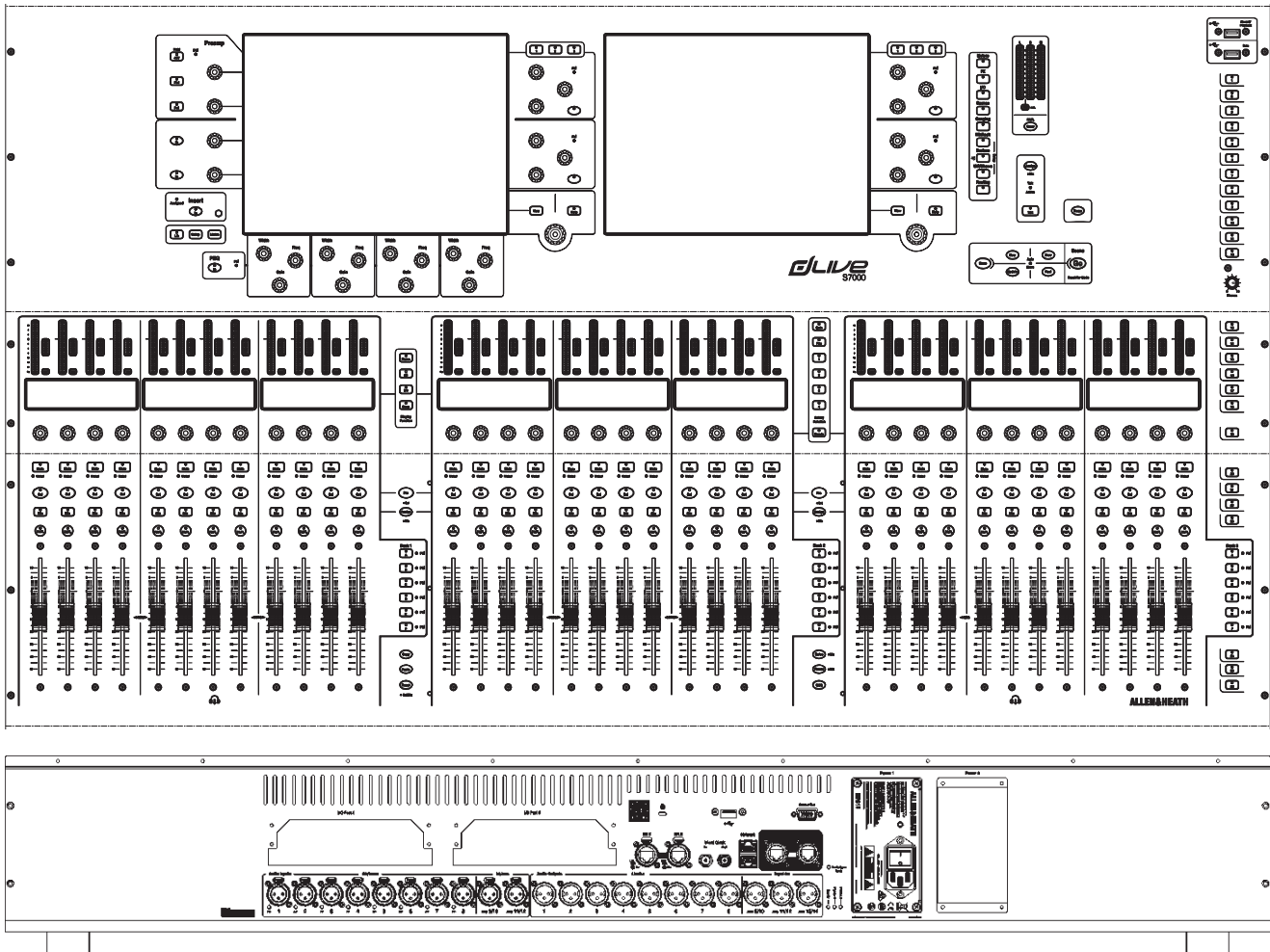


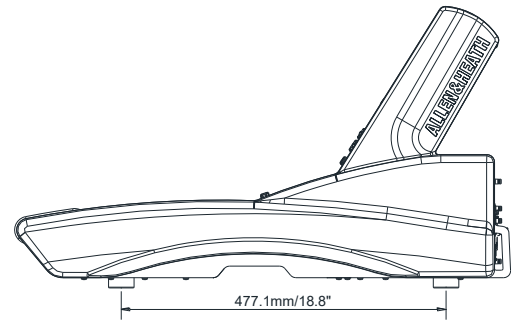
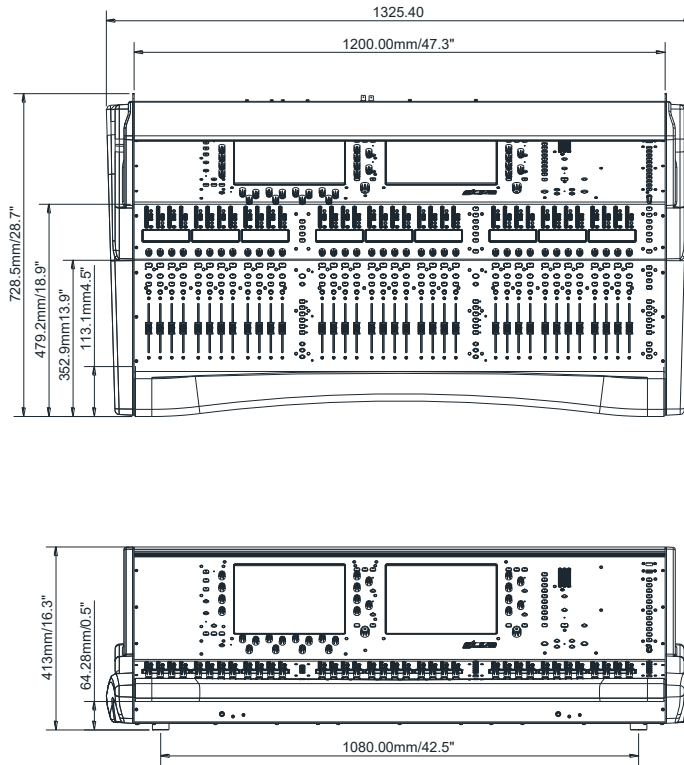
S7000 Technical Datasheet

Overview

- 36 faders, 6 layers
- Fully assignable layout – up to 216 fader strips
- Harmony UI integrates screen and wrap-around controls
 - Twin 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 per screen
- 26 assignable SoftKeys
- Engineer's Wedge and IEM fader strips
- Comprehensive multipoint metering
- Daylight visibility
- USB stereo recording and playback
- 8 XLR mic/line in, 8 XLR line out
- 2 digital st AES3 in, 3 digital st AES3 out
- Connection hub
 - Dual redundant GigaACE gigabit link to MixRack
 - 1x redundant DX link for I/O expansion
 - 2x I/O Ports – 128 ch 96 kHz each
 - 2x Network ports
 - Wordclock BNC I/O
 - Video output
- Dual redundant, hot swappable power supply



Dimensions



A&E Specifications

The control surface shall have 36 moving faders in three banks, 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, 22-segment multi-point meter, 6-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 meters, FX, I/O, scene management, setup, utilities and diagnostics. A further 12" capacitive touchscreen shall be dedicated to channel processing. Physical, dedicated controls shall be provided for adjustment of gain, HPF/LPF filters, and 4-band PEQ. Further physical controls shall be user assignable, including 2 sets of 6 rotary encoders arranged over 3 layers, and 26 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. 1/4" 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, and a further USB port on the back panel.

The surface shall provide 8 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 8 XLR line outputs, 2 AES-3 stereo XLR inputs with SRC, and 3 AES-3 stereo XLR outputs with SRC. There shall be an option to bypass the Sample Rate Conversion on the digital inputs or outputs.

Two 128-channel I/O ports for optional digital interface modules shall also be provided. Optional interface modules shall include: MADI, EtherSound, Dante, Waves SoundGrid, and ACE.

A pair of Ethercon ports shall be provided for redundant 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. 2 Ethercon ports shall be provided for I/O expansion via a redundant 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 pair of BNC connectors 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 modular power supply accepting AC mains voltages of 100~240V, 50/60 Hz, 300W 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. The unit shall also provide the option

for a second, hot-swappable, redundant power supply. This shall be of the same type and interchangeable with the power supply fitted as standard.

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 S7000.

Technical Specifications

Inputs

Mic/Line XLR Inputs	Balanced XLR, +48V phantom power
Mic/Line Preamp	Fully recallable
Input Sensitivity	-60 to +15dBu
Analogue Gain	+5 to +60dB, 1dB steps
Pad	-20dB Active PAD
Maximum Input Level	+30dBu (PAD in)
Input Impedance	>4k Ω (Pad out), >10k Ω (Pad in)
Mic EIN	-127dB with 150 Ω source
Phantom Power indication	Per socket, internal or external phantom power sensing, triggered at 24V

Digital Inputs

AES3 2 Ch XLR, 2.5Vpp balanced terminated 110 Ω
SRC on each pair, range 32k - 192kHz, with bypass option

Outputs

Analogue XLR Outputs	Balanced, Relay protected
Output Impedance	<75 Ω
Nominal Output	+4dBu = 0dB meter reading
Maximum Output Level	+22dBu
Residual Output Noise	-92dBu (muted, 20-20kHz)
	-90dBu (muted, 20-40kHz)

Digital Outputs

AES3 2 Ch XLR, 2.5Vpp balanced terminated 110 Ω
96kHz sampling rate, switchable to 48kHz, 44.1kHz

System

Measured balanced XLR in to XLR out, 20-20kHz, minimum Gain, Pad out	
Dynamic Range	110dB
System Signal to Noise	-92dB
Frequency Response	20Hz - 30kHz +0/-0.8dB
THD+N (analogue in to out)	0.0015% @ +16dBu output, 1kHz 0dB gain
Headroom	+18dB
Internal operating Level	0dBu
dBFS Alignment	+18dBu = 0dBFS (+22dBu at XLR output)
Meter Calibration	0dB meter = -18dBFS (+4dBu at XLR out)

Meter Peak indication	-3dBFS (+19dBu at XLR out)
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Sampling Rate	96kHz +/- 20 PPM
ADC	24-bit Delta-Sigma
DAC	24-bit Delta-Sigma

Latency	0.7 ms (MixRack XLR in to XLR out, Input to Mix)
	+ 5 samples, Surface to Mixrack (GigaACE hop)
	+ 8 samples, DX32 to Mixrack (DX hop)

Operating Temperature Range	
Fitted with:	

MPS16 V1 300w	0°C to 35°C (32°F to 95°F)
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MPS16 V2 250w	0°C to 40°C (32°F to 104°F)
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Mains Voltage Operating Range	100-240V AC, 50/60Hz
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Mains Power Consumption	300W max (MPS16 V1 300W)* 250W max (MPS16 V2 250W)*
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ⓘ MPS16 power consumption is printed under AC inlet

Dimensions and Weights

	Width x Depth x Height x Weight		Width x Depth x Height x Weight
S7000	1325 x 728 x 413 mm (52.2"x 28.7"x 16.3") x 41kg (90lbs)	S7000 - boxed	1485 x 920 x 560 mm (58.5"x 36.2"x 22") x 56kg (123.5lbs)