



## DATASHEET

# D2-Rack

A world of connectivity

## OVERVIEW

The DiGiCo D2-Rack is a 48 input, 16 output rack. It features two output expansion slots for expanding the output count to 32. It is available in two versions, either with 48 analogue inputs or 24 analogue inputs and 24 digital inputs.

## KEY FEATURES

48 Inputs (all mic in or 24 mic in and 24 AES)

16 Line Outputs

2 Output expansion card slots for adding up to 16 outputs

Supports either MADI BNC or MADI RJ45

9U Rack Mountable

Rack sharing or digital splits at 48kHz

Gain Tracking™

Redundant PSUs

Flashing screen to indicate system OK from a distance

Locked controls to prevent accidental setting changes

Internal Oscillator

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

- 48 x XLR Inputs configurable as:
  - 48 x Mic Inputs
  - 24 x Mic Inputs and 24 AES/EBU Inputs (from 12 XLR connections)
- 16 x XLR Outputs
- 2 x Output Expansion Slots
- 2 x Redundant PSUs
- 1 x LCD Menu Screen
- 4 x Menu Buttons
- 1 x MADI Main I/O (BNC or Cat5)
- 1 x MADI Aux I/O (BNC or Cat5)
- 1 x USB 2.0 Type B port

## SIGNAL PROCESSING

- Internal Oscillator
- Gain Tracking™

## OPTIONS

- BNC or Cat5 (RJ45) MADI
- 48 in and 16 out or 24in, 24 AES/EBU in and 16 out
- Compatible Cards: 8 ch Line Output / 8 ch AES Output / 16 ch Aviom





## A&E SPECIFICATION

The DiGiCo D2-Rack shall have 48 inputs and 16 line outputs. The 48 inputs shall be configurable as either 48 analogue mic inputs or 24 analogue mic inputs and 24 AES inputs (from 12 XLRs). There shall be two output expansion slots for adding up to 16 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. The front panel shall have 2 sets of MADI I/O ports, available as either BNC or Cat5 (RJ45). At 48kHz, this shall allow sharing of the rack between any two DiGiCo consoles or digital splits for recording. At 96kHz, this shall allow all inputs and outputs to be accessed by the console with the use of both MADI ports. There shall also be a USB Type B port for updating rack firmwares, and two redundant PSUs. The USB port shall also allow connection to a computer running DiGiCo Control software. The software shall allow control over the sample rate, input gains, pads and phantom power, and show firmware versions running on the rack. DiGiCo Control software shall make it possible to use the rack as a standalone device without a DiGiCo console.

The D2-Rack shall have an LCD menu screen on the front. The main screen shall display what input the rack is receiving from, what it is syncing to, the sample rate and the valid sync sources available. When the rack is receiving a valid sync source, the screen shall flash between white and green so that it can be seen from a distance that the rack is syncing correctly. The screen shall be locked until the left and right buttons are both pressed and held for 2 seconds. The up and down buttons shall allow the user to scroll through the different menu items. There shall be a set of menu items that display system information, showing the PSU info and card firmwares. There shall also be menu items to select the sync source and if the sync source is set to internal, the internal sample rate of the rack. There shall also be a menu option that allows an oscillator signal to be sent to all rack outputs. The signal level shall be chosen between -96dB and 0dB and the signal frequency shall be chosen between 20Hz and 22kHz.

The dimensions of the D2-Rack shall be: 482.6 (w) x 248 (d) x 399.2 (h) mm  
The weight of the D2-Rack shall be: 13kg

### AUDIO SPECIFICATIONS

Sample Rate: 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176kHz or 192kHz

Crosstalk (100 - 10kHz): >90dB

AES Input Frequency Response (10Hz - 20kHz):  $\pm 0.1$ dB

Analogue Input Frequency Response (10Hz - 20kHz):  $\pm 1$ dB

AES Noise: <-140dB

Analogue EIN (150 $\Omega$ ): 127dB

Dynamic Range: 113dB

Input Impedance: 2500 $\Omega$  (2650 $\Omega$  with pad)

CMRR @ 1kHz (150 $\Omega$   $Z_{in}$ ): >71dB

AES Distortion @ -1dBFS Gain (100Hz - 10kHz): <0.00015%

Analogue Distortion @ 30dBFS Gain (100Hz - 10kHz): <0.01%

AES Cable Length: OK over 100m

Phantom Power: 48.3V

Oscillator Level: -96dB to 0dB

Oscillator Frequency: 20Hz to 22kHz

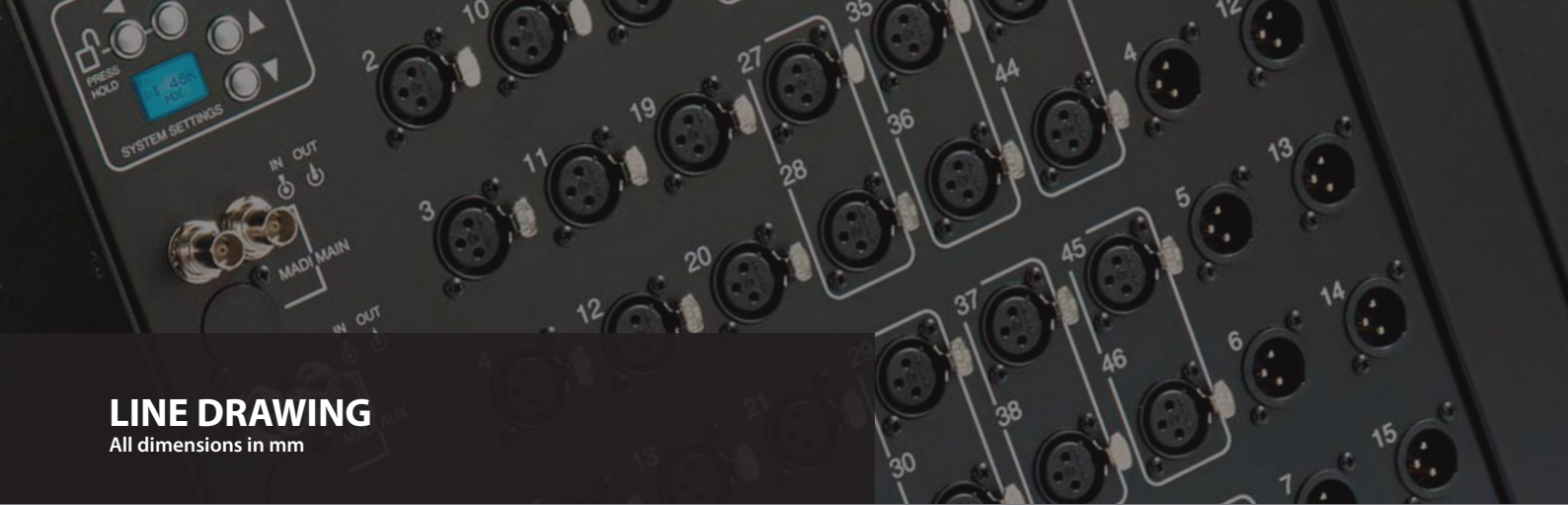
Gain Range: -10dB to +60dB

System Delay:  $\approx 2$ ms @ 48kHz or  $\approx 1.1$ ms @ 96kHz

Maximum Input Level: +22dBu

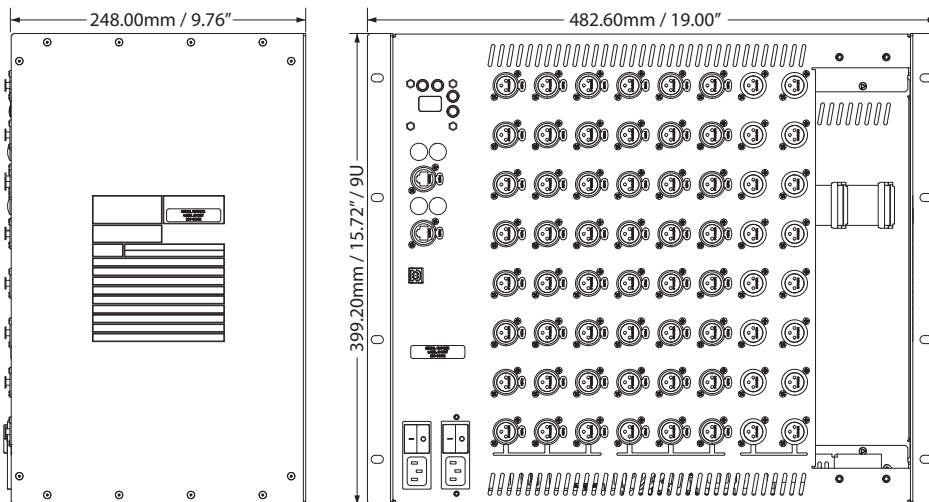
Maximum Output Level: +22 dBu

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: 482.6mm (w) x 248mm (d) x 399.2mm (h)

Weight: 13kg

Power Requirements: 100-240 VAC, 47-440Hz, 200VA MAX

Redundancy: Internal PSUs x 2

Product Code: X-D2-AN-M (All analogue inputs with BNC MADI)

Product Code: X-D2-DI-M (Analogue and digital inputs with BNC MADI)

Product Code: X-D2-AN-C (All analogue inputs with MADI RJ45)

Product Code: X-D2-DI-C (Analogue and digital inputs with MADI RJ45)

#### DiGiCo HQ

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

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## 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

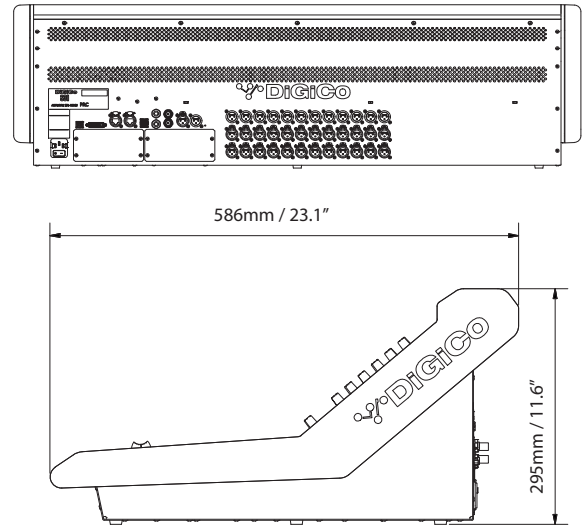
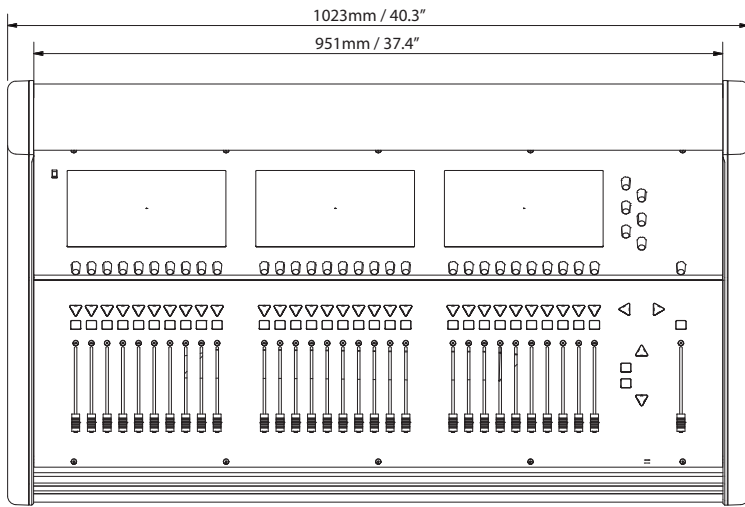
Sample Rate: 48kHz or 96kHz
Processing Delay: 2ms Typical @ 48K (60 Stereo Channels, Stage input Through L-R Buss to Stage Output) 1.1ms @ 96k
Internal Processing: Up to 40-bit, Floating Point
A>D & D>A: 24-bit Converter Bit Depth
Frequency Response: +/- 0.6dB (20Hz – 20kHz)
THD: <0.05% @ Unity Gain,;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

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## Datenblatt – DiGiCo DMI-MADI-B

(MADI über BNC, Erweiterungskarte für DiGiCo-Konsolen / Racks)

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### Produktbeschreibung

Die **DMI-MADI-B** ist eine Multichannel-Interface-Karte von DiGiCo, die Audio-Daten über klassische MADI-Verkabelung (BNC / 75 Ω Koaxial) überträgt. Mit dieser Karte lassen sich bis zu **64 Kanäle Ein- und Ausgang** bei 48 kHz oder 96 kHz realisieren. Bei Betrieb mit 96 kHz ist die B-Verbindung erforderlich, um die volle Kanalanzahl zu nutzen. ([digico.biz](http://digico.biz))

Sie ist kompatibel mit DiGiCo-Konsolen und Audio-Racks wie S-Series, Quantum, SD12, Orange Box oder 4REA4 und unterstützt bei SD/4REA4-Integration die Steuerung der I/O über das Konsolensystem. ([digico.biz](http://digico.biz))

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### Hauptmerkmale

- 75 Ω Koaxial-Verbindungsstandard über **BNC** (keine RJ45) ([digico.biz](http://digico.biz))
  - Bis **64 Kanäle** Ein-/Ausgabe bei 48 kHz oder 96 kHz ([digico.biz](http://digico.biz))
  - Bei 96 kHz ist die B-Verbindung erforderlich, um alle Kanäle zu übertragen ([digico.biz](http://digico.biz))
  - Redundanzfunktion bei 48 kHz möglich (Dual-BNC-Verbindung als Backup) ([SHOWTECHNIX](http://SHOWTECHNIX))
  - Kompatibel mit Geräten von DiGiCo (S-Series, Quantum, SD12, Orange Box, 4REA4) ([digico.biz](http://digico.biz))
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### Technische Daten

Merkmal	Spezifikation
Kanäle	64 I/O bei 48 kHz oder 96 kHz ( <a href="http://digico.biz">digico.biz</a> )
Anschlüsse	Duale BNC (75 Ω Koaxial) ( <a href="http://digico.biz">digico.biz</a> )
Protokoll	Standard MADI über Koaxialverbindung ( <a href="http://digico.biz">digico.biz</a> )
Redundanz	Ja, bei 48 kHz (Backup-Pfad) ( <a href="http://SHOWTECHNIX">SHOWTECHNIX</a> )
Kompatible Geräte	S-Series, Quantum, SD12, Orange Box, 4REA4 ( <a href="http://digico.biz">digico.biz</a> )

**Merkmal****Spezifikation**

Besonderheit bei  
96 kHz

Die B-Verbindung muss aktiv sein für volles Kanal-Set  
([digico.biz](http://digico.biz))

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**Anwendung & Hinweise**

- Die Karte wird in DMI-kompatible Slots von DiGiCo-Konsolen oder Racks eingesetzt (z. B. S-Serien, SD-Range, Orange Box)
- Bei 96 kHz-Betrieb ist zwingend die BNC-Verbindung erforderlich, damit alle 64 Kanäle zur Verfügung stehen
- Bei 48 kHz kann eine doppelte BNC-Verbindung als redundanter Pfad eingerichtet werden
- Zur Integration in SD/4REA4-Systeme ermöglicht die Karte, dass Konsolen die peripheren I/O module steuern können
- Empfehlung: hochwertige 75  $\Omega$  Koaxialkabel mit guter Abschirmung und korrektem Erdungspotenzial