

V12 console



description

When your professional live-sound reputation is on the line, Crest Audio's V12 becomes your secret-weapon: delivering bullet-proof quality and reliability in a superlative front-of-house or monitor console. V12 includes those features most-desired by touring and permanent-installation engineers. Full-parametric eq is provided on all input channels. A wealth of outputs are available for unexpected situations. Gold-plated connectors and balanced-circuitry are provided, both internally and externally, for long-term interference-free operation

sound fundamentals

The sonic performance of the V12 is sure to please discriminating sound engineers and audiences alike, even when the console is pushed hard in demanding applications. In order to maintain high-headroom with low-noise, V12 circuits exclusively employ the latest-generation of integrated circuits (operated on +/-20 volt rails) and studio-grade proprietary-design microphone pre-amplifiers. Dual-VCA elements are the best available from THAT Corporation, offering improved performance over single-element VCA designs. Phase-shift has received special attention in the design, revealing less than five-degrees of phase-shift on lower frequencies and less than 18-degrees on upper frequencies—better performance than that observed in significantly more-expensive consoles.

wide range of configurations

V12 consoles are supplied with either 24, 32, 40, and 48 mono input channels, plus four full-featured stereo mic/line input channels. Basic configurations for all consoles include Master and Group modules, plus four stereo-input modules that may be used as effect-returns. All other inputs may be individually-ordered as mono-mic/line or stereo-mic/line modules. An optional expansion-system enables the addition of up to two 28-input side cars. Up to three V12 chassis may also be linked together for single-console operation.

muting systems

Three-types of mute systems provide the appropriate mute system for any application. Microprocessor based systems may be disabled for total manual mute operation. The V12 microprocessor mute system was co-developed with JL Cooper; insuring utmost reliability and industry-standard operation methods.

also available without microprocessor system

features

- front-of-house console with secondary-applications—a full-facility monitor console capable of generating up to 28 monitor-mixes
- four-band full-parametric eq on both mono and stereo input modules—HF and LF frequency bands are switchable between bell- and shelving-curves
- sweepable 18db high-pass filters on both mono and stereo input modules
- twelve VCA masters—dual THAT-VCA elements used throughout
- sixteen aux mixes, with eight switchable between mono and stereo operation—aux controls include on/off and pre/post fader switching
- stereo solo-system includes last-pressed, momentary, and cumulative (default) solo switch operation—plus normal, input priority and input solo-in-place operating modes
- solo system may be switched between stereo AFL and PFL source modes
- solo-isolate switch is available for use when multiple consoles are linked together—master SOLO CLEAR switch is provided
- direct-output system optimized for use in live-performance recording, or for use in expanded-operation as a monitor console
- discrete bus assignment to groups, left/right and mono outputs
- true LCR panning available on mono input channels
- five-segment level meters on mono and stereo input modules (separate left and right meters on stereo input modules) with variable-intensity SIGNAL PRESENT indicator and multiple sample-point PEAK indicator
- full-time pre-fader signal-monitoring of analog groups, aux, and matrix pre-level output controls
- output meter bridge provided as standard
- all balanced inputs and outputs utilize gold-plated connectors, including both balanced insert-send and -return connectors
- fully-balanced internal bussing to minimize or eliminate most types of external interference
- internally-illuminated switches used throughout, with separate dimmer controls for switches and external lighting system
- group swap-controls re-map group/aux/matrix operations to accommodate use as a front-of-house, monitor, or matrix mixer
- eight-mono and four-stereo matrix outputs, plus four ALTERNATE OUTPUTS which may be operated in mono or stereo

built to defy murphy's law

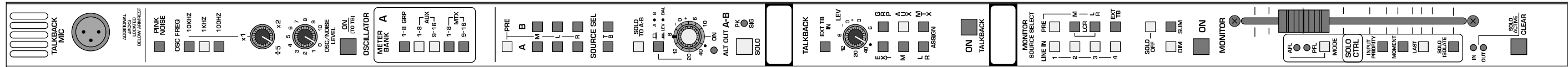
V12 consoles are constructed to endure the rigors of the road. A segmented mother-board system is employed, thoroughly shock-mounted from the multi-walled chassis. Despite being extremely-rigid, the V12 console is amazingly light. Gold-plated interconnects and connectors are used throughout, delivering impeccable performance in even the most harsh environments.



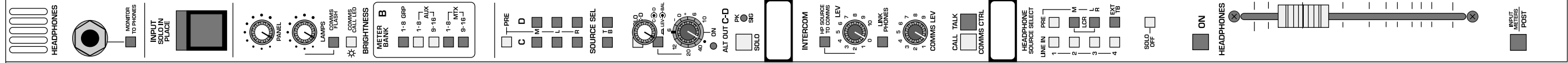
frequency response	+0/-0.5dB 20Hz–20kHz ref 1kHz—any input to any output		
THD	any output <.01% THD 20Hz–20kHz @ +15dBu out		
noise	mic in better-than -129dBu 20Hz–20kHz—150ohm source, 60dB gain		
crosstalk	channel mute >90dB	channel routing >80dB	
	channel fader attenuation >90dB	aux send attenuation >80dB	
phase shift	< +10/-20 degrees, 20Hz–20kHz—mic-in to main-out		
inputs	mic-in XLR 4k ohm balanced—max voltage gain to left/right balanced out = 92dB		
	line-in TRS >10k ohms balanced with dedicated balanced line buffer		
outputs	left/right/mono—group, aux, matrix—monitor-out all 100 ohms balanced		
	headphones to drive > eight-ohms		
insert	send 50 ohms balanced on TRS jack		
	return >10k ohms balanced on TRS jack		
nominal output level	+4dBu	max level +28dBu balanced into >1k ohms	
input channel eq	high freq +/- 15dB	frequency range 1kHz–20kHz	Q variable 3.0–0.7 switchable to shelving
	high-mid freq +/- 15dB	frequency range 400Hz–8kHz	Q variable 3.0–0.7
	low-mid freq +/- 15dB	frequency range 100Hz–2kHz	Q variable 3.0–0.7
	low freq +/- 15dB	frequency range 40Hz–800Hz	Q variable 3.0–0.7 switchable to shelving
channel metering	eight-segment LED ladder with VU-type response—top red-LED warns of impending overload anywhere within the channel—lowest green-LED shows signal-present—source is globally-switchable b/w pre- and post-fader		
master metering	21 mechanical VU-type meters, with solid-state meter illumination (eight LED-ladders used on 42 and 50 frame sizes) two-banks of eight meters—switchable to show either groups 1–8 aux 1–8, aux 9–16, matrix 1–8, and matrix 9–16 left, right, and mono (center) meters and stereo solo meters dual-color LED power supply status-indicators in meterbridge littlites can be made to flash with intercom-call		
signal generators	variable sine wave—frequency 20Hz–20kHz	pink-noise generator	
construction	chassis is powder-coated 12-gauge aluminum with internal bracing modules are powder-coated 18-gauge galvanized-steel with baked-epoxy screening		
dimensions and weights	see dimension-drawing		
warranty	five-years		

modules

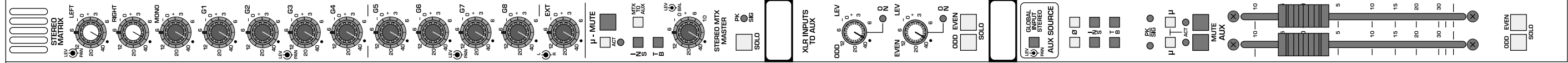
master-1 module



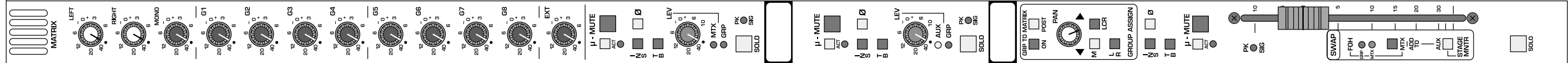
master-2 module



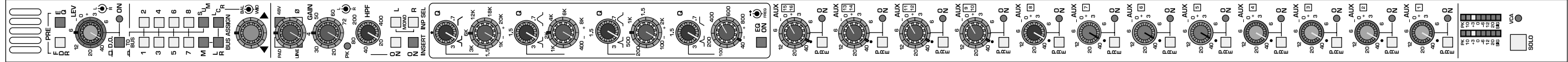
main output module



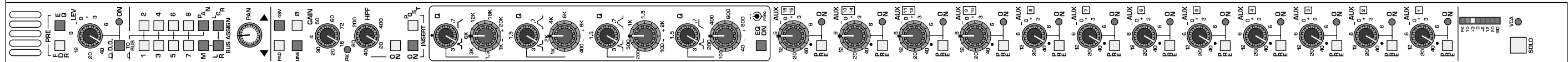
group output module



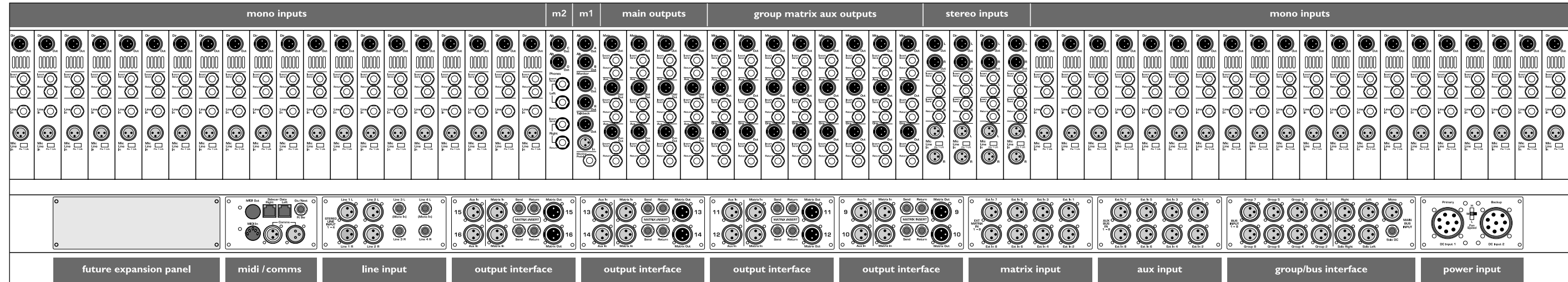
stereo input module



mono input module

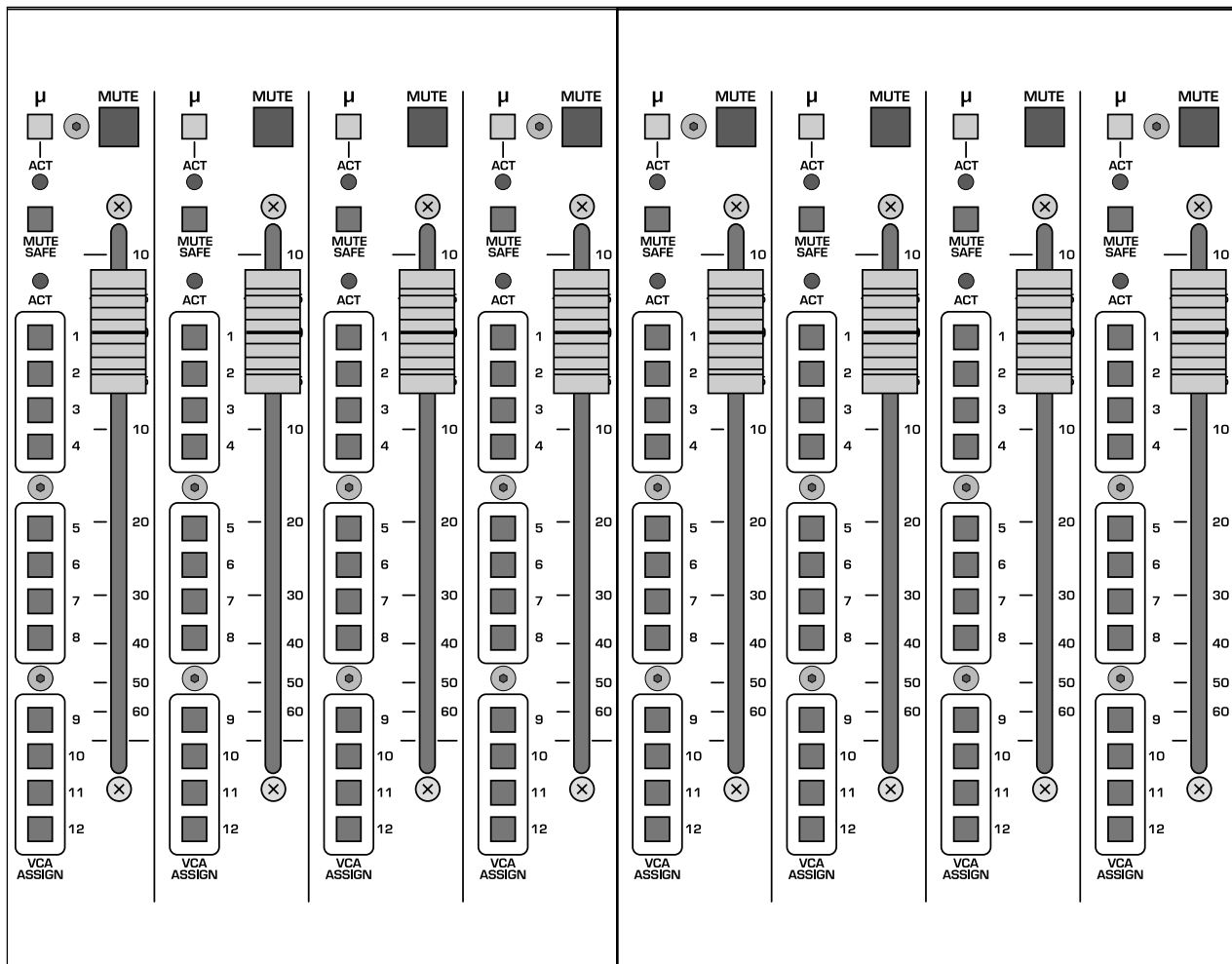


V12 console rear view

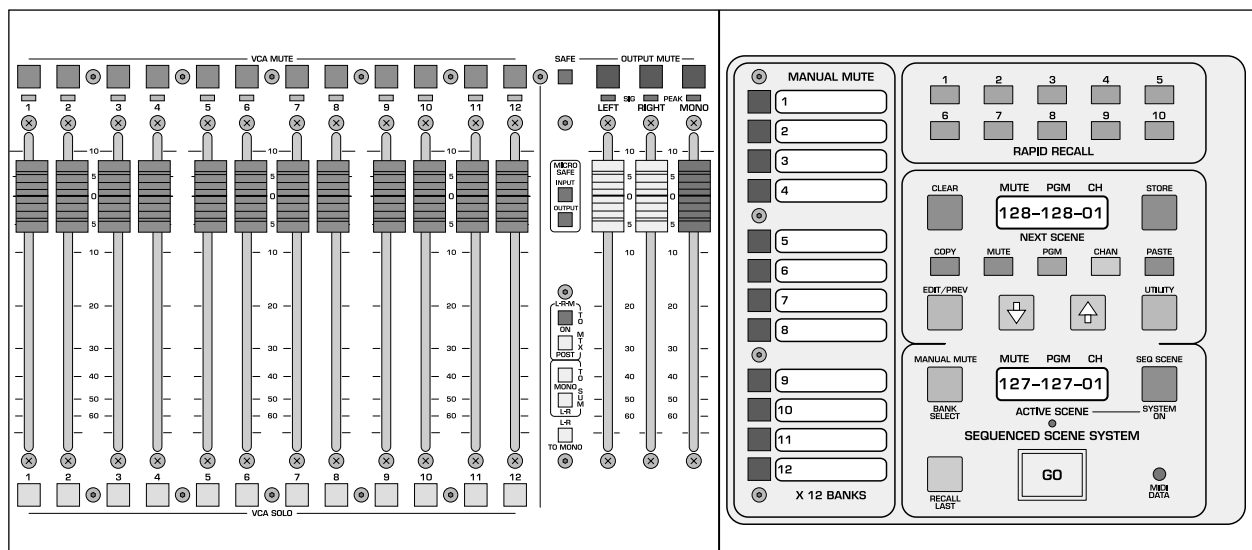


fader bay

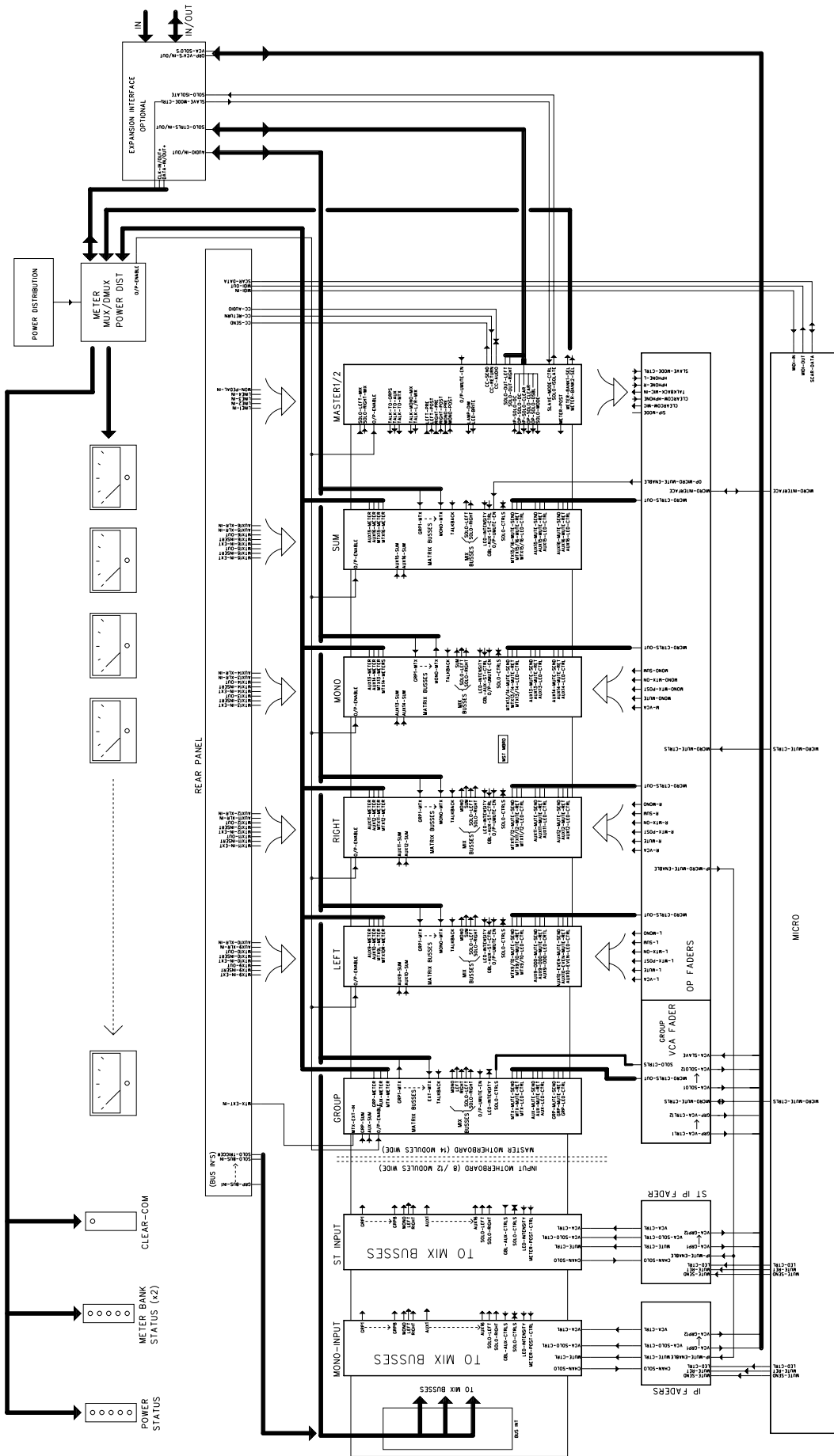
input faders



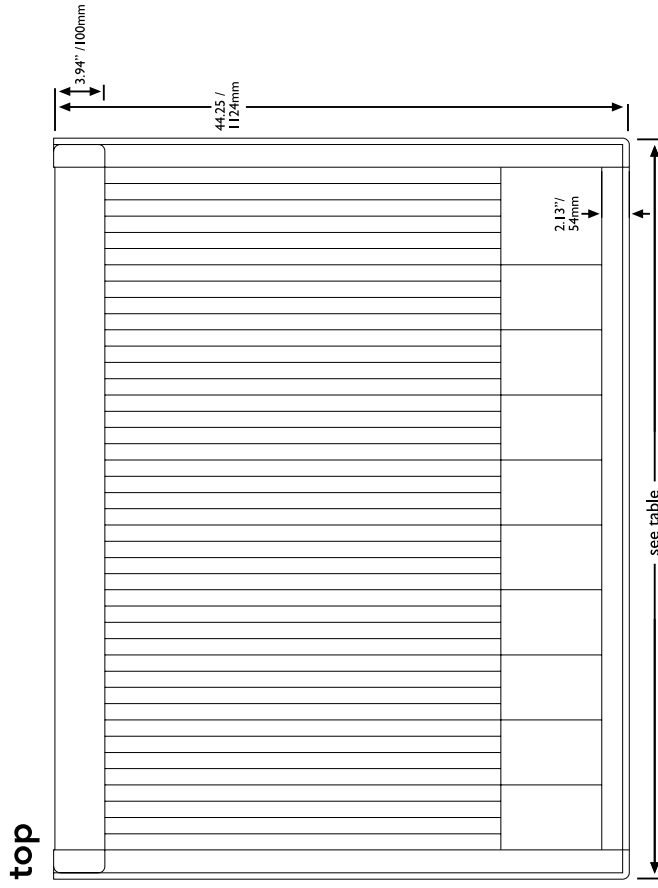
microprocessor faders



block diagram



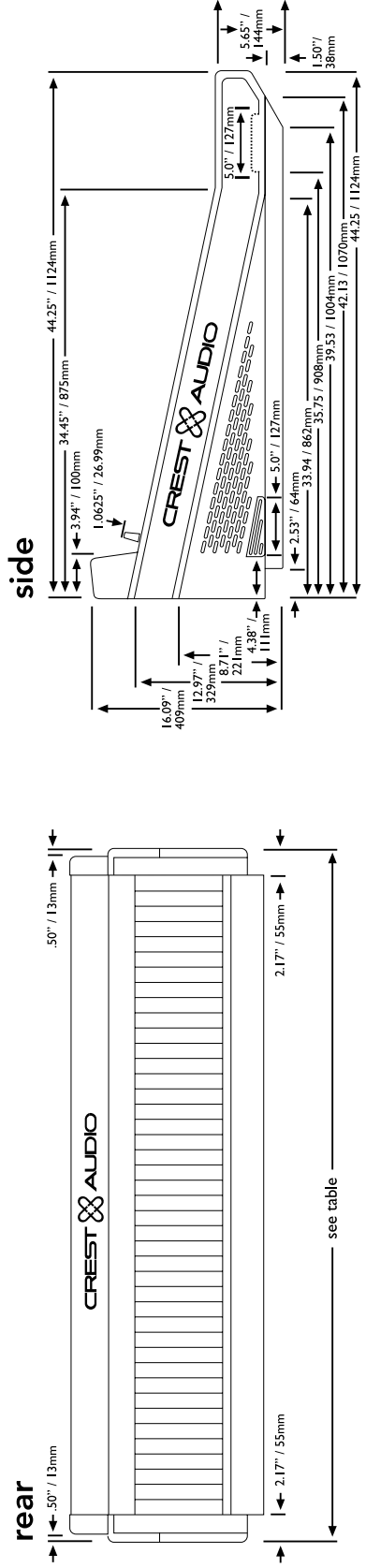
dimensions



V12

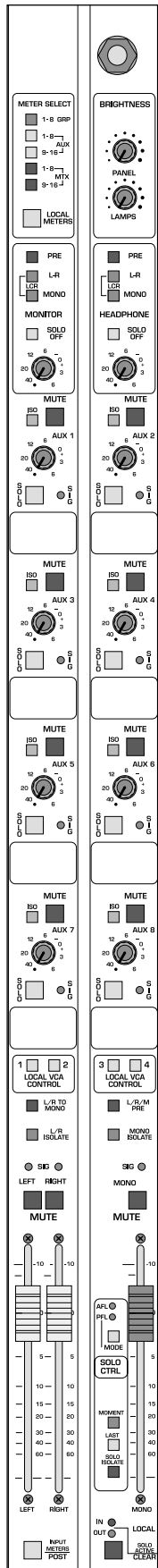
frame	dimensions	weight
30	42 x 44.25 x 16 in 145 x 112 x 40.6 cm	215 lbs 98 kg
42	57 x 44.25 x 16 in 145 x 112 x 40.6 cm	300 lbs 136 kg
50	67 x 44.25 x 16 in 170 x 112 x 40.6 cm	350 lbs 159 kg
58	77 x 44.25 x 16 in 196 x 112 x 40.6 cm	400 lbs 204 kg
66	87 x 44.25 x 16 in 221 x 112 x 40.6 cm	400 lbs 204 kg

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



side-car

master modules 1+2



V12 input expansion capabilities

The V12 console's input capacity may be increased in a number of ways. The first method is simple substitution of stereo modules for mono modules. There is no restriction as to the quantity or location of any modules, except for the 66-position frame, which is restricted to no-more-than 28 stereo-input modules (including the four stereo modules that are provided as standard on all V12 configurations).

The second-method links multiple V12 chassis together, using the optional internal-linking electronics and multi-way cable system. Up to three-chassis may be linked together, making up to 156-inputs available. While all functions link-together, specific functions may be selectively-isolated, including the very important solo-functions where multiple operators may not wish to disturb other members of the mixing team operating on master or slaved consoles. This functionality is accomplished via a conveniently-located front-panel solo-isolate switch.

The third-method employs the V12 expander-frame system. This is a 28 input-position frame that also includes a two-wide master section—delivered with all mono input modules, but optionally configured with any number of stereo modules. Up to two-sidecars can be connected to a master chassis, making available up to 108 input-positions. When three 52-input V12 chassis are linked with two 28-input side-cars, up to 212 input-module positions are then available for use within this single-console system.

The inclusion of a master section allows a side-car to be used as a limited-function stand-alone mixer or to allow the local-control of selected outputs, such as effect sends, whose feeds may be isolated from the master console.

The side-car provides, in addition to master control from the main console, four local-VCA group channels, eight local-aux outputs and local left/right/mono outputs. These features are especially useful when the console is used as a drum or orchestra mixer.

side-car master fader

