 4 segment LED
Channels.....peak reading 4 segment LED

PEAK LEDs: Turn on 5dB before clipping

FREQUENCY RESPONSE referred to 1kHz @ +4dBu:
Any input to any output..... 20Hz to 30kHz +/-1dB

DISTORTION: THD+Noise @ +14dBu 1kHz
Mic in to L-R output, 40dB gain0.010%
Line in to L-R output, 0dB gain0.008%

CMRR
Mic in, 40dB gain @ 1kHz >88dB

CROSSTALK: Referred to driven channel @ 1kHz
Adjacent channel < -94dB
Channel fader off < -90dB
Channel mute on < -90dB
Channel Pan pot isolation < -80dB

NOISE: Measured rms, 22kHz bandwidth
Mic input EIN (150 ohm source)..... < -128dB
Line preamp, 0dB gain..... < -90dBu
L-R output residual noise < -94dBu (98dB S/N)
L-R faders '0', nothing routed..... < -90dBu (94dB S/N)
L-R mix noise (16 channels routed) < -84dBu (88dB S/N)
Group, faders '0', nothing routed..... < -91dBu (95dB S/N)
Group mix noise (16 channels routed). < -84dBu (88dB S/N)

POWER SUPPLY:..... 100 to 240V AC @ 47/63Hz
..... Internal, autosensing AC mains input
Power consumption:60W max
Mains Fuse rating 100-240VAC: T1A 250V 20mm

Connections

INPUTS:

Mic in	.....XLR.....	pin 2 hot, 3 cold, balanced	.....>2k Ohm.....	variable -60 to -20dBu
Line in	.....XLR.....	pin 2 hot, 3 cold, balanced	.....>10k Ohm.....	variable -30 to +10dBu
	or TRS jack	.....tip hot, ring cold, balanced	.....>10k Ohm.....	variable -30 to +10dBu
Stereo Ch Line in	.....TRS jack	.....tip hot, unbalanced.....	>8k Ohm	.....-20dBu min
Stereo Return	.....TRS jack	.....tip hot, unbalanced.....	>6k Ohm	.....-10dBV min
2-Track Return	.....RCA PHONO	.....unbalanced	>10k Ohm	.....-10dBV min
Insert Return	.....TRS jack	.....tip send, ring return, unbalanced	>6k Ohm	.....0dBu (chan), -2dBu (out)

OUTPUTS:

L-R, Group out	.....XLR.....	pin 2 hot, 3 cold, balanced	.....<75 Ohm	.....+4dBu, +27dBu max
Direct out	.....TRS jack	.....tip hot, impedance balanced	.....<75 Ohm	.....0dBu
2-Track sends	.....RCA PHONO	.....unbalanced	.....<75 Ohm	.....variable +21dBu max
Aux out	.....TRS jack	.....tip hot, impedance balanced	.....<75 Ohm	.....variable +21dBu max
Mono out	.....XLR.....	tip hot, ring cold, balanced	.....<75 Ohm	.....+4dBu, +27dBu max
Insert send	.....TRS jack	.....tip send, ring return, unbalanced	.....<75 Ohm	.....0dBu (chan), -2dBu (out)
Monitor out	.....TRS jack	.....tip left, ring right, unbalanced	.....<75 Ohm	.....variable +21dBu max
Phones out	.....TRS jack	.....tip left, ring right	..... for stereo headphones 30 to 600 Ohms	

Ordering a *GL2200* Console

To order a new console please specify the model number and AC mains voltage required.

MODEL	DESCRIPTION	ORDER CODE
<i>GL2200</i> 12 Channel	10 mono + 2 stereo input channels	GL2200-412/volts
<i>GL2200</i> 16 Channel	14 mono + 2 stereo inputs channels	GL2200-416/volts
<i>GL2200</i> 24 Channel	22 mono + 2 stereo inputs channels	GL2200-424/volts
<i>GL2200</i> 32 Channel	30 mono + 2 stereo inputs channels	GL2200-432/volts

Ordering an Option

To order an option please specify the serial number of the console that is to have the option fitted.

MODEL	DESCRIPTION	ORDER CODE
<i>GL2200-SL1</i>	GL2200 SYS-LINK KIT	GL2200-SL1
	GL2200 Balanced Output IC option	AE0302
<i>RPS9</i>	2U external linear power supply	RPS9/volts

Manuals and Support Documentation

DESCRIPTION	ORDER CODE
<i>GL2200</i> User Guide	AP3388
<i>GL2200</i> Service Manual	AP3389
<i>GL2200</i> Brochure	AP3390
<i>GL2200</i> SYS-LINK Fitting Instructions	AP3622
<i>GL2200</i> SYS-LINK Application Note	AP3623
<i>RPS9</i> User Guide	AP0334

Service Tools

The tools required to service the *GL2200* are standard to an electronic service workshop and are easily obtainable. The following items are necessary for disassembly and service access:

1-point Crosshead screwdriver (M3, 4AB)	AT0004
2-point Crosshead screwdriver (M4, 6AB)	AT0002
11mm AF Nutdriver (potentiometer nuts)	
12mm AF Nutdriver (jack nuts)	

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 achieved 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 Board (PCB) Assemblies:

* specify position of PCB assembly

	Mono Input & Connector PCB assembly	002-412
	Stereo Input & Connector PCB assembly	002-442
	* Group PCB assembly	002-439
	OSC/Noise PCB assembly	002-453
	Left PCB assembly	002-440
	Right PCB assembly	002-441
	Switch Mode PSU assembly (12 & 16)	002-456
	Switch Mode PSU assembly (24 & 32)	002-457

IDC connector harnesses:

GL2200-412	20 way Main harness	AL3535
GL2200-416	20 way Main harness	AL3536
GL2200-424	20 way Main harness	AL3537
GL2200-432	20 way Main harness	AL3538

The Chassis Trim

GL2200 (all formats)	Left & Right Chassis side trims	AA2539-L/R
	Write-on strip (specify console size)	AK0327

Ordering a Spares Kit

It is recommended that the spares kit order code **002-481** is held and maintained by the service agent to enable in-field service repairs to the **GL2200** 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 are listed below and are 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 CSK Pozi Black	AB0059	5
Screw 6AB x 3/8 Pan Pozi Black	AB0062	10
Screw M3 x 6mm Pan Pozi Black	AB0072	5
Screw M3 x 8mm Pan Pozi Black	AB0073	10
Screw M3 x 12mm Pan Pozi Black	AB0078	5
Screw M3 x 16mm Pan Pozi Black	AB0079	5
Nylock Nut M3	AB0102	5
Screw M3 x 4mm Pan Pozi Black	AB0233	10
Screw 4AB x 1/4 Pan Pozi Plated	AB0252	4
Screw 6B x 1/4 Trunc Pozi Zinc	AB2083	10
Screw 4 x 5/16 Pan Pozi Plastite	AB2771	5
Screw 6B x 5/16 Pan Pozi Black	AB2809	5
Screw 4 x 5/16 Poly Pan Pozi	AB2810	10

Knobs and caps:

Knob Red & Grey 11mm D	AJ2074	10
Knob Blue & Grey 11mm D	AJ2075	10
Knob Light Blue & Grey 11mm D	AJ2076	10
Knob Green & Grey 11mm D	AJ2077	10
Knob Dark Grey & Grey 11mm D	AJ2078	10
Knob Yellow & Grey 11mm D	AJ2079	10
Knob Brown & Grey 11mm D	AJ2080	10
Button 5.5mm Square Grey	AJ2864	10
Button 10 x 5mm Rectangular Grey	AJ2865	10
Button Round Black	AJ2887	1
Button 5.5mm Square White	AJ2960	10
Button 5.5mm Square Red	AJ2961	10
Button 10 x 5mm Rectangular White	AJ2962	10
Button 10 x 5mm Rectangular Black	AJ3228	3
Fader Knob 11mm White+Black Line	AJ8078	10
Fader Knob 11mm Red+Black Line	AJ8079	5
Fader Knob 11mm Yellow+Black Line	AJ8080	5
Fader Knob 11mm Blue+Black Line	AJ8081	5

Faders, Potentiometers, Switches and connectors:

Pot 10KC x 2 (103C 14mm wide)	AI0150	5
Pot 20KK (203K 11mm wide)	AI8003	5
Pot 20KB centre click (203B 11mm wide)	AI8004	5
Pot 200KC x 2 (204C 11mm wide)	AI8005	5
Pot 20KB x 2 centre click (14mm wide)	AI8006	5
Pot 20KK x 2 (203K 14mm wide)	AI8007	5

Pot 10K centre click (103AC 14mm wide)	AI8008	5
Pot 5K (502RD 11mm wide)	AI8111	5
Fader 10KA x 2 60mm	AI8051	5
Fader 10KD 100mm	AI8117	10
Fader 10KD x 2 100mm	AI8118	5
Switch 2PCO Latching 90 Deg	AL0162	5
Switch 4PCO Latching	AL0333	5
Switch 2PCO Momentary	AL0374	5
Jack Socket Headphone	AL0328	1
XLR 3 Pin Female Vertical PCB Mount	AL2410	5
XLR 3 Pin Male Vertical PCB Mount	AL2411	5
Molex 0.1" Male 10 Pin 90 Deg	AL2572	3
Molex 0.1" Female 10 way Straight	AL2573	3
Jack Socket ¼" Stereo Unswitched	AL3407	5
Jack Socket ¼" Stereo Switched	AL3410	5
Pot Nut 9mm	AB8050	10

LEDs and Semiconductors:

Transistor BC549 NPN	AE0020	3
Transistor BC638 PNP	AE0037	2
Transistor BC637 NPN	AE0068	2
Transistor 2N4403 PNP	AE0273	5
Transistor BC556B PNP	AE3001	2
Transistor 2SB737 PNP	AE8069	5
IC Op-Amp TL072	AE0046	5
IC LM339N Quad Comparator	AE0071	2
IC CMOS 4053B	AE0117	1
IC Op-Amp NE5532N	AE0221	5
LED 3mm T1 Yellow	AE0084	5
LED 3mm T1 Green	AE0085	5
LED 3mm T1 Red	AE0086	5
LED Bar Rectangular 12 Way	AE2701	1
LED 5 x 2mm Rectangular Red Flat Top	AE3502	10

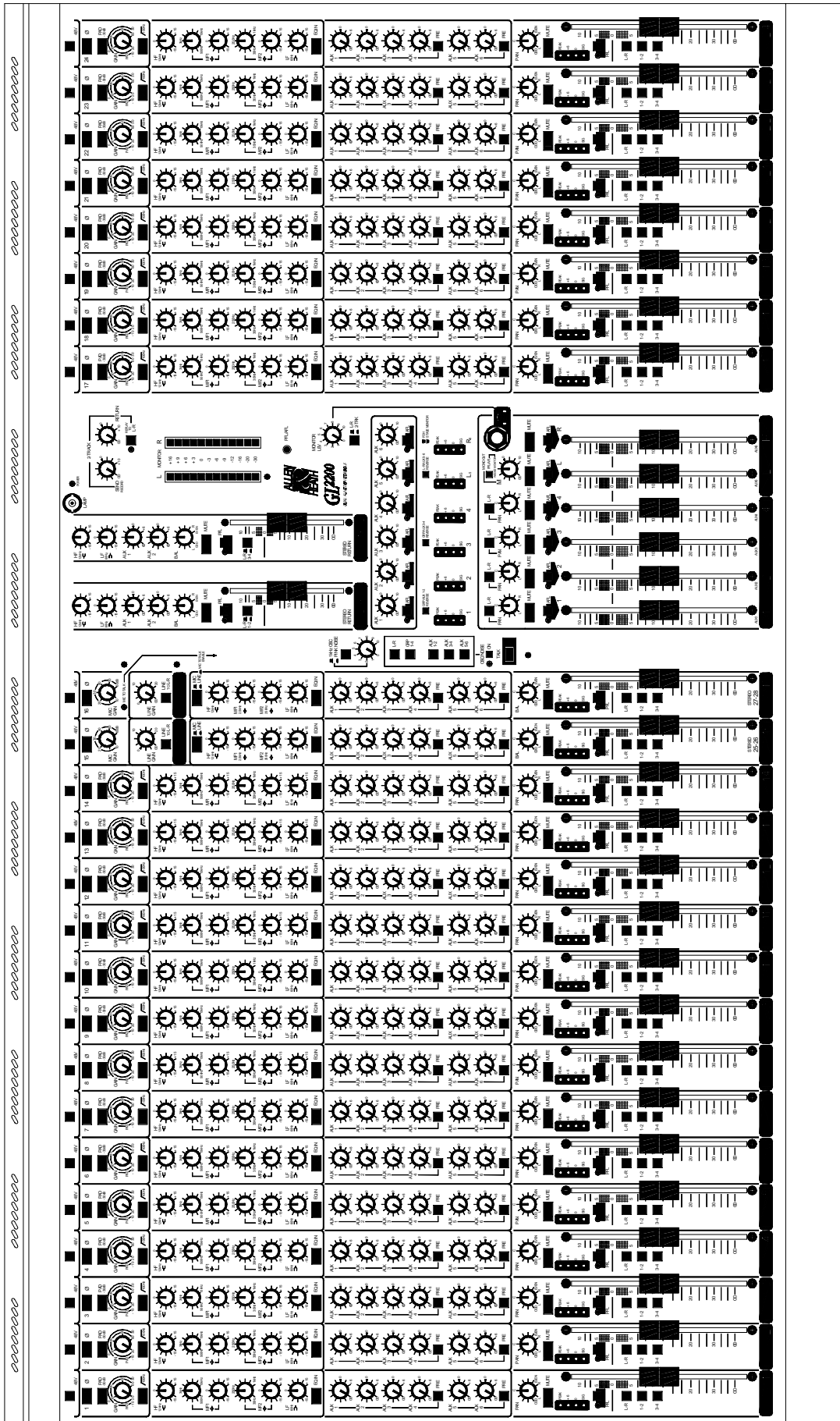
Power Supply:

Mains Lead IEC-2pin EURO	AH0205	-
Mains Lead IEC-3pin UK	AH0206	-
Mains Lead IEC-3pin US (C33)	AH0323	-
Mains Fuse 20mm 1A Anti-Surge	AL0305	10

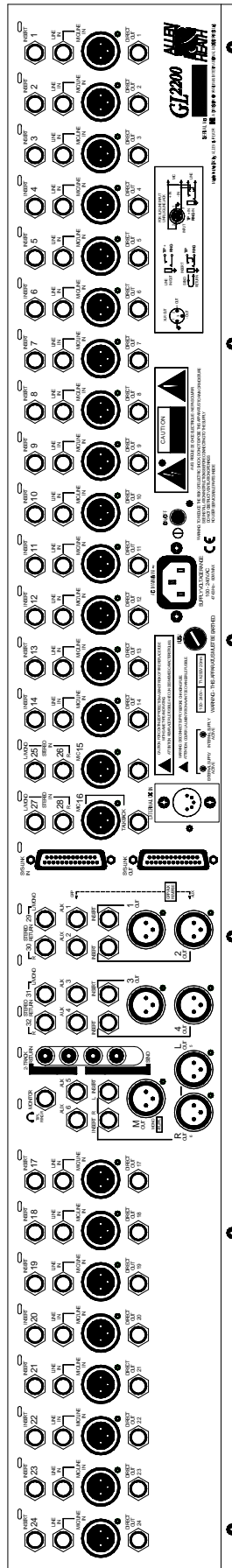
Miscellaneous:

GL2200-412 Packing Assembly	002-435	-
GL2200-416 Packing Assembly	002-436	-
GL2200-424 Packing Assembly	002-437	-
GL2200-432 Packing Assembly	002-438	-
Flex Cable 12 Way 90mm	AH2228	5

GL2200 FRONT PANEL

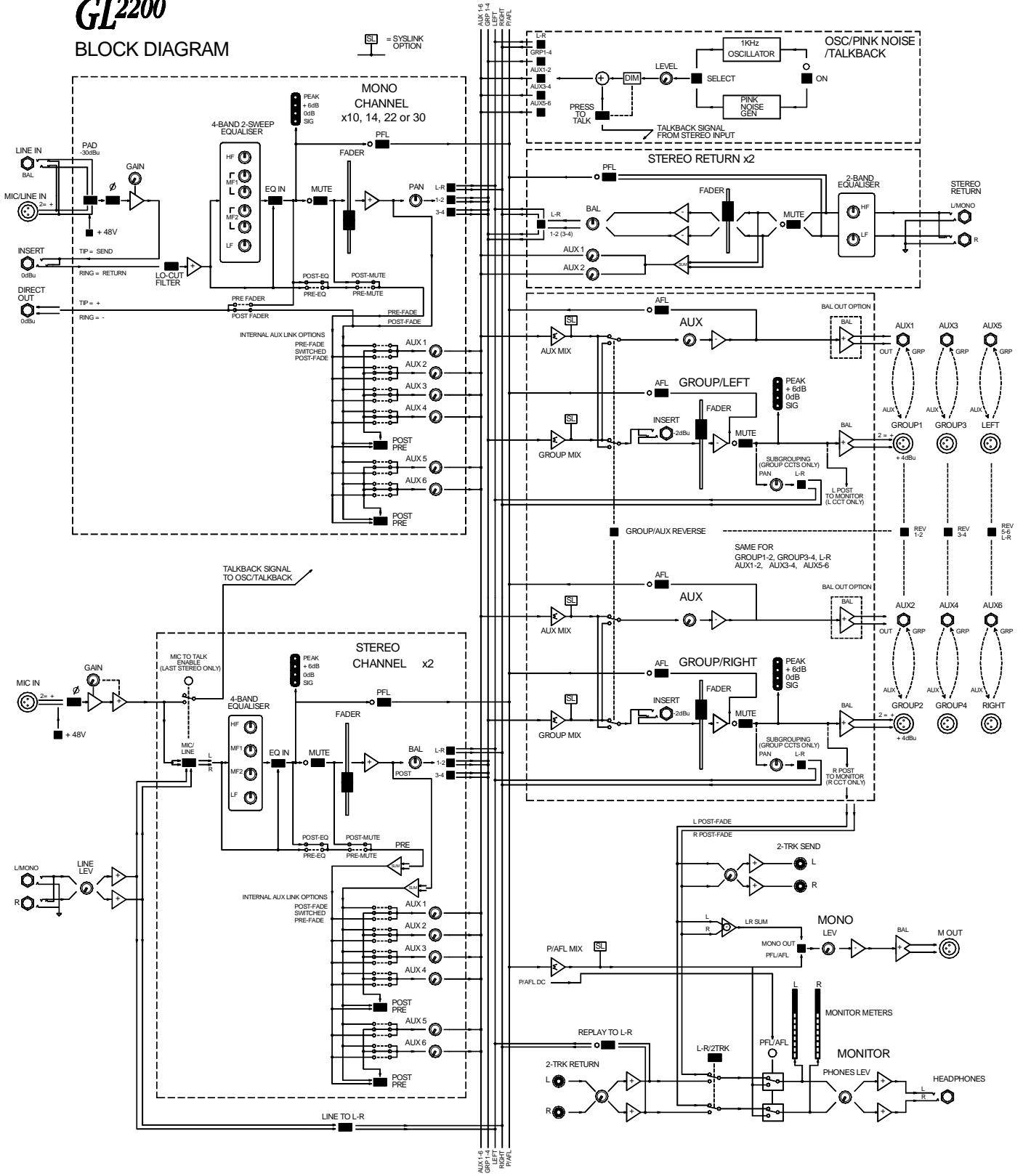


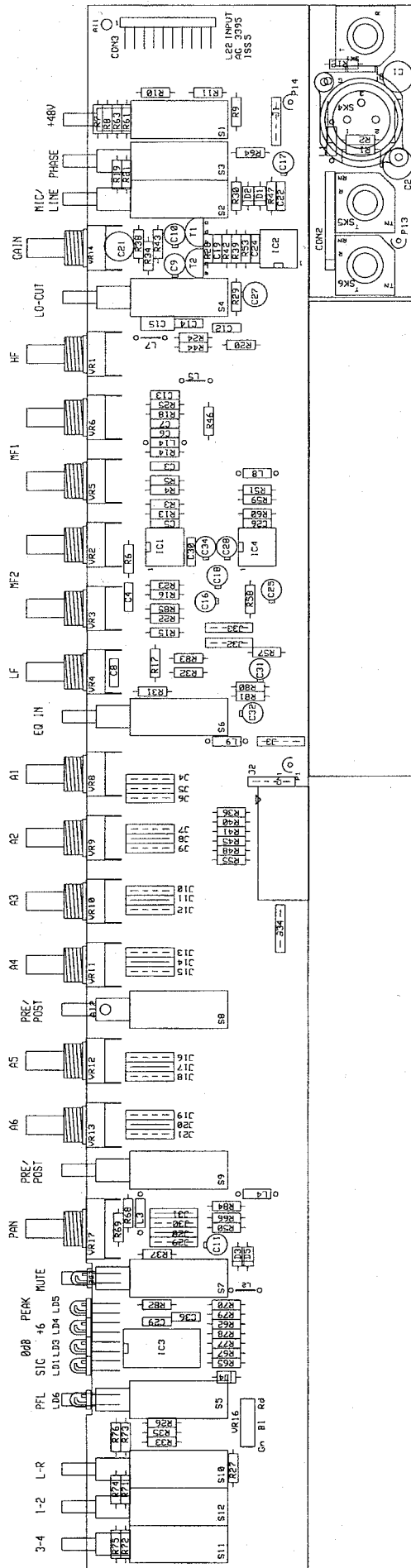
GL2200 REAR PANEL



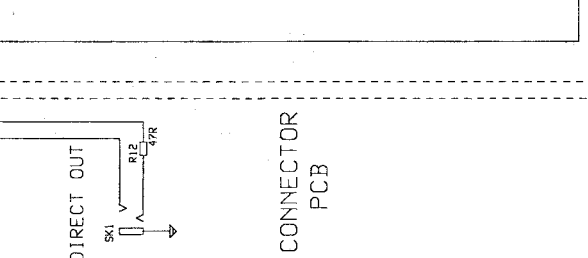
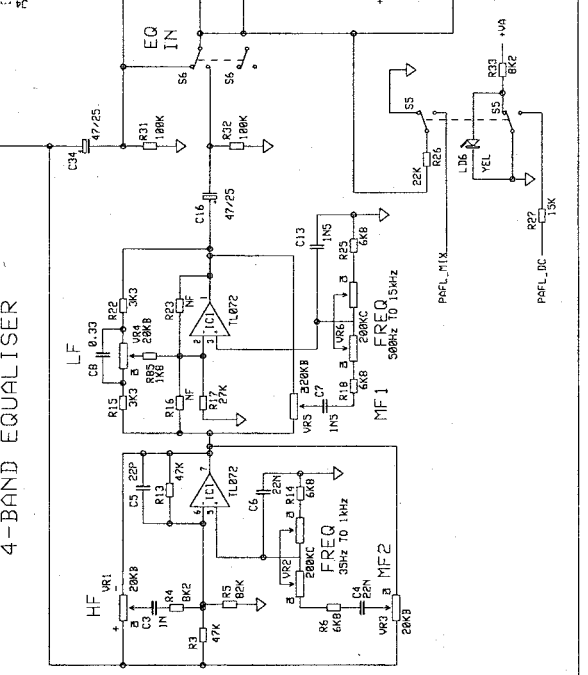
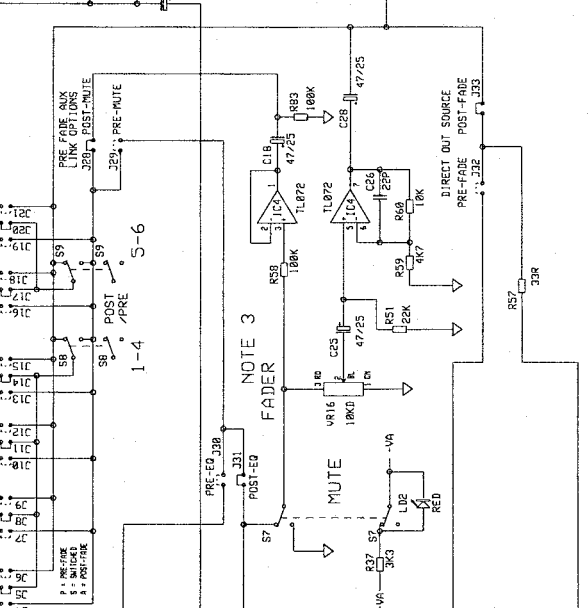
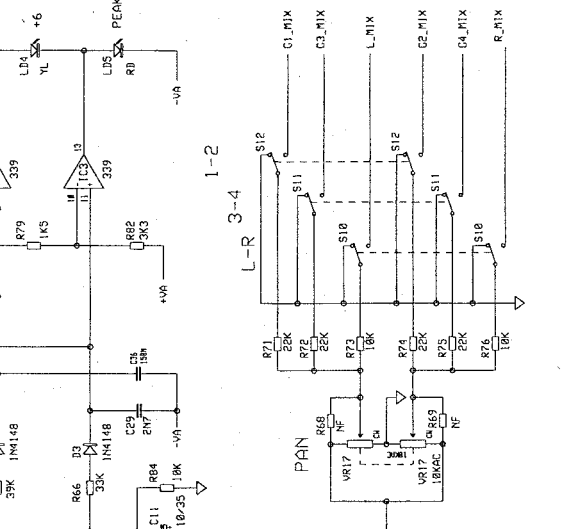
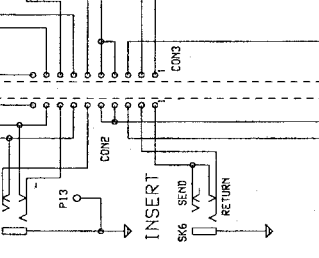
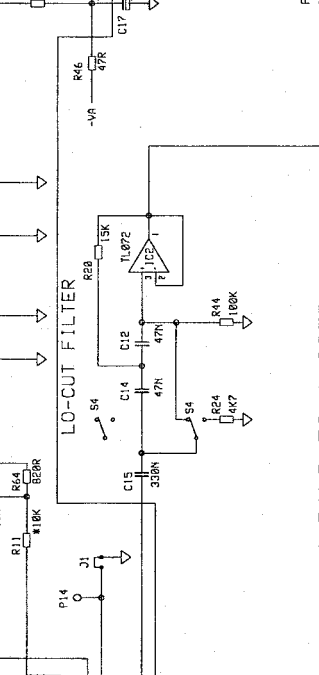
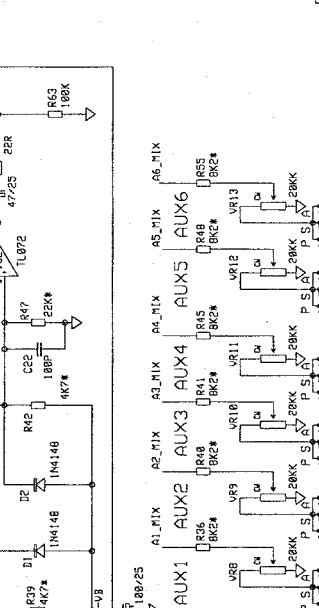
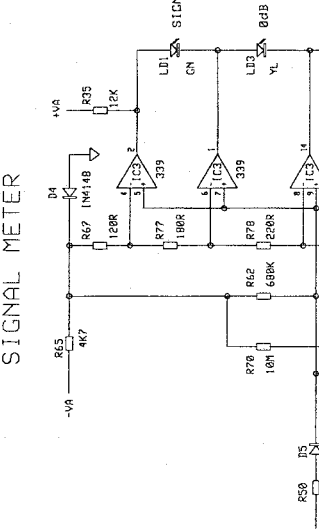
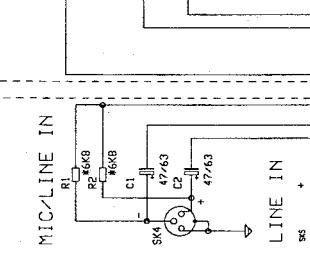
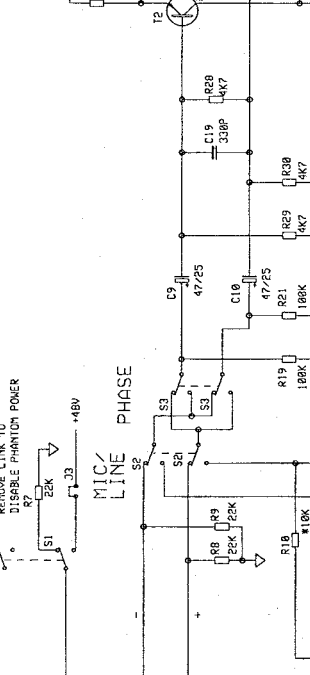
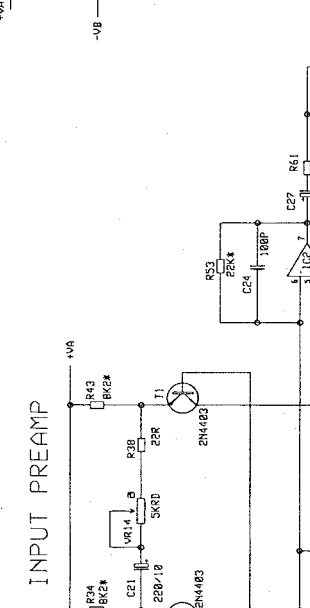
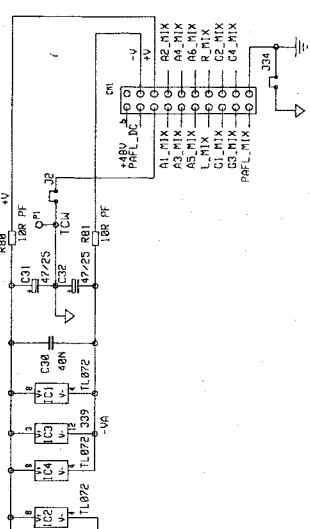
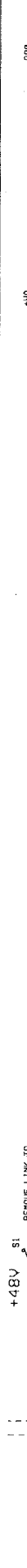
GL2200

BLOCK DIAGRAM

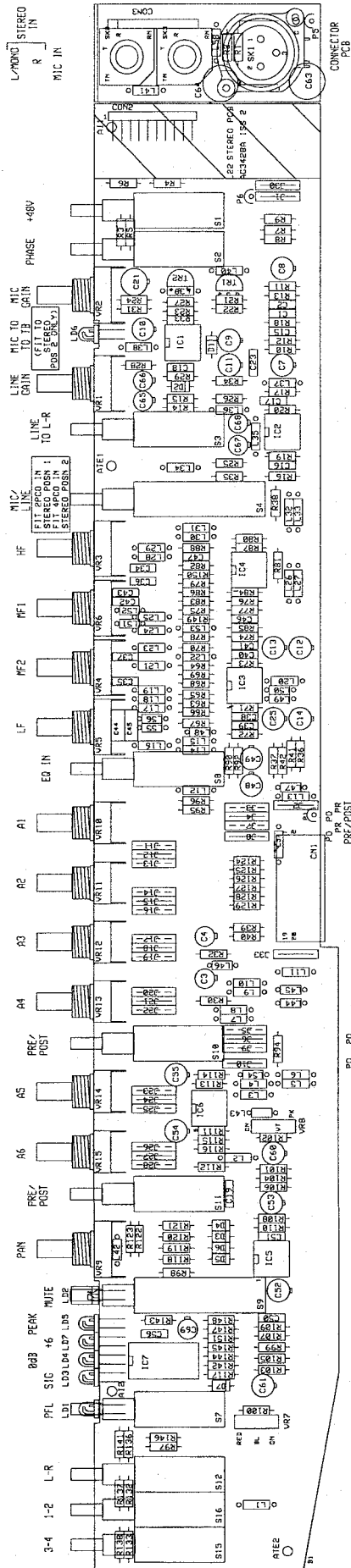




20 WAY MAIN RIBBON



ISS.	5	REVISION	REVISED COT	BY DATE	AR224-02-99	UNIT TITLE	L22	DRAWING TITLE	CIRCUIT DIAGRAM	DRAWING NO.	C3395	ISSUE	5	AI
<p>NOTES</p> <ol style="list-style-type: none"> RESISTORS MARKED * ARE UNLESS OTHERWISE MARKED ELECTROLYTIC CAPACITORS ARE MF/VOLTS R49 100K IF 100K FADER FITTED R51 82K IF 100K FADER FITTED 														
<p>ALLEN & HEATH LTD ALLEN & HEATH INDUSTRIAL PENRYN ENGLAND TRURO 9 LU FAX (44) (0) 1326 378878 TEL (44) (0) 1326 378879 A FULL RANGE OF AUDIO INTERFACING PRODUCTS AVAILABLE DRAWING NO. C3395</p>														



L/MONO STEREO
R IN
MIC IN

LINE GAIN TO L-R
MIC TO MIC STEREO
POSN 2 ONLY

LINE GAIN +48V
PHASE

MIC LINE IN STEREO POSN 1
FIT APCD IN STEREO POSN 2

LF MF1 MF2 HF

EQ IN

A1 A2 A3 A4

PRE/POST A5 A6

PAN PRE/POST

PFL SIG +6 MUTE

3-4 1-2 L-R

PO PR PA
PRE/POST
EQ LINKS

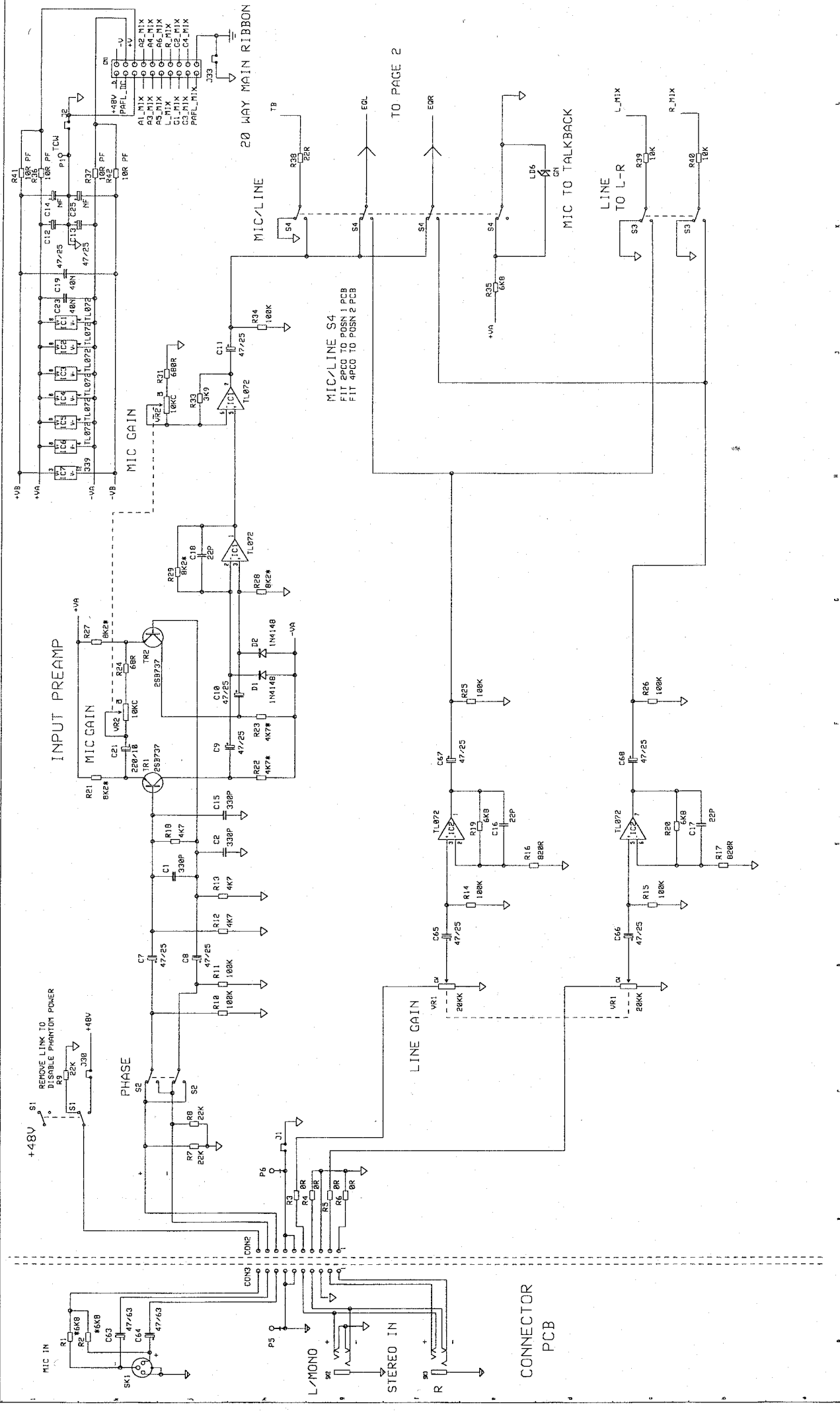
PO PR PA
PRE/POST
MUTE LINKS

LEFT FADER

RIGHT FADER

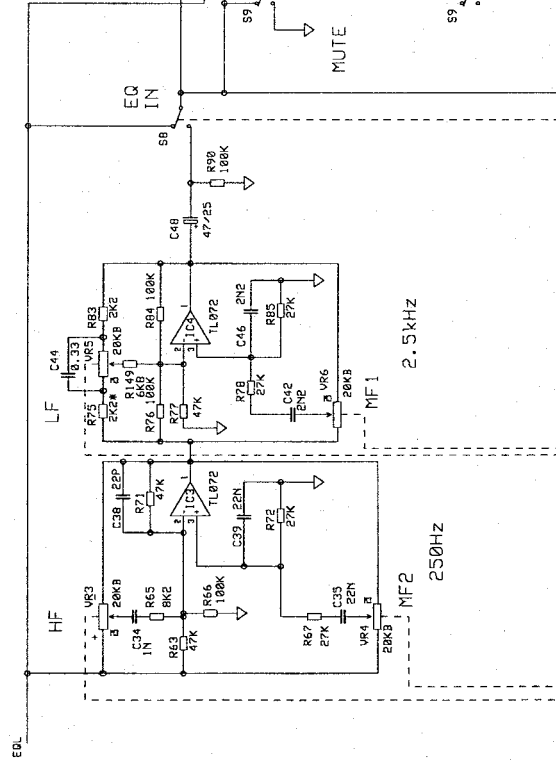
CONNECTOR PCB

2P STEREO PWR
PC448A 1.5A 2

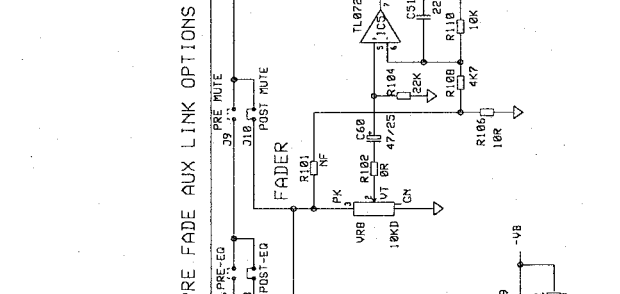
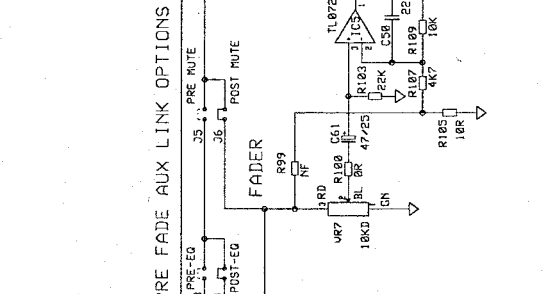
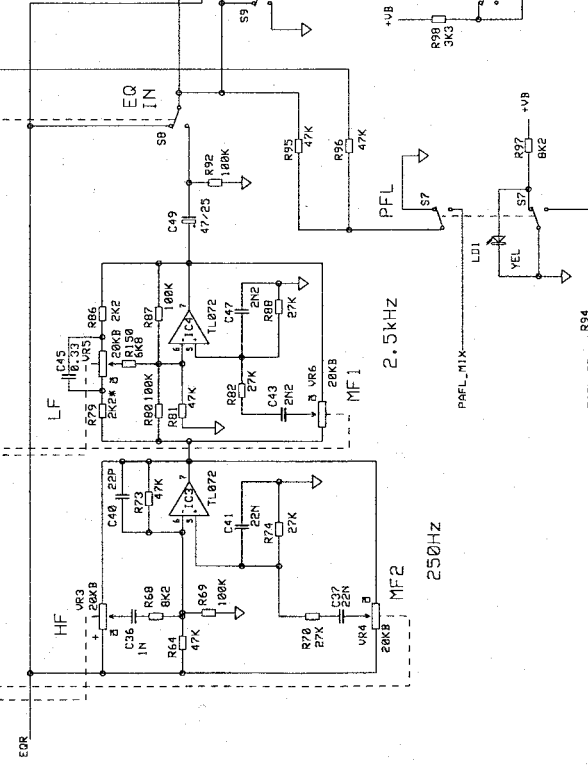


ISS.	REVISION	BY	DATE	NOTES
1	ORIGIN PRODUCTION	DRP	12-9-98	1. RESTORES WORKING REV. 14
2	FADER CORRECTION	DRP	15-9-98	2. ELECTRONIC COMPONENTS INC./DOLBY
UNIT TITLE L22 PAGE 1 OF 2 DRAWING TITLE CIRCUIT DIAGRAM STEREO PCB				ALLEN & HEATH 1000 WINDMILL DRIVE WINDMILL HILL, NJ 07093 TEL. (908) 426-7800 FAX. (908) 426-7807 A.L.S. & M.E.P. A DIVISION OF AMPRO INTERNATIONAL, WINDMILL HILL, NJ DRAWING NO. C3428 ISSUE 2

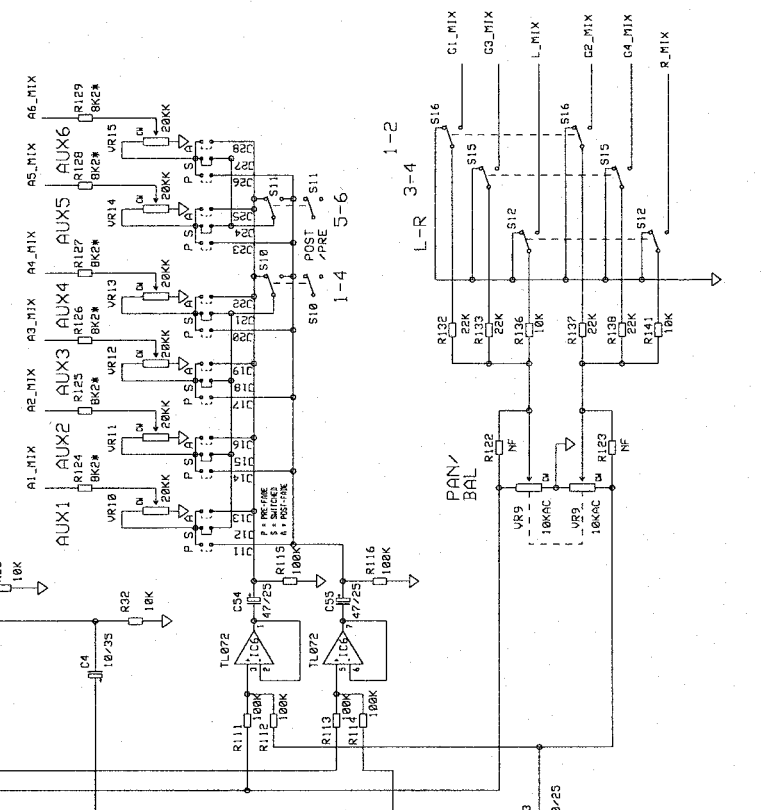
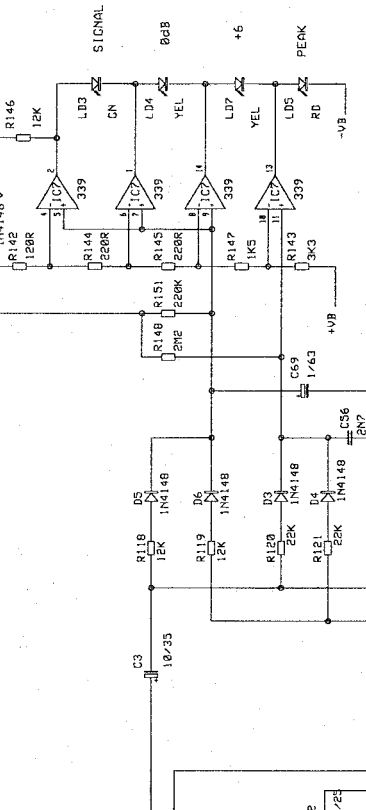
4-BAND EQUALISER



4-BAND EQUALISER



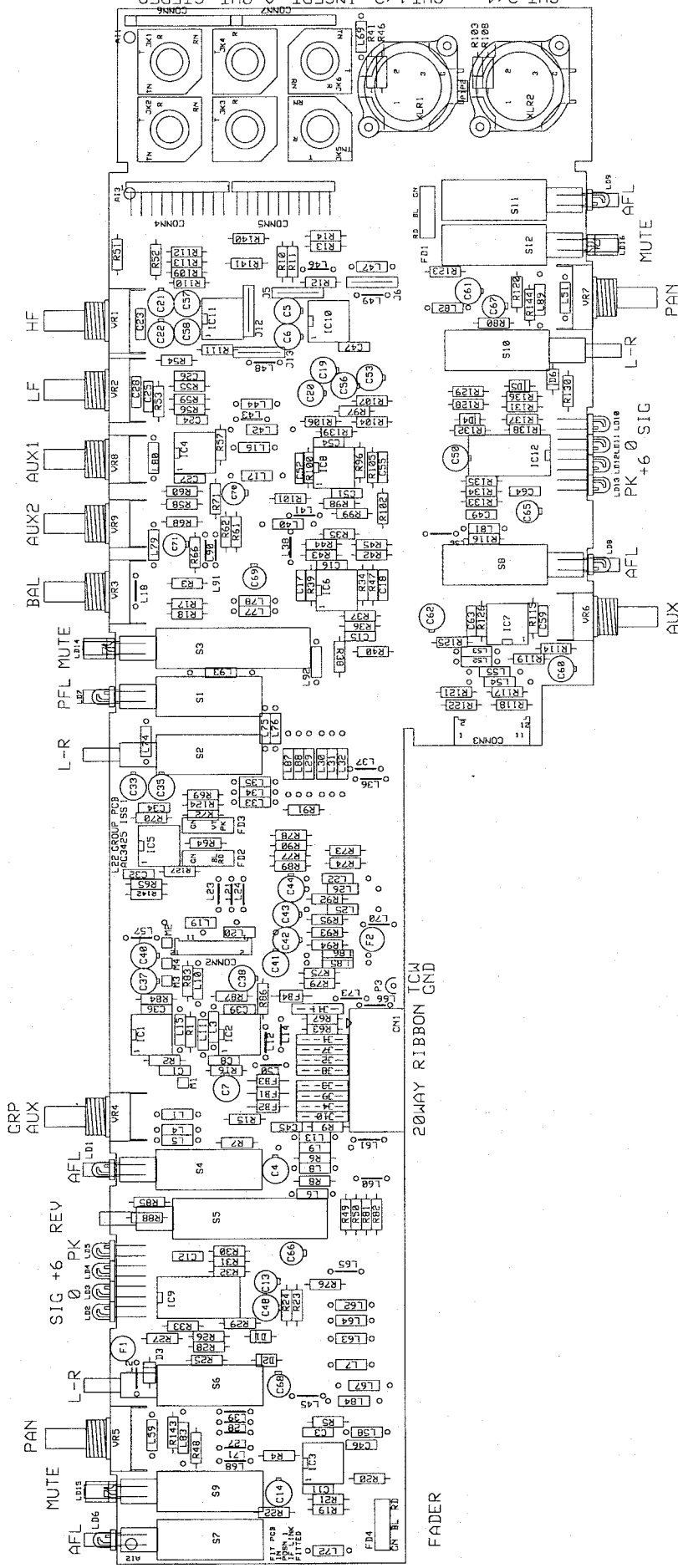
SIGNAL METER

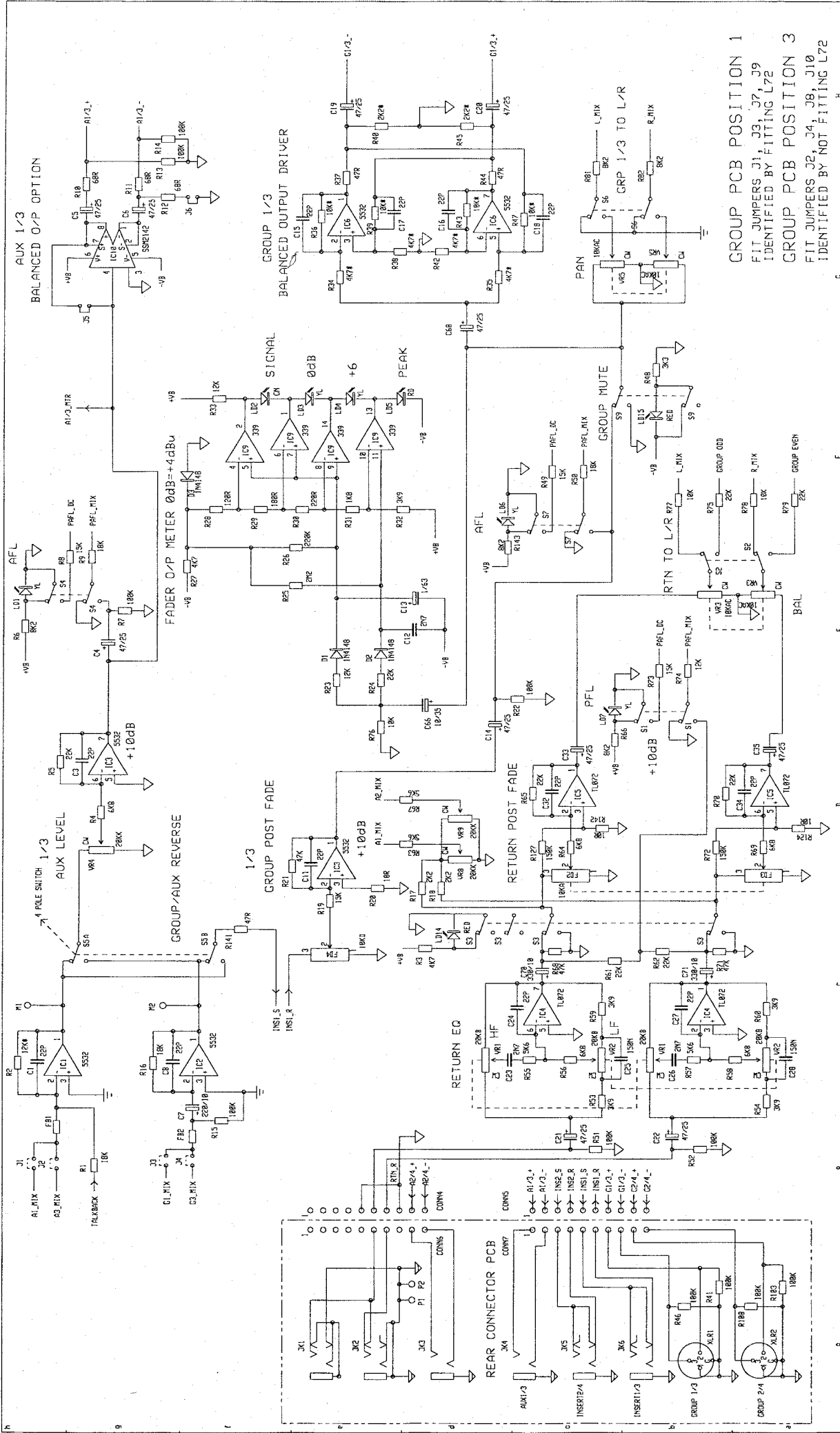


ISS.	REVISION	BY	DATE	NOTES
A	ORIGIN PRODUCTION	DRP	12-18-98	1. RESISTOR VALUES ARE IN OHMS UNLESS OTHERWISE NOTED
1	FADER CORRECTION	DRP	15-9-98	2. ELECTROLYTIC CAPACITORS ARE µF/OLV
2	FADER CORRECTION	ART	05-02-99	

UNIT TITLE L22 PAGE 2 OF 2
 DRAWING TITLE CIRCUIT DIAGRAM STEREO PCB
 ALLEN & HEATH
 KENTON INDUSTRIAL ESTATE
 CENTRAL
 ENGLAND
 TEL: (44) (0) 1336 37899
 FAX: (44) (0) 1336 37897
 E-MAIL: SALES@ALLEN-HEATH.COM
 WWW.ALH.CO.UK
 ISSUE 2 A1

OUT 2/4 OUT 1/3 INSERT A OUT STEREO RTN



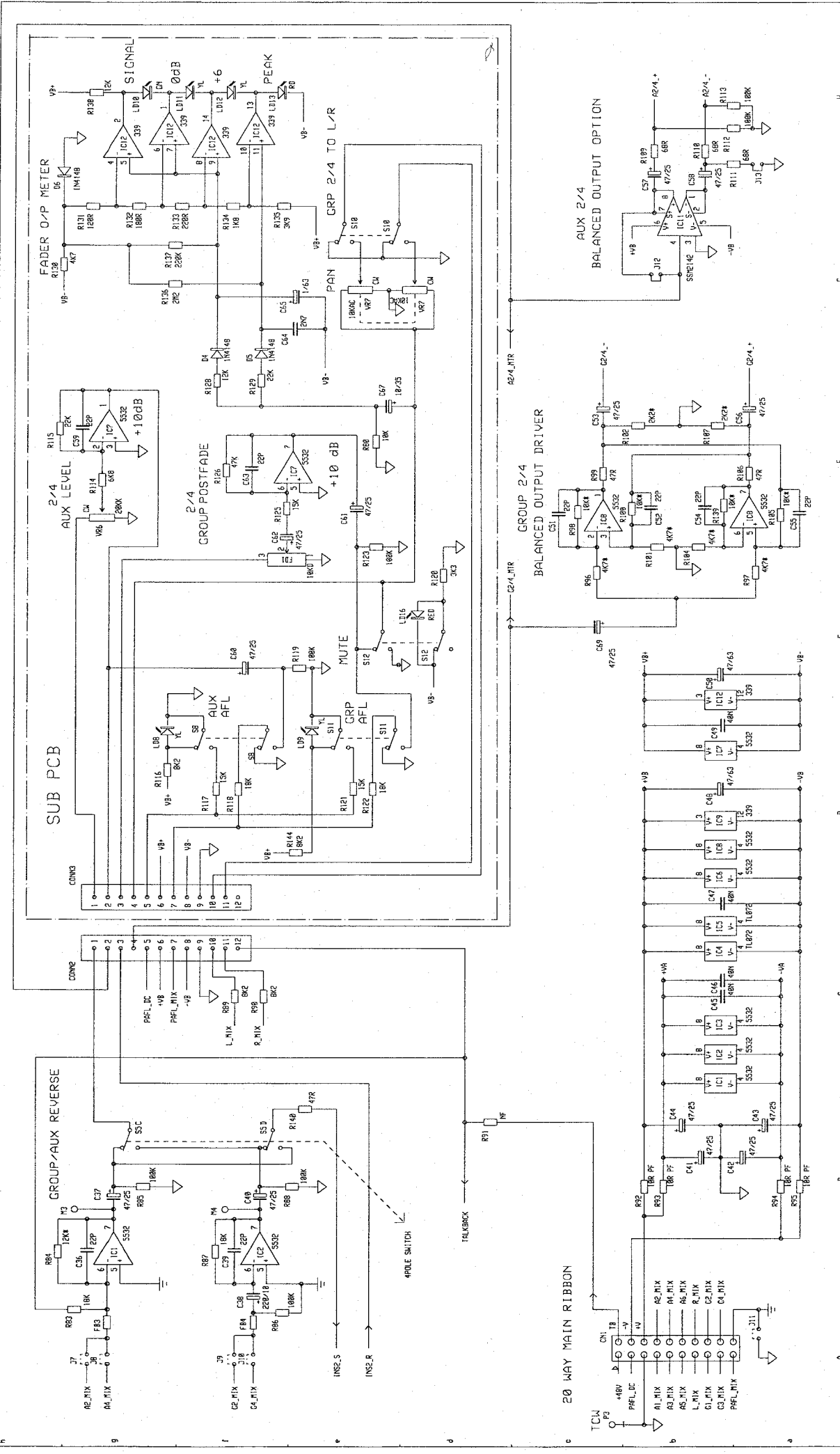


ISS.	REVISION	BY	DATE	NOTES
1	ORIGIN	DRP	24-8-98	1. RESISTORS MARKED * ARE 1% ALL OTHERS ARE 5% 1/4W UNLESS OTHERWISE MARKED
2	PRODUCTION	AAT	21-09-98	2. ELECTROLYTIC CAPACITORS ARE 4% VAULTS
	REVISION	DWD	25-02-99	

UNIT TITLE	L22
DRAWING TITLE	CIRCUIT DIAGRAM GROUP PCB
PAGE 1 OF 2	
AC3425	
ISSUE	2
ALLEN & HEATH KERNUX INDUSTRIAL ESTATE PENRYN CORNWALL ENGLAND TR10 9LU	TEL. (44) (0) 1326 372818 FAX. (44) (0) 1326 378877
ALLEN & HEATH A DIVISION OF HARMAN INTERNATIONAL INDUSTRIES LIMITED	

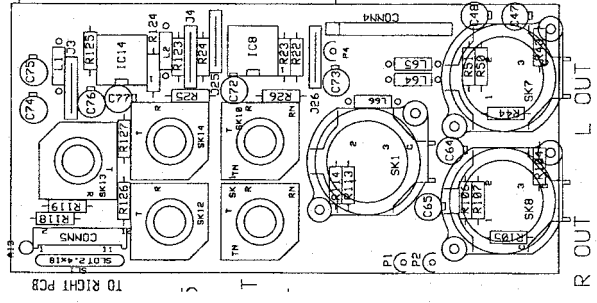
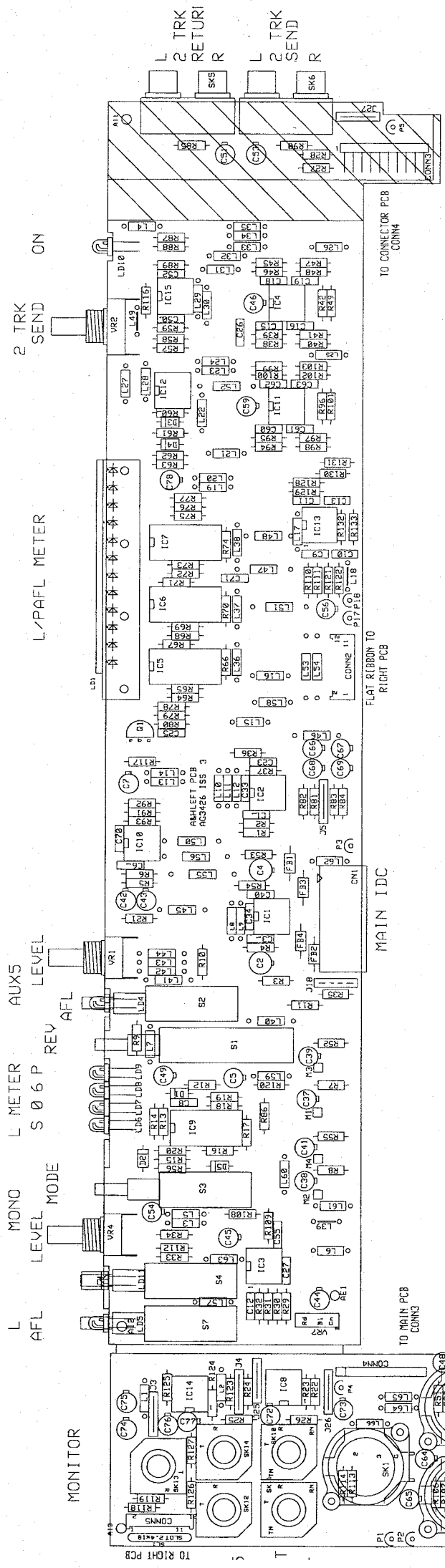
GROUP PCB POSITION 1
FIT JUMPERS J1, J3, J7, J9
IDENTIFIED BY FITTING L72

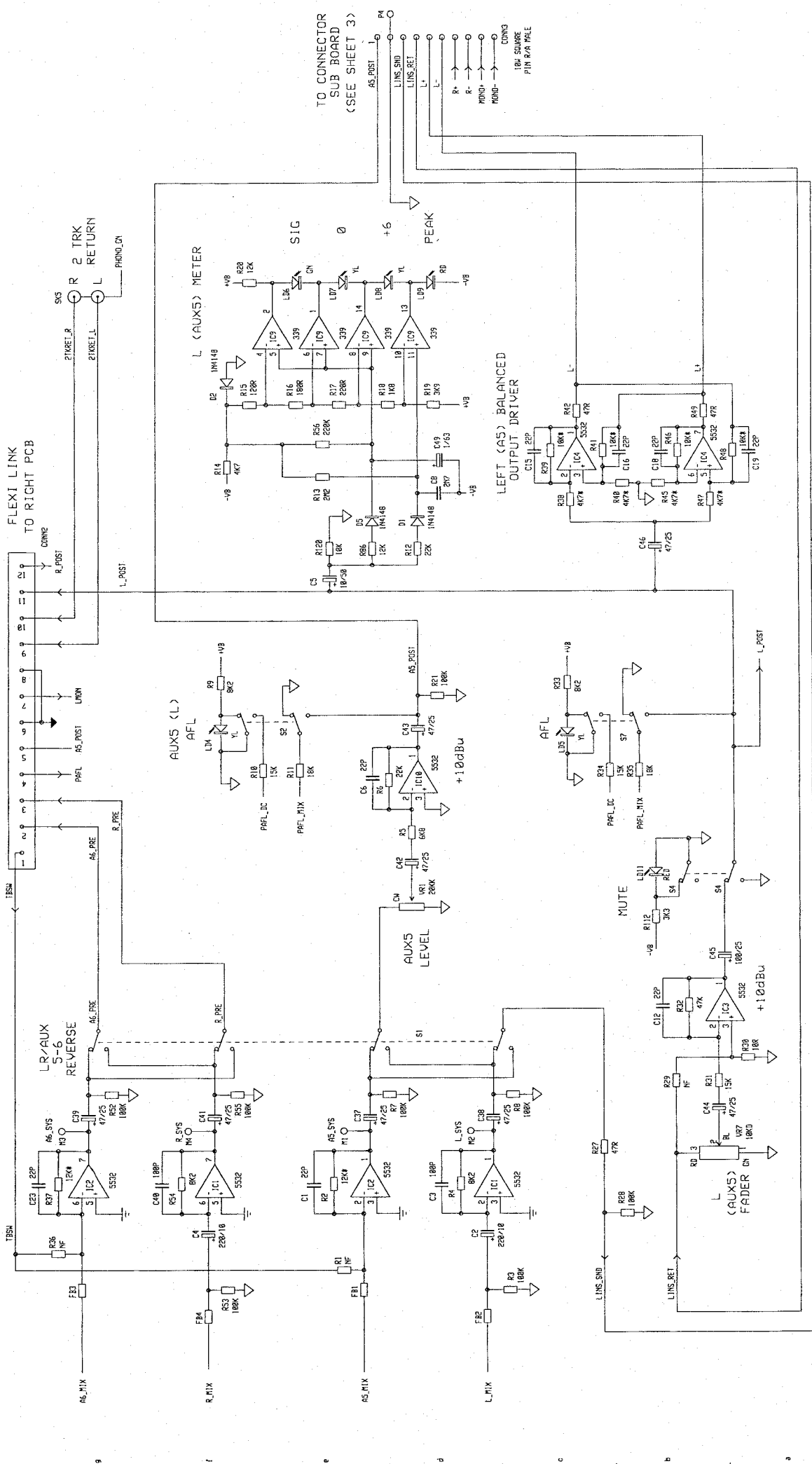
GROUP PCB POSITION 3
FIT JUMPERS J2, J4, J8, J10
IDENTIFIED BY NOT FITTING L72



ISS.	REVISION	BY	DATE	NOTES	UNIT TITLE	DRAWING TITLE	ISSUE
1	ORIGIN	DRP	24-8-98	1. RESISTORS MARKED # ARE 1% ALL OTHERS ARE 5% 1/4W UNLESS OTHERWISE MARKED	L22	CIRCUIT DIAGRAM	2
2	PRODUCTION	AAT	21-09-98	2. ELECTROLYTIC CAPACITORS ARE µF/ALTS	AG3425	GROUP PCB	2
	REVISION	DWD	25-02-99				

ALLEN & HEATH
KENTUCK INDUSTRIAL ESTATE
PENRYN
ENGLAND TR18 9LU
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DRAWING NO. C3425
PAGE 2 OF 2
TEL. (44) (0) 1266 372070
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FLEXI LINK
TO RIGHT PCB

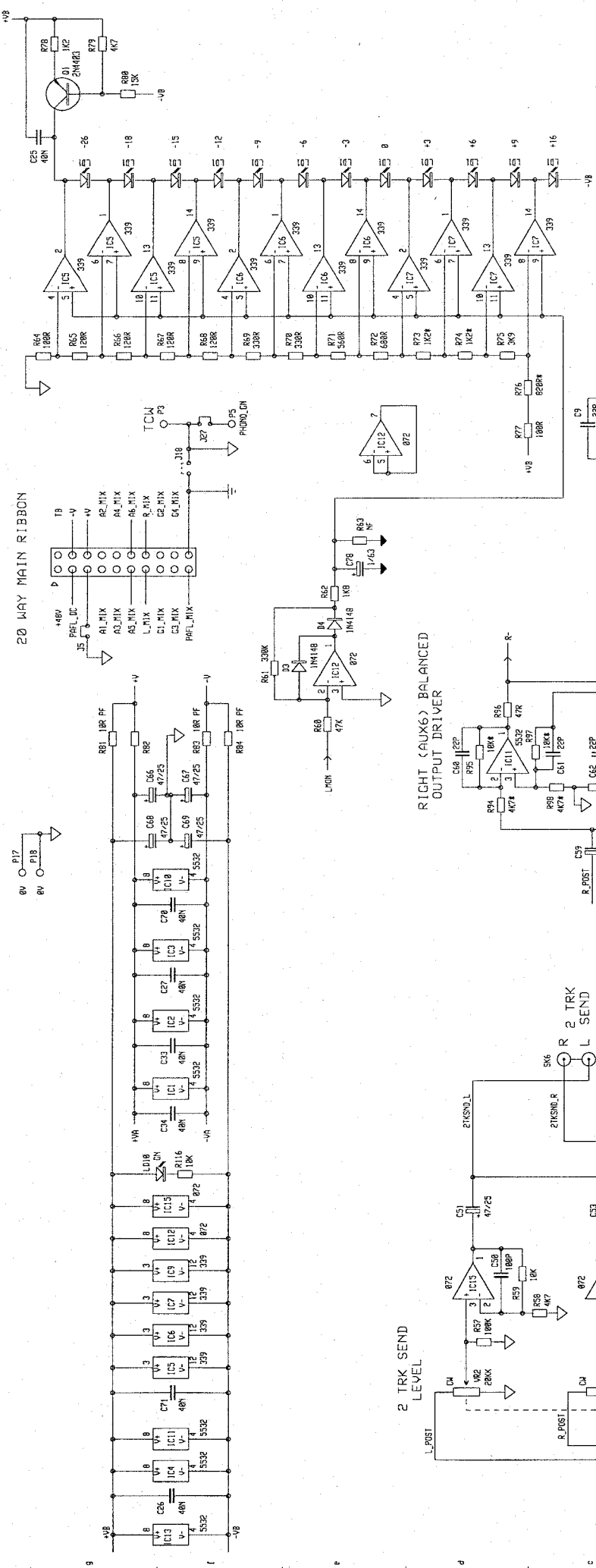
TO CONNECTOR
SUB BOARD
(SEE SHEET 3)

LEFT (AS) BALANCED
OUTPUT DRIVER

L (AUX5) METER

ISS.	REVISION	BY DATE	NOTES	UNIT TITLE		
				L22		
A	ORIGIN PRODUCTION	DRP 27-7-98	1. RESISTORS MARKED 'A' ARE 1% ALL OTHERS ARE 5% UNLESS OTHERWISE MARKED	SHEET 1 OF 3		
1	CONN GND MOD	DRP 9-10-98		2. ELECTROLYTIC CAPACITORS ARE 'A' UNLESS OTHERWISE MARKED	CIRCUIT DIAGRAM	
2		PAAT 26-01-99			LEFT PCB	
				DRAWING No. C3426		
				ISSUE 2		
				ALLEN & HEATH PENRYN INDUSTRIAL ESTATE PENRYN CORNWALL ENGLAND TR10 8LU		
				TEL. (44) (0) 1366 37899 FAX. (44) (0) 1366 37897		
				ALLEN & HEATH A DIVISION OF HARMON INTERNATIONAL INDUSTRIES LIMITED		

20 WAY MAIN RIBBON



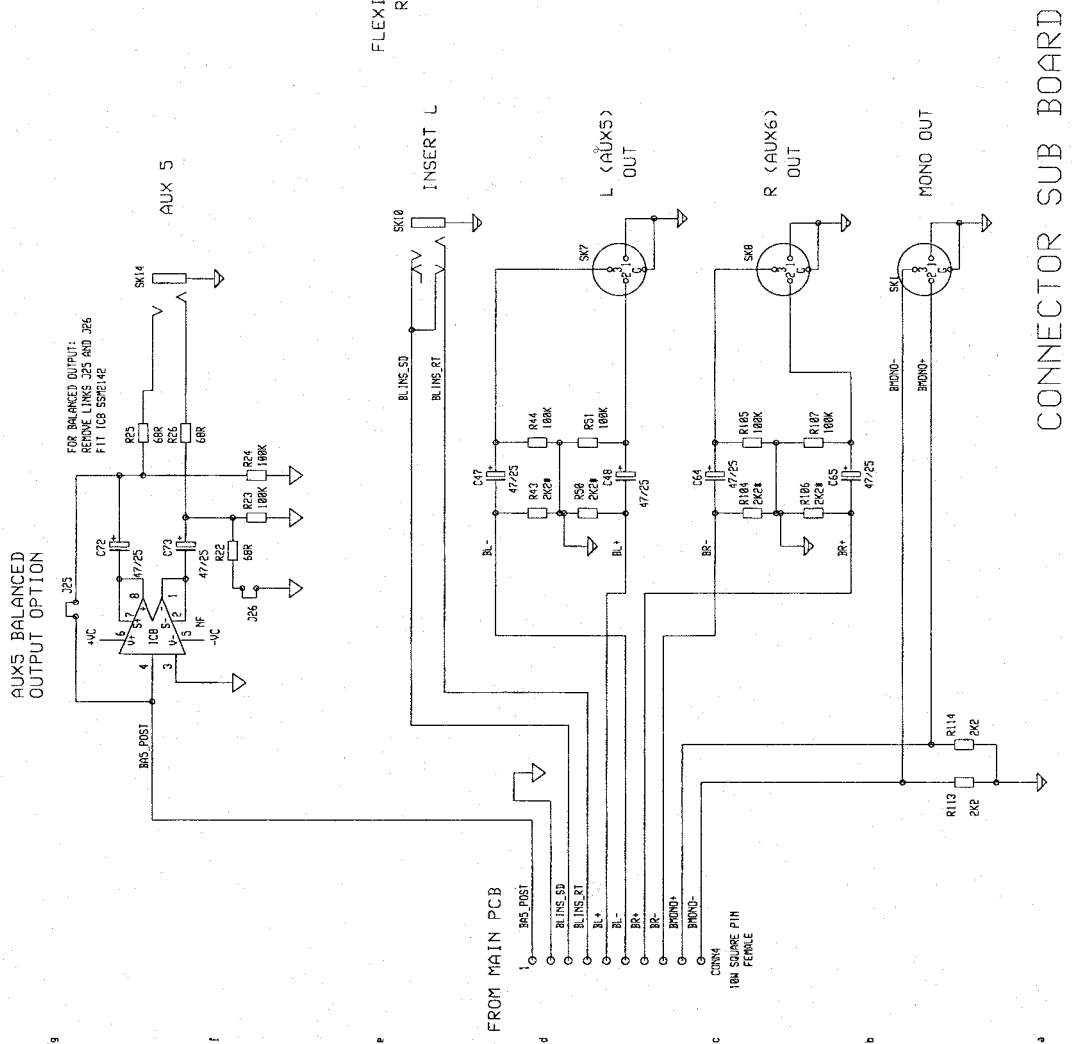
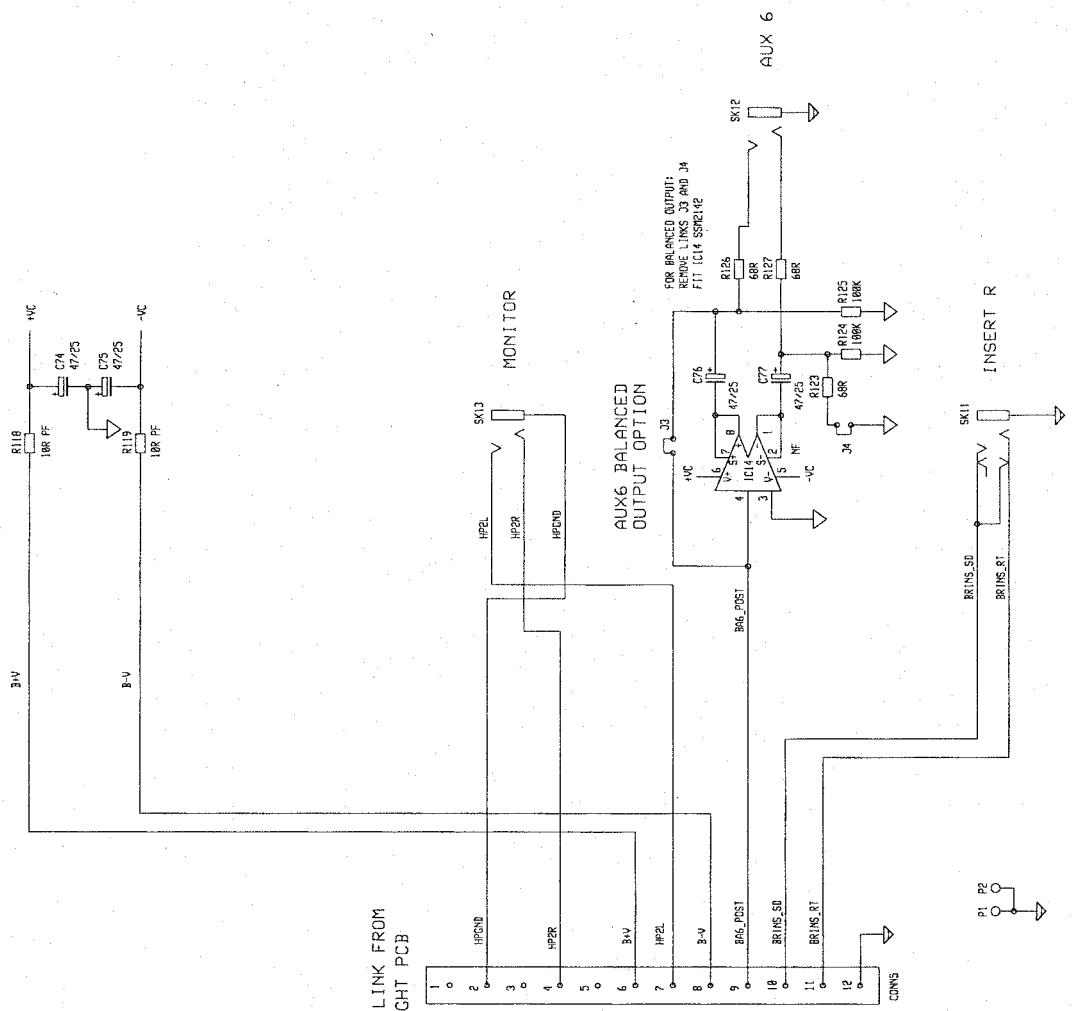
ALLEN & HEATH
 KERRICK INDUSTRIAL ESTATE
 PENRYN
 CORNWALL TR18 9LU
 ENGLAND
 TEL. (44) (0) 1286 372078
 FAX. (44) (0) 1286 377897

L22 SHEET 2 OF 3
 C3426
 ALLEN & HEATH A DIVISION OF HARMAN INTERNATIONAL INDUSTRIES LIMITED
 DRAWING NO. ISSUE 2

UNIT TITLE
 CIRCUIT DIAGRAM
 LEFT PCB

NOTES
 1. RESISTORS MARKED * ARE 1%
 ALL OTHERS ARE 5% UNLESS OTHERWISE MARKED
 2. ELECTROLYTIC CAPACITORS ARE µF/ALTS

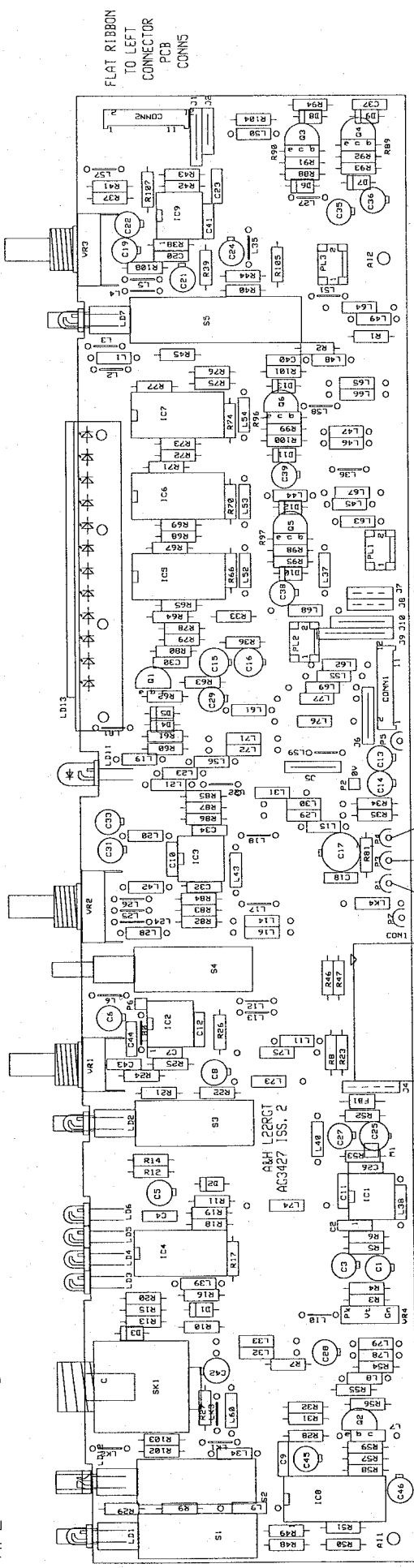
ISS.	REVISION	BY	DATE
A	ORIGIN PRODUCTION		DRP 27-7-98
1	CONN GND MOD		DRP 9-10-98
2			AAT 26-01-99



CONNECTOR SUB BOARD

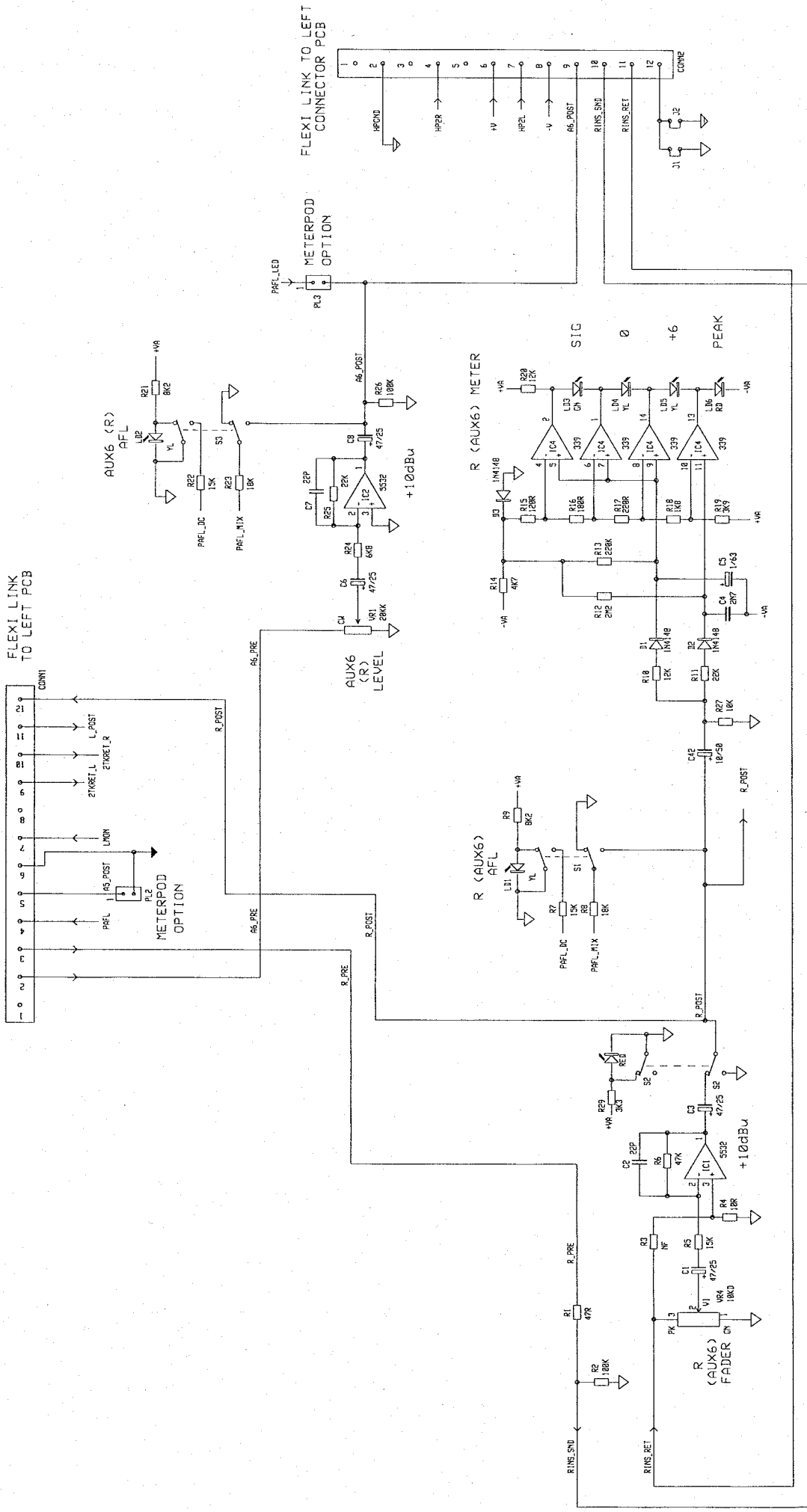
ISS.	A	REVISION	BY	DATE	NOTES
1		ORIGIN	DRP	27-7-98	1. RESISTORS MARKED * ARE 1% ALL OTHERS ARE 5% 1/4W UNLESS OTHERWISE MARKED
2		PRODUCTION	DRP	9-10-98	2. ELECTROLYTIC CAPACITORS ARE µF/VOLTS
		CONN GND MOD	AAT	26-01-99	
UNIT TITLE					
L22 SHEET 3 OF 3					
DRAWING TITLE					
CIRCUIT DIAGRAM LEFT PCB					
DRAWING No. C3426 ISSUE 2					
ALLEN & HEATH PERVEX INDUSTRIAL ESTABLISHMENT CONWAY ENGLAND TR18 9LU ALLEN & HEATH, A DIVISION OF HARROCK INTERNATIONAL INDUSTRIES LIMITED.					
TEL. (44) (0) 1326 378278 FAX. (44) (0) 1326 378979					

R AFL HPHONE S 0 6 P R METER AUX6 LR/ HP 2 TRK TO LR LEVEL
 R/PAFL METER PAFL

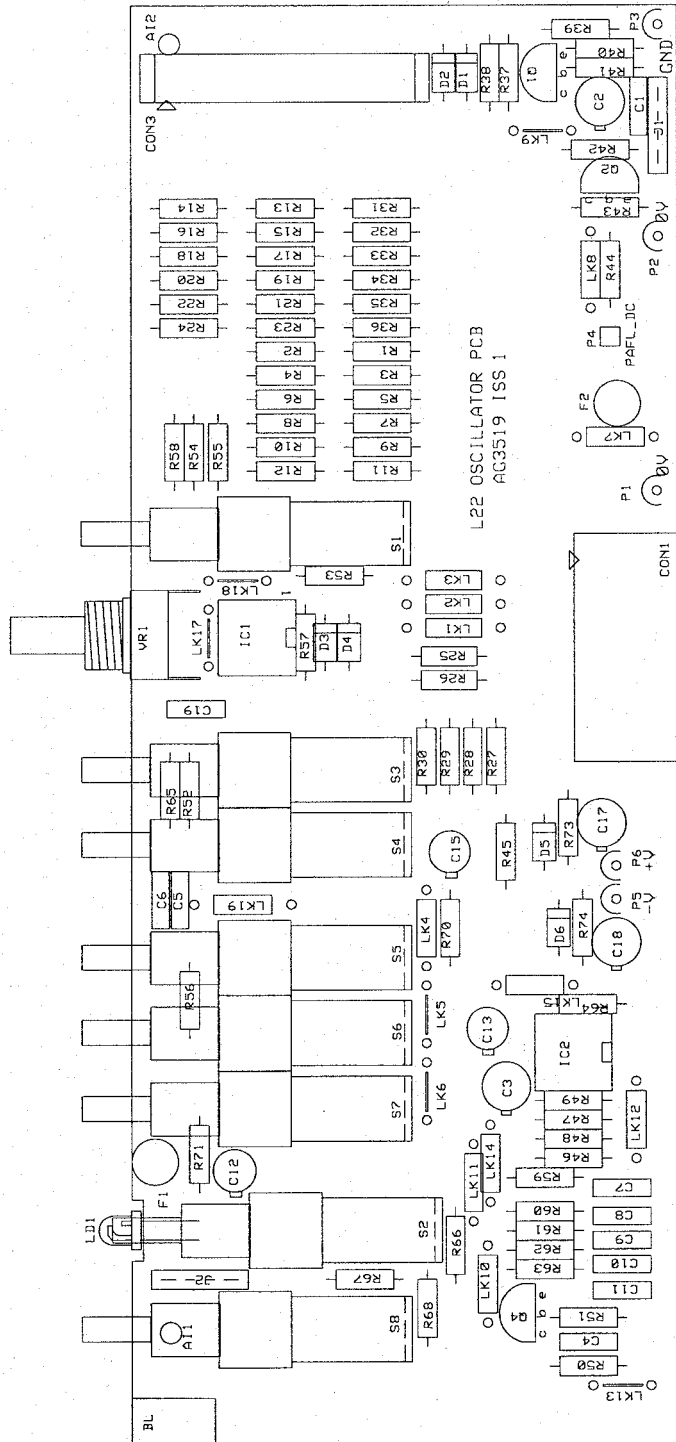


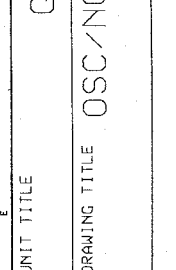
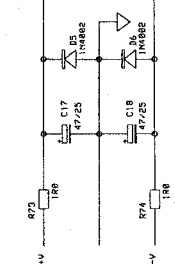
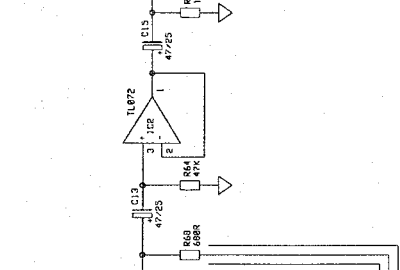
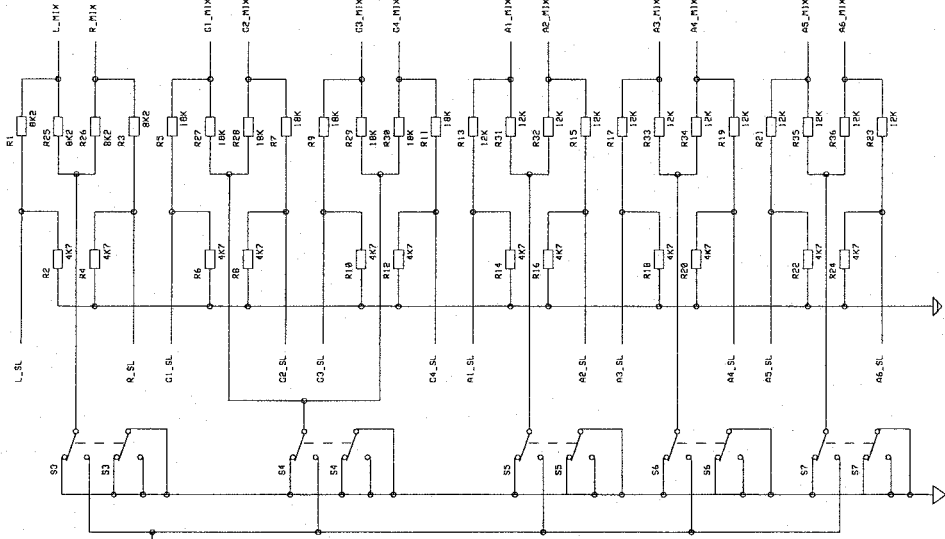
FLAT RIBBON TO LEFT PCB CONNE
 MAIN IDC RA BL YEL

FLAT RIBBON
 TO LEFT
 CONNECTOR
 PCB
 CONNS



ISS.	REVISION	BY	DATE	NOTES	UNIT TITLE	SHT 1 OF 2	MANUFACTURED IN ENGLAND BY
	1			1. RESISTORS MARKED * ARE 1% ALL OTHERS ARE 5% 1/4W UNLESS OTHERWISE MARKED	L22		ALLEN & HEATH
2	ORIGIN PRODUCTION UPDATES			2. ELECTROLYTIC CAPACITORS ARE µF/VOLTS	RIGHT PCB		A DIVISION OF HARMON INTERNATIONAL INDUSTRIES LTD
							DRAWING No. C3427 ISSUE 2





ISS.	REVISION	BY	DATE	NOTES
1	ORIGIN	AAT	18-08-98	1. RESISTORS MARKED * ARE 1% ALL OTHERS ARE 5% 1/4W UNLESS OTHERWISE MARKED
2	PRODUCTION	AAT	17-09-98	2. ELECTROLYTIC CAPACITORS ARE 4F/40V
	SYS-LINK MOD. (R45) DWD 26-02-99			

UNIT TITLE
GL2200

DRAWING TITLE
OSC/NOISE/SYS IN
PCB

PCB TYPE
AG3519

ALLEN & HEATH
SERVICK INDUSTRIAL ESTATE
BERRYK
CORNWALL
ENGLAND TR18 9U
ALLEN & HEATH A DIVISION OF HARMON INTERNATIONAL INDUSTRIES LIMITED

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DRAWING No. C3519
ISSUE 2