



DATASHEET

S31 / S31+

Mixing without limits

OVERVIEW

The DiGiCo S31 is a 48/60 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

- 48/60 Flexi Input Channels (mono/stereo)
- 16/24 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 and channel parameters



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
- S31+ software channel upgrade
- 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

48/60 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

16/24 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 mono, stereo, LCR or LR M 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 48/60 flexi input channels (mono/stereo), 16/24 flexi Aux/Sub-group Busses (mono/stereo), a Master Buss that can be configurable as mono, stereo, LCR or LR M, 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

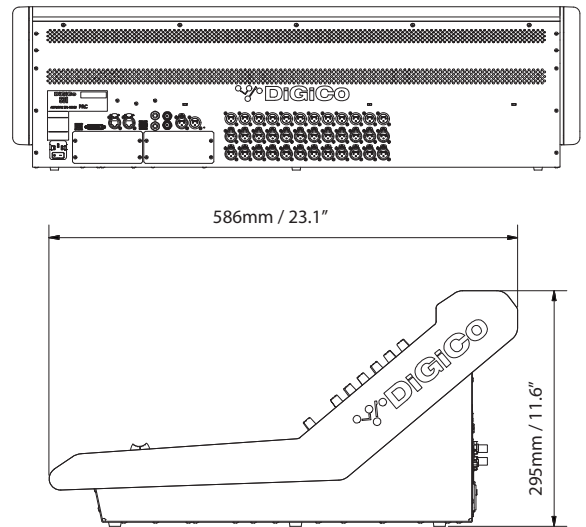
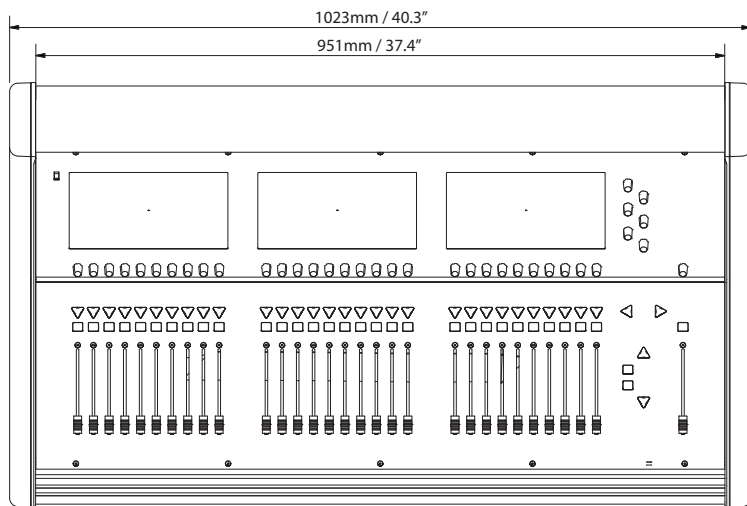
Maximum Input Level: +22dBu

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

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