X-Monitor console

description

Designed for today's monitor-mixing techniques, X-Monitor is capable of generating both mono and stereo mixes, via the use of global mode-switches. When stereo-mode is selected for a pair of outputs, both level and pan controls are made available on each input channel. X-Monitor can be used as a self-contained monitor-system, because both an input microphone-splitter and comprehensive output-eq are provided. Simply add speakers and power, or in-the-ear monitors, and the system is ready to go. Extensive signal-monitoring is provided for the mix engineer: any input or output may be routed to the primary monitor-system (controllable from100mm fader) and headphones. An additional alternate-output may be used to feed an external real-time analyzer, or as a feed to an artist's technician. Full-time LED metering is provided on all input channels, while the twelve primary-outputs are monitored with solid-state illuminated mechanical meters, located in the meter bridge assembly. A microprocessor-based muting system is provided on both inputs and outputs, and may be operated manually or in sequential-mode.

X-Monitor may also be used in front-of-house applications where multiple mixed-outputs are required—as in special AV applications. All group channels may be routed to the primary mix output-pair, allowing up to twelve sub-group channels to be operated. X-Monitor consoles are available with 24, 32, 40, and 48 mono input channels.

sound fundamentals

Even in the most demanding environments, the sonic performance of the X-Monitor is sure to please discriminating sound engineers and audiences alike. The X-Monitor's circuitry delivers both extended headroom and low-noise: exclusively employing the latest-generation of integrated circuits and studio-grade proprietary-design microphone pre-amplifiers. The X-Monitor console has exceptional phase-shift performance, exibiting less than +/-30 degrees-of-shift from input to output—significantly better results than most consoles, regardless of price.

features

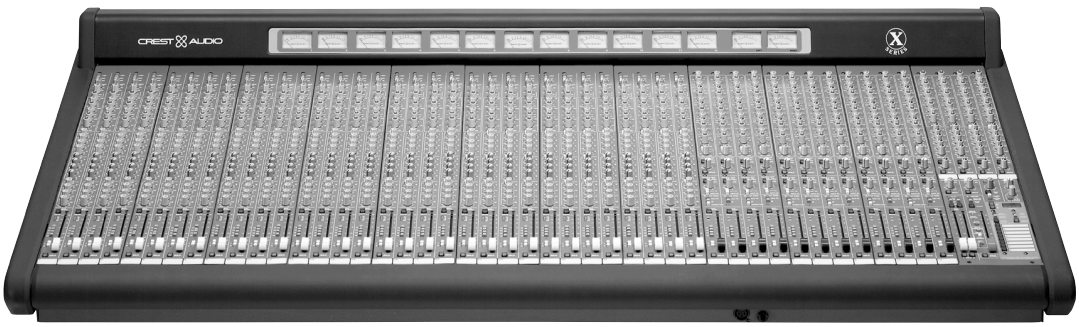
- four-band eq with sweepable mid-bands and high-pass filters on all inputs
- twelve monitor-mixes from inputs operated in mono —or in-pairs for stereo operation with level and pan functions
- additional bus assignment to four MATRIX and A and B output mixes for a total of 18-outputs
- built-in SPLITTER system with ground-lift switches
- twelve-channels of six-band output eq, with three fully-parametric mid-bands—HF and LF being sweepable, plus a continuously-variable high-pass filter
- four-channels of five-band eq on MATRIX outputs
- five-segment LED level indication on all mono input modules, with variable-intensity SIGNAL PRESENT indicator and multiple sample point PEAK indicator
- stereo solo-system features: switchable AFL/PFL mode, LAST-PRESSED functions, and input-priority with master SOLO CLEAR switch —all inputs and outputs may be monitored
- signal-monitoring via headphone and alternate output, plus primary monitor output on 100mm fader
- direct input assignment to matrix system enables effects-output control or the assembly of additional generic-mix outputs
- direct input and group assignment to A and B output channels —providing additional monitor outputs (cross-stage monitor system) or primary outputs (front-of-house application)
- separate ground-compensated insert sends and balanced returns on group, matrix and left/right outputs
- meter bridge—fourteen mechanical meters with solid-state illumination: outputs 1–12 and solo-left and solo-right

built to defy murphy's law

X-Monitor consoles are manufactured to the same exacting quality-standards as all Crest Audio console products. Each input channel has its own discrete vertically-mounted circuit board, for greater impact resistance and serviceability. All circuit boards employ plated-through double-sided glass epoxy construction—providing greater strength and integrity. The console's road-worthy external frame is fabricated from 14-gauge galvanized steel. X-Series power supplies utilize amplifier-engineering technology to deliver stable voltages and long-term reliability, and provide built-in facilities for a redundant back-up supply—ensuring that the show will always go on.

microprocessor-based muting system

The X-Monitor's straightforward microprocessor-based muting system was co-developed with JL Cooper, and combines muting flexibility with ease of operation. Eight manual-mute groups are provided, each with a dedicated activation-switch, any number of which may be activated at one-time. The system includes 128 MIDI-based sequential scene mutes that can work alone, or in conjunction with, the manual mute groups. Scene mutes can be controlled via external MIDI signals, and each of the 128 mute scenes may be preset to issue a MIDI program-change command to an external device.



specifications

X-Monitor

frequency response	+0/-1dB **20Hz–20kHz ref 1kHz**—any input to any output
THD	any output <.01% THD **20Hz–20kHz @ +15dBu out**
noise	mic ein better-than -128dBu **20Hz–20kHz**—150ohm source, 60dB gain
crosstalk	channel mute >80dB channel routing >80dB channel fader attenuation >90dB aux send attenuation >75dB
phase shift	< +/- 30 degrees, **20Hz–20kHz**—mic-in to main-out
inputs	mic-in XLR 4k ohm balanced—max voltage gain to group balanced out = 98dB line-in TRS >10k ohms balanced
outputs	left/right/mono—group, aux, matrix—monitor-out **all 100 ohms balanced** headphones to drive > eight-ohms
insert	send 50 ohms ground-compensated on TRS jack return >10k ohms balanced on TRS jack
nominal output level	+4dBu max level **+26dBu balanced** into >1k ohms
input channel eq	high freq +/- 15dB shelf at **12kHz** hi-mid freq +/- 15dB bell freq range **400Hz–8kHz**, Q=1.5 low-mid freq +/- 15dB bell freq range **80Hz–2kHz**, Q=1.5 low freq +/- 15dB bell-boost/shelf-cut freq center **80Hz**, Q=.7 on boost high-pass filter -12dB/octave freq range **20Hz–400Hz** separate on-switches for eq and high-pass filter
output features	five-band eq on all main outputs high-pass filter: -12dB/octave freq range **20Hz–400Hz** separate on-switches for eq and high-pass filter
channel metering	five-segment LED ladder with VU-type response—displays pre-fader signal level top red-LED warns of impending overload anywhere within the channel
master metering	fourteen mechanical VU-type meters with LED illumination twelve-meters showing group-out two dedicated solo-meters
signal generator	pink-noise generator can feed the talk-back section
construction	chassis is powder-coated **14-gauge galvanized steel** with internal-bracing modules are powder-coated **18-gauge galvanized steel** with baked-epoxy screening
dimensions and weights	see dimension-drawing
warranty	five-years

Crest Audio specification literature is available in downloadable PDF format at our website www.crestaudio.com

Crest Audio reserves the right to make improvements in manufacturing or design which may affect specification.

v. 1.0 D7000020 1/24/00

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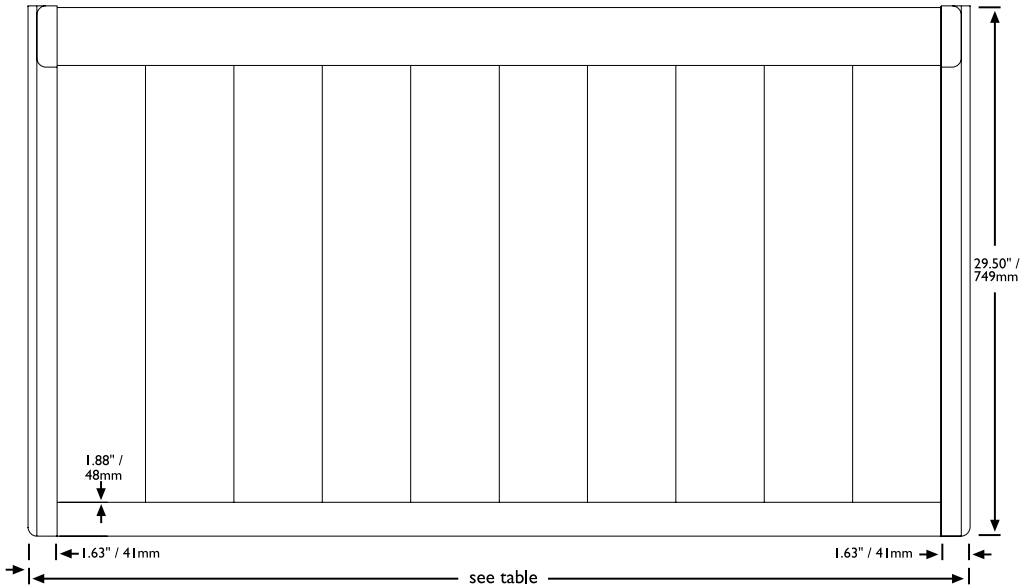
dimensions

top

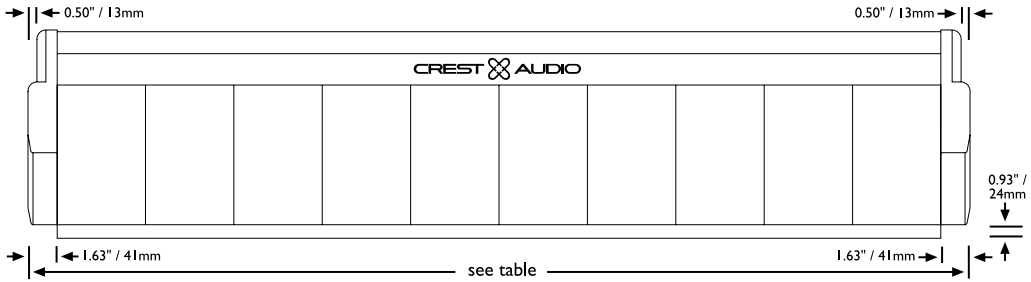


X-Monitor

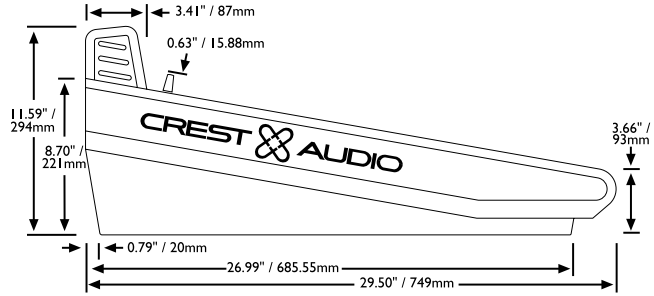
frame	dimensions	weight
40	52.5 x 29.5 x 11.6 in 133.5 x 75 x 29.5 cm	139 lbs 63 kg
48	62.25 x 29.5 x11.6 in 158 x 75 x 29.5 cm	165 lbs 75 kg
56	72.13 x 29.5 x 11.6 in 183 x 75 x 29.5 cm	190 lbs 86 kg
64	81.97 x 29.5 x 11.6 in 208 x 75 x 29.5 cm	217 lbs 99 kg

frame size = total number of modules in a console
(inputs + groups + master + etc)

rear

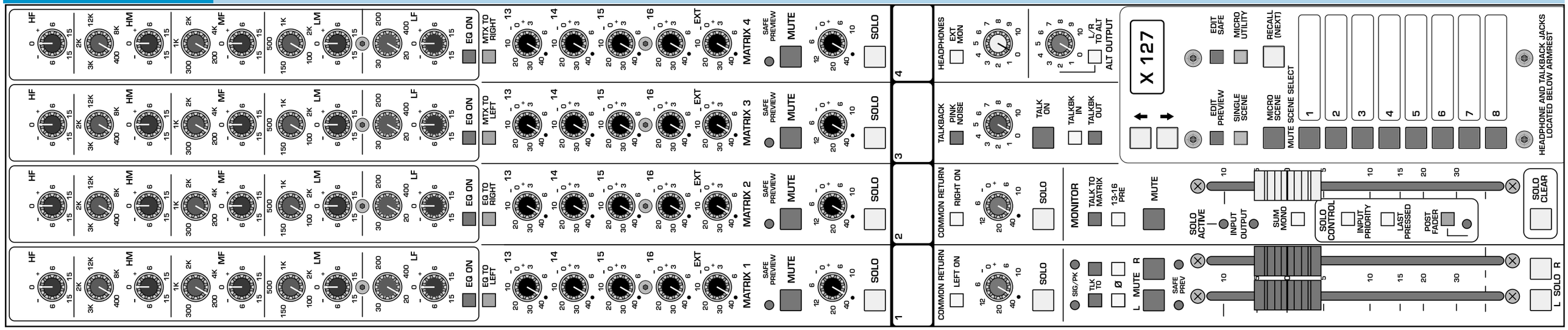


side

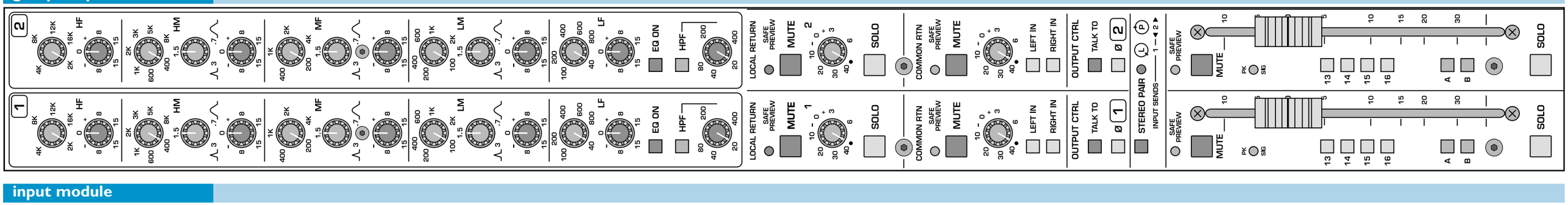


modules

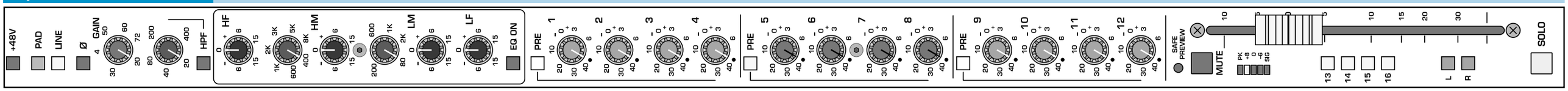
master module block



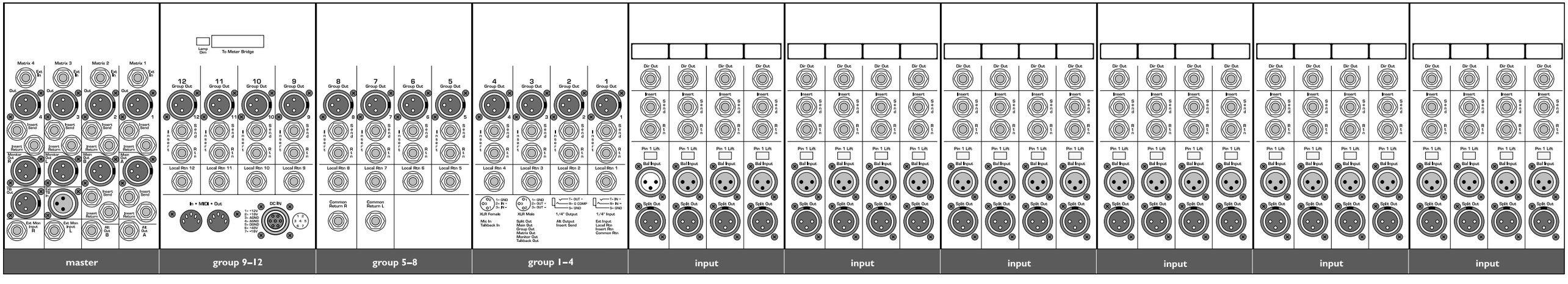
group output module



input module



rear view X-Monitor



block diagram