

X-Eight HS console



description

The X-Eight HS is a dual-function console, equipped for both front-of-house and stage-monitor duties. Designed specifically for live-performance, professional sound contracting, industrial, rental, and installation applications, the X-Eight HS provides those features most needed by front-of-house and monitor engineers. The X-Eight HS includes identical four-band eq on all mono and stereo input channels, and auxiliary sends 5/6 and 7/8 may be switched between mono or stereo operation. Signal monitoring is provided on all input and output fader channels, assisting the operator in setting correct gain structure throughout the console. Stereo full-facility input channels are used for effect-returns on all faders. Twelve-channels of five-band eq are provided on the Aux and Matrix outputs, switchable to the group, left, right, and mono outputs. A microprocessor-based muting system is provided on both inputs and outputs, and may be operated manually or in sequential-mode.

sound fundamentals

Even in the most demanding environments, the sonic performance of the X-Eight HS is sure to please discriminating sound engineers and audiences alike. The X-Eight'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-Eight HS console has exceptional phase-shift performance, exhibiting less than +/-30 degrees-of-shift from input to output—significantly better results than most consoles, regardless of price.

microprocessor-based muting system

The X-Eight HS'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 pre-set to issue a MIDI program-change command to an external device.

features

- four-band eq with sweepable mid-bands and high-pass filters on all inputs
- fader-reverse function optimizes operation as a front-of-house or as a monitor-mix console
- direct output on all mono input channels
- five-segment LED level indication on all mono input-modules with variable intensity SIGNAL PRESENT indicator and multiple sample-point PEAK INDICATOR
- eight aux mixes, with aux 5/6 and aux 7/8 switchable to stereo operation
- stereo solo system features switchable AFL/PFL mode and last-pressed functions, with master SOLO CLEAR switch
- discrete bus assignment to groups, left/right and mono outputs
- true LCR panning available on mono input-channels
- separate ground-compensated insert sends and balanced returns on group, auxiliary and primary outputs as well as on mono input-channels
- fully-balanced primary outputs and balanced mic- and line-inputs
- meter bridge as standard: thirteen mechanical meters with solid-state illumination: eight groups, left, right, mono (center) and solo-left/solo-right

wide range of configurations

X-Eight consoles are supplied with either 24, 32, 40, or 48 mono input channels, plus four full-featured stereo line-input channels—which can also serve as effect-returns. These standard configurations include Master and Group modules—all other inputs may be ordered as mono-mic/line or stereo-line, in four-channel blocks.

built to defy murphy's law

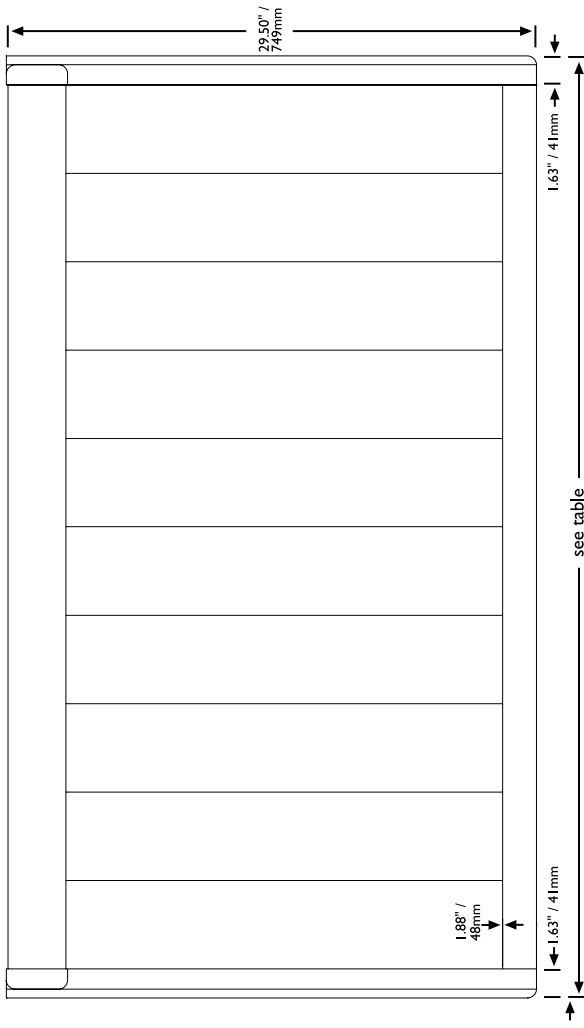
X-Eight HS consoles are manufactured to the same exacting quality-standards as all Crest Audio console products. Each input channel has its own discrete vertically-mounted circuit board, for greater impact resistance and serviceability. All circuit boards employ plate-through double-sided glass epoxy 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.



frequency response	+0/-1dB 20Hz-20kHz ref 1kHz—any input to any output		
THD	any output <.01% THD 20Hz-20kHz @ +15dBu out		
noise	mic in better-than -128dBu 20Hz-20kHz—150ohm source, 60dB gain bus output noise less-than -80dBu—output fader @ 0dB, 24 channels routed residual output noise less-than -90dBu—output fader at minimum		
crosstalk	channel mute >80dB	channel routing >80dB	
phase shift	channel fader attenuation >90dB aux send attenuation >75dB < +/- 30 degrees, 20Hz-20kHz—mic-in to main-out		
inputs	mic-in XLR 4k ohm balanced—max voltage gain to left/right 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	
	high-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	aux and matrix eq high freq +/- 15dB shelf at 12kHz high-mid freq +/- 15dB bell, freq range 400Hz-8kHz, Q=1.5 low-mid freq +/- 15dB bell, freq range 100Hz-2kHz, Q=1.5 low freq: +/- 15dB bell, freq range 20Hz-400Hz, Q=1.5 eq switchable between aux and group or matrix and main outs		
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 lowest green-LED shows signal-present		
master metering	thirteen mechanical VU-type meters with LED-illumination eight-meters showing group-outs three-meters showing main-outs (left/right/mono), and 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		

dimensions

top

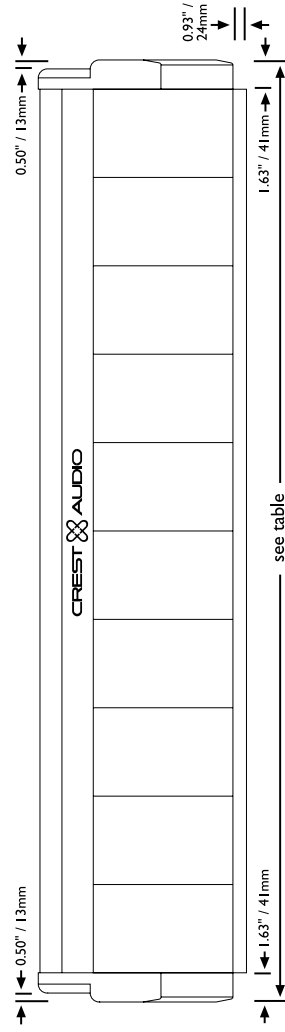


X-Eight HS

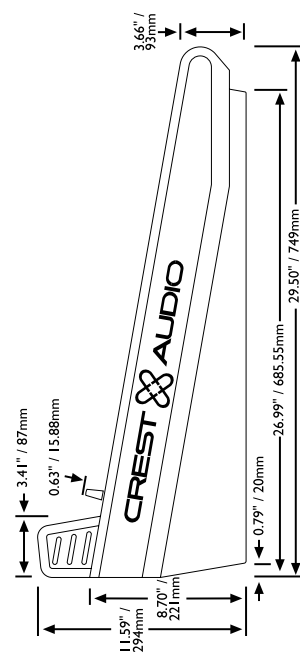
frame	dimensions	weight
40	52.5 x 29.5 x 11.6 in 133.5 x 75 x 29.5 cm	139 lbs 63 kg
48	62.25 x 29.5 x 11.6 in 158 x 75 x 29.5 cm	165 lbs 75 kg
56	72.13 x 29.5 x 11.6 in 183 x 75 x 29.5 cm	190 lbs 86 kg
64	81.97 x 29.5 x 11.6 in 208 x 75 x 29.5 cm	217 lbs 99 kg

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

rear



side



modules

master module block HS

The Master module block HS control panel features four rows of EQ controls (HF, 2K, 4K, 8K, HM, 1K, MID, 500, 1K, LM, 200, LF, EQ ON) for EXT IN MATRIX, MONO MATRIX, RIGHT MATRIX, and LEFT MATRIX. It includes four MTX (Matrix Transfer) knobs (MTX 1-4) with associated MUTE, TALK TO, and SOLO buttons. A central section contains a PATCH selector (X 1 2 7), EDIT SAFE, SINGLE SCENE, MICRO SCENE, and MUTE SCENE SELECT buttons. The bottom right features a large SOLO control with a slider and a HEADPHONE AND TALKBACK JACKS LOCATED BELOW ARMREST indicator.

group module HS

The Group module HS control panel includes EQ controls (HF, 2K, 4K, 8K, HM, 1K, MID, 500, 1K, LM, 200, LF, EQ ON) for GRP 1 MATRIX. It features a REVERSE AUX/GRP button, MONO GROUP ASSIGN L/R, GRP PAN, and SOLO controls. A large SOLO control with a slider is located on the right side.

stereo input module

The Stereo input module control panel includes a LINE 2 selector, GAIN controls (0, 3, 6, 10, 15, 25), L MONO, R, and HPF/80 buttons. It features PRE AUX 1-4, PRE AUX 5-6, and PRE AUX 7-8 knobs with associated MUTE and SOLO buttons. A large SOLO control with a slider is on the right.

mono input module

The Mono input module control panel includes +48V, PAD, LINE, and GAIN controls (0, 20, 40, 50, 75, 80, 200, 400). It features HPF, PRE AUX 1-4, PRE AUX 5-6, and PRE AUX 7-8 knobs with associated MUTE and SOLO buttons. A large SOLO control with a slider is on the right.

rear view X-Eight HS

The Rear view X-Eight HS connector panel shows the physical connections for the modules. It is organized into four main sections: master (Matrix 1-4, Group Out 1-8, Aux Out, Ab L Out, Ab R Out, DC In), groups (Group In 1-8), stereo inputs (Line In 1-2, Bal Line In 1-2), and mono inputs (Direct Out, Bal Line In, Bal Mic In). Each section contains multiple XLR and TRS connectors.

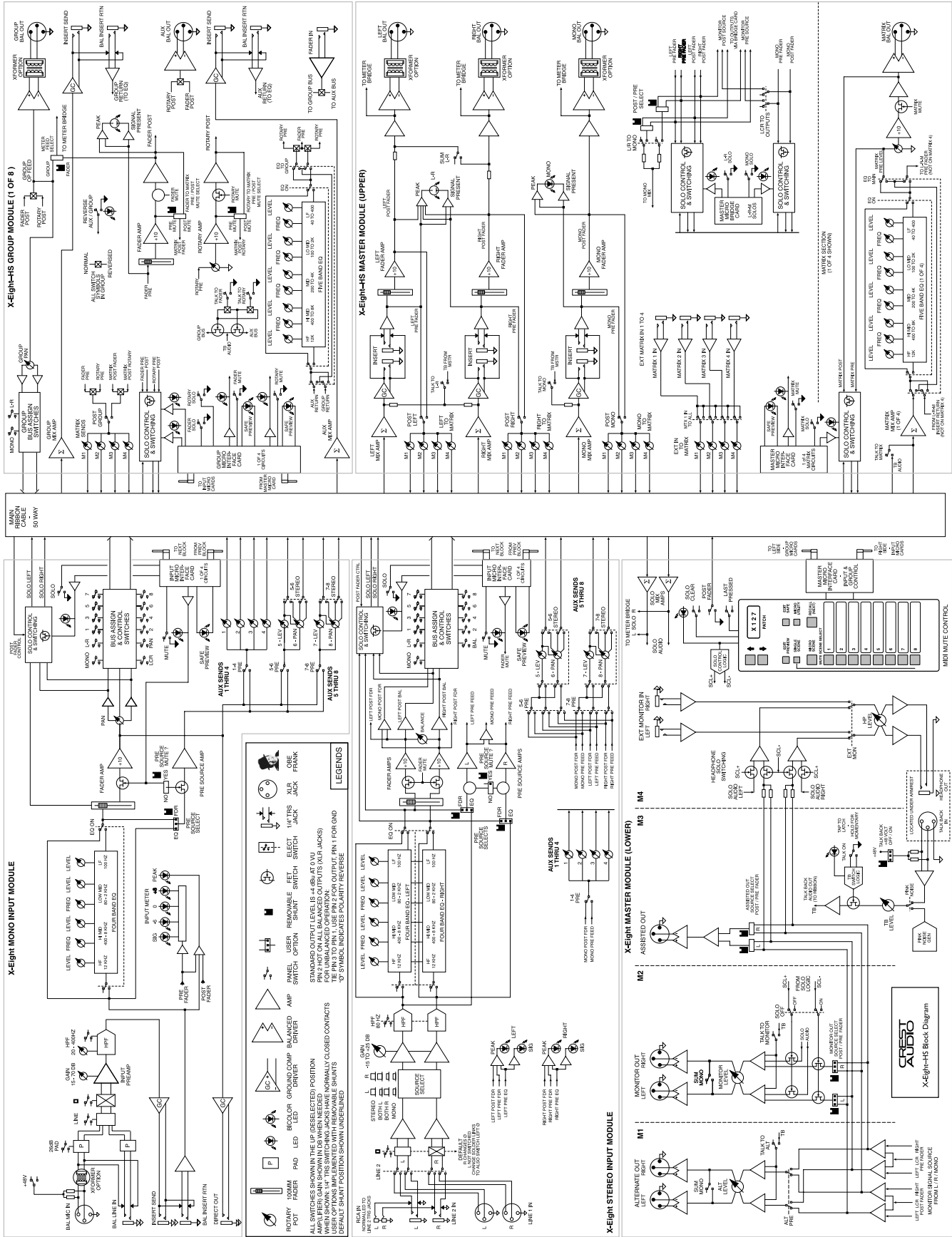
master

groups

stereo inputs

mono inputs

block diagram



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