Soundcraft

SAC200

USER MANUAL

CE This equipment complies with the EMC Directive 89/336/EEC

For further details contact:

Harman International Industries Ltd,
Cranborne House, Cranborne Road,
Potters Bar, Hertfordshire, EN6 3JN, U.K.

Tel: +44 (0) 1707 665000
Fax: +44 (0) 1707 660482

CONTENTS

Introduction 2

Stereo Input Module 3

Mono Input Module 4

Telco Input Module 5

Stereo Groups & Effects Return Module 6

Mono & Control Room Monitor Module 7

Stereo Programme & Studio Monitor Module 8

Stereo Source Select Module 9

Internal Jumper Settings

Mono Input Module 10
Stereo Input Module 11
Telco, SUB/FX & PGM/Studio 12

Interface Requirements for Peripheral Device 13

Logic Interface Connector Pinouts 14

Internal Connector Pinouts

Mono & Control Room Module 15
PGM & Studio Module 16
Stereo Source Select Module 17
SUB/FX Module 18
Telco Module 19
Stereo & Mono Input Modules 20
Motherloom 21

External Interface Connector Pinouts

Stereo Source Select
38 Way EDAC Connectors 22

Dimensions 23

Index 24

Introduction

The Soundcraft SAC 200 is a stereo on-air console designed to meet the requirements of today's highly sophisticated radio stations. A fully modular broadcast console, integrated into the design are many of the features which would normally be provided by engineer's interface boxes. The options are simple to install and make the console an extremely economical and versatile investment.

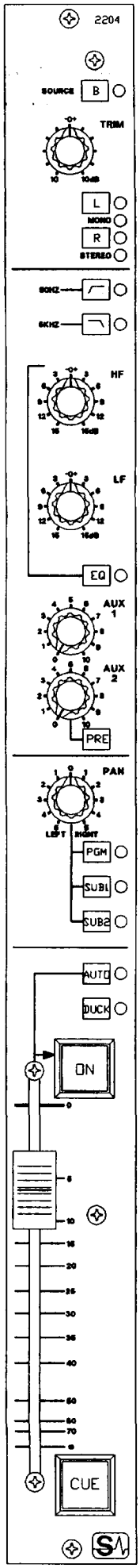
The SAC 200 solves the problem of interfacing to a wide variety of cart machines, two track tape machines and turntables by providing a bi-directional universal logic interface.

All inputs and most outputs are electronically balanced, thus reducing the degradation of signal quality which is introduced by the more normal transformer coupled designs and ensures superior transient response, minimal phaseshift and excellent common mode rejection, even at high frequencies.

All fader and mute functions are performed by high quality solid state voltage control devices. VU meters are provided, with PPM's as an option to display the mono or cue signal and the main stereo programme output or the monitor source.

Additional meters or customised meter panels are available at extra cost. Two timers are provided, a machine timer which resets and restarts every time a machine module is turned on, and a mic timer which resets and restarts if a mic channel is turned on and no other mic channels are active. The mic timer will continue to run until all mic channels are off.

All input modules have their logic interface to the outside world on 9 pin 'D'-type connectors. Mic inputs and line level inputs are all on XLR's with the mono channels having a stereo jack for prefade insert points. The frame design allows installation as either drop through or table top, as well as providing access for routine servicing, provision is made to tidily conceal cables and connectors.



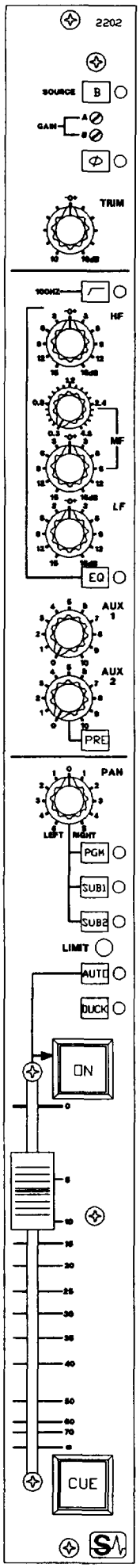
Stereo Input Module

Each module has two selectable line level stereo sources as inputs, the second being accessed via the button marked 'B'. Each input has an individual XLR mounted on the modular rear connector panel and each is individually jumper selectable to cope with all common interface levels. It is also possible to have RIAA equalisation or transformers fitted to the rear connector pcb as a chargeable option. The selected input is fed to a common gain trim control which will compensate for any further variations in level from the standard set-up levels.Inputs can be routed through the module as a conventional stereo signal or, by using the left and right mono buttons, can be passed through as mono sum of left and right to both left and right paths or left only to both left and right or right only to both left and right.

High and low pass filters are always fitted as standard,the high pass filter having a shelving frequency of 50Hz and the low pass having a shelving frequency of 5kHz, both of which operate independently from the equaliser option. On the stereo module, a two band fixed frequency equaliser can be switched in and out of circuit using the EQ button. The high frequency control is of a shelving characteristic with 15dB's of cut and boost operating at 10kHz. The low frequency control is also shelving with 15dB's of cut and boost and operates at 60Hz. As part of the production option there are two auxiliary sends available. These can be switched from the front panel to be pre or post fader, but internally can be jumpered so that either input left goes to aux 1 and right to aux 2 or a mono sum of left and right is fed to both auxiliary one and two sends.A balance control feeds the post fade signal to the stereo programme or the two stereo subgroup busses.

The fader controls a VCA circuit which is also used to perform muting operations and a control port is accessible externally, this allows the console to be controlled by a audio-follow-video controller or for a more sophisticated radio station, central programming controller. The ON circuit is controlled via a large illuminated 'on' switch which uses FET's. The switch can be jumpered to control the timers and internal mute busses. This feature is also interfaced to the outside world for the remote start of peripheral devices and may be also controlled via the auto switch from the fader so that the fader can automatically start, for instance, a cartridge machine. The large illuminated CUE switch makes the prefade signal available for monitoring and can be programmed to mute the main audio path. CUE can also be accessed externally and to cope with individual operator requirements the ON and CUE switches may be interchanged.

The DUCK switch allows the module to be attenuated from any module designated the DUCK source or the manual duck control.



Mono Input Module

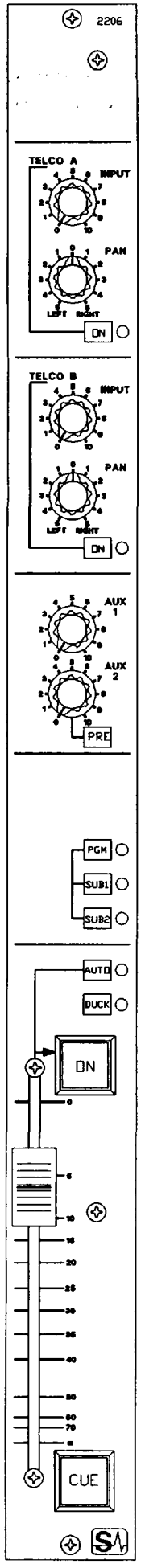
Each module has two selectable mono inputs which can be internally jumpered for either microphone or line levels. Normally input A is selected but by pressing B the alternative input is selected. As well as the jumpers for configuring gain setup, jumpers are also available to apply phantom power to selected microphone inputs. The individual mono inputs may also be jumpered to the internal mute busses so that, for instance, input A could be designated to the operator's mic and mute the main monitor circuits, whereas input B could be designated to be a guest microphone and mute the main studio monitor feed. There are individual preset gain adjustments for each of A and B input and the selected source is fed through a phase switch and a common gain trim control giving a further 20dB's of adjustment on the front panel.

All mono modules are fitted with a high pass filter with a shelving frequency of 100Hz as standard. An optional three band equaliser is available as part of the production option with two auxiliary sends and may be switched in and out of circuit independently of the filter. The high frequency section of the equaliser operates at 10kHz, the low frequency section operates at 60Hz, each is shelving and has 15dB's of cut and boost. The centre band can be swept from 300Hz to 4.8kHz and has a peaking characteristic and again 15dB's of cut and boost.The two auxiliary sends may be internally jumpered to be prefade or switched pre or post fade. The switched prefade send may also be jumpered to be pre cut. Aux 2 may be jumpered post fade or may follow the pre post switch as for auxiliary 1. The signal is routed via a pan control and the three stereo routing switches to either the main stereo programme output or the two stereo subgroups. The signal is controlled by a VCA circuit controlled by the long throw linear fader.

The mute circuit provides exactly the same facilities as on a stereo input module complete with the external interfacing for remote start of peripheral devices, likewise this may be controlled by the auto switch from the fader.As for the stereo module, the ON button can control internal timers and mute circuits for the main monitors and it can also be controlled externally by a bi-directional and steered logic.

The large illuminated CUE switch makes the pre-fade signal available for monitoring and can be programmed to mute the main audio path.This facility also allows for externally controlled talkback. To cope with different user requirements, the ON and CUE switches may also be interchanged.

The DUCK switch allows the module to be attenuated from the master ducker circuits. Any input module may have an internal jumper fitted to make it a source for the automatic ducker circuits. There is an internal limiter built into the module with its own pre-set level control and a jumper to remove it from the signal path.

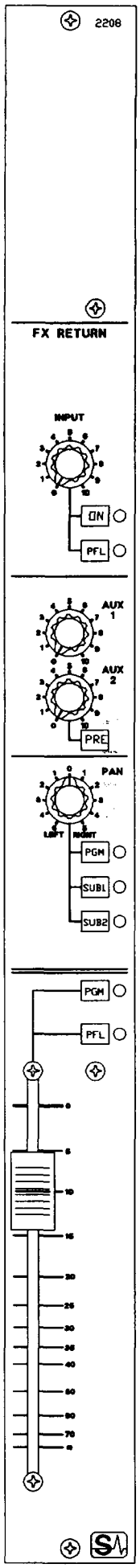


Telco Module

The Telco module provides the interface to two external telephone hybrids. Each input has a level control and pan and ON/OFF switch and routing to the three stereo busses, (main programme and the two subgroups). A mix/minus signal is derived within the module and fed back individually to the telephone hybrid, making it possible to install any number of Telco input modules.

As with the mono and stereo modules, there is an auto switch which allows the fader to control the ON/OFF function and a CUE switch allowing the prefade signal to be presented for monitoring.

There is also a DUCK facility allowing the module to be controlled by the master ducker. As an option, there are two auxiliary sends which may be switched from the front panel to be pre or post fader. There is provision internally in the console to link the operator's mic into the Telco circuits for talkback to the telephone callers whilst off air.



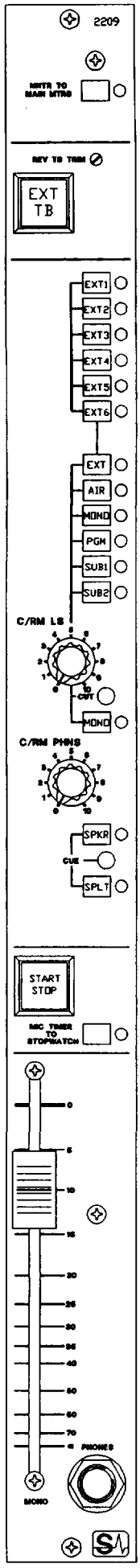
Stereo Groups and Effects Return Module

Each of these modules contains a summing amplifier, fader and output amplifier for each of the two stereo subgroup busses. As well as having its own independent output, each stereo subgroup signal can be routed to the main programme output, allowing them to be used as audio subgroups primarily for production applications.

The subgroup outputs can of course be used as recording outputs or clean feeds for other parts of a broadcasting facility. The pre fade signal is also available for monitoring.

As part of the module there is a mono effects return input which may be routed via the input and pan controls to either of the stereo subgroup busses or the main programme output.

The effects return also has an individual ON/OFF and PFL button together with an optional pair of auxiliary sends which can be switched to either pre or post the effects fader.



Mono & Control Room Monitor Module

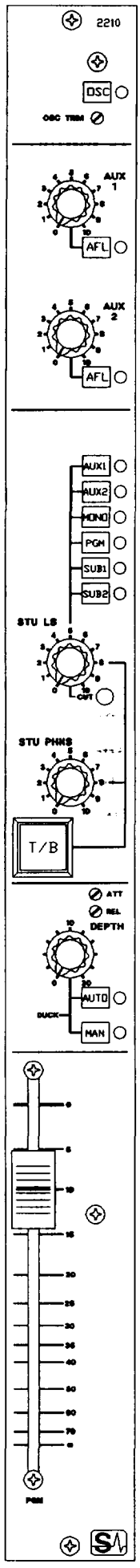
This module controls the main mono output and the principal control room monitoring circuits. Normally, the stereo pair of meters fitted as standard to the console will follow the main programme output. The switch at the top of the mono and control room module allows the meters to follow the monitor source selection switch.

There is a bi-directional talkback system with both DC and audio being generated from the console and fed to external destinations and a controlling signal and audio being fed into the console for return talkback. The operator's or DJ's mic is used as the source for the talkback send. There is a preset gain trim for reverse talkback and a large illuminated button for switching the talkback to an external destination. Reverse talkback or external talkback signals can be switched by the external control line into the SAC 200's headphone and loudspeaker monitors.

The operator's mic can be routed to an external destination by pressing the EXT TB button. The external talkback will normally appear on the headphone circuits, but when the 'spkr' button is pressed any talkback or prefade listen signals can be automatically routed to the control room monitor loudspeakers. It is also possible by using the split button to have the left and right outputs split so that mono programme appears on the right channel and CUE or talkback on the left channel. Normally, CUE or talkback will appear over the top of dimmed stereo programme.

There are separate level controls for control room loudspeaker and control room headphone circuits. The loudspeaker also has provision to be mono'd and can be cut by one of the console's internal mute busses. In its normal mode, the control room monitor can listen to any of the following sources; main stereo programme output, either of the two stereo subgroup outputs, the main mono output, an external stereo input designated to be the off-air receiver or any one of six other external stereo line level sources.

There is also provision on this module to change the function of the mic timer so that it becomes a conventional stop watch, in which case a large illuminated switch allows the clock to be re-set and run.



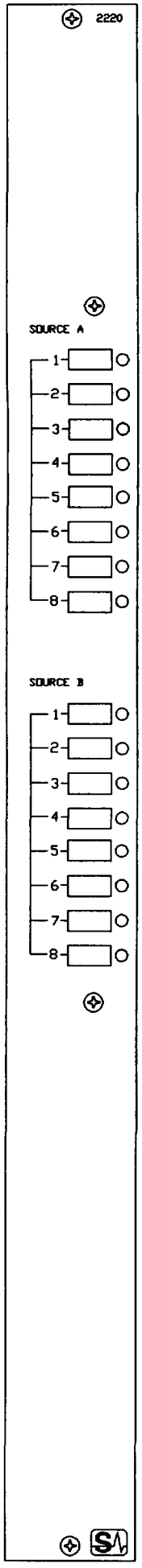
Stereo Programme & Studio Monitor Module

This module contains the main stereo programme summing amplifiers, fader and electronically balanced outputs as well as the master auxiliary one and two level controls each with its own after fade listen facility.

There is a built-in oscillator which is turned on by pressing the oscillator button and a front panel trim control to adjust the level. For safety reasons the oscillator may only be accessed via a rear panel connector and cannot be routed directly to any of the programme busses or outputs.
The master duck circuits has facility to either run the ducker on the auto mode or to manually duck any selected channels.In the auto position, any module designated to be a duck master (and this can be more than one module) will activate the ducker. The amount of attenuation is determined by the depth control and the attack and release times are adjustable with screwdriver presets.

Studio loudspeaker monitoring circuits can be fed from the main stereo programme output, either of the two stereo subgroups, the main mono output or either of the two auxiliaries. The studio loudspeaker output can be cut via an internal mute bus which can be controlled by any preselected mono source.

The Studio phones circuit with its independent level control is not affected by the mute busses and talkback can be routed to either studio loudspeaker or studio phones.In the case of a loudspeaker output, talkback will be prohibited whilst any designated studio microphone is active, the operator's mic will be the talkback source.



Stereo Source Select Module

The Stereo Source Select Module is designed to expand the source capability of the Standard Stereo Input. It can also be used to expand the monitoring capability of the console.

The module is entirely passive in design and consists of two banks of 8 interlocking switches labelled A and B. Each of these banks receives 8 balanced stereo source from one of the two 38 pin connectors situated on the rear connector panel provided with this module. These two connectors are linked to the module via 34 way IDC wireforms plugged into CNA (Bank A) and CNB (Bank B) on the module PCB.

The selected outputs from Bank A and Bank B leave the module on two parallel wired 10 way IDC connectors STE1 and STE2. These allow connection of the module to two Stereo Inputs positioned adjacent to the Source Select Module in the frame. Therefore, selecting A or B source on either Stereo Input will pick up the output of A or B Bank on the Source Select Module.

N.B. (Selecting A or B identically on each of the two Stereo Inputs will cause the same source to be the input for both modules.) A further output from the module, MNTR, allows hand wiring to two of the external stereo inputs into the control room monitor module.

Internal Jumper Settings

'*' Denotes standard configuration.

Mono Input Module - **Issue 1,2 & 3.**

J1*	Fitted for mic level operation - input A
J2	Fitted for line level operation - input A
J3	Fitted for line level operation - input A
J4*	Fitted for mic level operation - input A
J5*	Fitted for mic level operation - input B
J6	Fitted for line level operation - input B
J7	Fitted for line level operation - input B
J8*	Fitted for mic level operation - input B
J9	Fitted for +48V phantom power - input A
J10	Fitted for +48V phantom power - input B
J11	Fitted to designate module as master talkback sourse.
J12	Fitted to enable module to be an auto duck source.
J13	Fitted to make Aux pre switch pre - on.
J14*	Fitted to make Aux pre switch post - on.
J15	Fitted to make Aux 1 permanently pre-fade, post on.
J16*	Fitted to make Aux 1 switchable pre/post fader.
J17*	Fitted to make Aux 2 switchable pre/post fader.
J18	Fitted to make Aux 2 permanently post fader.
J19*	Fitted to make CUE mute channel VCA.
J20	Not Used
J21*	Fitted to latched command to timers.
J22	Fitted for momentary command to timers.
J23*	Fitted for latched stop command to ext. interface.
J24	Fitted to make module control machine timer.
J25*	Fitted to make module control mic timer.
J26*	Fitted to mute C/RM LS with I/P A selected.
J27	Fitted to mute STUDIO LS with I/P A selected.
J28	Fitted to mute C/RM LS with I/P B selected.
J29*	Fitted to mute STUDIO LS with I/P B selected.
J30*	Fitted for latched start command to ext. interface.
J31	Fitted for momentary start command to ext. interface.
J32	Fitted to disable limiter.

Mono Input Module - **Issue 4.**

J1,J33	Fitted for mic level operation - input A
J4,J35	Fitted for mic level operation - input A
J5,J37	Fitted for mic level operation - input B
J8,J39	Fitted for mic level operation - input B
J2,J34	Fitted for line level operation - input A
J3,J36	Fitted for line level operation - input A
J6,J38	Fitted for line level operation - input B
J7,J40	Fitted for line level operation - input B

Internal Jumper Settings

'*' Denotes Standard Configuration.

Stereo Input Module

Input A Left

J1	Fitted for -10dBV input level
J2	Fitted for 0dBu input level
J3	Fitted for -10dBV input level
J4	Fitted for 0dBu input level

Input B Left

J5	Fitted for -10dBV input level
J6	Fitted for 0dBu input level
J7	Fitted for -10dBV input level
J8	Fitted for 0dBu input level

J9	Fitted to feed Aux 1 from left channel
J10*	Fitted to feed Aux 1 from mono sum

Input A Right

J11	Fitted for -10dBV input level
J12	Fitted for 0dBu input level
J13	Fitted for -10dBV input level
J14	Fitted for 0dBu input level

Input B Right

J15	Fitted for -10dBV input level
J16	Fitted for 0dBu input level
J17	Fitted for -10dBV input level
J18	Fitted for 0dBu input level

J19	Fitted to feed Aux 2 from Right channel
J20*	Fitted to feed Aux 2 from mono sum
J21	Fitted for latched command to timers
J22*	Fitted for momentary command to timers
J23	Not Used
J24*	Fitted to make module control machines timer
J25	Fitted to make module control mic timer
J26	Fitted to mute C/RM LS when module 'ON'
J27	Fitted to mute STUDIO LS when module 'ON'
J28*	Fitted to make CUE mute channel VCA
J29	Not Used
J30	Fitted to latched start command to ext interface
J31*	Fitted for momentary start command to ext interface

Note: For +4dBu Operation, do not fit any of the level set jumpers

Internal Jumper Settings

'*' Denotes Standard Configuration

Telco Module

J1 - Fitted to enable module to be a duck source

Sub/FX Module

J7* - Remove for 0dBu output level
J8* - Remove for 0dBu output level

PGM/Studio Module

J1* - Remove for 0dBu output level
J2* - Remove for 0dBu output level

Interface Requirements for Peripheral Devices

The SAC200 uses a "bi-directional logic" system for interfacing to external equipment. This consists of open collector outputs for transmission of commands from the console with active LOW status. Remote control of the console from an external source is achieved by pulling the same lines down to logic ground. This can be directly from a switch (eg. remote operator 'ON' switch) or from an active low logic output, either latched or momentary.

The following facilities are available on the 9 Pin 'D'-Type connectors :

Mono Module

*** Momentary or latched START command from ON/OFF switch/auto.**
*** Momentary or latched STOP command from ON/OFF switch/auto.**
*** External control of ON/OFF switch.**
*** External control of CUE (this must be latching).**

Note:
Logic ground is switched between two lines by the A/B input select switch. This allows the input that is in use to be controlled by its own control system.

Stereo Module

*** Momentary or latched START command from ON/OFF/AUTO.**
*** External control of ON function (2 lines, for A or B input).**
*** (It may also be possible to access the OFF function).**
*** Momentary commands available for Cart Machines and Gramdecks.**

Note:
The momentary command pulse may be too short for some Gramdecks. In this case adjust the value of C204 in the stereo logic - refer to diagram ED 2733.

Master Logic

*** Control room MUTE input/output.**
*** Studio MUTE input/Output.**
*** EXT Talkback output enable - active low.**
*** REV Talkback input enable - active low.**

Pinouts for the 9 Way 'D'-type connectors are on the following page.

Logic Interface Connector Pinouts

Master Logic

9 Way D-Type

1	Logic GND
2	N/C
3	T/B Out enable
4	MAC. Timer
5	+7.5V
6	MIC. Timer
7	T/B In enable
8	Control Room Mute Access
9	Studio Mute Access

Mono Logic

9 Way D-Type

1	Logic GND (input B selected)
2	"ON" Access
3	+7.5V
4	"ON" Access
5	CUE Enable Access
6	Logic GND (input A selected)
7	"OFF" Access
8	+7.5V
9	"OFF" Access

Stereo Logic

9 Way D-Type

1	Logic GND
2	"ON" Access (input B selected)
3	+7.5V
4	"ON" Access (input A selected)
5	CUE Enable Access
6	Logic GND
7	N/C
8	+7.5V
9	N/C

Internal Module Connectors

Mono & CRM Module 2209

CN2 IDC 20 Way Connector

1	MonitorLeft
2	MonitorRight
3	+7.5V
4	Talkback OUT Enable
5	Talkback IN Enable
7	Machine Timer
8	Mic. Timer
9	Talkback +ve
10	Talkback-ve
11	GND
12	Talkback External
13	GND
14	GND
15	C/RM LeftGND
16	C/RM Left +ve
17	C/RM RightGND
18	C/RM Right +ve
19	PH CUE
20	CUE

CN4 26 Way IDC Connector

1	Ext 6 L -ve
2	Ext 6 L +ve
3	Ext 6 R -ve
4	Ext 6 R +ve
5	Ext 5 L -ve
6	Ext 5 L +ve
7	Ext 5 R -ve
8	Ext 5 R +ve
9	Ext 4 L -ve
10	Ext 4 L +ve
11	Ext 4 R -ve
12	Ext 4 R +ve
13	GND
14	GND
15	Ext 3 L -ve
16	Ext 3 L +ve
17	Ext 3 R -ve
18	Ext 3 R +ve
19	Ext 2 L -ve
20	Ext 2 L +ve
21	Ext 2 R -ve
22	Ext 2 R +ve
23	Ext 1 L -ve
24	Ext 1 L +ve
25	Ext 1 R -ve
26	Ext 1 R +ve

Mono & CRM Module 2209 & PGM & Studio Module 2210

CN3 20 Way IDC Connector

1	SUB 2 L -ve
2	SUB 2 L +ve
3	SUB 2 R -ve
4	SUB 2 R +ve
5	SUB 1 L -ve
6	SUB 1 L +ve
7	SUB 1 R -ve
8	SUB 1 R +ve
9	PGM L -ve
10	PGM L +ve
11	PGM R -ve
12	PGM R +ve
13	MONO -ve
14	MONO +ve
15	AIR L -ve
16	AIR L +ve
17	AIR R -ve
18	AIR R +ve
19	MIX Post Fade Left
20	MIX Post Fade Right

Pgm / Studio Pcb module 2210

CN2 26 Way IDC Connector

1	Studio LS R Gnd
2	Studio LS R +ve
3	Studio LS L Gnd
4	Studio LS L +ve
5	Studio PH R Gnd
6	Studio PH R +ve
7	Studio PH L Gnd
8	Studio PH L +ve
9	GND
10	GND
11	Mix Right Insert Send
12	Mix Right Insert Return
13	Mix Left Insert Send
14	Mix Left Insert Return
15	TELCO Feed to MIX Left
16	TELCO Feed to MIX Right
17	Aux 2-ve
18	Aux 2+ve
19	Aux 1-ve
20	Aux 1+ve
21	GND
22	GND
23	Studio Mute Access (to 9Way D-Type)
24	N/C
25	Osc.Out+ve
26	Osc. Out-ve

Stereo Source Select Module 2220

CNA & CNB 34 Way IDC Connector

IDC Pin #	Edac	Input
1	LL	8 R+ve
2	RR	8 R-ve
3	MM	8 L+ve
4	SS	8 L-ve
5	KK	7 R+ve
6	PP	7 R-ve
7	NN	7 L+ve
8	TT	7 L-ve
9	JJ	6 R+ve
10	DD	6 R-ve
11	CC	6 L+ve
12	HH	6 L-ve
13	Z	5 R+ve
14	X	5 R-ve
15	Y	5 L+ve
16	BB	5 L-ve
17		GND
18		GND
19	W	4 R-ve
20	T	4 R+ve
21	R	4 L-ve
22	V	4 L+ve
23	U	3 R-ve
24	P	3 R+ve
25	E	3 L-ve
26	L	3 L+ve
27	K	2 R-ve
28	D	2 R+ve
29	F	2 L-ve
30	A	2 L+ve
31	J	1 R-ve
32	C	1 R+ve
33	H	1 L-ve
34	B	1 L+ve

Ste1 10 Way IDC Connector
Ste2 10 Way IDC Connector
Mntr 10 Way IDC Connector

1	B	Right-ve
2	B	Right+ve
3	B	Left-ve
4	B	Left+ve
5		GND
6		GND
7	A	Right-ve
8	A	Right+ve
9	A	Left-ve
10	A	Left+ve

SUB/FX Module 2208

CON 2 16 Way IDC Connector

1	TELCO feed to SUB Left
2	TELCO feed to SUB Right
3	SUB Left Insert Send
4	SUB Left Insert Return
5	SUB Left Out -ve
6	SUB Left Out +ve
7	GND
8	GND
9	SUB Right Insert Send
10	SUB Right Insert Return
11	SUB Right Out -ve
12	SUB Right Out +ve
13	GND
14	GND
15	FX Return Input -ve
16	FX Return Input +ve

Telco Input Module 2206

CN2 10 Way IDC Connector

1	MIX Left
2	MIX Right
3	GND
4	GND
5	SUB 2 Left
6	SUB 2 Right
7	GND
8	GND
9	SUB 1 Left
10	SUB 1 Right

CON 3 10 Way IDC Connector

1	Output B +ve
2	Output B -ve
3	Input B +ve
4	Input B -ve
5	GND
6	GND
7	Output A +ve
8	Output A -ve
9	Input A +ve
10	Input A -ve

Stereo Input Module 2204

CN2 10 Way IDC Connector

1	B	Right -ve
2	B	Right +ve
3	B	Left -ve
4	B	Left +ve
5		GND
6		GND
7	A	Right -ve
8	A	Right +ve
9	A	Left -ve
10	A	Left +ve

Mono Input Module 2202

CN2 10 Way IDC Connector

1	Insert Return
2	Insert Send
3	GND
4	GND
5	Input B -ve
6	Input B +ve
7	GND
8	GND
9	Input A -ve
10	Input A +ve

CN3 10 Way IDC Connector

1	Logic GND B Selected
2	Logic GND A Selected
3	ON Access
4	OFF Access
5	+7.5V
6	+7.5V
7	ON Access
8	OFF Access
9	CUE Enable Access
10	

Motherloom

34 Way Buss Connector

1	Studio Cut
2	Control Room Cut
3	Mic. Timer
4	Machine Timer
5	+7.5V
6	-7.5V
7	Gnd
8	Gnd
9	+24V
10	+24V
11	Talkback (link)
12	+48 V
13	Duck IN
14	Duck OUT
15	Cue Enable
16	Cue Audio
17	Gnd
18	Gnd
19	Sub 2 Summing Gnd
20	Sub 2 Sum Right
21	Sub 2 Sum Left
22	Sub 1 Summing Gnd
23	Sub 1 Sum Right
24	Sub 1 Sum Left
25	Mix Bus Summing Gnd
26	Mix Bus Sum Left
27	Mix Bus Sum Right
28	Aux Summing Gnd
29	Aux 2 Sum
30	Aux 1 Sum
31	-17V
32	-17V
33	+17V
34	+17V

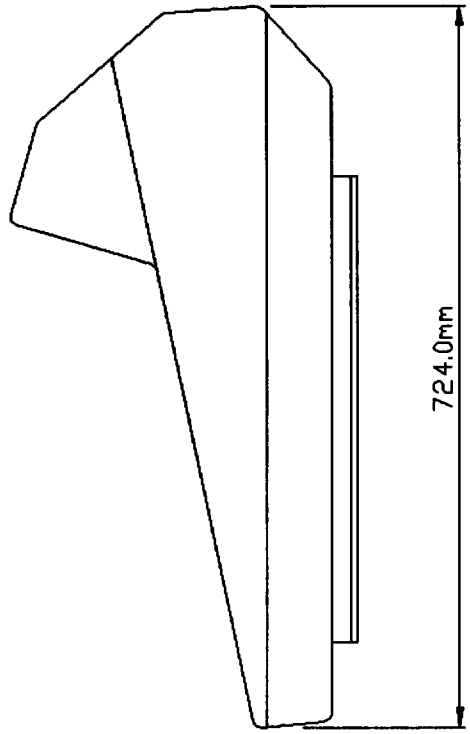
External Interface Connectors

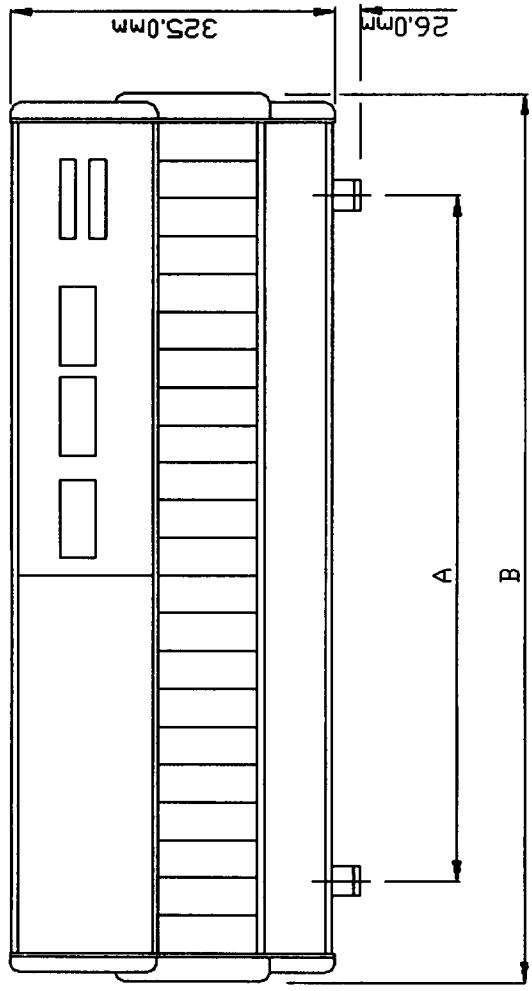
Stereo Source Select (2220)

38 Way Edac pin configurations

Pin	Input	Side
A	2	L +ve
B	1	L +ve
C	1	R +ve
D	2	R +ve
E	3	L -ve
F	2	L -ve
H	1	L -ve
J	1	R -ve
K	2	R -ve
L	3	L +ve
M		GND
N		GND
P	3	R +ve
R	4	L -ve
S		GND
T	4	R +ve
U	3	R -ve
V	4	L +ve
W	4	R -ve
X	5	R -ve
Y	5	L +ve
Z	5	R +ve
AA		GND
BB	5	L -ve
CC	6	L +ve
DD	6	R -ve
EE		GND
FF		GND
HH	6	L -ve
JJ	6	R +ve
KK	7	R +ve
LL	8	R +ve
MM	8	L +ve
NN	7	L +ve
PP	7	R -ve
RR	8	R -ve
SS	8	L -ve
TT	7	L -ve

SAC200 Overall Dimensions





FRAME	16 CH.	24 CH
DIM A	692.5mm	997.5mm
DIM B	897.5mm	1202mm

Access, 2
Activate, 8
Active, 2, 8
Adjustable, 8
Adjustment, 4
Adjustments, 4
Air, 5
Alternative, 4
Amount, 8
Amplifier, 6
Amplifiers, 8
Attack, 8
Attenuated, 3, 4
Attenuation, 8
Audio, 3, 4, 6, 7
Audio-follow-video, 3
Auto, 3, 4, 5, 8
Automatic, 4
Automatically, 3, 7
Aux, 3, 4
Auxiliary, 3, 4, 5, 6, 8

Balance, 3
Balanced, 2, 8, 9
Band, 3, 4
Bank, 9
Bi-directional, 2, 4, 7
Boost, 3, 4
Broadcast, 2
Broadcasting, 6
Busses, 3, 4, 5, 6, 7, 8
Button, 3, 4, 6, 7, 8

Cables, 2
Callers, 5
Cart, 2
Cartridge, 3
Central, 3
Centre, 4
Channel, 2, 7
Channels, 2, 8
Circuit, 3, 4, 8
Circuits, 4, 5, 7, 8
Clean, 6
Clock, 7
Configuring, 4
Connection, 9
Connector, 1, 3, 8, 9
Connectors, 1, 2, 9
Console, 2, 3, 5, 7, 9
Console's, 7
CONTENTS, 1
Control, 1, 2, 3, 4, 5, 7, 8, 9
Controlled, 3, 4, 5, 8
Controller, 3
Controlling, 7
Controls, 3, 6, 7, 8
Coupled, 2
Cue, 2, 3, 4, 5, 7
Customised, 2
Cut, 3, 4, 7, 8

D'-type, 2
DB's, 3, 4
DC, 7
Degradation, 2
Depth, 8
Derived, 5
Designed, 2, 9
Destinations, 7
Devices, 1, 2, 3, 4
Dimmed, 7
Display, 2
DJ's, 7
DUCK, 3, 4, 5, 8
Ducker, 4, 5, 8

EDAC, 1
Effects, 1, 6
Electronically, 2, 8
Engineer's, 2
Equaliser, 3, 4
Expand, 9
EXT, 7
External, 1, 4, 5, 7, 9

Facility, 4, 5, 6, 8
Fader, 2, 3, 4, 5, 6, 8
Feed, 4
Feeds, 3, 6
FET's, 3
Filter, 3, 4
Frame, 2, 9
Frequencies, 2
Frequency, 3, 4
FX, 1

Gain, 3, 4, 7
Groups, 1, 6
Guest, 4

Headphone, 7
Hybrid, 5
Hz, 3, 4

IDC, 9
Illuminated, 3, 4, 7
Input, 1, 2, 3, 4, 5, 6, 7, 9
Insert, 2
Installation, 2
Integrated, 2
Interface, 1, 2, 3, 5
Interlocking, 9
Internal, 1, 3, 4, 7, 8
Introduction, 1, 2

Jack, 2
Jumper, 1, 3, 4

KHz, 3, 4

Level, 2, 3, 4, 5, 7, 8
Limiter, 4
Line, 2, 3, 4, 7
Linear, 4
Link, 5
Linked, 9
Listen, 7, 8
Logic, 1, 2, 4
Loudspeaker, 7, 8
Low, 3, 4

Machine, 2, 3
Main, 2, 3, 4, 5, 6, 7, 8
Manual, 3
Manually, 8
Master, 4, 5, 8
Meters, 2, 7
Mic, 2, 4, 5, 7, 8
Minimal, 2
Minus, 5
Mix, 5
MNTR, 9
Mode, 2, 7, 8
Module, 1, 2, 3, 4, 5, 6, 7, 8, 9
Monitor, 1, 2, 4, 7, 8, 9
Monitoring, 3, 4, 5, 6, 7, 8, 9
Mono, 1, 2, 3, 4, 5, 6, 7, 8
Motherloom, 1
Mute, 2, 3, 4, 7, 8

Normal, 2, 4, 7

Off-air, 7
On-air, 2
Operates, 3, 4
Operator's, 4, 5, 7, 8
Option, 2, 3, 4, 5
Optional, 4, 6
Options, 2
Oscillator, 8
Output, 2, 4, 6, 7, 8, 9
Outputs, 2, 6, 7, 8, 9

Pair, 6, 7
Pan, 4, 5, 6
Panel, 3, 4, 5, 8, 9
Parallel, 9
Pass, 3, 4
Passive, 9
Path, 3, 4
PCB, 3, 9
Peaking, 4
Peripheral, 1, 3, 4
PFL, 6
PGM, 1
Phantom, 4
Phase, 4
Phaseshift, 2
Phones, 8
Pinouts, 1
Plugged, 9
Port, 3
Post, 3, 4, 5, 6
Power, 4
PPM's, 2
Pre, 3, 4, 5, 6
Prefade, 2, 3, 4, 5, 7
Preselected, 8
Preset, 4, 7
Presets, 8
Production, 3, 4, 6
Programme, 1, 2, 3, 4, 5, 6, 7, 8
Programmed, 3, 4
Programming, 3

Radio, 2, 3
Re-set, 7
Receiver, 7
Receives, 9
Recording, 6
Rejection, 2
Release, 8
Remote, 3, 4
Resets, 2
Response, 2
Restarts, 2
Return, 1, 6, 7
Reverse, 7
RIAA, 3
Routed, 3, 4, 6, 7, 8
Routing, 4, 5

SAC, 2, 7
Screwdriver, 8
Select, 1, 9
Selected, 3, 4, 8, 9
Selection, 7
Sends, 3, 4, 5, 6
Servicing, 2
Settings, 1
Setup, 3, 4
Shelving, 3, 4
Signal, 2, 3, 4, 5, 6, 7
Source, 1, 2, 3, 4, 7, 8, 9
Spkr, 7
Split, 7
Start, 3, 4
State, 2
Station, 3
Stations, 2
STE, 9
Stereo, 1, 2, 3, 4, 5, 6, 7, 8, 9
Stop, 7
Studio, 1, 4, 8
SUB, 1
Subgroups, 3, 4, 5, 6, 8
Sum, 3
Summing, 6, 8
Swept, 4
Switched, 3, 4, 5, 6, 7
Switches, 3, 4, 9
System, 7

Talkback, 4, 5, 7, 8
Tape, 2
TB, 7
Telco, 1, 5
Telephone, 5
Timers, 2, 3, 4, 7
Track, 2
Transformers, 2, 3
Transient, 2
Trim, 3, 4, 7, 8
Turntables, 2

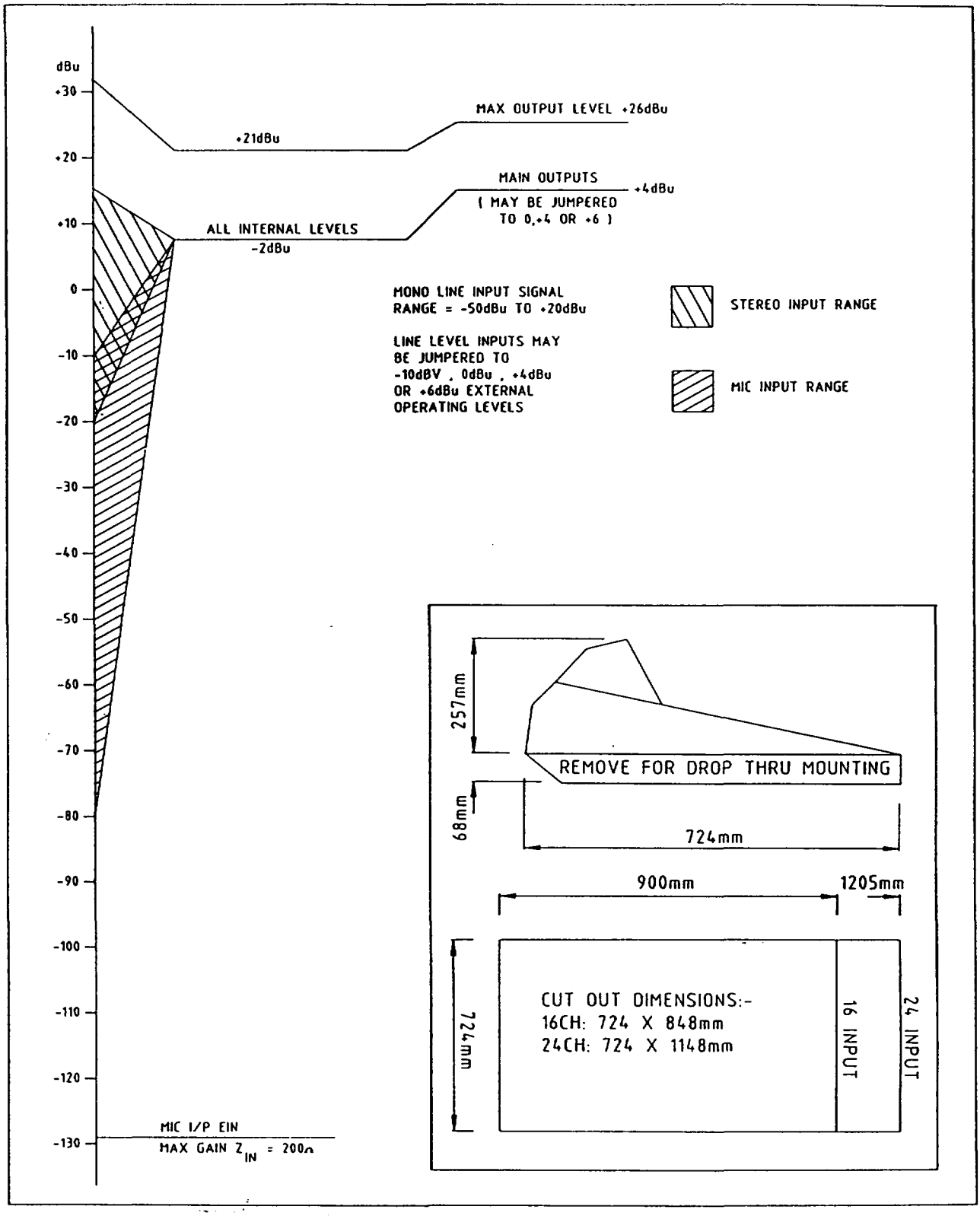
Universal, 2
User, 4

Variations, 3
VCA, 3, 4
Voltage, 2
VU, 2

Watch, 7
Wired, 9
Wireforms, 9

XLR, 2, 3

LEVEL DIAGRAM & CONSOLE PROFILE

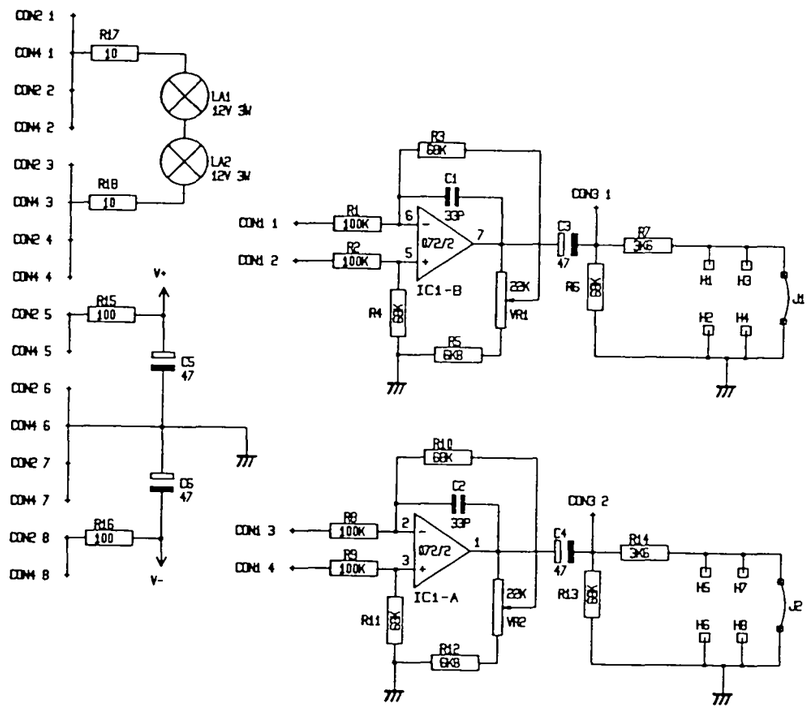


SPECIFICATIONS

DISTORTION:		
MEASURED AT UNITY GAIN WITH +10dBu AT OUTPUT		
LINE INPUT TO ANY OUTPUT:	1kHz:<0.02%	10kHz:<0.03%
CROSSTALK:		
	1kHz	10kHz
UNRELATED CHANNELS	>−100dB	−90dB
STEREO L-R	−70dB	−68dB
CHANNEL OFF	>−100dB	−96dB
ROUTING CROSSTALK	>−100dB	−98dB
NOISE:		
MEASURED WITH 20Hz – 20kHz BANDWIDTH		
MIC INPUT EIN, 200Ω SOURCE		−128dBu
GROUP OUTPUT NOISE (1 CHANNEL ROUTED)		−80dBu
TYPICAL MIX OUTPUT NOISE (10 CHANNELS ROUTED)		−80dBu
FREQUENCY RESPONSE:		
MEASURED AT +10dBu, EQUALISER BYPASSED.		REF 1kHz
20Hz – 20kHz: +/– 0.5dB		
GAIN:		
MAX GAIN FROM MIC INPUT TO GROUP OUTPUT		80dB
MAX GAIN FROM LINE INPUT TO GROUP OUTPUT		24dB
OPERATING LEVELS:		
EXTERNAL INTERFACES		−10, 0, +4, +6dBu
INTERNAL LEVEL		−2dBu
INPUT AND OUTPUT IMPEDANCES:		
MIC: 1K8Ω	LINE LEVEL INPUTS: >10KΩ	ANY OUTPUT:<75Ω
MAX OUTPUT LEVELS:		
UNBALANCED OUTPUTS		+21dBu INTO 5KΩ
BALANCED OUTPUTS		+26dBu INTO 600Ω
INPUT COMMON MODE REJECTION:		
MIC INPUT, 60dB GAIN, 20Hz – 20kHz:		−65dB
DIMENSIONS:		
16 CHANNEL FRAME:		L: 900 D: 724 H: 325mm
24 CHANNEL FRAME:		L: 1205 D: 724 H: 325mm
FOR CUT OUT DIMENSIONS, SEE PAGE 10		

DRG No. ED2285

Init	Issue 1
	25 · 6 · 85



Soundcraft Electronics Limited own the copyright of this drawing which is not to be copied, reproduced or disclosed, in part or whole, to a third party without written permission.

NOTES.

HOLE INDEX.

TOLERANCE.
All imperial dimensions ±0·010
All metric dimensions ±0·25mm
All angles ±0·50°
Unless otherwise stated.

THIRD ANGLE PROJECTION

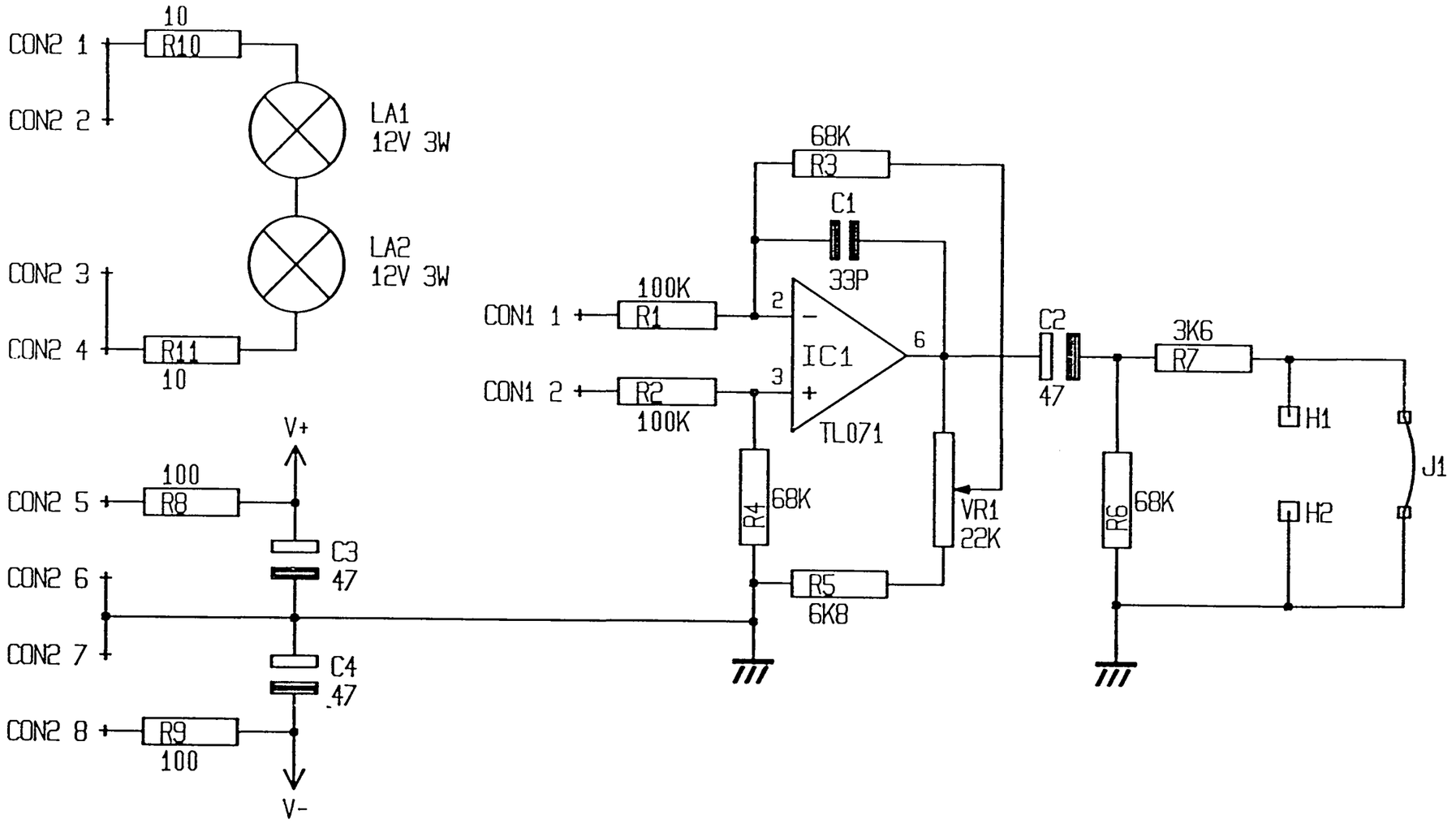
MATL.	DRG. GHB	
FINISH.	TRCD.	
SCALE.	CHKD.	

SOUNDCRAFT ELECTRONICS LTD.
5-8 GREAT SUTTON STREET
LONDON, EC1V. 0BX.
TELEPHONE. 01-251-3631/2/3
TELEGRAMS. SOUNDCRAFT LDN, EC1
TELEX. UK No. 21198. USA No. 01-2203

TITLE. SAC 2000
STEREO METER PCB
SC1484

DRG No. ED2285

ISSUE P1
1-11-85



TOLERANCES

HOLE SIZES AFTER PAINTING	GENERAL TOLERANCE
0-3mm +0·10 −0·00	Delete where not applicable.
OVER 3-6mm +0·12 −0·00	± 0·50mm (0·020")
OVER 6-10mm +0·15 −0·00	± 0·25mm (0·010")
OVER 10-18mm +0·18 −0·00	± 0·12mm (0·005")
OVER 18-25mm +0·21 −0·00	HOLE CENTRES ± 0·004"
OVER 25mm +0·25 −0·00	ALL ANGLES ± 0·50'
	Unless otherwise stated.

HOLE INDEX

MATL | DRN
FINISH | TRCD
SCALE | CHKD

THIRD ANGLE PROJECTION

THIS DRAWING TO COMPLY TO BS308.

SOUNDCRAFT ELECTRONICS LTD
UNIT 2,
BOREHAMWOOD INDUSTRIAL PARK,
ROWLEY LANE,
BOREHAMWOOD,
HERTFORDSHIRE WD6 5PZ.
TELEPHONE: 01-207-5050
FACSIMILE No. 2070194

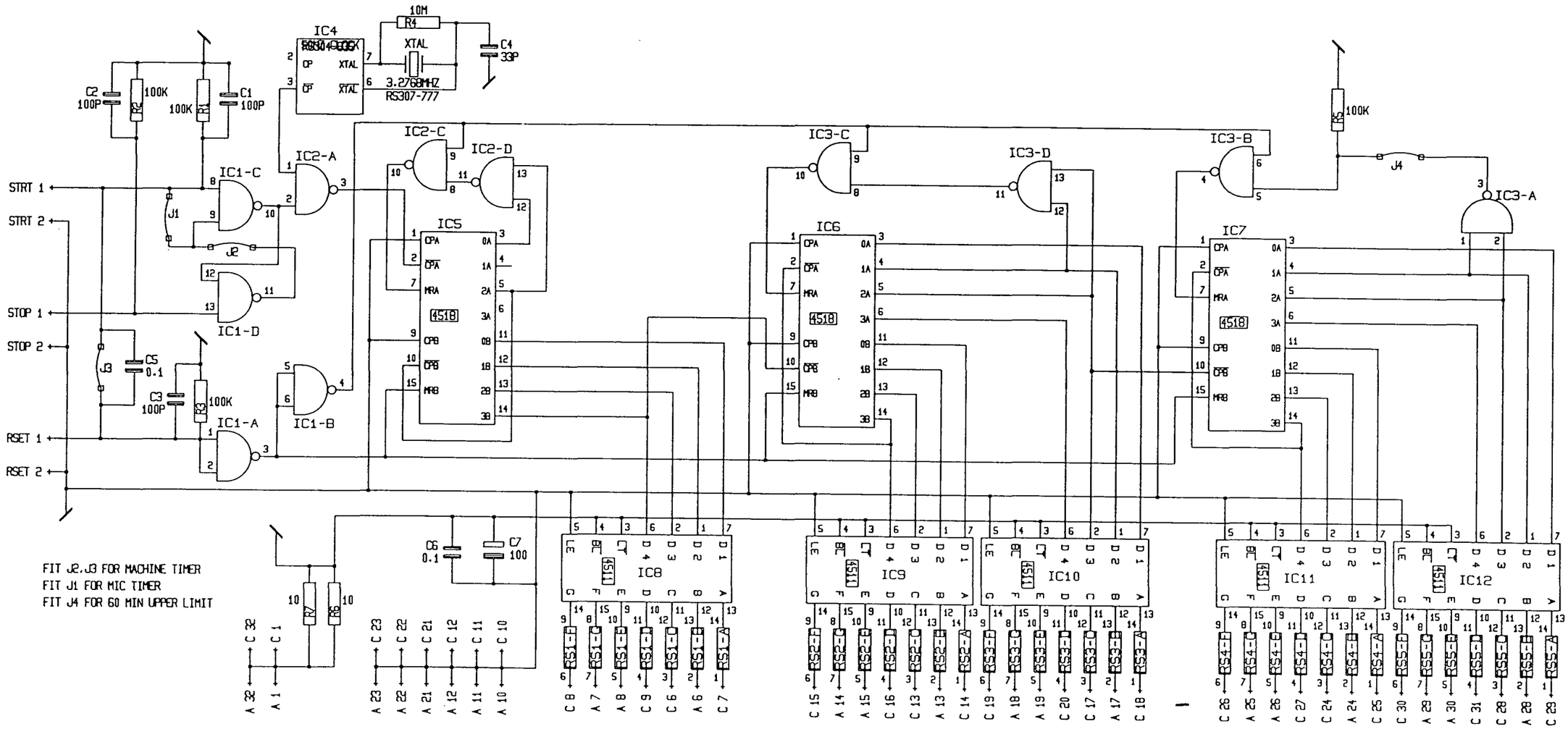
TITLE
SAC 2000
MONO METER
(SC2505 ISS.P1)

DRG.No. ED2505

UDO 31149

DRG No. ED2533

Init	
	Issue P1 10-12-85
	Issue P2 28-7-86
ML	Issue P3 TITLE CHANGED 21-6-90



FIT J2, J3 FOR MACHINE TIMER
FIT J1 FOR MIC TIMER
FIT J4 FOR 60 MIN UPPER LIMIT

Soundcraft Electronics Limited own the copyright of this drawing which is not to be copied, reproduced or disclosed, in part or whole, to a third party without written permission.

NOTES

HOLE INDEX

TOLERANCES

HOLE SIZES AFTER PAINTING

0-3mm	+0.10 -0.00
OVER 3-6mm	+0.12 -0.00
OVER 6-10mm	+0.15 -0.00
OVER 10-18mm	+0.18 -0.00
OVER 18-25mm	+0.21 -0.00
OVER 25mm	+0.25 -0.00

Unless otherwise stated.

GENERAL TOLERANCES

Delete where not applicable.

± 0.50mm (0.020")
± 0.25mm (0.010")
± 0.12mm (0.005")
All angles ± 0.50°
Hole centres ± 0.004"

MATL	DRN
FINISH	TRCD
SCALE	CHKD

THIRD ANGLE PROJECTION
THIS DRAWING TO COMPLY TO BS308.

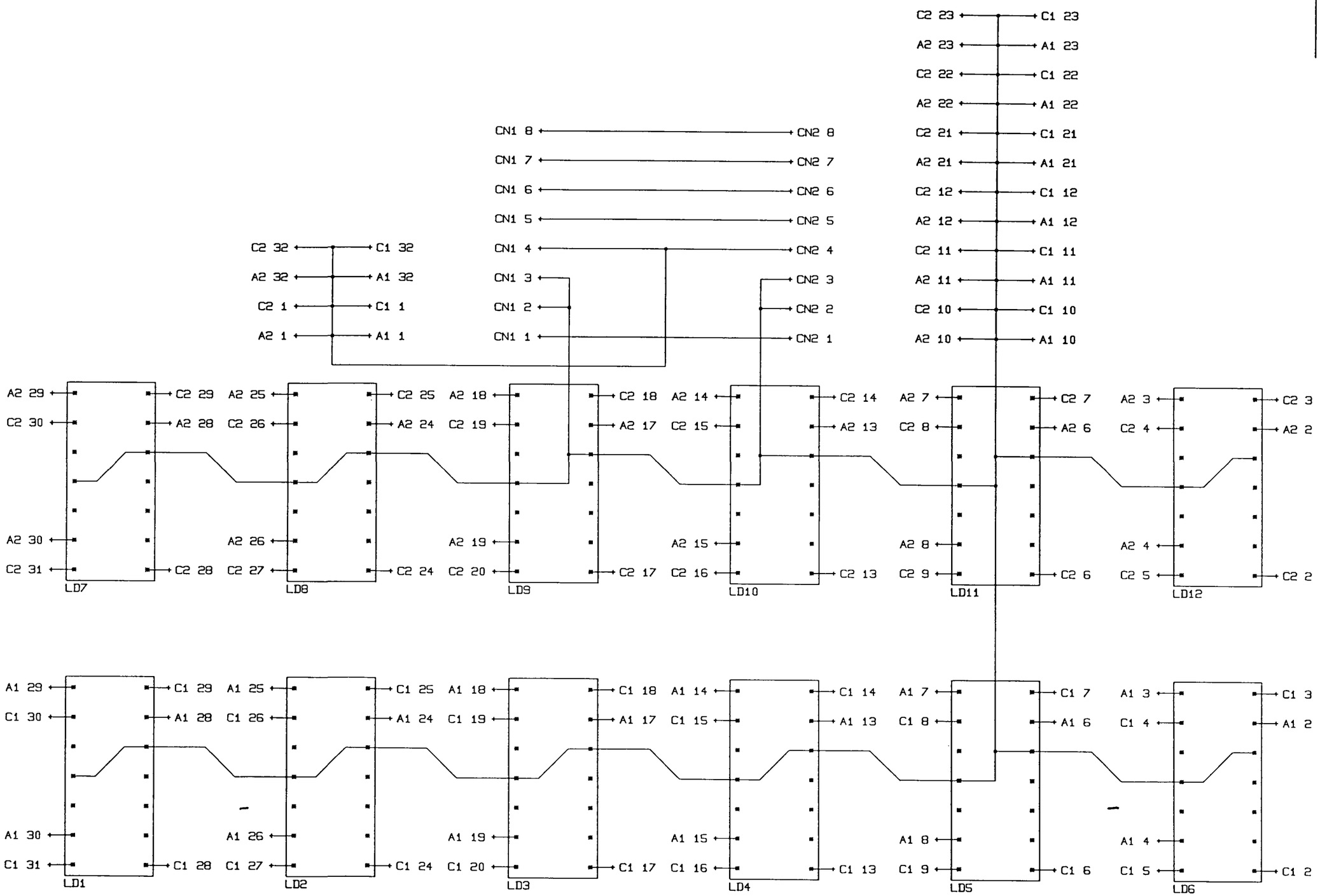
SOUNDCRAFT ELECTRONICS LTD
UNIT 2,
BOREHAMWOOD INDUSTRIAL PARK,
ROWLEY LANE,
BOREHAMWOOD,
HERTFORDSHIRE WD6 5PZ.
TELEPHONE: 01-207-5050
FACSIMILE No. 2070194

TITLE.
SAC2000 / SAC200
TIMER

DRG No. ED2533

DRG No. ED2534

Init	
	Issue 1 12/12/88
ML	Issue 2 TITLE CHANGED 21-6-90



Soundcraft Electronics Limited own the copyright of this drawing which is not to be copied, reproduced or disclosed, in part or whole, to a third party without written permission.

NOTES

HOLE INDEX

TOLERANCES

HOLE SIZES AFTER PAINTING

0-3mm	+0·10 −0·00
OVER 3-6mm	+0·12 −0·00
OVER 6-10mm	+0·15 −0·00
OVER 10-18mm	+0·18 −0·00
OVER 18-25mm	+0·21 −0·00
OVER 25mm	+0·25 −0·00

Unless otherwise stated.

GENERAL TOLERANCES

Delete where not applicable.

± 0·50mm (0·020")
± 0·25mm (0·010")
± 0·12mm (0·005")
All angles ± 0·50'
Hole centres ± 0·004"

MATL	DRN
FINISH	TRCD
SCALE	CHKD

THIRD ANGLE PROJECTION

THIS DRAWING TO COMPLY TO BS308.

SOUNDCRAFT ELECTRONICS LTD
UNIT 2,
BOREHAMWOOD INDUSTRIAL PARK,
ROWLEY LANE,
BOREHAMWOOD,
HERTFORDSHIRE WD6 5PZ.
TELEPHONE: 01-207-5050
FACSIMILE No. 2070194

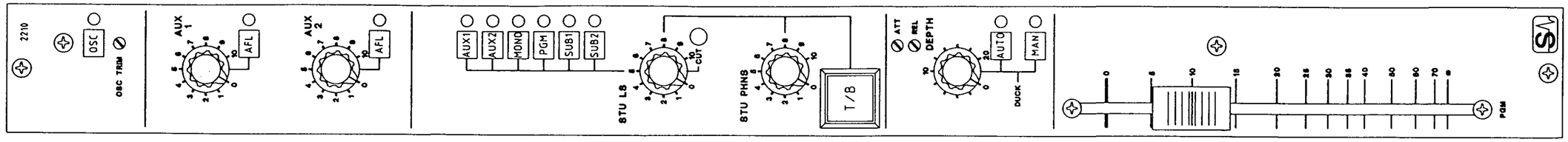
TITLE.
SAC 2000 / SAC 200
TIMER DISPLAY

DRG No. ED 2534

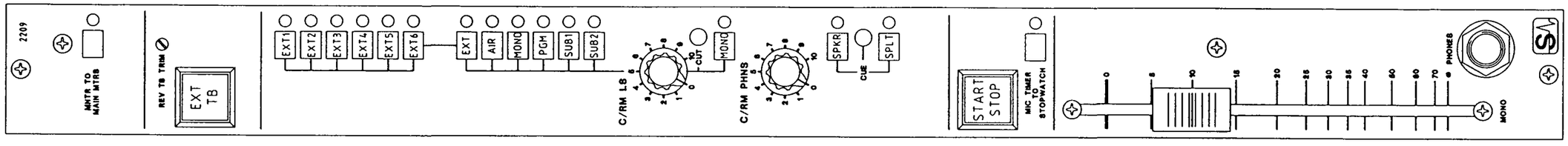
DRG No MI2688

Init'l	
	ISSUE P1 23/9/88
C.S	ISSUE P2 PUSH CLIP REMOVED FROM MALE XLRS. 4/10/88
C.S	ISSUE 1 THREE MALE XLRS ADDED TO OUTPUT REAR CON PANEL 8/12/88
KJB	ISSUE 2 SCREEN CHANGE DUCK AND AUTO ADDED REAR CON PANELS & PROFILE DWG ADDED TO SHEET 2 OF 2 22/05/89

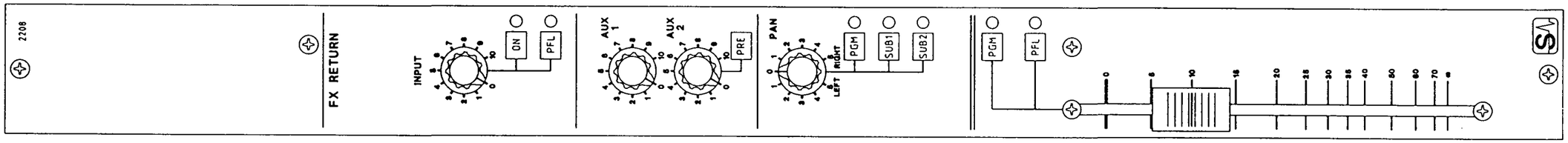
PGM & STUDIO MODULE



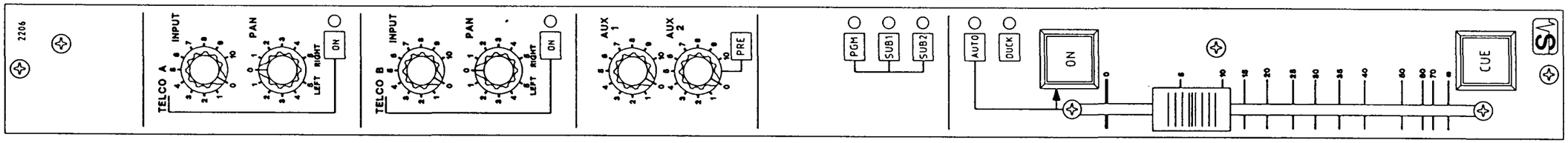
MONO & C/RM MODULE



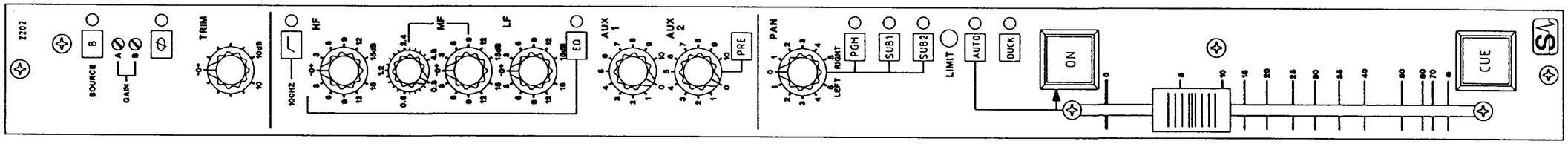
SUB FX MODULE



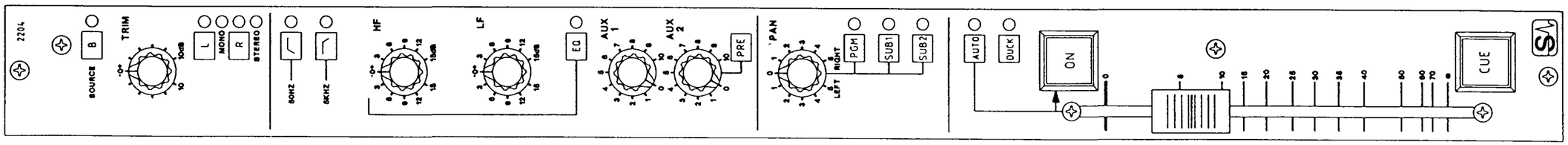
TELCO INPUT MODULE



MONO INPUT MODULE



STEREO INPUT MODULE



Soundcraft Electronics Limited own the copyright of this drawing which is not to be copied, reproduced or disclosed, in part or whole to a third party without written permission

NOTES

HOLE INDEX

TOLERANCES

HOLE SIZES AFTER PAINTING

0-3mm	+0.10 -0.00
OVER 3-6mm	+0.12 -0.00
OVER 6-10mm	+0.15 -0.00
OVER 10-18mm	+0.18 -0.00
OVER 18-25mm	+0.21 -0.00
OVER 25mm	+0.25 -0.00

Unless otherwise stated

GENERAL TOLERANCES

Delete where not applicable

±0.50mm (±0.020")

±0.25mm (±0.010")

±0.12mm (±0.005")

HOLE CENTRES ±0.006"

ALL ANGLES ±0.50°

MATL	DRN COLIN
FINISH	TRCD
SCALE 11	CHKD

THIRD ANGLE PROJECTION

THIS DRAWING TO COMPLY TO BS308

SOUNDCRAFT ELECTRONICS LTD
UNIT 2,
BOREHAMWOOD INDUSTRIAL PARK,
ROWLEY LANE,
BOREHAMWOOD,
HERTFORDSHIRE WD6 5PZ
TELEPHONE: 01-207-5050
FACSIMILE No 2070194

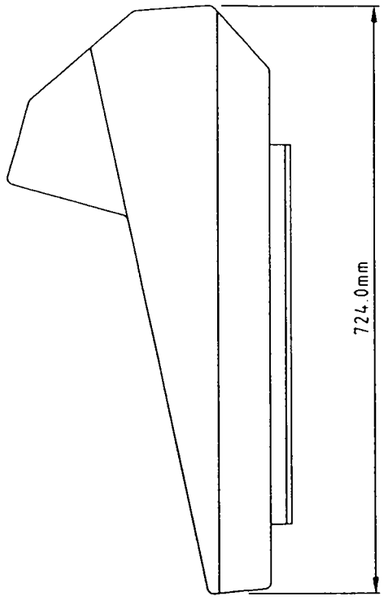
TITLE

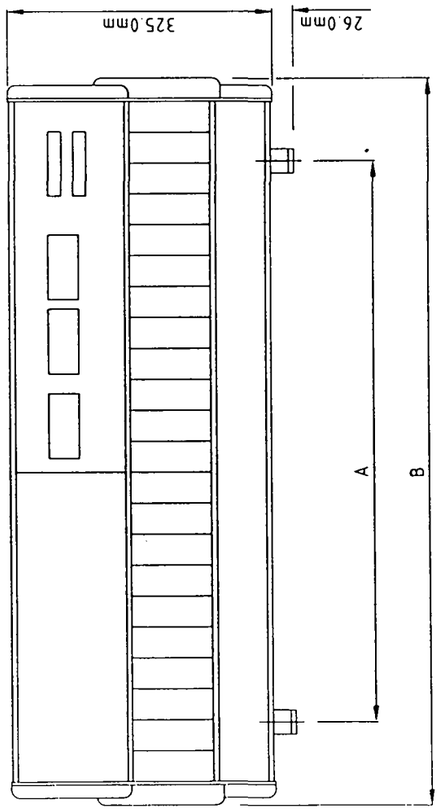
SAC200
MODULE LAYOUT

DRG No MI2688 (1 OF 2)

DRG No M12688

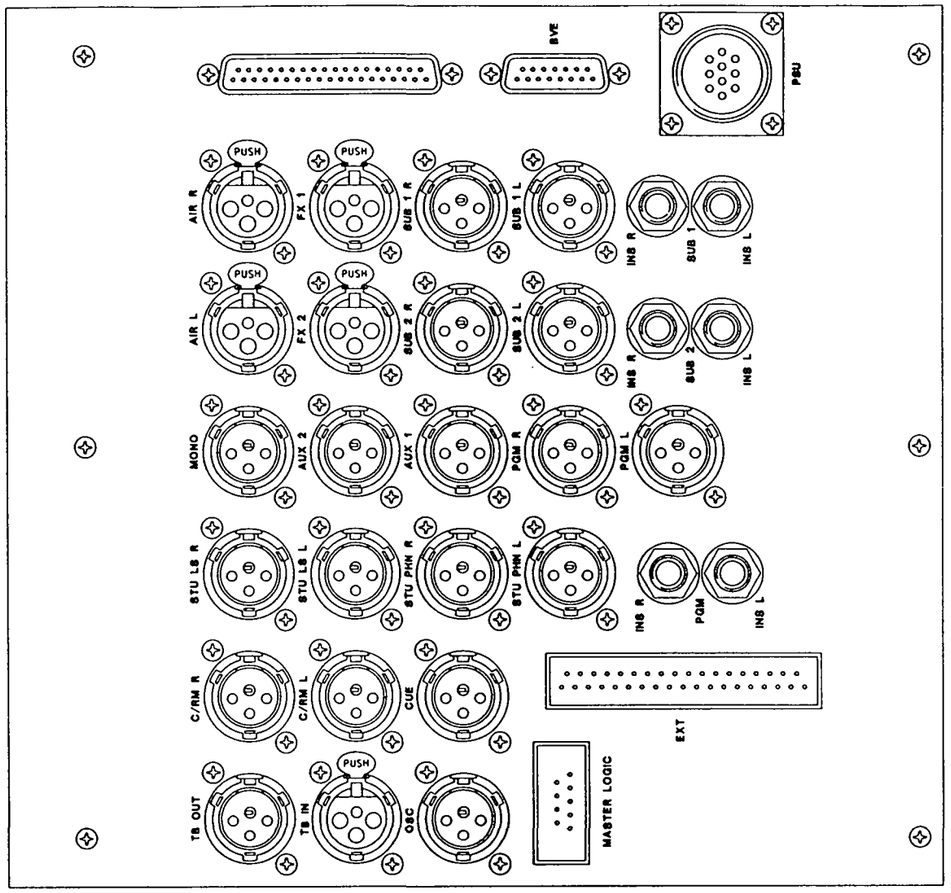
Init'l	
	ISSUE P1 23/9/88
	ISSUE 2 22/05/89



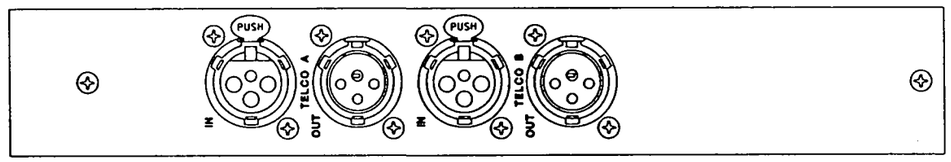


	16 CH.	24 CH
DIM A	692.5mm	997.5mm
DIM B	897.5mm	1202mm

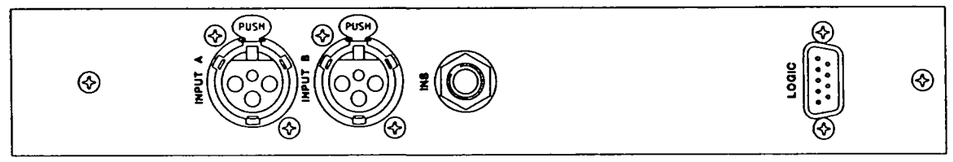
O/P REAR CONN



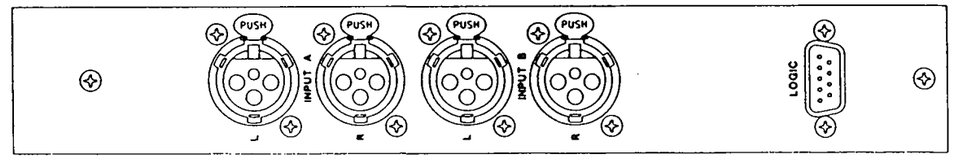
TELCO REAR CONN



MONO REAR CONN



STEREO REAR CONN



Soundcraft Electronics Limited own the copyright of this drawing which is not to be copied, reproduced or disclosed, in part or whole to a third party without written permission

NOTES

HOLE INDEX

TOLERANCES

HOLE SIZES AFTER PAINTING

0-3mm	+0.10 -0.00
OVER 3-6mm	+0.13 -0.00
OVER 6-10mm	+0.15 -0.00
OVER 10-18mm	+0.18 -0.00
OVER 18-25mm	+0.21 -0.00
OVER 25mm	+0.25 -0.00

Unless otherwise stated

GENERAL TOLERANCES

Delete where not applicable

±0.50mm (0.020")

±0.25mm (0.010")

±0.12mm (0.005")

HOLE CENTRES ±0.004"

ALL ANGLES ±0.50°

MAT'L	DRN COLIN
FINISH	TRCD
SCALE 1:1	CHKD

THIRD ANGLE PROJECTION

THIS DRAWING TO COMPLY TO BS308

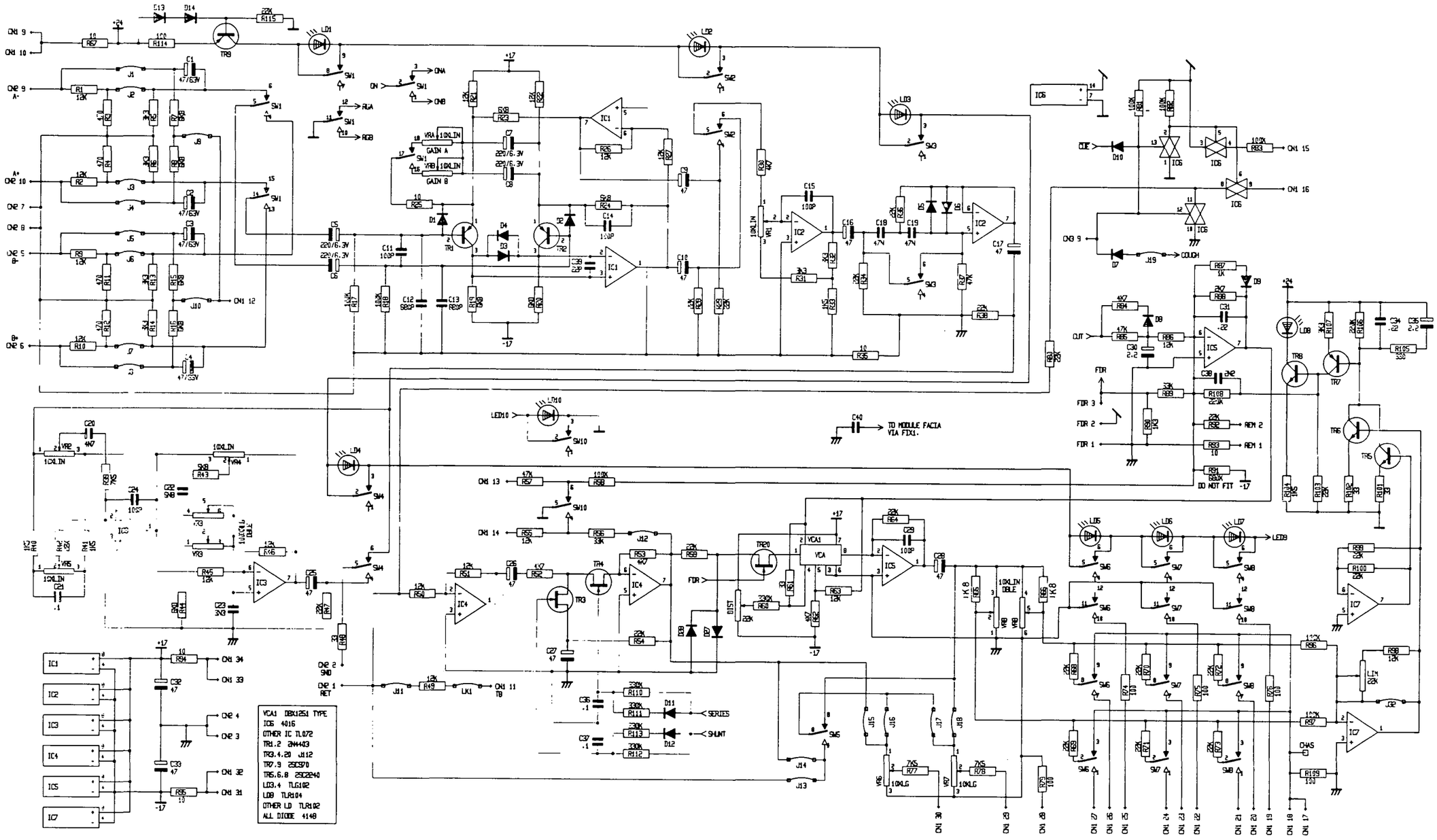
SOUNDCRAFT ELECTRONICS LTD
UNIT 2,
BOREHAMWOOD INDUSTRIAL PARK,
ROWLEY LANE,
BOREHAMWOOD,
HERTFORDSHIRE WD6 5PZ
TELEPHONE 01-207-5050
FACSIMILE No 2070194

TITLE
SAC200
MODULE LAYOUT

DRG No M12688 (2 OF 2)

DRG No ED2717

Init	Issue P3 8-3-88
	ISSUE P2 R65, R66 1K8 WAS 3K3 16-6-88



Soundcraft Electronics Limited own the copyright of this drawing which is not to be copied, reproduced or disclosed, in part or whole to a third party without written permission.

NOTES

HOLE INDEX

TOLERANCES

HOLE SIZES AFTER PAINTING

0-3mm	+0.10 0.00
OVER 3-5mm	+0.12 0.00
OVER 5-10mm	+0.15 0.00
OVER 10-18mm	+0.18 0.00
OVER 18-25mm	+0.21 0.00
OVER 25mm	+0.25 0.00

Unless otherwise stated.

GENERAL TOLERANCES

Delete where not applicable

0.50 mm (0.020)
0.25 mm (0.010)
0.12 mm (0.005)
All angles 0.50
Hole Centres ± 0.004

MATL	DRN
FINISH	TRCD
SCALE	CHKD

THIRD ANGLE PROJECTION

THIS DRAWING TO COMPLY TO BS308.

SOUNDCRAFT ELECTRONICS LTD
UNIT 2.
BOREHAMWOOD INDUSTRIAL PARK.
ROWLEY LANE.
BOREHAMWOOD.
HERTFORDSHIRE WD6 5PZ.
TELEPHONE: 01-207-5050
FACSIMILE No. 2070194

TITLE: SAC 200 MONO AUDIO FOR ISS P4 PCB

DRG. No. ED 2717 SHT 1

ISSUE P3
8-3-88

ISSUE P4
R209 150 WAS 330
R220 82K WAS 100K
16-6-88

ALL IC 4011
TR15,16,17,19 2SA970
OTHER TR 2SC2240
LD9 TLR102
ALL DIODES 4148

CN3 7 ON
CN3 3
CN3 8 OFF
CN3 4
D21
D22
D23
D24
D25
100K R201
100K R202
100K R203
100K R204
R205 100K
C201 0.1
C202 0.1
47 C207
ONSW 4
ONSW 3
ONSW 2
ONSW 1
IC11
R208 12K
R209 150
C204 .22
J21
J22
22K R210
TR12
CN1 4
J24
TIMERS
J25
CN1 3
J30
J31
22K R213
TR14
J23
C205 .22
22K R211
TR13
R231 100K
R230 100K
100K R206
22K R207
TR11
0.1 C203
TR17
82K R220
100K R219
FDR
TR19
R232 220K
-17
CUSW 4
CUSW 3
CUSW 2
CUSW 1
R224 12K
CUE
IC11
IC12
330 R225
100K R222
22K R223
TR18
0.1 C209
LD9
LED9
LED10
SW9
100K R221
ONA
ONB
D26
100K R212
ON
J26
J27
J28
J29
CN1 2
MUTES
CN1 1
100K R214
COUGH
OUT
11K R216
11K R215
TR16
TR15
SERIES
SHUNT
12K R218
12K R217
CN1 6
IC11
IC12
R226
R227
R228 100K
R229 100K
RGA
RGB
CN1 5
CN3 6
CN3 5
CN3 2
CN3 1
CN1 8
CN1 7
C208 47

TOLERANCES

HOLE SIZES AFTER PAINTING

0–3mm	+ 0·10 − 0·00
OVER 3–6mm	+ 0·12 − 0·00
OVER 6–10mm	+ 0·15 − 0·00
OVER 10–18mm	+ 0·18 − 0·00
OVER 18–25mm	+ 0·21 − 0·00
OVER 25mm	+ 0·25 − 0·00

GENERAL TOLERANCE

Delete where not applicable.
± 0·50 mm (0·020")
± 0·25 mm (0·010")
± 0·12 mm (0·005")
HOLE CENTRES ± 0·004"
ALL ANGLES ± 0·50°
Unless otherwise stated.

HOLE INDEX

MATL	DRN
FINISH	TRCD
SCALE	CHKD

THIRD ANGLE PROJECTION

THIS DRAWING TO COMPLY TO BS308.

SOUNDCRAFT ELECTRONICS LTD
UNIT 2,
BOREHAMWOOD INDUSTRIAL PARK,
ROWLEY LANE,
BOREHAMWOOD,
HERTFORDSHIRE WD6 5PZ.
TELEPHONE: 01-207-5050
FACSIMILE No. 2070194

TITLE
SAC 200
MONO LOGIC
FOR ISS P4 PCB

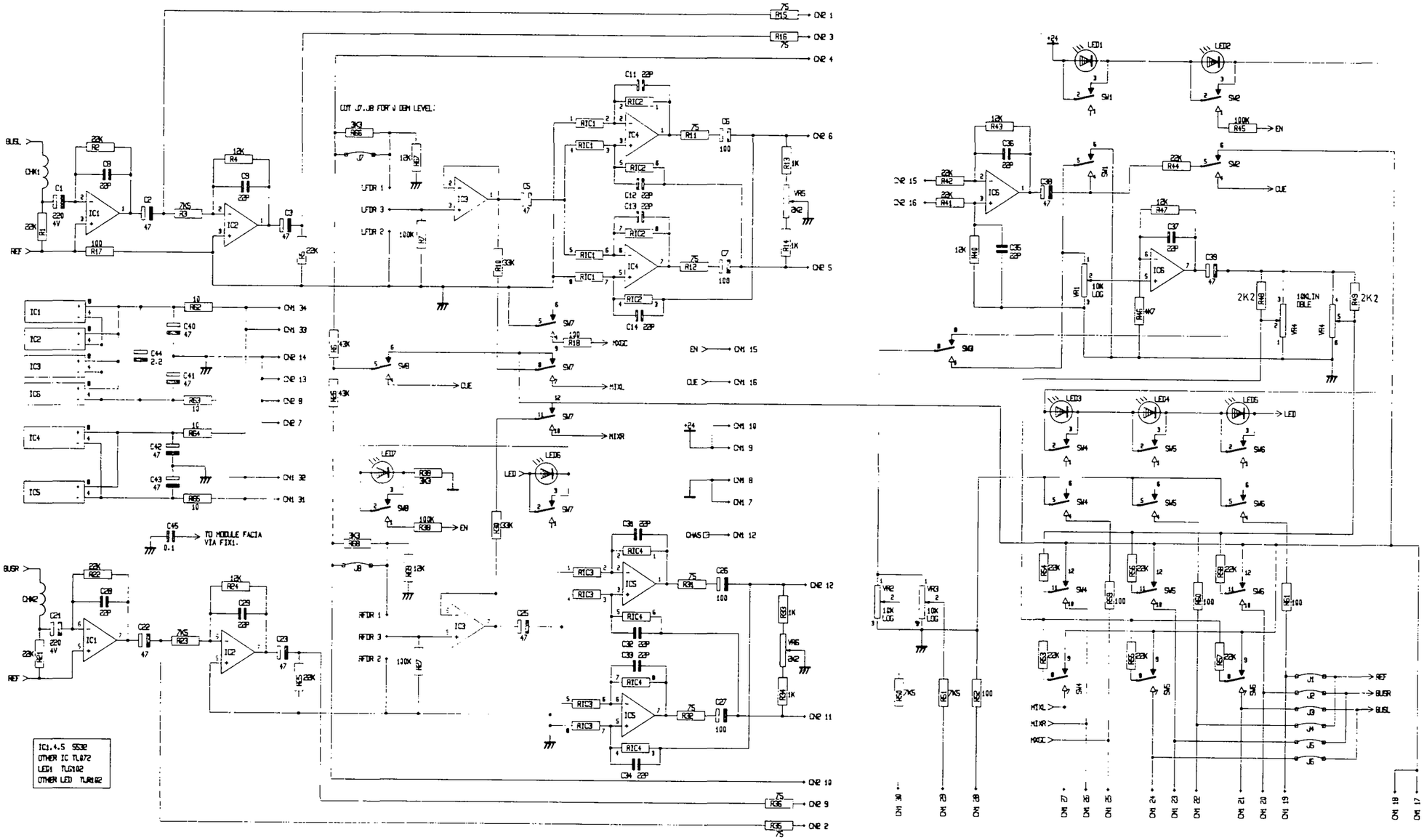
DRG. No. ED 2717 SHT 2

LTB 1187

1226-287T

DRG No ED2718

Init'	Issue P3
	8-3-88
	ISSUE P4 R48, R49 2K2 WAS 3K3 16-6-88



Soundcraft Electronics Limited own the copyright of this drawing which is not to be copied, reproduced or disclosed, in part or whole to a third party without written permission.

NOTES

HOLE INDEX

TOLERANCES

HOLE SIZES AFTER PAINTING

0-3mm	0.10 / 0.00
OVER 3-6mm	0.12 / 0.00
OVER 6-10mm	0.15 / 0.00
OVER 10-18mm	0.18 / 0.00
OVER 18-25mm	0.21 / 0.00
OVER 25mm	0.25 / 0.00

Unless otherwise stated

GENERAL TOLERANCES

Delete where not applicable

0.50 mm (0.020")

0.25 mm (0.010")

0.12 mm (0.005")

All angles ± 0.50

Hole Centres ± 0.004

MATL	DRN
FINISH	TRCD
SCALE	CHKD

THIRD ANGLE PROJECTION

THIS DRAWING TO COMPLY TO BS308.

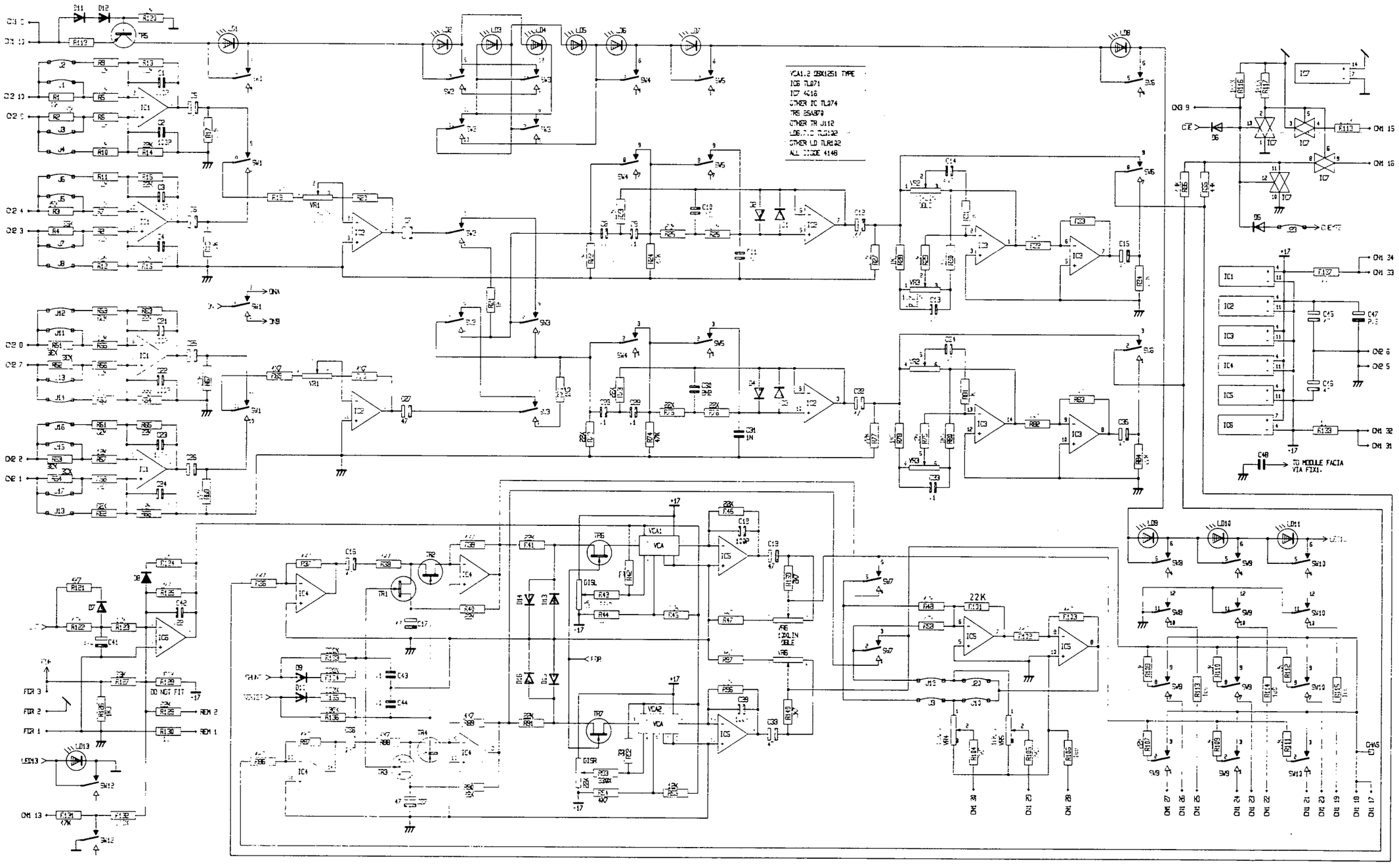
SOUNDCRAFT ELECTRONICS LTD
UNIT 2,
BOREHAMWOOD INDUSTRIAL PARK,
ROWLEY LANE,
BOREHAMWOOD,
HERTFORDSHIRE WD6 5PZ.
TELEPHONE: 01-207-5050
FACSIMILE No. 2070194

TITLE: SAC 200
SUB/FX PCB
FOR ISS P4 PCB

DRG No. ED 2718

DRG No ED2733

Init	
	Issue P3 8-3-88
	Issue P4 R101 22K WAS 33K 16-6-88



Soundcraft Electronics Limited own the copyright of this drawing which is not to be copied, reproduced or disclosed, in part or whole to a third party without written permission.

NOTES

HOLE INDEX

TOLERANCES

HOLE SIZES AFTER PAINTING

0-3mm	+0.10 -0.00
OVER 3-6mm	+0.12 -0.00
OVER 6-10mm	+0.15 -0.00
OVER 10-18mm	+0.18 -0.00
OVER 18-25mm	+0.21 -0.00
OVER 25mm	+0.25 -0.00

Unless otherwise stated

GENERAL TOLERANCES

Delete where not applicable

±0.50 mm (±0.020)
±0.25 mm (±0.010)
±0.12 mm (±0.005)
All angles ±0.50
Hole Centres ±0.004

MATL	DRN
FINISH	TRCD
SCALE	CHKD

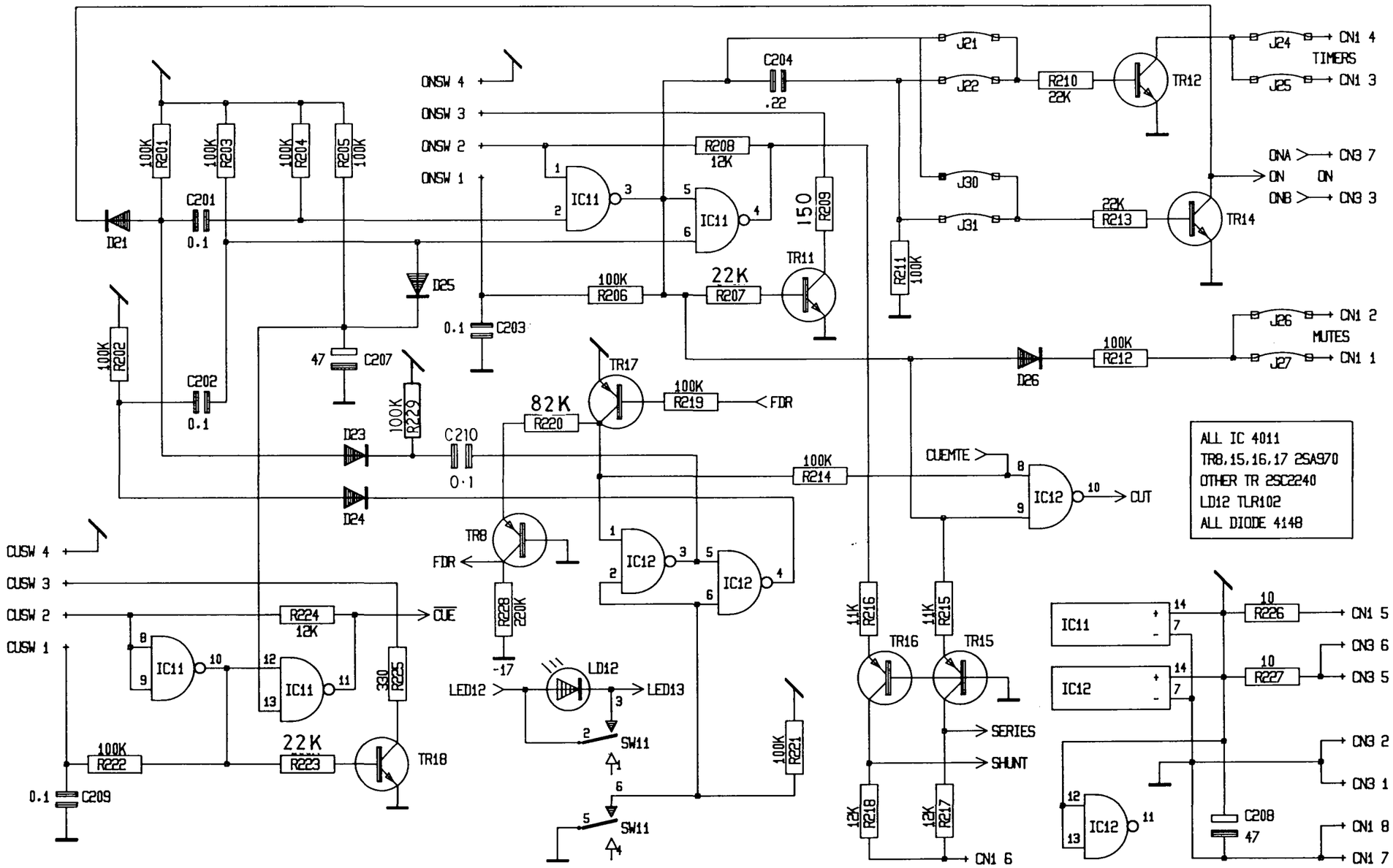
THIRD ANGLE PROJECTION
THIS DRAWING TO COMPLY TO BS308.

SOUNDCRAFT ELECTRONICS LTD
UNIT 2,
BOREHAMWOOD INDUSTRIAL PARK,
ROWLEY LANE,
BOREHAMWOOD,
HERTFORDSHIRE WD6 5PZ.
TELEPHONE. 01-207-5050
FACSIMILE No 2070194

TITLE. SAC 200
STEREO AUDIO
FOR ISS P4 PCB

DRG. No ED2733 SHT 1

ISSUE P3 8-3-88
ISSUE P4 R209 150 WAS 330 R220 82K WAS 100K 16-6-88
ISSUE 1 R229 & C210 ADDED MJH 26/07/88



ALL IC 4011
TR8,15,16,17 2SA970
OTHER TR 2SC2240
LD12 TLR102
ALL DIODE 4148

TOLERANCES

HOLE SIZES AFTER PAINTING

0–3mm	$^{+0.10}_{-0.00}$
OVER 3–6mm	$^{+0.12}_{-0.00}$
OVER 6–10mm	$^{+0.15}_{-0.00}$
OVER 10–18mm	$^{+0.18}_{-0.00}$
OVER 18–25mm	$^{+0.21}_{-0.00}$
OVER 25mm	$^{+0.25}_{-0.00}$

GENERAL TOLERANCE

Delete where not applicable.
± 0·50 mm (0·020")
± 0·25 mm (0·010")
± 0·12 mm (0·005")
HOLE CENTRES ± 0·004"
ALL ANGLES ± 0·50°
Unless otherwise stated.

HOLE INDEX

MATL	DRN
FINISH	TRCD
SCALE	CHKD

THIRD ANGLE PROJECTION

THIS DRAWING TO COMPLY TO BS308.

SOUNDCRAFT ELECTRONICS LTD
UNIT 2,
BOREHAMWOOD INDUSTRIAL PARK,
ROWLEY LANE,
BOREHAMWOOD,
HERTFORDSHIRE WD6 5PZ.
TELEPHONE: 01-207-5050
FACSIMILE No. 2070194

TITLE SAC 200
STEREO LOGIC
FOR ISS.1 PCB

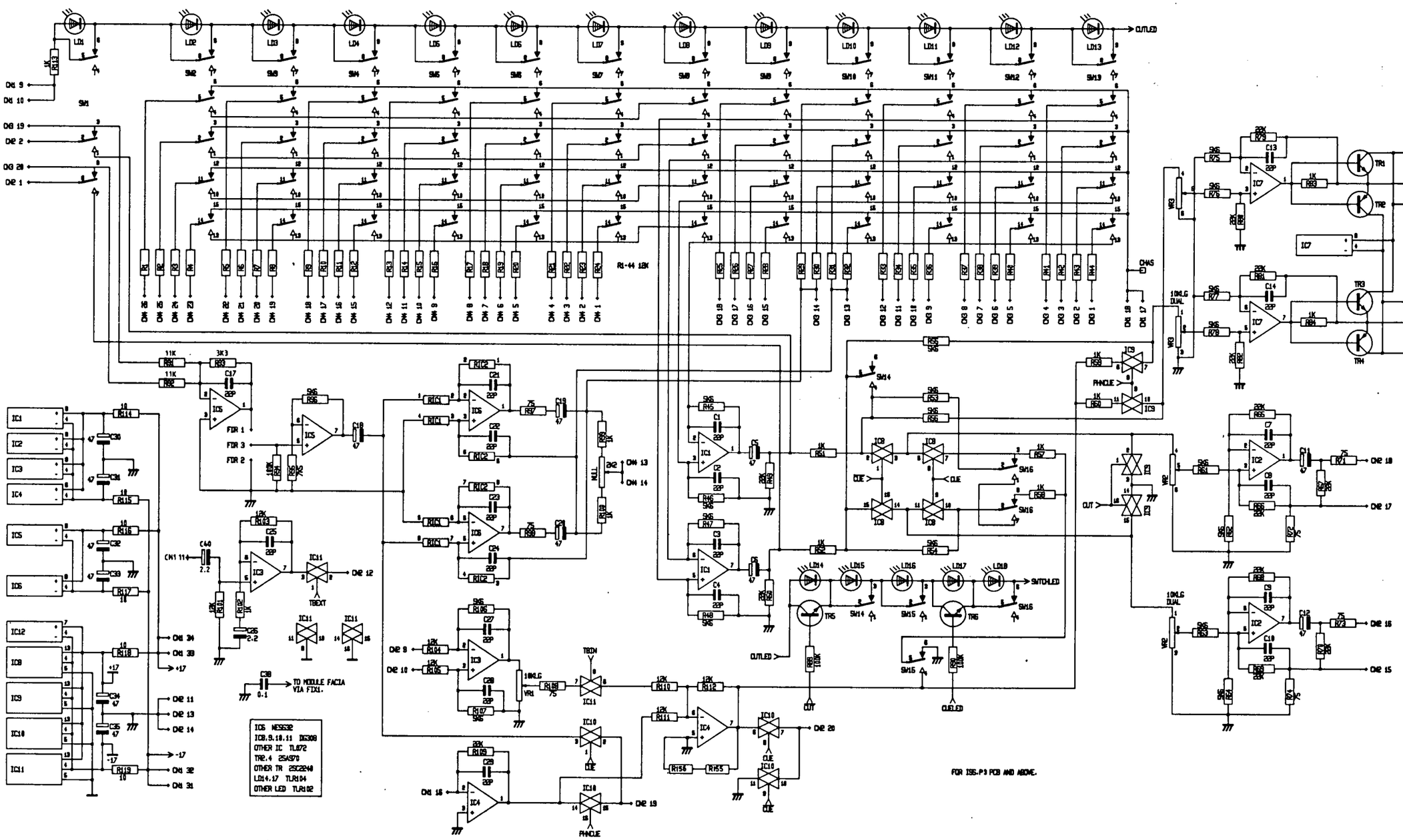
DRG. No. ED2733 SHT 2

LTB 1187

1226-287T

DRG. No. ED2734

Init'l	
	Issue P2 15-3-88
	ISSUE P3 R91, R92 11K WAS 12K. R155, R156 ADDED 16-6-88
	ISSUE 1 C40. 2.2/50V ADDED. R93. 3K3 WAS 6K8 C17. 33p WAS 22p PRODUCTION 27-6-88



Soundcraft Electronics Limited own the copyright of this drawing which is not to be copied, reproduced or disclosed, in part or whole to a third party without written permission.

NOTES

HOLE INDEX

TOLERANCES

HOLE SIZES AFTER PAINTING

0-3mm	± +0.10 −0.00
OVER 3-6mm	± +0.12 −0.00
OVER 6-10mm	± +0.15 −0.00
OVER 10-18mm	± +0.18 −0.00
OVER 18-25mm	± +0.21 −0.00
OVER 25mm	± +0.25 −0.00

Unless otherwise stated.

GENERAL TOLERANCES

Delete where not applicable.

± 0.50 mm (0.020")
± 0.25 mm (0.010")
± 0.12 mm (0.005")
All angles ± 0.50°
Hole Centres ± 0.004"

MATL	DRN G.B.
FINISH	TRCD
SCALE	CHKD

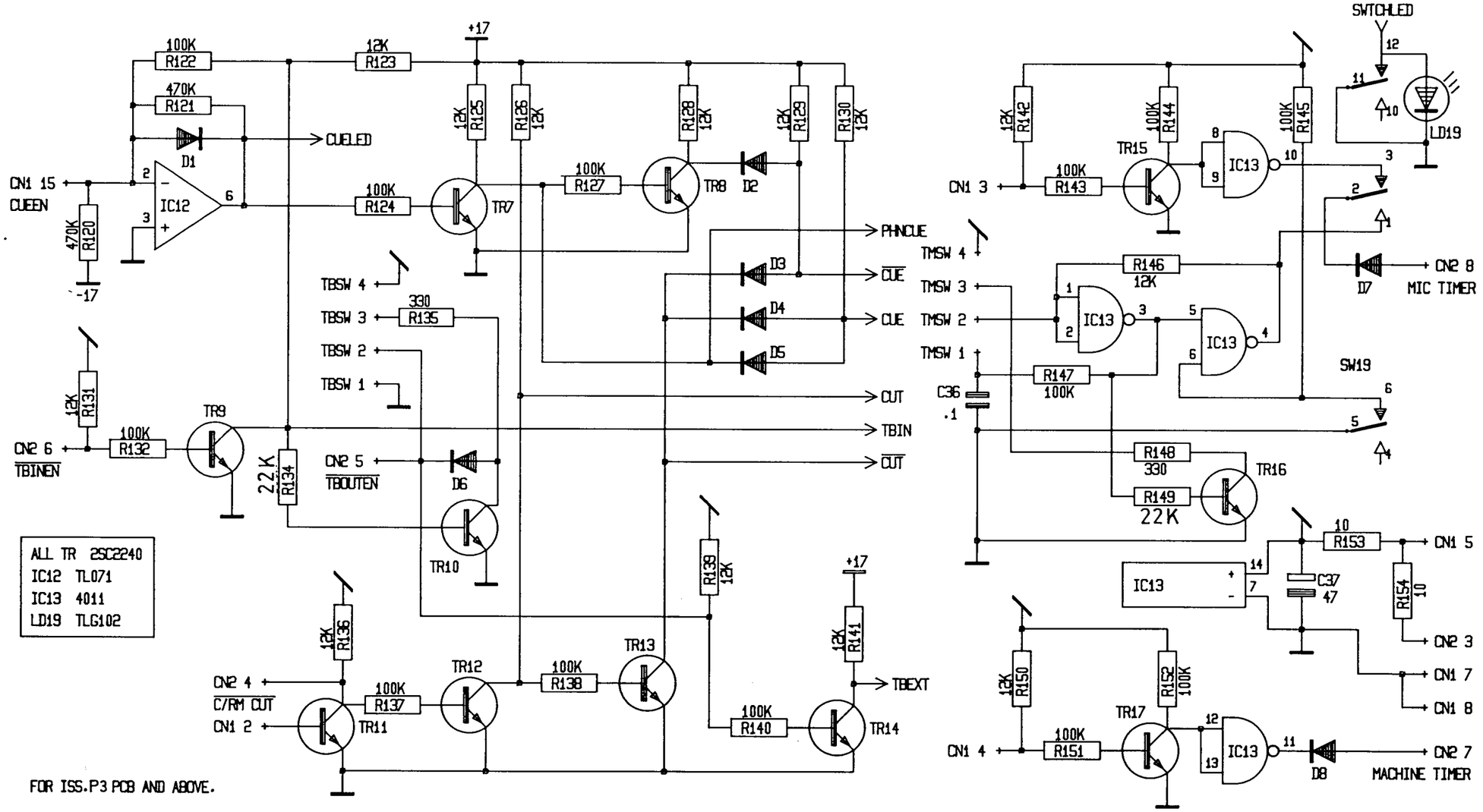
THIRD ANGLE PROJECTION
THIS DRAWING TO COMPLY TO BS308.

SOUNDCRAFT ELECTRONICS LTD
UNIT 2,
BOREHAMWOOD INDUSTRIAL PARK,
ROWLEY LANE,
BOREHAMWOOD,
HERTFORDSHIRE WD6 5PZ.
TELEPHONE: 01-207-5050
FACSIMILE No. 2070194

TITLE. SAC 200
MONO C / ROOM AUDIO

DRG. No. ED2734 SHT 1

ISSUE	
P2	15-3-88
P3	16-6-88
1 PRODUCTION	27-6-88



TOLERANCES		GENERAL TOLERANCE
HOLE SIZES AFTER PAINTING		Delete where not applicable.
0-3mm	= +0.10 −0.00	± 0.50 mm (0.020")
OVER 3-6mm	= +0.12 −0.00	± 0.25 mm (0.010")
OVER 6-10mm	= +0.15 −0.00	± 0.12 mm (0.005")
OVER 10-18mm	= +0.18 −0.00	HOLE CENTRES ± 0.004"
OVER 18-25mm	= +0.21 −0.00	ALL ANGLES ± 0.50°
OVER 25mm	= +0.25 −0.00	Unless otherwise stated.

HOLE INDEX

MATL	
FINISH	
SCALE	
DRN	G.B.
TRCD	
CHKD	

THIRD ANGLE PROJECTION

THIS DRAWING TO COMPLY TO BS308.

SOUNDCRAFT ELECTRONICS LTD
UNIT 2,
BOREHAMWOOD INDUSTRIAL PARK,
ROWLEY LANE,
BOREHAMWOOD,
HERTFORDSHIRE WD6 5PZ.
TELEPHONE: 01-207-5050
FACSIMILE No. 2070194

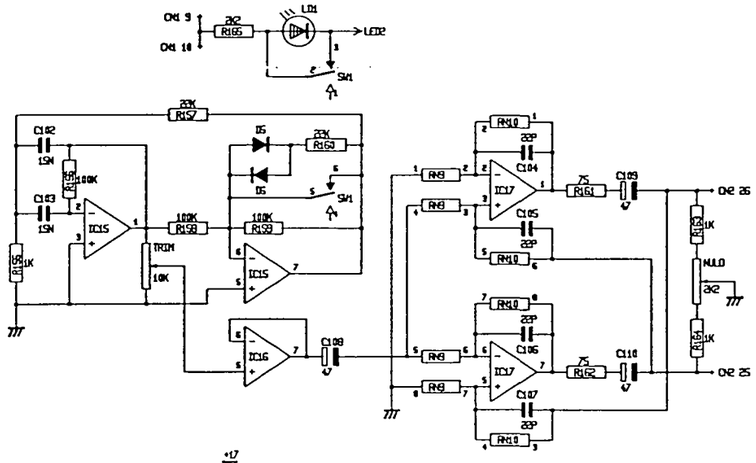
TITLE

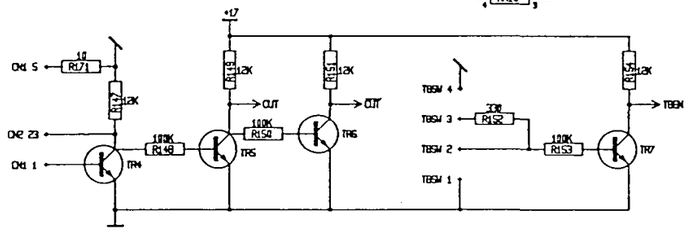
SAC 200
MONO C/ROOM LOGIC

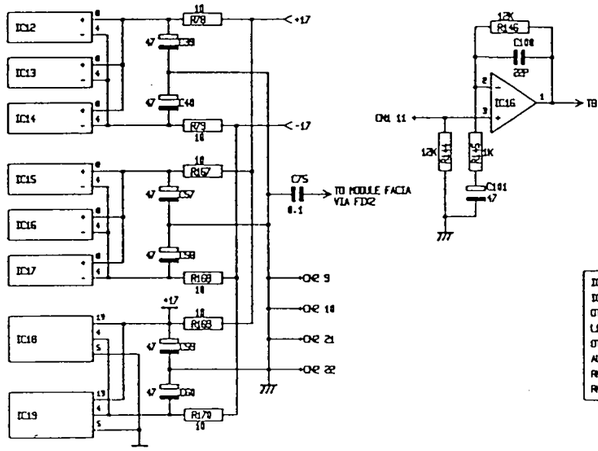
DRG. No. ED2734 SHT 2

DRG. No. ED2735

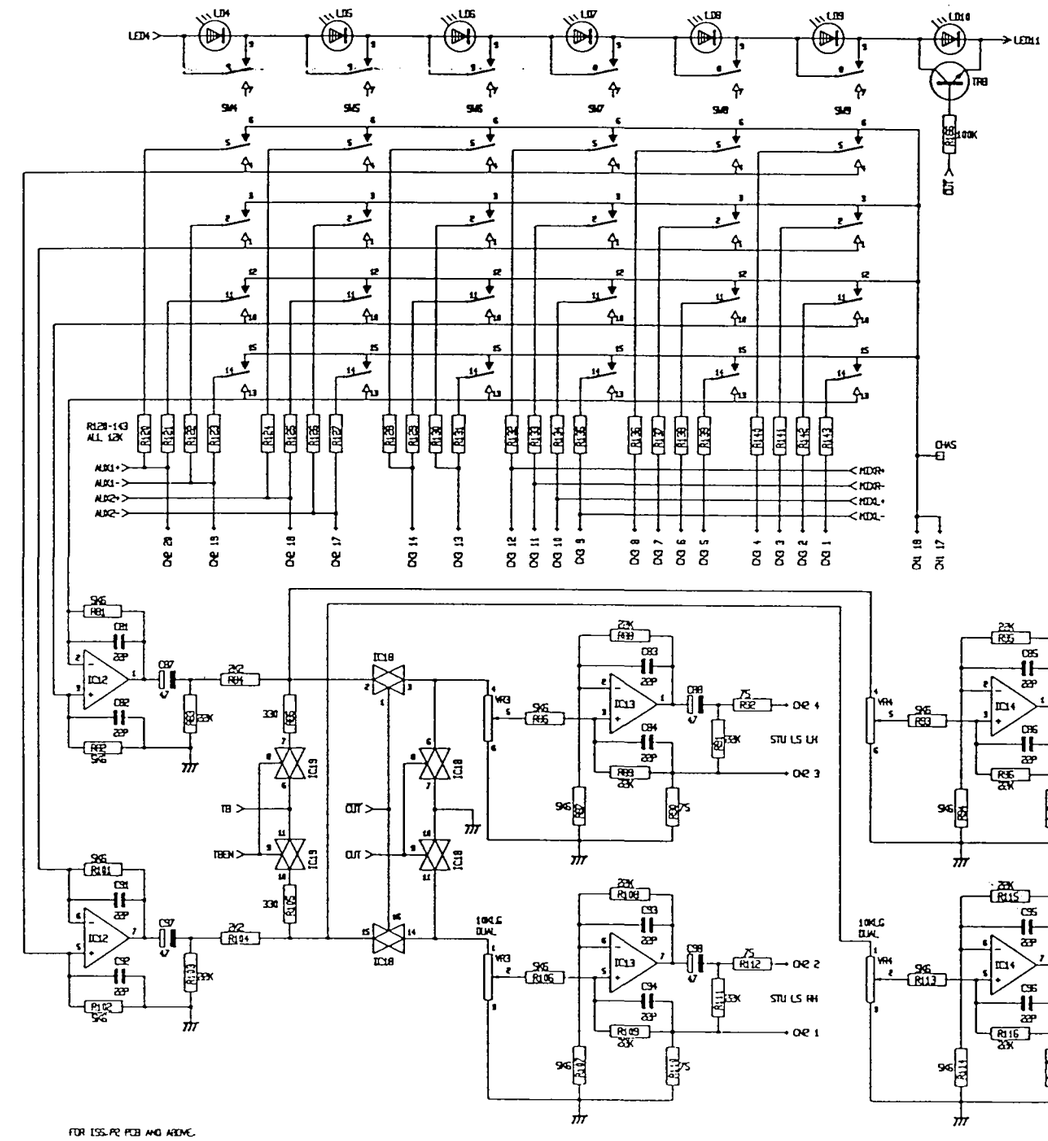
Init'l	Issue P2 15-3-88







IC17	NE5532
IC18,19	DG308
OTHER IC	TL072
LD10	TLR134
OTHER LED	TLR132
ALL TR	2SC2240
RN9	4K7 SIL
RN10	10K SIL



FOR ISS.P2 PCB AND ABOVE.

Soundcraft Electronics Limited own the copyright of this drawing which is not to be copied, reproduced or disclosed, in part or whole to a third party without written permission.

NOTES

HOLE INDEX

TOLERANCES

HOLE SIZES AFTER PAINTING

0-3mm	+ 0.10 - 0.00
OVER 3-6mm	+ 0.12 - 0.00
OVER 6-10mm	+ 0.15 - 0.00
OVER 10-18mm	+ 0.18 - 0.00
OVER 18-25mm	+ 0.21 - 0.00
OVER 25mm	+ 0.25 - 0.00

Unless otherwise stated

GENERAL TOLERANCES

Delete where not applicable

± 0.50 mm (0.020")
± 0.25 mm (0.010")
± 0.12 mm (0.005")
All angles ± 0.50°
Hole Centres ± 0.004"

MATL	DRN
FINISH	TRCD
SCALE	CHKD

THIRD ANGLE PROJECTION
THIS DRAWING TO COMPLY TO BS308.

SOUNDCRAFT ELECTRONICS LTD
UNIT 2,
BOREHAMWOOD INDUSTRIAL PARK,
ROWLEY LANE,
BOREHAMWOOD,
HERTFORDSHIRE WD6 5PZ.
TELEPHONE: 01-207-5050
FACSIMILE No. 2070194

TITLE. SAC 200
PGM/ STUDIO PCB

DRG No. ED2735
SHT 1.

DRG No
ED2735

Init'l | ISSUE P2 15-3-88

EN → CN1 15
CUE → CN1 16
CN1 8
CN1 7

IC11 TL471
IC2,3,7,14 TL072
OTHER IC NE5532
ALL LED TLR142
RN1,3,5,7 47 SIL
RN2,4,6,8 10K SIL

CN1 31 CN1 32 CN1 33 CN1 34 +17 -17

CN1 27 CN1 25 CN2 15 CN2 13 CN2 14 CN2 19 CN2 21 CN2 12 CN2 11 CN2 16

CUT J1..J2 FOR 0 DB M LEVEL

AFDR 1 AFDR 3 AFDR 2

MIXL+ MIXL- MIXR+ MIXR-

FOR PSS.P2 PCB AND ABOVE.

CN1 28 CN1 29 CN1 26 CN1 14 CN1 13

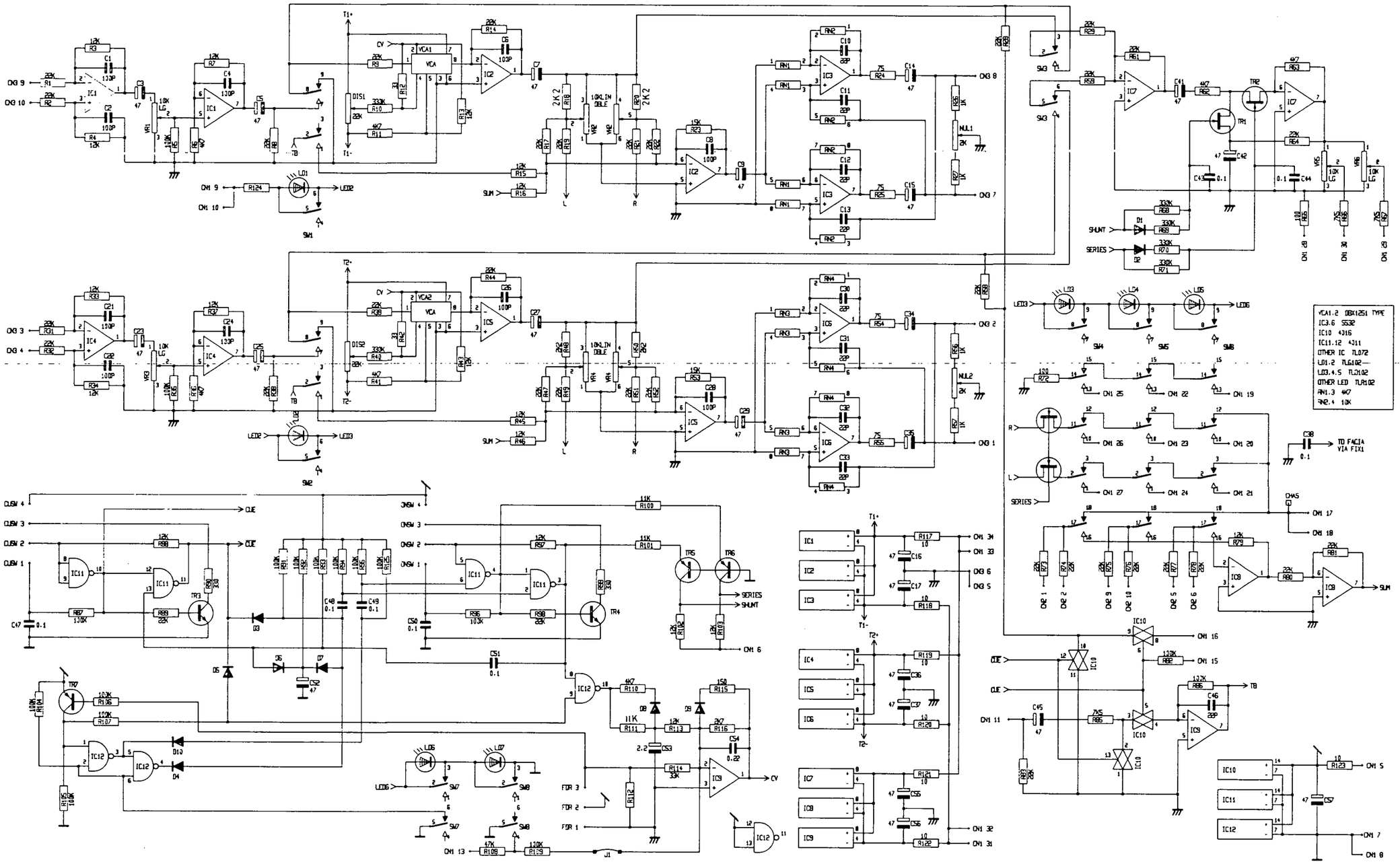
LED2 LED3 LED11 LED12

AUX1+ AUX1- AUX2+ AUX2-

Soundcraft Electronics Limited own the copyright of this drawing which is not to be copied, reproduced or disclosed, in part or whole to a third party without written permission	NOTES	HOLE INDEX	TOLERANCES HOLE SIZES AFTER PLATING GENERAL TOLERANCES THIRD ANGLE PROJECTION THIS DRAWING TO COMPLY TO BS308	MADE FINISH SCALE	DRN ERCO CHKD	SOUNDCRAFT ELECTRONICS LTD UNIT 2 BOREHAMWOOD INDUSTRIAL PARK ROWLEY LANE BOREHAMWOOD HERTFORDSHIRE WD6 5PZ TELEPHONE 01-207-5050 FACSIMILE No 2070196	TITLE SAC 200 PGM / STUDIO PCB DRG No ED2735 SHT 2

DRG. No. ED2740

Init'l	Issue P3
	08-06-88
	ISSUE P4
	R111 11K WAS 12K
	16-6-88



FOR ISSUE P4 PCB

Soundcraft Electronics Limited own the copyright of this drawing which is not to be copied, reproduced or disclosed, in part or whole to a third party without written permission.

NOTES

HOLE INDEX

TOLERANCES

HOLE SIZES AFTER PAINTING

0-3mm	+ 0.10 0.00
OVER 3-6mm	+ 0.12 0.00
OVER 6-10mm	+ 0.15 0.00
OVER 10-18mm	+ 0.18 0.00
OVER 18-25mm	+ 0.21 0.00
OVER 25mm	+ 0.25 0.00

Unless otherwise stated.

GENERAL TOLERANCES

Delete where not applicable.

± 0.50 mm (0.020)
± 0.25 mm (0.010)
± 0.12 mm (0.005)
All angles ± 0.50°
Hole Centres ± 0.004

MATL	DRN
FINISH	TRCD
SCALE	CHKD

THIRD ANGLE PROJECTION
THIS DRAWING TO COMPLY TO BS308.

SOUNDCRAFT ELECTRONICS LTD
UNIT 2,
BOREHAMWOOD INDUSTRIAL PARK,
ROWLEY LANE,
BOREHAMWOOD,
HERTFORDSHIRE WD6 5PZ.
TELEPHONE: 01-207-5050
FACSIMILE No. 2070194

TITLE. SAC200 TELCO PCB

DRG. No. ED2740

DRG No	Init'l	ISSUE P1
ED2764	HC	2-2-88

MONO I/P

I/P A

I/P B

48V

GAIN A

GAIN B

GAIN TRIM

EQ

(OPTION)

PRE

AUX1

AUX2

DUCK SOURCE

T/B SOURCE (OPERATORS MIC)

REM ON CUT CUE CUT

ON

VCA

PAN

DUCK

CUT

REM

LIM

REM CUE

CUE

AUTO

ON SWITCH

PGM L R

SUB1 L R

SUB2 L R

CUE

AUX1 AUX2

METER/MONITOR

AUX 1

EBOS

AUX 1 O/P

AFL (CUE)

AUX 2 IDENTICAL

AUX 2 O/P

PGM 'L'

METER/MONITOR

MIX MINUS

0/+4

EBOS

PGM L O/P

PGM 'R' IDENTICAL

PGM R O/P

OSC 1KHZ

EBOS

OSC

LEVEL

RELEASE

ATTACK

DUCKER

DUCK CONTROL

SOURCE DEPTH

AUX 1 AUX 2 MONO PGM L R SUB 1 L R SUB 2 L R

AUTO CUT

L

STUDIO PHONES OUTPUT

R

L

STUDIO LOUDSPEAKER OUTPUT

R

TB

OPERATOR MIC

STEREO I/P

I/P A

(BALANCED)

I/P B

SYSTEM LEVEL

MONO R STEREO

TRIM

EQ

(OPTION)

AUX1

AUX2

PRE

CUE

REM CUE

ON

VCA

L R

STEREO

BAL

REM ON CUT CUE CUT

CUT

REM

AUTO

ON SWITCH

DUCK

FX RET. INPUT (BALANCED)

PAN

AUX1

AUX2

PFL

SUB 2 SUB 1 PGM MONO AIR EXT 6 EXT 5 EXT 4 EXT 3 EXT 2 EXT 1

L

R

ALL MONITOR SOURCE SELECTORS INTERLOCKED

CRM

L

CRM L/S O/P

R

METER SW

'L' METER

'R' METER IDENTICAL

AUTO CUE

(CAN ALSO BE SPLIT)

AUTO MUTE

SPKR

METER/MONITOR

EBOS

MONO

AUTO CUE

PHONE

CONTROL ROOM (OPERATORS) HEADPHONES

RET TB

(EXTERNAL CONTROL)

CUE

CUE O/P

MONO/CUE METER

AUTO CUE

STEREO GROUP 'L'

0/+4

METER/MONITOR

EBOS

MIX MINUS

SUB 1 LEFT O/P

PGM

PGM L R

CUE

STEREO GROUP 'R' IDENTICAL

STEREO SUB GROUP 2 L & R IDENTICAL

KEY

- PROGRAMABLE JUMPER
- SIGNAL SWITCH
- PRESET
- FRONT PANEL CONTROL
- N/C SWITCH CONTACT
- N/O SWITCH CONTACT

Soundcraft Electronics Limited own the copyright of this drawing which is not to be copied, reproduced, or disclosed, in part or whole to a third party without written permission.

NOTES

HOLE INDEX

TOLERANCES

HOLE SIZES AFTER PLATING

0-3mm	+0.10 -0.00
OVER 3-6mm	+0.12 -0.00
OVER 6-10mm	+0.15 -0.00
OVER 10-18mm	+0.18 -0.00
OVER 18-25mm	+0.21 -0.00
OVER 25mm	+0.25 -0.00

Unless otherwise stated

GENERAL TOLERANCES

Delete where not applicable.

±0.50mm (0.020")

±0.25mm (0.010")

±0.12mm (0.005")

HOLE CENTRES ±0.004"

ALL ANGLES ±0.50°

MATL	DRN HC
FINISH	TRCD
SCALE	CHKD

THIRD ANGLE PROJECTION

THIS DRAWING TO COMPLY TO BS308

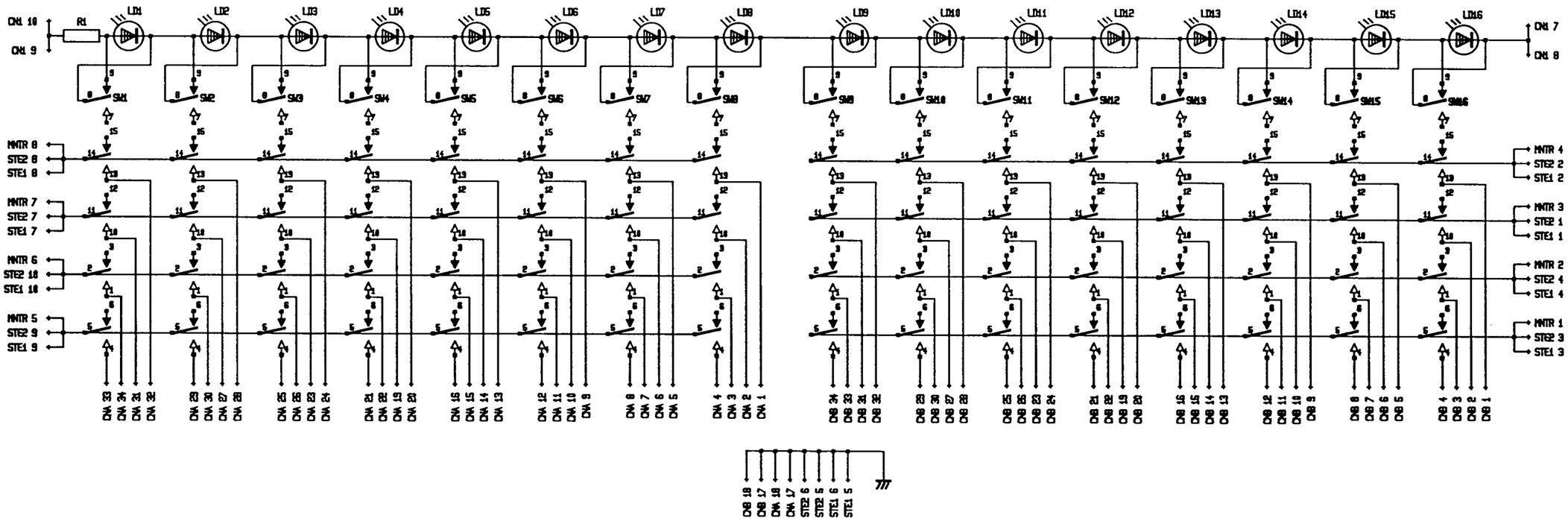
SOUNDCRAFT ELECTRONICS LTD
UNIT 2,
BOREHAMWOOD INDUSTRIAL PARK,
ROWLEY LANE,
BOREHAMWOOD,
HERTFORDSHIRE WD6 5PZ
TELEPHONE: 01-207-5050
FACSIMILE No 2070194

TITLE

SAC200 SYSTEM DIAGRAM

DRG ED 2764

ISSUE P1
24/10/88



TOLERANCES

HOLE SIZES AFTER PAINTING

0–3mm	=	+ 0.10 − 0.00
OVER 3–6mm	=	+ 0.12 − 0.00
OVER 6–10mm	=	+ 0.15 − 0.00
OVER 10–18mm	=	+ 0.18 − 0.00
OVER 18–25mm	=	+ 0.21 − 0.00
OVER 25mm	=	+ 0.25 − 0.00

GENERAL TOLERANCE

Delete where not applicable.

± 0.50 mm (0.020")

± 0.25 mm (0.010")

± 0.12 mm (0.005")

HOLE CENTRES ± 0.004"

ALL ANGLES ± 0.50°

Unless otherwise stated

HOLE INDEX

MATL	DRN
FINISH	TRCD
SCALE	CHKD

THIRD ANGLE PROJECTION

THIS DRAWING TO COMPLY TO BS308.

SOUNDCRAFT ELECTRONICS LTD
UNIT 2,
BOREHAMWOOD INDUSTRIAL PARK,
ROWLEY LANE,
BOREHAMWOOD,
HERTFORDSHIRE WD6 5PZ.
TELEPHONE: 01-207-5050
FACSIMILE No. 2070194

TITLE

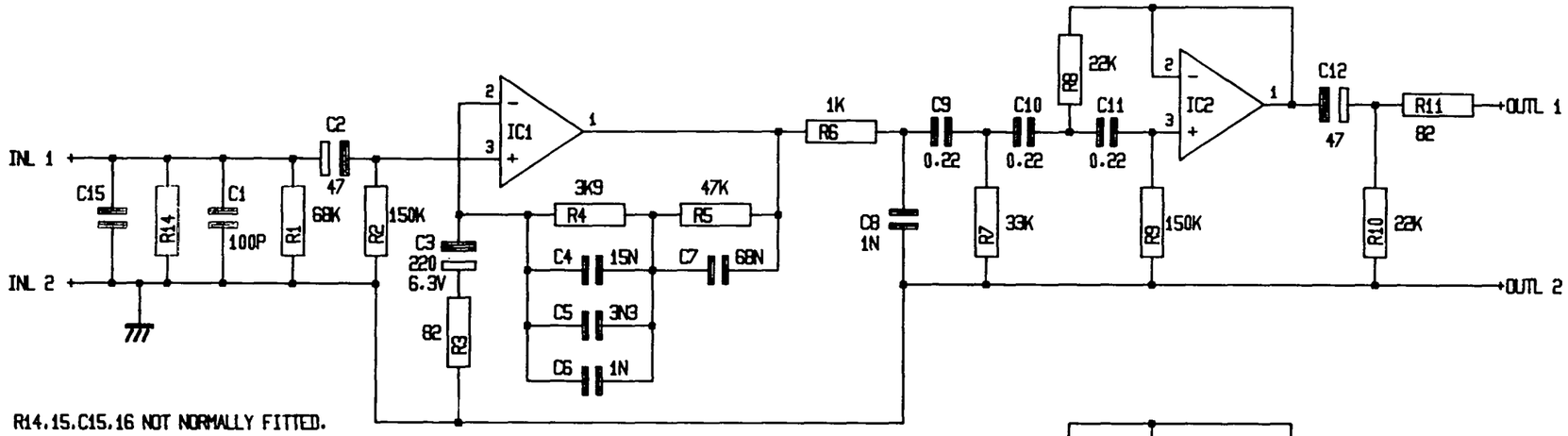
SAC200 SOURCE SELECT PCB

DRG. No. ED2819

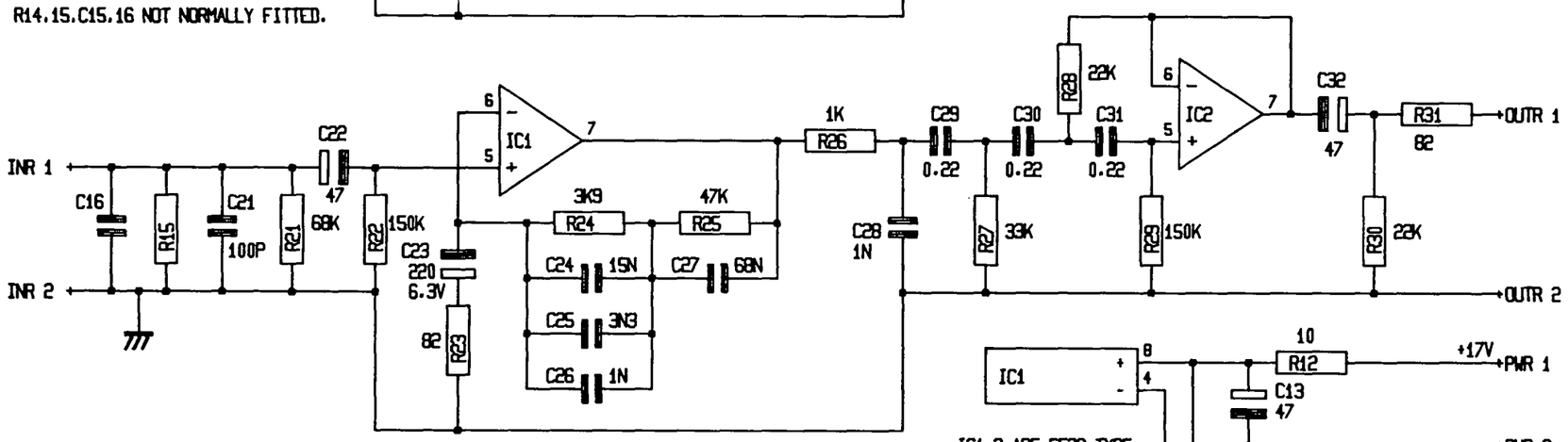
LTB 1187

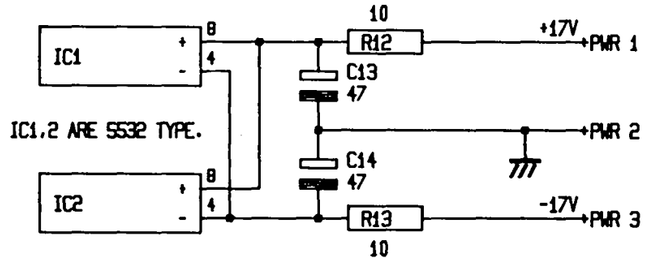
1276-287T

ISSUE P1
22 / 12 / 88



R14.15.C15.16 NOT NORMALLY FITTED.





IC1.2 ARE 5532 TYPE.

GENERAL PURPOSE STEREO RIAA PRE-AMP.

Soundcraft Electronics Limited
own the copyright of this drawing
which is not to be copied,reproduced
or disclosed, in part or whole to a
third party without written permission.

TOLERANCES

HOLE SIZES AFTER PAINTING		GENERAL TOLERANCES
0-3mm	= +0.10 -0.00	Delete where not applicable.
OVER 3-6mm	= +0.12 -0.00	±0.50mm (0.020")
OVER 6-10mm	= +0.15 -0.00	±0.25mm (0.010")
OVER 10-18mm	= +0.18 -0.00	±0.12mm (0.005")
OVER 18-25mm	= +0.21 -0.00	HOLE CENTRE ±0.004"
OVER 25mm	= +0.25 -0.00	ALL ANGLES ±0.50°
		Unless otherwise stated.

HOLE INDEX

MATL	ORN
FINISH	TRCD
SCALE	CHKD

THIRD ANGLE PROJECTION
THIS DRAWING TO COMPLY TO BS308.

SOUNDCRAFT
SOUNDCRAFT ELECTRONICS LTD
UNIT 2,
BOREHAMWOOD INDUSTRIAL PARK,
ROWLEY LANE,
BOREHAMWOOD,
HERTFORDSHIRE WD6 5PZ.
TELEPHONE: 01-207-5050
FACSIMILE No. 2070194

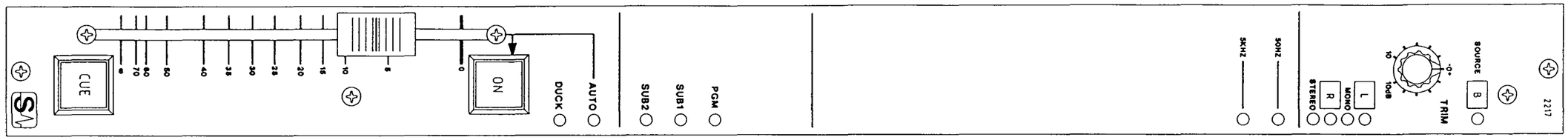
TITLE
GENERAL PURPOSE
STEREO RIAA
PRE-AMP

DRG. NO. ED2836

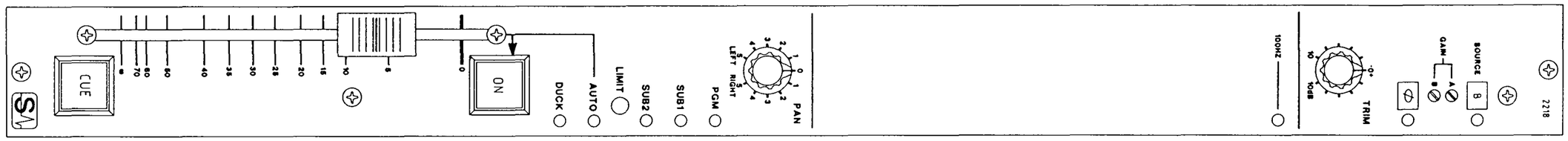
ORG No
MI2955

ISSUE	Init'l	REVISION	DATE
2	MJH	SOURCE SELECT MODULE ADDED	31:5:89

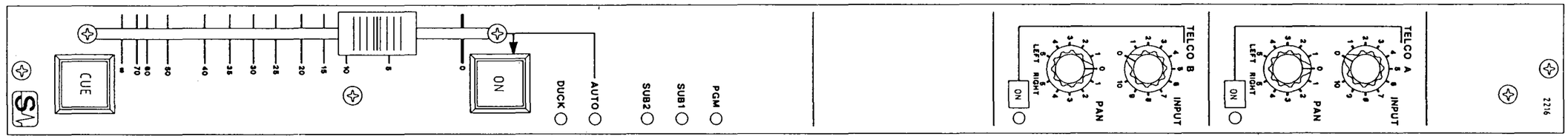
BASIC STEREO INPUT MODULE



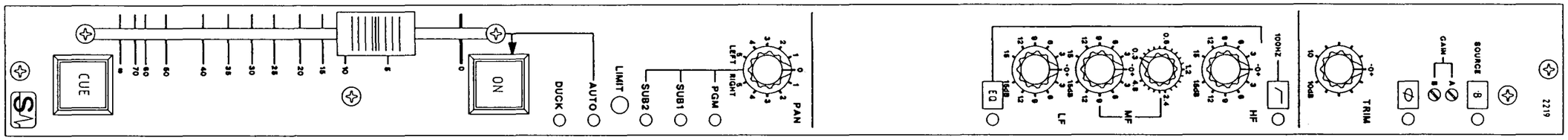
BASIC MONO INPUT MODULE



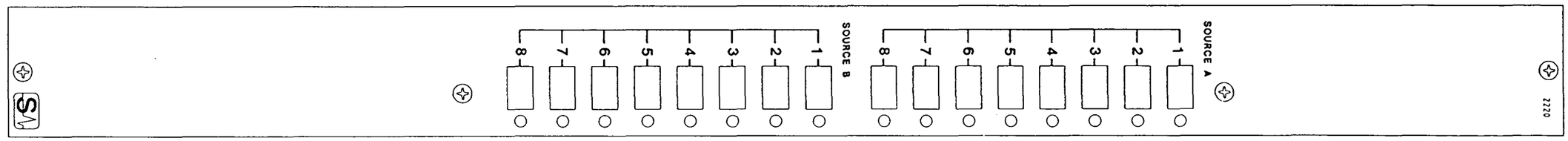
BASIC TELCO INPUT MODULE



BASIC MONO & EQ. INPUT MODULE



SOURCE SELECT MODULE



Soundcraft Electronics Limited own the copyright of this drawing which is not to be copied, reproduced or disclosed, in part or whole to a third party without written permission

NOTES

HOLE INDEX

TOLERANCES

HOLE SIZES AFTER PAINTING

0-3mm	+0.10 -0.05
OVER 3-6mm	+0.12 -0.00
OVER 6-10mm	+0.15 -0.00
OVER 10-18mm	+0.18 -0.00
OVER 18-25mm	+0.21 -0.30
OVER 25mm	+2.15 -0.35

Unless otherwise stated

GENERAL TOLERANCES

Delete where not applicable

±0.50mm (±0.020")

±0.25mm (±0.010")

±0.12mm (±0.005")

HOLE CENTRES ±0.004"

ALL ANGLES ±0.50°

MATL	DRN MJH
FINISH	TRCD
SCALE	CHKD

THIRD ANGLE PROJECTION

THIS DRAWING TO COMPLY TO BS308

SOUNDCRAFT

SOUNDCRAFT ELECTRONICS LTD
UNIT 2,
BOREHAMWOOD INDUSTRIAL PARK,
ROWLEY LANE,
BOREHAMWOOD,
HERTFORDSHIRE WD6 5PZ
TELEPHONE 01-207-5050
FACSIMILE No 2070194

TITLE

SAC200
BASIC MODULE LAYOUT

MI 2955