SOUNDCRAFT *RM105*

USER GUIDE



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

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1. Introduction

System Overview

The RM105 is designed as a simple-to-operate on-air radio console. Front panel controls are kept to a minimum to give a clear and uncluttered appearance while providing sufficient flexibility and choice to meet individual requirements.

The design of the console allows for desktop mounting or drop-through mounting into a table-top.

A choice of input modules and frame sizes is available, with the option of a script tray on the larger frame sizes.

The console features illuminated switches for clear operation and a choice of high quality carbon or conductive plastic faders.

Frame Sizes

The RM105 is available in three frames sizes:

- 8 Inputs + Master
- 12 Inputs + Master
- 20 Inputs + Master

Module Options

Frames may be fitted with a choice of modules as follows:

- Mono Mic/Line Input module, with or without EQ
- Stereo Line Input module, with or without EQ
  features full remote start/stop capability
- Telco Input module, with or without EQ
- Master Broadcast Module
- Master Production Module (with PGM and AUX Master Faders)

Metering

Two meterbridge styles are available.

The standard version comprises:

- a single pair of VU meters (PPM meters optional)
- two pairs of VU meters on the 20 input frame

The alternative version comprises:

- a single pair of VU meters (PPM meters optional)
- two pairs of VU meters on the 20 input frame
- 4-digit timer module
- cue loudspeaker

Power Supplies

- 8, 12 and 20 input frames CPS150 power supply

Warranty

1 **Soundcraft** is a trading division of Harman International Industries Ltd.

End User means the person who first puts the equipment into regular operation.

Dealer means the person other than Soundcraft (if any) from whom the End User purchased the Equipment, provided such a person is authorised for this purpose by Soundcraft or its accredited Distrubutor.

Equipment means the equipment supplied with this manual.

2 If within the period of twelve months from the date of delivery of the Equipment to the End User it shall prove defective by reason only of faulty materials and/or workmanship to such an extent that the effectiveness and/or usability thereof is materially affected the Equipment or the defective component should be returned to the Dealer or to Soundcraft and subject to the following conditions the Dealer or Soundcraft will repair or replace the defective components. Any components replaced will become the property of Soundcraft.

3 Any Equipment or component returned will be at the risk of the End User whilst in transit (both to and from the Dealer or Soundcraft) and postage must be prepaid.

4 This warranty shall only be available if:

a) the Equipment has been properly installed in accordance with instructions contained in Soundcraft's manual; and

b) the End User has notified Soundcraft or the Dealer within 14 days of the defect appearing; and

c) no persons other than authorised representatives of Soundcraft or the Dealer have effected any replacement of parts maintenance adjustments or repairs to the Equipment; and

d) the End User has used the Equipment only for such purposes as Soundcraft recommends, with only such operating supplies as meet Soundcraft's specifications and otherwise in all respects in accordance Soundcraft's recommendations.

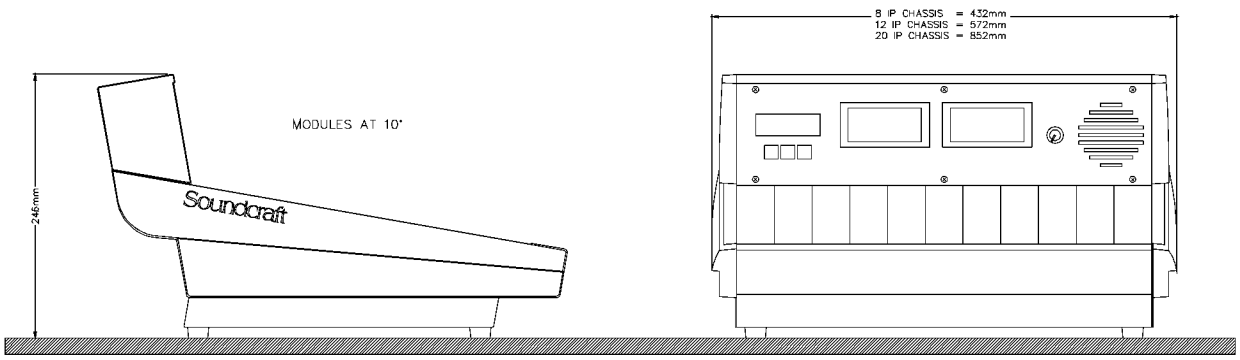
5 Defects arising as a result of the following are not covered by this Warranty: faulty or negligent handling, chemical or electro-chemical or electrical influences, accidental damage, Acts of God, neglect, deficiency in electrical power, air-conditioning or humidity control.

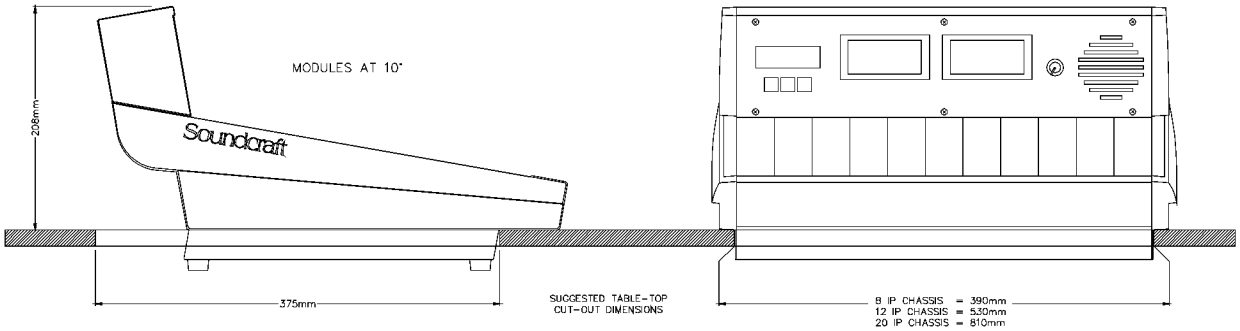
6. The benefit of this Warranty may not be assigned by the End User.

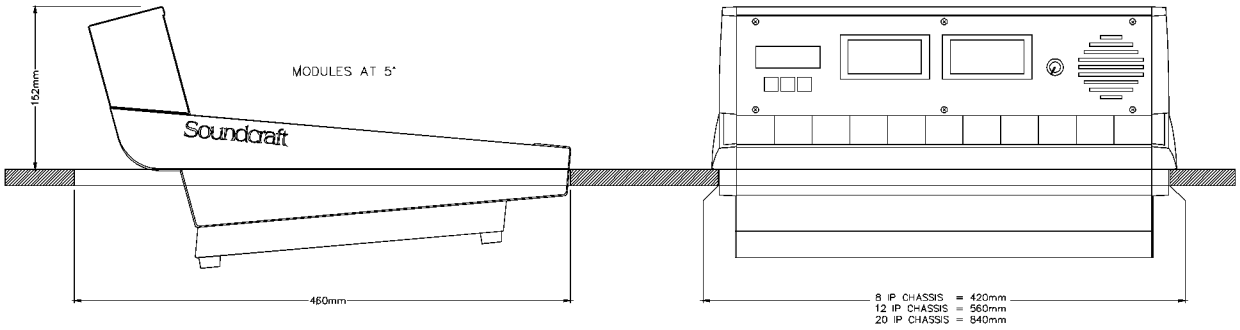
7. End Users who are consumers should note their rights under this Warranty are in addition to and do not affect any other rights to which they may be entitled against the seller of the Equipment.

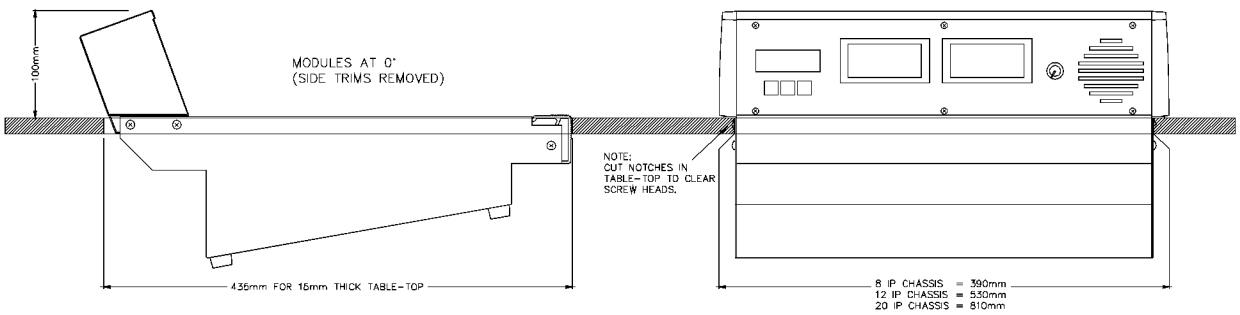
2. Installation

Dimensions









THESE DIMENSIONS ARE PROVIDED AS A GUIDE.
THEY SHOULD BE ADJUSTED TO SUIT THE THICKNESS
AND CONSTRUCTION STYLE OF THE TABLE-TOP.
ADEQUATE CLEARANCE MUST BE ALLOWED AT THE REAR
FOR CONNECTORS AND SERVICE ACCESS TO THE MODULES.

Precautions and Safety Instructions

General Precautions

Avoid storing or using the mixing console in conditions of excessive heat or cold, or in positions where it is likely to be subject to vibration, dust or moisture. Do not use any liquids to clean the fascia of the unit: a soft dry brush is ideal. Use only water or ethyl alcohol to clean the trim and scribble strips. Other solvents may cause damage to paint or plastic parts.

Avoid using the console close to strong sources of electromagnetic radiation (e.g. video monitors, highpower electric cabling): this may cause degradation of the audio quality due to induced voltages in connecting leads and chassis. For the same reason, always site the power supply away from the unit.

Caution! **In all cases, refer servicing to qualified personnel.**

Handling and Transport

The console is supplied in a strong carton. If it is necessary to move it any distance after installation it is recommended that this packing is used to protect it. Be sure to disconnect all cabling before moving. If the console is to be regularly moved we recommend that it is installed in a foamlined flightcase. At all times avoid applying excessive force to any knobs, switches or connectors.

Power Supplies & cables

Always make sure that the power supply unit (PSU) has been set to the same voltage as the mains supply

Always use the power supply and cable supplied with the mixer: the use of alternative supplies may cause damage and voids the warranty; the extension of power cables may result in malfunction of the mixing console.

Warning! **Always switch the power supply off before connecting or disconnecting the mixer power cable, removing of installing modules, and servicing. In the event of an electrical storm, or large mains voltage fluctuations, immediately switch off the PSU and unplug from the mains.**

Always ensure that you use the correct PSU for your mixer. The RM105 uses a CPS150 power supply for the 8, 12 and 20 input frames.

Signal Levels

It is important to supply the correct input levels to the console, otherwise signalto noise ratio or distortion performance may be degraded; and in extreme cases, damage to the internal circuitry may result. Likewise, on all balanced inputs avoid sources with large commonmode DC, AC or RF voltages, as these will reduce the available signal range on the inputs. Note that 0dBu = 0.775V RMS.

The microphone inputs are designed for use with balanced low impedance (150 or 200 ohms) microphones.

Caution! **DO NOT use unbalanced microphones or battery powered condenser microphones without isolating the +48V phantom power: degraded performance or damage to the microphone may result.**

The sensitivity of the Mic inputs is variable from -20dBu to -70dBu, with a maximum input level of +6dBu. The Line Input sensitivity is variable from -30dBu to +6dBu with a maximum input level of +26dBu.

The Stereo and Telco input sensitivity is variable from -10dBu to +4dBu, with a maximum input level of +26dBu.

The main outputs of the console (PGM, AUX and MONO) are balanced at a nominal level of 0dBu, with the option of -10dBV on the AUX output by changing internal jumpers. Maximum output level is +26dBu into 600 ohms.

The Telco mix-minus output is balanced at a nominal level of 0dBu with a maximum output level of +26dBu into 600 ohms.

Installation

The RM105 is designed for reliability and high performance, and is built to the highest standards. Whilst great care has been taken to ensure that installations are made as troublefree as possible, care taken at this stage, followed by correct setting up will be rewarded by a long life and reliable operation.

Wiring Considerations

A For optimum performance it is essential for the earthing system to be clean and noisefree, as all signals are referenced to this earth. A central point should be decided on for the main earth point, and all earths should be 'star-fed' from this point. It is recommended that an individual earth wire be run from each electrical outlet, back to the system star point to provide a safety earth reference for each piece of equipment.

B Install separate mains outlets for the audio equipment, and feed these independently from any other equipment.

C Avoid locating mains distribution boxes near audio equipment, especially tape recorders, which are very sensitive to electromagnetic fields.

D Where possible ensure that all audio cable screens and signal earths are connected to ground only at their source.

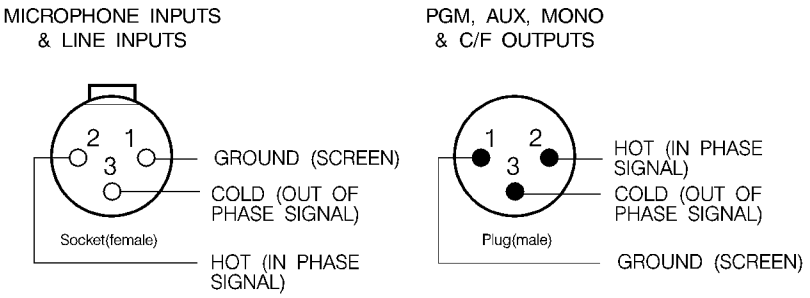
Power Supply

Always ensure that you use the correct PSU for your mixer. The RM105 uses a CPS150 power supply for the 8, 12 and 20 input frames.

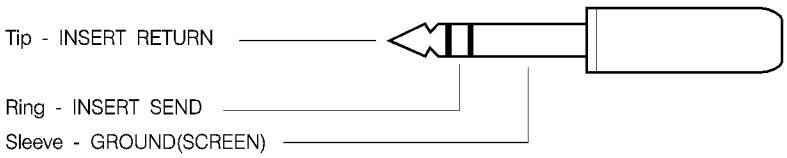
Warning! **Before switching on your RM105 console, check that the mains voltage selectors on the power supply unit is set to the correct mains voltage for your area, and that the fuse is of the correct rating and type. This is clearly marked on the case of the power supply. Do not replace the fuse with any other type, as this could become a safety hazard and will void the warranty.**

Wiring Conventions

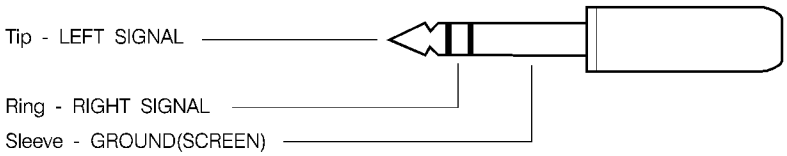
The RM105 uses various different types of audio connector: 3-pin XLR, ¼" 3-pole jacks and 'D' type connectors. This section describes how to connect external equipment to the console. Correctly-made cables of the proper type will ensure peak performance from your console.



¼" 'A' Gauge Stereo Jack Plug used as an insert point:



1/4" 'A' Gauge Stereo Jack Plug used as stereo output:
Headphones and Control Room Monitors



The following pages give details of the connectors which are not covered by the diagram above.

Stereo Input Module

Input 2 + Remotes (15-pin 'D' type connector, CN5)

Pin 1, 7, 14	Chassis
Pins 2, 9	Machine 1 Start
Pins 3, 10	Machine 1 Stop
Pins 4, 11	Machine 2 Start
Pins 5, 12	Machine 2 Stop
Pins 6, 13	Input 2 Right -,+
Pins 8, 15	Input 2 Left -,+

Telco Input Module

Remotes (15-pin 'D' type connector, CN5)

Pin 1	Chassis
Pin 2	Divert n/c
Pin 3	Divert n/o
Pins 9,10	Divert common
Pin 8	Insert Return
Pin 15	Insert Send
Pins 7, 14	Ground
Pins 4, 5, 6, 11, 12, 13	no connection

Master Module

External Inputs (15-pin 'D' type male connector, CN3)

Pin 1	Chassis
Pin 2	External Input 1 Left +
Pin 3	External Input 1 Right +
Pin 4	External Input 2 Left +
Pin 5	External Input 2 Right +
Pin 6	Ground
Pin 7	External Input 3 Left
Pin 8	External Input 3 Right
Pin 9	External Input 1 Left -
Pin 10	External Input 1 Right -
Pin 11	External Input 2 Left -
Pin 12	External Input 2 Right -
Pin 13	Ground
Pin 14	External Input 4 Left
Pin 15	External Input 4 Right

Remote (9-pin 'D' type connector, CN11)

Pin 1	C/Room Mute Contact 1 common
Pin 2	C/Room Mute Contact 1 n/o
Pin 3	C/Room Mute Contact 2 common
Pin 4	C/Room Mute Contact 2 n/o
Pin 5	no connection
Pin 6	no connection
Pin 7	no connection
Pin 8	no connection
Pin 9	no connection

Guest H/P + Rev T/B (9-pin 'D' type connector, CN11)

Pin 1	Chassis Ground
Pin 2	Headphone Ground
Pin 3	Guest Headphone Left channel output
Pin 4	Headphone Ground
Pin 5	Guest Headphone Right channel output
Pin 6	Ground
Pin 7	Reverse Talkback audio nominal level 0dB
Pin 8	Reverse Talkback control, connect to pin 6 to activate
Pin 9	no connection

Jumper Settings

* = factory default setting

Mic/Line Input Module SC3655

J1 - Phantom Power

link pin 1 to pin 2	Phantom power on
link pin 2 to pin 3	Phantom power off *

J2 - feed to talkback mix

link pin 1 to pin 2	enable feed to talkback mix
link pin 2 to pin 3	disable feed to talkback mix *

Dual Stereo Input Module SC3654

J1

closed* to enable start from CUE selection

J2	**J3**	
closed*	closed*	enables momentary start from the START button (each time START is pressed a pulse is generated)
open	closed	enables latching start from the fader or START button
open	open	enables momentary start from fader or START button

Note: fader closure issues stop pulse in all configurations

J4

closed* to enable timer

Telco Input Module SC3656

J1 - Insert Point Enable/Disable

link pin 1 to pin 2	Insert Point Disabled
link pin 2 to pin 3	Insert Point Enabled *

Left/Right Master Module SC3449

J1 - Set Level for AUX Left & Right Output

Position A	0dBu *
Position B	-10dBv

J1 - Mute/Timer Bus Select

J2 - Mute/Timer Bus Select

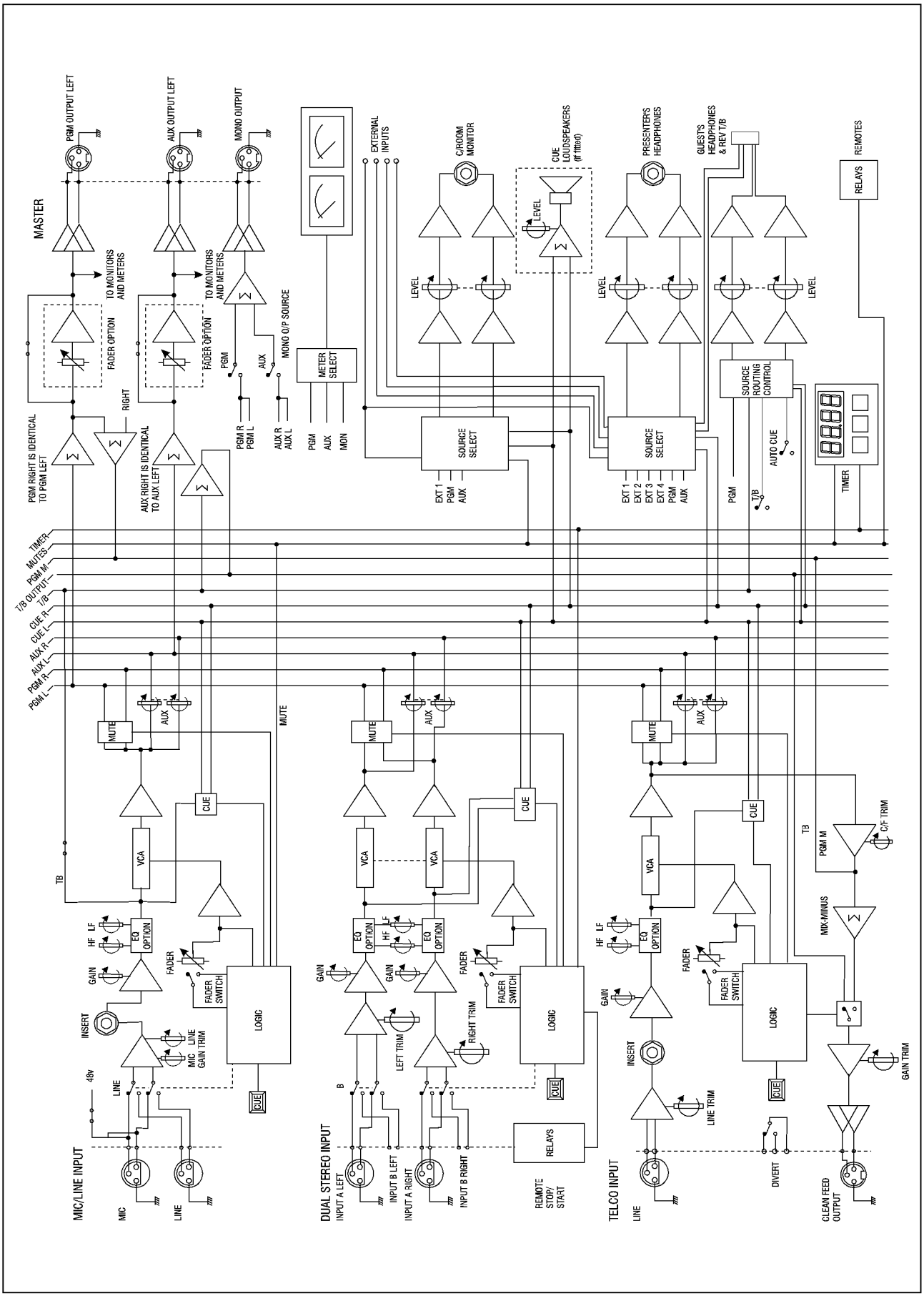
For **manual-only** operation, place jumper J1 across pins 2 & 3, and remove jumper J2.

For operation from the **mute bus***, place jumpers J1 and J2 across pins 1& 2. The timer will count up from zero when a mic channel is active and the fader is raised. The timer will stop when the fader is closed. It will reset and start again when the fader is opened again.

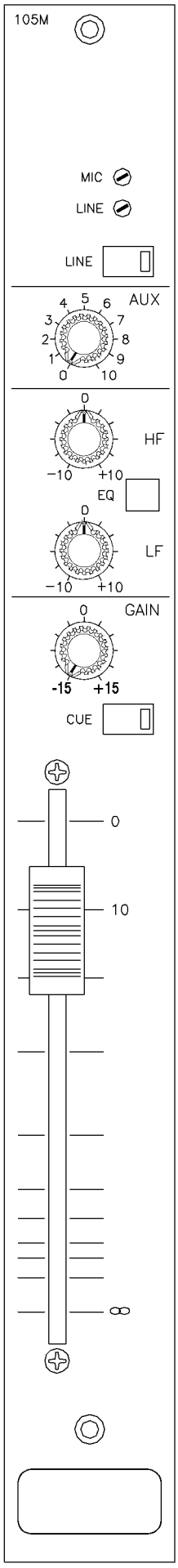
For operation from the **timer bus**, place jumpers J1 and J2 across pins 2 & 3. The timer will count up from zero when a stereo channel is active and the fader is raised. The timer will reset and start when another channel is active and its fader is raised. The timer may be stopped and reset by the front panel switches.

3. Block Diagram

Block Diagram



4. Functional Description



Mic/Line Input Module

Input Stage

Two inputs, one microphone level and one line level, are provided to the module on separate XLR connectors. The MIC input has +48V Phantom Power available, which may be activated by an internal jumper.

1 Each input has an individual sensitivity control via a multiturn preset which may be adjusted using a small screwdriver through the front panel.

2 The **LINE** switch selects the Line Input socket when depressed and the Mic Input socket when released. A LED in the switch glows red when the Line Input is selected.

Note that phantom power is not connected to the LINE XLR, even when selected on the MIC input.

3 A further GAIN control allows an adjustment of +/-15dB to the signal level. The GAIN control is located after the insert-point.

Auxiliary Send

4 The post-fader Aux send is level-controlled via the **AUX** pot.

EQ

5 The EQ section is a two-band shelving type, with +/-10dB of cut or boost at 8kHz (**HF**) and 180Hz (**LF**). The **EQ** switch brings the equaliser into circuit.

The EQ section is located post insert-point, and pre-fade.

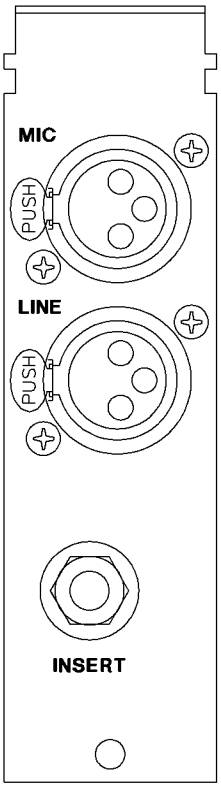
Cueing

6 The **CUE** switch works in conjunction with a microswitch on the Fader. The illuminated, electronically latching CUE switch works as follows: when the fader is fully down it routes the pre-fade, post-EQ signal to the stereo Cue busses. This signal appears on the Headphones or Cue Speaker (if fitted) and can be selected onto the main monitors by pressing the AUTO CUE button on the Master module.

Cue may be cancelled in two ways:

- Pressing the CUE switch a second time
- Moving the fader away from rest at infinity

CUE cannot be selected when the fader is not fully down.



Rear Connector Panel

Output Control

7 The 100mm **FADER** (with microswitch) operates on a VCA, and has 0dB of gain at the top. The output of the VCA feeds the L and R PGM Mix busses (and also the stereo aux busses via the AUX pot).

The microswitch attached to the Fader detects when it is in the fully down position.

Insert Point

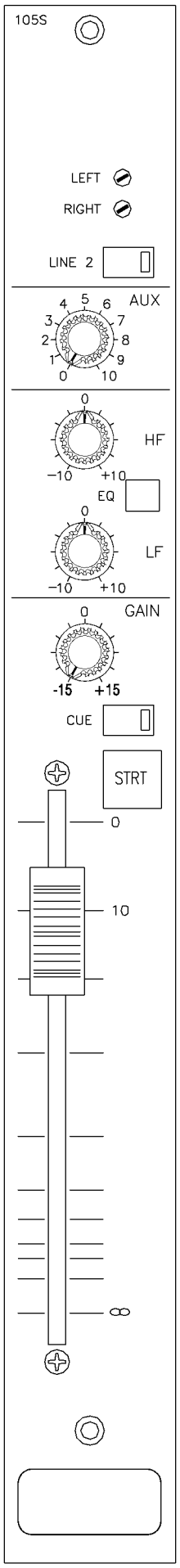
A pre-fade, pre-talkback Insert Point is provided on a 1/4" 3-pole jack on the rear panel. This allows for the use of an effects machine to be added to the mono input channel, e.g. voice processor, echo. The send and return lines are unbalanced and care will need to be taken with the length and type of leads which are used.

The Insert is by-passed when no jack is connected.

Talkback

The post-EQ, pre-fade signal is routable, via an internal jumper, to the Talkback Mix bus. This signal is ultimately routed to any Telco modules, allowing the Presenter to talk off-air to a caller.

Stereo Input Module



Input Stage

Two stereo Line Inputs are provided to the module: input 1 is on XLR connectors, and input 2 is on the multipin connector.

1 The input has individual gain controls for Right and Left via multiturn presets which may be adjusted using a small screwdriver through the front panel. The gain range allows matching to -10dBV or +4dBu sources.

2 The **LINE 2** switch selects input 2 on the multipin connector when depressed and the Input 1 XLR connectors when released. An LED in the switch glows red when input 2 is selected. The switch also selects the corresponding pair of start/stop remote contacts (see below).

3 A further **GAIN** control allows an adjustment of +/-15dB to the signal level.

Auxiliary Send

4 The post-fader AUX send is level-controlled via the **AUX** pot.

EQ

5 The EQ section is a two-band shelving type with ganged stereo controls for HF and LF. There is 10dB of cut or boost at 6.5kHz (**HF**) and 60Hz (**LF**). The **EQ** switch brings the Equaliser into circuit.

Cueing

6 The **CUE** switch works in conjunction with a microswitch on the Fader. The illuminated, electronically latching CUE switch routes the pre-fade, post-EQ signal to the stereo Cue busses. This signal appears on the Headphones or Cue Speaker (if fitted) and can be selected onto the main monitors by pressing the AUTO CUE button on the Master module.

An internal jumper allows the CUE switch to issue a remote start command (see point 7 below).

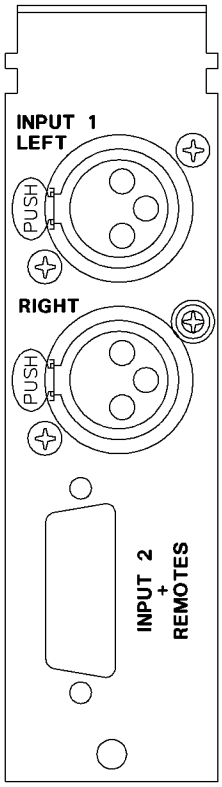
Cue may be cancelled in two ways:

- Pressing the CUE switch a second time
- Moving the fader away from rest at infinity

CUE cannot be selected when the Fader is not fully down.

7 The illuminated **START** switch allows start commands to be issued to external sources. There are two sets of relays which issue the start and stop commands: one set for Line Input 1 and the other for Line Input 2. The start/stop commands are only issued to the machine which is selected by the Line 2 switch.

When the Fader is moved away from the fully down position, the START switch is armed: its internal LED glows at half brightness to indicate that it is armed. When the START button is then pressed a start command is issued and the START switch



Rear Connector Panel

lights up at full brightness.

Alternatively the Start switch may be pressed before the Fader is moved up, in which case it will illuminate at half brightness. When the Fader is then moved away from the fully down position a start command will be issued and the START switch will illuminate at full brightness.

A stop command is issued whenever the Fader is moved to the fully down position.

If the CUE switch is enabled to issue a start command (via an internal jumper), note that the fader must be down and the START switch must be armed before the CUE switch is able to issue the start command.

Note: the start commands may be latched or momentary, depending upon jumper settings; the stop commands are always momentary (see page 2.9).

Output Control

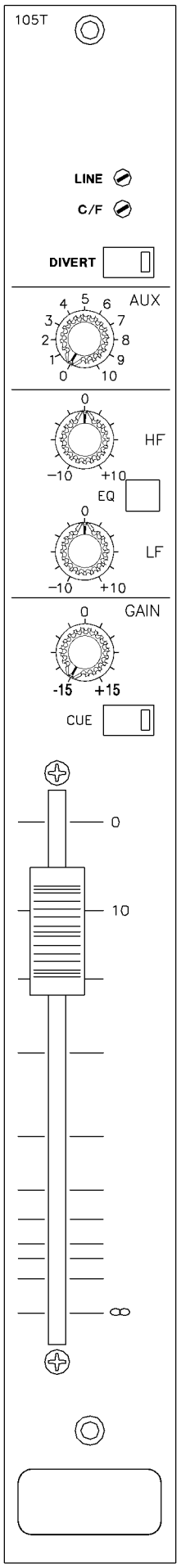
8 The 100mm **FADER** operates on twin VCAs. It has 0dB of gain at the top. The output of the VCAs feed the L and R PGM Mix busses (and the also the stereo aux busses via the AUX pot).

There is a microswitch attached to the Fader which detects when it is in the fully down position.

Remotes

The multipin connector on the rear panel provides individual start/stop commands for each stereo input source, as selected by the Line 2 switch. The outputs are isolated relay contact closures.

Telco Input Module



Input Stage

The Telco module must be connected to the telephone system via a Telephone Hybrid.

1 The balanced **LINE** Input is a female XLR connector on the rear panel into which the output from an external Telephone Hybrid may be plugged. A gain control is provided via a multiturn preset which may be adjusted using a small screwdriver through the front panel.

2 The balanced **C/F** (Clean Feed) output is a male XLR connector on the rear panel which may be plugged into the input of an external Telephone Hybrid. The Clean Feed signal (also known as Mix-Minus) is the programme output *minus* the telephone signal. A multiturn preset is accessible through the front panel to allow the output level to be adjusted.

3 The **DIVERT** switch with integral LED provides an isolated switch change-over to connect to an external Telephone Hybrid to allow a caller to be diverted to or from, for example, a standard telephone handset. These switch contacts are provided on the Remotes connector.

4 The **GAIN** control allows an adjustment of +/-15dB to the input signal level. The GAIN control is located after the insert-point.

Auxiliary Send

5 The post-fader Aux send is level-controlled via the **AUX** pot.

EQ

6 The EQ section is a two-band shelving type, with +/-10dB of cut or boost at 8kHz (**HF**) and 180Hz (**LF**). The **EQ** switch brings the equaliser into circuit.

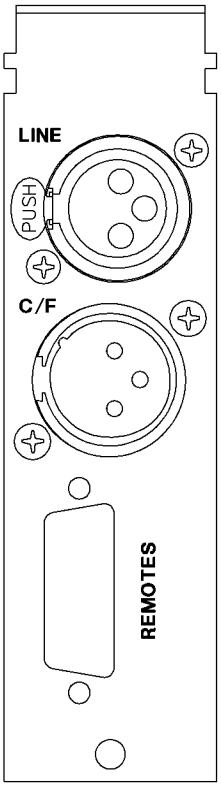
Cueing

7 The **CUE** switch works in conjunction with a microswitch on the Fader. Pressing the electronically latching CUE switch routes the pre-fade signal to the stereo Cue busses. This signal appears on the Headphones or Cue Speaker (if fitted) and can be selected onto the main monitors by pressing the AUTO CUE button on the Master module. Additionally, the Talkback Output signal is routed to the Cleanfeed Output. This allows the presenter to talk to the caller off-air.

Cue may be cancelled in two ways:

- Pressing the CUE switch a second time
- Moving the fader away from rest at infinity

CUE cannot be selected when the Fader lifted away from the fully down position.



Rear Connector Panel

Output Control

8 The 100mm **FADER** operates on a VCA, and has 0dB of gain at the top. The output of the VCA feeds the L and R PGM Mix busses (and also the stereo aux busses via the AUX pot).

The microswitch attached to the Fader detects when it is in the fully down position.

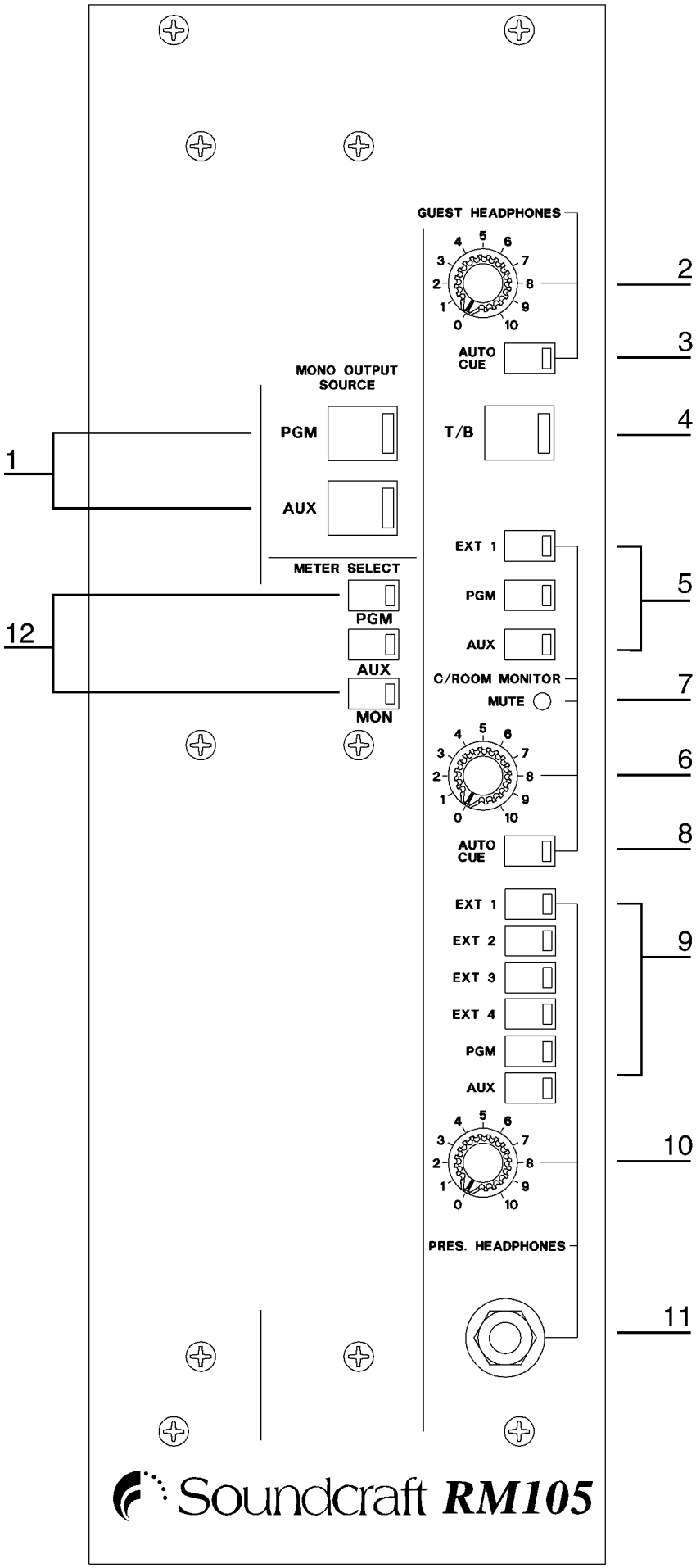
Insert Point

The insert send and return connections are available on the remotes connector. They are unbalanced. The insert point must be enabled by an internal jumper. The insert point is located immediately before the GAIN pot.

Remotes

The Remotes connector provides the following facilities:

- Insert Point - unbalanced, which may be by-passed or enabled by an internal jumper.
- Divert - isolated single-pole change-over switch.


GUEST HEADPHONES
AUTO CUE
MONO OUTPUT SOURCE
PGM
AUX
T/B
METER SELECT
PGM
AUX
MON
EXT 1
PGM
AUX
C/ROOM MONITOR
MUTE
AUTO CUE
EXT 1
EXT 2
EXT 3
EXT 4
PGM
AUX
PRES. HEADPHONES
Soundcraft RM105
1
2
3
4
5
6
7
8
9
10
11
12

Master Section

Main Outputs

The Master module incorporates the mix amps outputs for the **PGM** and **AUD** busses, plus a **MONO** output which can be sourced from the PGM or AUD busses as selected by the MONO OUTPUT SOURCE switches (see below). These three outputs are electronically balanced on male XLR connectors on the rear panel.

Output levels are nominally 0dBu, but the AUD outputs may be changed via internal jumpers to give -10dBV.

Master Faders are available as an option for the PGM and AUD outputs.

External Inputs

There are four stereo external available on a 15-pin male 'D'-type connector on the rear panel. Inputs 1 & 2 are electronically balanced at 0dBu and Inputs 3 & 4 are unbalanced at -10dBV.

Mono Output

1 The **MONO OUTPUT SOURCE** switches select either one or both of PGM or AUD as the source for the MONO output. Integral LED indicators illuminate when the source is selected.

Monitoring

Separate source selectors feed the Guest Headphones, Control Room Monitors and the Presenter's Headphones

Guest Headphones

2 The LEVEL control sets the output level to the stereo Guest Headphones output. The source is normally PGM.

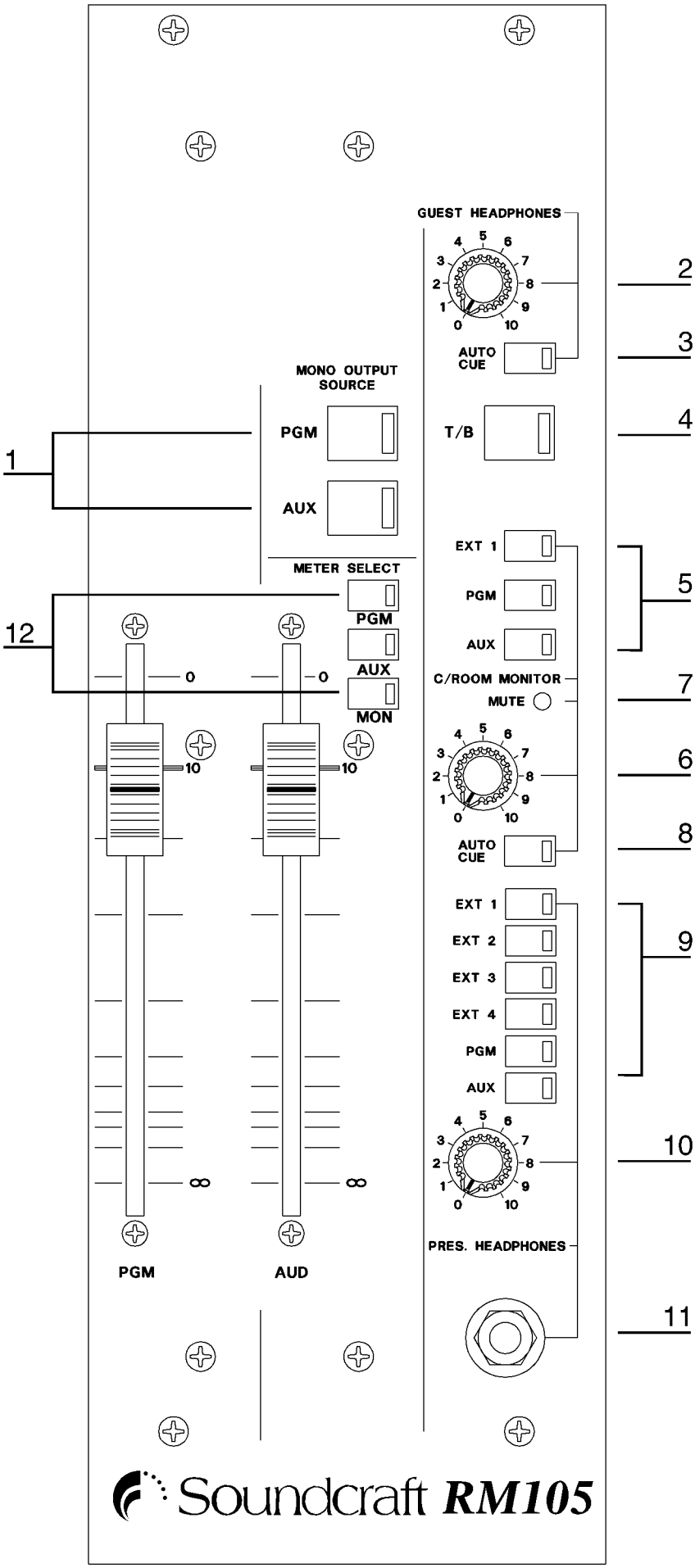
3 Normally the Cue signal appears on the Presenter's Heaphones and Cue Speaker in the meterbridge (when fitted). Pressing **AUTO CUE** routes an active CUE to the Guest Headphones, replacing the normal PGM source. When the CUE is released the headphones return to the original source.

4 Pressing **T/B** routes the signal from the Talkback Bus directly to the Guest Headphones, replacing the PGM signal. (The Talkback Bus normally carries the Presenter's Mic signal via a dedicated Mic/Line input with the Talback jumper fitted). The PGM signal is restored when T/B is released.

Control Room Monitor

5 Three **SOURCE SELECT** switches provide a choice of External Input 1, PGM or AUD as the source for the monitors.

3 The **LEVEL** control sets the output level to the stereo C/Room Monitor jack on the rear panel. The outputs are unbalanced.


GUEST HEADPHONES
AUTO CUE
MONO OUTPUT SOURCE
PGM
AUX
T/B
METER SELECT
PGM
AUX
MON
EXT 1
PGM
AUX
C/ROOM MONITOR
MUTE
AUTO CUE
EXT 1
EXT 2
EXT 3
EXT 4
PGM
AUX
PRES. HEADPHONES
PGM
AUD
Soundcraft RM105
1
2
3
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7 The Control Room Monitors may be muted automatically when local microphones are turned ON and the corresponding Faders opened. The **MUTE** LED illuminates to show that a 'Mic Live' condition has muted the monitors. The same signal is used to activate a relay which provides two isolated single-pole contact closures on the 9-pin 'D'-type **REMOTE** socket on the rear panel.

8 Normally the Cue signal appears on the Presenter's Heaphones and Cue Speaker in the meterbridge (when fitted). Pressing **AUTO CUE** routes an active CUE to the Control Room Monitors, replacing the previous source. When the CUE is switched off the monitor returns to the original source.

Presenter's Headphones

9 Six **SOURCE SELECT** switches provide a choice of External Inputs 1-4, PGM or AUX as the source for the headphones.

10 The **LEVEL** control sets the level of the headphone signal.

11 The headphone output is a 3-pole 1/4" jack.

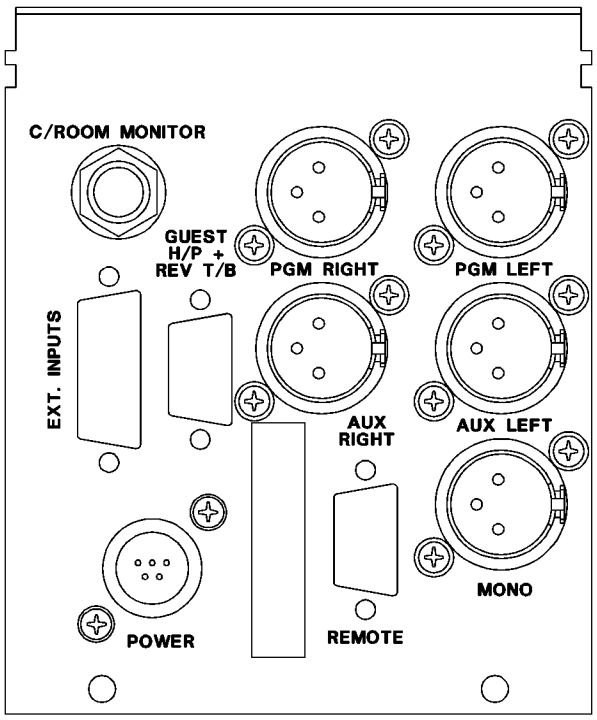
12 The meterbridge is fitted with a pair of VU meters as standard. The **METER SELECT** switches provide a choice of PGM, AUX or MON (C/Room Monitor) as the source for the meters. Note that the MON position provides a means of monitoring the external inputs via the C/Room Monitor source selection.

On the larger frame sizes an additional pair of meters may be fitted, and in this case one pair of meters will always display the PGM output.

Power Input

The 5way locking **POWER** connector is the power input to the console. The console requires +17V, 17V and +48V.

Rear Connector Panel



PGM, AUX & Mono

Max. output	+26dBu into 600Ω
Output impedance	<75Ω

General

THD	< 0.02%
Crosstalk	< -80dB @ 20kHz

Meterbridge

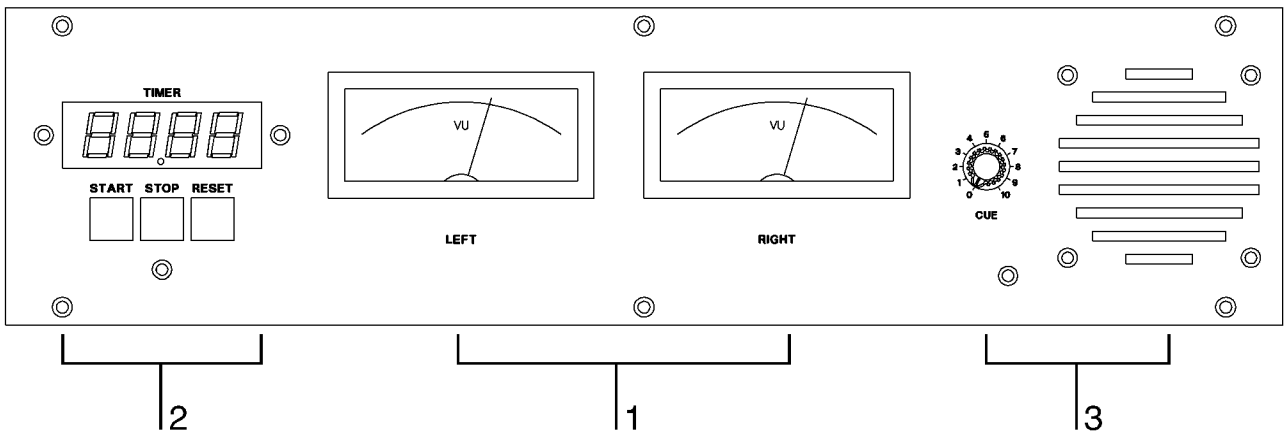
Two meterbridge styles are available. The following facilities are provided as standard:

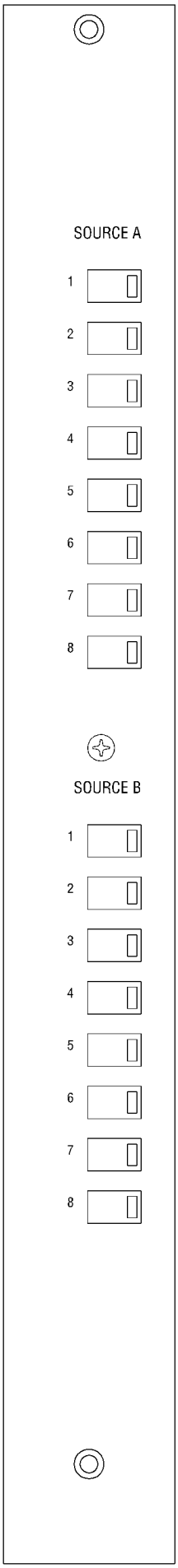
1 a single pair of VU meters (PPM meters optional). These display the level of the source selected by the METER SELECT switches, and can be calibrated by means of two screwdriver presets on the Master Panel (see earlier in this chapter).

The following facilities are only available on the optional meterbridge:

2 4-digit **TIMER MODULE.** This can be programmed by internal jumpers on the stereo modules to start automatically when the stereo channel is activated, or controlled manually by the local switches.

3 The **CUE SPEAKER** and associated **LEVEL** control monitor the output of the CUE bus





Stereo Source Select Module

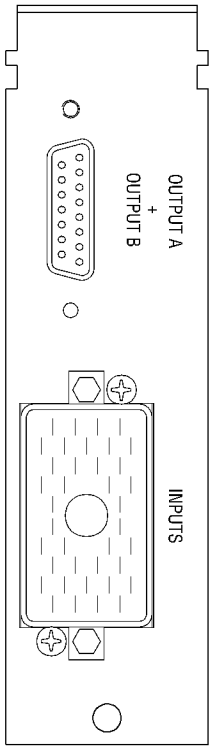
The Stereo Source Select module provides switching from 8 balanced stereo sources, which are presented on a 38-way male EDAC connector to two independent balanced stereo outputs on a 15-way male D-type connector. Switching is done via two independent banks of eight switches.

Select Switches

An LED in each switch indicates which switch in each bank is selected. The switches in each bank are interlocked, i.e. pressing a switch will deselect any othet switch in the same bank.

EDAC Connector Pinouts

Pin	Signal	Pin	Signal
A	1 L+	X	Chassis Ground
B	1 L-	Y	Chassis Ground
C	1 R+	Z	5 L+
D	1 R-	AA	5 L-
E	2 L+	BB	5 R+
F	2 L-	CC	5 R-
H	Not used	DD	6 L+
J	2 R+	EE	6 L-
K	2 R-	FF	6 R+
L	3 L+	HH	6 R-
M	3 L-	JJ	7 L+
N	3 R+	KK	7 L-
P	3 R-	LL	Not used
R	4 L+	MM	7 R+
S	4 L-	NN	7 R-
T	4 R+	PP	8 L+
U	4 R-	RR	8 L-
V	Chassis ground	SS	8 R+
W	Chassis ground	TT	8 R-



15-Way D-type Pinout

Pin	Signal	Pin	Signal
1	Chassis ground	9	Source A L+
2	Source A L-	10	Not used
3	Not used	11	Source A R+
4	Source A R-	12	Not used
5	Not used	13	Source B L+
6	Source B L-	14	Not used
7	Not used	15	Source B R+
8	Source B R-		

5. Specifications

Mic/Line Input Module

Microphone Input

Electronically balanced

Input Impedance	>2.2kΩ
Maximum I/P level	+6dBu
Sensitivity Range	-70dBu to -20dBu
CMRR	> 100dB
EIN	-128dBu, 150Ω source

Line Input

Electronically balanced

Input Impedance	>20kΩ
Maximum I/P level	+26dBu
Sensitivity Range	-30dBu to +6dBu

Insert Point

Insert Send Nominal Level	-10dBu unbalanced
Insert Send Maximum Level	+20dBu
Output Impedance	<75Ω
Insert Return Nominal Level	-10dBu unbalanced
Insert Return Maximum Level	+20dBu
Input Impedance	>10kΩ

General

THD	< 0.02%, 40Hz - 20kHz

Stereo Input Module

Line Inputs

Electronically balanced

Input Impedance	>40kΩ
Maximum I/P level	+26dBu
Sensitivity Range	-10dBu to +4dBu
EIN	-85dBu, 600Ω source

General

EIN	-85dBu, 600Ω source
THD	< 0.02%, 40Hz - 20kHz