S-Series

S21 & S31

Awesome Specification. Exceptional Performance. Stunning Value.

MULTIBAND DYNAMICS

48 TRACK RECORDING

10 X 8 MATRIX

96kHz AS STANDARD

DMI
2 X PLUG-IN CARD SLOTS FOR INTERFACING WITH INDUSTRY FORMATS

INTUITIVE TOUCH USER INTERFACE

STEALTH DIGITAL PROCESSING™

S21

S31

Re-writing
the rule book

From the beginning, DiGiCo has been at the technological forefront with its products to stay ahead of the game in both flexibility and audio quality. It's impossible to wrap that evolution up in words, but to summarise, DiGiCo was the first console manufacturer to use TFT touch screen technology, and it pioneered Stealth Digital Processing's™ FPGA technology, to replace DSP.

SD7

SD5

SD10

SD8

SD12

SD9

SD11

STEALTH
DIGITAL PROCESSING

Stealth Digital Processing™ has been particularly instrumental in the SD-Range which, according to a recent independent survey, played a pivotal role in eight of the top ten international grossing tours. It proves that DiGiCo did exactly what it set out to do: be the cutting-edge brand in this industry; and thousands of users will now vouch for that. Safe to say, when it comes to live sound consoles, look no further than DiGiCo.

DiGiCo's high standards in not only audio quality but roadworthy mechanical design, have limited its ability to release an affordable introductory product. These values have required the same pioneering approach to design: not to follow the trend, but to deliver the flagship at an attractive price point and change expectations. DiGiCo's S-Series does exactly that.

Making
the step

By using lower cost FPGA components programmed with the same audio algorithms, combined with a new control processor, DiGiCo is able to deliver the S-Series with the fundamental technological values at its core.

Running in harmony with the FPGA core is a new ARM QuadCore RISC processor, which delivers faster processing with lower power consumption. Combined with the audio core, this has allowed for the development of a cost-effective console worthy of carrying the DiGiCo brand.

To date, it has been the Tiger SHARC™ controlling the FPGA, but integrating these three technologies, along with networking capabilities, was a brand new challenge.

Using the high power QuadCore SoC, associated with high bandwidth memory, the S-Series consoles connect to a low power 484-ball array FPGA, which in turn connects to fourth-generation control SHARC DSP, capable of not only controlling the FPGA, but leaves the door wide open for any additional processing in the future. And don't be fooled by its size: the engine is a pint-sized powerhouse.

Even during DiGiCo's humble digital beginnings back in 1997, touch screens have been at the heart of the operation – and today, you hardly see a console without one. The S-Series required even more rule-bending. DiGiCo opted for the latest P-CAP multi-touch screens for crystal clear visuals and gesture control, and put in a not one but two or even three of them!

When audio engineers first see the S-Series, they gravitate towards it. It really is remarkably inviting. This level of connection with the audio sources and their manipulation is something the world's leading audio engineers experience when they harness DiGiCo's super-powerful SD7.

And it's got more than a hint of the SD7 in its aesthetics, too, which is pretty apt considering it shares so much of its functionality: the aluminium extrusion, durable polycarbonate overlays, RGB LED Hidden Til Lit technology – even the touch sensitive faders and integrated LED light bar. You know it's a DiGiCo before you turn the PA on.

Ultimately, the S-Series redefines industry expectations at its price point and at 96kHz out of the box.
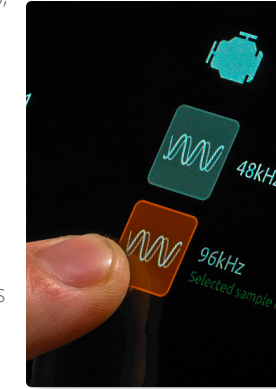
The compact multiple-screen design of S-Series provides 10 channel strips per screen, and instant feedback and control on 30 (20 on S21) simultaneous channels, which means it's got your back when it comes to mixing large shows; and the newly-designed drag, swipe and drop channel layout system makes it a piece of cake for engineers to customise their console by moving channels and busses across the surface.

Wherever you are on S-Series, a stereo LED meter is be at hand, showing your Master or Solo Buss output, making sure that you can always see what's going on.

The beauty of having multiple screens not only gives you more channels to view at any one time, but it means you can make one the master screen, while still operating on the others.

Touch the EQ screen, and you can choose to pinch, touch and drag your curves or for a more old school experience, just use the touch sensitive rotary encoders to fine-tune your frequencies, and press to change function or switch on or off. It's the same philosophy for all other processing functions within the console.

The new-look screen designs are developed under the flat designs philosophy, to aid the user's learning curve, and prevent the engineer being distracted. These will feel familiar to existing DiGiCo users, but at the same time, will make new operators feel right at home.

S-Series provides a great visual experience courtesy of the Hidden Til Lit functionality of the encoder rings, and anything not in use is automatically greyed out, so the engineers always know where they are and what they're working on.

Virtual Soundcheck

It was back in 2002 when DiGiCo first introduced the Touring world to 'Virtual Soundcheck' on the D5 console, and it's been a key feature on DiGiCo consoles ever since, including S-Series. It allows any input channel to be sent from a dedicated pre-processed Record Send point to any output socket. And with S-Series, multitrack recording is a walk in the park, thanks to an integrated 48-channel I/O USB audio interface, which will talk to any DAW software.

To listen back to a recording, just press the 'Listen to Copied Audio' button, and to switch back to the live sources, simply press 'Listen to Sources'. And this doesn't have to be switched for all channels at once. Each individual channel has its own Listen controls, so musicians can play along live to a previous recording and fine-tune their performance as well as their sound.

'Aux to Faders' Mode
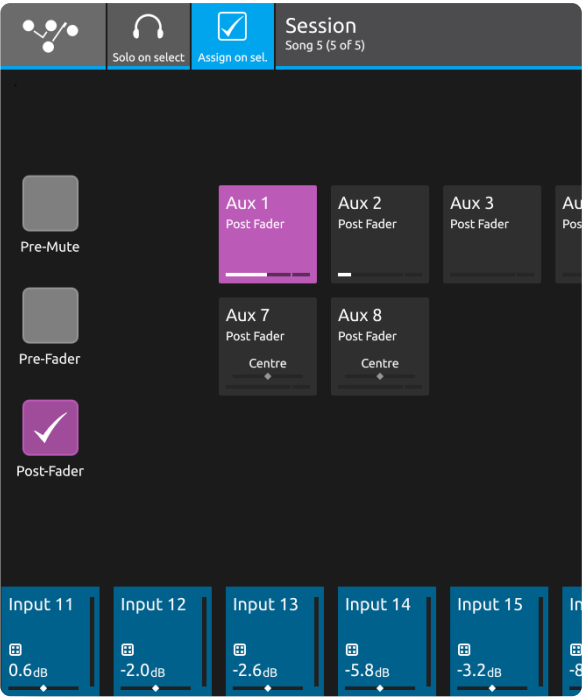
In addition to the standard 'Aux to Faders' function found on most digital consoles, the S-Series can also assign the sends to the row of rotaries underneath the screens; a dedicated 'Aux Sends' panel displays every Aux buss in the current session. Touching a buss on the screen will activate the buss solo and/or Aux to Faders, which makes it so simple to create a monitor mix.

Dynamics

Each Input, Aux, Group, and Matrix benefits from full processing at all times: there's a user-definable delay (up to 682ms), a HPF and LPF, a 4-Band Parametric EQ, and two Dynamic sections.

Dynamics 1 is by default a Single Band Compressor, but up to 21 Multiband compressors can also be assigned to any of the channels or busses on the console. To make everything nice and easy, you can work with each individual band, or all three at the same time; and the cherry on top is S-Series' Tube Emulation, 21 instances of which can be assigned to any 21 processing paths.

With Dynamics 2, the user can select between a keyed gate, a ducker, or another Single Band Compressor, but this time with a sidechain input. Both Dynamics show an RTA meter, allowing the user to visually determine the best parameters for the instrument selected.
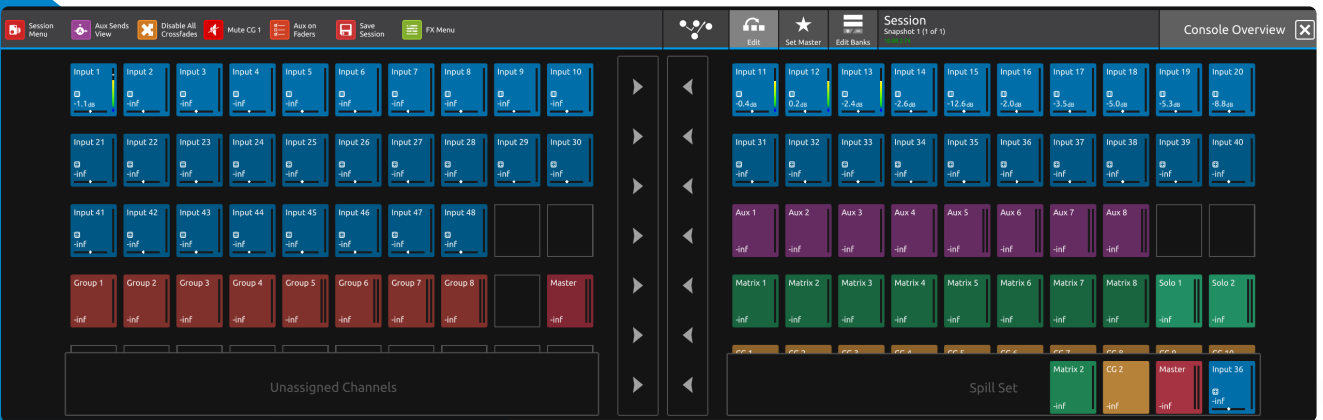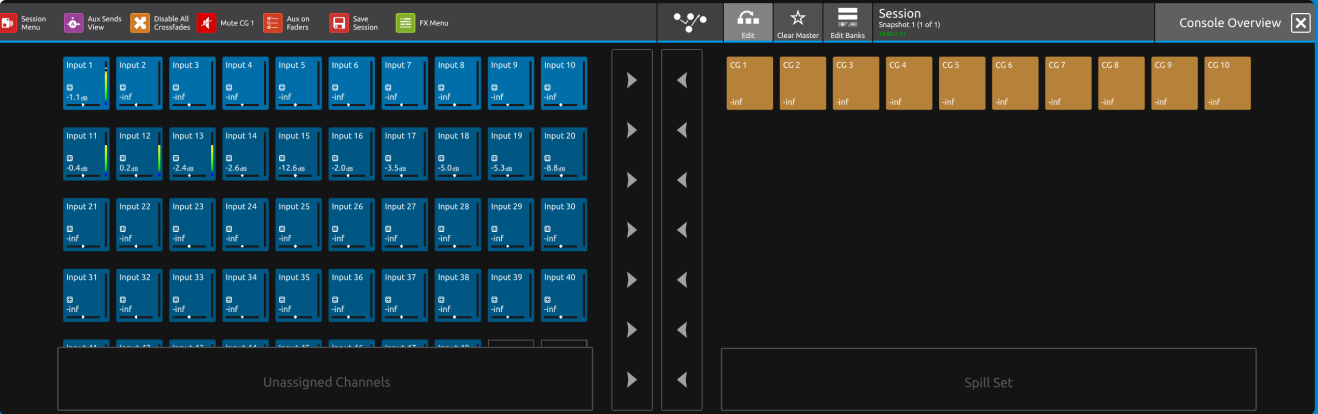

Features

Console Layout

Due to the complexities and layers within digital consoles today, it's crucial for any engineer to be able to assign banks, channels, and busses to wherever they feel most comfortable. With this in mind, DiGiCo has made it possible to assign any strip or bank anywhere on S-Series, taking full advantage of the multiple touch-screens for quick and simple customisation.
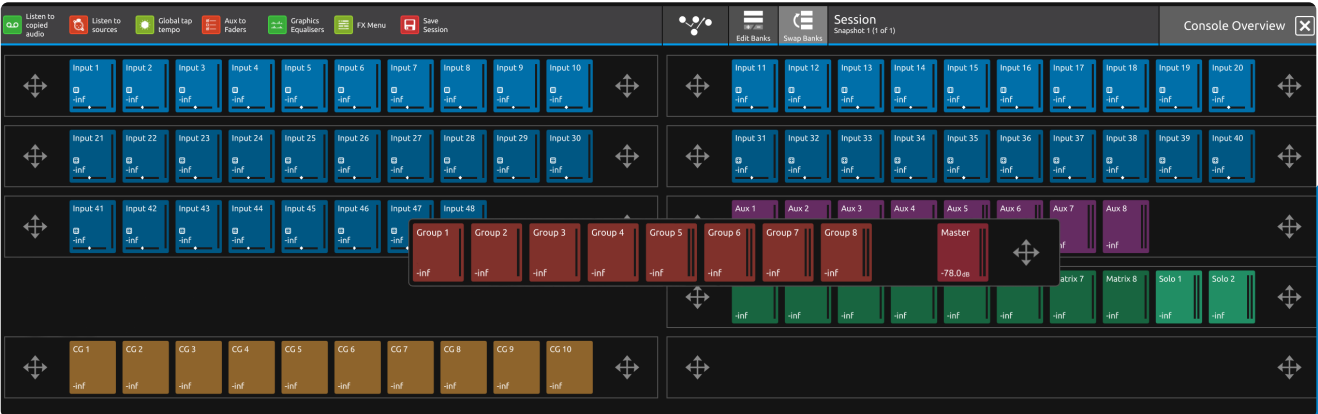

Set Master Layout

For engineers that prefer a more traditional workflow with a fixed master screen area, there is a Set Master function, where you can assign a specific bank to the right hand screen: a FOH engineer could lock the 10 Control Groups (DiGiCo's equivalent to a VCA) to the right hand bank of faders, for example.

Spill Set

What if you need a specific type of layout, but only intermittently? Enter Spill Set, which allows up to 10 channels and/or busses to be assigned to a specific button that recalls them to the surface when selected. These are locked into position regardless of which fader bank layer is selected, which is great for bringing the lead vocal plus FX returns to the surface quickly, or to handle a big guitar solo, for instance.


Graphic EQ

As well as the on-board EQ & Dynamics, the S-Series has 16 x 32-band Graphic EQs, all of which can be inserted across any processing path at any time.
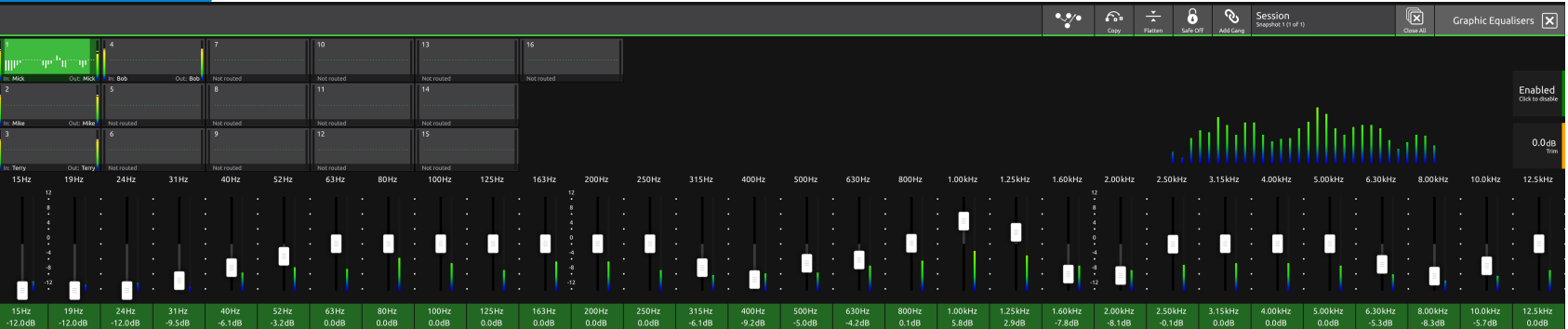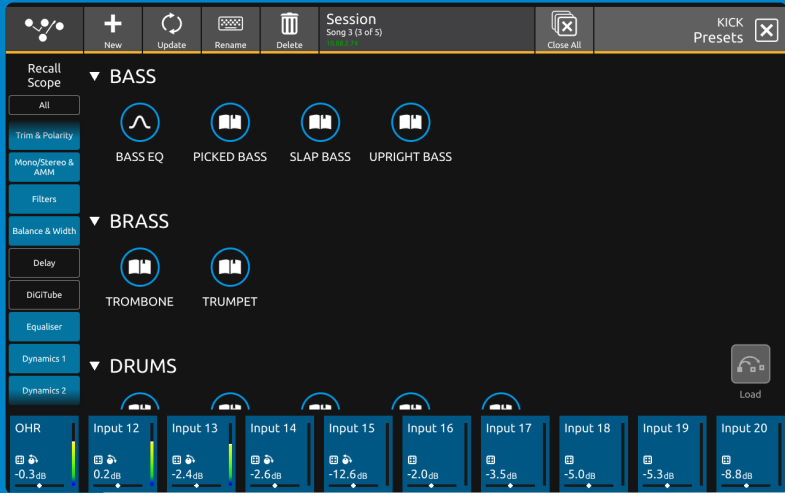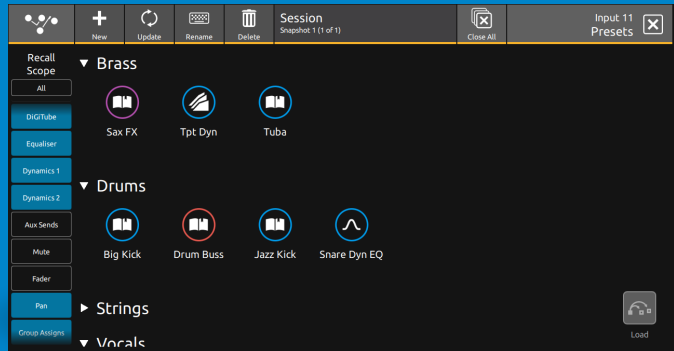

S31 Screen

Channel Setup

The Channel Setup page is a convenient page that provides a quick overview of every function on a channel strip, where the graphical interface clearly shows the signal path through the channel, ideal for users who are new to digital consoles. All the key channel parameters are just one touch away and this one page provides the ability to access all routing (which includes the popular 'Ripple Route' feature inherited from the SD-Range consoles) and channel processing. In addition, Copying parameters from one channel to another and Ganging (linking) channels together are possible from here as well.
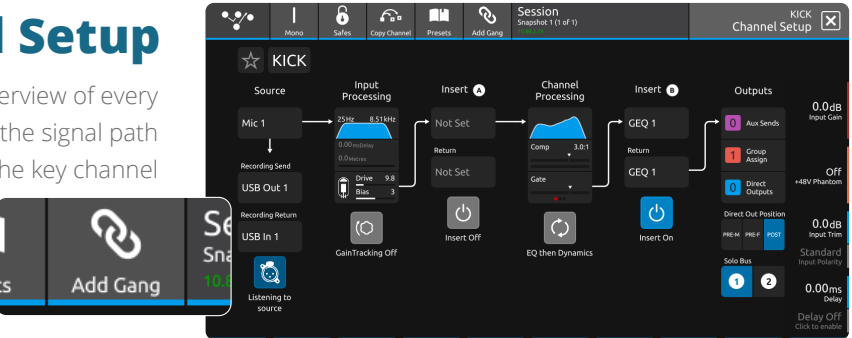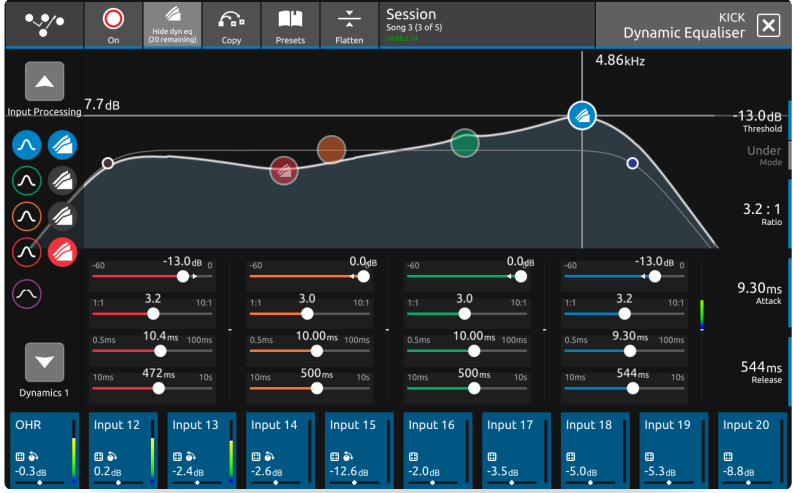
Presets

Presets allow users to create and save their favourite channel settings. These can even be exported to an external USB stick so that you can load your own personalised presets whenever and wherever you are. And if that's not enough, there is an extensive recall scope allowing you to pick and choose which elements of the preset that you want to recall.
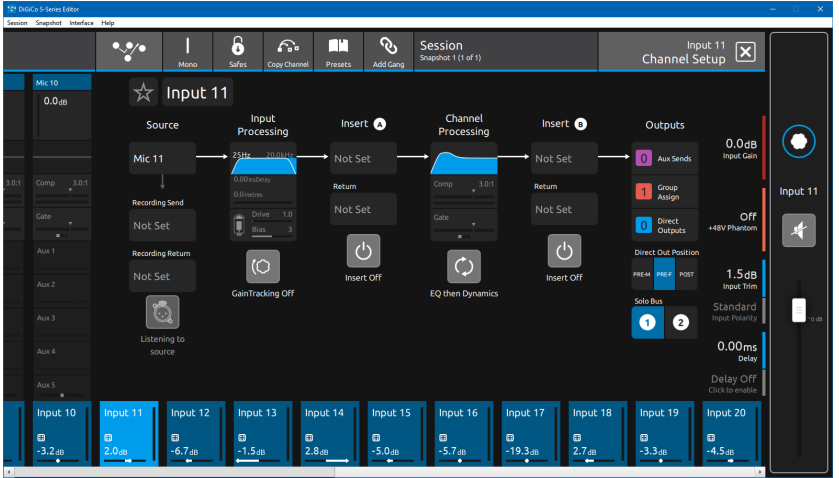

Dynamic EQ

Dynamic EQ is an advanced tool for fixing frequency specific problems; a tool that no engineer should be without. Offered on any channel type, Dynamic EQ gives S-Series users the tools needed to get the best sound possible. The simple, intuitive interface is also a great introduction to the tool for less experienced engineers.

Offline Software

Users with a Windows or Mac computer have the added bonus of being able to run the S-Series Offline Editor. This free piece of software allows users to create and edit sessions without a console present. This is perfect for prepping a session when you are out and about, be it on a train, plane, tour bus or anywhere else you can think of!

CG Spill

Adding to the S-Series spill set, any 10 members of a CG can be spilled with the press of a button. Easy access to the members of any of your 10 CGs. What is more, not only can the members to spill be selected, but also the screen on which they spill. There are plenty of options for customising how your CG spill works, meaning it can be made to fit into any workflow.


iPad

Just like the SD-Range, the S-Series has its own iPad App, allowing control over any of the major parameters of the console via WiFi. But that's not all. Not only does the app allow you to walk around the audience while controlling your mix, but it also is an extension to the worksurface. Quick access to all channels on the console.

Snapshots

Snapshots have always been a major part of DiGiCo's design, and allow total recall of every parameter of the console. Most users won't want this for all parameters, so the Global Recall Scope function lets you decide which ones to recall. Furthermore, the Recall Safe function offers even more manipulation. You can even switch inputs from mono to stereo using Snapshots, which is a first for DiGiCo, and ideal for festival situations, where multiple bands are playing. What is more, S-Series also allows fader crosfades for switching between snapshots. Perfect for more subtle transitions between fader values.
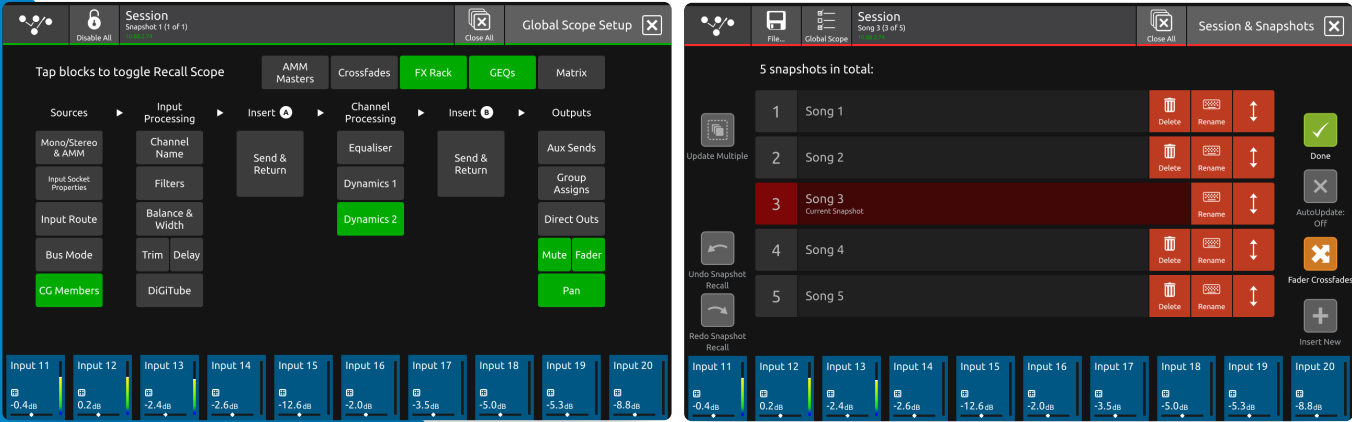
Matrix

DiGiCo's ethos has always been, 'if you require a feature set, it should be available at all times', and to back that up, S-Series comes complete with a 10 input x 8 output Matrix with full processing (in addition to any Channels, Busses and Master). And it's really a mixer within a mixer, as the inputs can come from anywhere - internal or external. It's even possible for monitor engineers to bring the output of the Solo Buss into the monitor matrix, which has proven very popular with users of DiGiCo's SD range.
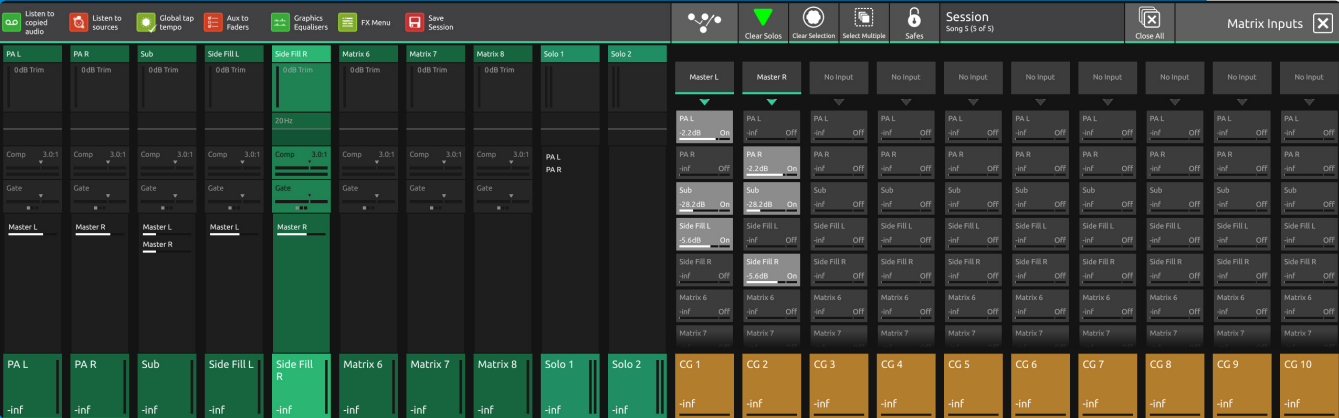
Macros

DiGiCo appreciates that many engineers require quick access to key functions, and that's why a set of factory Macro buttons were created. For example;

- ✔ Save Session
- ✔ FX menu
- ✔ Listen to copied audio or sources (Virtual Soundcheck)
- ✔ Update Snapshot
- ✔ Graphic EQ view
- ✔ Aux Sends view (instant access to monitor mix)
- ✔ Control Group Mutes and Spills

FX

From the get-go, a palette of assignable effects have been available on all DiGiCo consoles, originally using DSP, and now utilising the power of Stealth Digital Processing™ with FPGA. It just sounds better. With the S-Series, there are eight FX slots that have access to a wide selection of Reverbs (with on board RTA), Enhancers, Modulation and Delays. And these Delays don't just have individual tap tempo, they have global! This means an engineer can set the global tempo by touching a touch-sensitive rotary and the associated LED ring will flash the tap speed.
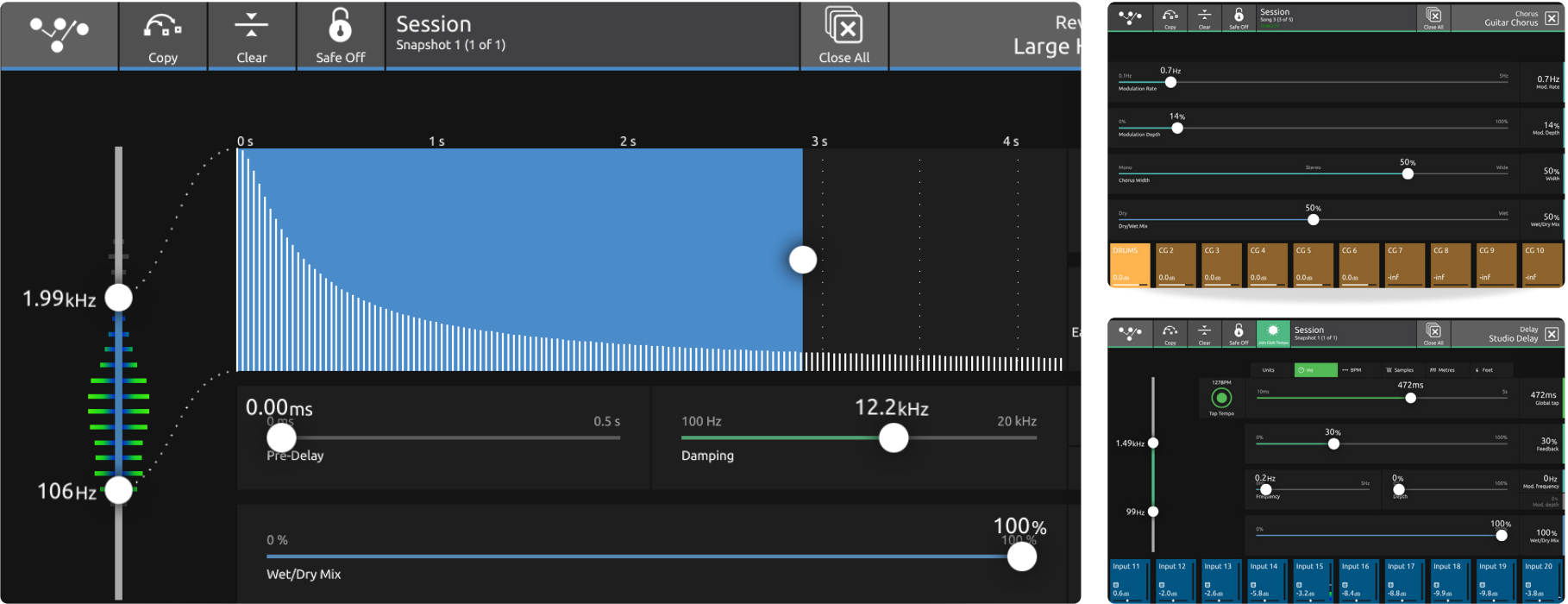
Gain Tracking™

In a complete house-and-monitor DiGiCo system, Gain Tracking™, a world first for DiGiCo, allows the console operator to change any input gain without affecting the sound balance on either console - Gain Tracking™ is selectable on each channel independently on each console.

DMI-MADI-B

D2 Rack
2 MADI Ports, available either as BNC or CAT5E connections

DMI-MADI-B

Front of House Console
DMI Card required - either BNC or CAT5E connections

Monitor Console
DMI Card required - either BNC or CAT5E connections

Analogue Gain Control
When pushed becomes a digital trim

Monitors

FOH

Sharing a stage rack between two consoles has a number of benefits but there is one potential issue in that any mic preamp adjustments made from one console could change the mix on the other. This is where DiGiCo's Gain Tracking™ technology comes into its own.

Gain Tracking™ uses a console's digital trim to automatically compensate for any mic preamp gain changes made by the other console.

In the example above, the Monitor desk has Full Control of the D2-Rack (ie control of the mic preamp gains and access to all the rack outputs) whilst the FOH desk receives a digital split of the inputs only.
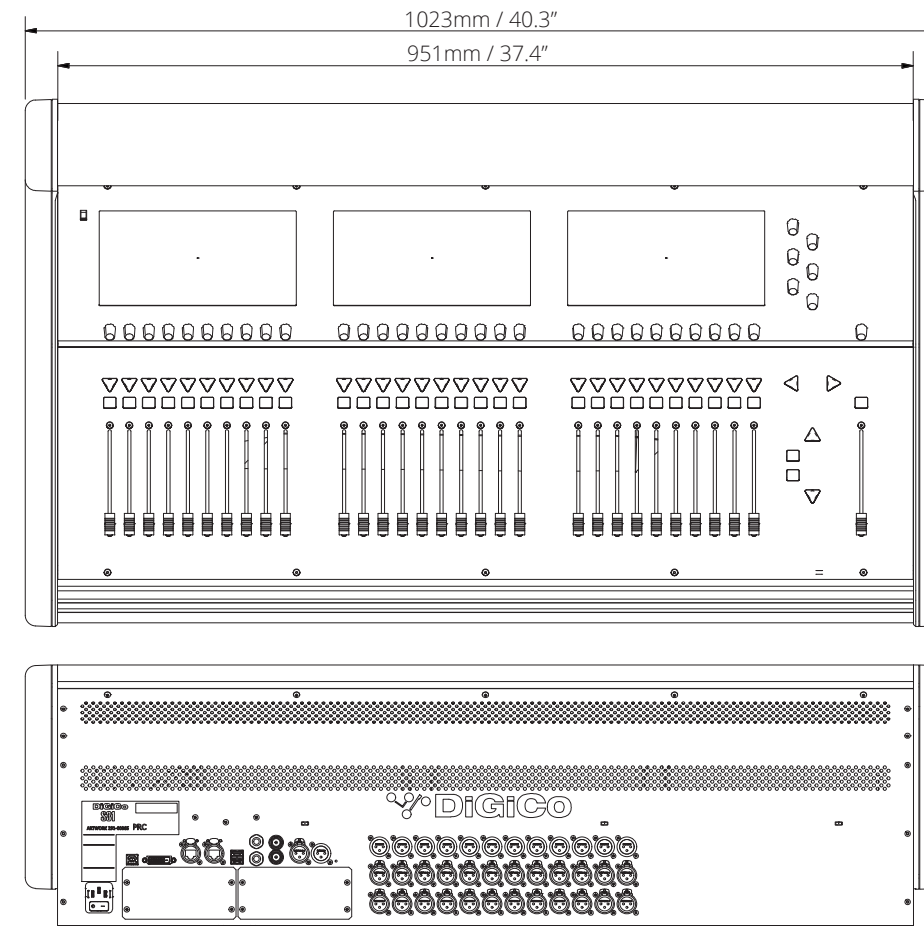
Once the mic preamp gains have been set by the Monitor engineer, the FOH engineer then simply switches on Gain Tracking™ on all channels where there are shared Inputs.

In the example to the left, the monitor engineer has increased the mic preamp gain on the KICK channel by 8dB – see how the Gain Tracking™ function on the FOH desk has compensated for this increase in level by automatically decreasing the digital trim by 8dB.

Gain Tracking™
Is switchable on a channel by channel basis and is shown by a green icon on the channel strip

Waves SoundGrid

Using the Waves DMI card, you can connect to an external server/computer to uncover a plethora of Waves and other SoundGrid Plugins via Multirack and SuperRack.

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

USB
Multi-Touch Screens
HTL (RGB)
100mm Faders

Integral Light Bar
Hidden Til Lit (RGB) Touch sensitive encoders with integral switches
24 Segment Master Meters
Headphone Level
Snapshot
Master Fader

Set Spill   Overview   Fader Bank Assign   Headphones 3.5mm + 1/4" Sockets

UB MADI
DMI Slot

Local I/O

DVI Out   Ethernet   GPI/GPO   AES I/O   DMI Slot
USB   WORD CLOCK

1023mm / 40.3"
951mm / 37.4"

586mm / 23.1"
295mm / 11.6"

1107mm/43.58"*
467mm/18.38"*
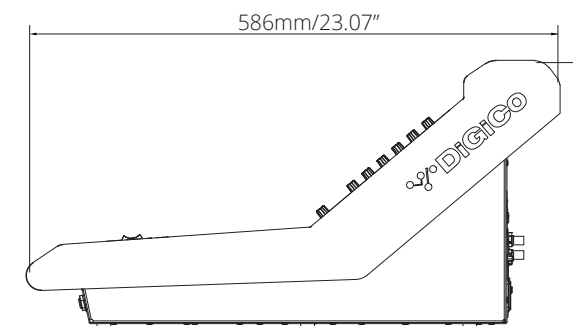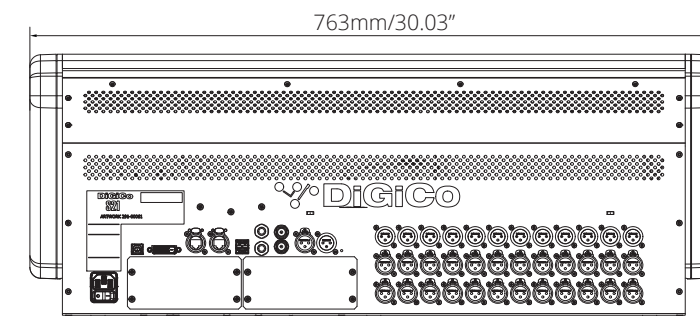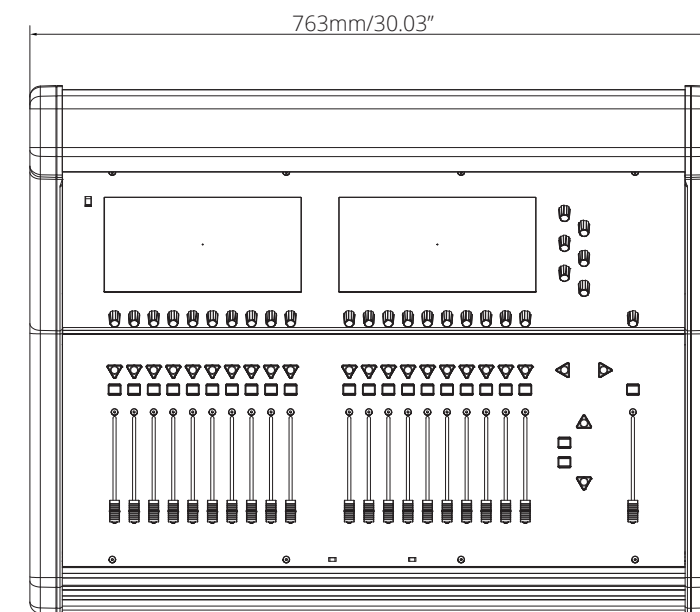871mm/34.29"*

*Flightcase not to scale

S31 Specification

- 48 x Input flex-channels Mono/Stereo (equivalent of 96 DSP channels)
- 46 busses: 16 x flexi-busses Mono/Stereo (equivalent of 32 DSP busses), Stereo Master (2), Solo busses (2 stereo, 4 total), and 10 x 8 Matrix (8)
- 10 x Control Groups
- 1 x Compressor per channel and buss
- 1 x Gate per channel and buss (switchable to ducker, or compressor with side chain access)
- 16 x assignable 32 band Graphic EQs
- 8 x FX engines (reverbs, delays, modulations and enhancer)
- 21 x assignable DiGiTuBes
- 21 x assignable Multiband Compressors
- 21 x assignable Dynamic EQs
- Macros
- An extremely high power headphone amplifier with 1/4 inch and mini jack socket
- 96kHz as standard
- 24 mic line inputs
- 12 analogue outs
- 2 AES I/O (mono)
- Word Clock I/O
- DVI out (for an external monitor)
- 2 DMI Card slots (up to 64 I/O per slot)
- 2 Ethernet connections for Networking
- 2 x 24 segment master/solo meters
- Touch sensitive rotaries with integrated switch & HTL
- 3 x multi-touch screens
- 31 x touch sensitive moving faders (optional free fader mode)
- 4 x layers of banks of 10 faders
- Customisable bank and channel layout
- Snapshots
- Integrated USB2 Audio I/O interface for recording and playback of up to 48 channels
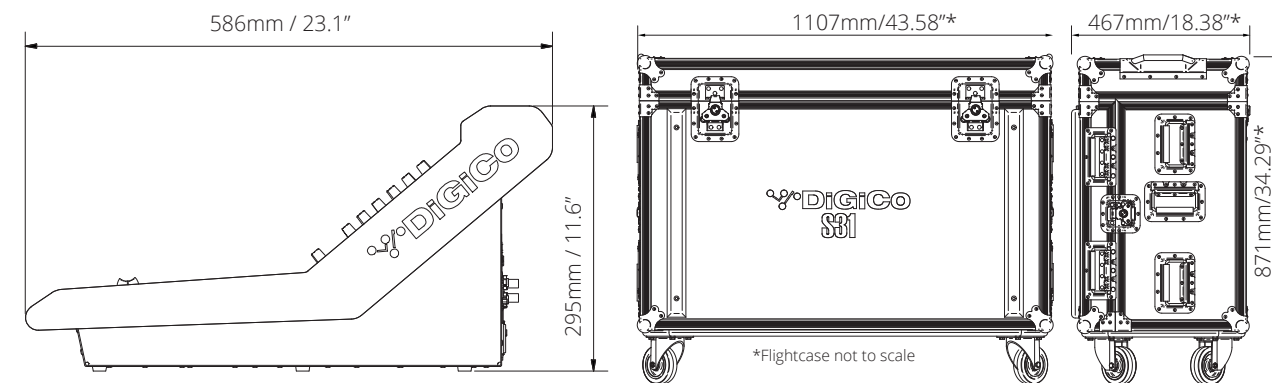
Dimensions
W 1023mm x D 586mm x H 295mm, 40.3" x 23.1" x 11.6"
**Weight** 25kg/55.11lb

Dimensions inc Flightcase
W 1107mm x H 871mm x D 467mm, 43.58" x 34.29" x 18.38"
Weight inc Flightcase 78kg/172lb

Dimensions inc Cardboard Box
W 1160mm x D 750mm x H 460mm, 45.66" x 29.52" x 18.11"
Weight 35kg/77.16lb

USB

Multi-Touch Screens

HTL (RGB)

Integral Light Bar

Hidden Til Lit (RGB) Touch sensitive encoders with integral switches

24 SegmentMaster Meters

Headphone Level

Snapshot

Master Fader

100mm Faders   Set Spill   Fader Bank Assign

Overview

Headphones 3.5mm + 1/4" Sockets

Local I/O

DMI Slot   DVI Out   USB   AES I/O   DMI Slot

UB MADI   Ethernet   GPI/GPO   WORD CLOCK

763mm/30.03"

763mm/30.03"

586mm/23.07"

295mm/11.61"

846mm/33.30"*   467mm/18.38"*

866mm/34.09"*

*Flightcase not to scale

S21 Specification

✔ 48 x Input flex-channels Mono/Stereo (equivalent of 96 DSP channels)
✔ 46 busses: 16 x flexi-busses Mono/Stereo (equivalent of 32 DSP busses), Stereo Master (2), Solo busses (2 stereo, 4 total), and 10 x 8 Matrix (8)
✔ 10 x Control Groups
✔ 1 x Compressor per channel and buss
✔ 1 x Gate per channel and buss (switchable to ducker, or compressor with side chain access)
✔ 16 x assignable 32 band Graphic EQs
✔ 8 x FX engines (reverbs, delays, modulations and enhancer)
✔ 21 x assignable DiGiTuBes
✔ 21 x assignable Multiband Comps
✔ 21 x assignable Dynamic EQs
✔ Macros
✔ An extremely high power headphone amplifier with 1/4 inch and mini jack socket
✔ 96kHz as standard
✔ 24 mic line inputs
✔ 12 analogue outs
✔ 2 AES I/O (mono)
✔ Word Clock I/O
✔ DVI out (for an external monitor)
✔ 2 DMI Card slots (up to 64 I/O per slot)
✔ 2 Ethernet connections for Networking
✔ 2 x 24 segment master/solo meters
✔ Touch sensitive rotaries with integrated switch & HTL
✔ 2 x multi-touch screens
✔ 21 x touch sensitive moving faders (optional free fader mode)
✔ 6 x layers of banks of 10 faders
✔ Customisable bank and channel layout
✔ Snapshots
✔ Integrated USB2 Audio I/O interface for recording and playback of up to 48 channels
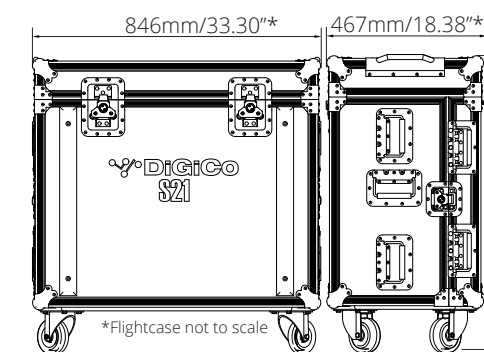
Dimensions
W 763mm x D 586mm x H 295mm, 30.03" x 23.07" x 11.61"
Weight 19kg/41.88lb

Dimensions inc Flightcase
W 846mm x H 866mm x D 467mm, 33.3" x 34.09" x 18.38"
Weight inc Flightcase 65kg/143lb

Dimensions inc Cardboard Box
W 900mm x D 750mm x H 450mm, 35.43" x 29.52" x 17.71"
Weight 27kg/59.52lb

DMI Cards

The S-Series comes complete with dual DMI (DiGiCo Multichannel Interface) option card slots, perfect for expandability, as it can interface with industry formats be it Analogue expansion, MADI, Dante, Waves, or Calrec's Hydra 2 Network. All bases are covered.

DMI-ME
This card offers a 40 output interface to Allen & Heath ME-1 or ME-500 Personal Mixers. Multiple personal Mixers can be connected to the DMI ME via the ME-U Hub.

DMI-A3232
This card allows S-Series Consoles to connect to the A168 STAGE Stage Rack. Each Ethercon port supports up to 32 I/O, for a total channel count of 64 I/O.
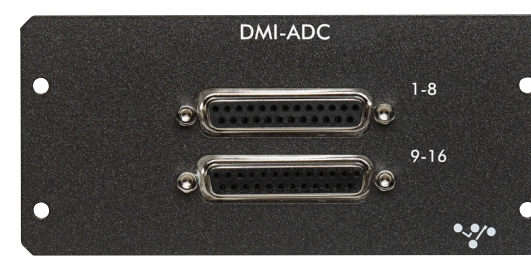
DMI-MADI-B
This card can be used to connect a Standard MADI stream (64 channels in and out) at 48KHz or 96KHz or an SD-Range DiGiCo Rack with the appropriate connector (D-Rack, D2-Rack, SD-Rack, SD-MiNiRack)

DMI-DANTE64@96
This card provides 64 input and 64 output channels at both 48kHz and 96kHz. It is provided with Primary and Secondary (backup) Gigabit Ethernet ports for connection to the Dante network.

DMI-HYDRA 2
This card will provide 56 Input and 56 output channels at 48kHz with Primary and Secondary (backup) optical connections.

DMI-AVIOM
This card provides 16 output channels at 48kHz (with SRC) and Supports Aviom's proprietry A-Net Pro16 protocol. It has 1 CAT5E connection and faceplate DIP switched for Stereo output selection.

DMI-WAVES
This card will provide 64 input and 64 output channels at 48kHz or 96kHz to the SoundGrid™ Network with 2 CAT5E connections.

DMI-MADI-C
This card can be used to connect a Standard MADI stream (64 channels in and out) at 48KHz or 96KHz or an SD-Range DiGiCo Rack with the appropriate connector (D-Rack, D2-Rack, SD-Rack, SD-MiNiRack)

DMI-ADC
This card provides 16 analogue inputs on 2 x 25 way "D" connectors. The ADC card is a line card only. There is no microphone amplifier or phantom power available. S-Series has no gain control function for these inputs (only digital trim). Maximum input level +22dBu
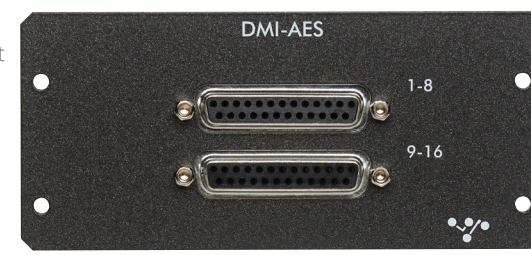
DMI-DAC
This card provides 16 analogue outputs on 2 x 25 way "D" connectors DAC card is line level only. Maximum output level +22dBu (Digital Full Scale)

DMI-AES
This card provides 16 Inputs (8 pairs) and 16 outputs (8 pairs) on 2 x 25 way "D" connectors. All AES inputs are provided with sample rate conversion (SRC) by default. All AES outputs are synchronised to the mixer system clock.

DMI-MIC
This card adds an extra eight mic inputs, connected via a 25-way D-sub, using the same great pre-amps already found in the console. This allows for up to 40 mic inputs directly on the console surface.
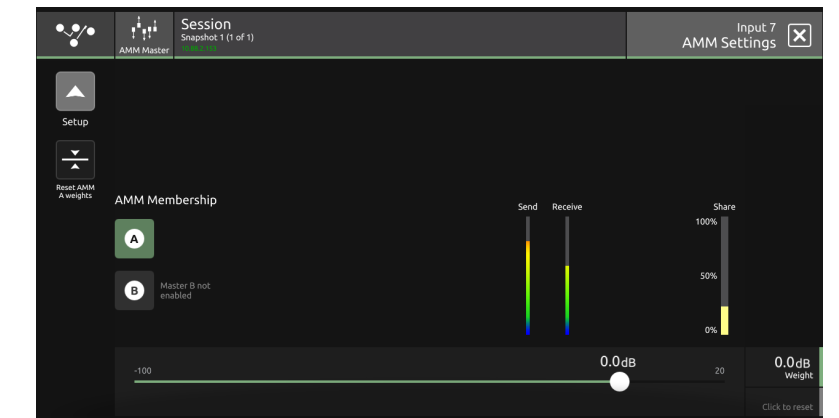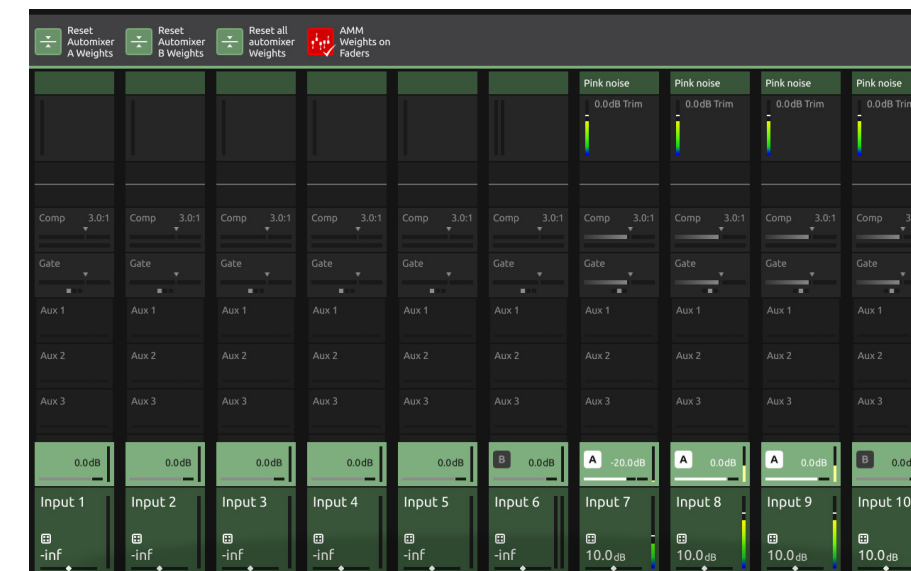
E&OE

DMI-AMM

Using FPGA technology, the DMI-AMM offers two independent 48 channel automatic microphone mixers with low latency, that can be inserted into any input channel on the console. The beauty of having two independent AMMs is that two separate events can run at the same time on a single console. It was also tested with multiple languages, ensuring that it will work efficiently in any dialogue situation.

The DMI-AMM system works by instantly fading up a microphone's gain when one person begins to speak and reducing the gain of the other microphones. When the speaker pauses, all microphone levels return to medium gain, collectively matching the level of one microphone with the full gain share. The resulting effect is as if all speakers are sharing one microphone. When several people talk at once, the gain is shared between the speakers. Each channel is given a Share Meter, which is shown in percentage, not dB, making it easy to see what channels are taking the majority of the gain.

Making use of the S-Series DMI slots, the DMI-AMM transforms any S-Series console into an automatic microphone mixer, perfect for unpredictable dialogue situations such as conferences.

The DMI-AMM also allows adjustment of the relative sensitivity (or weighting) of the AMM on a per channel basis. This means that should one of the speakers be quieter than the others, they still have the ability to "take over" the system. Furthermore, the card features a vital noise floor control that imposes a lower limit on the level detector of all mics in the AMM to prevent a noisy mic from catching a disproportionate share of the gain.

All of these controls are seamlessly incorporated into the console's user interface, ensuring that ease of use is still a priority for users. There is also the ability to put channel weights onto faders, giving even more ways to customise your DiGiCo workflow.

Away from your console or haven't got you DMI-AMM but need to prepare a session? No problem. All AMM controls can be adjusted without the DMI being present with our virtual DMI-AMM feature, which not only works on the console itself, but on the S-Series offline software too.

E&OE

Systems

S-Series Rack Systems

There are many packages and rack systems available for the S-Series. Whether it be for Theatre, Concert Sound or HOW, with CAT5E or BNC connections, there will be a specific system and price to suit every need. Please contact your local distributor or dealer for more information.
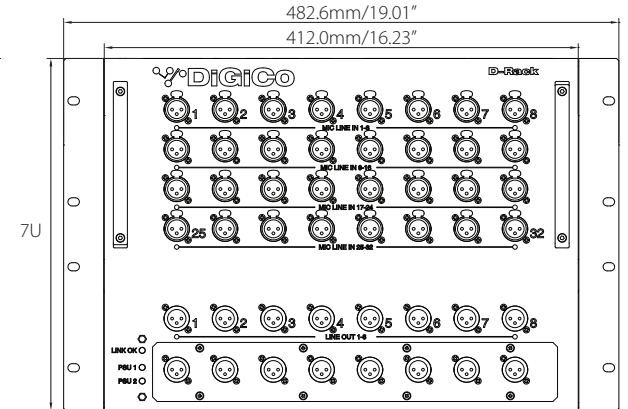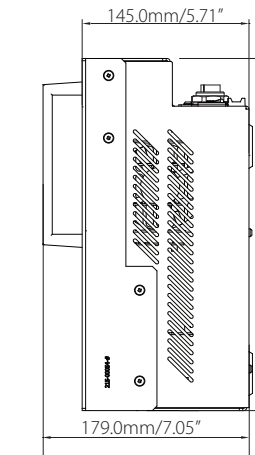
Optional Extra Output Cards for D2-Rack
- Analogue
- Digital
- Aviom

Optional Extra Output Cards for D-Rack
- Analogue
- Digital
- Aviom

D-Rack

The D-Rack comes complete with CAT5E audio as standard 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 (7U).

D2-Rack

The D2-Rack is the latest addition to the range of high sample rate racks. The 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 3 option modules – Line out or AES out or Aviom.

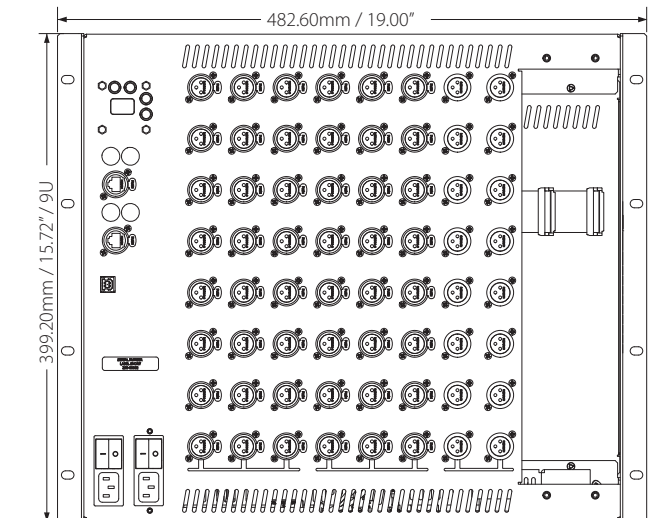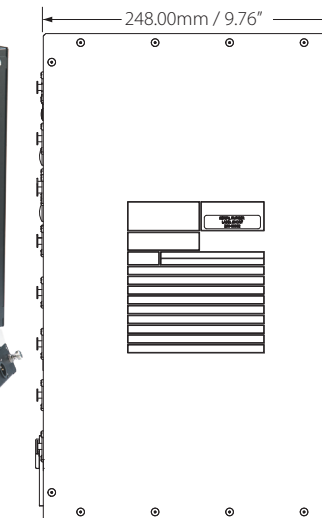The 48 inputs can be specified as either 48 mic in or 24 mic/24 AES in.

As standard, there are 2 MADI Ports, available either as BNC or DiGiCo CAT5E. These ports allow rack sharing between any 2 consoles or digital splits for recording. When running at 96kHz, these 2 ports combine to create a single high definition 96kHz 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 customised rack settings and the control and activation of the D2-Rack's internal oscillator. *Optional Aviom, AES and or Analogue Ouput cards*

S-Series also supports the following racks:
- SD Rack
- SD-MINI Rack
- DiGi-Rack
- MaDi-Rack
- MiNi-Rack

145.0mm/5.71"
412.0mm/16.23"
482.6mm/19.01"
310.0 mm/12.21"
179.0mm/7.05"
7U

248.00mm / 9.76"
482.60mm / 19.00"
399.20mm / 15.72" / 9U

E&OE

STAGE 48

The STAGE 48 system inludes an S-Series console (either an S21 or an S31), a DMI-A3232 and 3 A168s. Perfect for smaller venues, the STAGE 48 offers versatility and scalability to help you fully equip your venue.

With DiGiCo's first dive into the world of AV install, the 4REA4 introduced some new stage boxes to the DiGiCo rack family, along with a new audio protocol.

The A168 is a 96kHz floor or rack mountable rack (rack ears available) with 16 analogue inputs and 8 analogue outputs. Each has two RJ45 (EtherCON) connections which can be run in Cascade or Redundant mode, meaning you can connect one A168 to your S-Series console with redundant cabling or daisy-chain the racks together to connect up to four A168s per DMI-A3232.

The A168 uses DiGiCo's A3232 protocol to send 32 input channels and 32 output channels over a single CAT5e/CAT6 cable.
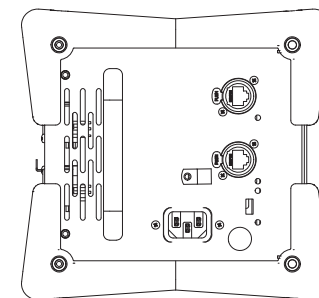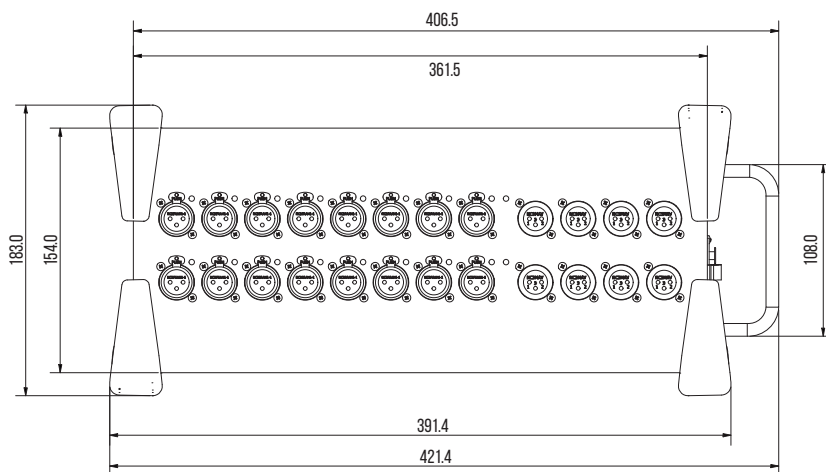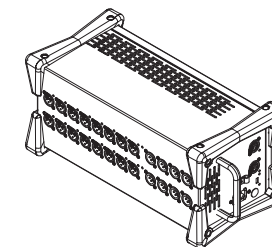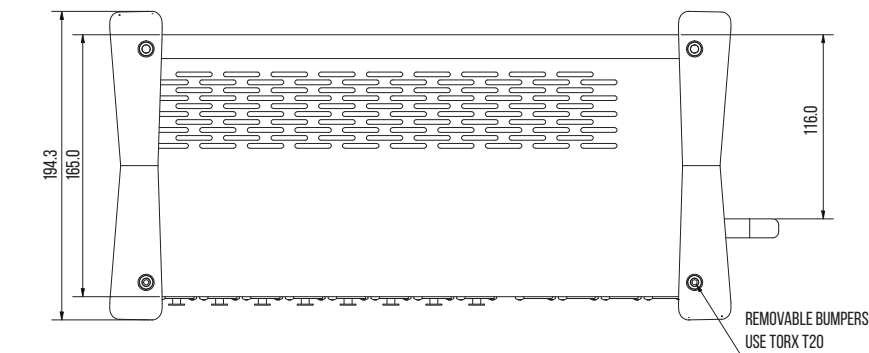
The A168 is also available in a Dante compatible version: the A168D. It works in exactly the same way as the standard A168 except it can operate at both 48kHz and 96kHz and uses Dante instead of the A3232 protocol. With the typical Primary and Secondary ports found on most Dante devices, the A168D is a familiar interface that makes it incredibly easy to set up. The A168D is compatible with the DMI-DANTE64@96 (not the DMI-DANTE) meaning it can benefit from the built in SRC to run at a different Sample Rate to the rest of your Dane network.

REMOVABLE BUMPERS
USE TORX T20

194.3
165.0
116.0
406.5
361.5
183.0
154.0
108.0
391.4
421.4

Audio

Specification

Sample Rate	48kHz, 96kHz
Processing Delay	2ms Typical @ 48k (60 Stereo Channels, Stage Input Through L-R Buss to Stage Output) 1.1ms @ 96kHz
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
Max Output Level	+22dBu
Max Input Level	+22dBu

Processing Channel Specification

Input

Name	User-Defined
Channel Selection	Mono / Stereo
Input Routing	Main Input
Analogue Gain	-20 to +60dB
Phase	Normal / Reverse
Digital Trim	40 to +40dB
Delay	0 - 682ms
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/Hishelf, Hi/Hishelf) On/Off Freq; 20 – 20kHz Gain; +/- 18dB Q: 0.1 -20 (Parametric) / 0.10-0.90 (Shelf) Dynamic EQ On/Off Over/Under Band On/Off Threshold; -60 – 0dB Attack; 0.5ms – 100ms Release; 10ms – 10s Ratio; 1:1 – 10:1
Dynamics 1	Single or 4 x Multiband (3-Band)
Compressor	On/Off Threshold; -60 – 0dB Attack; 500us – 100ms Release; 5ms – 5s
	Ratio; 1:1 – 50:1 Gain; 0 to +40dB Hi Crossover; 20Hz – 20kHz Lo Crossover; 20Hz – 20kHz Knee : Hard, Med, Soft
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; 5ms – 5s Ratio; 1:1 – 50:1 Gain; 0 to +40dB Link; Any Channel / Buss S/C Source : Any Source S/C Listen : On/Off S/C Filter Freq/Width: 20Hz – 20kHz
Insert B	(Post EQ/Dyn) On/Off
Mute	Channel Mute
Solo	Solo Buss 1 / Solo Buss 2 / Both,
Channel Safe	Socket Properties, Input Route, Mono/Stereo, Label, Filters, Trim, Delay, Tube, Insert A, EQ, Dyn1, Dyn2, Insert B, Aux, Group Assigns, Pan, Fade, Mute, Direct Outs, Full Safe
Output Routing	Buss, Insert A, Insert B, Direct: Pre-Mute / Pre-Fade / Post-Fade

Fader	100mm Motorised Fader ∞ to +10dB

Processing Channel Specification

Aux / Group / Matrix Output

Name	User-Defined
Phase	Normal / Reverse
Digital Trim	-40 to +40dB
Delay	0 - 682ms
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/Hishelf, Hi/Hishelf) On/Off Freq; 20 – 20kHz Gain; +/- 18dB Q: 0.1 -20 (Parametric) / 0.10-0.90 (Shelf) Dynamic EQ On/Off Over/Under Band On/Off Threshold; -60 – 0dB Attack; 0.5ms – 100ms Release; 10ms – 10s Ratio; 1:1 – 10:1
Dynamics 1	Single or 4 x Multiband (3-band)
Compressor	On/Off Threshold; -60 – 0dB Attack; 500us – 100ms Release; 5ms – 5s Ratio; 1:1 – 50:1
	Gain; 0 to +40dB Hi Crossover; 20Hz – 20kHz Lo Crossover; 20Hz – 20kHz Knee : Hard, Med, Soft
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; 5ms – 5s Ratio; 1:1 – 50:1 Gain; 0 to +40dB Link; Any Channel/Buss S/C Source : Any source S/C Listen : On/Off S/C Filter Freq/Width: 20Hz – 20kHz
Insert B	(Post EQ/Dyn) On/Off
Mute	Channel Mute
Solo	Solo Buss 1 / Solo Buss 2 / Both,
Channel Safe	Mono/Stereo, Bus Mode, Label, Filters, Trim, Delay, Tube, Insert A, EQ, Dyn1, Dyn2, Insert B, Group Assigns, Fade, Mute, Direct Outs, Full Safe
Output Routing	Outputs, Insert A, Insert B
Fader	100mm Motorised Fader ∞ to + 10dB

Company Profile

The Ultimate in Digital Consoles

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-Range 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-Range 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-Range s is so often the go-to.

In 2015, DiGiCo launched the S-Series: S21 and S31, which brought serious power in a super-small package; and in 2016, Stealth Core 2 software multiplied the power of the SD-Range.

in 2017, DiGiCo released the SD12; a small footprint, powerful, and highly advanced console, with all the functionality and processing power you'd expect from an SD console, but at an unbelievable pricepoint. Suited to any application, from live touring to broadcast, it brought industry firsts, as well as dual 15-inch touchscreens, that familiar DiGiCo workflow, and advanced connectivity.

In 2018, DiGiCo delivered the first in a new generation of console, the Quantum7. Once again turning the pro-audio world on its head, the Quantum7 showed the immense power that can be provided with three seventh generation FPGAs working in unison. With huge channel counts and all new features like Nodal Processing and True Solo, the start of the Quantum range gave a dramatic leap forward in power and connectivity.

Following on from the huge success of the Quantum7, 2020 sees the expansion of the Quantum range with the Quantum5 and the Quantum338. Providing all of the Quantum features, Quantum338 gives all new hardware features such as "Ultimate Stadius" 32bit local I/O and the three huge 17" super bright, high resolution, PCAP touchscreens, making sure that you won't miss a thing.