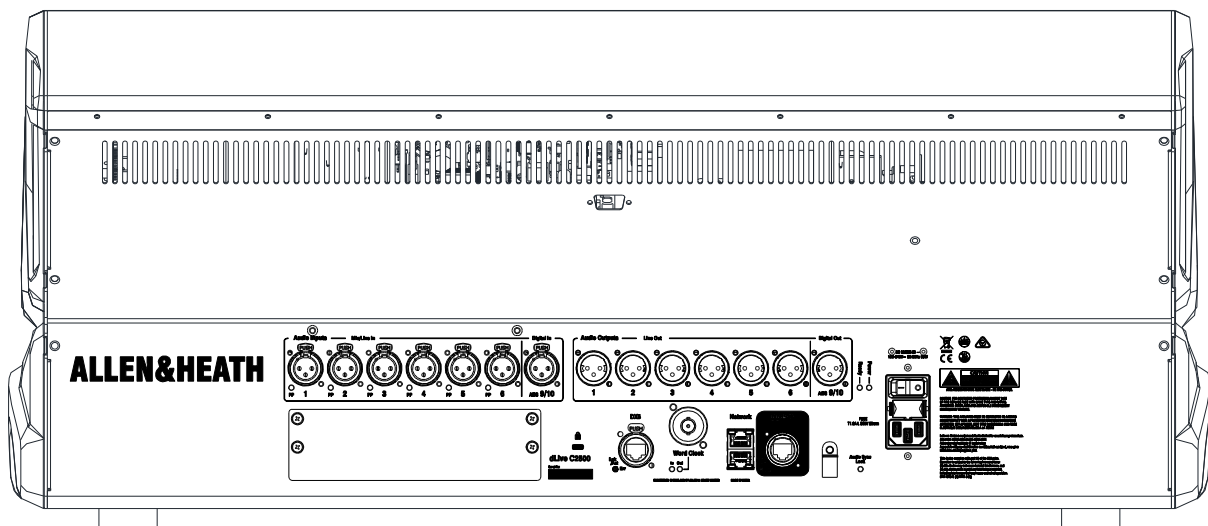
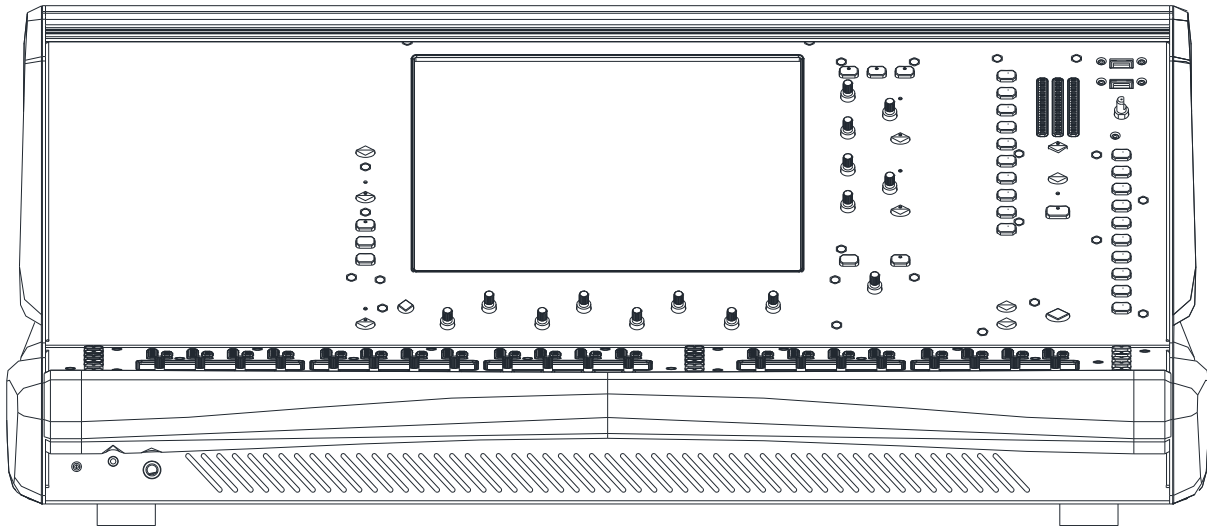


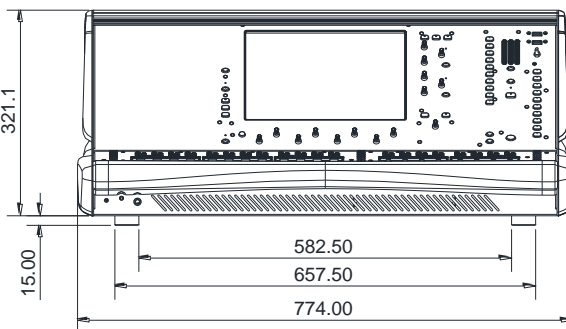
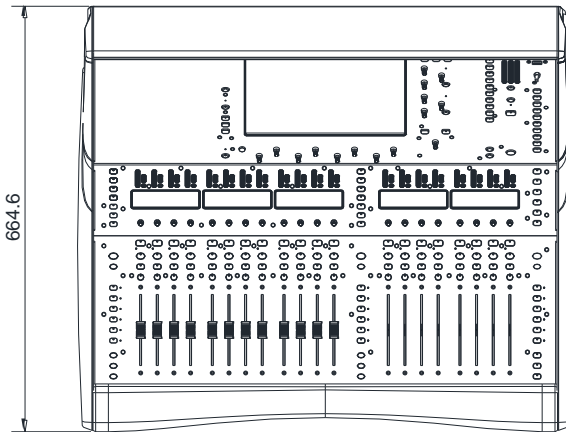
C2500 Technical Datasheet

Overview

- 20 faders, 6 layers
- Fully assignable layout – up to 120 fader strips
- Harmony UI integrates screen and wrap-around controls
 - 12" capacitive touchscreen
 - Gesture control – pinch, swipe, drag 'n drop
 - Dedicated multi-mode EQ view
 - Configurable widget areas for Scenes, meters, FX and more
 - 3 pages of 6 assignable rotaries
- 19 assignable SoftKeys
- Engineer's Wedge and IEM fader strips
- Comprehensive multipoint metering
- Daylight visibility
- USB stereo recording and playback
- 6 XLR mic/line in, 6 XLR line out
- 1 digital st AES3 in, 1 digital st AES3 out
- Connection hub
 - 1 x GigaACE gigabit link to MixRack
 - 1 x DX link for I/O expansion
 - 1 x I/O Port – 128 ch 96 kHz
 - 2 x Network ports
 - Wordclock BNC I/O
 - Video output



Dimensions

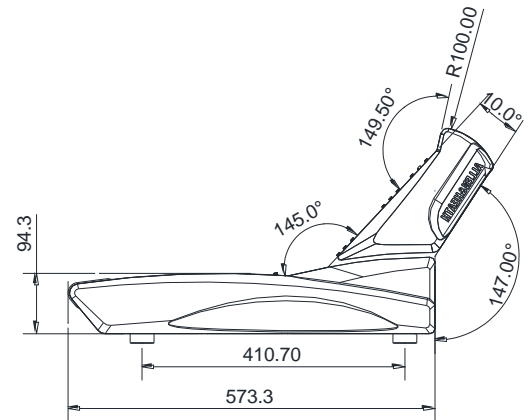


C2500

Height 325mm (12.8")
Length 665mm (26.2")
Width 775mm (30.5")
Weight 24.5kg (54lbs)

C2500 Packaged

Height 480mm (18.9")
Length 870mm (34.3")
Width 950mm (37.4")
Weight 33kg (72.8lbs)



A&E Specifications

The control surface shall have 20 moving faders, each with 6 layers accessed by dedicated keys. All fader strips shall be configurable as input channels, mixes, FX sends, FX returns, DCA masters, or MIDI strips. Each fader strip shall have a dedicated PAFL, Mix, Select, and Mute button with indicators, 10-segment multi-point meter, 4-segment gain reduction meter, rotary encoder, and coloured LCD display with name, mode, status, and level indicating. 7 buttons with indicators shall provide global mode for the rotary controls being Gain, Pan, Sends and up to 4 custom functions. Send levels to mixes shall be adjustable using the faders.

A 12" capacitive touchscreen shall be provided for access to channel processing, meters, FX, I/O, scene management, setup, utilities and diagnostics. Physical, dedicated controls shall be provided for the 4-band PEQ. Further physical controls shall be user assignable, including 6 rotary encoders arranged over 3 layers, and 19 user-defined keys. Dedicated keys shall be provided for quick Copy/Paste/Reset of mixes and processing parameters, pre/post and mix assignments, scene safes, GEQ fader flip, PAFL clear, scene automation, talkback, and access to libraries.

22-segment meters shall indicate the 3 Main mix levels, the PAFL signal shall override the LR meters accompanied by a PAFL-active indicator. ¼" and 3.5mm jacks for the surface PAFL headphones output shall be provided, plus an analogue output level control. The mixer shall include a 2-track record and playback system for optional USB drives. The surface shall have 2 USB ports on the front, one of which dedicated to record / playback.

The surface shall provide 6 XLR inputs of high quality and capable of handling microphone or line signals, with remote controlled analogue gain adjustable in 1dB steps, a 20 dB PAD, and phantom power. It shall also provide 6 XLR line outputs, 1 AES-3 stereo XLR inputs with SRC, and 1 AES-3 stereo XLR outputs

with SRC. There shall be an option to bypass the Sample Rate Conversion on the digital inputs or outputs.

A 128-channel I/O port for an optional digital interface module shall also be provided. Optional interface modules shall include: MAD1, EtherSound, Dante, Waves SoundGrid, and ACE.

An Ethercon port shall be provided for connection to the rack engine via the Allen & Heath gigaACE protocol. This connection shall carry over 300x300 channels of uncompressed audio at 96kHz, control data and tunnelling of third party Ethernet traffic. An Ethercon port shall be provided for I/O expansion via an audio connection carrying up to 32x32 channels of uncompressed audio at 96kHz. A range of optional expansion racks shall be provided and shall include a modular rack with 8-channel card options including analogue or digital I/O.

A BNC connector shall be provided on the unit for Wordclock input and output. A pair of RJ45 sockets shall also be provided for gigabit Ethernet network connections to laptops or other control systems.

The unit shall have a fixed power supply accepting AC mains voltages of 100-240V, 50/60 Hz, 110W max via an earthed 3-pin IEC male connector. A rocker switch shall be provided near the mains inlet to isolate the unit from the incoming mains supply.

An option shall be provided for password protection for log-in of several users with different levels of system access and permissions.

The control surface shall be the Allen & Heath dLive C2500.

Technical Specifications

		System	
Inputs			
Mic/Line XLR Inputs	Balanced XLR, +48V phantom power	Measured balanced XLR in to XLR out, 20-20kHz, minimum Gain, Pad out	
Mic/Line Preamp	Fully recallable	Dynamic Range	110dB
Input Sensitivity	-60 to +15dBu	System Signal to Noise	-92dB
Analogue Gain	+5 to +60dB, 1dB steps	Frequency Response	20Hz - 30kHz +0/-0.8dB
Pad	-20dB Active PAD	THD+N (analogue in to out)	0.0015% @ +16dBu output, 1kHz 0dB gain
Maximum Input Level	+30dBu (PAD in)	Headroom	+18dB
Input Impedance	>4kΩ (Pad out), >10kΩ (Pad in)	Internal operating Level	0dBu
Mic EIN	-127dB with 150Ω source	dBFS Alignment	+18dBu = 0dBFS (+22dBu at XLR output)
Phantom Power indication	Per socket, internal or external phantom power sensing, triggered at 24V	Meter Calibration	0dB meter = -18dBFS (+4dBu at XLR out)
Digital Inputs			
	AES3 2 Ch XLR, 2.5Vpp balanced terminated 110 Ω	Meter Peak indication	-3dBFS (+19dBu at XLR out)
	SRC range 32k - 192kHz, with bypass option		
Outputs			
Analogue XLR Outputs	Balanced, Relay protected	Sampling Rate	96kHz +/- 20 PPM
Output Impedance	<75Ω	ADC	24-bit Delta-Sigma
Nominal Output	+4dBu = 0dB meter reading	DAC	24-bit Delta-Sigma
Maximum Output Level	+22dBu	Latency	0.7 ms (MixRack XLR in to XLR out, Input to Mix)
Residual Output Noise	-92dBu (muted, 20-20kHz)		+ 5 samples, Surface to Mixrack (GigaACE hop)
	-90dBu (muted, 20-40kHz)	Operating Temperature Range	+ 8 samples, DX32 to Mixrack (DX hop)
Digital Outputs			
	AES3 2 Ch XLR, 2.5Vpp balanced terminated 110 Ω	Mains Power	100-240V AC, 50-60Hz, 110W max
	96kHz sampling rate, switchable to 48kHz, 44.1kHz	USB Audio playback	Mono/stereo .WAV files, 16/24bit, 44.1/48/96kHz
		USB Audio recording	Stereo .WAV files, 24bit 96kHz
Dimensions and Weights			
	Width x Depth x Height x Weight		Width x Depth x Height x Weight
C2500	665 x 775 x 325 mm (26.2 x 30.5 x 12.8") x 24.5kg (54lbs)	C2500 - boxed	870 x 950 x 480 mm (34.3 x 37.4 x 18.9") x 33kg (72.8lbs)