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

For further details contact:
Marmen 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 22
38 Way EDAC Connectors

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 source.
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 (e.g., 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

<table>
<thead>
<tr>
<th>Pin</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MonitorLeft</td>
</tr>
<tr>
<td>2</td>
<td>MonitorRight</td>
</tr>
<tr>
<td>3</td>
<td>+7.5V</td>
</tr>
<tr>
<td>4</td>
<td>Talkback OUT Enable</td>
</tr>
<tr>
<td>5</td>
<td>Talkback IN Enable</td>
</tr>
<tr>
<td>7</td>
<td>Machine Timer</td>
</tr>
<tr>
<td>8</td>
<td>Mic. Timer</td>
</tr>
<tr>
<td>9</td>
<td>Talkback + ve</td>
</tr>
<tr>
<td>10</td>
<td>Talkback -ve</td>
</tr>
<tr>
<td>11</td>
<td>GND</td>
</tr>
<tr>
<td>12</td>
<td>Talkback External</td>
</tr>
<tr>
<td>13</td>
<td>GND</td>
</tr>
<tr>
<td>14</td>
<td>GND</td>
</tr>
<tr>
<td>15</td>
<td>C/RM Left GND</td>
</tr>
<tr>
<td>16</td>
<td>C/RM Left + ve</td>
</tr>
<tr>
<td>17</td>
<td>C/RM Right GND</td>
</tr>
<tr>
<td>18</td>
<td>C/RM Right + ve</td>
</tr>
<tr>
<td>19</td>
<td>PH CUE</td>
</tr>
<tr>
<td>20</td>
<td>CUE</td>
</tr>
</tbody>
</table>

### CN4 26 Way IDC Connector

<table>
<thead>
<tr>
<th>Pin</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ext 6 L -ve</td>
</tr>
<tr>
<td>2</td>
<td>Ext 6 L + ve</td>
</tr>
<tr>
<td>3</td>
<td>Ext 6 R -ve</td>
</tr>
<tr>
<td>4</td>
<td>Ext 6 R + ve</td>
</tr>
<tr>
<td>5</td>
<td>Ext 5 L -ve</td>
</tr>
<tr>
<td>6</td>
<td>Ext 5 L + ve</td>
</tr>
<tr>
<td>7</td>
<td>Ext 5 R -ve</td>
</tr>
<tr>
<td>8</td>
<td>Ext 5 R + ve</td>
</tr>
<tr>
<td>9</td>
<td>Ext 4 L -ve</td>
</tr>
<tr>
<td>10</td>
<td>Ext 4 L + ve</td>
</tr>
<tr>
<td>11</td>
<td>Ext 4 R -ve</td>
</tr>
<tr>
<td>12</td>
<td>Ext 4 R + ve</td>
</tr>
<tr>
<td>13</td>
<td>GND</td>
</tr>
<tr>
<td>14</td>
<td>GND</td>
</tr>
<tr>
<td>15</td>
<td>Ext 3 L -ve</td>
</tr>
<tr>
<td>16</td>
<td>Ext 3 L + ve</td>
</tr>
<tr>
<td>17</td>
<td>Ext 3 R -ve</td>
</tr>
<tr>
<td>18</td>
<td>Ext 3 R + ve</td>
</tr>
<tr>
<td>19</td>
<td>Ext 2 L -ve</td>
</tr>
<tr>
<td>20</td>
<td>Ext 2 L + ve</td>
</tr>
<tr>
<td>21</td>
<td>Ext 2 R -ve</td>
</tr>
<tr>
<td>22</td>
<td>Ext 2 R + ve</td>
</tr>
<tr>
<td>23</td>
<td>Ext 1 L -ve</td>
</tr>
<tr>
<td>24</td>
<td>Ext 1 L + ve</td>
</tr>
<tr>
<td>25</td>
<td>Ext 1 R -ve</td>
</tr>
<tr>
<td>26</td>
<td>Ext 1 R + ve</td>
</tr>
</tbody>
</table>
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

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

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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Right-ve</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>Right-ve</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>Left-ve</td>
</tr>
<tr>
<td>3</td>
<td>B</td>
<td>Left+ve</td>
</tr>
<tr>
<td>4</td>
<td>B</td>
<td>GND</td>
</tr>
<tr>
<td>5</td>
<td>A</td>
<td>Right-ve</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>Right+ve</td>
</tr>
<tr>
<td>7</td>
<td>A</td>
<td>Left-ve</td>
</tr>
<tr>
<td>8</td>
<td>A</td>
<td>Left+ve</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>-------------------------------------</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>TELCO feed to SUB Left</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>TELCO feed to SUB Right</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>SUB Left Insert Send</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>SUB Left Insert Return</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>SUB Left Out -ve</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>SUB Left Out +ve</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>GND</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>GND</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>SUB Right Insert Send</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>SUB Right Insert Return</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>SUB Right Out -ve</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>SUB Right Out +ve</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>GND</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>GND</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>FX Return Input -ve</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>FX Return Input +ve</td>
<td></td>
</tr>
</tbody>
</table>
### Telco Input Module 2206

**CN2 10 Way IDC Connector**

<table>
<thead>
<tr>
<th>1</th>
<th>MIX Left</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>MIX Right</td>
</tr>
<tr>
<td>3</td>
<td>GND</td>
</tr>
<tr>
<td>4</td>
<td>GND</td>
</tr>
<tr>
<td>5</td>
<td>SUB 2 Left</td>
</tr>
<tr>
<td>6</td>
<td>SUB 2 Right</td>
</tr>
<tr>
<td>7</td>
<td>GND</td>
</tr>
<tr>
<td>8</td>
<td>GND</td>
</tr>
<tr>
<td>9</td>
<td>SUB 1 Left</td>
</tr>
<tr>
<td>10</td>
<td>SUB 1 Right</td>
</tr>
</tbody>
</table>

**CON 3 10 Way IDC Connector**

<table>
<thead>
<tr>
<th>1</th>
<th>Output B +ve</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Output B -ve</td>
</tr>
<tr>
<td>3</td>
<td>Input B +ve</td>
</tr>
<tr>
<td>4</td>
<td>Input B -ve</td>
</tr>
<tr>
<td>5</td>
<td>GND</td>
</tr>
<tr>
<td>6</td>
<td>GND</td>
</tr>
<tr>
<td>7</td>
<td>Output A +ve</td>
</tr>
<tr>
<td>8</td>
<td>Output A -ve</td>
</tr>
<tr>
<td>9</td>
<td>Input A +ve</td>
</tr>
<tr>
<td>10</td>
<td>Input A -ve</td>
</tr>
</tbody>
</table>
### Stereo Input Module 2204

**CN2 10 Way IDC Connector**

<table>
<thead>
<tr>
<th>1</th>
<th>Right -ve</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Right +ve</td>
</tr>
<tr>
<td>3</td>
<td>Left -ve</td>
</tr>
<tr>
<td>4</td>
<td>Left +ve</td>
</tr>
<tr>
<td>5</td>
<td>GND</td>
</tr>
<tr>
<td>6</td>
<td>GND</td>
</tr>
<tr>
<td>7</td>
<td>Right -ve</td>
</tr>
<tr>
<td>8</td>
<td>Right +ve</td>
</tr>
<tr>
<td>9</td>
<td>Left -ve</td>
</tr>
<tr>
<td>10</td>
<td>Left +ve</td>
</tr>
</tbody>
</table>

### Mono Input Module 2202

**CN2 10 Way IDC Connector**

<table>
<thead>
<tr>
<th>1</th>
<th>Insert Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Insert Send</td>
</tr>
<tr>
<td>3</td>
<td>GND</td>
</tr>
<tr>
<td>4</td>
<td>GND</td>
</tr>
<tr>
<td>5</td>
<td>Input B -ve</td>
</tr>
<tr>
<td>6</td>
<td>Input B +ve</td>
</tr>
<tr>
<td>7</td>
<td>GND</td>
</tr>
<tr>
<td>8</td>
<td>GND</td>
</tr>
<tr>
<td>9</td>
<td>Input A -ve</td>
</tr>
<tr>
<td>10</td>
<td>Input A +ve</td>
</tr>
</tbody>
</table>

**CN3 10 Way IDC Connector**

<table>
<thead>
<tr>
<th>1</th>
<th>Logic GND B Selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Logic GND A Selected</td>
</tr>
<tr>
<td>3</td>
<td>ON Access</td>
</tr>
<tr>
<td>4</td>
<td>OFF Access</td>
</tr>
<tr>
<td>5</td>
<td>+ 7.5V</td>
</tr>
<tr>
<td>6</td>
<td>+ 7.5V</td>
</tr>
<tr>
<td>7</td>
<td>ON Access</td>
</tr>
<tr>
<td>8</td>
<td>OFF Access</td>
</tr>
<tr>
<td>9</td>
<td>CUE Enable Access</td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>
### 34 Way Buss Connector

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

### Stereo Source Select (2220)

38 Way Edac pin configurations

<table>
<thead>
<tr>
<th>Pin</th>
<th>Input</th>
<th>Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2</td>
<td>L +ve</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>L +ve</td>
</tr>
<tr>
<td>C</td>
<td>1</td>
<td>R +ve</td>
</tr>
<tr>
<td>D</td>
<td>2</td>
<td>R +ve</td>
</tr>
<tr>
<td>E</td>
<td>3</td>
<td>L -ve</td>
</tr>
<tr>
<td>F</td>
<td>2</td>
<td>L -ve</td>
</tr>
<tr>
<td>H</td>
<td>1</td>
<td>L -ve</td>
</tr>
<tr>
<td>J</td>
<td>1</td>
<td>R -ve</td>
</tr>
<tr>
<td>K</td>
<td>2</td>
<td>R -ve</td>
</tr>
<tr>
<td>L</td>
<td>3</td>
<td>L +ve</td>
</tr>
<tr>
<td>M</td>
<td></td>
<td>GND</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>GND</td>
</tr>
<tr>
<td>P</td>
<td>3</td>
<td>R +ve</td>
</tr>
<tr>
<td>R</td>
<td>4</td>
<td>L -ve</td>
</tr>
<tr>
<td>S</td>
<td></td>
<td>GND</td>
</tr>
<tr>
<td>T</td>
<td>4</td>
<td>R +ve</td>
</tr>
<tr>
<td>U</td>
<td>3</td>
<td>R -ve</td>
</tr>
<tr>
<td>V</td>
<td>4</td>
<td>L +ve</td>
</tr>
<tr>
<td>W</td>
<td>4</td>
<td>R -ve</td>
</tr>
<tr>
<td>X</td>
<td>5</td>
<td>L +ve</td>
</tr>
<tr>
<td>Y</td>
<td>5</td>
<td>R +ve</td>
</tr>
<tr>
<td>Z</td>
<td></td>
<td>GND</td>
</tr>
<tr>
<td>AA</td>
<td>5</td>
<td>L -ve</td>
</tr>
<tr>
<td>BB</td>
<td></td>
<td>GND</td>
</tr>
<tr>
<td>CC</td>
<td>6</td>
<td>L +ve</td>
</tr>
<tr>
<td>DD</td>
<td>6</td>
<td>R -ve</td>
</tr>
<tr>
<td>EE</td>
<td></td>
<td>GND</td>
</tr>
<tr>
<td>FF</td>
<td></td>
<td>GND</td>
</tr>
<tr>
<td>HH</td>
<td>6</td>
<td>L -ve</td>
</tr>
<tr>
<td>JJ</td>
<td>6</td>
<td>R +ve</td>
</tr>
<tr>
<td>KK</td>
<td>7</td>
<td>R +ve</td>
</tr>
<tr>
<td>LL</td>
<td>8</td>
<td>R +ve</td>
</tr>
<tr>
<td>MM</td>
<td>8</td>
<td>L +ve</td>
</tr>
<tr>
<td>NN</td>
<td>7</td>
<td>L +ve</td>
</tr>
<tr>
<td>PP</td>
<td>7</td>
<td>R -ve</td>
</tr>
<tr>
<td>RR</td>
<td>8</td>
<td>R -ve</td>
</tr>
<tr>
<td>SS</td>
<td>8</td>
<td>L -ve</td>
</tr>
<tr>
<td>TT</td>
<td>7</td>
<td>L -ve</td>
</tr>
</tbody>
</table>
Soundcraft SAC200

Index

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
Connect, 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
Electronic, 2, 8
Engineer's, 2
Equaliser, 3, 4
Expand, 9
EXT, 7
External, 1, 4, 5, 7, 9
Facility, 4, 5, 6, 8
Fade, 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
ICD, 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
Limit, 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
Motherboard, 1
Mute, 2, 3, 4, 7, 8
Normal, 2, 4, 7
Off-air, 7
On-air, 2
Operator, 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
Pair, 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
Phase-shift, 2
Phones, 8
Pinouts, 1
Plugged, 9
Port, 3
Post, 3, 4, 5, 6
Power, 4
PPM’s, 2
Pre, 3, 4, 5, 6
Prelim, 2, 3, 4, 5, 7
Presel, 8
Preset, 4, 7
Preset’s, 8
Production, 3, 4, 6
Program, 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
Restarts, 2
Return, 1, 6, 7
Reverse, 7
RIA, 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
Shielding, 3, 4
Signal, 2, 3, 4, 5, 6, 7
Source, 1, 2, 3, 4, 7, 8, 9
Spkr, 7
Spit, 7
Start, 3, 4
State, 2
Station, 8
Stations, 2
STE, 9
Stereo, 1, 2, 3, 4, 5, 6, 7, 8, 9
Stop, 7
Studio, 1, 4, 8
SUE, 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
VGA, 3, 4
Voltage, 2
VU, 2
Watch, 7
Wired, 9
Wireforms, 9
XLR, 2, 3
LEVEL DIAGRAM & CONSOLE PROFILE

MAX OUTPUT LEVEL +26dBu

MAIN OUTPUTS
(+4dBu

ALL INTERNAL LEVELS
(-2dBu

MONO LINE INPUT SIGNAL RANGE = -50dBu to +20dBu

LINE LEVEL INPUTS MAY
BE JUMPERED TO
-10dBV, 0dBu, +4dBu
OR +6dBu EXTERNAL
OPERATING LEVELS

STEREO INPUT RANGE

MIC INPUT RANGE

CUT OUT DIMENSIONS:
16CH: 724 X 848mm
24CH: 724 X 1148mm

MIC IN/PH IN
MAX GAIN ZIN = 700m
### Specifications

**Distortion:**
MEASURED AT UNITY GAIN WITH +10dBu AT OUTPUT
LINE INPUT TO ANY OUTPUT: 1kHz: <0.02%, 10kHz: <0.03%

**Crosstalk:**
<table>
<thead>
<tr>
<th>Frequency</th>
<th>1kHz</th>
<th>10kHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNRELATED CHANNELS</td>
<td>&gt; -100dB</td>
<td>-90dB</td>
</tr>
<tr>
<td>STEREO L-R</td>
<td>-70dB</td>
<td>-68dB</td>
</tr>
<tr>
<td>CHANNEL OFF</td>
<td>&gt; -100dB</td>
<td>-95dB</td>
</tr>
<tr>
<td>ROUTING CROSSTALK</td>
<td>&gt; -100dB</td>
<td>-98dB</td>
</tr>
</tbody>
</table>

**Noise:**
MEASURED WITH 20Hz – 20kHz BANDWIDTH
MIC INPUT EIN, 200Ω SOURCE: -128dBu
GROUP OUTPUT NOISE (1 CHANNEL ROUTED): -60dBu
TYPICAL MIX OUTPUT NOISE (10 CHANNELS ROUTED): -60dBu

**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: 1kΩ
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