DiGiCo

Digital Mixing Consoles for Live Sound, Theatre and Broadcast

SD Series Digital Mixing Consoles

STEALTH™ CORE 2

SD7

SD5

SD10

SD8

SD9

SD11

DiGiCo

Digital Mixing Consoles for Live Sound, Theatre and Broadcast.

SD Series Overview

The SD Series 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.

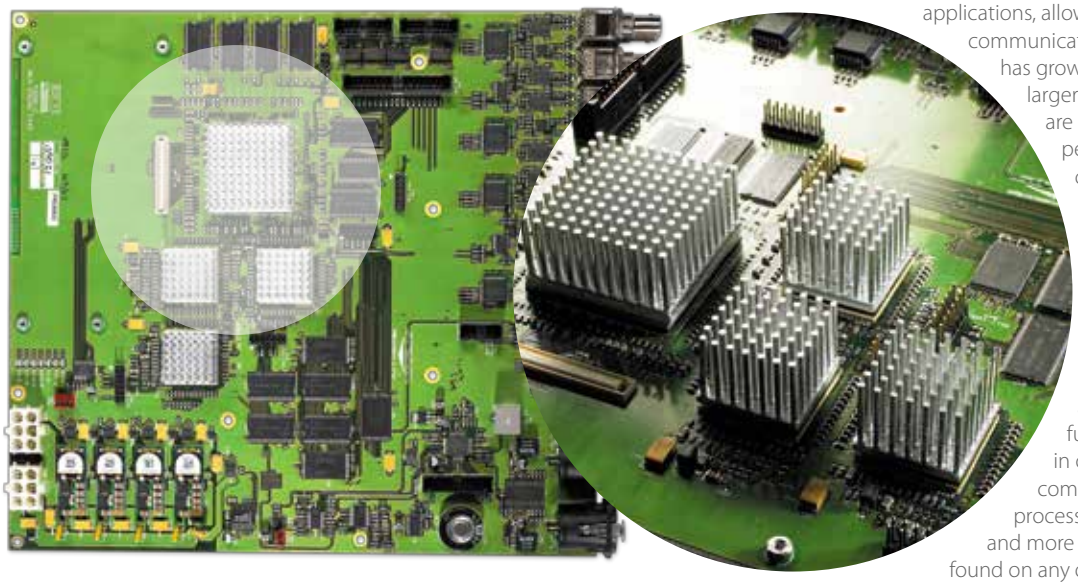
Common Operating System Back in the day, when analogue consoles first came out, all you really had to do was learn one to understand the rest; and that's the DiGiCo way of thinking when it comes to digital: not only does it allow you to work the same way as you did with an analogue console, but every SD product operates the same way. Unlike other manufacturers, once DiGiCo developed their interface and operating system for the SD range, they didn't change it.

Let's say you're touring with an SD7 or an SD5, but suddenly you turn up at a show and there's an SD8 sitting in its place. Quaking in your boots? Have no fear, it'll be a breeze! And that's the same for any DiGiCo console, because when you learn one, you learn them all. And furthermore, thanks to the cool SD convert software, when you're working, you can move any file from one console to another. It's the same user interface and the same operating system across the board, for ultimate flexibility and simplicity.

No Sharing of Resources Unlike many DSP console manufacturers, DiGiCo isn't into the idea of taking from one resourse to provide for another: if we say, 'you have this many channels', we don't also say, 'oh, but that takes up x and that takes up y'. Our matrix is the perfect example of this: the resource is always there regardless of the amount of aux or group busses assigned. All additional DiGiCo I/O is exactly what it says it is.

Same Pristine Audio Quality All consoles in the SD Series benefit from the same pristine audio quality. From the smallest of the SD family, the SD11, up to the flagship SD7, they've all got the same Stealth Digital Processing™ regardless, which offers unparalleled processing flexibility, configurability, and functionality, for a guaranteed no-compromise performance. In addition, they all boast the same high-end A-D and D-A converters, and the same high quality 96kHz sample rate capabilities, which just goes to show that size really doesn't matter!

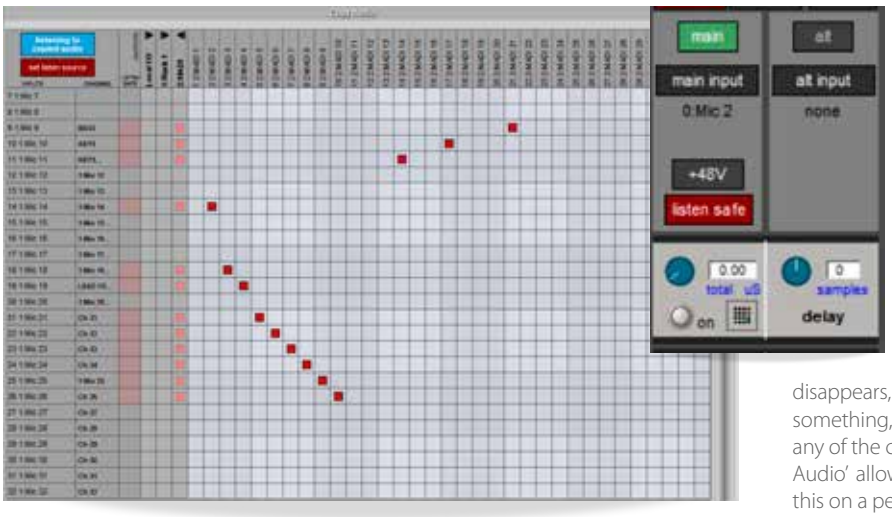
FPGA (Field Programmable Gate Array) These neat components have been around almost as long as DSP. Historically, due to their small size, they played the role of the glue logic in larger applications, allowing multiple DSP chips to communicate, but as the technology has grown, so have the FPGAs; much larger and smarter components are now available, which can perform a staggering amount of calculations, surpassing even the most advanced DSP.



Stealth Digital Processing™ is the increadibly powerful technology that DiGiCo has applied to process all mixing functions and reverb algorithms in one of the latest FPGA design components. One single chip processes unrivalled channel counts, and more channel processing than can be found on any other digital live console.

15" Touchscreens The most striking single feature in the SD Series is the large (15"), super high-resolution, touch-sensitive TFT LCD backlit display. Depending on the console, it's either one, two, or three screens, and they are the hub of the user interface, and for realtime information, act as the primary command centre. They also work completely intuitively with every other control within the console, automatically displaying functions that are relevant to what the operator is working on there and then.

It's all about ease-of-use and speed with the SD Series: 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.



Virtual Soundcheck All DiGiCo consoles benefit from this very handy function - and it's super-easy to use: just select your channels and route your signals using the audio I/O screen, and in conjunction with a DiGiCo UB-MADI or DiGiGrid MGB (or any MADI-based recorder for that matter), you can track your show into any DAW. It's a simple one-button press, no routing is required, so unlike on many other systems, there's no pops or clicks, and certainly no rebooting!

But there's more... Just as you would with an inline console in a recording studio, once the band disappears, and you realise you need to re-record, or rehearse something, you can route one (or many) items from stage on any of the channels at the press of a button. 'Listen to Copied Audio' allows monitoring of playback. 'Listen Safe' prevents this on a per channel basis. So if your singer missed that all important high note on the night, or the drummer flunked the odd paradiddle, you don't need the rest of the band present to fill in the gaps.

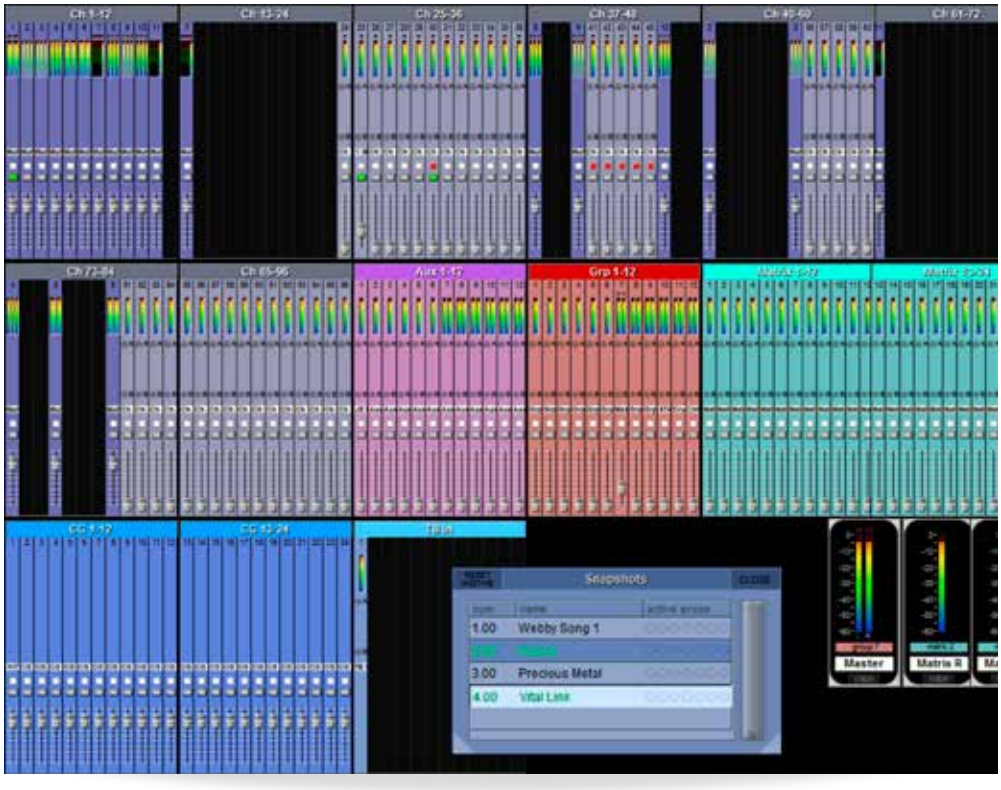
Aux Sends on Busses

A feature recently added to the DiGiCo SD console range is the inclusion of aux sends on busses, which allows the user to create a sub group, and apply whatever processing they want across it. If the user then unfolds that sub group, he or she has dedicated aux sends for that buss, which can be sent directly to someone's aux mix, rather than have to waste time sending to individual channels. It's essentially a broadcast feature, but after chatting with a number of live engineers, we realised it would fit very nicely into the rock and roll world. As a result, some of the top live guys in the industry are using it to sub their drums, keys, artist playback, or whatever fits their show.

SD Convert Software

This standalone piece of software allows the user to load their files from any console in the SD Range into the SD Convert application, and choose which model they want to convert to, defining their existing session with the resources available on the new console. This makes it possible to move freely up and down the console range depending on space, budget, and system requirements.

Ultimately, it's an easy way of converting session files between the large and the small consoles within the range.

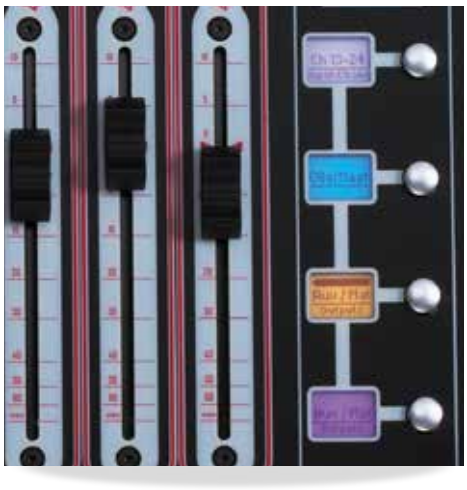


Overview Screen

This is an external VGA output that shows what is going on with the console at all levels; it displays all your channels, groups, auxes, matrices, control groups, fx, dynamic processing, metering, sub groups, and your master, all in an easy-to-navigate format.

Banks in blocks of 12

All SD consoles are designed with banks of 12 faders, unlike the more common 8 fader banks that are found on the majority of digital consoles today. These provide the user with a much stronger platform from which to mix their audio palette. A good example of an application that really benefits from a 12 fader bank is working with a full drum kit: often, 8 channels just won't cut it, and it can lead to limitations; having 12 faders in one bank means there is literally more room to play with, which adds more flexibility in your mix. The same can be said for larger percussive sessions, where more channels are needed in the same bank to get the job done properly.



Aux to Faders

We've come up with a solution to a common problem monitor engineers have, by creating a panel which floats on top of any SD console's screen, to provide a very quick way of getting to Send to Faders for any of the aux mixes. Why? So that when they're listening to one mix – let's say it's the lead vocal - and want to make tweaks to another at the same time – the guitarist, perhaps - they can do so, without even listening to it. Just drop the console into Send to Faders mode at any time to make it happen; and although it's defaulted to auxes, users can also activate the solo fader, should they require further flexibility.

Control Group Faders Control Aux Sends

When the user goes to Send to Faders, the control groups adjust the individual aux mixes' levels, as opposed to the main master buss level on anything that's assigned to them. In other words, let's imagine Eric wants more guitar: the user finds his mix, the control group faders drop down to middle of the fader path to give he or she +/-18dB worth of trim. So you can immediately solo his mix, increase or decrease his overall guitar level (or any level, of course). And by the same token, if Rik wants his keyboard turned up (or down) that's no problem, either. It's essentially providing the user with VCAs on every single aux mix.

Gain Tracking™

DiGiCo were the pioneers of Gain Tracking™. In a nutshell, it's there to keep channel levels consistent when two or more DiGiCo consoles share a single rack. When Gain Tracking™ is enabled on an input channel, any changes to the analogue gain on one console will be compensated for by the digital trim on the other. When Using MADI, one console is the master for the analogue gain; when using Optocore, up to five redundant engine consoles can be on the same loop, each with its own Gain Tracking™, while retaining full access to the analogue gains.

Alternative Input

Routing an alternative (ALT) input is as simple as it sounds. The spare input becomes the main in an instant, and keeps all of the same settings: EQ, dynamics, aux sends, gangs, and group routing.

Let's say the lead singer, pastor, or commentator's microphone fails, and there is always a back-up on hand. Having this routed into the ALT input means the microphone will always be ready to be switched over; and if you assign it to a macro, you don't even have to be looking at the channel to switch it! There is no need to create another input channel, or have to waste time and effort copying all your parameters from the main channel, these are still there, even in the snapshots.

DiGiTuBe is there to emulate the non-linearity of a valve amplifier. At low levels, the valve is almost linear, whereas at high levels, it starts to compress, which leads to "soft clipping". The drive control increases the input gain into the valve, automatically reducing the output gain, so the volume stays the same. The indicator shows how hard you are driving the valve and how much distortion is happening, and the bias control sets the symmetry of the distortion, and the intensity of the distorted sounds.

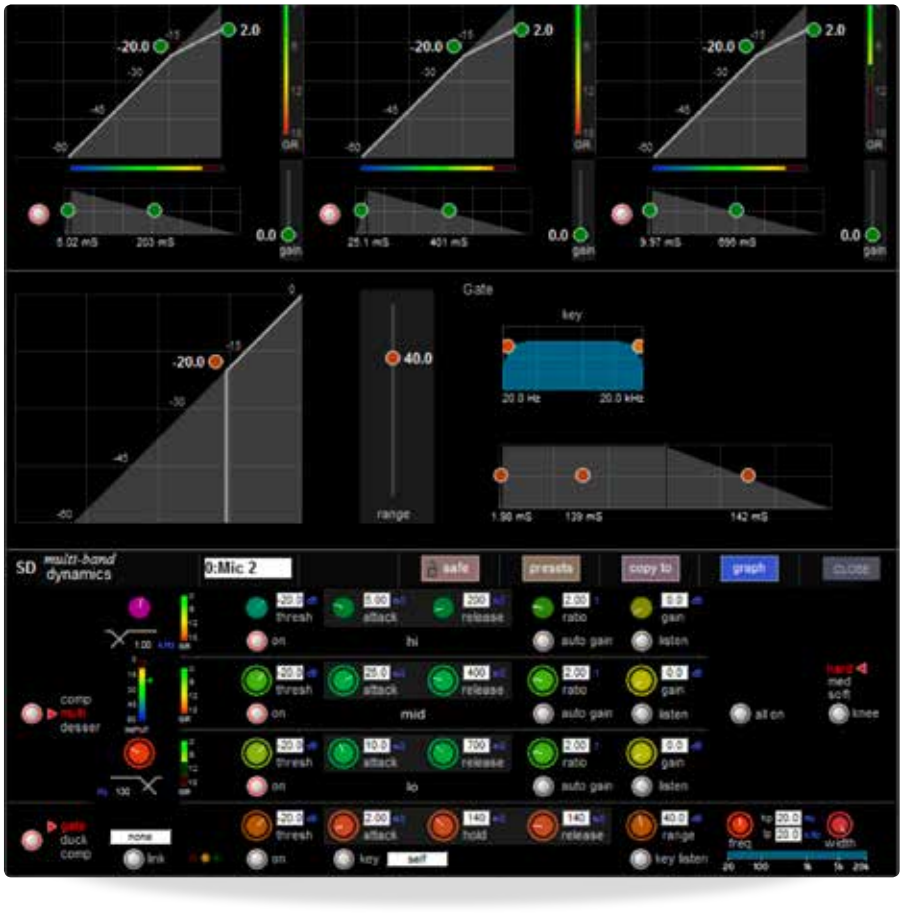
If you crank up a classic guitar amp, you can see clearly how the valves glow and kick into action to transform the sound; DiGiTuBe, like real valves, works great if you want to add presence to an instrument. Now available on all channels and busses with CORE 2 .

Merge Inputs allows the user to bring a secondary source into a buss. Back in the analogue days, when you needed more channels, you had an additional input on a buss where you could cascade desks together – and this is doing just that. You can bring in any source - internal or external – with a dedicated level control and an on switch; it's as simple as that. Some users also find it handy as a secondary channel – and why not? If you turn it on, and you haven't routed anything to it, you can bring in your FX returns into subgroups, as all the subgroups effectively now have the processing you would have on a channel, including aux sends. In fact, it's providing the user with additional channel processing. Furthermore, we now have ident control. If you're using busses to get a record feed to a camera, or a stereo signal to a broadcaster somewhere, just hold down the Merge Input button, and you'll get tone coming out of that buss. No need to have to go and create the tone, and route it to a buss; it's all doable direct, to make setting your levels totally hassle-free.

Line Check Mode This feature was introduced recently within the Copy Audio page - originally designed to be able to route an input to an output for virtual soundcheck work by mapping any sockets to any MADI stream. However, now people are using it to route an input to output without it physically coming to the desk. The issue being, however, a lack of gain control: they have had to bring a socket into a socket to do that, unroute it, and so on. But Line Check mode changes all of that: if the user goes to a rack, selects a socket, he or she now has the ability to adjust the gain of that socket without having to patch it into a channel to do it there. There is also 48v Phantom Power, and it tells you which channel it's being used by; you can also solo it, and choose which buss it goes to. So in the live environment, you could potentially have an output assigned to a solo buss to your technician on stage, and whenever he or she hits solo via the offline software, he or she can immediately hear what's coming out. It's a great way of checking everything's on the money before going live.

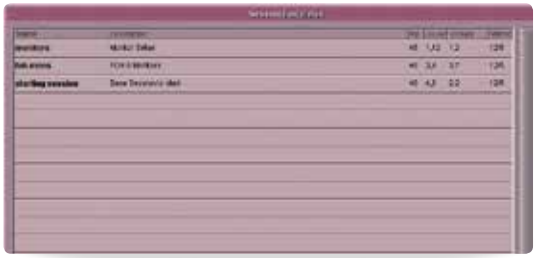
Multi-Band Compression DiGiCo offers three compression bands, and the engineer can set the attack, decay, release and gain (including auto-gain) on each compressor. Additionally, there are Link and Listen functions. Link enables the user to link compressors' control voltages to another channel; and Listen lets the user listen to individual compression bands rather than the whole signal. Nice and simple.

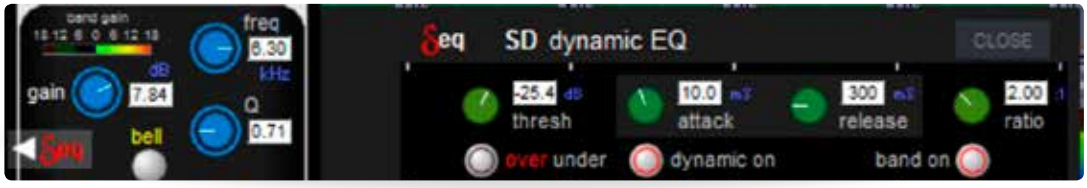
Multi-band compression works particularly well on drum groups. Let's say you've got a really loud kick drum to deal with... A single band compressor would compress the entire signal, whereas with a multi-band compressor, only the lowest band will compress, which leaves the mid and high bands unaffected. The key word here is control, which the engineer now has in abundance. Now available on all channels and busses with CORE 2 .



Session Templates The templates option allows users and engineers to save sessions as templates. Once loaded, the templates session cannot be overwritten and must be saved as a new session file.

An example of use – If the desk has been installed into a facility, having templates will mean the console will have sessions to load straight away. This can be useful in places where part-time sound engineers or volunteers use the console and an easy to navigate and familiar to use session is required.





Dynamic EQ is the holy grail of audio mixing; it allows the audio level to dynamically control the amount of EQ being applied to the signal. But to perform these calculations in realtime requires a serious processing resource, which many of today's standard DSP systems simply cannot deliver; and the same is true of many plugin systems, as the resource required consumes such a vast amount of the processing pool. However, none of these limitations even come into play when you're working with a DiGiCo console, as the capabilities of a single FPGA are so great. Dynamic EQ is like a super-smart EQ. It can be applied variably, and it's based on the incoming signal passing a threshold set in the individual band of EQ. It means total control for the engineer, as the further past the threshold the signal goes, the more EQ is applied.

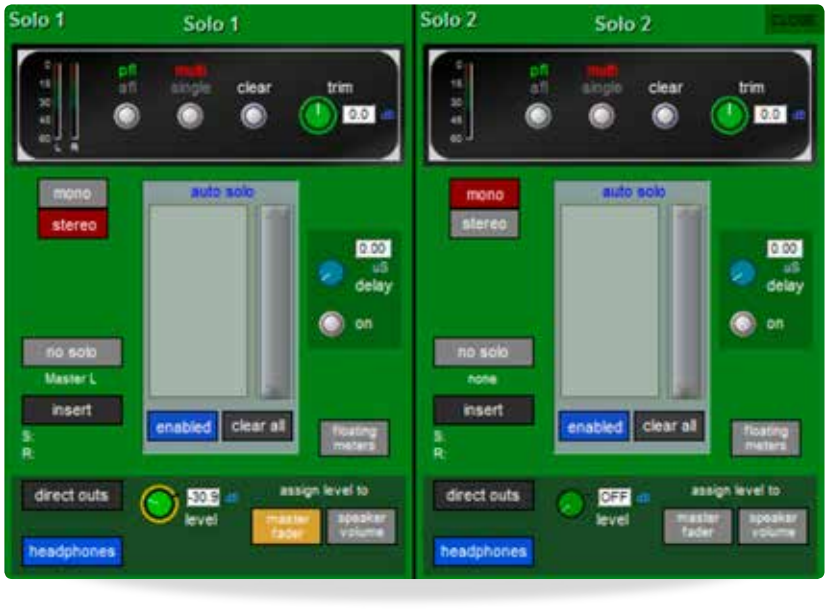
Let's say you're working a show, and your lead vocalist is eating the mic half the time, and moving away from it the rest of the time. It's a common thing with a dynamic vocalist, but it causes something called the 'proximity effect', which often leaves the engineer struggling to cope with low frequency boost. Dynamic EQ, however, will fix all that... In this example, when the bass frequency increases past a set threshold, the EQ will activate and auto-correct the timbre changes from the singer's voice, and keep it at a consistent level. Simple. Now available on all channels and busses with CORE 2 .

Graphic EQ The SD Series of consoles boasts between 12 and 32 internal 32-band Graphic EQs (depending which console you're using), each of which can be applied to any channel's input and output, normally using channel insert A or B. There is a large EQ display which can be adjusted individually via the touchscreen. There is also an overall trim control and an EQ on/off button, and the EQs can be linked together globally, or by ganging groups of them together.

This is ideal, for example, if you want to apply a pair of mono EQs across a stereo buss: if you touch any Graphic EQ, it immediately transfers to the 12 faders below it, and you can sweep or swipe your finger across to highlight the faders you wish to adjust.

FX The FX menu button on the console's master screen opens the master FX display, which shows all assigned FX units in a single rack. Touch any control on the screen, and the Touch-Turn controls will become live on the console's work-surface. A number of factory presets are built-in, including stereo FPGA reverbs and other high quality effects such as delays, choruses, pitch shifters, and audio enhancers; and up to 16 Stereo Reverbs can be used at any one time with between 6 and 48 stereo FX , depending on the SD console you're working with.

Macros All consoles in the SD Series benefit from assignable Macro buttons. RGB backlit Smart Keys which users can name and assign a colour to are available on the SD10, SD5, SD5cs and SD7 having 40 of these to play with. And they allow the user to program almost any function, or series of functions, down to a single macro action. These macros can then be assigned to the work-surface or keyboard for quick access, via the macro editor. An engineer might build a macro to achieve greater control of a reverb or a delay out on a live show, for example, or to update snapshots he or she is working in, then quickly get to it without having to worry about menus. Macros are designed to improve efficiency in the user's workflow.



Dual Solo Busses Dual Solo Busses are present on all DiGiCo SD consoles, and can be either mono or stereo, or even up to 5.1, providing the engineer with ultimate flexibility. The solo busses can also be assigned to a master fader/pot on the work surface and brought into a bank as a fader, allowing for easy fader control over the solo output level. If you have 2 solo busses, for example, one can be assigned stereo, the other as a mono, which means when creating stereo in-ear mixes for your band, all of your stereo auxes can be assigned to solo buss 1, and for those listening to the mix through a mono wedge, all mono auxes can be assigned to solo buss 2.

Matrix A Matrix is available on all SD consoles, ranging from an 8 x 8 on the small-footprint SD11, to a 32 x 32 on the flagship SD7. What's unique about a DiGiCo Matrix is, all of these busses are in addition to any Aux, Groups, Masters, or Solo Busses, unlike many others on the market that share resources, no processing power is borrowed from the console.

What's also cool is, any source can be used as an input to the Matrix. Let's say you're working monitors, for example, using the matrix as a Comms mixer: you can bring the crew mics and solo buss outputs into the Matrix and submix them together, which means you can still hear the technicians, even when a buss or channel is soloed.

Fader Bank Customisation Across the entire DiGiCo range, users can completely customise the layout of their fader banks; input channels, aux busses, group busses, master busses, solo busses, control groups, talkback and matrix outputs can be assigned quickly and effectively to provide the user with the perfect customised work-surface layout. At a live show, for example, an engineer might assign all inputs to the left hand fader banks, and all outputs to the right.

Set Spill This feature provides quick access to a custom group of channels, and any number of different channels can be assigned to a set. This set can then be assigned to an easy-access macro button on the work-surface; by pressing the macro button, the channels will 'spill' (vertically or horizontally) onto the work-surface, giving the operator access to the channels.

Typically, you would select your most important channels to access at a press of a button. For example, the input channels that make up a drum kit on stage: maybe the high-hat needs to come down in the mix? Just a press of the assigned set spill button, and those channels will come to the surface, regardless of what screen is being viewed at the time. Press it again, and it will change the work-surface back to the fader banks that you were viewing before. This can be done with everything, including buss outputs, VCAs, and talkback inputs.

Multi channels are available on the entire SD Series, to assign up to 11 input channels onto a single channel strip, and are great for saving space in fader banks. All the channels are assigned to a 'multi' fold into a single fader with a meter bridge at the top of the channel to show meters of all the channels. If all channels within the multi are linked or 'ganged', then control parameters (EQ, Gain, etc.) can be applied across the whole multi. To access the individual channels, unfolding the multi-channel will spill the channels across the bank, allowing adjustments to be made per channel.

Folding and unfolding of Multi Channels can be done in stereo, LCR, or 5.1 - imagine having your whole drum set allocated to one channel strip! Then just unfold it to access the channel processing for all of the contained channels. And it's more than that – you can also include processing into a folded channel strip: EQ, dynamics, aux sends, whatever you like. This super-flexible setup is the ultimate for control, gone are the days of searching through banks on your work-surface while mixing: fold your guitars, your brass section, a group of BVs, anything you like, for much quicker access to parameters, and without switching banks.

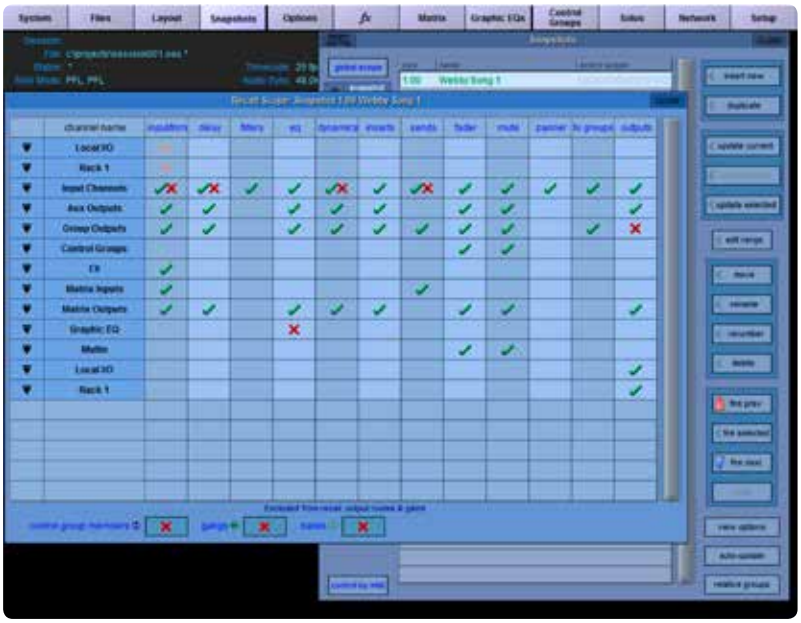
And we've gone that bit further... We've taken that folding and unfolding concept, and applied it to our output busses, so you can take stereo, LCR, or surround, and unfold it to reveal its individual components. Once unfolded, you can apply unique processing such as changes to EQ, or re-patching, then fold it back up. Unfold to adjust, fold to mix, quickly and efficiently.

Snapshots

The clue is in the name... These are literally snapshots of the state of your console; every time one is made, it stores the position of every compressor, EQ, aux send, fader, mute – you name it - on every channel. You might snapshot each song at a gig, or each scene in a theatre production; and when recalling them, you can filter recorded or stored snapshots through a series of filters or 'scopes', and the level of control is staggering. Thanks to precision programming, you can set different crossfade times for individual parameters on every channel, to provide ultimate control, and they can even fire MIDI messages.

Furthermore, and unique to DiGiCo, is the ability to group snapshots together relatively, then apply changes to them as a group, rather than updating them individually; and you also have the ability to take the surface offline on the SD11, SD9, SD8, SD10, SD5 (cs) and SD7.

All SD consoles have the ability to take Snapshots offline allowing the user to recall the Snapshot parameters to the worksurface without affecting the audio path. Parameters can then be adjusted and saved. The user can then recall that specific snapshot with its new changes or return to audio.



Local I/O

The SD Series has local I/O in abundance. The SD7 includes 12 analogue inputs, 12 analogue outputs, and 12 AES I/O (mono); 4 redundant MADI ports per engine, and 1 Optocore loop (with an optional second if required). Even the smallest offering, the rack-mount SD11, has a monumental I/O section: 16 mic/line inputs, 8 line outs, 2 mono AES/EBU, and 1 MADI port.

iPad® Control DiGiCo also has an SD App, which allows you to control any of the major parameters of the console over WiFi with an iPad. Better still, the iPad is not only a remote control surface, but also an expansion of the control surface. As an example, the SD9 has 8 macro buttons, but if you connect the iPad via the SD App, many more user-defined buttons appear; in fact as many as 256 Macros can be created. So you can have your quick access go-tos in one hand (literally), while the console remains clear to mix the show on.

Remote Control and Offline Software An embedded PC powers the SD Series' user interface and work-surface, running independently of the console's Stealth engine, therefore you can take the standard DiGiCo software and run it on a consumer PC as offline software. It gives access to every console function, adding real functionality in two ways: offline preparation of sessions, which means you can tweak and edit your sessions while on a plane, train, tour bus, or wherever takes your fancy. Just fire up the appropriate offline software version, load a session, and away you go; and then when you're done, save it to a USB, and plug it back into the console.

You can also turn your offline software into remote control via your PC, to achieve realtime remote control over every aspect of your session; and because it's network connected, you're not just limited to one: multiple remotes are supported simultaneously (wired or wireless). This is gold in the theatre environment in particular, where it's commonplace for sound designers to sit at separate workstations with multiple screens, working independently of the operator during tech rehearsals.

MADI (Multi Channel Digital Interface) This classic AES Audio format may have been designed for the studio environment some twenty years ago, but its capabilities have grown, as has its popularity; MADI is now commonplace in the broadcast sector as well as the live console market.

MADI was already a proven reliable transmission system, capable of carrying a vast amount of audio, but cable run limitations deemed it null and void for the live sector. However, DiGiCo developed a method of line driving the MADI, more than doubling the distances, and as a result, it is very much the industry standard today. On the SD-Racks, you can also run the MADI (utilising the Aux MADI connections) at 96kHz.

DiGiCo's optical connectivity via 2nd generation Optocore

All DiGiCo consoles benefit from a 2Gigabit Optocore system, which allows users to connect up to 14 racks and 5 audio engines or consoles on one optic loop; as a result, users can assign any output card on any rack to any console on the loop. Users can also send up to 56 channels of audio between the desks - making it a no-brainer for submixing - with HMA, Opticalon, or ST connectivity (single or multi-mode). In addition, the desks also connect people, thanks to the new text chat function on every Optocore-enabled console. The system is functional in single or multi-mode, and users also benefit from a graphical display of the Audio I/O.

24 IDs (devices) are available on the optical loop, which means engineers can access I/O from each engine or console. As an example, let's say an engineer at FOH might only want L/C/R with an aux sub out – he or she could take the first output strip on rack one; the broadcast engineer might only need talkback feeds from his console – he or she takes the second output strip; and the monitor engineer could then take the last five slots (40 outputs). The SD7 platform also allows for two independent optical loops, so it can buss and route between both.

Waves Plugins In addition to the SD Series' superb internal processing, you can also access all the plugins you know and love from the studio into any SD console thanks to Waves SoundGrid®, which allows access to a vast range of Waves plugins, available in special bundles.

And it's not just about the Waves effects, DiGiCo takes the concept of Waves integration even further than the norm: unlike all other SoundGrid platforms, DiGiCo provides complete control of plugin parameters, as well as recall of snapshots, and simple loading and saving, directly from the console's surface. A Waves I/O card is fitted directly to the console – and this is no-compromise I/O, it doesn't use up any existing I/O on the console. In addition, there is no external computer needed to control the plugin parameters, that's all done through the touchscreen and the hardware controllers. The only external elements are the SoundGrid sever, an approved network switch, and your iLok or USB key to authorise the plugins. SoundGrid is a very low-latency network-based system that integrates perfectly with DiGiCo; audio to SoundGrid comes directly from the SD engine into the I/O card, so there is no format conversion or clocking to worry about. From there, the I/O card audio connects to SoundGrid through standard networking hardware, and it's standard CAT5E connectivity for everything, making setup very straightforward.

The console-based MultiRack software allows you to set up, control, recall, snapshot and save Waves plugin configurations within your overall mix setup, while the processing power of the SoundGrid module allows the console to drive itself and its work surface. This unique DiGiCo / Waves setup gives you instant access to up to 64 fully integrated Waves stereo processor racks, with up to 8 plugins in each rack, and Waves TDM plugins collections can also be utilised.

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

Theatre

From a mixing perspective, theatre is a notoriously tough sector to work in, as so much is going on all of the time. With this in mind, we designed a theatre (T) extension to the standard SD software, which opens more doors for operators working in that environment, and provides more flexibility. Many theatre operators still like to mix hands-on, so we've added some cool additional elements that allow the console to take care of more of the 'behind the scenes work' for you: a more powerful cue list automation and editing, and the ability to alter your cues on the fly, are prime examples.

› Marriott Show - Lincolnshire Illinois

The SD7, SD10, SD9 (T) are everything their standard counterparts are but with a theatrical twist, adding the most advanced set of cue processing tools known to man (or should that be machine?). For this reason, it has become the new standard in theatre mixing worldwide. There are several key benefits for theatre operators to get excited about: DiGiCo's Advanced Cue Update system, Channel Aliases, and Matrix Nodal Delays. The Nodal Delays add more than 1,000 individually recordable delay settings, which are super-crucial in theatre world when it comes to aligning groups of speakers, and getting your positioning spot-on within the sound field. As with everything DiGiCo, the Cue Update programming tools have been developed in conjunction with some of the world's leading sound designers, which has resulted in an Auto Update System which offers precise control over the update and recall of channel settings in every single cue. The Aliases come into play when an actor needs to change costume or character: channel settings will change, but the actor won't, so this cool function populates the show with that person's unique channel settings (EQ, dynamics, etc.), so all the programming and cue-to-cue changes are retained, they're just updated with new actor specific settings.

Many of today's leading international theatre productions incoporate child actors, who are limited by law in terms of how many working hours they are allowed to put in, so several child actors will often be assigned the same role, and they'll alternate shows. This also means different tonal and dynamic qualities will appear in their respective voices, and from the operator's point of view, much like when an understudy is taking the lead for a performance, they're not always sure until the last minute who is going to play that character on the night. This is where the DiGiCo Players tool comes in: operators are able to apply settings for numerous actors under the same character name, and then choose which actor is playing a particular role; the production is then automatically updated with all of the correct settings (EQ, dynamics, filters, etc.) but without destroying the specific cue-to-cue programming you've made.

Another neat little tweak is the addition of a VCA programming map, which allows the operator to see (and plan) changes throughout the show. Poor programming can make the life of a theatre operator pretty hellish, especially as the shows are so cue-heavy, but a function like this helps alleviate all that stress, and stops the operator from losing his or her mind when trying to keep up!

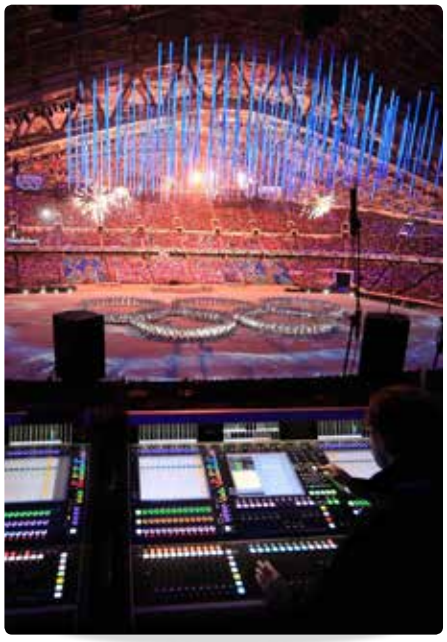
› American Folklore Theatre

› Batman - Live Theatre Tour

› A Chorus Line

Broadcast

Broadcast applications can be particularly demanding to mix, which led to us designing a bespoke broadcast (B) extention to the standard SD software, which goes that stage further. As well as extra facilities the console's routing flexibility has rocketed, to allow for LCRS and 5.1 mixes as well as the usual stereo and LCR. And that's just for starters.



The B software (for broadcast) can be applied not just to the SD7, but the SD5, SD10, SD9 and SD11 as well; and when the SD11 becomes the SD11B, it's probably the tiniest, most powerful, real broadcast console available, all within a 19-inch rack-mount chassis... Frightening!

The SD7 always includes surround capability, of course, but B brings surround formats to the SD5, SD10, SD9 and SD11 for up to 5.1 on the input channels and the output busses. The B software also adds solo options, Backstop PFL, Dual AFL and PFL, Auto Fader PFL, and Surround Solo Busses. The Solo options integrate with a fully customisable monitor matrix, where you can make multiple speaker selections, catering for up to 5.1.

Furthermore, we've included Mix Minus busses, which are also perfect for applications such as radio phone-ins, or remote satellite feeds; and any mono busses can be used as a Mix Minus.

What's really great and unique about these application-specific enhancements is, there is no hardware change, so from a rental company's point of view, for example, it's perfect: to turn your existing SD console into an SDT or an SDB, all you need to do is get a software upgrade, which takes just a few seconds; and in a few more seconds, you can return it back to its live self, as a regular SD7, 5, 10, 9 or 11. There is no need to add to your inventory, because the SD Series is the gift that keeps on giving.

› Sochi Winter Olympics - 2014

"I've had the opportunity to collaborate with and deploy DiGiCo on a number of large scale Broadcast events and truly appreciate the performance, flexibility and reliability of both the product and the support team." *Kevin Cleary Broadcast Audio Producer*

"The console is the most powerful, problem-free device in the whole truck!" *Rodney Kobayakawa, General Manager, NEP Hawaii*

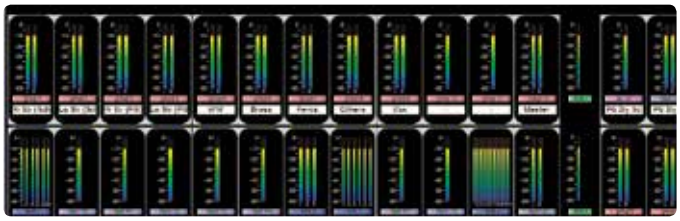
"A lot of our events are setup, shoot and strike and in a single, 10-hour day and I've got to give individuals that have never operated the console before a generic overview in less than an hour. I believe I'm able to do that rather well because the console is very easy to use. And DiGiCo's training and customer service in that area is exceptional." *Kory Loy, Engineer in Charge, Sure Shot Transmissions*

- up to 253 (MAX) Input Channels
- up to 124 Aux / Sub-Group Busses
- L/R/LCR/LCRS/5.1 Master Buss
- 32 x 32 Full Processing Matrix
- 2 Solo
- 253 Dynamic Equalizers
- 253 DiGiTuBes
- 253 Multiband Compressors
- 48 Digital FX
- 32 Graphic Equalizers
- Optional Waves Integration
- 48/96 kHz Sample Rate
- Standard Optics
- 36 VCA Style Control Groups

Folding and Unfolding of Channels

Video Network Link (VNL)

Full Redundancy with Dual Engines and Operating Systems



Interactive Dynamic Metering (IDM)

1 FGPA Engines (A&B)
2 Optical I/O
3 Waves
4 VGA
5 Ethernet
6 AES Sync
7 Video Reference
8 I/O Word Clock
9 MADI
10 GPIO
11 MIDI
12 Video I/O
13 I/O
14 SMPTE I/O
15 Dual Redundant PSU

Other Models and Upgrades

SD7T

- Cue list automation and editing
- Channel Aliases
- Crosspoint delays on each of the matrix nodes
- Channel Sets
- Players Tool

SD7B

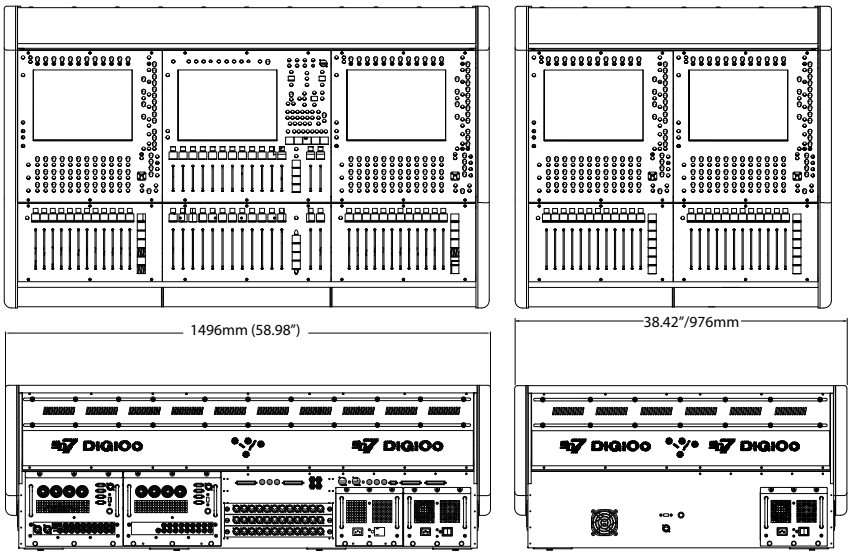
- 5.1 monitor matrix
- Mutli channel folding
- User defined stem order selection
- Mix Minus busses (one per mono channel)
- Backstop PFL (over press) and Auto PFL
- Audio Follow Video implementation

EX-007

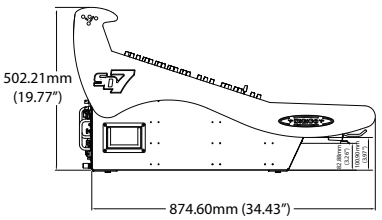
Connecting up to two EX-007s directly to the main console gives you additional control for up to 48 channels of your mix. The expandability of the SD7 along with the application specific software makes using the desk on a studio floor for TV shows or award ceremonies a dream. In a live performance mixing an orchestra or large event becomes even easier.

Of course the EX-007 doesn't only come with faders, it also features two additional 15"TFT LCD touch screens and HTL encoders and its own dedicated control PC and power supply. All this together with the use of CAT5E to connect to the main console means the fader expansion unit can be used up-to 100 meters away from the main desk — should you need to!

Dimensions



SD7 Console
1496mm(w) x 875mm(d) x 503(h) - 107Kgs
58.9"(w) x 34.45"(d) x 19.8(h) 236lbs
SD7 Console packed in flightcase
1600mm(w) x 600mm(d) x 1240mm(h) - 245Kgs
62.93" (w) x 23.63" (d) x 48.9" (h) - 540lbs
EX007 Console
976mm(w) x 875mm(d) x 503mm(h) - 80Kgs
38.42" (w) x 34.45" (d) x 19.8"(h) - 176lbs
EX007 Console packed in flightcase
1070mm(w) x 600mm(d) x 950mm(h) - 165Kgs
42.13" (w) x 23.63" (d) x 37.4" (h) - 363lbs



Racks

SD-Rack > 32 | SD-MiNi Rack > 34 | SD-Nano Rack > 34 | D2-Rack > 35

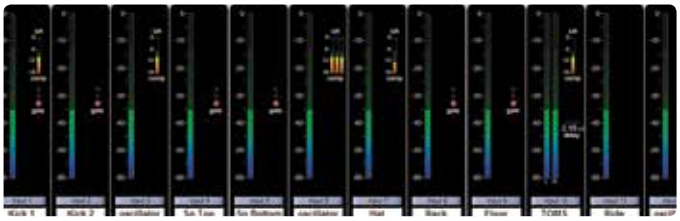
SD5

- up to 253 Input Channels
- up to 128 Aux / Sub-Group Busses
- LR/LCR/LCRS/5.1 Master Buss
- 24 x 24 Full Processing Matrix
- 2 Solo
- 253 Dynamic Equalizers
- 253 DiGiTuBes
- 253 Multiband Compressors
- 48 Digital FX
- 32 Graphic Equalizers
- Optional Waves Integration
- 48/96kHz Sample Rate
- Standard Optics
- 36 VCA Style Control Groups

Smart Key Macros

Hidden Til Lit (HTL)

Multiple 15" Touch Screen Display



Interactive Dynamic Metering (IDM)

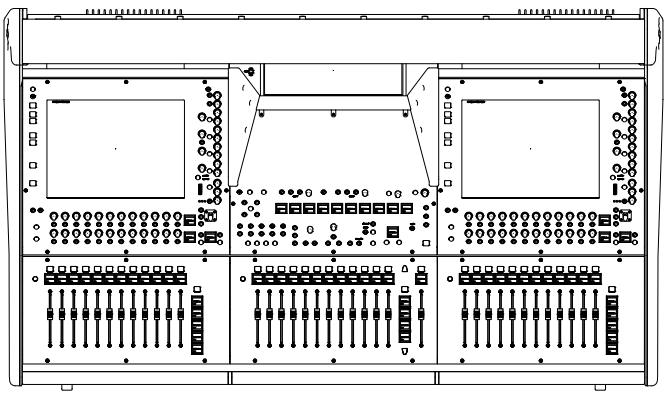
1. MIDI
2. AES/EBU I/O
3. Line Input
4. Line Output
5. AES/ EBU Sync
6. Optical I/O
7. Video Sync
8. I/O Word Clock
9. MADI
10. GPIO
11. Dual Redundant PSU

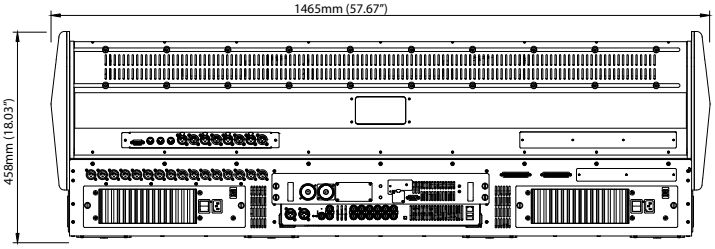
Other Models and Upgrades

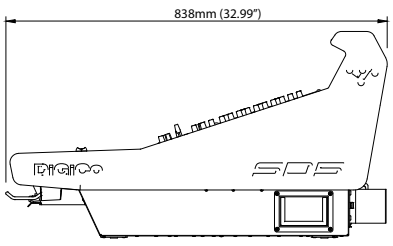
SD5B

- 5.1 monitor matrix
- Mutli channel folding
- User defined stem order selection
- Mix Minus busses (one per mono channel)
- Backstop PFL (over press) and Auto PFL
- Audio Follow Video implementation

Dimensions







SD5 Console
1465mm(w) x 838mm(d) x 458mm(h) - 116Kgs
57.67"(w) x 32.99"(d) x 18.03"(h) - 256lbs
SD5 Console packed in flightcase
1600mm(w) x 600mm(d) x 1200mm(h) - 235Kgs
62.93" (w) x 23.63" (d) x 47.25" (h) - 518lbs

Racks

SD-Rack > 32 | SD-MiNi Rack > 34 | SD-Nano Rack > 34 | D2-Rack > 35

SD5 cs

- 132 Input Channels
- 56 Aux / Sub-Group Busses
- LR/LCR/LCRS/5.1 Master Buss
- 24 x 24 Full Processing Matrix
- 2 Solo
- 218 Dynamic Equalizers
- 218 DiGiTuBes
- 218 Multiband Compressors
- 24 Digital FX
- 24 Graphic Equalizers
- Optional Waves Integration
- 48/96kHz Sample Rate
- 24 VCA Style Control Groups

Smart Key Macros

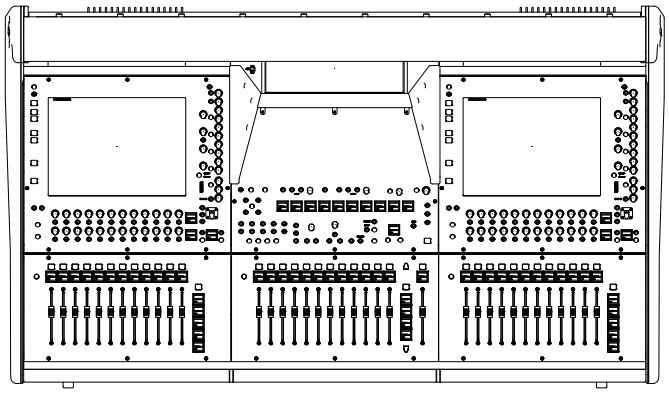
Hidden Til Lit (HTL)

Multiple 15" Touch Screen Display

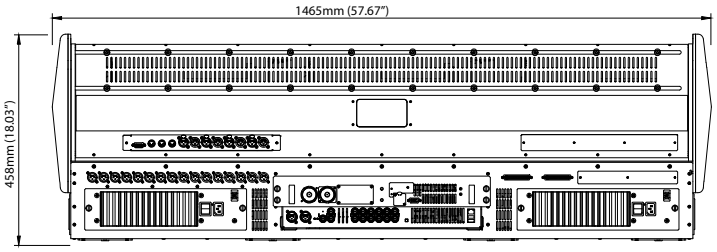
Interactive Dynamic Metering (IDM)

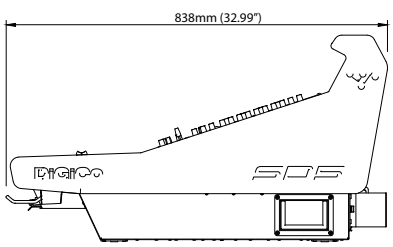
1 MIDI
2 AES/EBU I/O
3 Line Input
4 Line Output
5 AES/ EBU Sync
6 Video Sync
7 I/O Word Clock
8 MADI
9 GPIO
10 Dual Redundant PSU

Dimensions



SD5cs Console
1465mm(w) x 838mm(d) x 458mm(h) - 116Kgs
57.67"(w) x 32.99"(d) x 18.03"(h) - 256lbs
SD5cs Console packed in flightcase
1600mm(w) x 600mm(d) x 1200mm(h) - 235Kgs
62.93" (w) x 23.63" (d) x 47.25" (h) - 518lbs





Racks

SD-Rack > 32 | SD-MiNi Rack > 34 | D2-Rack > 35

- 132 Input Channels
- 56 Aux / Sub-Group Busses
- LR/LCR/LCRS/5.1 Master Buss
- 24x24 Full Processing Matrix
- 2 Solo
- 218 Dynamic Equalizers
- 218 DiGiTuBes
- 218 Multiband Compressors
- 24 Digital FX
- 24 Graphic Equalizers
- Optional Waves Integration
- 48/96 kHz Sample Rate
- Standard Optics
- 24 VCA Style Control Groups

Smart Key Macros

20 Segment LED Meters

Fader Banks in Blocks of 12

Electronic Scribble Strips (ESS)

1 Waves
2 GPIO
3 Optical HMA Optical Con
4 Littlite
5 MIDI
6 AES/EBU I/O
7 Mic/Line Input
8 Line Output
9 Dual Redundant PSU
10 AES/EBU I/O Sync
11 I/O Word Clock
12 MADI
13 VGA
14 Ethernet
15 USB

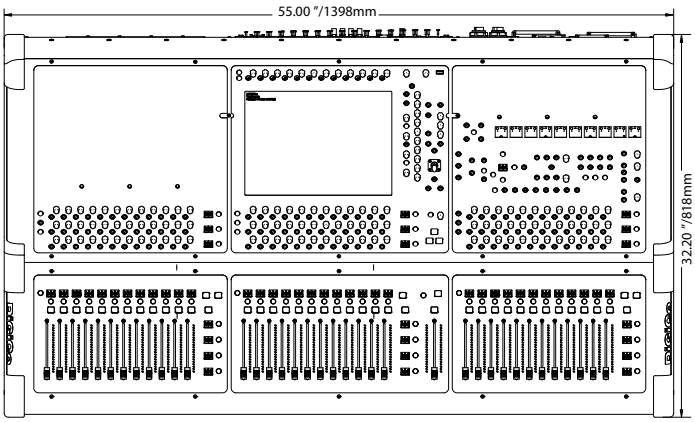
Other Models and Upgrades

- Cue list automation and editing
- Channel Aliases
- Crosspoint delays on each of the matrix nodes
- Channel Sets
- Players Tool

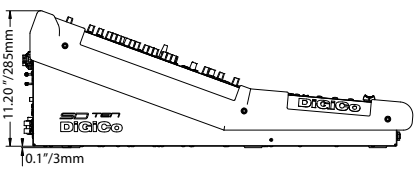
- 5.1 monitor matrix
- Mutli channel folding
- User defined stem order selection
- Mix Minus busses (one per mono channel)
- Backstop PFL (over press) and Auto PFL
- Audio Follow Video implementation

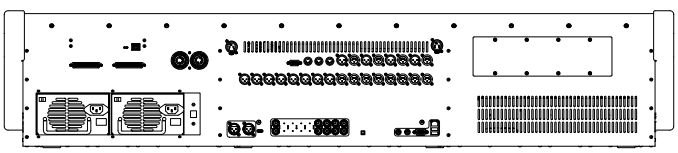
- Compact 24 input fader version

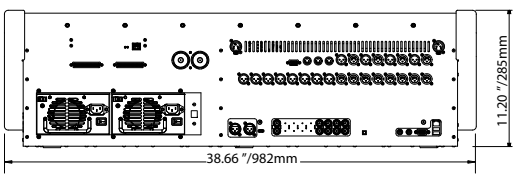
Dimensions



SD10 Console
1398mm/*982mm(w) x 818mm(d) x 285mm(h) - 60Kgs/*52Kgs
55.0"/*38.66"(w) x 32.2"(d) x 11.2(h) 133lbs"/*114lbs
SD10 Console packed in flightcase
1560mm/*1250mm (w) x 500mm (d) x 1170mm (h) - 175Kgs/*140 Kgs
61.42"/*49.22" (w) x 19.69" (d) x 46.07"(h) 385lbs/*308lbs
* Smaller frame size weights and dimensions







Racks

SD-Rack > 32 | SD-MiNi Rack > 34 | SD-Nano Rack > 34 | D2-Rack > 35

- 120 Input Channels
- 48 Aux / Sub-Group Busses
- LR/LCR/LCRS/5.1 Master Buss
- 16x16 Full Processing Matrix
- 2 Solo
- 190 Dynamic Equalizers
- 190 DiGiTuBes
- 190 Multiband Compressors
- 16 Digital FX
- 24 Graphic Equalizers
- Optional Waves Integration
- 48/96 kHz Sample Rate
- Optional Optics
- 24 VCA Style Control Groups

20 Segment LED Meters

8 Macro Buttons

Flexible Snapshot Panel

Surface Offline Capability

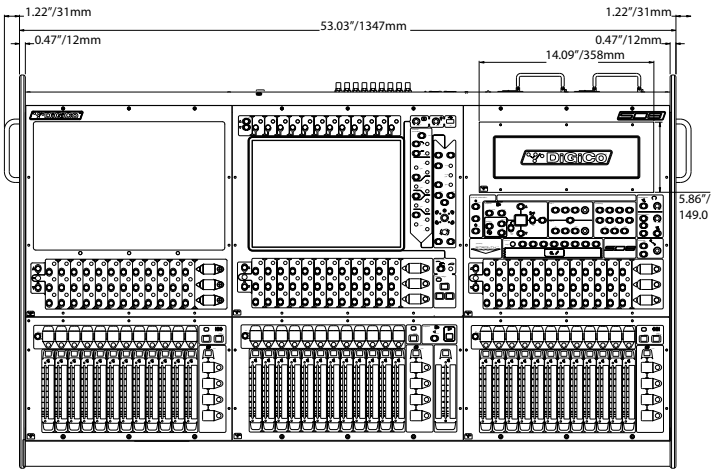
1. Littlite
2. MIDI
3. AES/EBU I/O
4. Mic/Line Input
5. Line Output
6. Dual Redundant PSU
7. AES/EBU I/O Sync
8. I/O Word Clock
9. MADI
10. VGA
11. Ethernet
12. USB

Other Models and Upgrades

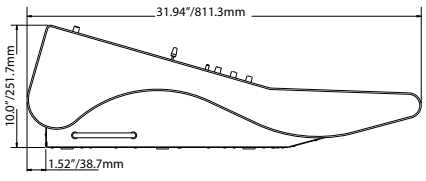
SD8-24

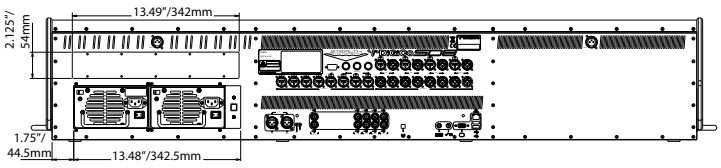
- Compact 24 input fader version

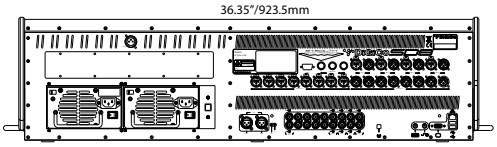
Dimensions



SD8 Console
1347mm/*923.5mm(w) x 811.3mm(d) x 254mm(h) - 71Kgs/*50Kgs
53.03"/*36.35"(w) x 31.94"(d) x 10"(h) - 157lbs/*111.23"lbs
SD8 Console packed in flightcase
1500/*1100mm (w) x 450mm (d) x 1150mm (h) - 155Kgs/*127 Kgs
59.06"/*43.31" (w) x 17.72" (d) x 45.28" (h) 341lbs/*279 lbs
* Smaller frame size weights and dimensions







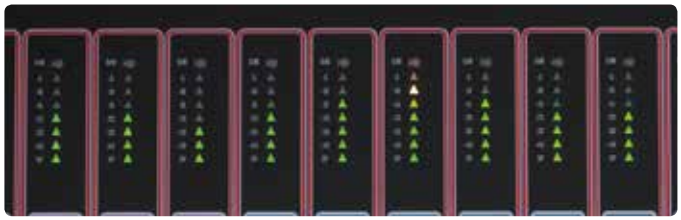
Racks

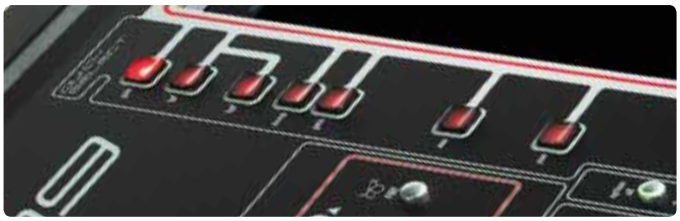
SD-Rack > 32 | SD-MiNi Rack > 34 | SD-Nano Rack > 34 | D2-Rack > 35

- 96 Input Channels
- 48 Aux / Sub-Group Busses
- LR/LCR Master Buss
- 12 x 8 Full Processing Matrix
- 2 Solo
- 155 Dynamic Equalizers
- 155 DiGiTuBes
- 155 Multiband Compressors
- 12 Digital FX
- 16 Graphic Equalizers
- Optional Waves Integration
- 48/96kHz Sample Rate
- Optional Optics
- 12 VCA Style Control Groups

Macro Buttons

Electronic Scribble Strips


Meters


Quick Access Buttons

1 Littlite
2 GPIO
3 MIDI
4 AES/EBU Input
5 Mic/Line Input
6 Dual Redundant PSU
7 AES/EBU Output
8 Line Output
9 I/O Word Clock
10 MADI
11 Dual D-Rack CAT5E
12 VGA
13 Ethernet
14 USB

Other Models and Upgrades

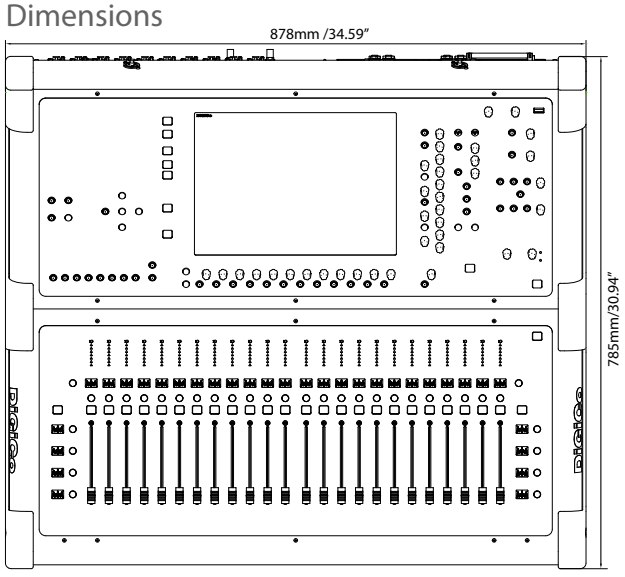
SD9T

- Cue list automation and editing
- Channel Aliases
- Crosspoint delays on each of the matrix nodes
- Channel Sets
- Players Tool

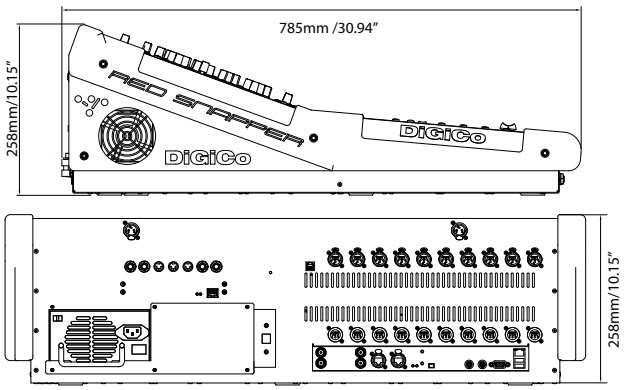
SD9B

- 5.1 monitor matrix
- Mutli channel folding
- User defined stem order selection
- Mix Minus busses (one per mono channel)
- Backstop PFL (over press) and Auto PFL
- Audio Follow Video implementation

Dimensions



SD9 Console
878mm(w) x 785mm(d) x 258mm(h) - 36Kgs
34.59"(w) x 30.94"(d) x 10.15"(h) - 80lbs
SD9 Console packed in flightcase
1100mm (w) x 500mm(d) x 1000mm(h) - 115Kgs
43.31" (w) x 19.69" (d) x 39.37" (h) - 253lbs



Racks

SD-Rack > 32 | SD-MiNi Rack > 34 | SD-Nano Rack > 34 | D-Rack > 35 | D2-Rack > 35

- 48 Input Channels
- 24 Aux / Sub-Group Busses
- LR/LCR Master Buss
- 8 x 8 Full Processing Matrix
- 2 Solo
- 83 Dynamic Equalizers
- 83 DiGiTuBes
- 83 Multiband Compressors
- 6 Digital FX
- 12 Graphic Equalizers
- Optional Waves Integration
- 48kHz/96kHz Sample Rate
- Optional Optics
- 8 VCA Style Control Groups

Detatchable Side Cheeks To Enable Rack Mounting

Comprehensive Local I/O

CAT5E and MADI Port For Connection To Racks And Or DAW's

12 Faders x 4 Banks x 2 Layers

1 Littlite
2 Mic/Line Input
3 Line Output
4 Waves
5 AES/EBU I/O
6 GPIO
7 MIDI
8 Removable Power Supply
9 I/O Word Clock
10 MADI
11 D-Rack CAT5E
12 VGA
13 Ethernet
14 USB

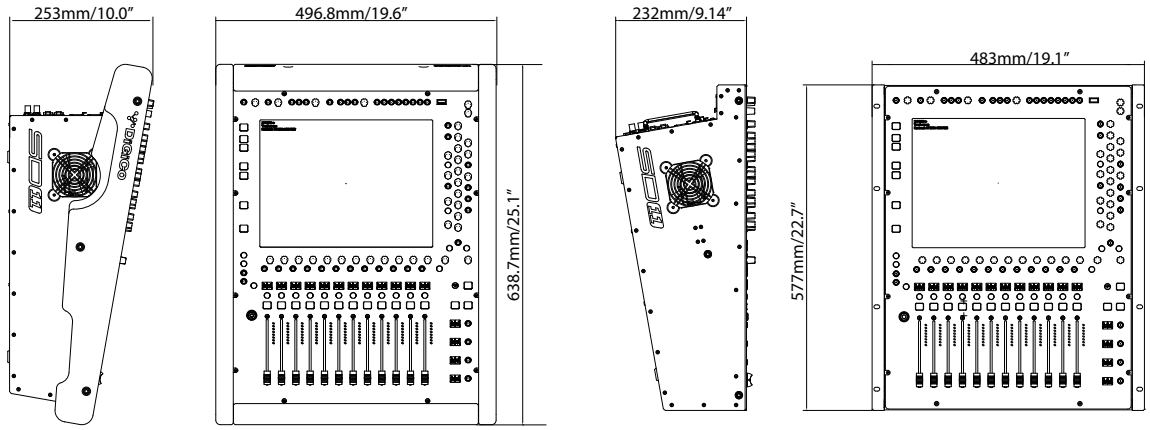
Other Models and Upgrades

SD EFX SD EFX

- 80 Input Channels
- 12 x 8 Full Processing Matrix
- 8 Digital FX
- 5.1 Monitor Matrix
- User defined stem order selection
- Mix minus busses (one per mono channel)
- Backstop PFL (over press) and Auto PFL
- Audio Follow Video implementation

Dimensions

SD11 Console
496.8mm/483mm(w) x 638.7mm/577mm(d) x 253mm/232mm(h) - 24Kgs
19.6"/19.1"(w) x 25.1"/22.7"(d) x 10"/9.14"(h) - 53lbs
SD11 Console packed in flightcase
700mm (w) x 500mm(d) x 900mm(h) - 73Kgs
27.56" (w) x 19.69" (d) x 35.44" (h) - 160lbs
* Rack mountable size weights and dimensions



Racks

SD-Rack > 32 | SD-MiNi Rack > 34 | SD-Nano Rack > 34 | D-Rack > 35 | D2-Rack > 35

SD-Rack

The SD-Rack is the finest I/O rack available, capable of delivering up to 192kHz high resolution analogue I/O converters and multiple digital formats simultaneously, be it MADI, AES/EBU, Dante, AES-42, ADAT, or Aviom.

It's also based around the same Stealth FPGA technology present in the SD console engines, so it can run the optical loop at 96KHz, while providing a down-sampled 48KHz feed to the broadcast truck from one of the MADI output streams. This is industry-leading A/D conversion, and complete with DiGiCo's famous Gain Tracking™, all consoles benefit from +/-40dB of digital gain.

The gain can be set independently, on a channel-by-channel basis: once it's set, each of the consoles on the loop can then Gain Track their own mixes; and if you do need to tweak any analogue gain settings, each Gain Tracked channel will automatically compensate, ensuring your mix stays the same. And what's really cool is, any of those 5 consoles on the loop can then take control of an analogue gain should clipping occur, safe in the knowledge that everyone else's mix will be unaffected.

There are 14 slots on the SD-Rack, which amounts to 56 ins and outs, and it comes with or without optics. When running at 48kHz, the two MADI ins and outs provide 56 fully redundant input and output channels via a duplicate MADI aux; and 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, so the SD-Rack will automatically identify and configure each card for you; and because the power supplies are located at the top of the rack (also hot swappable, by the way), you won't find yourself battling through mountains of cable to get to them!

192kHz Mic/Line Input Card

192kHz Analogue Output Card

AES/EBU Output Card

AES/EBU Input/Output Card with bi-directional sample rate conversion

Dante Input/Output Card

AES/EBU Input Card (XLR)

AES/EBU Input /Output Card (BNC)

AES-42 Input Card for digital microphones

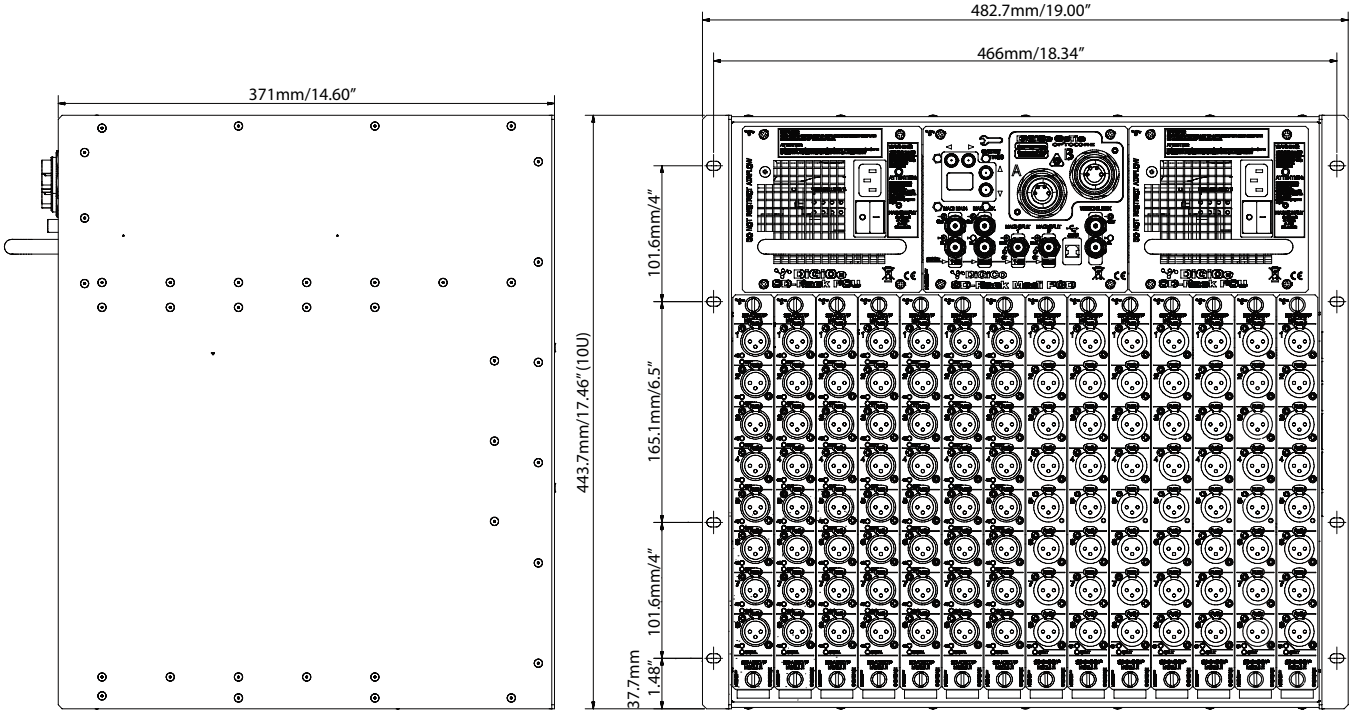
ADAT Input/Output Card with optical connections

HD-SDI Card

Aviom D-16c A-Net Card


DiGiCo
192 KHz
SD-Rack


DiGiCo
SD-Rack PSU
DiGiCo
SD-Rack Madi POD
DiGiCo
SD-Rack PSU


482.7mm/19.00"
466mm/18.34"
371mm/14.60"
443.7mm/17.46" (10U)
101.6mm/4"
165.1mm/6.5"
101.6mm/4"
37.7mm
1.48"

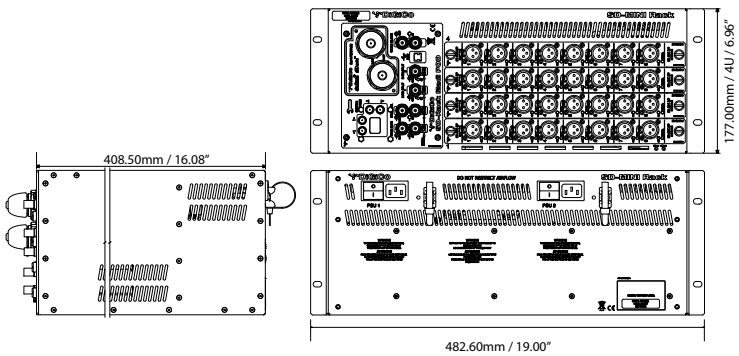
SD-Mini Rack

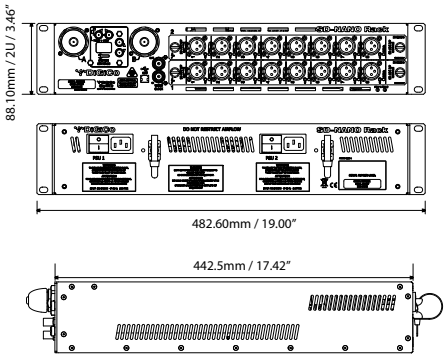
The SD-MINI is a 4U rack and can accept SD input and output cards, be they analogue or digital, including AES/EBU, Dante, AES-42, ADAT, HD-SDI and Aviom. Running purely digital, the MINI can run up to 32 ins and outs. Or if it's all analogue, you can have a maximum of 32 ins or outs or any combination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

There is also the ability to run the rack at different sample rates and to convert the Gain Tracking™ split outputs to other sample rates for compatibly with external devices.

SD-Nano Rack

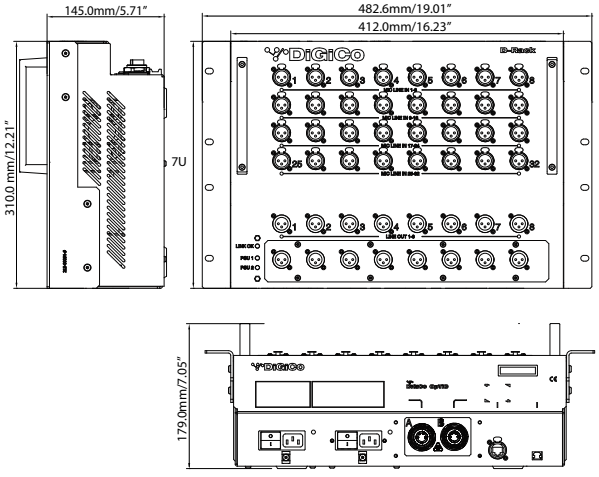
At the smallest end of the spectrum is the SD-NANO Rack. This 2U stage box works almost exactly the same way as the MINI, except it is half the size and therefore can only handle half the amount of inputs and outputs. The NANO is only available with optical connectivity.





D-Rack

The next rack in the DiGiCo series of high sample rate interfaces is the D-Rack. It comes complete with CAT5E 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 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.



D2-Rack

The D2-Rack is the latest in addition to the range of high sample rate racks. The compact 9U D2-Rack has a fixed format 48 inputs with 16 outputs fitted as standard. The output count can be increased to 32 by populating the 2 spare output slots with one or more of the 2 option modules – Line out or AES out
or Aviom.

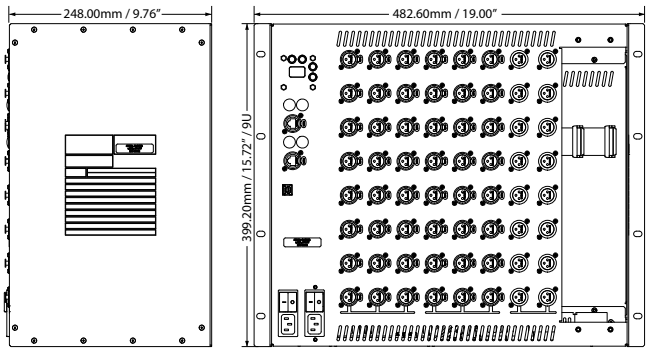
The 48 inputs can be specified as either 48 mic in or 24 mic/24 AES in.

As standard, there are 2 MADI Ports, available either as BNC or DiGiCo CAT5E connections that are available on the SD9 and SD11. These ports allow rack sharing between any 2 two SD Series consoles or digital splits for recording. When running at 96K, these 2 ports combine to create a single high definition 96K MADI connection with no reduction in IO.

The D2-Rack has dual redundant power supplies as standard with LED indicators on the front panel.

The SD-Rack Style menu system allows for customises rack settings and the control and activation the D2-Rack's internal oscillator.

Optional Aviom, AES and or Analogue Ouput cards



SD-RE and 12 Fader Remote

- 132 Input Channels
- 56 Aux / Sub-Group Busses
- LR/LCR/LCRS/5.1 Master Buss
- 24x24 Full Processing Matrix
- 2 Solo
- 218 Dynamic Equalizers
- 218 DiGiTuBes
- 218 Multiband Compressors
- 24 Digital FX
- 24 Graphic Equalizers
- Optional Waves Integration
- 48/96 kHz Sample Rate
- Standard Optics
- 24 VCA Style Control Groups

The SD-RE is a redundant engine for a DiGiCo SD10 console. It can connect to a 12-fader remote worksurface and a screen, keyboard and mouse.

It provides the same type of redundancy option for an SD10 that is standard on our flagship, dual engine SD7.

By simply connecting the compact, 3U box to the console with an Ethernet crossover cable and the system's audio racks using MADI or Optocore, the SD-RE provides a seamless backup for the console.

The console's control computer, audio engine, software application and important worksurface controls can all be duplicated on the redundant system, offering either automatic or manual switchover whenever it's required.

1. Waves
2. GPIO
3. Optical HMA Optical Con
4. MIDI
5. AES/EBU I/O Sync
6. Dual Redundant PSU
7. I/O Word Clock
8. MADI
9. VGA
10. Ethernet
11. USB
12. Remote Fader

Orange Box With DiGiCo's compact 2U Orange Box, you can use DMI (DiGiCo Multichannel Interface) cards to create audio paths over whatever interface you desire.

The Orange Box has 2 PSUs for redundancy, and 2 slots to accommodate any of our ten* different interfaces that allow you to convert pretty much any format to another.

How? We have Slot A and Slot B, let's say you have MADI on your product, but you want to go to Dante. No problem, just buy a DMI with MADI, and a DMI with Dante, connect them up via the two slots, and away you go.

It's the same with Hydra 2, Optocore, Aviom, AES, Analogue, and so on. This cool little 'anything in, anything out' box essentially gives you a choice of Multichannel user interfaces that enable you to send audio wherever you want, in whatever format you choose.

*Watch this space for more interfaces...!

DMI-DANTE

DMI-HYDRA 2

DMI-MADI-B

DMI-MADI-C

DMI-OPTO

DMI-AVIOM

DMI-ADC

DMI-AES

DMI-DAC

DMI-SOUNDGRID

Little Red Box This neat little USB-powered box allows users to expand the connectivity of their SD9 or SD11 console. How? Simple. The Little Red Box lets you share racks, and therefore operate either FOH or monitors. You can connect a D-Rack or a MADI Rack to 2 SD9s or SD11s, so the main console controls the gains and outputs on the rack, and the secondary console simply receives the inputs. DiGiCo's Gain Tracking™ system can be activated when needed, and there is also a handy little SPLIT MADI switch which allows you to split racks other than the D-Rack. And if you connect a DiGi-Rack, you're no longer limited to the Little Red Box's 32 inputs and 16 outputs: all 56 I/O will run at the same time. Furthermore, to avoid loss of available connections, there is a second USB port acting as a 'thru'.

Little Blue Box This sleek, rack-mountable unit is a powerful CAT5E/MADI to optical convertor, complete with 128 available channels (within the box). Whether it's a CAT5E connection from an SD console or D-Rack, or a MADI connection from an SD console, SD-Rack, or any other MADI device for that matter, it converts it seamlessly for optical transmission (and vice-versa, of course).

Purple Box This sleek, rack-mountable unit is a powerful CAT5E/MADI to optical convertor, complete with 128 available channels (within the box). Whether it's a CAT5E connection from an SD console or D-Rack, or a MADI connection from an SD console, SD-Rack, or any other MADI device for that matter, it converts it seamlessly for optical transmission (and vice-versa, of course).

The Purple Box allows two MADI or D-Rack streams (or a combination of the two), and its standard interface is opticalCON, though it is also available with ST or HMA connectors.

Dual Redundant Power Supplies — MADI — Select Switch — DiGiCo CAT5E — OpticalCON — MADI — DiGiCo CAT5E — OpticalCON

Interface One — Interface Two

Optional ST Connector

Optional HMA Connector

UB MADI The DiGiCo UB MADI is a lightweight, simple, USB-to-MADI converter, designed to provide a vast channel count with minimal latency. The result? A top quality audio interface capable of 48 channels of simultaneous I/O. Powerful. Stable. Reliable.

Because UB MADI is fully digital, end-to-end, it isn't reliant on USB's data clock for timing, so jitter becomes a thing of the past, and although the nature of USB does mean it's tougher to achieve low-latency, UB MADI has a highly-tuned USB processor and driver up its sleeve, which has led to industry-leading latencies over USB 2.0.

Furthermore, it's fully hot-pluggable. What does that mean? Audio flows within four seconds of the device being plugged in, and you don't need to reboot, even if you lose connection during recording or playback; and remarkably, you only need the USB cable to power it, even if you're driving signals over 100m of cable!

DiGiGrid MGO / DiGiGrid MGB Recording a live show is so important in today's industry for a FOH engineer, and these two cool Ethernet/MADI interfaces are just the ticket if it's low-latency, pristine multi-channel audio capture you're after when out on the road. In simple terms, MGO & MGB take portable MADI to a new level, in a pocket-sized footprint.

All you need is an MGO or MGB (Choose O for Optical, or B for BNC connection), an SD console (or any MADI-enabled console, for that matter), and a CAT5E cable, and you can record 128 channels of audio direct to your favourite DAW via your computer. Add a switch, and you can record onto two computers, simultaneously! And if you want to get really flash, why not add a Waves SoundGrid DSP server to the chain, for realtime processing and an abundance of high-end SoundGrid and 3rd party plugins?

Just stick one end of your CAT5E cable into your laptop, the other into your MADI-enabled console, and away you go. It's that easy. Now, let's say you've recorded a show using your MBG or MGO, and it's all sitting nicely on your DAW. Next morning, you're in a new city for a new show; switch to Virtual Soundcheck, and route that same audio back through your console, and Bob's your uncle. Band sound-checked. Job Done. Simple.

128 channels, captured straight through your DAW's 1GB Ethernet socket BNC or Optical inputs and flexible control panel set up. It's elegant, reliable and above all, simple to use.

REMOTE RACK PSU

There are certain situations where one needs absolute quiet. With this in mind, DiGiCo has developed the Remote Rack PSU or RR-PSU for its SD range of digital mixing consoles.

This simple, yet elegant, solution comprises two modules; one with a single multi pin connector, the other a 3U rack mount unit with a corresponding multi pin connector and two power supply sockets. These two modules are connected via a 5m long cable which allows the power supply to sit in a remote location, thus removing any fan noise from the level sensitive area.

The RR-PSU can also be used in conjunction with the SD11, with the additional benefit of turning the SD11 into a redundant PSU system.

Under normal circumstances, the PSU fan noise produced by our consoles is insignificant, but in some level sensitive theatres and halls we wanted to take our console to a further stage of quiet.

The RR-PSU is another addition to our ancillary range of equipment that makes this possible with our SD consoles.

Combine it with an SD11 and you have the makings of an amazing little broadcast console.

The DiGiCo RR-PSU can be used with SD10, SD8, SD9 and SD11 consoles.

Product Comparison

	SD7/SD7B/SD7T	SD5/SD5B	SD5cs
Max no of Input Processing Channels	253	253	132
Max aux / sub-group busses	128 (full processing**) (inc 2x solo buss)	128 (full processing**) (inc 2x solo buss)	56 (full processing**)
Surround	Yes	Yes	Yes
Matrix (in addition to aux / sub - group)	32 x 32 (full processing**)	24 x 24 (full processing**)	24 x 24 (full processing**)
Solo busses	2	2	2
Max no. of inputs - Non optic consoles	N/A	N/A	272
Max no. of inputs - 1 console on single optic loop	784	776	N/A
Local I/O spec	12x mic/line, 12x line outputs, 12x 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, 8x AES/EBU I/O (mono streams)
Max no. of outputs	784	776	272
Max no. of faders	52 (plus 48 if used with 2 x EX007)	37	37
Screen	3 x 15" touch	3 x 15" touch	3 x 15" touch
Ext. overview screen	Yes	Yes	Yes
I/O expandability	Yes	Yes	Yes
Insert points / channel	2	2	2
On Board FX	48	48	24
Graphic Eqs (32-Band)	32	32	24
Dynamic EQ	253	253	218
Buss 8-band Parametric EQ	Yes	Yes	Yes
Multiband Compression	253	253	218
DiGiTuBes	253	253	218
Multi-channels	Yes	Yes	Yes
VCA - style control groups	36	36	24
Set Spill	Yes	Yes	Yes
Mute Groups (part of control groups)	36	36	24
Reorder Busses	Yes	Yes	Yes
Multi-operator	Yes	Yes	Yes
MADI connectivity	4x Redundant ports	4x Redundant ports	4x Redundant ports
Optics	Yes (including dual loop)	Yes (including dual loop)	N/A
Snapshot Offline	Yes	Yes	Yes
Snapshot Auto-Update	Yes	Yes	Yes
Sampling rates	48 / 96 / 192 kHz	48 / 96 / 192 kHz	48 / 96 / 192 kHz
Signal processing	FPGA, up to 40-bit floating-point	FPGA, up to 40-bit floating-point	FPGA, up to 40-bit floating-point
Audio processing and OS location	Surface	Surface	Surface
Redundant Processing and Computer	Standard	Yes (Dual Surface)	Yes (Dual Surface)
Redundant PSU's	Yes	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)	Up to 56 in / 56 out / MADI split x2 (@ 48kHz)
Max no of Racks	18. On 2 loops = 32	18. On 2 loops = 32	4
Rack Interface	MADI / Optocore	MADI / Optocore	MADI / Optocore
Connector type for racks	BNC / HMA optics / ST / Opticalcon	BNC / HMA optics / ST / Opticalcon	BNC / HMA optics / ST / Opticalcon
Rack sharing FOH/MON	Gain Tracking™	Gain Tracking™	Gain Tracking™
Offline Software	Yes	Yes	Yes
Recording	Virtual Soundcheck up to 256 channels	Virtual Soundcheck up to 256 channels	Virtual Soundcheck up to 256 channels
Dimensions (mm) and Weight (kg)	1496(w) x 875(d) x 503(h) - 107Kgs	1465(w) x 838(d) x 458(h) - 116Kgs	1465(w) x 838(d) x 458(h) - 116Kgs
Dimensions (inches) and Weights (lbs)	58.9(w) x 34.45(d) x 19.8(h) 236lbs	57.67(w) x 32.99(d) x 18.03(h) - 256lbs	57.67(w) x 32.99(d) x 18.03(h) - 256lbs

* Smaller frame size weights and dimensions

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

Now with CORE 2 Software

	SD10/SD10B/SD10T	SD8	SD9/SD9B/SD9T	SD11/SD11i/SD11B
	132	120	96	48/80/80
	56 (full processing**)	48 (full processing**)	48 (full processing**)	24 (full processing**)
	Yes	Yes	No/Yes/No	No/No/Yes
	24 x 24 (full processing**)	16 x 16 (full processing**)	12 x 8 (full processing**)	8 x 8 / 12 x 8 / 12 x 8 (full processing**)
	2	2	2	2
	144	144	204	146
	648	648	708	650
	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)
	648 (Non Optics)	648	708	138 (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
	24	16	12	6/8/8
	24	24	16	12
	218	190	155/158/155	83/ 115/118
	Yes	No (4 band only)	No (4 band only)	No (4 band only)
	218	190	155/158/155	83/ 115/118
	218	190	155/158/155	83/ 115/118
	Yes	Yes	Yes	Yes
	24	24	12	8
	Yes	Yes	Yes	Yes
	24	24	12	8
	Yes	Yes	Yes	Yes
	By remote only	By remote only	By remote only	By remote only
	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	Yes	Yes
	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) D2-Rack (48 - 32)	D-Rack (32 - 16) - D2-Rack (48 - 32) - SD-Rack (56-56)	D-Rack (32 - 16) - D2-Rack (48 - 32) - SD-Rack (56-56)
	16	16	17	16
	MADI / Optocore (option)	MADI / Optocore (option)	MADI / RJ45 CAT5E / Optocore (option)	MADI / RJ45 CAT5E / Optocore (option)
	BNC / HMA optics / ST / Opticalcon (option)	BNC / HMA optics / ST / Opticalcon (option)	BNC / CAT5E / HMA optics / ST / Opticalcon (option)	BNC / CAT5E / HMA optics / ST / Opticalcon (option)
	Gain Tracking™	Gain Tracking™	Gain Tracking™	Gain Tracking™
	Yes	Yes	Yes	Yes
	Virtual Soundcheck up to 128 channels	Virtual Soundcheck up to 128 channels	Virtual Soundcheck up to 64 channels	Virtual Soundcheck up to 64 channels
	1398/*982(w) x 818(d) x 285(h) - 60/*52Kgs	1347/*923.5(w) x 811.3(d) x 254(h) - 71/*50Kgs	878(w) x 785(d) x 258(h) - 36Kgs	496.8/483(w) x 638.7/577(d) x 253/232(h) - 24Kgs
	55/*38.66(w) x 32.2(d) x 11.22(h) - 133/*114lbs	53.03/*36.35(w) x 31.94(d) x 10(h) - 157/*111.23lbs	34.59(w) x 30.94(d) x 10.15(h) - 80lbs	19.6/19.1(w) x 25.1/22.7(d) x 10/9.14(h) - 53lbs

E&OE

*** 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)

Company Profile

The Ultimate in Digital Consoles

Concert Sound

Broadcast

Permanent Install

Houses of Worship

Musical Theatre

DiGiCo's digital evolution really began with the release of the D5 Live – a breakthrough console that turned the pro-audio world on its head, and raised eyebrows across the industry. A super-powerful and slick piece of kit, with a massive feature set, which would set the standard for years to come.

Fast-forward 5 years, and the first of the SD Series was born – another real trend setter, combining a quick and intuitive user interface, and sonic capabilities that are still yet to be beaten. Each console in the range retains that classic analogue feel, with the ultimate in digital processing.

The SD Series raised the bar in many ways: not only in terms of power and flexibility, but creativity; never before had engineers experienced Super FPGA technology, which allowed for massive I/O capabilities, and the ultimate dynamic toolbox, easily accessible at the press of a button or via the touch screen.
From the rackmount SD11, all the way up to the flagship SD7, and everything in between, there is an SD console suited to every possible audio application - and they all pack a similar punch. Be it a bar or club gig, a stadium world tour, or a massive broadcast event such as The Grammys or The Oscars, the SD Series is so often the go-to.

But it doesn't end there.

DiGiCo has made quite a statement with its latest console, the S21. It's a baby SD7, at first glance – and the two actually have a lot in common: the same core engine, the same dynamic processing, and even multiple touch screens.

S21 packs all the power of its big brothers into a super-compact shell, and and keeps DiGiCo right on the cutting edge of the pro-audio industry.

Also, the release of Stealth Core 2™ processing takes the SD series to yet another unsurpassed level of channels, busses and processing power.

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