# )iGiCo

A new world of performance and versatility in a choice of frame sizes to suit your application





### SD8

A new world of performance and versatility in a choice of frame sizes to suit your application.

The SD8 and the SD8-24. The power, finesse and clarity of DiGiCo digital mixing with Stealth Digital Processing™, and a choice of standard or ultra compact frame sizes.

The DiGiCo SD8 Series brings you the complete DiGiCo digital mixing experience, from the ultimate in intuitive user interfaces to the power and purity of Stealth Digital Processing™, at a price point more commonly associated with midrange mixing consoles.

Choose either the 'standard' SD8, with triple fader banks and a laptop rest, or the SD8-24, a diminutive powerhouse which packs all of the SD8's features into a space saving frame with dual fader banks less than a metre wide. It's perfect for any application where space is at a premium – from corporate events to

the West End and Broadway; from smaller theatres and colleges to houses of worship and tours.

Either way, whether you're upgrading from an analogue desk or adding more flexibility to an existing system, the SD8 Series offers DiGiCo's accurate and sonically pristine Stealth Digital Processing™.

It's also the world's first 'affordable' console series to provide the smoothness, accuracy and dynamic range of the latest generation Super FPGA technology with floating point processing, the heart of the groundbreaking DiGiCo SD7.

Both versions house an enhanced feature set that provides a powerful array of live sound

engineering tools, made yet more powerful with the Overdrive II package, extended Matrix and Graphic EQ facilities, and a powerful new multi-level Security system that allows you to 'lock out' anything from a single fader to everything but a single fader, be it a pastor's mic or a VT feed.

The SD8 Series offers an extensive specification in a complete digital package. It has a stage MaDiRack with 48 microphone inputs as standard, 8 analogue outputs and dual MADI connections – making rehearsal and live show recording a breeze – a digital MADI multicore, a full worksurface with integral I/O consisting of 8 Mic/line inputs, 8 line outputs and 8 AES/EBU (mono).

The essentials of the channel and master





facilities are exactly as you'd find on any DiGiCo console and employ identical signal paths for exemplary sonic quality.

Defying the limits of conventional consoles, the SD8 series can potentially handle a staggering 120 inputs simultaneously, thanks to our Flexi Channel feature. With Flexi Channel, each of the 60 input channels can be selected to be either mono or stereo, ideal nowadays where so many sources are stereo (eg keyboards / hard disc playback / intro music / FX returns). In addition, each mono Flexi Channel has a Main and Alternate input... the days of sacrificing a channel for use as a 'spare' are long gone.

Moreover, the ability to assign and unassign any Flexi Channel or buss to any fader

allows you to easily build custom fader banks - making the entire work surface fully customisable. For example, you can set up the desk so that no matter what fader bank you're working with, the lead vocalist can always be on the same fader.

Despite the console's compact footprint, this design replaces a rack full of outboard equipment, and places the key tools where you need them, in the channel itself and – at a press of one button - on the touch screen.

The screen is the same 15"TFT LCD specially developed for the SD7 and is matched with motorised faders arranged in blocks of 12 for logical operation.

You'll also appreciate DiGiCo's snapshot

automation, making scene store and recall a simple task, with advanced functions such as channel-specific snapshot control of channel parameters and crossfades.

The master section incorporates 24 graphic equalisers with centre-detent faders for fast system set-up. Stereo or LCR master buss, 24 mono or stereo busses and a powerful 16 x 12 matrix complete the channel and bussing structure. But that's not all, since the SD8 Series also provides dual solo busses for greatly increased flexibility as a monitor console.

The DiGiCo SD8 and SD8-24. A new world of performance and versatility in a choice of frame sizes to suit your application.

# Stealth Digital Processing<sup>™</sup> Engine

The latest generation of advanced digital signal processing and audio quality.



Stealth Digital Processing™, Super FPGA combined with Tiger SHARCS®.



 MADI-Rack connectivity with main and AUX for rack sharing, recording or redundancy. The SD8 Series incorporates the highly innovative Stealth Digital Processing™, initially designed for the pioneering SD7. Based on a single Super FPGA combined with Analogue Devices Tiger SHARCS® for an array of effects processing, it provides unrivalled audio quality, precision and processing power.

The future is Super FPGA (Field Programmable Gate Array) technology with floating-point processing.

Allied to the already powerful SHARC® processor, in use at the heart of every DiGiCo console, is the very latest Tiger SHARC® FX engine, all underpinned by DiGiCo's Stealth Digital Processing™.

Super FPGA technology is literally two generations beyond the world of DSP and is a core component of DiGiCo's advances in console design.

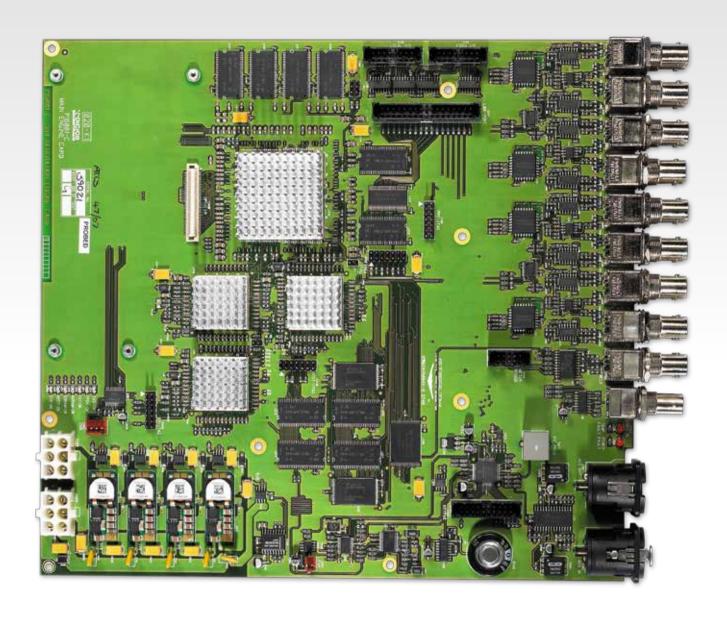
This potent combination provides a stunning level of instant controllability over multiple functions. It supports a comprehensive control surface with 37 motorised faders, dedicated and multifunction control knobs and electronic labeling.

It also provides an extensive range of builtin, world-class effects, reverbs, dynamics, output matrix and more. Plus a huge, high resolution interactive touch screen that makes the SD8 Series a pleasure to mix on and, of course, the smoothest, cleanest and warmest digital console sound yet devised - at any price!

These facilities are constantly available across every one of the SD8 Series' 60 Flexi Channels – the equivalent of 120 channels of full DSP processing. Thanks to the combined power of the SD8 Series technologies, the number and quality of effects, dynamics or other functions available to all channels simultaneously is never compromised or reduced, no matter how you have the console set up.

Recognising the ever growing need for many outputs to drive multiple loudspeaker arrays, monitors and more, the SD8 Series provides as standard a 16 x 12 output matrix – its 12 busses being additional to the console's 24 mono or stereo, solo and master/LCR busses.





### **Feature Packed**

The latest generation of advanced digital signal processing and audio quality.



> 37 motorised touch sensitive faders

All the essentials you'd expect in a DiGiCo console are here, even if many come as a revelation at this price point.

The most striking single feature is the large (15"), super high resolution, touch sensitive TFT LCD backlit display. This rich mine of real-time information is the SD8 Series' primary command centre and works completely intuitively with every other control of the console, automatically displaying functions that are exactly relevant to what you're doing right now.

Because speed of operation is high up the SD8 Series' design priority list, this approach continues throughout the worksurface. Look for menus and submenus and you'll look in vain, as far as all major operations are concerned. A physical fader, knob or backlit electronically labelled button is either provided as standard for every major mix function, or can be programmed onto one of the user macro buttons.

The 37 main channel faders (25 on the SD8-24) and the central master fader are smooth, top quality, 100mm long throw motorised types: accurate, durable and long proven. Touch sensitive fader caps put even more intuitive controllability right where you need it. Each bank of 12 faders can be instantly assigned as channels or masters, allowing all the main faders to

control inputs or AUX sends if desired, while any bank of 12 can be assigned to the touch screen for fine tuning.

Also familiar to D Series users is the SD8 Series' snapshot flexibility – a feature as vital today for smaller theatre and touring acts as it is for the largest productions. It provides such features as global scope, snapshot specific recall, scope and crossfade, plus the ability to take the console offline enabling snapshot editing without affecting audio. There are also eight, user defined Macros for fast access to key parameters. For users upgrading from analogue or a budget digital desk, the snapshot and Macro facilities will open an exciting new realm of possibilities.





### A Clearer Picture



 Touch sensitive motorised faders with high resolution, 20-LED bargraph meters With the SD8 Series there's no need to search for information – you always have a clear picture of every part of the signal path.

As well as the built-in touch screen, an XGA output allows you to run an external overview screen, while each physical fader is accompanied by a meter integrated into the worksurface with a polycarbonate overlay, eliminating the need for a bulky meter bridge.

Alongside each motorised fader is another important touch of clarity. On the one hand, DiGiCo's designers wanted to place as much information as possible right where your hands normally are – at the faders. On the other, they also wanted to keep the console frame as low-profile as possible, so that when you're mixing from a position of restricted visibility, you don't have to peer over a tall meter bridge. The answer:- high resolution, 20-LED bargraph meters, right beside each channel fader.

### **Effects**

A wealth of onboard effects, EQ and dynamics processing greatly reduces the need for external processing. 12 stereo floating point effects – including ultra smooth Stealth Reverbs – are available at all times with a choice of reverbs, delays and more.

The power of Stealth Digital Processing™ delivers 24x32 graphic equalisers, assignable across any of the busses or channels, along with 10 channels of mono or stereo 4-band dynamic EQ and 10 channels of multiband mono or stereo compression, plus gate, ducker, de-esser and a delay offering up to 1.3 seconds per channel.

### **Dual solo busses**

For the first time in a mid-price console, the SD8 Series offers not one but two solo busses – excellent for monitor mixing, allowing separate soloing facilities for wedges and in-ear monitors.

Each solo buss can be selected as mono, stereo, PFL, AFL or solo in place – versatility that's unique to the SD8 in its price range.







Overview Screen



16 x 12 Matrix



> 24 Graphic Equalisers

or second Stage Rack



100mm Touch Sensitive Faders 20 Segment Meter Strips 3 Line Multi Function LCD Displays





Touch Turn Encoder and Button

Fader Bank Assign

Master Fader

Previous and Next Screen and Fader Assign



StageRack

Overview Screen

Connection

# The complete digital system

From stage to FOH



MADI Rack output card options



Optional MiNiRack



Optional DiGiRack

The SD8 is much more than just a powerful worksurface. It provides you with a complete digital package from stage to your mix position.

Included with it is a dedicated SD8 stage MaDiRack, which serves as system input, digital/analogue signal splitter and MADI digital output, along with 100 metres of touring quality MADI digital cable. So it's goodbye to the heavyweight analogue multicore and hello to 100% noise free, pure digital signal from stage to console – a significant cost saving too, especially for installed systems.

As a further touch, the worksurface boasts full Gain Tracking<sup>™</sup>, an advanced feature of all DiGiCo consoles. This allows FOH and monitor consoles to share inputs, yet have independent gain structures. The MaDiRack has 48 microphone inputs which are complemented by 8 analogue outputs as standard. A further 16 analogue, AES/EBU or Aviom outputs can be fitted to allow for any connection requirements, whether feeding a crossover digitally or for IEM.

The SD8's dual BNC MADI connections are the key to another remarkable aspect of the package – the ability to make live multitrack recordings of rehearsals and shows straightforward and inexpensive.

While one MADI is used for the stage rack, the other is ready for use for live recording of all 48 inputs to any MADI compatible recording system. You'll notice the SD8's worksurface incorporates a convenient flat area at top left to hold a laptop – with sturdy steel locating pegs to keep your PC or Mac in place when the joint is jumping.

Hook up a laptop running Logic, Cubase, Nuendo, Samplitude, Reaper, Pro Tools or any other leading multitrack recording software to the dedicated MADI port on the console's left side and you're in business with an instant, low cost, studio quality 48 track recording and playback set-up.

Perfect, too, for fine-tuning scenes and settings at your leisure.

The worksurface itself provides more I/O - 8 mic/ line inputs, 8 line outputs and 8 AES inputs and outputs (mono).

Finally, DiGiCo will offer an Optocore interface option as a special order item, giving the ability to connect to the new SD Racks.

### **Built for the road**

Every inch an engineer's console, the SD8 Series is designed for the rough and tumble of the road, the pressure of corporate events and festivals, the rehearsals and nightly changes of operator in the theatre world as well as the unique challenges of providing excellent, repeatable audio for houses of worship.

Powerful as it is on the inside, the SD8
Series is ready for everything the road
can throw at it too. A sturdy steel chassis
provides excellent rigidity, while the
worksurface is highly resistant to wear and
tear. Every aspect of the worksurface and
the MaDiRack exudes DiGiCo quality, from
the perfectly weighted encoder wheels and
faders to the durable silk screening and
solid construction.

In the worksurface a dual, hot-swappable, integrated switch-mode power supply provides peace of mind and is designed for world-wide use.





The UB MADI interface is so small and

light you can slip it inside your pocket. No bulky power supply required —just a USB 2.0 cable to connect to your computer, two MADI cables to the desk

and hit record.



The UB MADI works with a PC or a Mac so you won't be limited by your choice of operating system. In addition the UB MADI will work with virtually any digital audio workstation software. \*\*

\*\* For more information on compatible DAW software and minimum recommended computer hardware specification please contact your DiGiCo dealer or DiGiCo technical support.

# Recording and UB MADI

Simple 48 track recording and playback to USB

With the DiGiCo UB MADI USB 2.0 interface it is now even easier to get up to 48 channels of full duplex audio into and out of your PC or Mac. Simply connect the UB MADI to your computer via a USB cable and a MADI stream from the SD8 and you're away. Low latency recording and playback is there for you to complete your virtual sound-check or performance multi-track.

The UB MADI is small and robust and as it is not reliant on the USB's data clock for sync, jitter is not a problem. The device will take the first 48 channels of any 48k AES-10 compliant connected MADI stream or coaxial AES3 (AES/EBU) stereo audio and clock directly to it. With no input connected the UB MADI will switch to its own, highly stable, internal clock.

UB MADI - It doesn't get much simpler than



JD and D nack

Expand your SD8 possibilities

The SD-Rack offers high resolution analogue to digital convertors, incredible flexibility and superior sound quality to complement the power of your SD8 console. Running sample rates up to 96kHz, the SD-Rack can run multiple digital formats simultaneously including AES/EBU, Dante, AES-42, MADI, ADAT and Aviom.

Based around the same Stealth FPGA technology as the Digital Engines in the SD range itself, the SD-Rack can run the optical loop at 96KHz while providing a downsampled 48KHz feed to the broadcast truck from one of the MADI output streams even with  $Gain Tracking^{TM}$ .

Of course, it all starts with the mic preamplifier and here is the beginning of a high quality, sophisticated and sonically superior signal path. With the same FPGA technology onboard as the console itself the SD range of racks provide industry leading A/D conversion and DiGiCo's famous Gain Tracking™.

Gain Tracking™ gives all consoles +/-40dB of digital gain which can be set independently on a channel-by-channel basis, ensuring that once the analogue gain is set each of the maximum of five consoles on the loop can Gain Track their own mixes. Should there be a need to adjust an analogue gain each Gain Tracked channel will automatically compensate – ensuring your mix stays the same. Not only that but any of the five consoles on the loop can take control of an analogue gain should clipping occur, safe in the knowledge that everyone else's mix will be unaffected. The SD-Rack features 14 slots providing up to 56 ins and outs and comes with





- '48V present' LEDs confirm 48V is present per XLR. A further LED indicates signal present and clip at each analogue input, giving you a complete picture of activity on the SD-Rack itself.
- Dual hot swappable power supply units are located at the top of the rack for fast access, so that your connector looms can remain in place near floor level while the more frequently accessed components are right on top.
- The 56 input / 56 output arrangement, in blocks of eight, allows you to populate the SD-Rack with the I/O cards to suit your application. And the cards themselves are hot-swappable, with the SD-Rack automatically detecting the card that has been plugged in.
- Up to 14 rack IDs can be connected on a single optical loop.

or without optics. Running at 48kHz the two MADI ins and outs provide 56 fully redundant input and output channels via a duplicate MADI aux. If you need to run at 96kHz you can get a full complement of 56 channels of MADI in and out.

Each interface card is hot swappable and the rack will automatically identify the type of card and configure it. The dual power supplies are also hot swappable and easily accessible at the top of the rack ensuring you won't have to fight a mass of cables to get them out.

The next rack in the DiGiCo series of high sample rate interfaces is the D-Rack. It comes complete with CAT5 audio as standard or with optional optical connection and can run sample rates up to 96kHz. Additionally, the D-Rack will now also support the new Aviom interface and provides 32 inputs and 8 outputs as standard, with the option of eight modular outputs that can either run AES or analogue. This small, flexible rack is designed to sit on the floor, but can just as easily be rack mounted using the optional ears.

SD and D-Rack: It's all about connections.



D-Rack (with optics)

32 Mic in 8 Analogue out (as standard) showing optional 8 AES Mono Stream outputs, 8 Analogue outputs, Aviom Module and 19" Rack Ears





# SD-MINI Rack and SD-NANO Rack

Size is not important - it's what it can do

The SD-MINI and SD-NANO Racks are the latest additions to the DiGiCo range of high sample rate racks, complementing the SD and D racks to make a completely flexible remote rack solution for any situation.

The SD-MINI is a 4U rack and can accept SD input and output cards be they analogue or digital including AES/EBU, Dante, AES-42, ADAT, HD-SDI and Aviom. Running purely digital the MINI can run up to 32 ins and outs or if it's all analogue you need then a maximum of 32 ins or outs is possible or any combination in banks of eight (8 in and 24 out for example). The MINI has MADI connectivity as standard with optical as an

option . With the ability to multi sample rate to convert external devices via MADI and also the ability for Gain Tracking $^{\text{TM}}$ .

At the smallest end of the spectrum is the SD-NANO Rack. This 2U stage box works almost exactly the same way as the MINI except it is half the size and therefore can only handle half the amount of inputs and outputs. The NANO is only available with optical connectivity.

So, when you need smaller racks distributed around a stage or building, the MINI and the NANO are there to provide you with flexible, affordable digital I/O totally compatible and controllable with the full

range of DiGiCo consoles and the larger SD and D racks.

With up to a total of 14 racks on one optical loop, or 28 on a dual loop system, it is easy to see the potential for large corporate events, installations or just expansive stages. This, coupled with the ability for any of the five consoles that can sit on one optical loop being able to address all inputs and individually address output slots on any rack, giving any engineer, or system designer the flexibility and power they need to make any complex situation easy and intuitive.

SD-MINI and SD-NANO racks - When size isn't everything.





NANO Rack showing 8 Mic in and 8 Line out



NANO Rack showing 16 AES streams in and out



NANO Rack rear showing dual power supplies



MINI Rack rear showing dual power supplies

## Waves SoundGrid®

Access the plugins you love















- The SD8 already comes with its powerful Stealth Digital Processing™ powered suite of audio processing but sometimes you want to access the plugins you know and love from the studio. Now it is so simple thanks to DiGiCo and Waves SoundGrid® giving you access to a wide range of Waves plugins in special bundles.
- The choice doesn't only extend to the range of Waves effects - DiGiCo takes the concept of Waves integration even further than the norm. Unlike all other SoundGrid platforms, DiGiCo provides complete control of plug-in parameters, as well as recall of snapshots, simple loading and saving directly from the consoles' surface.
- Console-based MultiRack software allows you to set up, control, recall, snapshot and save Waves plugin configurations as an integral part of your overall mix setup, while the processing power of the dedicated SoundGrid module allows the SD8's own processing power to remain dedicated to the task of driving the console and its work surface.
- The DiGiCo Waves setup gives you instant access to up to 16 fully integrated, low latency Waves stereo processor racks, with up to eight plugins in each rack. Waves TDM plugins collections can be used too.

**Plugin Bundles** 

Bundles and existing Waves plugins available online at www.waveslive.com or from Waves dealer/distributor



SSL-G Channel



Vocal Rider



Waves MultiRack



C4 Multiband Compressor



CLA-2A



Renaissance Equalizer



# SD8 Quick Reference

Quick Reference		
Maximum Number of Input Processing Channels	60 Flexi*	
Maximum Buss Count	67***	
Max Aux / Sub-Group Busses	24 Flexi* (Full Processing**)	
Matrix (In Addition to Aux/Sub - Group)	16 x 12 (Full Processing**)	
Solo Busses	2	
Max Number of Inputs - Non Optic Consoles	N/A	
Max Number of Inputs - 1 Console on Optic Loop	576	
Max Number of Inputs - 2 Consoles on Optic Loop	632	
Local I/O Spec	8x Mic/Line, 8x Line Outputs, 8x AES/EBU I/O (Mono Streams)	
Max Number of Outputs	576	
Max Number of Faders	37 (SD8) 25 (SD8-24)	
Screen	1 x 15" Touch	
External Overview Screen	Yes	
I/O Expandability	Yes	
Insert Points / Channel	2	
On Board FX	12	
Graphic EQs (32-Band)	24	
Dynamic EQ	10	
Buss Parametric EQ	4 Band	
Multiband Compression	10	
DiGiTuBes	10	
Multi-Channels	Yes	
VCA - Style Control Groups	12	
Set Spill	Yes	
Mute Groups (Part of Control Groups)	12	
Reorder Busses	Yes	
Multi-Operator	By Remote Only	
Surround	No	
MADI Connectivity	2x Redundant Ports	
Optics	Yes	
Snapshot Offline	Yes	
Snapshot Auto-Update	Yes	
Sampling Rates	48 / 96 kHz	
Signal Processing	FPGA, up to 40-bit Floating-Point	
Audio Processing and OS Location	Surface	
Redundant Processing and Computer	No	
Redundant PSU's	Yes	
Maximum Stage Rack Spec	Up to 56 ln / 56 Out / MADI Split x2 (@ 48kHz)	
Maximum Number of Racks	16	
Rack Interface	MADI/Optocore (Option)	
Connector Type for Racks	BNC (HMA Optics / ST / Opticon) (Option)	
Rack sharing FOH/MON	Gain Tracking	
Offline Software	Yes	
Recording	Virtual Soundcheck up to 112 Channels	
Dimensions (mm) and Weight (kg)	1347(w) x 811(d) x 254(h) - 71.3Kgs	
Dimensions (inches) and Weights (lbs)	53.03(w) x 31.93(d) x 10(h) - 157lbs	

<sup>\*\*</sup> Full Processing - Includes Delay, DiGiTuBe, HP/LP Filters, 4 or 8 Band EQ, Dynamics 1 and Dynamics 2.

<sup>\*\*\*</sup> Max Buss Count is Calculated as Aux / Group Buss + Master Buss (LCR or 5.1 depending on Product) + Matrix Buss + 2 Solo Busses (up to 5.1 Depending on Product)

# **SD8 Specifications**

General Specifications	
Faders	37 x 100mm Touch-Sensitive, Motorised (25 on SD8-24)
Screens	1 x 15" (38cm) LCD High - Resolution Touch Screen
Meters	38 x 20-Segment LED Bargraph (26 on SD8-24)
Input Channels	60 Flexi Channels
Busses	24 Mono or Stereo Busses + LR or LCR Master
Solo Busses	2 Stereo Busses
Matrix	16 x 12 Matrix (Additional to Busses Above)
Control Groups	12, Selectable for VCA-style, Moving Fader, Mute Group
Graphic EQ	24 x 32-band, Gain +/- 12dB
Internal FX	12 Stereo FX Processors
Local I/O	8 x Mic/Line I/O, 8 x AES/EBU I/O (Mono)
MADI Interface	2 Redundant Interfaces, 75 Ohm BNC Connectivity
Optic Interface	Optocore (Optional Factory Fit Only)
MIDI Interface	In / Out / Through
VGA Port	DB-15 Mini-Female (1024 x 768 Resolution)
USB Ports (3)	USB 2
Light Connection (2)	XLR3 1.2 – 12V
Ext Sync	Word Clock, AES, MADI, Optics
Headphone	TRS Unbalanced / 8-600 Ohms 1/4 Inch Jack
SD8 Dimensions	1347mm (w) x 811mm (d) x 251.7mm (h)
SD8 Weight	65Kg (155Kg with Optional Flightcase)
SD8 Flightcase	1517mm (w) x 1133mm (h) x 452mm (d) (Optional)
SD8 Power Requirements	90-264 VAC, 47-63Hz Auto Sensing. 230VA Typical, 295VA Peak (Meters Full, Faders Moving)
SD8-24 Dimensions	923.5mm (w) x 811mm (d) x 251.7mm (h)
SD8-24 Weight	50Kg (127Kg with Optional Flightcase)
SD8-24 Flightcase	1092mm (w) x 1133mm (h) x 452mm (d) (Optional)
SD8-24 Power Requirements	90-264 VAC, 47-63Hz Auto Sensing. 230VA typical, 295VA Peak (Meters Full, Faders Moving)
Redundancy	Internal PSU x 2

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Sample Rate	48kHz or 44.1kHz (96kHz with SD Rack)
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 Seperation	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

# Processing Channel Specification Input Channel

Name	User-Defined / Presets
Channel Selection	Mono / Stereo / Multi
Input Routing	Main & Alternate Input
Analogue Gain	-20 to +60dB
Phase	Normal / Reverse
Digital Trim	-40 to +40dB
Delay	>1 Sec (Coarse & Fine Control)
DiGiTuBe	Drive 0.01 - 50.0 Bias 0 - 6
LPF	20 – 20kHz, 24dB/Oct
HPF	20 – 20kHz, 24dB/Oct
Insert A	(Pre EQ/Dyn) On/Off
Equalisation	4 Band EQ: Parametric or Dynamic (Low/Lowshelf, Lower-Mid/Lowshelf, Upper-Mid/ Hi Shelf, Hi/Hishelf) On/Off Freq; 20 – 20kHz Gain; +/- 18dB Q: 0.1 -20 (Parametric) / 0.10- 0.85 (Shelf) Dynamic EQ On/Off Over/Under Band On/Off Threshold; -60 – 0dB Attack; 500us – 100ms Release; 10ms – 10s Ratio; 1:1 – 50:1



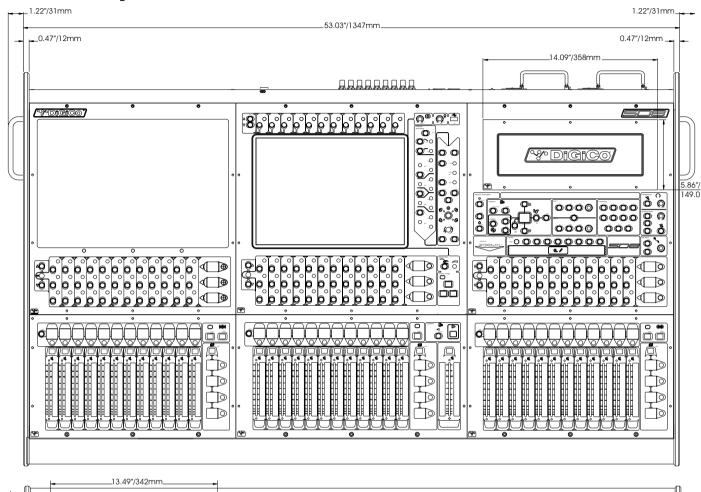
D	C: L M III L/2 D IV
Dynamics 1	Single or Multiband (3-Band)
Compressor	On/Off Threshold; -60 – 0dB Attack; 500us – 100ms Release; 10ms – 10s Ratio; 1:1 – 50:1
	Gain; 0 to +40dB with
	Autogain Option Link; Any Channel/Buss
	Hi Crossover; 20Hz – 20kHz
	Lo Crossover; 20Hz – 20kHz Knee : Hard, Med, Soft
De-Esser	Threshold: 20us – 20ms
	Release : 1ms – 100ms Ratio : 1:1 – 50:1
	Ess-Band : Listen On/Off
	Ess-Band Filter Freq / Width: 20Hz – 20kHz
Dynamics 2	On/Off
Gate / Ducker	Threshold; -60 – 0dB
	Attack; 50us – 100ms Hold; 2ms – 2s
	Release; 5ms – 5s
	Range; 0 - 90dB Key; Any Source
	Key Listen
C	Freq/Width; 20 – 20kHz
Compressor	On/Off Threshold; -60 – 0dB Attack; 500us – 100ms Release; 10ms – 10s
	Ratio; 1:1 – 50:1
	Gain; 0 to +40dB with Autogain Option
	Link; Any Channel / Buss
	Hi Crossover; 20Hz – 20kHz Lo Crossover; 20Hz – 20kHz
	S/C Source : Any Source
	S/C Listen : On/Off S/C Filter Freq/Width: 20Hz –
	20kHz
Insert B	(Post EQ/Dyn) On/Off
EQ/Dyn order Mute	EQ/Dyn or Dyn/EQ Channel Mute / Hard Mute
Solo	Solo Buss 1 / Solo Buss 2 / Both,
	Auto Solo
Channel Safe	Input, EQ, Dyn, Aux, Pan, Fade/ Mute, Inserts, Buss, Directs, Full Safe
Output Routing	Buss, Insert A, Insert B, FX Direct: On/Off, Pre-Mute / Pre-Fade / Post-Fade, Level
	+/- 18dB
Fader	100mm Motorised Fader ∞ to +10dB

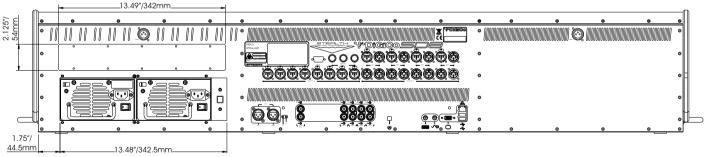
Nama	User-Defined / Presets
Name	Normal / Reverse
Phase	
Digital Trim	-20 to +60dB
Delay	>1 Sec (Coarse & Fine control)
DiGiTuBe	Drive 0.01 - 50.0 Bias 0 - 6
LPF	20 – 20kHz, 24dB / Oct
HPF	20 – 20kHz, 24dB / Oct
Insert A	(Pre EQ/Dyn) On/Off
Equalisation	4 Band EQ: Parametric or Dynamic (Low/Lowshelf, Lowe Mid/Lowshelf, Upper-Mid/Hi Shelf, Hi/Hishelf) On/Off Freq; 20 – 20kHz Gain; +/- 18dB Q: 0.1 -20 (Parametric) / 0.10-
	0.85 (Shelf) Dynamic EQ On/Off Over/Under Band On/Off Threshold; -60 – 0dB Attack; 500us – 100ms Release; 10ms – 10s Ratio; 1:1 – 50:1
Dynamics 1	Single or Multiband (3-band)
Compressor	On/Off Threshold; -60 – 0dB Attack; 500us – 100ms Release; 10ms – 10s Ratio; 1:1 – 50:1 Gain; 0 to +40dB with Autogain Option Link; Any Channel / Buss Hi Crossover; 20Hz – 20kHz Lo Crossover; 20Hz – 20kHz Knee: Hard, Med, Soft
De-Esser	Threshold: 20us – 20ms Release: 1ms – 100ms Ratio: 1:1 – 50:1 Ess-Band: Listen On/Off Ess-Band Filter Freq/Width: 20Hz – 20kHz
Dynamics 2	On/Off
Gate / Ducker	Threshold; -60 – 0dB Attack; 50us – 100ms Hold; 2ms – 2s Release; 5ms – 5s Range; 0 - 90dB Key; Any Source Key Listen Freq/Width; 20 – 20kHz

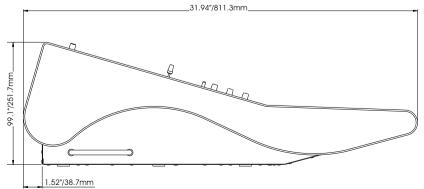
Compressor	On/Off Threshold; -60 – 0dB Attack; 500us – 100ms Release; 10ms – 10s Ratio; 1:1 – 50:1 Gain; 0 to +40dB with Autogain Option Link; Any Channel/Buss Hi Crossover; 20Hz – 20kHz Lo Crossover; 20Hz – 20kHz S/C Source : Any source S/C Listen : On/Off S/C Filter Freq/Width: 20Hz – 20kHz
Insert B	(Post EQ/Dyn) On/Off
EQ/Dyn Order	EQ/Dyn or Dyn/EQ
Mute	Channel Mute / Hard Mute
Solo	Solo Buss 1 / Solo Buss 2 / Both, Auto Solo
Channel Safe	Trim, EQ, Dyn, Fade/Mute, Inserts, Outputs, Full Safe
Output Routing	Outputs, Insert A, Insert B, FX
Fader	100mm Motorised Fader $\infty$ to + 10dB



### **Technical Specifications**





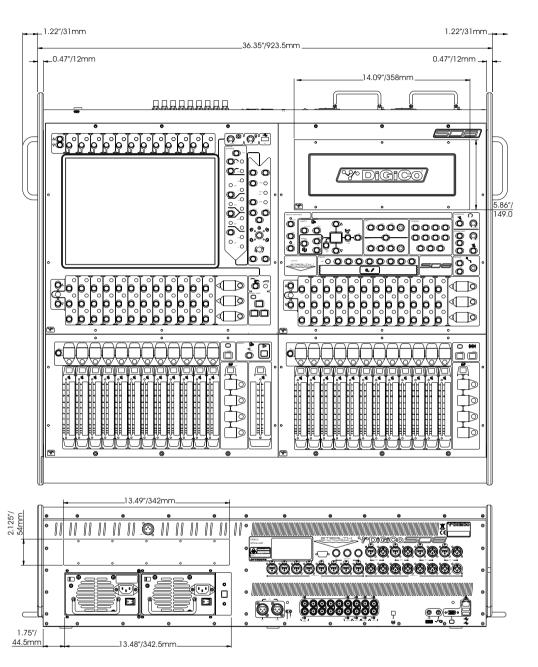


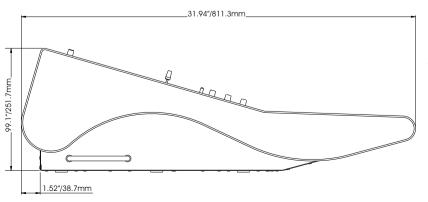
### **DiGiCo SD8 Notes**

- I. SD8 WEIGHT
- 2. SINGLE PSU
- 3. PSU CHASSIS COMPLETE WITH 2 PSUs
- 4. RACK WEIGHT
- (CONFIGURATION DEPENDANT)
  5. FLIGHT CASE
  6. FLIGHT CASE (PACKED)

65Kg/143.3lb 1.6Kg/3.52lb 6Kg/13.22lb 25Kg/55.11lb

90Kg/198.42lb 155Kg/341.72lb





### DiGiCo SD8-24 Notes

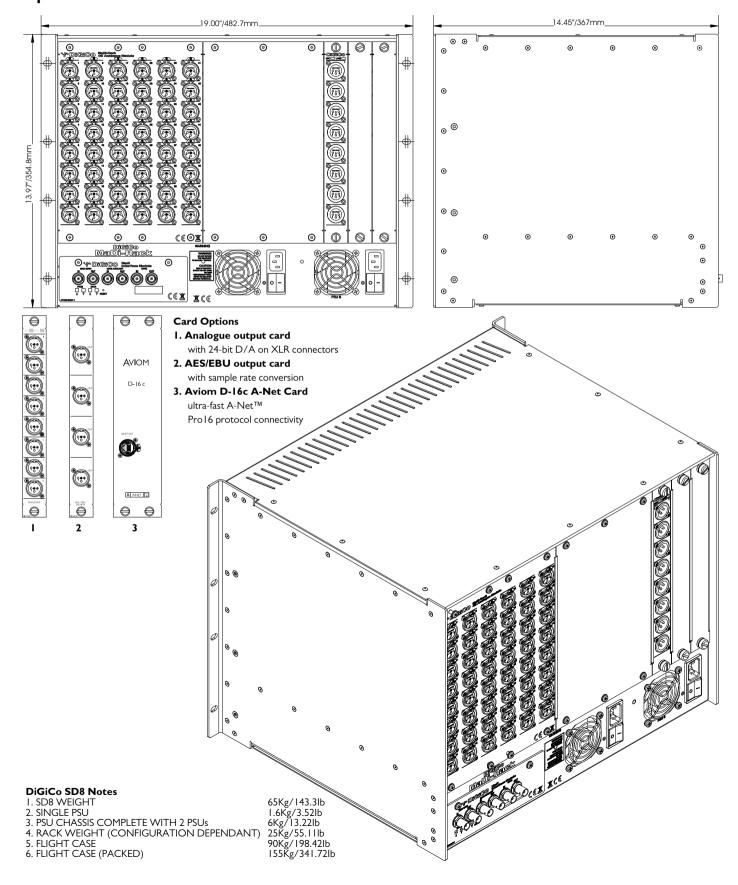
- I. SD8-24 WEIGHT
- 2. SINGLE PSU
- 3. PSU CHASSIS COMPLETE WITH 2 PSUs 4. RACK WEIGHT
- (CONFIGURATION DEPENDANT)
  5. FLIGHT CASE
- 6. FLIGHT CASE (PACKED)

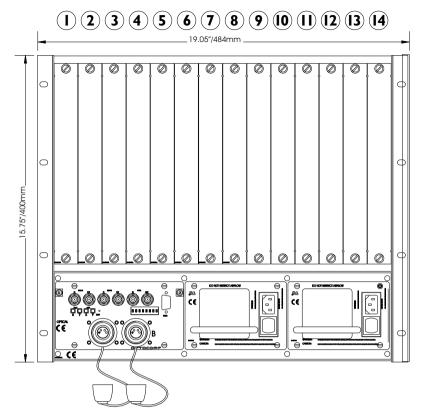
50Kg/111.23lb 1.6Kg/3.52lb 6Kg/13.22lb 25Kg/55.11lb

77Kg/169.76lb 127Kg/279.99lb



### **Options**



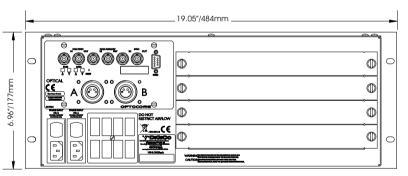


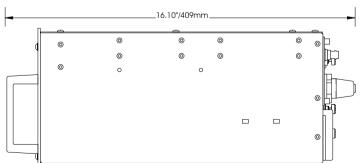
### **DIGIRACK**

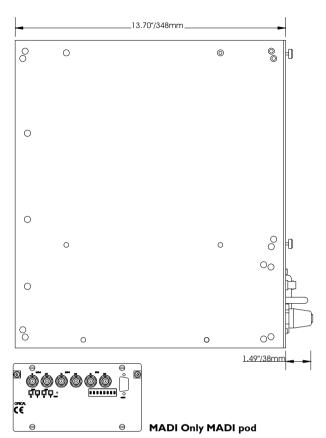
9U 19" Rack Mount Weight (Unpacked) 36kg/80lb Weight (Packed) 56kg/124lb Optional Configurations (1-7 Inputs 8-14 Outputs)

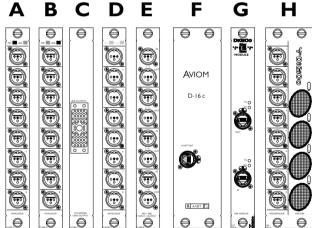
### **MiNi DiGiRACK**

4U 19" Rack Mount Weight (Unpacked) 14kg/30.86lb Weight (Packed) 20kg/44.09lb Optional Configurations (1-4 Inputs 8-1 I Outputs)









### Card Options (DiGiRack and MiNiRack)

C

D

A. Mic input card

with 24-bit A/D on XLR connectors

B. Line input card

with 24-bit A/D on XLR connectors

C. Analogue input card

EDAC connector with 24-bit A/D, mic & line inputs

D. Analogue output card

with 24-bit D/A on XLR connectors

E. AES/EBU input/output card

with Bi-directional sample rate conversion

F. Aviom D-I 6c A-Net Card

ultra-fast A-Net™ Pro I 6 protocol connectivity

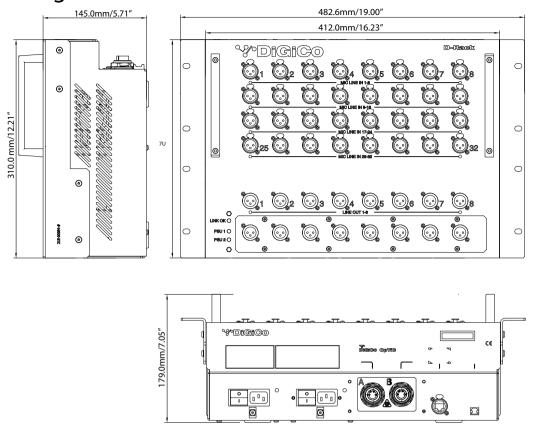
G. Ethersound I/O Card

8 channel input/output and control card

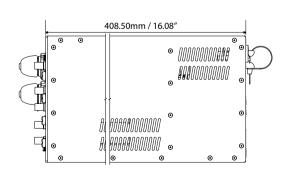
H. DiGiCo D-TuBe

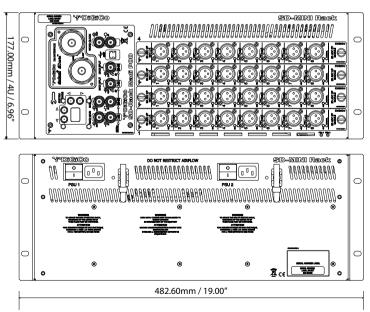
Remote controlable tube Mic pre amp

# **D-Rack Line Drawings**

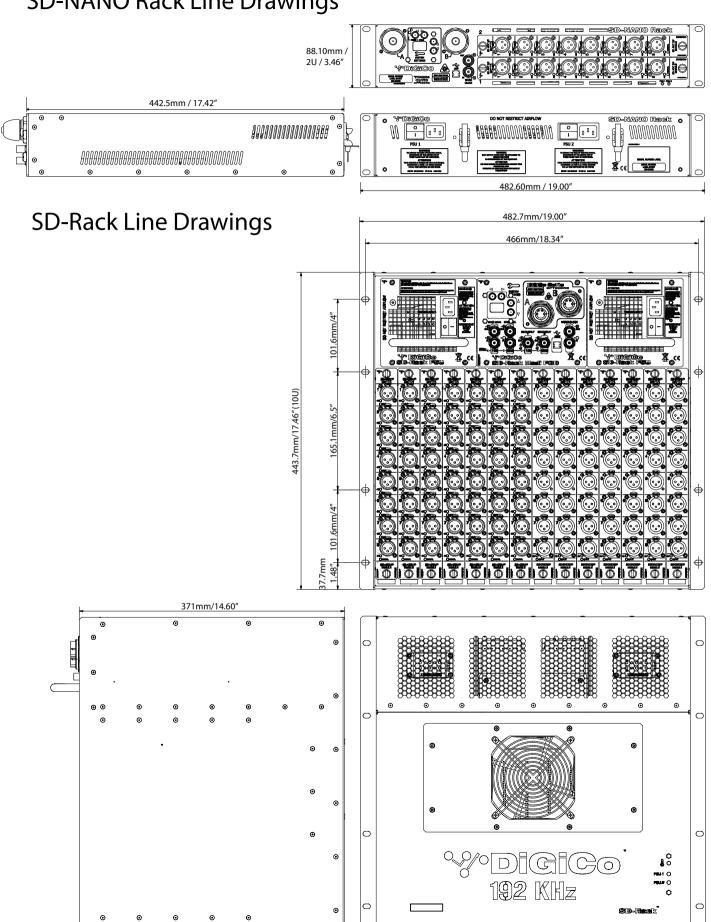


# **SD-MINI Rack Line Drawings**



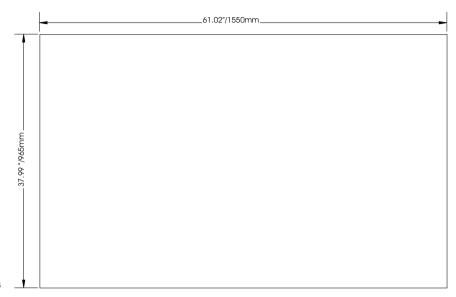


# **SD-NANO Rack Line Drawings**





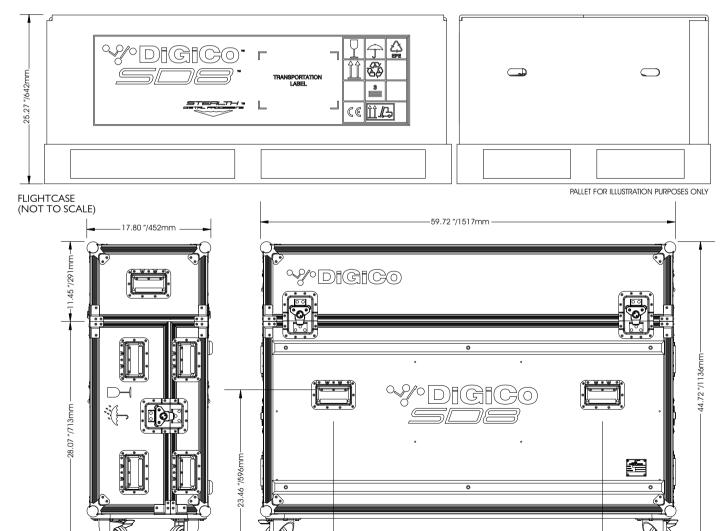
### **Options**



38.62 "/981mm-

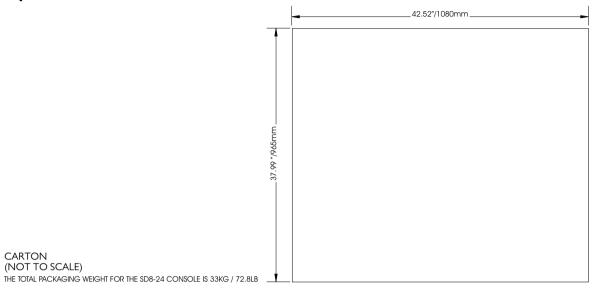
CARTON (NOT TO SCALE)

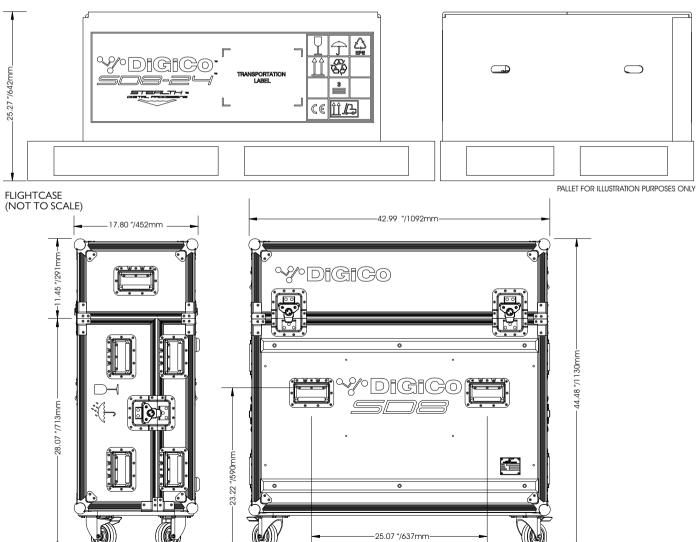
THE TOTAL PACKAGING WEIGHT FOR THE SD8 CONSOLE IS 43.0KG / 94.8LB





### **Options**





# **Product Comparison**





	SD7/SD7B/SD7T	SD5
Max no of Input Processing Channels	253	124
Maximum Buss Count	160***	87***
Max aux / sub-group busses	128 (full processing**) (inc 2x solo buss)	56 (full processing**)
Matrix (in addition to aux / sub - group)	32 x 32 (full processing**)	24 x 24 (full processing**)
Solo busses	22	2
Max no. of inputs - Non optic consoles	N/A	N/A
Max no. of inputs - 1 console on single optic loop	696	632
Max no. inputs - 2 consoles on single optic loop	752	688
Local I/O spec	12x mic/line, 12x line outputs, 12x AES/EBU I/O	8x mic/line, 8x line outputs, 8x AES/EBU I/O (mono
	(mono streams)	streams)
Max no. of outputs	696	632
Max no. of faders	52 (plus 48 if used with 2 x EX007)	37
Screen	3 x 15" touch	3 x 15" touch
Ext. overview screen	Yes	Yes
I/O expandability	Yes	Yes
Insert points / channel	2	2
On Board FX	48	24
Graphic Eqs (32-Band)	32	32
Dynamic EQ	256	24
Buss 8-band Parametric EQ	Yes	Yes
Multiband Compression	256	24
DiGiTubes	256	24
Multi-channels	Yes	Yes
VCA - style control groups	36	24
Set Spill	Yes	Yes
Mute Groups (part of control groups)	36	24
Reorder Busses	Yes	Yes
Multi-operator	Yes	Yes
Surround	Yes	Yes
MADI connectivity	4x Redundant ports	3x Redundant ports
Optics	Yes (including dual loop)	Yes
Snapshot Offline	Yes	Yes
Snapshot Auto-Update	Yes	Yes
Sampling rates	48 / 96 / 192 kHz	48 / 96 / 192 kHz
Signal processing	FPGA, up to 40-bit floating-point	FPGA, up to 40-bit floating-point
Audio processing and OS location	Surface	Surface
Redundant Processing and Computer	Standard	Yes (Dual Surface)
Redundant PSU's	Yes	Yes
Stage Rack spec	Up to 56 in / 56 out / MADI split x2 (@ 48kHz)	Up to 56 in / 56 out / MADI split x2 (@ 48kHz)
Max no of Racks	18. On 2 loops = 32	17
Rack Interface	MADI / Optocore	MADI / Optocore
Connector type for racks	BNC / HMA optics / ST / Opticalcon	BNC / HMA optics / ST / Opticalcon
Rack sharing FOH/MON	Gain Tracking	Gain Tracking
Offline Software	Yes	Yes
Recording	Virtual Soundcheck up to 224 channels	Virtual Soundcheck up to 168 channels
Dimensions (mm) and Weight (kg)	1496(w) x 875(d) x 503(h) - 107Kgs	1465(w) x 850(d) x 753(h) - 116Kgs
Dimensions (inches) and Weights (lbs)	58.9(w) x 34.45(d) x 19.8(h) 236lbs	57.68(w) x 33.46(d) x 29.65(h) - 256lbs
Emensions (menes) and weights (tos)	50.5(W) N 5 1.15(M) N 15.0(H) 250H3	57.55(W) A 55.10(G) A 25.05(H) 250H5







SD8



SD9/SD9B/SD9T



SD11/SD11i/SD11B

	96 channels, 12 Flexi* 71/77*** 48 (full processing**)	60 Flexi* 67***	48 Flexi* 47/53***	32 Flexi* 39/45***
		67***	47/53***	39/45***
	40 (full processing**)			
	46 (tull processing)	24 Flexi* (full processing**)	16 Flexi* (full processing**) 1x Surround + 16 Flexi* or 2x Surround + 13 Flexi* or 3x Surround + 10 Flexi*	12 Flexi* (full processing**) 1x Surround + 12 Flexi* or 2x Surround + 9 Flexi*
	16 x 16 (full processing**)	16 x 12 (full processing**)	12 x 8 (full processing**)	8 x 8 (full processing**)
	2	2	2	2
	128	128	180	130
	576	576	628	578
(	632	632	684	634
	8x mic/line, 8x line outputs, 8x AES/ EBU I/O (mono streams)	8x mic/line, 8x line outputs, 8x AES/ EBU I/O (mono streams)	8x mic/line, 8x line outputs , 4x AES/ EBU I/O (mono streams)	16x mic/line inputs, 8x line outputs, 2x AES/EBU I/O (mono streams)
	576	576	180 (Non Optics)	122 (Non Optics)
	37	37	24	12
	1x 15" touch	1 x 15" touch	1x 15" touch	1x 15" touch
,	Yes	Yes	Yes	Yes
,	Yes	Yes	Yes	Yes
	2	2	1	1
	16	12	8	6
	24	24	16	12
	16	10	8	6
,	Yes	No (4 band only)	No (4 band only)	No (4 band only)
	16	10	8	6
	16	10	8	6
,	Yes	Yes	Yes	Yes
	24	12	8/12	8
	Yes	Yes	Yes	Yes
	24	12	8/12	8
	Yes	Yes	Yes	Yes
	By remote only	By remote only	By remote only	By remote only
	No/Yes	No	No/Yes	No/Yes
	2x Redundant ports	2x Redundant ports	1x Port	1x Port
	Yes	Yes	Yes, with new factory order	Yes, with new factory order
	Yes	Yes	Yes	Yes
	Yes	Yes	No	No
	48 / 96 kHz	48 / 96 kHz	48 / 96 kHz	48 / 96 kHz
	FPGA, up to 40-bit floating-point	FPGA, up to 40-bit floating-point	FPGA, up to 40-bit floating-point	FPGA, up to 40-bit floating-point
	Surface	Surface	Surface	Surface
	Yes (Dual Surface)	Yes (Dual Surface)	Yes (Dual Surface)	Yes (Dual Surface)
	Yes	Yes	Yes - Option	Yes - by remote PSU option only
	Up to 56 in / 56 out / MADI split x2 (@ 48kHz)	Up to 56 in / 56 out / MADI split x2 (@ 48kHz)	D-Rack (32 - 16) SD-Rack (56-56)	D-Rack (32 - 16) SD-Rack (56-56)
	16	16	17	16
	MADI / Optocore (option)	MADI / Optocore (option)	MADI / RJ45 CAT 5E / Optocore (option)	MADI / RJ45 CAT 5E / Optocore (option)
	BNC / HMA optics / ST / Opticalcon	BNC / HMA optics / ST / Opticalcon	BNC / CAT 5E / HMA optics / ST /	BNC / CAT 5E / HMA optics / ST /
	(option)	(option)	Opticalcon (option)	Opticalcon (option)
(	Gain Tracking	Gain Tracking	Gain Tracking	Gain Tracking
	Yes	Yes	Yes	Yes
	Virtual Soundcheck up to 108 channels	Virtual Soundcheck up to 112 channels	Virtual Soundcheck up to 56 channels	Virtual Soundcheck up to 56 channels
	1398/*982(w) x 818(d) x 285(h) - 60/*45Kgs	1347/*923.5(w) x 811(d) x 254(h) - 71.3/*50Kgs	878(w) x 785(d) x 262(h) - 36Kgs	483(w) x 577(d) x 232(h) - 24Kgs
	00/ 13/193	1 110, 2 2119		

### \* Smaller frame size weights and dimensions

<sup>\*</sup> Flexi - Configurable Mono or Stereo without the loss of any resources

<sup>\*\*</sup> Full Processing - Includes Delay, DiGiTuBe, HP/LP Filters, 4 or 8 Band EQ, Dynamics 1 and Dynamics 2.

<sup>\*\*\*</sup> Max Buss Count is calculated as Aux / Group Buss + Master Buss (LCR or 5.1 depending on product) + Matrix Buss + 2 Solo Busses (up to 5.1 depending on product)





Concert Sound (U2 360° Tour)

When the professional audio world first set eyes on the DiGiCo D5 Live there was a collective sharp intake of breath. Here was the digital mixing console that gave you the best of analogue working practices and audio finesse with all the versatility and feature richness that the digital environment could offer.

A decade on, the SD Series is the new standard setter and its fast, engineer friendly user interface has yet to be beaten. And to many engineers it continues to offer the optimum sonic combination of analogue smoothness and digital clarity.

But expectations continue to rise. 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 as well



Permanent Install
Wolftrap Arts Centre

thought out for every major application as it is designed for the art and science of sound engineering.

Above all, you want to do more. That's why we've added yet more depth and versatility to the SD Series, in which the DiGiCo SD7 is complemented by the new SD5, powerful SD Ten, compact SD8, the ultra compact SD9 and rackmount SD11.

What Makes the SD Series different from the D Series and other digital consoles?

The SD Series gives you more. More power, more flexibility and more creativity, wrapped in frames which are more serviceable, more compact and more user-friendly than ever.



Houses of Worship Gateway Church Southlake Texas

Selected features include:
All audio processing on one chip Stealth Digital Processing™
From input to output all the audio processing on an SD Series console is carried out on one chip using Super FPGA technology with floating-point processing, resulting in enhanced clarity, unique sound characteristics and a smaller console footprint.

The Power of Waves The SD Series is the world's first range of digital mixers to offer the power of Waves SoundGrid® as a fully integrated option, complementing the array of builtin Stealth digital effects.

Slicker Interface With 15inch touch screen LCD TFT technology and user defined RGB back lit LCD scribble strips delivering uninterrupted user feedback.



Musical Theatre
Mother Courage

Advanced Software UI
Building on the fine qualities
of over 20 years of digital
development, our engineers
have delivered a user experience
that's even faster, easier and more
productive than ever.

After the briefest introduction it's clear that the DiGiCo range was designed for audio engineers by audio engineers.

