

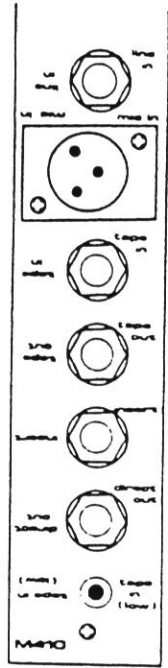
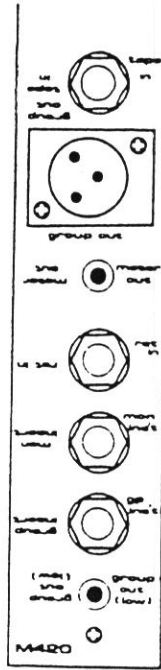
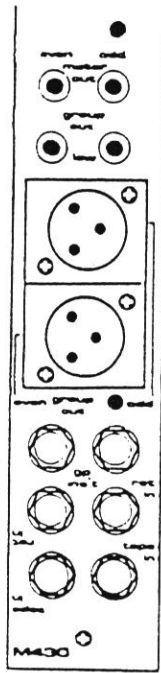
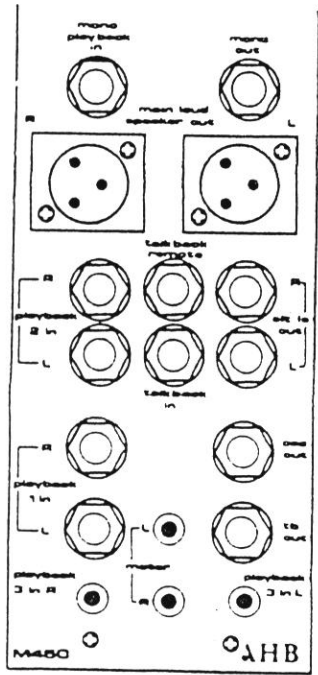
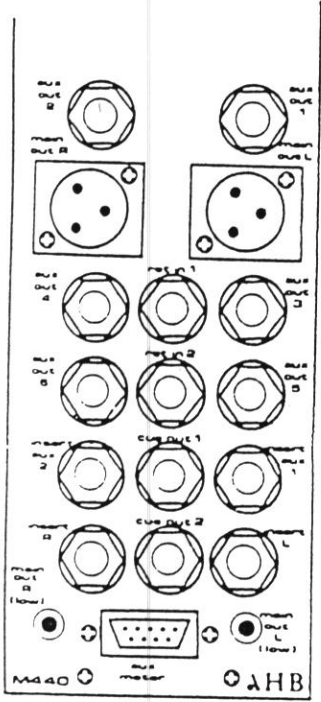
CONNECTIONS

- 1) DC inlet from the power supply is located on the mainframe inner rear panel. Open the meterbridge to gain access. Make all DC connections with AC power off.
- 2) The second 8 way DC connector provides power for the extender frame when fitted. The two connectors are wired in parallel.
- 3) Connections to the console for audio circuits terminate on the modules. The table gives details of connector type and wiring convention.
- 4) The Sigma producer's desk/patchbay includes rack capacity for a patchbay. The standard producer's desk/patchbay is supplied ex-works without patch-strips and wiring. Installation of patch-strips and wiring is the choice of the purchaser.
- 5) The console stand lower trims are removeable for the purposes of harnessing audio cables down the inside of the stands to floor ducts. If the harnessing is done with this in mind the trims can be replaced. Refer to the illustration of frame wiring.
- 6) Typical installation connections are illustrated.
- 7) The balanced output system includes short circuit protection and compensation for unbalanced operation.

Output level from balanced outputs will be as follows:

Connections	Output Level
Balanced load across XLR pins 2 and 3	0VU 1.23V
Unbalanced load, pin 3 grounded	0VU 1.23V (in phase)
Unbalanced load, pin 2 grounded	0VU 1.23V (anti phase)
Unbalanced load, pin 2 or pin 3 not terminated	-6VU 0.615V

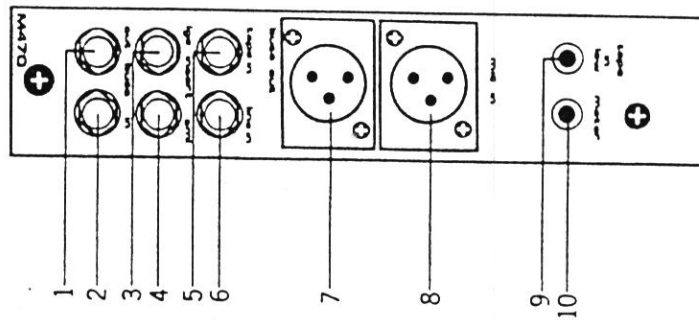
- 8) Experience shows that a logical studio earthing plan which avoids double earthing and which takes into account any unbalanced equipment usually yields the quietest interference-free system. The console/PSU combination may be earthed via the audio connector cases and pins 1, or at the chassis ground terminal. Console chassis is not connected to the PSU power cord earth.



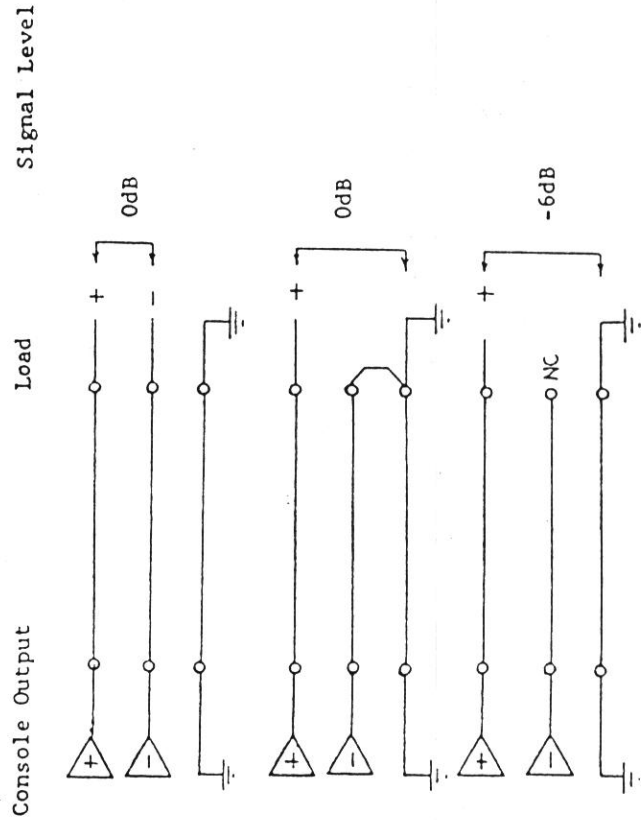
AUXILIARY NAME	TERMINAL	CONNECTIONS	DETAILS
Main Out Low	RCA phono female	Inner + phase, case ground	22 ohms unbalanced -10dBV output
Group Out Low	RCA phono female	Inner + phase, case ground	22 ohms unbalanced -10dBV output
Insert	1/4" 3 pole jack female	Tip send, ring return case ground	22 ohms unbalanced output
Headphone	1/4" 3 pole jack female	Tip left, ring right, case ground	100 ohms 4 ohm to 600 ohm suitable
DC Input	8 way female	connected in parallel with second 8 way see frame interconnection dwg no MB0181	+16V smoothed regulated 5A audio supply ±15V smoothed regulated 3A LED and logic supply +48V smoothed regulated 0.2A phantom power supply
Meter Out	RCA phono female	Inner signal, case ground	nominal +4dBV from 3600 ohms
TB In	1/4" 3 pole female jack	Tip signal, ring control, case ground	combined audio and control input for reverse talkback, see manual text
TB remote	1/4" 3 pole female jack	Tip control, ring + case ground	connect tip to ring for operation of TB circuit see manual text
Chassis terminal	2 B.A. binding post	audio ground and chassis	PSU output does not include AC earth

- INPUTS		NAME	TERMINAL	CONNECTIONS	SIGNAL LEVEL	IMPEDANCE	REMARKS
		Tape In	1/4" 3 pole jack female	Tip + phase, ring - phase, case ground	Nominal +4dBV, 1.23VRMS	10K ohm to 50K ohm	differential balanced input
		Line In	1/4" 3 pole jack female		Nominal +4dBV, 1.23VRMS	10K ohm to 50K ohm	differential balanced input
		Ret In	1/4" 3 pole jack female		Nominal +4dBV, 1.23VRMS	10K ohm to 50K ohm	differential balanced input
		Playback In (PB) 1,2	1/4" 3 pole jack female		Nominal +4dBV, 1.23VRMS	10K ohm to 50K ohm	differential balanced input
		Mono PB In	1/4" 3 pole jack female		Nominal +4dBV, 1.23VRMS	10K ohm to 50K ohm	differential balanced input
		Insert	1/4" 3 pole jack female	Tip send, ring = return	0dBV, 0.775VRMS	10K ohm to 50K ohm	unbalanced input
		Tape In Low	RCA phono female	Inner + phase, case ground	Nominal 300mVRMS	10K ohm	unbalanced -10dBV input
		PB 3 In	RCA phono female	Inner + phase, case ground	Nominal 300mVRMS	10K ohm	unbalanced -10dBV input
		Mic In	XLR female 3 pin	Pin 2 + phase, pin 3 - phase, pin 1 ground	variable -70dBV to -30dBV	1K ohm	differential balanced input with +48V phantom power (symmetrical)
OUTPUTS		NAME	TERMINAL	CONNECTIONS	SIGNAL LEVEL	IMPEDANCE	REMARKS
		Direct Out	1/4" 3 pole jack female	Tip + phase, ring and case ground	0dBV, 0.775VRMS	22 ohms	unbalanced line output
		Aux 1-6 Out	1/4" 3 pole jack female	Tip + phase, ring and case ground	+4dBV, 1.23VRMS	22 ohms	unbalanced line output
		Cue 1 Out	1/4" 3 pole jack female	Tip left, ring right case ground	+4dBV, 1.23VRMS	22 ohms	unbalanced line output
		Cue 2 Out	1/4" 3 pole jack female	Tip left, ring right case ground	+4dBV, 1.23VRMS	22 ohms	unbalanced line output
		Alt L.S. Out	1/4" 3 pole jack female	Tip + phase, ring and case ground	+4dBV, 1.23VRMS	22 ohms	unbalanced line output
		Osc. Out	1/4" 3 pole jack female	Tip + phase, ring and case ground	+4dBV, 1.23VRMS	22 ohms	unbalanced line output
		TB Out	1/4" 3 pole jack female	Tip + phase, ring and case ground	variable, nominal 0dBV	22 ohms	unbalanced line output
		Mono Out	1/4" 3 pole jack female	Tip + phase, ring - phase, case ground pin 2 + phase, pin 3 - phase, pin 1 ground	+4dBV, 1.23VRMS	22 ohms	electronic balanced output, short circuit protected with automatic compensation for balanced/unbalanced connection
		Group Out (M420X)	XLR female 3 pin	- phase, pin 1 ground pin 2 + phase, pin 3 - phase, pin 1 ground	+4dBV, 1.23VRMS	22 ohms	unbalanced version of M420X
		Main Out L/R	XLR female 3 pin	- phase, pin 1 ground pin 2 + phase, pin 3 - phase, pin 1 ground	+4dBV, 1.23VRMS	22 ohms	
		Main L.S. Out	XLR female 3 pin	- phase, pin 1 ground pin 2 + phase, pin 3 - phase, pin 1 ground	+4dBV, 1.23VRMS	22 ohms	
		Group Out (420)	XLR female 3 pin	ground, pin 1 ground	+4dBV, 1.23VRMS	22 ohms	

1. Bus out, unbalanced, -2dBv. 22 ohm source impedance, +21dBv max. 1/4" 3 pole female jack.
2. Bus in, unbalanced, -2dBv. 18K ohm impedance. 1/4" 3 pole female jack.
- Bus in/out are patched to create subgroups on large faders 25 upwards as required.
3. Large fader insert, breakpoint post EQ prefader. Unbalanced 0dBv, tip send, ring return. 22 ohm/5K ohm. 1/4" 3 pole female jack. +21dBv max.
4. Small fader insert, breakpoint post EQ prefader. Unbalanced 0dBv, tip send, ring return. 22 ohm/5K ohm. 1/4" 3 pole female jack. +21dBv max.
5. Tape in, input to large fader section, balanced, nominal +4dBv, tip +, ring -, 47K ohm impedance. 1/4" 3 pole female jack.
6. Line in, input to small fader section, balanced, nominal 0dBv, tip +, ring -, 15K ohm impedance. 1/4" 3 pole female jack.
7. Bus out, output to multitrack record input, balanced nominal +4dBv, pin 2+, pin 3-. XLR 3M. 50 ohm impedance +26dBv max.
8. Mic in, input to small fader section, balanced pin 2+, pin 3-. XLR 3F. Switched +4dBv phantom power is included. 2K ohm impedance.
9. Tape in (low): -10dBv(300mv) input to large fader section. Passes through the high level Tape in jack switch contacts. 50K ohm impedance. RCA phono female.



Note balanced output circuit connections



MULTITRACK SYSTEM: AHB SIGMA

