

D5 LIVE



 **DIGICO**

TRULY INNOVATIVE DIGITAL MIXING

D5 LIVE FRONT OF HOUSE AND MONITOR DIGITAL MIXING SYSTEM

DIGITRACS 56 TRACK SHOW AND SOUND CHECK RECORDER

Step up to a DiGiCo D5 Live and step into a new world of digital mixing.

Designed from the ground up to bring you superb sonic purity and powerful, instantly accessible control, the D5 Live is a live music mixing system unlike any other.

The D5 Live digital mixing system sets a completely new standard for live sound mixing. Its audio quality, convenience, simple and intuitive operation and cost effectiveness are a world apart from conventional mixing.

This complete, self contained system does away with the need for a multicore, splitters, line drivers, dynamics processors and an entire effects rack. You can record live to multitrack using the optional DiGiTRACS hard disk multitrack recorder, and store a complete show's settings on a tiny USB key.

The standard system comprises the console itself plus flightcase, a local DiGiRack, a stage DiGiRack and a 150m drum of fibre optic cable.

One glance at the innovative control surface tells you that this console has been designed for sound engineers by sound engineers.

Virtually every feature is there to see at a glance, or at most a single, logical fingertip press away. The four LCD touchscreens present their facilities exactly as you'd expect to find them on an advanced analogue console, with instant access and a refreshing lack of menus to navigate.

This thoroughly intuitive approach means that, despite packing in powerful digital dynamics, an effects package, total recall of every function, a 38x8 output matrix, up to 128 input channel s and 40 multi-configurable internal buses, your learning curve will be as short as the feature list is long.

The D5 Live software gives you unparalleled flexibility in configuring your console precisely to suit the show. Whether you choose the 56 or 112 input version, your internal buses can be set up as mono or stereo auxiliaries and mono or stereo surround busses (the console is fully 5.1-ready as well as for LCRS, with three joystick surround sound panners for instant sound placement). And you can instantly select a basic set-up for either front-of-house or monitor mixing. With both types of console sharing the same fibre optic loop, automatic Gain Tracking™ allows either console operator to alter input gain without affecting the mix on either console. There's Ethernet support for console mirroring or a remote control PC, and options on the D5 56 include 32 insertable processing channels on an extra slave card and a powerful effects card complete with graphic equalisers.

Three solo modes and two solo busses are provided, along with the facility to 'gang' groups of input faders together for single-fader control. The dynamics package offers comprehensive frequency-conscious gating, compression and limiting with powerful sidechain EQ, and a four-band fully

parametric equaliser plus high and low pass filters. Underlining the ease of use, the moment you touch an EQ control the screen displays a real-time EQ curve, with the same instant, highly accurate visual feedback provided for every other feature.

The D5's snapshots facilities have been greatly extended. At any time you can commit the console's entire status to a snapshot memory and as there's no limit to the number of snapshots you can store, you can effectively record a complete show mix settings. Then store it on a tiny USB key and recall the whole show on another continent with another D5 Live. Snapshots can be self-timed, allowing automated sequencing; relative snapshots allow venue adjustments independently of scene changes; and current or master snapshots can be updated with one touch.

At every step you'll find a wealth of clear tactile and visual information. The smooth, long-throw moving faders react precisely and predictably, and the moment you move one an adjacent backlit button shows you the level change in real time accurate to 0.1dB. 24 VCA-style control groups are at your disposal, and you can swap inputs between physical faders and groups of faders to suit your needs in a second.

More innovations can be found throughout the D5 Live. The compact and lightweight rigid frame houses a slide-out keyboard for naming channels and groups on the electronic scribble strips. The powerful bespoke DSP engine runs every channel continuously – giving you the benefit of just 2ms latency from analogue input to analogue output, equal on every channel at all times. The integral LED lighting behind the controls and the touchscreens can be dimmed, as can the elegant white LED illumination over the high resolution 30-segment LED meterbridge.

In terms of sonic performance, this is a true thoroughbred. 96kHz D/A converters provide an impeccable noise floor while 32-bit floating point internal processing delivers pure, smooth, rich musicality. Security modes prevent accidental changes during a live show, and there's failsafe recovery with no audio loss on mirrored consoles.

The design team behind the D5 Live's engineering has 10 years of experience with the Soundtracs family of digital recording consoles, and over 500 digital sales world-wide. The result is not only innovation, but road proven durability and the knowledge that whenever new features are created for the D5 Live, your console's software will be instantly updateable too.

The D5 Live from DiGiCo. A new world of mixing ideas.



INTUITIVE USER INTERFACE

The design of live digital consoles in the past has often been dictated by the desire to hide complex functions behind layers of menus and an assignable control surface. With the D5 Live, DiGiCo set out not only to emulate the directness and simplicity of an analogue board, but to improve on it wherever possible.

The first impression is of a blend of the familiar – three input groups of long-throw faders with a row of large illuminated buttons above them, three rows of rotary controls and input trim controls at the top – and the less familiar, in the shape of four large, full colour backlit LCD TFT touchscreens.

The surface is set out into three input sections. The master section screen controls the master and matrix sections, automation and console set-up pages.

All four touchscreens are pressure sensitive, protecting functions from accidental change by the sweat on a hand or a careless brush with a finger: you must press slightly to select a control or change a setting. This type of tactile feedback is consistent throughout the desk, and contributes to the feeling of security and predictability in mixing with it. Each screen shows the settings of eight input channels simultaneously, and provides interactive control over all functions per fader via a combination of LCD buttons and 'real' controls, while an input channel overview can be displayed on the master screen.

Each of the surface screens has an equivalent dedicated VGA video output on the back of the console, which allows you to view a duplicate of each surface screen on an external colour monitor. There's also a dedicated VGA output allowing you to connect an external 'total console overview' monitor. You can connect any type of VGA monitor (standard, LCD or plasma) and the output provides up to 1280 x 1024 resolution.

The D5 Live provides the facility to create a dedicated external overview screen (not supplied), giving you a 'big picture' of the console at a glance. Using the Layout page, each operator can decide what information is displayed on this screen, according to the demands of the project being worked on. The overview screen has the ability to display matrix outputs and all buss outputs for auxiliaries, groups and the main buss. Again, these show full metering, insert switching, mute and solo, and dynamic fader positions. You can also view the fader positions and muting status of VCA-style fader groups when these are in use. All channel strips can be displayed in full on the overview screen, showing peak LED, full channel metering, insert point switching, gain reduction, gate movement, muting and solo settings, and dynamic, real-time fader movement.

Each screen has an adjacent bank of rotary encoder controls, to allow instant, real-time adjustment of all equaliser and dynamics settings with an accompanying frequency curve display. It's all simple, direct and instantly displayed.

All three groups of channel faders have a row of illuminated, digitally labelled, fader bank buttons alongside them, allowing each fader group to be switched between six fader banks at a touch, the faders moving precisely to their memorised positions as you change banks. Labelling, in fact, is plentiful throughout: with the touch screen keyboard or the full-size slide-out QWERTY keyboard you can quickly assign names to the LCD scribble strip, screens, busses and fader banks.

Metering is comprehensive, while the 30-segment LED meter overbridge displays input level, gain reduction, gate activity, insert send level and direct output level. It also carries a console illumination strip of white LEDs which, in common with the touchscreens and scribble strips, can be dimmed down in steps when working in a light sensitive environment.

The combination of so much visual and tactile feedback, and the small footprint, makes it a very comfortable console to use live, with no need to stretch or crane your head to see the positions of controls or status settings.

The latest software version includes a host of new features, of which these are a few highlights. The enhanced 38 x 8 output matrix allows any channel, buss or physical input to be routed into the matrix, and then routed out to any of the physical outputs. A new session arranges inputs horizontally across banks rather than vertically. All surfaces can change banks with one touch. The LCD multi-function buttons display a tick mark to confirm 'ON' status, and can show channel name only in a larger font. Talkback sources can be from any input signal; and disabled routing buttons distinguish between used and unavailable routes.



lcd buttons



vga outputs



overview screen (not supplied)



input screen and rotary encoders



fader banks



comprehensive metering

INPUT CHANNELS

Each D5 Live input channel has its own analogue input gain and digital trim with Gain Tracking switch and presets for the whole channel, along with phase reverse, phantom power, six-band EQ and a delay function which allows you to add 240ms of delay to any or all of the channels.

Each channel has four bands of fully parametric 20Hz-20kHz EQ, while the upper and lower bands can be switched between different curve types and shelving characteristics. On top of that are dedicated high and low pass filters, and a preset library which allows you to save an unlimited number of EQ presets for instant recall.

The dynamics section for each input channel is called up with another press on the screen, displaying all the settings for the compressor / limiter and gate, and a powerful sidechain equaliser which allows frequency-conscious dynamics. The same press assigns that channel to the group of dedicated dynamics rotary controllers alongside the screen. The sidechain EQ can also be allocated to the compressor, providing a wide range of uses including highly effective de-essing. The section is accompanied by a dedicated user preset library.

Under the screens are three rows of assignable rotary controls, which are designed to give you the option of having the controls you use most often closest to you as physical controls. Functions can be assigned to them as you wish, including auxiliary sends, pans and dynamics controls. Access is available to any of the 40 busses, each of which can be assigned as either auxiliary busses or group busses. Auxiliaries can also be assigned to faders, allowing a visual feedback of aux levels by channel at the master fader section. The console is capable of stereo, LCRS and 5.1 mixing, and three 5.1 joystick panners provide instant sound image control. Assignment can be made either by touching the screen or scrolling to the buss required. Touching the aux on-screen brings up an expanded view of all auxiliary sends, and routing buttons show stereo or surround designations clearly. Input routing displays a warning if the signal is already in use, while the analogue output routing includes a -10dB switch.

The lower rotary control (nearest the fader) can be assigned to a dedicated channel function per input bank, by holding down the Assign button and touching the function you want to lock it to on the touchscreen. The same applies to the assignable button below this rotary, which can be assigned to its own, independent, function.

Two more features simplify multiple operations. The All button allows you to apply changes to all channels displayed on that screen. You can, for example, view all aux routings by holding All and touching Aux Routing. Another function of All is to route input channels sequentially: by holding All and routing the first input channel, the console automatically routes the other seven inputs in that input bank to the next seven channels in sequence – a very fast method of routing a complete block of inputs to the console surface. A new group feed button on each input channel indicates mono, stereo or surround busses. The input channel delay also has an on/off switch.

Below these three rows is a row of large, backlit liquid crystal buttons, one at the top of each physical fader. The buttons feed back an immense amount of information about what that individual fader is doing, using a combination of text and backlight colours which change automatically according to the button's status. The button displays channel number, mono or stereo status, whether the button is currently acting as a solo, fader to aux, safe switch, fader gang, and a fader level readout accurate to 0.1dB, which appears the instant a fader is touched.

Alongside the button is the LCD assign button, displaying the liquid crystal button's various functions – Solo, Safe (which removes the fader from a snapshot and turns the button red as an alert), Aux Send to Master Faders, Fader Ganging, Name Only and Revert To Solo. The Gang function allows similar channels to be locked together in a gang so that level, EQ and dynamics settings can be applied to all of them simultaneously, confirmed by a coloured line in the touchscreen. If, for example, multiple channels require the same high pass filter settings, it's simple to gang the channels and make a single EQ adjustment. Multiple gangs can be built within each input section and an individual channel can be temporarily dropped out of the gang for individual adjustment by pressing the Solo button. Fader assign and solo assign are further ways of assigning the channels to the hardware controls.



expanded eq view



expanded dynamics view



rotary controls



joystick for surround or 5.1



rotary and switch assign



multi-function lcd buttons

MASTER SECTION

The master section, as well as the customary output groups and master fader, provides powerful control of the console's overall setup via a series of pages instantly selectable on the fourth touchscreen.

SYSTEM PAGE: The first page, System, provides real-time diagnostics which constantly monitor the system, the MADI line, software versions, power supply levels, internal temperature and so on.

SESSION PAGE: This page stores, recalls and sets up individual sessions. As well as the standard default files, it includes features such as Load Preset Library for recalling user presets of EQ and dynamics settings, which can also be merged when, for example, two engineers are using the desk in the same session or show.

LAYOUT PAGE: The Layout page allows you to bring all the correct channels straight to the console's physical faders. On this page, too, are the extensive labelling facilities, enabling you to type in alphanumeric labelling on screen or the full-size slide-out QWERTY keyboard for the LCD scribble strip, screens, busses and fader banks.

Channel settings may be copied or moved here from one to another, and a channel's settings can be copied to multiple channels using the Duplicate feature.

SNAPSHOT PAGE: The D5 Live's store-and-recall functions are comprehensive, providing both an unlimited number of desk status 'snapshots' and the ability to build these into complete scenes. All of these, along with their associated EQ, dynamics and optional effects preset libraries, can then be transferred to another D5 Live via the USB key.

Snapshots can be triggered either manually or automatically, and can be self-timed for automatic sequencing. The feature also allows you to decide which controllers on the channel will change including input gain and more, how faders and auxiliaries interact and the input level. Direct send routing can also be changed with the snapshot. This is where you can make automated fader bank changes to prepare for the next band on stage or the next song. It also controls fader ganging, control groups and cross-fade times between snapshots.

The comprehensively-equipped 38 x 8 output matrix allows any channel, buss or physical input to be routed into the matrix, and then routed out to any of the physical outputs. The touchscreen gives you control over all the matrix sends via a dedicated rotary control and

a switch. The output matrix faders can also be assigned to the master section faders.

OUTPUT PAGE: The on-screen scroller provides fast access to group, master output and auxiliary output routings, and a touch on the screen displays current routing settings. Each output has a brick-wall master limiter, variable threshold and variable release time, along with routing to allow the buss to be routed to as many of the outputs - analogue or digital - as desired. There's also an output buss insert point for an external processor. Auxiliary outputs are handled in exactly the same way with an additional pre/post fade switch.

CONTROL GROUPS PAGE: Here you have the option of either VCA-style fader control in which the individual faders remain in position when the VCA group fader is moved, or digital-style in which all the moving faders physically follow the group fader. The choice of working method is yours; their functionality is identical.

There are 24 control groups, these can be moving fader or VCA style and can be assigned to inputs, outputs or both. Making a channel part of a group simply requires selecting Touch and then touching all the faders required for the control group. Further touches add or remove each fader from the group. Channels/busses can be assigned to multiple control groups, which also appear on screen.

The auxiliary master outputs are assigned here to the physical faders on the two master fader banks. The two master banks provide 16 master faders which can be assigned as matrix outputs, group outputs, auxiliary outputs and control group masters.

A Fader Flip function allows you to swap the two banks of eight faders, and there is the ability to build your own master banks, with the option to include control groups, input channels and so on by using the dedicated LCD assign button.

Also here, is Solo Assigns 'Aux to faders' or 'Aux to Rotaries'. Thus, when an aux master is soloed that aux send is assigned to the faders. Another function that is duplicated on the master touchscreen. This feature provides a fast and simple method of using your D5 Live as a monitor desk.



new session page



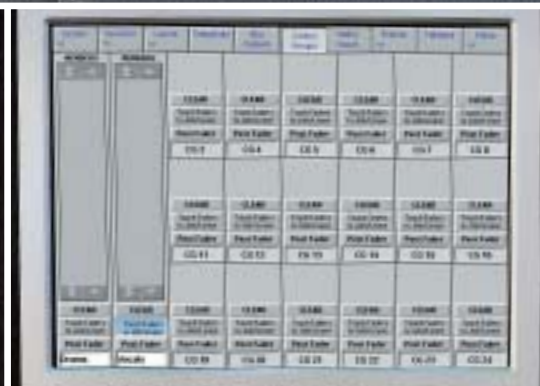
snapshot and scope page



matrix page



buss outputs



24 control groups (moving or VCA)



USB memory key

EFFECTS CARD

Available in either 56 or 112 input versions, the standard 'system' configuration is now supplemented by the enhanced 'EX' effects card and output processing options.

The versatile digital effects card, fitted as standard to all D5 Live 56EX, 112EX and FMX systems, effectively replaces a rack full of external effects processing units with a fully integrated suite of high quality multi effects.

The D5 effects card features its own powerful, dedicated DSP engine which allows you to run up to six digital effects per channel simultaneously without any load being placed on the console's central DSP engine. The effects processor has the capacity to support the simultaneous use of every effect on every channel without loss of performance or audio quality.

The first effect offers a range of dedicated reverb algorithms of exceptional quality, subtlety and depth. The next three provide flanging, phasing, double tracking, vocoder and digital delays. Effects five and six provide extra digital dynamics, compression and equalisation for up to 7.1 surround sound outputs.

All routing, patching, effects parameter adjustments and user memory store and recall functions are performed on the touchscreens. All effects and their settings can be stored as part of the console's user presets and sessions, and can be saved on the USB key for instant recall on another D5 Live.



reverb configurations



FX2,FX3,FX4 slots allow reverb plus other effects



FX5 and FX6 slots allow reverb other effects and output processing

INSERTABLE PROCESSING CHANNELS

The insertable processing channel (IPC) option, provided as standard with the D5 Live EX versions and the FMX package, adds features for theatre-style venue applications, AV and monitors.

The flexibility of the D5 Live's touchscreen-controlled work surface is demonstrated by the new IPC module.

This additional DSP card adds a range of features that allow the console to perform powerfully as a monitor mixer or for installation in a theatre or other venue.

It will also effectively eliminate the need for racks full of processing hardware, saving considerable space and expense.

The module provides a total of 32 IPCs, each complete with 6 bands of fully parametric equalisation, a fully featured compressor / limiter and digital delay of up to 240 milliseconds. The expanded equaliser view now appears across the screen, and is linked to the rotaries for frequency, Q and level below the screen, so as to distinguish output EQ from input channel EQ.

The IPCs facilities are displayed and controlled via the console's backlit TFT touchscreens. When IPC mode is selected, the screen's background colour changes to alert the engineer to this status.



32 insertable processing channels (IPC)



32 full function compressor limiters



32 six band parametric equalisers

D5 System Configuration

work surface surface channel count effects 32 channel output processor fibre optic drum

D5 live
56



1 x D5 worksurface

64

not fitted

not fitted



1 x 150 metres

D5 live
56 EX



1 x D5 worksurface

up to 128

yes

yes



1 x 150 metres

D5 live
112 EX



1 x D5 worksurface

up to 128

yes

yes



1 x 150 metres

D5 live
FMX



2 x D5 worksurface

up to 128

yes

yes



3 x 150 metres

fibre link

co-ax cable

local rack

stage rack 1

stage rack 2

flight case



no

2 x 6 metres
4 x 50 metres

40 analogue I/O
16 AES/EBU I/O

56 Mic inputs
8 line outs

no



no

2 x 6 metres
4 x 50 metres

40 analogue I/O
16 AES/EBU I/O

56 Mic inputs
8 line outs

no



1 x 2 metres



2 x 6 metres
6 x 50 metres

40 analogue I/O
16 AES/EBU I/O

56 Mic inputs
8 line outs

56 Mic inputs
8 line outs



1 x 2 metres



4 x 6 metres
8 x 50 metres

2 x 40 analogue I/O
2 x 16 AES/EBU I/O

56 Mic inputs
8 line outs

56 Mic inputs
8 line outs

D5 EX Package

The D5 Live EX package provides a versatile and cost effective package solution, with a choice of 56 or 112 mic/line inputs on stage and up to a full 128 channel console worksurface.

The 56 EX system comprises the console worksurface plus flightcase, a 40 analogue I/O and 16 AES EBU I/O local DiGiRack, a 56-in, 8-out stage DiGiRack and a 150m drum of fibre optic cable.

The 112 EX version adds a second, 56-in, 8-out stage Digirack and a 2 metre fibre optic connection between the two stage Digiracks.

It includes the digital effects card which allows you to run up to six digital effects per channel simultaneously, including dedicated reverb algorithms, flanging, phasing, double tracking, vocoder, delays, dynamics, compression and equalisation for up to 7.1 surround sound outputs.

It also includes the Insertable Processing Channels (IPCs) which provide a total of 32 IPCs, each complete with 6 bands of fully parametric equalisation, a fully featured compressor / limiter and digital delay of up to 240 milliseconds.

All routing, patching, effects parameter adjustments and user memory store and recall functions are performed on the touchscreens. All effects and their settings can be stored as part of the console's snapshots and sessions, and can be saved on the USB key for instant recall on another D5 Live.



worksurface



local DiGiRack



150 metres fibre optic cable drum



stage DiGiRack 1 (56 in 8 out)



stage DiGiRack 2 (56 in 8 out) 112 EX only



2 metre fibre connection 112 EX only

DIGITRACS

DiGiTRACS provides the benefit of an extremely compact show or tour recorder. At its heart is Merging Technologies' acclaimed Pyramix software and its powerful Mykerinos DSP card.

Operational simplicity is integral to the DiGiTRACS design. Built into a rugged 4U 19in rackmount casing with ample internal cooling, it connects to the FOH D5 Live in seconds using just two BNC MADI cables. The unit is rackmounted on rails, with a lockable front panel, and slides out on the rails for easy access. A powerful Switch Mode power supply ensures maximum reliability wherever you are in the world.

A massive 400Gb of media storage is provided by a high reliability RAID multiple hard disk array for maximum data security. It also features a removable 80Gb 'caddy' drive for archiving, backup and post production data exchange.

As with all DiGiCo products, compatibility and open access to industry standard formats have been built into the design.

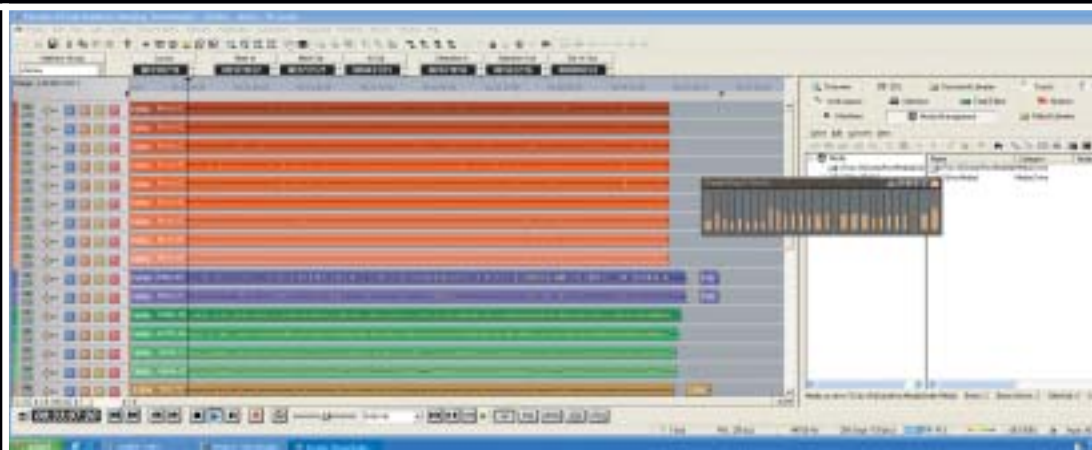
DiGiTRACS' front panel provides both USB II and Firewire connectors for backup to third party devices. File formats supported are PMF, WAV, BDW, AIFF, SD2, OMF and DSD, providing compatibility with a host of market leading systems including ProTools®.

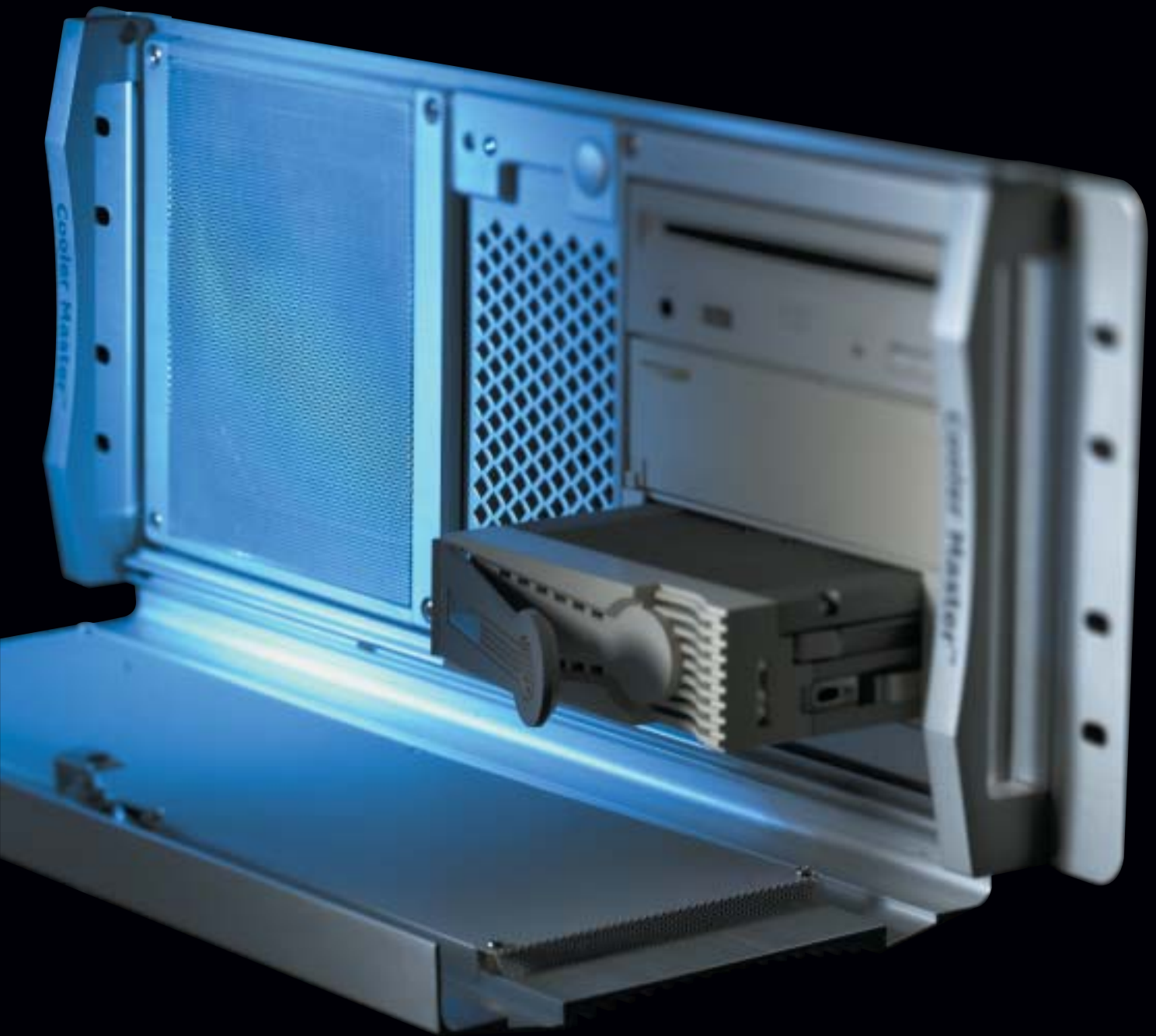
DiGiTRACS not only provides full recording and playback facilities, but all the hard disk editing and transport facilities required for mixing and post production. It also takes advantage of the total compatibility and file sharing between DiGiCo and sister company Soundtracs' products, enabling projects to move effortlessly between the live and studio environments. Session settings, user presets and complete sessions can be exchanged between D5 Live and Soundtracs consoles.

DiGiTRACS gives the sound engineer a facility that's always been a dream – the ability to work on a mix without the band needing to be in the room.

Because it takes the signal from all 56 microphone inputs and returns the playback signals to the same point, it's virtually as flexible as having the artist there, but with the ability to replay any track at will and refine the mix in as much detail as desired.

The next DiGiTRACS software release will allow tracks 55 and 56 to record the master stereo buss as a guide track.





technical specifications 1

Analogue inputs

Quantization range	24-bits
Frequency response 20Hz-20kHz	+/-0.2dB
Level linearity deviation 0dB to -90dB	<0.3dB
Phase difference between channels 20Hz to 20 kHz	<2 degrees
Channel separation 100Hz to 10kHz	>90dB
Total harmonic distortion 100Hz to 10kHz	<0.004%
Maximum input level (at unity gain) mic and line	+22dBu
Microphone equivalent input noise (150 ohm, 60dB gain)	-127.5dB
Maximum analogue gain (mic and line)	+60dB
Mic input impedance	>1k Ohms
All other analogue inputs impedance's	>5k Ohms

Analogue Outputs

Quantization range	24-bits
Frequency response 20Hz-20kHz	+/-0.2dB
Level linearity deviation 0dB to -90dB	<0.3dB
Phase difference between channels 20Hz to 20 kHz	<2 degrees
Channel separation 100Hz to 10kHz	>90dB
Total harmonic distortion 100Hz to 10kHz	<0.004%
Idle channel noise ratio	<112dB
Maximum output level	+22dBu
Output impedance	50 Ohms

Digital I/O

AES/EBU	24bit (with sample rate converters)
MADI	56 channels of 24 bit audio
OPTICAL	512 channel redundant optical loop

Clocking

Clock sources

Internal	44.1 and 48kHz using a high stability numerically controlled oscillator. With an upgrade option to 96kHz
External	From any digital input Black burst 75ohm video Wordclock
Sample range	30Hz to 50kHz

technical specifications 2

Power Requirements

Console	87 to 260v AC 50/60Hz autosensing. 300 watts max
Audio rack	87 to 260v AC 50/60Hz autosensing. 150 watts max

Note: All measurements are made with a 22Hz to 22kHz filter and RMS detector.

Delay	Up to 240mS in 0.5mS increments.
-------	----------------------------------

Channel Equaliser (IPC Eq has two extra bands with individual band switching)

High pass filter

High pass slope	-12dB/octave
High pass frequency range (-3dB)	20Hz to 20kHz

Low pass filter

Low pass slope	-12dB/octave
Low pass frequency range (-3dB)	200Hz to 20kHz

High band

Mode 1: Bell	
Gain range	+/-18dB
Frequency range	20Hz to 20kHz
Q range	0.1 To 20
Mode 2:	High Shelving
Gain range	+/-18dB
Frequency range	20Hz to 20kHz
Q range	0.1 to 0.85
Mode 3:	Low Pass
Low pass slope	-12dB/octave
Low pass frequency	20Hz to 20kHz

Upper mid band

Gain range	+/-18dB
Frequency range	20Hz to 20kHz
Q range	01. To 20

Lower mid band

Gain range	+/-18dB
Frequency range	20Hz to 20kHz
Q range	01. To 20

Low band

Mode 1:	Bell
Gain range	+/-18dB
Frequency range	20Hz to 20kHz
Q range	0.1 To 20
Mode 2:	Low Shelving
Gain range	+/-18dB
Frequency range	20Hz to 20kHz
Q range	0.1 to 0.85
Mode 3:	High Pass
High pass slope	-12dB/octave
High pass frequency	20Hz to 20kHz

technical specifications 3

Dynamics

Compressor channel and IPC

Threshold range	-50dB to 0dB
Attack range	500uS to 100mS
Decay range	10mS to 10S
Ratio range	1:1 to 50:1
Gain make up range	0 to 40dB

Gate

Threshold range	-50dB to 0dB
Attack range	50uS to 100mS
Decay range	5mS to 5S
Hold range	2mS to 2S
Gate depth range	0 to -90dB

Output buss limiter

Attack time	1 audio sample
Threshold range	0 to -50dB
Release range	5mS to 5s

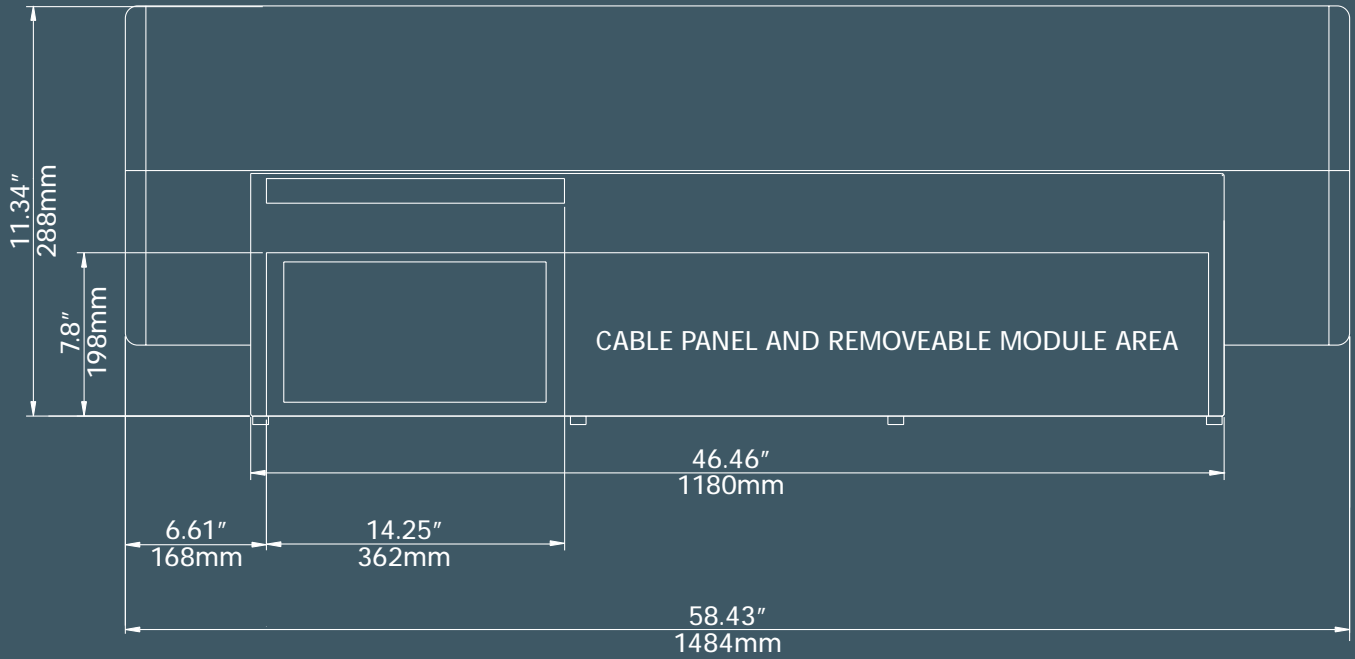
technical specifications 4

Effects Module

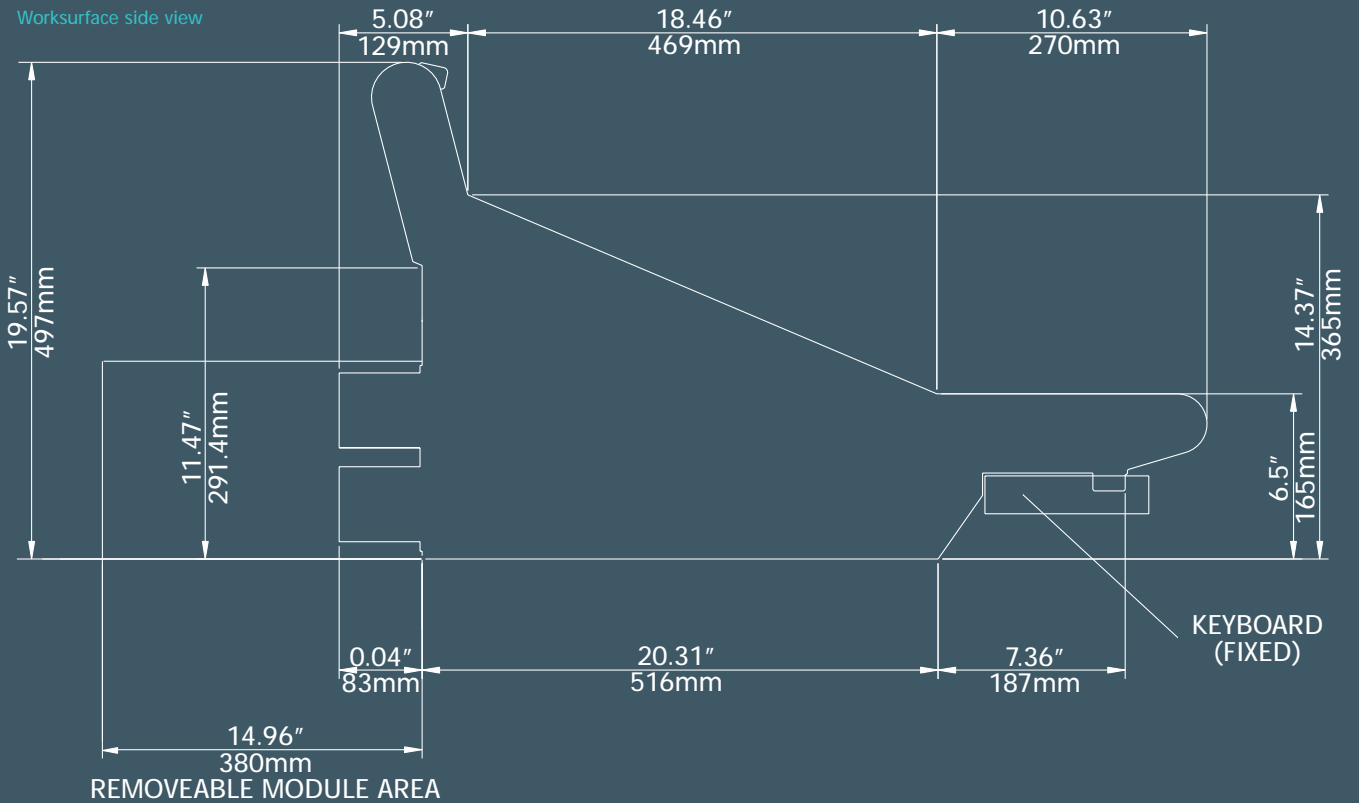
dialog box tab	effects type	name
reverb large reverb in FX1 only reverb in any/all FX slots	halls	large hall clear hall warm hall bright hall stage hall
		ambient hall live hall soft hall vocal hall small hall
	plates	silky plate bright plate hard plate ambient plate perc plate
	rooms	wood room clear room percussion room rehearsal room hard room
	spaces	lounge kitchen bathroom corridor car
		boardroom factory subway courtyard forest
other FX delay in FX2..FX6 only one delay unit available	delays	simple delay studio delay pingpong stereo 4 tap chorus & echo
	effects	public address phone thru the wall congregation comms
choruses in any/all FX2..FX6	choruses	piano chorus strings chorus strum chorus pick chorus lo chorus
		deep flange light flange vibrato robo
pich shifters in any/all FX2..FX6	pitch	dual pitch stereo pitch 12 string vox thicken vox double
vocoders in any/all FX2..FX6	vocoder	vocoder
auto-panners in any/all FX2..FX6	autopan	autopan
output processing slots FX5 and/or FX6 mutiband compressor, soft clipping limiter 4 band parametric eq and filters, and normalisation available up to 8 channels wide	mastering processors	stereo LCRS 5.1 7.1
	graphic equalisers	6 mono
slots FX5 and/or FX6 28 band proportional Q pairs selectable as stereo		

weights and dimensions

Worksurface rear view



Worksurface side view

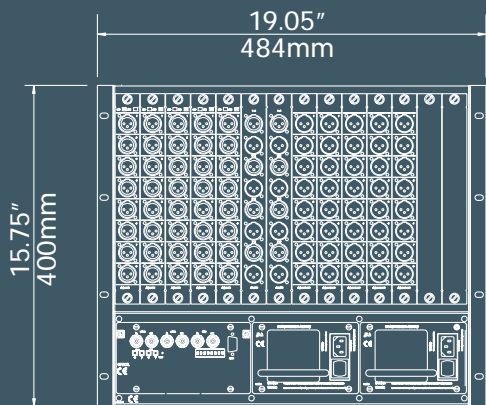


Weight in Flight Case
Weight out of Flight Case

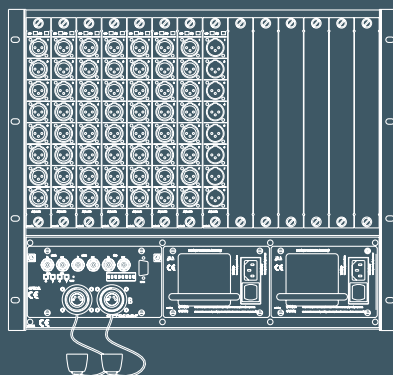
215Kg/474lb
115Kg/253lb

weights and dimensions

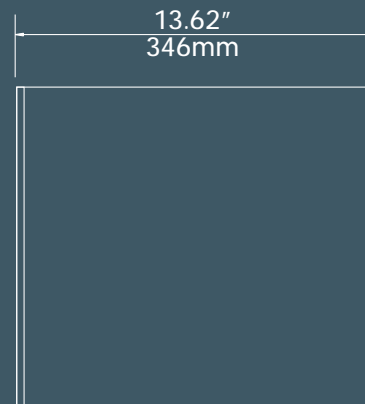
DiGiRack 9U 19" Rack Mount



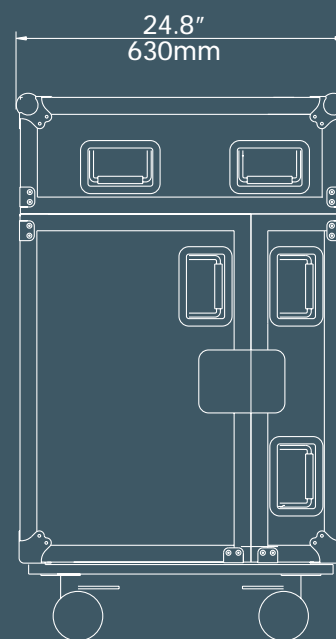
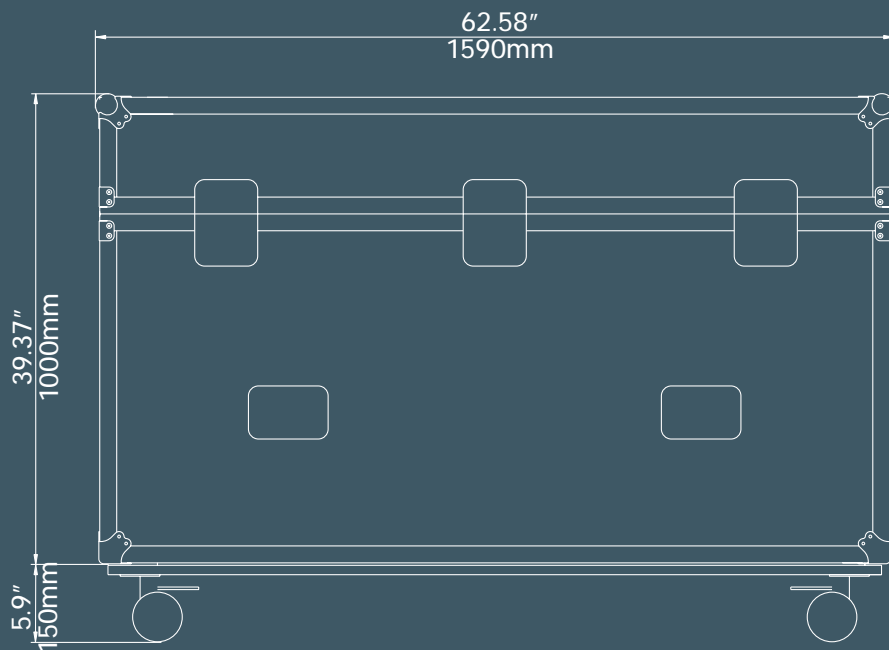
Local DiGiRack 9U 19" Rack Mount
Weight unpacked 36kg/80lb
Weight packed 56kg/124lb



Stage DiGiRack 9U 19" Rack Mount
Weight unpacked 36kg/80lb
Weight packed 56kg/124lb



Console Flight Case



D5 FMX

The D5 Live FMX (Front of House and Monitor) package is a complete production mixing system that offers exceptional value for money as well as stunning audio quality, versatility - and innovation.



In a complete house-and-monitor D5 Live system, Gain Tracking™ (patent pending), a world first for DiGiCo, allows either 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.

The D5 Live FMX gives a full 112 Mic inputs on stage, with a worksurface for monitors and a worksurface for Front of House both with their own local DiGiRacks. Also, three 150 Metre drums of fibre optic cable is provided to allow for a digital split and full redundancy of your fibre multicore. The D5 Live FMX package can also be split into two D5 live 56 EX packages therefore maximising rental flexibility.

The D5 Live FMX package eliminates the need for outboard gear, splitters and multiple line systems, reducing setup and get-out to a matter of minutes and taking up a fraction of the truck space of analogue and other digital solutions.

512 Channel Fibre Optic Cable
Optional Fibre Optic Cable

Stage DiGiRacks



Monitor Console and Local DiGiRack



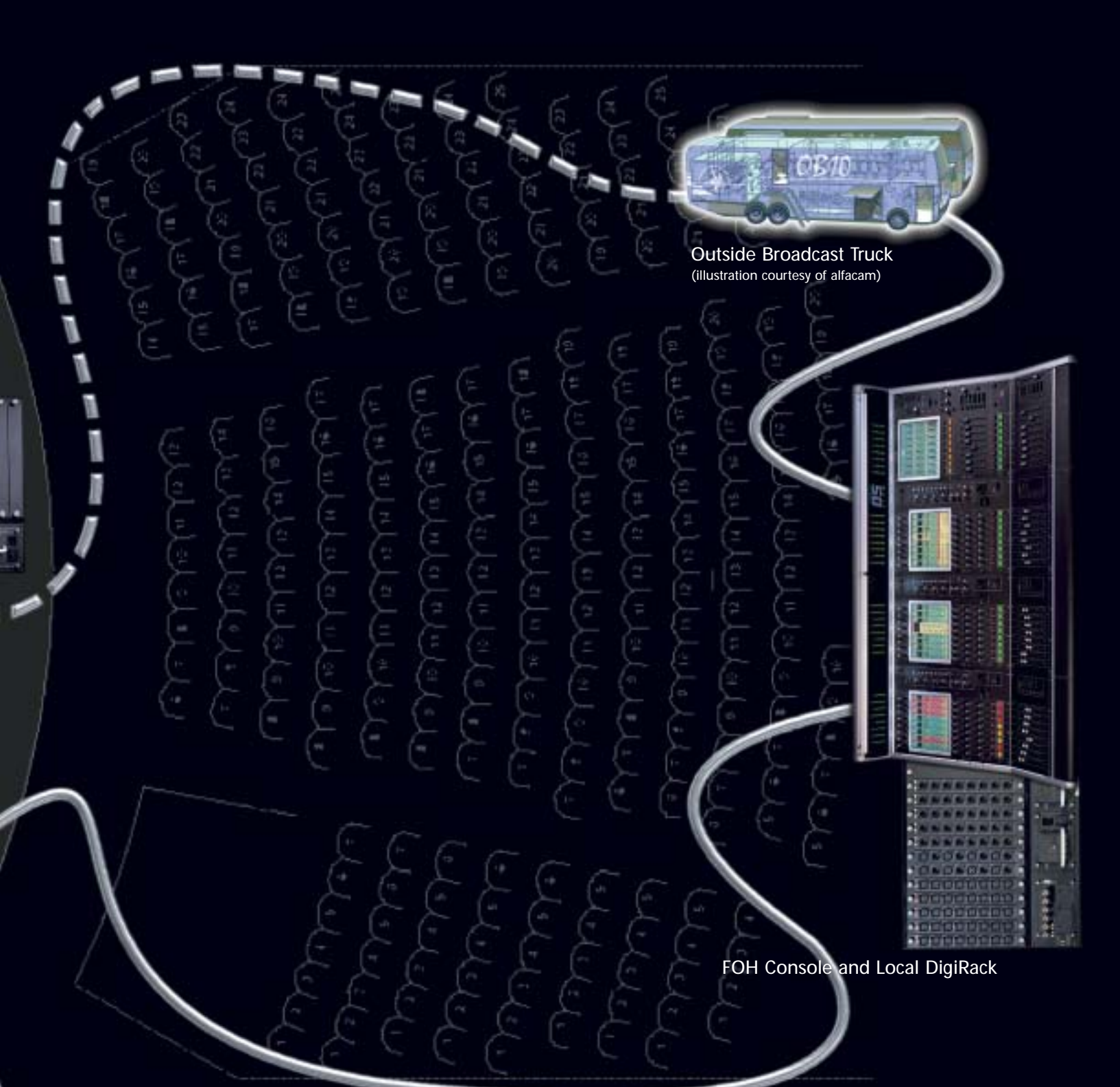
2 x worksurfaces



2 x local DiGiRacks



3 x 150 metres fibre optic cable drum



Outside Broadcast Truck
(illustration courtesy of alfacam)

FOH Console and Local DigiRack

Typical set up with inclusion of OB truck with soundtracs console in fibre loop



stage DiGiRack 1 (56 in 8 out)



stage DiGiRack 2 (56 in 8 out)



2 metre fibre connection

CUSTOM CONFIGURATION

A comprehensive range of I/O options allows you to tailor your D5 Live system precisely to your audio needs.

The options allow for connection with a variety of external digital recording and outside broadcast and analogue or digital input signal formats, as well as interfacing with a wide range of installation systems.

Also, as an extra cost option, your D5 live worksurface can be supplied with a centre master section.



Centre master option

Card Options

- 1. Mic input card with 24-bit A/D on XLR connectors.
- 2. Line input card with 24-bit A/D on XLR connectors.
- 3. T-DIF input/output card with Local clock output
- 4. ADAT input/output card with optical connections
- 5. Analogue input card with 24-bit A/D, mic & line inputs
- 6. Analogue output card with 24-bit D/A on XLR connectors
- 7. AES/EBU input/output card with Bi-directional sample rate conversion



DiGiCo UK Ltd SOUNDTRACS

DiGiCo (UK) Limited brings together the design and development skills that have helped create some of the world's most popular, successful and ground-breaking live sound consoles, with the digital engineering expertise and manufacturing resources of Soundtracs.

The company was formed in 2002 to develop the D5 Live digital mixing system, a revolutionary approach to both the live sound console and the way it interfaces with both ends of the audio chain.

In basing a console around a powerful DSP engine using proven Soundtracs hardware and software, but with features dedicated to live sound mixing, DiGiCo created the world's first truly open-ended console system, for which additional features will be made available in new software versions. This design philosophy ensures your investment in state of the art audio technology today will remain state of the art in the future. The D5 Live from DiGiCo: science dedicated to advancing the art of live sound engineering.

Soundtracs was formed in the early 1980s by a group of recording engineers in search of a better studio console than the desks available at the time. The team's success led to two decades of audio innovation and, in 1992, its first development of a digital audio mixing console.

In 1996 this program led to the launch of the acclaimed Virtua console, followed a year later by the DPC, in 1998 the DS3 and in 2000 the D4. Since 2000 the company's product range has been based entirely on digital audio.

Along the way a host of new technologies has been introduced, including the first use by a console manufacturer of the revolutionary Sharc DSP from Analog Devices, a faster, more efficient processor than any then on the market, the first (and still the most comprehensive) use of multiple TFT LCD touchscreens, a pioneer in the use of a 96kHz sample rate, and the first to run multiple sample rates simultaneously.

This is just some of the experience that has gone into creating the D5 Live digital mixing system, the latest innovation from one of the pioneers of professional digital audio.

