

# **OVERVIEW**

The DiGiCo SD12 is a 72 channel mixing console with 26 physical faders and 2 x 15" LCD high-resolution touchscreens. With Stealth Digital Processing and FPGA technology, the SD12 raises the bar as a multi-application digital console at an exceptionally affordable price point.



72 Input Channels with full processing

36 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 SD12 console

Redundant PSUs as standard

Snapshots for seamlessly changing many parameters at once

2 DMI Slots to expand the I/O as desired

Integrated UB MADI

Offline software

iPad control

SD12 96 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.

www.digico.biz DiGiCo SD12 Datasheet



#### WORKSURFACE

26 x 100mm touch-sensitive, motorised faders

2 x 15" LCD high-resolution touchscreens

28 x 20-Segment LED bargraph meters

1 x 1/4" Headphone socket

1 x 3.5mm Headphone Socket

1 x USB 2.0 slot

Integrated Light Bar

#### REAR

- 2 x Redundant PSUs
- 2 x DMI Slots (up to 64 I/O per slot)
- 8 x XLR Mic/Line Inputs
- 8 x XLR Line Outputs
- 4 x XLR AES/EBU Inputs (8 x channels)
- 4 x XLR AES/EBU Outputs (8 x channels)
- 1 x GPI DSub37 (16 inputs)
- 1 x GPO DSub37 (16 outputs)
- 1 x MIDI In/Thru/Out (5 pin DIN)
- 1 x Word Clock I/O BNC
- 2 x MADI BNC I/O
- 1 x DVI port
- 1 x Ethernet port
- 4 x USB 2.0 slots
- 2 x Optocore Interface (Optional)
- 1 x UB MADI (USB Type B Audio I/O interface for recording and playback of up to 48 channels)
- 1 x RS422 port (9 pin)

### **OPTIONS**

Single or Dual Loop Optocore (HMA, OpticalCon or ST)

Upgrade to SingleMode Optocore

SD12 96 Software Upgrade

Flightcase

Compatible DMI Cards: ADC / AES / AMM / Aviom / DAC / Dante / Dante64@96 / Hydra 2 / KLANG / MADI B / MADI C / ME / Mic / Waves

#### SIGNAL PROCESSING

### 72 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
- 2 Insert Points per Channel Channel Mute & Hard Mute
- **Channel Direct Outputs**

### 36 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
- 2 Insert Points 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 GEOs

#### 12 x Internal Stereo FX Processors

- Delays
- Audio Enhancer
- Choruses
- Pitch Shifters
- Reverhs

DiGiTuBes available on every channel and Buss

Dynamic EQs available on every channel and Buss

Multiband Compressors available on every channel & Buss

Virtual Soundcheck



The DiGiCo SD12 shall have 26 faders split into 2 worksurface sections, each with 3 layers of 4 banks, plus 2 master faders. All 26 faders may be assigned to control any of the channel types. The console shall be capable of 72 input channels, 36 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.

Two 15" (38cm) LCD high-resolution touch screens shall be provided to show the channel strips. The right hand screen shall also be able to show the master screen. The view selection of this screen shall be controlled by a physical button on the worksurface. To the left of each screen shall be 7 quick select buttons to allow easy reassignment of the underscreen rotaries, which shall have integrated switches and HTL colour encoded rings. Each screen shall also have a dedicated hardware channel strip, allowing control over filters, EQ, dynamics and insert points.

The master section to the right of the console worksurface shall have physical controls to allow control over some snapshot functions and control over basic Solo functions. There shall also be 5 layers of 5 user-assignable macro buttons and LCDs on the master section of the worksurface. The user shall also be able to program macros that can be triggered with fader movements, GPI, MIDI and keyboard function keys. This master section shall also have a USB port.

The rear panel shall have 8 Mic/Line inputs, 8 line outputs, 4 AES/EBU inputs (8 channels) and 4 AES/EBU outputs (8 channels). It shall also have an inbuilt UB MADI (USB Type B audio I/O interface for recording and playback of up to 48 channels), two sets of BNC MADI I/O for connections to MADI devices, and external Workclock I/O. The other connectors on the rear of the console shall be 1 DSub37 GPI (16 inputs), 1 DSub37 GPO (16 outputs), MIDI In, Thru and Out, 4 USB ports, a DVI port, an ethernet port and an RS422 port. It shall also have 2 DMI slots and 2 redundant power supplies.

There shall be an Optocore option, providing either a single or dual loop. Each loop shall give 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 an optional SD12 96 software extension that provides more channels and more busses, bringing the totals to 96 input channels and 48 Aux/Sub-group Busses.

The dimensions of the SD12 shall be: 1124 (w) x 795 (d) x 389 (h) mm The weight of the SD12 shall be: 42kg The DiGiCo SD12 shall be supplied with a dust cover.

### **AUDIO SPECIFICATIONS**

Sample Rate: 48kHz or 96kHz

Processing Delay: 1ms Typical (channel, SD Rack Input

Through L-R Buss to Stage Output @96kHz)

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)

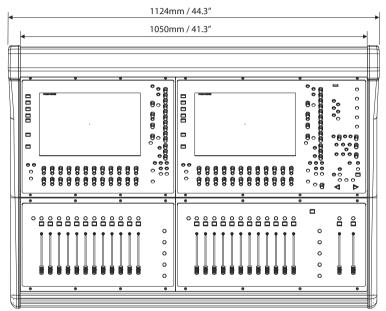
Microphone Input: Better Than -126dB: Equivalent Noise

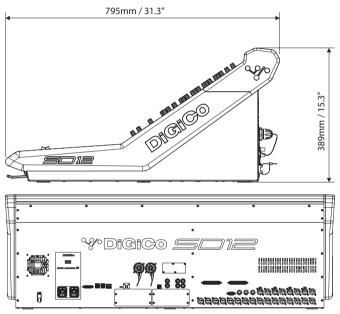
Maximum Output Level: +22dBu

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.







# **PHYSICAL**

Dimensions: 1124mm (w) x 795mm (d) x 389mm (h)

Weight: 42kg (130kg with optional flightcase)

Flightcase: 1270mm (w) x 570mm (d) x 1150mm (h) (Optional)

Power Requirements: 90-260V, 50-60Hz, 232VA (140W)

Redundancy: Internal PSU x 2

Product code: X-SD12

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