



DATASHEET

S31

Mixing without limits

OVERVIEW

The DiGiCo S31 is a 48 channel mixing console with 31 physical faders and 3 x 10" multitouch screens. Using state-of-the-art FPGA technology, the S31 provides the same high quality audio as the legendary SD-Range.



KEY FEATURES

48 Flexi Input Channels (mono/stereo)

16 Flexi Aux / Sub-Group Busses (mono/stereo)

10 x 8 Matrix with full processing

Fully assignable channel layout

24 local mic/line inputs and 12 line outputs

2 DMI slots to expand the I/O as desired

Snapshots for seamlessly changing many parameters at once

Offline software

iPad control

Compatible with the DMI-AMM for automatic mic mixing

OSC control of snapshots



DiGiCo S-Series

DiGiCo consoles are used on many of the biggest live sound tours and events around the world and the compact S-Series made this pedigree of audio performance available to every part of the industry, with Stealth Digital Processing™ introducing a new standard of audio quality, power and flexibility not seen before at its price point.

TECHNICAL SPECIFICATIONS

WORKSURFACE

- 31 x 100mm touch-sensitive, motorised faders
- 3 x 10" Multi-touch screens
- 2 x 24-Segment Master/Solo LED meters
- 1 x ¼" Headphone socket
- 1 x 3.5mm Headphone socket
- 1 x USB 2.0 slot
- 36 x Touch-sensitive rotaries

REAR

- 1 x PSU
- 24 x XLR Mic/Line Inputs
- 12 x XLR line Outputs
- 1 x XLR AES/EBU Input (2 x channels)
- 1 x XLR AES/EBU Output (2 x channels)
- 1 x GPI ¼" Jack
- 1 x GPO ¼" Jack
- 1 x UB MADI (USB Type B Audio I/O interface for recording and playback of up to 48 channels)
- 1 x Word Clock I/O BNC
- 1 x DVI port
- 2 x Ethernet ports
- 2 x USB 2.0 slots
- 2 x DMI slots (up to 64 I/O per slot)

OPTIONS

Flightcase

Compatible DMI Cards: A3232 / ADC / AES / AMM / Aviom / DAC / Dante / Dante64@96 / Hydra 2 / KLANG (audio only) / MADI B / MADI C / ME / MIC / Waves

SIGNAL PROCESSING

48 Flexi Input Channels (Mono or Stereo)

- Analogue Gain
- Phase Inversion Control
- Gain Tracking
- Digital Trim (-40dB to +40dB)
- Variable Delay (0ms to 682ms)
- DiGiTube*
- HPF/LPF (-24dB/Oct)
- 4 Band Parametric EQ / Dynamic EQ*
- DYN 1: Compressor, Multiband Compressor*
- DYN 2: Compressor with Side-Chain, Keyed Gate, Ducker
- EQ/Dyn Order Control
- 2 Insert Points per Channel
- Channel Mute
- Channel Direct Output (pre-mute, pre-fade, post-fade)
- Record Send and Return

16 Flexi Aux/Sub-Group Busses (Mono or Stereo)

- Phase Inversion Control
- Digital Trim (-40dB to +40dB)
- Variable Delay (0ms to 682ms)
- DiGiTube*
- HPF/LPF (-24dB/Oct)
- 4 Band Parametric EQ / Dynamic EQ*
- DYN 1: Compressor, Multiband Compressor*
- DYN 2: Compressor with Side-Chain, Keyed Gate, Ducker
- EQ/Dyn Order Control
- 2 Insert Points per Channel
- Channel Mute
- Channel Direct Outputs

1 LR Master Buss

10 input x 8 output Full Processing Matrix

10 Control Groups (CGs)

2 Solo Busses (Stereo)

16 x 32-band GEQs

8 x Internal Stereo FX Processors

- Reverbs
- Delays
- Audio Enhancer
- Choruses
- Flanger
- Stereo Thicken

* Up to 21 DiGiTubes

* Up to 21 Dynamic EQs

* Up to 21 Multiband Compressors



A&E SPECIFICATION

The DiGiCo S31 shall have 31 faders split into 3 worksurface sections of 10 faders plus a master fader. Each worksurface section shall have up to 4 layers of banks of 10 channels. The bank and channel layout shall be fully customisable, including the assignment of the master fader. The console shall be capable of 48 flexi input channels (mono/stereo), 16 flexi Aux/Sub-group Busses (mono/stereo), a LR Master Buss, 10 VCA style or mute group style Control Group channels, 2 Solo Busses, and a 10 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 all be limited to 21 instances of each per session. All processing shall be internal and FPGA-based. An internal FX rack with 8 stereo slots shall allow users to pick from 23 different FX. An internal set of 16 32-band GEQs shall also be accessible.

3 x 10" multitouch screens shall be provided to show channel strips and the master controls. There shall also be a set of touch sensitive rotaries with integrated switches and HTL colour encoded rings below each screen and another set of master rotaries to control global parameters. The front panel shall also have a physical control to adjust the headphone level, as well as physical buttons to change the snapshot, toggle the spill set and show the overview screen. The front worksurface shall also have a USB 2.0 slot and a 1/4" headphone socket as well as a 3.5mm headphone socket.

The rear panel shall have 24 Mic/Line inputs, 12 line outputs, 1 AES/EBU input (2 channels) and 1 AES/EBU output (2 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). The other connectors on the rear of the console shall be 1 GPI, 1 GPO, Word clock in/out, a DVI port, 2 USB 2.0 slots, 2 ethernet ports and 2 DMI slots.

The dimensions of the S31 shall be: 1023 (w) x 586 (d) x 295 (h) mm

The weight of the S31 shall be: 25 kg

The DiGiCo S31 shall be supplied with a dust cover.

AUDIO SPECIFICATIONS

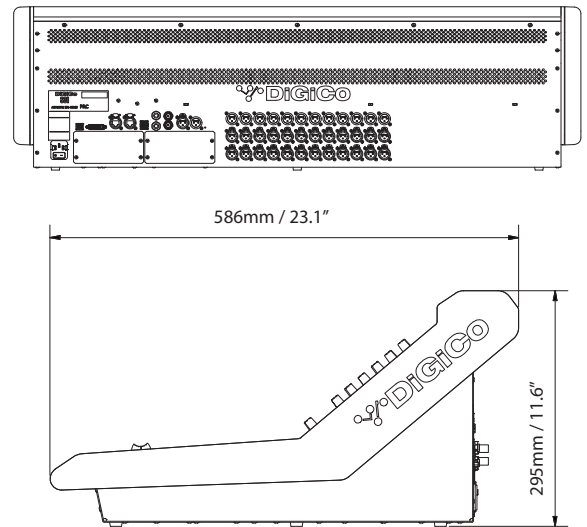
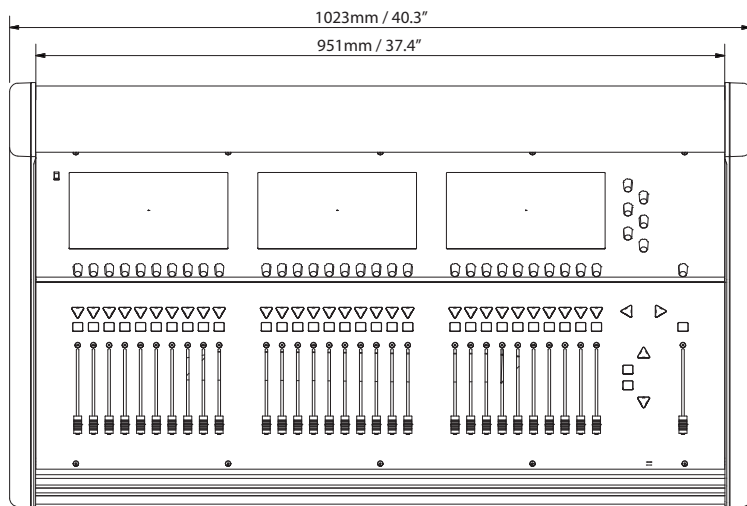
Sample Rate: 48kHz or 96kHz
Processing Delay: 2ms Typical @ 48K (60 Stereo Channels, Stage input Through L-R Buss to Stage Output) 1.1ms @ 96k
Internal Processing: Up to 40-bit, Floating Point
A>D & D>A: 24-bit Converter Bit Depth
Frequency Response: +/- 0.6dB (20Hz – 20kHz)
THD: <0.05% @ Unity Gain,; 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



PHYSICAL

Dimensions: 1023mm (w) x 586mm (d) x 295mm (h)

Weight: 25kg (78kg with optional flightcase)

Flightcase: 1107mm (w) x 467mm (d) x 871mm (h) (Optional)

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

Product Code: X-S31-WS

DiGiCo HQ

Unit 10 Silverglade Business Park Leatherhead Road, Chessington,
Surrey, KT9 2QL, United Kingdom
info@digiconsoles.com

©DiGiCo 2019. All brand and product names are copyright to their respective owners
E&OE

www.digico.biz

 **DiGiCo**
www.digico.biz



DATASHEET

D-Rack

Floor mounted DiGiCo I/O

OVERVIEW

The DiGiCo D-Rack is a 32 input, 8 output rack. It features an output expansion slot for increasing the output count to 16.

KEY FEATURES

32 Mic/Line Inputs at 48kHz or 28 Mic/Line inputs at 96kHz

8 Line Outputs

1 Output expansion card slot for adding 8 outputs

MADI RJ45 Connectivity

Optional Optics

7U Rack Mountable with supplied rackmount kit

Gain Tracking™

Optional Redundant PSUs

Can be used as a standalone rack



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

CONNECTIONS

- 32 x XLR Mic/Line Inputs
- 8 x XLR Line Outputs
- 1 x Output Expansion Slots
- 2 x Redundant PSUs (Optional)
- 1 x MADI RJ45 I/O
- 1 x MultiMode Optocore Interface (Optional)
- 1 x USB 2.0 Type B port

SIGNAL PROCESSING

- Gain Tracking™

OPTIONS

- Upgrade to Redundant PSUs
- Optocore Interface (HMA, OpticalCon or ST connectivity)
- Upgrade to SingleMode Optocore
- Compatible Cards: 8 ch Line Output / 8 ch AES Output / 16 ch Aviom
- Replace 8 Mic/Line inputs with 8 channels of AES inputs



A&E SPECIFICATION

The DiGiCo D-Rack shall have 32 inputs and 8 line outputs. There shall be an output expansion slots for adding 8 outputs to the rack. The available output cards shall be an 8 channel line output card, an 8 channel AES output card and a 16 channel Aviom card. If using the Aviom card, it shall also replace the standard 8 line outputs on the rack. The top panel shall have one RJ45 MADI I/O port. At 48kHz, this shall allow access to all inputs and outputs on the rack. At 96kHz, this shall allow access to the first 28 inputs and all outputs on the rack.

There shall also be a USB Type B port and a PSU. The USB port shall allow connection to a computer running DiGiCo Control software. The software shall allow control over Optocore ID and fibre speed, sample rate, input gains, pads and phantom power, and show firmware versions running on the rack.

The DiGiCo D-Rack shall be supplied with a set of rack mount brackets, making it a 7U rack mountable unit. It shall also be equipped with an isolating transformer to the RJ45 input.

There shall be an option to add a MultiMode Optocore interface to the rack. The Optocore connector type shall be chosen from HMA, OpticalCon on ST. There shall also be an option to upgrade the Optocore interface to SingleMode. There shall be an option to replace 8 of the Mic/Line inputs with 8 channels worth of AES inputs.

The dimensions of the D-Rack shall be: 412 (w) x 179 (d) x 310 (h) mm
The weight of the D-Rack shall be: 10kg

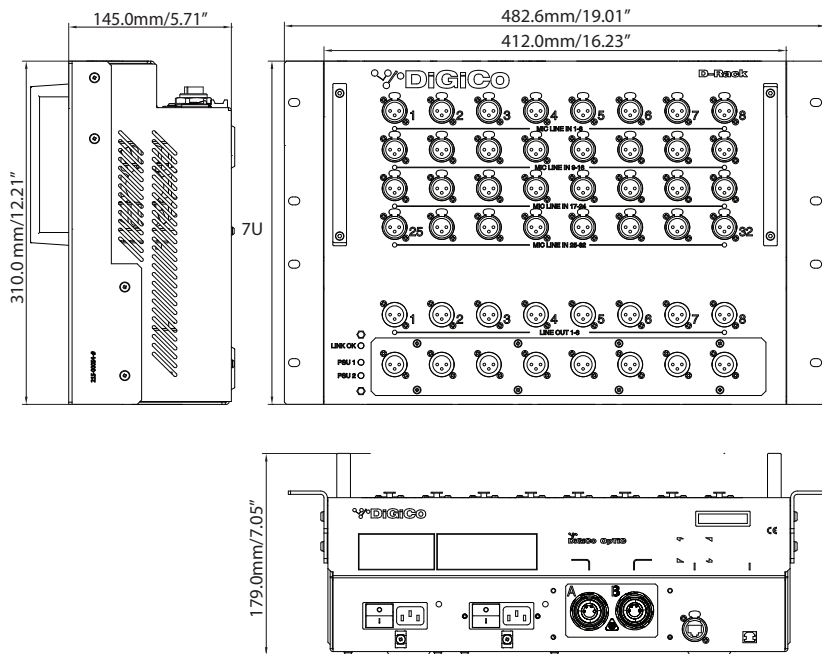
AUDIO SPECIFICATIONS

Sample Rate: 48kHz or 96kHz
Optocore Fibre Speed: 1G or 2G
Crosstalk (100 - 10kHz): >90dB
Analogue Input Frequency Response (10Hz - 20kHz): ± 1 dB
Analogue EIN (150 Ω): 127dB
Dynamic Range: 113dB
Input Impedance: 2500 Ω (2650 Ω with pad)
CMRR @ 1kHz (150 Ω Z_{in}): >71dB
Analogue Distortion @ 30dBFS Gain (100Hz - 10kHz): <0.01%
Phantom Power: 48.3V
Gain Range: -10dB to +60dB
System Delay: ≈ 2 ms @ 48kHz or ≈ 1.1 ms @ 96kHz
Maximum Input Level: +22dBu
Maximum Output Level: +22 dBu

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



PHYSICAL

Dimensions: 412mm (w) x 179mm (d) x 310mm (h)

Weight: 10kg

Power Requirements: 88-264VAC, 47-63Hz, 2.8A MAX

Redundancy: Internal PSUs x 2 (Optional)

Product Code: X-D-RACK-1 (Single PSU)

Product Code: X-D-RACK-2 (Dual PSU)

DiGiCo HQ

Unit 10 Silverglade Business Park Leatherhead Road, Chessington,
Surrey, KT9 2QL, United Kingdom
info@digiconsoles.com

©DiGiCo 2019. All brand and product names are copyright to their respective owners
E&OE

www.digico.biz

 **DiGiCo**
www.digico.biz

Datenblatt – DiGiCo DMI-MADI-C

(MADI over RJ45 Erweiterungskarte für DiGiCo Konsolen / Racks)

Produktbeschreibung

Die **DMI-MADI-C** ist eine Multichannel-Interface-Karte (DMI = DiGiCo Multichannel Interface), die es ermöglicht, Audio über RJ45-MADI (Cat-5/6 Leitung, proprietäres Protokoll) zwischen DiGiCo-Geräten oder DiGiCo-Racks zu übertragen. Mit dieser Karte steht ein bidirektionaler Kanal mit bis zu 64 Kanälen bei 48 kHz oder 96 kHz zur Verfügung. Sie ist ideal für Modularität und digitale Verkabelung zwischen Mixer und Audio-Rack über eine einzige Netzwerkleitung, allerdings **nicht Ethernet-kompatibel**. (digico.biz)

Hauptmerkmale

- Verbindung über **RJ45 (Cat-5/6, geschirmt)** (keine Standard-Netzwerk-Ethernetverbindung) (support.digico.biz)
 - **64 Kanäle Ein- / Ausgänge** bei 48 kHz oder 96 kHz (digico.biz)
 - Redundanz (Back-up) bei 48 kHz (zweiter Strom) (SHOWTECHNIX)
 - Interne Schalter zur Einstellung der Port-Mode: Console oder Rack (digico.biz)
 - Kompatibel mit DiGiCo-Konsolen und Racks wie S-Series, Quantum, SD12, Orange Box, 4REA4 (digico.biz)
 - Unterstützt sowohl 48 kHz als auch 96 kHz Betrieb (bei 96 kHz wird häufig beide Ports benötigt) (digico.biz)
 - Wird vor dem Einbau konfiguriert ("Port Mode") (digico.biz)
-

Technische Details

Merkmal	Spezifikation
Kanäle	64 I/O bei 48 kHz oder 96 kHz (digico.biz)
Anschluss	RJ45 (geschirmt, EtherCON kompatibel) (support.digico.biz)
Übertragungsprotokoll	DiGiCo-eigenes MADI over Cat5 (nicht Ethernet) (support.digico.biz)

Merkmal	Spezifikation
Redundanz (bei 48 kHz)	ja (zweiter Pfad) (SHOWTECHNIX)
interne Schalter	Mode-Auswahl (Console / Rack) pro Port (digico.biz)
Kompatible Geräte	S-Series, Quantum, SD12, Orange Box, 4REA4 (digico.biz)
Kabelanforderungen	Cat-5e oder Cat-6 STP mit geschirmten RJ45 / EtherCON & Ferrit-Suppressoren (support.digico.biz)
Max. Kabellänge	Bis zu 100 m (unter Beachtung der Signalbedingungen) (support.digico.biz)
Einschränkungen	Bei 96 kHz ist der B-Port erforderlich, nicht kompatibel mit normalem Ethernet (digico.biz)

Anwendung & Konfiguration

- Die DMI-MADI-C Karte wird typischerweise in DiGiCo-Konsolen oder in DMI-fähigen Audio-Racks installiert (z. B. Orange Box) ([digico.biz](#))
- Vor dem Einbau muss der Port-Modus (Console / Rack) über interne Schalter konfiguriert werden – beide Enden müssen entsprechend eingestellt sein, sonst funktioniert die Kommunikation nicht ([digico.biz](#))
- Es ist wichtig, hochwertige geschirmte Kabel zu verwenden und Erdungspotenzialdifferenzen zu vermeiden, da das Signal empfindlich auf Störungen reagiert ([support.digico.biz](#))
- Bei längeren Strecken über 100 m sind optische Konverter (z. B. Purple Box) erforderlich, da die Kupferverbindung Grenzen hat ([support.digico.biz](#))
- Die Karte ist kompatibel mit DiGiCo's DMI-Kompatibilitätsmatrix über verschiedene Konsolen und Racks hinweg ([digico.biz](#))