# SD9
*World-class performance in a compact console*

## OVERVIEW

The DiGiCo SD9 is a 96 channel mixing console with 24 physical faders and 1 x 15" LCD high-resolution touchscreen. It brings together Stealth Digital Processing and FPGA technology to deliver the power of the SD-Range in a smaller, more affordable console.

## KEY FEATURES

96 Input Channels with full processing

48 Aux/Sub-Group busses with full processing

12 x 8 Matrix with full processing

Assignable channel layout

User programmable macros

Capable of redundantly mirroring with another SD9 console

Optional redundant PSUs

Snapshots for seamlessly changing many parameters at once

Offline software

iPad control

Theatre software option

Broadcast software option

### DiGiCo SD-Range

The SD-Range caters for everything audio: be it the biggest rock and roll show on the planet, a crucial global broadcast, the most sizeable House of Worship application, or an intimate theatre performance, there is an SD console that will tick the box.

Powerful. Versatile. Smart. Desirable.

# TECHNICAL SPECIFICATIONS

## WORKSURFACE

24 x 100mm touch-sensitive, motorised faders

1 x 15" LCD high-resolution touchscreen

24 x 8-Segment LED bargraph meters

1 x ¼" Headphone socket

1 x USB 2.0 slot

## REAR

2 x Redundant PSUs (Optional)

2 x XLR3 1.2 – 12V Light connections

1 x Waves port (Optional)

8 x XLR Mic/Line Inputs

8 x XLR Line Outputs

2 x XLR AES/EBU Inputs (4 x channels)

2 x XLR AES/EBU Outputs (4 x channels)

2 x GPI ¼" Jack

2 x GPO ¼" Jack

1 x MIDI In/Thru/Out (5 pin DIN)

1 x Word Clock I/O BNC

1 x MADI BNC I/O

2 x MADI RJ45 Ethercon I/O (for D-Rack)

1 x VGA Port - DB-15 Mini-Female (1024 x 768 Resolution)

1 x Ethernet port

2 x USB 2.0 slots

1 x MultiMode Optocore Interface (Optional)

## OPTIONS

Waves SoundGrid Interface

Optocore Interface (HMA, OpticalCon or ST connectivity)

Upgrade to SingleMode Optocore

Theatre Software

Broadcast Software

Redundant PSU

Flightcase

## SIGNAL PROCESSING

**96 Input Channels (Mono)**
- Main & Alternative Input
- Analogue Gain
- Phase Inversion Control
- Gain Tracking
- Digital Trim (-40dB to +40dB)
- Variable Delay (0ms to 1.3s)
- DiGiTube
- HPF/LPF (-24dB/Oct)
- 4 Band Parametric EQ / Dynamic EQ
- DYN 1: Compressor, Multiband Compressor, Desser
- DYN 2: Gate, Duck, External Input Compressor
- EQ/Dyn Order Control
- 1 Insert Point per Channel
- Channel Mute & Hard Mute
- Channel Direct Outputs

**48 Aux/Sub-Group Busses**
- Phase Inversion Control
- Digital Trim (-40dB to +40dB)
- Variable Delay (0ms to 1.3s)
- DiGiTube
- Merge Input
- Tone Generator
- HPF/LPF (-24dB/Oct)
- 4 Band Parametric EQ / Dynamic EQ
- DYN 1: Compressor, Multiband Compressor, Desser
- DYN 2: Gate, Duck, External Input Compressor
- EQ/Dyn Order Control
- 1 Insert Point per Channel
- Channel Mute & Hard Mute

1 LR/LCR Master Buss (with full processing)

12 Input x 8 Output Full Processing Matrix

12 Control Groups (CGs)

2 Solo Busses

16 x 32-band GEQs

12 x Internal Stereo FX Processors
- Delays
- Audio Enhancer
- Choruses
- Pitch Shifters
- Reverbs

DiGiTubes available on every channel and Buss

Dynamic EQs available on every channel and Buss

Multiband Compressors available on every channel & Buss

Virtual Soundcheck

# A&E SPECIFICATION

The DiGiCo SD9 shall have 24 faders split into 2 worksurface sections, each with 4 banks and each having 3 layers. These can be assigned to control any of the channel types. The console shall be capable of 96 input channels, 48 Aux/Sub-group Busses, a LR/LCR Master Buss, 12 VCA style or mute group style Control Group channels, 2 Solo Busses, and a 12 input x 8 output full processing Matrix. All processing paths shall have full processing including Tube emulation, Dynamic EQ and Multiband Compression. Tube emulation, Dynamic EQ and Multiband Compression shall be available on every channel and Buss on the console. All processing shall be internal and FPGA-Based. An internal FX rack with 12 stereo slots shall allow users to pick from 34 different FX. An internal set of 16 32-band GEQs shall also be accessible.

A 15" (38cm) LCD high-resolution touch screen shall be provided to show either channel strips for the left worksurface, channel strips for the right worksurface or the Master screen. The view selection shall be controlled with physical buttons on the worksurface. There shall also be a physical control on the worksurface to control the master level so that it can be accessed at all times.

Physical controls on the master section of the worksurface shall allow control over some snapshot functions, control over basic Solo functions, and there shall be a dedicated hardware channel strip to the right of the touchscreen, allowing control over filters, EQ, dynamics and insert points. 7 quick select buttons shall be on the master section to allow easy reassignment of the underscreen rotaries. There shall also be 8 user-assignable macro buttons on the worksurface. The user shall also be able to program macros that can be triggered with fader movements, GPI, MIDI and keyboard function keys.

The rear panel shall have 8 Mic/Line inputs, 8 line outputs, 2 AES/EBU inputs (4 channels) and 2 AES/EBU outputs (4 channels). It shall also have 2 Ethercon ports for connections to D-Racks, one set of MADI I/O for connections to MADI devices, and external Workclock I/O. The other connectors on the rear of the console shall be 2 GPIs, 2 GPOs, MIDI In, Thru and Out, 2 USB ports, a VGA port, an ethernet port and two ports for external lights.

There shall be a Waves SoundGrid option providing 64 inputs and 64 outputs to the SoundGrid Network at 48kHz and 96kHz. There shall also be an Optocore option, providing 504 additional audio paths at 48kHz and 96kHz. The Optocore connector type shall be chosen from HMA, OpticalCon or ST. The Optocore Mode shall be chosen from MultiMode or SingleMode.

There shall be a Theatre Software option that shall provide Auto Update, Aliases, Players, Advanced CG programming tools and Matrix nodal delays.

There shall also be a Broadcast Software option available that shall provide Surround Busses, a Monitor Matrix, Backstop PFL and Mix Minus Busses.

The dimensions of the SD9 shall be: 878 (w) x 785 (d) x 262 (h) mm
The weight of the SD9 shall be: 36kg
The DiGiCo SD9 shall be supplied with a dust cover.

## AUDIO SPECIFICATIONS

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|---|
| Sample Rate: 48kHz or 96kHz |
| Procesing Delay: 2ms Typical @ 48K (48 Stereo Channels, Stage input Through L-R Buss to Stage Output) 1.1ms @ 96k |
| Internal Processing: Up to 40-bit, Floating Point |
| A>D & D>A: 24-bit Converter Bit Depth |
| Frequency Response: +/- 0.6dB (20Hz – 20kHz) |
| THD: <0.05% @ Unity Gain,: 10dB Input @ 1kHz |
| Channel Separation: Better Than 90dB: (40Hz-15kHz) |
| Residual Output Noise: <90dBu Typical (20Hz-20kHz) |
| Microphone Input: Better Than -126dB: Equivalent Noise |
| Maximum Output Level: +22dBu |
| Maximum Input Level: +22dBu |

In a world as competitive for engineers as it is for console owners, you want the best tools you can lay your hands on. You also want a console and audio tools as well thought out for every major application as they are designed for the art and science of sound engineering.

# LINE DRAWING
**All dimensions in mm**

878mm /34.59"

785mm/30.94"

785mm /30.94"

258mm/10.15"

258mm/10.15"
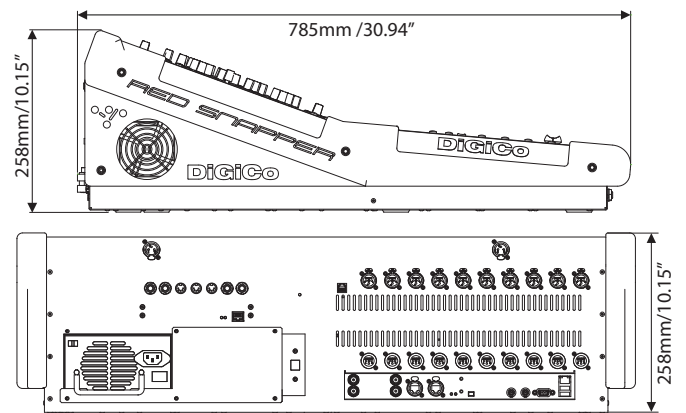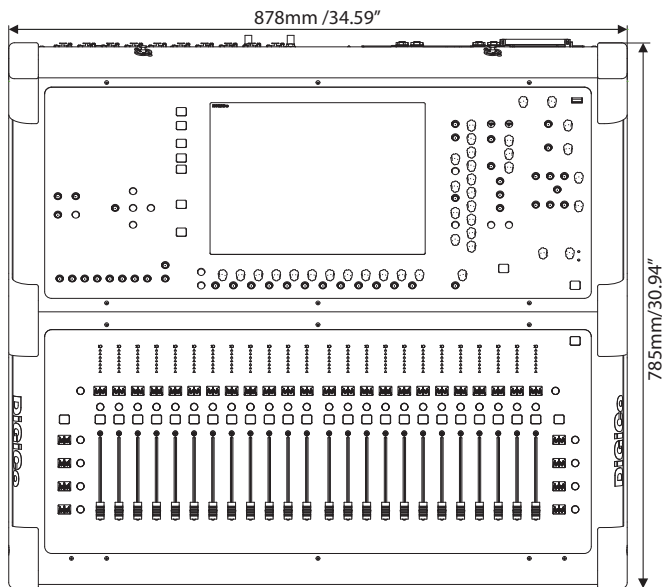
## PHYSICAL

Dimensions: 878mm (w) x 785mm (d) x 262mm (h)

Weight: 36kg (105kg with optional flightcase)

Flightcase: 1063mm (w) x 472mm (d) x 1131mm (h) (Optional)

Power Requirements: 90-264 VAC, 47-63Hz Auto Sensing. 208 watts, 232VA

Redundancy: Internal PSU x 2 (Optional)

Product Code: X-SD9-WS (Single PSU)

Product Code: X-SD9-WS-2P (Dual PSU)

**DiGiCo**
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