

SIGMA OPERATING SYSTEM HIGHLIGHTS

- 24 bus outputs.
- Assignment to buses from inputs and from monitors.
- 8 auxiliary mixes for cue and echo (in-line M470 systems) 6 on M410/20/30 systems.
- Two stereo cue outputs with talkback for performer's foldback.
- Stereo monitor/remix main output.
- Mono sum of stereo output.
- Four variable equaliser sections plus high pass filter provided on inputs and monitors.
- Low residual noise preamps, equalisers, line and mix amplifiers.
- Low distortion design at all points in the system.
- PFL facility on all inputs, groups and monitors. Interrupts LS and meter only.
- AFL facility on all inputs, groups and monitors derived post-pan-pot. Interrupts LS and meter only.
- SOLO MUTE facility on all inputs and monitors. Auto shut-off of all sources not selected SOLO.
- SOLO MUTE has two sub systems — input and monitor. Both can be enabled and inhibited independently.
- AUTO MUTE facility on all inputs and monitors, sequence and synchronise audio mutes to MIDI.
- Three fader options, retrofit capable. 100mm low cost or VCA grouping or fader automation.
- Capacity for 56 modules, potentially 112 inputs to the mix.
- 2 mainframe lengths 36 and 48 module capacity total.
- Complementary module expander frames and patchbay/producer's desk frames.
- High standard of appearance when installed, cabling concealed within the frame.
- Electronic balanced circuits on all main inputs and outputs

including microphones, line and tape inputs, group outputs, main outputs, etc.

Attention to details of audio performance at all stages. The electronic signal path is of the high input impedance, low output impedance type. Coupling capacitor isolate all input connections and outputs from DC offsets. All switches pot and faders are capacitor coupled to prevent clicks and noise.

Amplifier bandwidths are tailored to accept the maximum bandwidth possible while rejecting extreme LF (sub 5Hz) and HF (over 60KHz) signals. While the external operating level is +4dBv (1.23v RMS) the internal level is reduced to 0dBv. This yields 22dB internal headroom 0VU sine wave input or output and maximum output level.

The electronically balanced outputs are actively driven by separate amplifiers for each phase (pin 2 hot) and feedback design removes drive to either phase if grounded. At the same time the other phase output amplitude is doubled.

Electronic balanced inputs are differential type on line inputs and symmetrical long tail pair design on microphone input having excellent CMRR. The preamps are designed so that the headroom at the critical input stage is also 22dB. Low noise preamp design achieves noise performance at line inputs superior to the output noise of signal sources including dBx tape and 16 bit linear digital playback.

The use of summing amplifiers for every output, main, or sub system, ensures consistent performance with any module loading format. Low noise amplifiers keep noise floors negligible. The same high quality standards apply to all outputs. All inputs and outputs except group insertion points are phase coherent.

