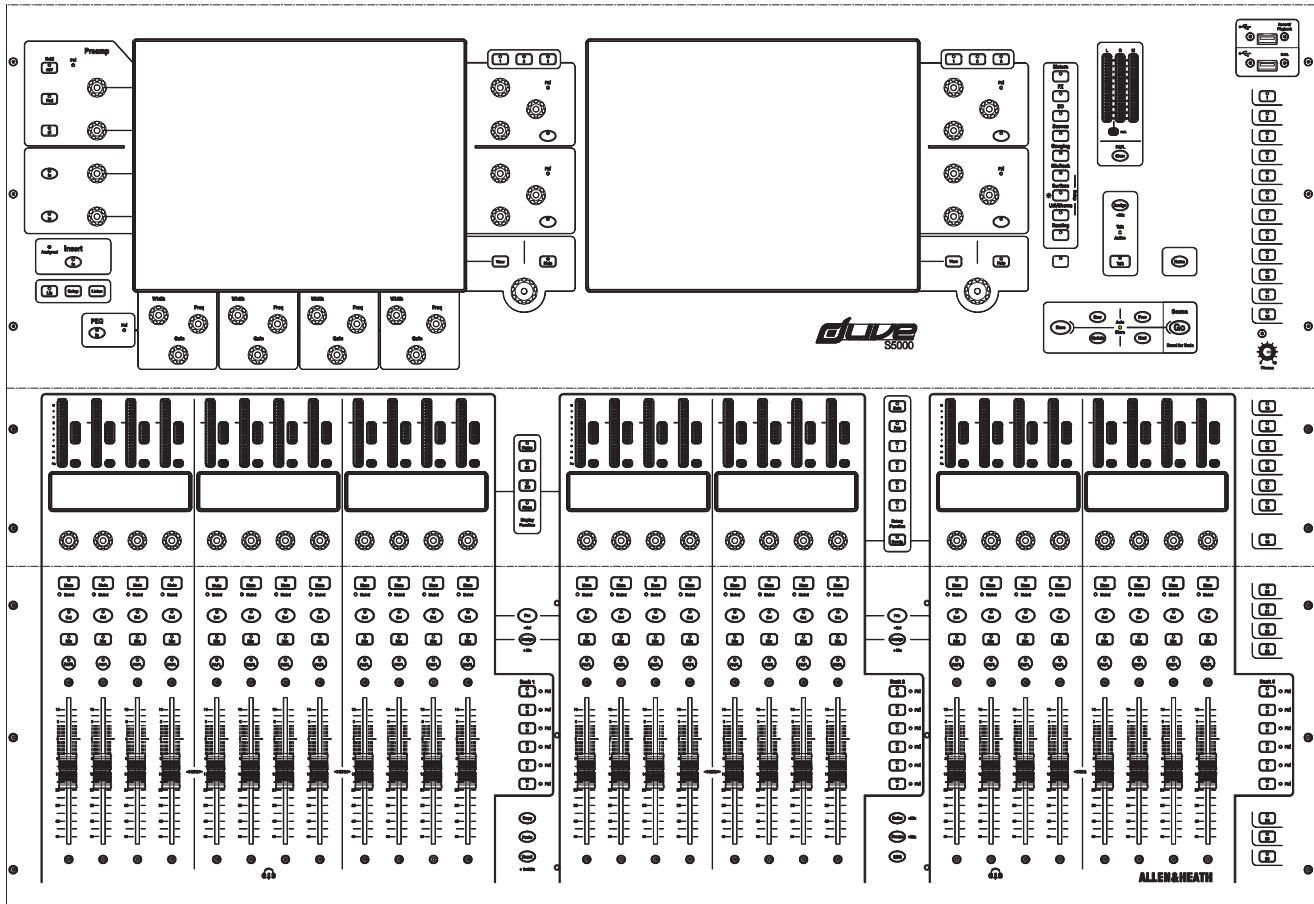
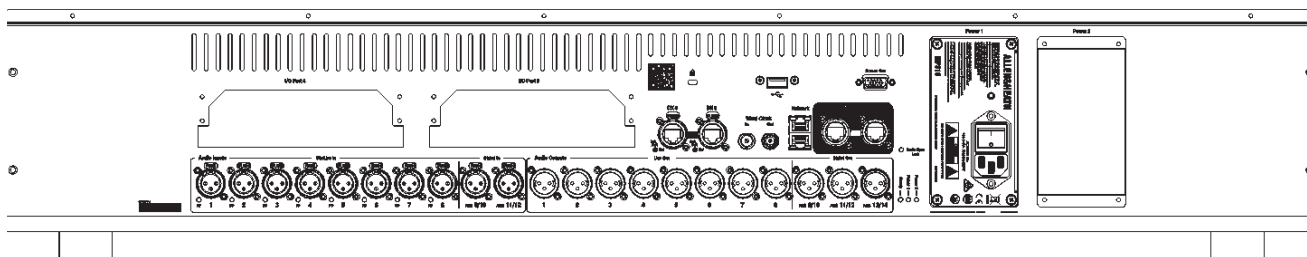


## S5000 Technical Datasheet

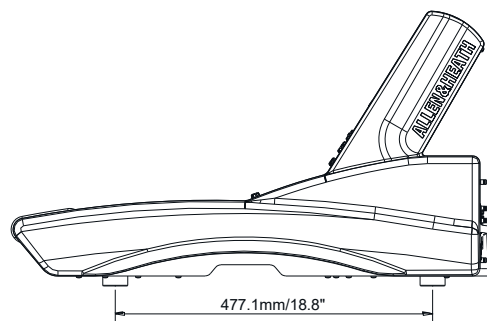
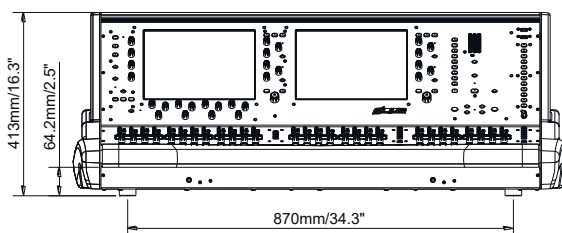
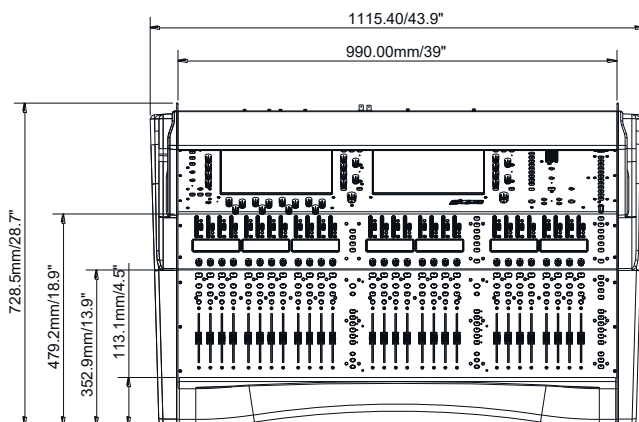
### Overview

- 28 faders, 6 layers
- Fully assignable layout – up to 168 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 28 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 S5000.

## Technical Specifications

### Inputs

|                            |                                                                          |
|----------------------------|--------------------------------------------------------------------------|
| <b>Mic/Line XLR Inputs</b> | 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 $\Omega$ (Pad out), >10k $\Omega$ (Pad in)                           |
| Mic EIN                    | -127dB with 150 $\Omega$ 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 $\Omega$   |
| SRC on each pair, range 32k - 192kHz, with bypass option |

### Outputs

|                             |                                                      |
|-----------------------------|------------------------------------------------------|
| <b>Analogue XLR Outputs</b> | Balanced, Relay protected                            |
| Output Impedance            | <75 $\Omega$                                         |
| Nominal Output              | +4dBu = 0dB meter reading                            |
| Maximum Output Level        | +22dBu                                               |
| Residual Output Noise       | -92dBu (muted, 20-20kHz)<br>-90dBu (muted, 20-40kHz) |

### Digital Outputs

|                                                        |
|--------------------------------------------------------|
| AES3 2 Ch XLR, 2.5Vpp balanced terminated 110 $\Omega$ |
| 96kHz sampling rate, switchable to 48kHz, 44.1kHz      |
| -90dBu (muted, 20-40kHz)                               |

### Digital Outputs

|                                                        |
|--------------------------------------------------------|
| AES3 2 Ch XLR, 2.5Vpp balanced terminated 110 $\Omega$ |
| 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) |
|-----------------------|----------------------------|

|               |                    |
|---------------|--------------------|
| 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)<br>+ 5 samples, Surface to Mixrack (GigaACE hop)<br>+ 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) |
|---------------|----------------------------|

|               |                             |
|---------------|-----------------------------|
| MPS16 V2 250w | 0°C to 40°C (32°F to 104°F) |
|---------------|-----------------------------|

|                               |                      |
|-------------------------------|----------------------|
| Mains Voltage Operating Range | 100-240V AC, 50/60Hz |
|-------------------------------|----------------------|

|                         |                                                        |
|-------------------------|--------------------------------------------------------|
| Mains Power Consumption | 300W max (MPS16 V1 300W)*<br>250W max (MPS16 V2 250W)* |
|-------------------------|--------------------------------------------------------|

ⓘ 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                              |
|-------|-------------------------------------------------------------|---------------|--------------------------------------------------------------|
| S5000 | 1115 x 728 x 413 mm<br>(43.9"x 28.7"x 16.3") x 35kg (77lbs) | S5000 - boxed | 1290 x 920 x 560 mm<br>(50.8"x 36.2"x 22") x 50kg (110.2lbs) |