

The SYSTEM 8 range of mixing consoles for multitrack recording or sound reinforcement, offers 16 or 24 input configurations together with an 8-input expander module. Models 1616 and 2416 both feature 16 tape monitor (or FX) inputs and meters, 8 sub-groups with fader reverse between group output and tape (or FX) input, post-fader direct outputs on all input channels and insert points on all inputs, group and stereo mix outputs. Electronically-balanced outputs optional on group and stereo mix.

**INPUT SECTION** Electronically-balanced microphone inputs on XLR connectors, with phantom power. Line level inputs (over-riding tape returns) and separate insert points for connection of effects devices. PFL on each channel, plus an input PAD giving 20dB attenuation of microphone signals. Comprehensive 3-Band EQ—LF and HF offering selectable shelving at 60/120Hz and 8/12kHz respectively, plus Mid sweep EQ variable between 400 Hz and 6kHz. EQ In/Out switch. Three auxiliary sends; one pre-fade, one post-fade and one switchable pre/post. Direct routing to the main stereo mix. 100mm ultra-smooth long life fader has +10dB over-travel for extra input gain, and each channel is fitted with a peak-indicating LED and mute switch.

**GROUP OUTPUT SECTION** Effects insertion points, PFL and Group/Tape select available on each group output, plus level and pan control to the stereo mix. Two flexible auxil-

## SYSTEM FEATURES

ary sends allow echo send from the tape monitors during overdubbing. Tape returns, usable as extra effects returns during remix, are internally normalised to channel line inputs. Fader reverse function.

**MASTER SECTION** A comprehensive monitoring system is essential in multi-track working. SYSTEM 8 gives you instant monitoring of all signals without disturbing or compromising the recording in progress. A one-shot PFL function with PFL-Active LED indicator overrides monitor mix, outputs and metering. The control room monitoring system, with independent level control of head-phones and loudspeakers, may be driven by the main stereo mix, stereo master recorder, or the cue system. A loudspeaker Dim facility is available and a mono switch allows compatibility checks.

**CUE SYSTEM** The truly versatile Cue system enables you to provide two separate mono foldback mixes (or one stereo mix) and a Talk-to-Cue facility lets you communicate with

the performers. Mixes can be set up from the channels, track monitors (or a combination of the two), or the stereo mix may be selected as a cue source. This can be useful when overdubbing, providing an instant stereo fold-back mix containing any effects present on the monitors. The cue system can also double as secondary monitoring for studio or stage.

Three auxiliary send masters each have AFL available, permitting their true output levels to be accurately monitored. These are independent of the cue system, enabling effects devices and foldback lines to remain permanently connected, minimising re-plugging hassles.

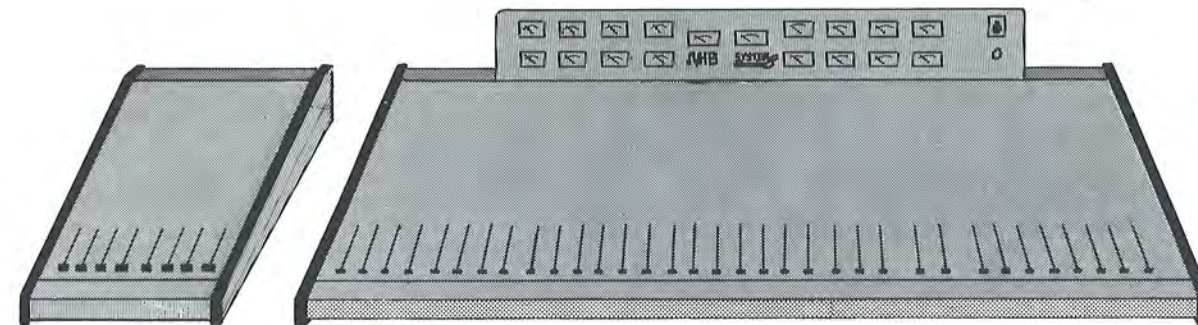
**TALKBACK CIRCUIT** The Talkback circuit may be routed to either Cue or groups (for slating purposes) and its output is adjustable. Auto-Dim of monitors and cue outputs improves intelligibility and prevents howl-round.

Two echo returns are included, each with PFL and 2 auxiliary sends, with full control over level, pan and routing.

**LEVEL MATCHING** User-adjustable controls allow level matching on main outputs and tape returns to suit low-level recording equipment, whilst a low-distortion oscillator (reference level OVU at 1kHz) is included for accurate calibration of external equipment.

A separate power supply for all SYSTEM 8 Mixers ensures low-noise, hum-free operation.

## SYSTEM EXPANSION



EX-8 8 INPUT EXPANDER

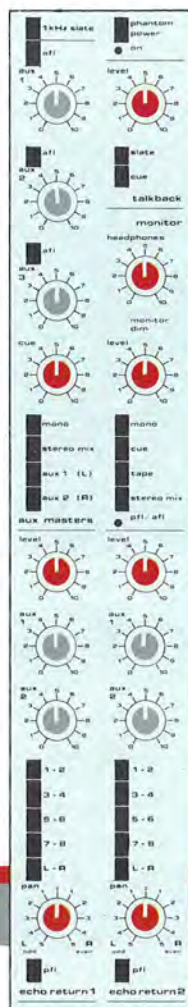
SYSTEM 8 MAIN CONSOLE

**THE EXPANDER:** The System 8 concept includes console expansion and is achieved using buss access points on mixers and expander units. No inputs or outputs are sacrificed, EX 8 expanders are complete with their own power supplies and even two or more System 8 mixers can be linked together if required.

### INPUT



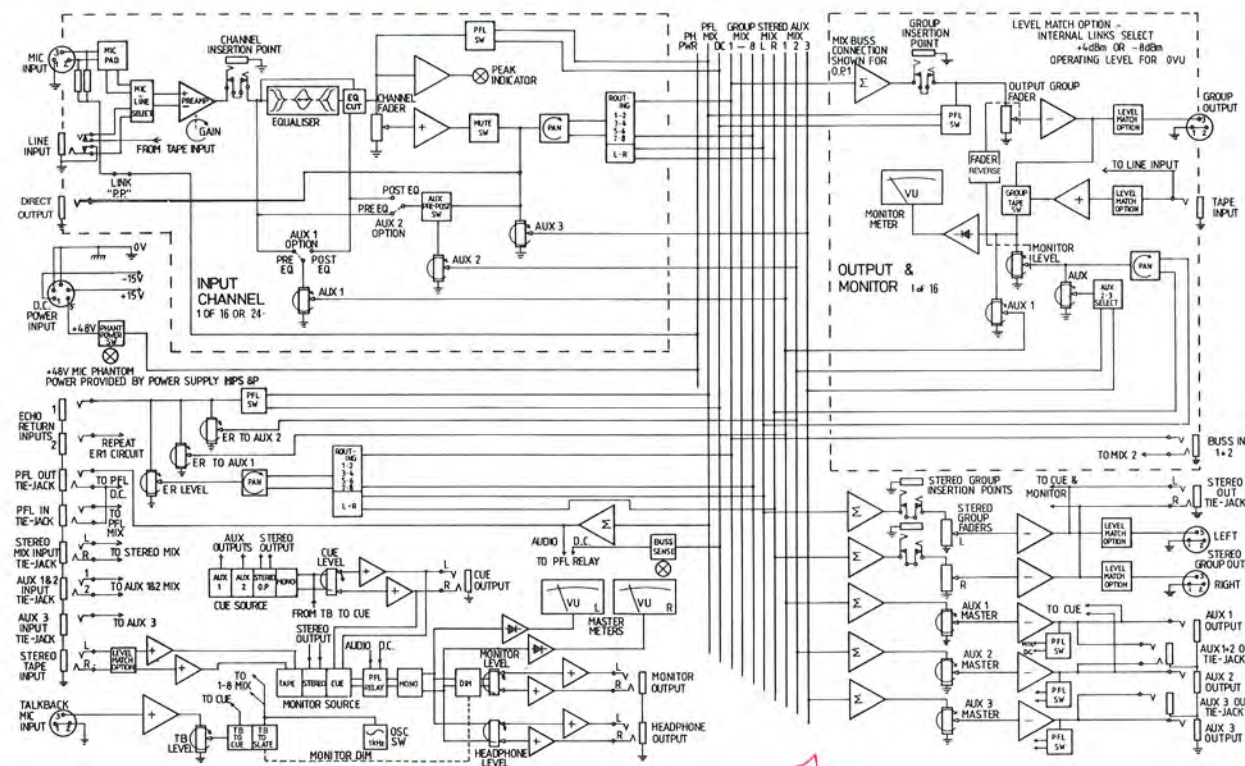
### MASTER



### OUTPUT



*Mixing Art  
with Science*



## SYSTEM SCHEMATIC



# SYSTEM 8

## TECHNICAL SPECIFICATION

	1616	2416	Ex8
Input Channels	16	24	8
Outputs	8	8	—
Separate Stereo Mix	Yes	Yes	—
Monitoring	16	16	—
NOISE PERFORMANCE*			
Stereo Output			
One Line input routed unity gain	— 79dB	— 79dB	— 82dB
All inputs routed & faders closed	— 81dB	— 79dB	— 79dB
Group Output			
One Line input routed unity gain	— 81dB	— 81dB	— 82dB
All inputs routed & faders closed	— 78dB	— 74dB	— 78dB
Auxiliary Output			
Unity gain. All inputs closed	— 77dB	— 74dB	— 85dB
*20kHz bandwidth RMS noise ref. 0dBv (0-775V RMS) All figures better by 4dB ref. OVU = +4dBv			
Microphone			
Equivalent input noise	— 125dB (200 Ohm source)		
Dimensions			
Width (mm)	1065 (42")	1350 (53")	381 (15")
Height (mm)	245 (9 1/2")	240 (9 1/4")	125 (5")
Front to Back (mm)	672 (26 1/2")	670 (26 1/2")	672 (26 1/2")
Weight (kg)	47 (103 lbs)	49 (141 lbs)	17 (37 lbs)
GAIN Input to Output)			
Minimum (includes Mic PAD)	MIC + 4dB	LINE — 15dB	
Normal Range	+ 24dB to + 64dB	— 11dB to + 30dB	
Maximum (includes fader boost)	+ 74dB	+ 40dB	

**Normal Operating Level:** + 4dBv or — 8dBv selectable  
**Internal Headroom:** + 18dB, maximum output level + 21dBv into 5k ohms or more. + 18dBm into 600 ohms. Peak indicator warning at 3dB before clipping overload.  
**Frequency Response:** Mic or Line input to output 20Hz to 30kHz  $\pm$  1dB ref 1kHz.  
**Equalisation:** HF shelving  $\pm$  16dB at 12kHz or 8kHz  
 LF Shelving  $\pm$  12dB at 120Hz or 80Hz  
 MID Peak/Dip  $\pm$  12dB, 400Hz to 6kHz, Q = 1.5  
**Distortion:** Mic input to output at + 4dBv, 45dB Gain. Less than 0.05% THD 30Hz to 20kHz.  
**Cross talk:** Left and Right output separation better than 60dB 30Hz to 10kHz.  
 Interchannel separation better than 70dB 30Hz to 10kHz.

**Construction:** Steel main panel and covers. Hard stove enamel paint finish with epoxy-ink screenprinted legend. Semi-modular electronic printed circuit assemblies. IC op-amp and discrete transistor audio system of transformerless design. 1/4-inch jack connectors except microphone inputs and main outputs on XLR.

**Power Supply Model MPS8P** applies to all models. Audio Circuits:  $\pm$  15v DC at 1 amp per rail. Phantom power:  $\pm$  48v DC at 50 milliamps. May be internally wired to suit mains voltage between 100v and 240v AC. Mains setting marked on MPS8P label.



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