



DATASHEET

SD-Rack

The I/O rack that has it all

OVERVIEW

The DiGiCo SD-Rack is a 14 slot input and output rack, allowing up to 56 inputs and 56 outputs. The SD-Rack is compatible with a large selection of analogue and digital modules including DiGiCo's 32-bit DACs, Dante, AES/EBU and Aviom. Based on the same Stealth FPGA technology as the world-renowned SD-Range of consoles, the result is industry-leading A/D conversion complete with DiGiCo's famous Gain Tracking™.

KEY FEATURES

14 card module slots (up to 56 inputs and 56 outputs)

10U Rack Mountable

Gain Tracking™

Proven touring ready rugged design

Easily accessible, hot-swappable, redundant PSUs

Removable PSUs and MADI Pod for cleaning and repair

MADI Split outputs

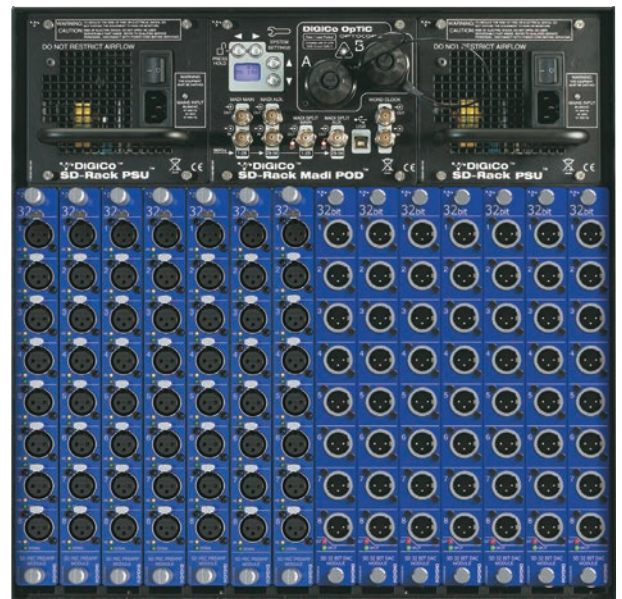
Inbuilt SRC for MADI Split outputs

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

WORKSURFACE

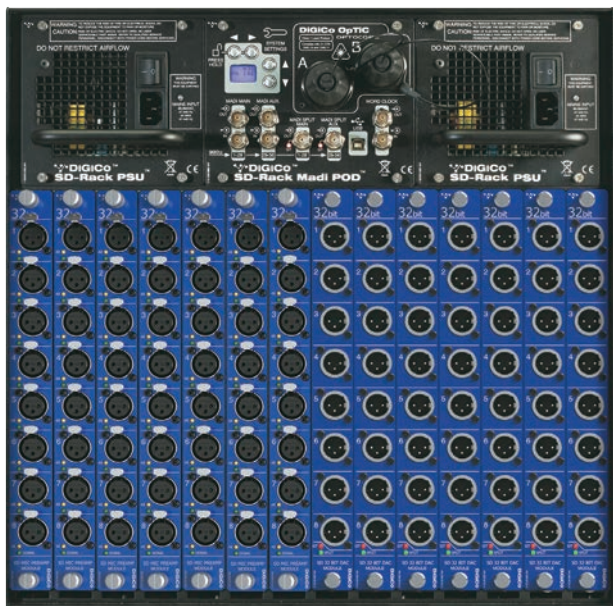
- 14 card module slots (7 input and 7 output)
- 2 x Redundant, hot-swappable PSUs
- 1 x Optocore Interface (Optional)
- 1 x LCD Menu Screen
- 4 x Menu Buttons
- 1 x MADI Main I/O BNC
- 1 x MADI Aux I/O BNC
- 1 x MADI Split Main Output BNC
- 1 x MADI Split Aux Output BNC
- Word Clock I/O BNC
- 1 x USB 2.0 Type B port

SIGNAL PROCESSING

- Internal Oscillator
- Inbuilt Sample Rate Conversion for split outputs
- Gain Tracking™

OPTIONS

- Optocore Interface (HMA, OpticalCon or ST connectivity)
- Upgrade to SingleMode Optocore
- Compatible Cards: 32-Bit Mic Pre / 32-Bit DAC / ADC / DAC / AES I/O XLR / AES I/O BNC / AES Input / AES Output / AES42 / Dante / ADAT / SDI I/O / Aviom
- Blanking Plate





A&E SPECIFICATION

The DiGiCo SD-Rack shall have 14 card module slots. The first 7 slots shall be for input cards and the last 7 shall be for output cards. A full rack shall allow a maximum of 56 inputs and 56 outputs. The front panel shall have 1 set of redundant MADI BNC ports. At 48kHz, this shall allow redundant cabling between the rack and the console. At 96kHz, this shall allow all 56 inputs and outputs to be accessed with the use of both MADI ports. The front panel shall also have two MADI Split output ports. At 48kHz, this shall allow two full output streams to go to devices with MADI BNC input connections. At 96kHz, this shall allow one full stream to go to a MADI BNC device. There shall be an option to add a MultiMode Optocore interface to the SD-Rack. The Optocore connection type shall be chosen from HMA, OpticalCon or ST. There shall also be an option to upgrade the Optocore interface to SingleMode. Other connections on the rack shall be a USB Type B port for updating the rack firmwares, external Wordclock I/O and two redundant, hot-swappable PSUs. 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 SD-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 Optocore ID, 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, card firmwares and rack firmwares. The user shall also be able to set the Optocore ID of the rack and the Optocore fibre speed. There shall be menu items to select the sync source, sync order and if the sync source is set to internal, the internal sample rate of the rack.

For the two split outputs, there shall be controls for each to turn on outputs, turn on Gain Tracking™ and select the type of MADI being sent. When working at a sample rate greater than or equal to 88.2kHz, there shall be an option in the menu to sample rate convert each split output to half of the sample rate. There shall also be menu options to send the inputs from each card directly to their respective output card. Gain tracking can be turned on for these outputs. 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.

Both PSUs and the MADI POD (central section with all MADI/Optocore connections) shall be removable to allow for cleaning and repair. Card modules shall be hot-swappable within the rack, which shall automatically identify and configure cards. The SD-Rack shall be compatible with all SD-I/O modules. Blanking plates shall be available for empty card slots.

The dimensions of the SD-Rack shall be: 482.7 (w) x 371 (d) x 443.7 (h) mm
The weight of the SD-Rack shall be: 26kg

AUDIO SPECIFICATIONS

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

Optocore Fibre Speed: 1G or 2G

Split Output MADI Type: 56 Ch, SD Rack or 64 Ch

Oscillator Level: -96dB to 0dB

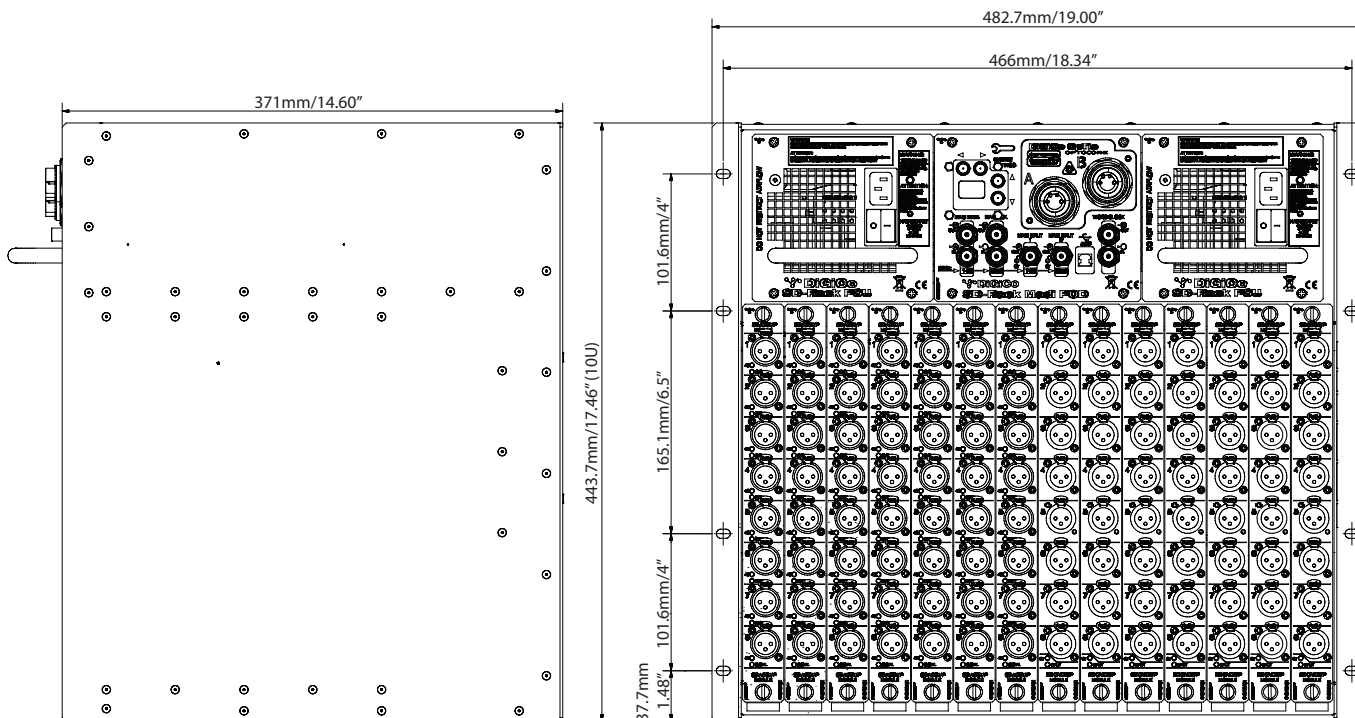
Oscillator Frequency: 20Hz to 22kHz

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: 482.7mm (w) x 371mm (d) x 443.7mm (h)

Weight: 26kg (Unloaded)

Power Requirements: 85-264 VAC, 47-440Hz, 4A MAX

Redundancy: Internal hot-swappable PSUs x 2

Product Code: X-SD-RACK (Unloaded MADI only)

Product Code: X-SD-RACK-O (Unloaded HMA optics)

DiGiCo HQ

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

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www.digico.biz

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