

The SSL Channel Strip Guide

SOLID STATE LOGIC • OXFORD • ENGLAND

The SSL Console Timeline

What are the sonic differences between SSL console channel strips? Explore this official guide to learn more about the SL 4000 B, 4000 E, 4000 G, and 9000 J & K channel strips and how this iconic technology has evolved into Oracle, Duality Fuse, and ORIGIN consoles.

Take a deep dive into the differences in SSL preamps, dynamics, and EQs, with insights into the unique sonic characteristics of each strip, and explore the iconic records shaped by these legendary SSL consoles.



1976

4000 B

Introduced in 1976, the SL 4000 B was one of the first inline recording consoles and a visionary force in studio technology.



1979

4000 E

Released in 1979, the iconic SL 4000 E console redefined music production with its punchy sound, powerful processing, and unmatched versatility, becoming the top choice for leading studios worldwide.



4000 G

SSL introduced the 4000 G console in 1987, marking the pinnacle of the 4000 series and the final chapter in the iconic B, E, and G trilogy.

9000 J & K

In the mid-1990s, SSL redefined studio excellence with the 9000 Series and its groundbreaking SuperAnalogue™ technology.



1994



From mid **70's**



To **2023**

Harrison 32 Series

In the mid-1970s, Nashville engineer Dave Harrison transformed recording technology with the 32 Series console. In 2023, Solid State Logic acquired Harrison Audio to revive this iconic sound with the 32Classic console.

Duality

The final 9000 Series unit rolled off the production line in 2004, paving the way for Duality, a flagship console that combines the 9000 Series' superior analogue performance with market-leading DAW control.



2006

2019



Oracle

Oracle delivers the power of a fully analogue, in-line mixing console with instant, total recall of every parameter, thanks to SSL's revolutionary ActiveAnalogue™ technology.

ORIGIN

Designed with a modern feature set and built for hybrid production workflows, ORIGIN stays true to SSL's iconic analogue legacy while introducing powerful enhancements for today's studios.

2025



4000 B

A RICH AND
VINTAGE SONIC
PROFILE,
WITH GRABBY
COMPRESSION.

History

Introduced in 1976, the SL 4000 B was one of the first inline recording consoles, a true pioneer in studio technology. Installed in the legendary 'Stone Room' at London's Townhouse Studios, it became the foundation behind some of music's most unforgettable moments.

From the thunderous drama of Phil Collins' In the Air Tonight, to the synth-pop revolution of The Buggles' Video Killed the Radio Star, and the brilliance of Peter Gabriel's Intruder, the SL 4000 B console is where it all began.

1976

Preamp

The 4000 B console featured a Jensen JE-115K-E transformer-coupled mic preamp, designed to deliver rich, non-linear harmonic character and saturation.

This transformer-coupled design was instrumental in shaping the console's unique tonal character, contributing to its dynamic and characterful sonic signature.

The 4000 B's mic pre is often described as warm, largely due to the transformer's tendency to introduce distortion that emphasises the lower frequencies of the source's audio spectrum.



Dynamics

Unlike the later 4000 E and 9000-series consoles, the SL 4000 B featured a distinctive channel dynamics section inspired by the legendary SSL Bus Compressor. Its design incorporated peak detection and a sidechain VCA within a feedback loop, hallmarks of the Bus Compressor's punchy, musical response.

The 4000 B's dynamics section utilised the dbx 202 'black can' VCA chip, which was also used for channel signal level control. This shared implementation restricted the dynamics section to a post-EQ position in the signal path. Together, these design choices contributed to the grabby, hard-hitting compression the 4000 B is known for, perfect for adding punch and presence to drums, bass, and guitars.

The 4000 B dynamics section was the first to introduce SSL's Auto Gain Make-Up feature, eliminating the need for a physical gain make-up control. This was achieved by linking the threshold and gain make-up: the lower the threshold is set, the more make-up gain is automatically applied.

EQ

The 4000 B introduced the original 4000-series 4-band parametric EQ circuit, an influential design that laid the groundwork for future SSL EQs, which would undergo numerous revisions over the years.

This early EQ was the direct predecessor to the iconic '02 "Brown Knob" EQ, featuring constant-bandwidth parametric mid-bands.

These made it particularly effective for shaping drums and bass, offering a combination of precision and warmth that engineers continue to seek out today.

Legacy

The 4000 B is the ideal channel strip for those seeking the rich, characterful sound of the first commercially available SSL console. With its powerful compression and musical EQ options, the 4000 B has an unmistakable character that's the essence of SSL's early sonic identity.

Bringing the past into the present, you can access that sound with the 4K B Channel Strip plug-in, a faithful emulation of the original console.

Its preamp stage is modelled on the Jensen JE-115K-E transformer mic preamp, delivering the same non-linear harmonics and analog-style drive. Thanks to automatic gain compensation, you can add saturation and colour without altering your signal levels, making it easy to dial in warmth and character while keeping your mix balanced.

Authentic down to the fader, the 4K B plug-in also models the dbx 202 'black can' VCA fader, adding subtle saturation at the output, allowing you to drive the fader to introduce harmonics, then control the level with the output trim to give you vintage colour with modern precision.

4K B



Modelled on the Jensen JE-115K-E transformer mic preamp

4000-series EQ circuit, a precursor to the '02 "Brown Knob" EQ

The 4000 B's dynamics section is also available in hardware form via the 500 Series B-DYN module, delivering the same hard-hitting compression in an 500 module format. Additionally, the unique B Series DeEsser circuit is featured in the Revival 4000 Channel Strip, offering swift tonal shaping of harsh frequencies using the famous SSL Bus Compressor circuitry.



B Series DeEsser circuit of the Revival 4000 Channel Strip

4000 E

1979

History

At the heart of SSL's legacy lies the iconic SL 4000 E console. Released in 1979, the 4000 E revolutionised music production with its in-your-face, punchy sound, advanced processing capabilities, and unmatched flexibility. It quickly became the console of choice for top studios around the world, reshaping the way records were made.

PUNCHY AND
AGGRESSIVE
WITH FORWARD
MIDS. THE
ICONIC, IN-YOUR-
FACE SOUND
THAT DEMANDS
ATTENTION.

Throughout the 1980s, the 4000 E dominated the studio landscape, leaving its sonic imprint on countless iconic albums and tracks. Many producers and engineers credit it with shaping the evolution of modern production techniques and defining the sound of contemporary music. Even today, 4000 E consoles remain in use in studios across the globe, if you know where to look.

The 4000 E quickly became a favourite among mix engineers such as Andy Wallace, Hugh Padgham, Chris Lord-Alge, Alan Moulder, and Spike Stent. It was also embraced by legendary artists including Peter Gabriel, Phil Collins, Kate Bush, Bryan Adams, Madonna, Prince, Oasis, U2, and many more.

Preamp

Early 4000 E consoles marked a transition from the Jensen JE-115K-E transformer used in the 4000 B series to the updated Jensen JT-115K-E. This newer variant produced more even-order harmonics at moderate saturation levels, resulting in a noticeably less coloured sonic character compared to the B Series mic amp.

Most 4000 E consoles were equipped with electronically-balanced preamps, which removed the transformer from the signal path entirely.

These electronically-balanced designs featured a modest, continuously variable gain range, and included a 20dB pad for coping with louder sound sources.

Dynamics

The iconic dynamics section of the 4000 E helped define the sound of the 1980s. Known for its punchy response, the channel dynamics delivered aggressive compression and fast gating, typical of drum processing during that era.

To offer greater flexibility and routing options, the 4000 E moved away from the shared VCA design of the 4000 B, instead incorporating a separate Class A Aphex VCA with a feed-forward architecture. This change gave the E Series dynamics their signature sound and enhanced control. The Aphex VCA was later discontinued, and replaced with a dbx VCA alternative.

The 4000 E was the first SSL console to introduce program-dependent attack times, adjustable between 3ms and 30ms. This innovation allowed the attack time to respond dynamically to the frequency and amplitude of the incoming signal.

Additionally, a selectable fixed FAST ATTACK mode was available, set at 3ms for consistent rapid response.

Throughout the console’s production, several revisions were made to the channel dynamics, but 'Revision 4' is widely regarded as the definitive benchmark.

It introduced a soft-knee response, selectable FAST/SLOW attack settings, and a logarithmic release curve.

For many engineers, the 4000 E dynamics section represents the pinnacle of SSL’s compressor evolution.

EQ

The 4000 E EQ quickly became a staple in professional recording studios worldwide, renowned for offering engineers the flexibility to intuitively shape their sources with precision. Comprising a four-band parametric EQ with filters, the E Series EQ underwent several design iterations, each providing unique tonal characteristics that evolved over time.

The original '02 "Brown Knob" EQ was known for its gritty, aggressive sound. In contrast, the rare '132 "Orange Knob", drawing inspiration from Pultec-style EQ curves, was celebrated for its broader and more musical response.

In 1983, the ‘242 "Black Knob" EQ was developed in collaboration with Sir George Martin for the first SSL console installed at AIR Studios.

It introduced wider cut and boost ranges (±18 dB vs. ±15 dB), a more refined control feel, and a steeper 18 dB/octave high-pass filter, delivering tighter low-end control and enhanced tonal flexibility.

The success of the '242 "Black Knob" EQ secured its place in modern SSL consoles, including the ORIGIN, ORACLE, and Duality.

Legacy

Arguably the most recognisable recording console of all time, the 4000 E’s legacy lives on through many of SSL’s designs. It has shaped the sound of countless records over the past 40 years, whether through analogue hardware or software emulation.

The 4000 E’s iconic EQ layout remains a familiar sight in studios around the world.

Celebrated for defining the sound of modern rock and pop music, the 4000 E is a go-to choice for those seeking a mid-forward, aggressive tone in their mix, while still retaining the clean, polished character SSL is known for.

Today, the 4000 E sound is accessible in both hardware, such as the Revival 4000 and our 500 Series, and software via the 4K E plug-in. Like the 4K B, the 4K E plug-in has also been modelled down to the component level, including the dbx 202 'gold can' VCA, delivering a hyper-realistic recreation with multiple layers of harmonic saturation available throughout the channel strip.



4KE

The dbx 202 ‘black can’ VCA fader

4000 G



REFINED AND
TIGHT WITH
FOCUSED DETAIL,
MUSICAL YET
POWERFUL,
DELIVERING
PRECISION WITH
IMPACT.

History

Building on the legacy of the 4000 E, SSL introduced the 4000 G console in 1987, marking the pinnacle of the 4000 series and the final chapter in the B, E, and G trilogy.

While the E Series was celebrated for its punchy, aggressive sonic character, many studio professionals sought a smoother, more refined sound. SSL responded with the 4000 G, a console that delivered next-level innovations, including redesigned microphone preamps, the distinctive "Pink Knob" '292 EQ, and an enhanced dynamics section. These upgrades gave the G Series a more polished and versatile sound, contrasting with the aggressive tones of its predecessor.

The 4000 G's exceptional sonic clarity and versatility transcended genres, helping shape countless chart-topping hits in pop, rock, and hip-hop. Its capabilities were embraced by legendary engineers and producers such as Tom Lord Alge, Bob Rock, and MixedByAli, with artists including Bruce Springsteen, Pink Floyd, Nirvana, Massive Attack, Mariah Carey, & Whitney Houston all writing music history with the 4000 G.

Thanks to its powerful yet intuitive automation system and exceptional versatility, the SSL 4000 G Series quickly became a staple in top-tier studios worldwide.

Its success was further cemented with the release of the 4000 G+, which introduced a suite of advanced production tools, including Phase Scope, Remote Talkback, PPM Metering, Push/Push Aux Masters, and more, further enhancing workflow for professional engineers.

1987

Preamp

The 4000 G featured a redesigned preamp to accommodate cleaner amplification of input sources with greater headroom. This redesign included a super-matched pair of transistors in the input stage, allowing the mic preamp to offer a much wider gain range. As a result, it no longer required a pad for handling louder signals and delivered improved signal-to-noise performance. Instead of a continuously variable control, the input gain was also switched in 6 dB steps.

This new preamp design in the 4000 G offered a very low noise floor and significantly improved noise rejection.



Dynamics

By the time the 4000 G console was released, SSL's channel dynamics had undergone numerous incremental circuit revisions throughout the 4000 series era, constantly evolving to meet the demands of modern music.

The 4000 G introduced a more refined compression style, offering a tighter response that proved invaluable in shaping the increasingly elaborate and densely layered mixes being produced in the late '80s and early '90s.

Its dynamics section gave engineers and producers greater transient control and a more focused sound, while still retaining the familiar punch that made the 4000 E so admired.

EQ

Combining end-user feedback with technical refinements, the 4000 G console introduced a completely new EQ circuit: dubbed the "Pink Knob" '292 EQ. This design was SSL's direct response to the demand for a tighter, more focused EQ, in comparison to the aggressive, gritty character of the earlier E Series EQ.

The '292 EQ features a variable Q design, meaning smaller boosts or cuts result in broader, more natural curves. This made it a popular choice for gentle tone shaping, especially on vocals. In contrast, the '242 EQ, with its constant Q design, was often preferred for more surgical tasks like vocal processing.

Another standout feature of the 4000 G is the HMF $\times 3$ and LMF $\div 3$ selector switches, which extend the mid-frequency bands to the outer edges of the spectrum. This allows for more creative and expressive EQ curves, giving engineers the flexibility to sculpt wide or narrow bell shapes in both low and high frequency ranges, alongside the standard LF and HF shelf controls.

Legacy

Widely regarded as the pinnacle of the 4000 Series, the 4000 G gave producers the flexibility and sonic precision needed to continue pushing the boundaries of record production. Its sound transcended genres, but it was especially revered by top hip-hop artists and producers for its tighter, more refined character, offering a musicality to other genres that surpassed the earlier E Series.

The 4000 G sound remains a popular choice among producers today, and as of 2025, completes SSL's 4K plug-in series.

The 4K G plug-in faithfully recreates the refinements made to the original G Series console, including its tighter dynamics and the iconic "Pink Knob" '292 EQ, with its variable Q design, along with HMF $\times 3$ and LMF $\div 3$ frequency selectors.



2025

4KG

The refinements introduced in the G Series console continue to influence SSL's later designs with G Series EQ curves switchable on consoles such as the 9000 Series, Duality, AWS, Oracle & Super 9000 SuperAnalogue™ Channel Strip, preserving the sound and design choices that made the original so distinctive.

9000 J & K

History

In the mid-1990s, SSL once again set the standard for modern music production with the launch of the 9000 Series console, featuring groundbreaking SuperAnalogue™ technology.

SuperAnalogue™ technology creates a signal path so transparent and wide bandwidth that nothing is lost, putting the engineer right there in the room with the artist. By eliminating electrolytic capacitors from the audio path and achieving extremely low noise and harmonic distortion, this technology delivers exceptionally low phase shift across the audible spectrum. The result is an analogue soundstage that feels both transparent and immersive.

The 9000 Series made rock and pop mixes sound bigger than ever, while enhancing hip-hop and R&B with deep, extended low-end and shimmering highs. Renowned for making music sound larger than life with its unmatched dynamics and depth, the 9000 Series became the industry standard of its era, setting a milestone in analogue design and paving the way for the development of the today's flagship Duality and Oracle consoles.

CLEAN AND
SMOOTH WITH
HI-FI CLARITY,
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The 9000 Series became the benchmark for modern music production, trusted by the world's most influential artists and engineers. Seminal hip-hop and R&B artists such as Dr. Dre, Jay-Z, Nas, DMX, Mary J. Blige, and Nicki Minaj relied on its precision and depth. Rock giants like Metallica, along with the Fugees' Wyclef Jean, installed 9000 Series consoles in their private studios. Many commercial recording facilities, including Abbey Road, Metropolis, Real World, and The Record Plant, still use 9000 Series consoles today.

1994

Preamp

With its SuperAnalogue™ design, the 9000 Series introduced a dual-impedance microphone amplifier that leveraged advanced circuitry to achieve exceptional bandwidth, noise performance approaching theoretical limits, and virtually unmeasurable distortion. These consoles became highly regarded for their unmatched clarity, delivering what was described as a “hi-fi” sound, making them an ideal choice for recording everything from chart-topping pop hits to the most dynamic orchestral film scores.



Dynamics

The 9000 Series dynamics used a similar control and time constant approach to previous SL 4000 series consoles, however an Analogue Devices SSM 2018 VCA delivered a revitalised performance thanks to the SuperAnalogue™ design philosophy.

This new SuperAnalogue™ technology provided an extremely wide frequency response in each channel, extending beyond 100kHz, which resulted in a ruler-flat phase response across the 20Hz to 20kHz audio spectrum.

In addition, the 9000 Series dynamics introduced several new features, including Peak vs. RMS (soft-knee) sensing in the compressor and a HOLD control as part of the expander design, enabling precise gate and downward expansion management.

EQ

Renowned for its smooth, open sound and minimal phase shift, the SSL 9000 Series EQ delivered greater clarity than earlier SSL designs. It introduced a cleaner sonic character while maintaining the legacy of the G and E Series consoles. Users could switch between the distinct G & E Series EQ curves, offering flexibility to tailor the sound based on the source material, musical style, or familiarity with previous SSL consoles.

Like its predecessors, the 9000 Series EQ remained a four-band parametric equaliser. In G Series mode, it featured variable Q on the mid bands and selectable shelving or bell curves on the high and low bands. Activating the E switch engaged EQ characteristics based on the classic '242 E Series EQ: the mid bands had constant Q and the high-frequency band had a shallower slope compared to G Series mode.

Legacy

A breakthrough in performance, the 9000 Series embodies SSL's relentless pursuit of sonic transparency, removing every possible barrier between the musician and the engineer. It combines continuous innovation, meticulous component selection, and precision engineering to deliver unmatched clarity and depth.

The 9000 J and K consoles are often regarded as SSL's "Concorde moment," with SuperAnalogue™ technology marking a major leap forward. This innovation delivered an exceptionally clean, wide, and open sound, featuring shimmering highs, thunderous lows, and punch powerful enough to be felt in the control room.

The SuperAnalogue™ design philosophy continues to shape SSL's modern consoles, including Duality, AWS, ORIGIN, and ORACLE, the consoles behind some of the most iconic records in modern music.

Inspired by the legendary 9000 Series, SSL's Channel Strip 2 brings the unmistakable tone and powerful feature set of the 9000 K channel strips straight to your DAW. It delivers the same pristine clarity, punch, and the flexible E/G EQ curves that made the originals a studio standard.

New for 2025, the Super 9000 SuperAnalogue™ Channel Strip takes 9K sonic precision to the next level.



Combining the unmatched depth and transparency of the 9000 Series with SSL's acclaimed VHD™ (Variable Harmonic Drive) technology, borrowed from the flagship Duality console, for adding rich harmonic character and saturation when desired. Super 9000 wouldn't be complete without the punchy dynamics and pristine clarity of the 9000 Series, all housed in a compact 19" 1U rack unit.

9K



Harrison 32 Series

History

Whilst Solid State Logic were still a small operation during the mid-1970s, Nashville based engineer, Dave Harrison, was already pioneering advancements in recording technology, also concluding that an in-line recording system offered a more streamlined and efficient workflow for recording engineers.

WARM AND
MUSICAL, WITH A
SILKY SMOOTH
TOP-END.

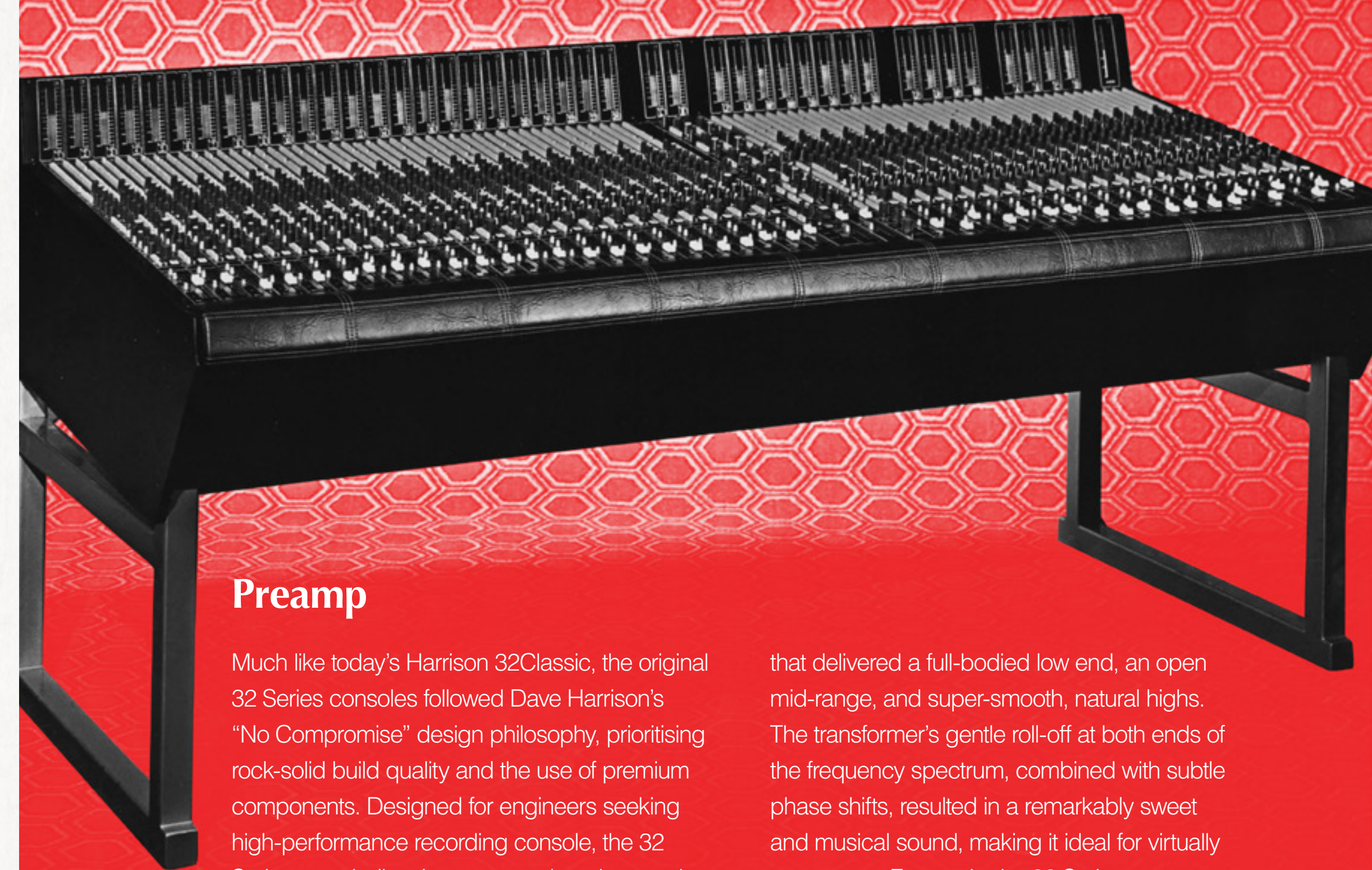
Harrison's vision was to create a console that enhanced the music in a truly musical and intuitive way. Guided by this design concept, Harrison introduced the 32 Series console in 1975, which quickly became known for its warm, rich tonal character and ability to deliver exceptionally smooth highs.

Trusted by legendary engineers like Bruce Swedien, Roger Nichols, and Reinhold Mack, the Harrison 32 Series consoles made their way into some of the world's most renowned studios, including The Village and Westlake Studios in Los Angeles, LSI Studios in Nashville, Polar Studios in Stockholm, and Musicland Studios in Munich, with artists such as Michael Jackson, ABBA, Queen, Led Zeppelin, Supertramp, Johnny Cash, and Steely Dan shaping music history at a Harrison 32 Series.

Throughout the 1970s and 1980s, Harrison Audio played a pivotal role in the recording industry, standing as a major competitor to Solid State Logic. As record production evolved, Harrison continued to innovate, adapting its console designs to meet the changing needs of engineers and producers, but by the 1990s, the company shifted focus to developing motion picture consoles for post-production, manufacturing industry-leading technology that remains in use today by Sony Pictures and Universal for blockbuster films and TV shows.

Fast-forward to 2023, Solid State Logic sought to expand its tonal palette by acquiring Harrison Audio and welcoming it into the SSL family. This new partnership led to the launch of the 32Classic console, reintroducing the legendary Harrison sound to music studios around the world, for the first time in nearly 30 years.

From Mid
70's To
2023



Preamp

Much like today's Harrison 32Classic, the original 32 Series consoles followed Dave Harrison's "No Compromise" design philosophy, prioritising rock-solid build quality and the use of premium components. Designed for engineers seeking high-performance recording console, the 32 Series were built to impart warmth, colour, and musicality to every recording.

The 32 Series console featured a Jensen transformer-balanced microphone preamp

that delivered a full-bodied low end, an open mid-range, and super-smooth, natural highs. The transformer's gentle roll-off at both ends of the frequency spectrum, combined with subtle phase shifts, resulted in a remarkably sweet and musical sound, making it ideal for virtually any source. Famously, the 32 Series preamp could be pushed into saturation and subtle compression, adding the signature "Harrison vibe" and depth to recordings.

Filters

Dave Harrison and his close friend Bruce Swedien shared a belief that compression wasn't necessary in the music recording process. They felt that music should reflect the natural dynamics of a performance, with subtle compression already occurring through transformer saturation in the preamp, and the inherent characteristics of recording to tape.

As a result, Harrison consoles famously did not include any dynamic processing until the introduction of their music broadcast consoles in the 1990s.

The 32 Series did, however, feature a distinctive pair of high-pass and low-pass filters with a musical 12 dB/octave slope. The high-pass filter, ranging from 25 Hz to 3.1 kHz, included a characterful 3 dB resonant peak, while the low-pass filter spanned 160 Hz to 20 kHz. These filters were ideal for quickly and precisely removing low-end rumble or smoothing out harsh high frequencies, contributing significantly to the smooth, musical sound Harrison became known for.

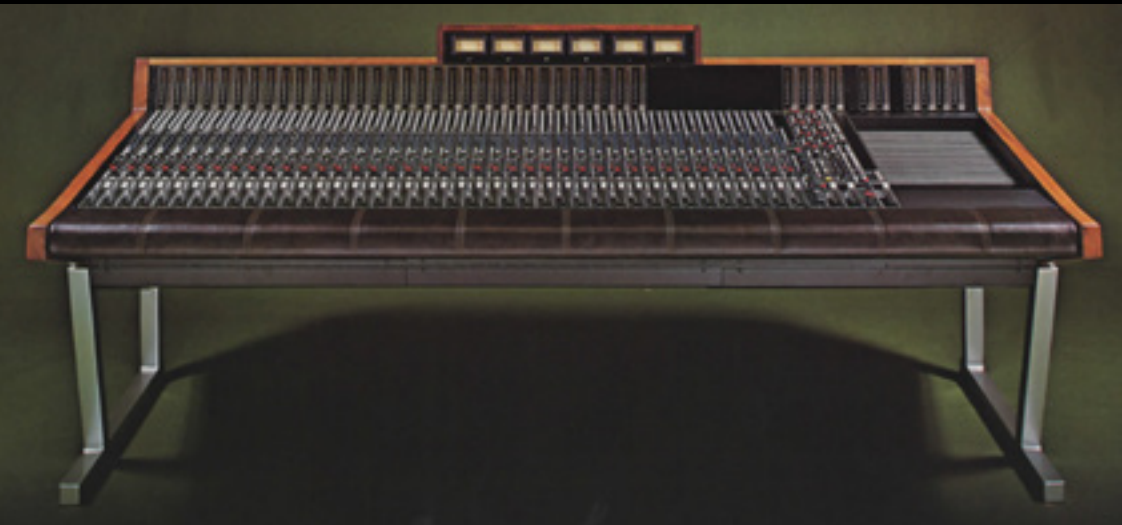
The real magic happens when these filters were used in combination with the EQ section, allowing engineers to tighten the low end and ‘bloom’ the top end, without ever sounding harsh or brittle.

EQ

Designed in an era where you had to simply get it right on the way in, the 32 Series EQ features four carefully developed frequency bands with generous overlap and a proportional Q design. These elements were painstakingly engineered to deliver both broad, musical curves and precise sculpting when necessary, ensuring optimal results across any source material or recording scenario.

The 32 Series EQ also includes a switchable bell button on both the 'Hi' and 'Lo' frequency bands. When engaged, this button changes the response from shelving mode to a second-order bell curve, incorporating the classic Harrison proportional-Q design. In this mode, the frequency knob controls the center frequency of the bell response, allowing for more focused and musical EQ shaping.

Revered for its super-smooth characteristics, the 32 Series EQ was built to be pushed, producing a natural-sounding response without harshness or “over-produced” results.



Legacy

Bringing a distinct sonic character to the table, the warm and colourful Harrison sound offers a compelling contrast to SSL's precise, punchy signature. It gives engineers the flexibility to reach for a vintage, characterful tone when needed, one of the key reasons SSL acquired Harrison Audio. This partnership expands the sonic palette available to engineers and producers, with some engineers now choosing to track on a Harrison and mix on an SSL.

Long associated with rock and pop records, the legendary Harrison sound also delivers ideal tonal qualities for blues, jazz, and country music.

With its sonic identity deeply rooted in Nashville, Harrison's musical tones continue to resonate across genres well into the 21st century.

Available in 16 to 96+ channel configurations, with an optional high-performance Dante audio interface, the 32Classic console delivers the same beautiful analogue tone as the original 32 Series. It's equipped with Jensen JT-MB-CPCA balanced mic preamps and the iconic 32 Series EQ with filters.



For those seeking the same sonic performance in a compact format, the 32Classic Mix Strip delivers identical specifications in a 19" 1U rack unit, complete with an integrated summing bus, making it a convenient sidecar for tracking. Additionally, the 32Cpre+ provides the legendary Harrison mic preamp and filters in a compact 500-series module.

The 32Classic console has also been expertly modelled in the 32Classic Channel Strip Plug-in, bringing the same legendary Harrison tools into modern in-the-box workflows.



Duality

Development

SSL entered the SuperAnalogue™ era with the 9000 Series, a console that paved the way for the sound of modern, up-front, larger-than-life music. The final 9000 Series unit rolled off the production line in 2006, laying the technological foundation for a new flagship console: Duality.

FROM CLEAN AND
SMOOTH HI-FI CLARITY
TO WARM, RICH, AND
DRIVEN TONES.

Duality retains the superior analogue performance of the 9000 Series while integrating market-leading DAW control.

Duality was first SSL production tool to feature Variable Harmonic Drive (VHD) technology, offering two distinct mic preamp flavours, the ultra-clean and precise sound of SuperAnalogue™, or warm, harmonically rich tones of VHD.

This dual sonic character and the ability to seamlessly switch between a traditional analogue console workflow and an advanced DAW control give Duality its name and its unique versatility.

Since its launch in 2006, Duality has evolved through several iterations — ‘SE’, ‘Delta’ which debut the Delta control Plug-in, and now ‘Duality Fuse’.

The latest version integrates the SSL FUSION processor into the centre section, introducing additional analogue colouration designed to deliver the perfect blend of tonal character, weight, and spatial depth to your mix bus or stereo stems.

2006

Preamp

Duality offers two distinct mic preamp characteristics: SuperAnalogue™, which delivers near-linear phase response, flat frequency response, 0.005% total harmonic distortion, and an exceptionally low noise floor, resulting in stunning clarity and an expansive sound stage; and Variable Harmonic Drive™ (VHD) technology. VHD™ introduces 2nd or 3rd harmonic distortion, or a blend of both.

At lower levels, it adds gentle valve-style warmth or a touch of transistor edge, while higher gain settings produce intense, trashy, transistoresque grunge. This versatility enables Duality mic preamps to deliver everything from ultra-clean SSL precision to subtle warmth or full-on distortion, redefining the capabilities of a preamplifier.

Dynamics

Across all its variants, Duality features classic SSL Channel Dynamics processing: a Compressor (switchable between traditional RMS and modern Peak Sense modes), a Gate (with variable Hold time), and an Expander. A Side Chain Listen feature is also included, offering full creative control.

Other than replacing the obsolete SSM VCA with the THAT 2181A VCAs in the signal path and sharing identical time constants, Duality's dynamics processing is fundamentally the same design as found in the 9000 Series.

This ensures the same flexibility, control, and superior sonic performance, all powered by SSL's renowned SuperAnalogue™ technology.

EQ

Duality has evolved through several revisions, yet its four-band parametric equaliser remains a defining feature, uniting the most coveted elements of SSL's classic E and G Series consoles.

At its core is the renowned '242 "black knob" EQ, originally developed for the 4000 E, with the ability to switch between E Series and G Series curves.

This offers steeper shelving curves with undershoot/overshoot at the turnover frequency, and the distinctive gain/bandwidth interaction in the mid bands that made the G Series EQ a studio favourite.

The HF and LF bands can be switched between shelving and fixed-Q parametric (BELL), while the HMF and LMF bands provide precise parametric mid-band control, ensuring engineers have the flexibility to sculpt sound with both authority and finesse.

Continuing the implementation of E Series technology, Duality also features a powerful 3rd-order 18dB/octave high-pass filter and a precise 2nd-order 12dB/octave low-pass filter.



Summary

Duality Fuse is the definitive industry standard for large-scale music tracking and mixing in professional environments, where both sonics and workflow are non-negotiable. With unparalleled flexibility and near-limitless routing power, it features refined SuperAnalogue™ technology from the legendary 9000 Series, combined with classic E/G Series EQ and channel dynamics.

Duality also introduces powerful innovations, including advanced multi-layer DAW control, analogue automation via the Delta-Control Plug-in, dual SuperAnalogue™ and Variable Harmonic Drive™ (VHD) mic preamp technology, and an integrated Fusion processor offering a wide range of tonal colouration options.

For producers and engineers who demand the very best, Duality delivers the sound of professional audio excellence; punchy, open, refined, and unmistakably SSL.

With the likes of Trent Reznor, Dr. Dre, Eminem, and The Chemical Brothers opting for Duality in their personal studios, VHD™ and SuperAnalogue™ technology has become accessible outside of the console, via the Super 9000 SuperAnalogue™ Channel Strip and the VHD+ Pre 500 Series module.

2025

ORIGIN

PURE AND
DETAILED
TO WARM,
HARMONICALLY-
RICH, DRIVEN
TONES.

Development

Introduced at the AES Show in New York in 2019, the SSL ORIGIN console was designed to combine traditional SSL analogue workflows with the demands of today's modern, DAW-driven hybrid recording studios.

Harking back to the early days of Solid State Logic, and featuring a familiar purely analogue inline console design, ORIGIN stays true to SSL's legacy with a dual-channel architecture, 16 buses, E Series EQs, and a classic Bus Compressor, while offering a revitalised update to workflow that's tailored to contemporary production needs.

Designed with a modern feature set and built for hybrid production workflows, ORIGIN stays true to SSL's iconic analogue legacy while introducing powerful enhancements for today's studios.

Offering an exceptionally low noise floor, massive headroom, PureDrive mic preamps, stem-ready 0 dB fader bypass switches, and improved energy efficiency.

At ORIGIN's core is a highly adaptable centre section with a 19" rack space, perfect for integrating DAW controllers or additional processing gear, bridging the gap between digital flexibility and traditional analogue workflow.

Since its launch, ORIGIN has been embraced by renowned studios and educational facilities worldwide including Blackbird Studios, Republic Records, Abbey Road Institute, Chris Lord-Alge's Mix LA, and Tom Lord-Alge's personal studio.

Its success was further cemented with the release of the 4000 G+, which introduced a suite of advanced production tools, including Phase Scope, Remote Talkback, PPM Metering, Push/Push Aux Masters, and more, further enhancing workflow for professional engineers.

2019



Preamp

ORIGIN features SSL's new PureDrive™ microphone preamp technology, which builds on the SuperAnalogue™ clarity and purity of previous SSL mic pres. It adds the flexibility to switch to a warm, harmonically rich, and driven tone that varies with gain, making ORIGIN's mic pre incredibly versatile in modern recording environments.

The PureDrive™ mic pres are based on a discrete transistor design using modern FET components. In 'Pure' mode, they deliver an ultra-clean, ultra-low-noise signal path with fast response and stunning resolution, staying true to the SuperAnalogue™ design philosophy. When desired, users can engage the 'Drive' circuit to introduce gain-dependent, non-linear harmonic saturation, adding character and depth to input sources.



Modular Centre Section

ORIGIN remains true to SSL's analogue heritage, offering hybrid flexibility tailored to modern recording and production environments, giving studios the freedom to customise the console's feature set to suit their specific workflow.

ORIGIN's dedicated 19" rack space in the centre section is perfect for integrating outboard gear, DAW controllers, or commonly, the installation of 500 Series chassis loaded with a mix of SSL E-DYN and B-DYN dynamics modules.

ORIGIN also features the iconic SSL Bus Compressor, which still sits proudly in the centre section. Offering new compression ratios, an insert return, and a built-in sidechain filter, while continuing to deliver the legendary mix bus glue its known for.

EQ

The E-Series '242 EQ was arguably the most popular equaliser from the SL 4000 series console range, originally developed in collaboration with George Martin for AIR Studios back in 1983.

Its popularity stemmed from its wide cut and boost ranges (± 18 dB vs. ± 15 dB), a more refined control feel, and a steeper 18 dB/octave high-pass filter, all of which contributed to tighter low-end control and enhanced tonal flexibility, firmly cementing the decision its place in ORIGIN.

Each of ORIGIN's channel strips are equipped with this acclaimed E-Series four-band parametric EQ, offering variable cut/boost per band, HF and LF bell/shelf switching, and an independent sweepable high-pass filter.

The result is the unmistakable '242 growl and deep low-end that engineers continue to rely on.



Summary

Taking influence from the legacy of the 4000 Series consoles, but with a fresh perspective on modern production workflows, ORIGIN stands as a testament to both SSL's analogue design heritage and its ongoing commitment to innovation.

The result is a reimagined inline analogue console, purpose-built for today's tracking and mixing environments that embrace hybrid workflows, while still demanding access to the unmistakable SSL sound.

Thanks to ORIGIN's versatile PureDrive™ preamps, tracking spaces benefit from both the pristine clarity of SuperAnalogue™ and the ability to dial in rich harmonic saturation when needed.

Paired with the familiar '242 "Black Knob" EQ, engineers can sculpt their sound using a tried-and-tested tool that has proven its relevance over the past 45 years.

Add to that the iconic SSL Bus Compressor, flexible routing options, and the ability to customise the console's centre section to suit your specific hybrid workflow, ORIGIN is an ever-evolving SSL console.

Oracle

Development

Launched at Peter Gabriel's iconic Real World Studios in 2025, Oracle marks a new era for Solid State Logic — the dawn of Future Analogue technology.

FROM SUPERANALOGUE™
SONICS TO HARMONICALLY
RICH, DRIVEN TONES, AND
EVERYTHING IN BETWEEN.

Combining the unmistakable sound of SSL's legendary large-format consoles with next-gen innovation, Oracle delivers the power of a fully analogue, in-line mixing console with instant recall of every parameter, thanks to SSL's revolutionary ActiveAnalogue™ technology.

Built to transform studio workflows, Oracle lets engineers flip between tracking and mixing setups in seconds, while preserving the rich, musical character of true analogue.

Evolving SSL's acclaimed SuperAnalogue™ lineage from the 9000 and Duality Series, Oracle introduces a host of forward-thinking features, including switchable plasma or UV metering, unparalleled analogue routing flexibility, mid/side processing, integrated recallable THE BUS+, and next-generation PURE DRIVE mic pres with harmonic drive control.

*Just as the 4000E redefined
recording in its time, Oracle
reimagines what an analogue
console can be — and once
again, changes the way music
is made.*

2025

Preamp

Built around modern FET components, the Oracle mic pre delivers ultra-low noise, speed, and exceptional detail, capturing the natural character of any source. Its dedicated 'Drive' control introduces non-linear harmonic saturation for added depth and colour.

The latest generation of PURE DRIVE mic pre technology that is also found in ORIGIN and rackmount PURE DRIVE QUAD and OCTO units, provides a powerful 75 dB of pristine gain, capable of driving any microphone type.

The Oracle mic pre allows producers and engineers to blend in 2nd- and 3rd-order harmonics, transforming the mic pre from a clean, transparent SuperAnalogue™ presentation through subtly warm and rounded textures to harmonically rich, driven tones.

THE BUS+ & LMC

The Oracle features an integrated and fully recallable THE BUS+, complete with analogue dynamic EQ, ten ‘4K’ saturation levels, and both traditional VCA feed-forward and a more ‘relaxed’ feed-back compression mode.

Leveraging Oracle’s analogue routing flexibility, THE BUS+ can be moved and inserted across any of the four Main Buses, eight Stereo Groups, or sixteen Track Buses.

For additional compression character, a Listen Mic Compressor can also be routed to the patch bay for processing external sources.

Just like the AWS range of consoles it replaces, Oracle does not include dynamic processing on individual channel strips.

This design choice reflects the compact nature of the console’s processing and control layout.



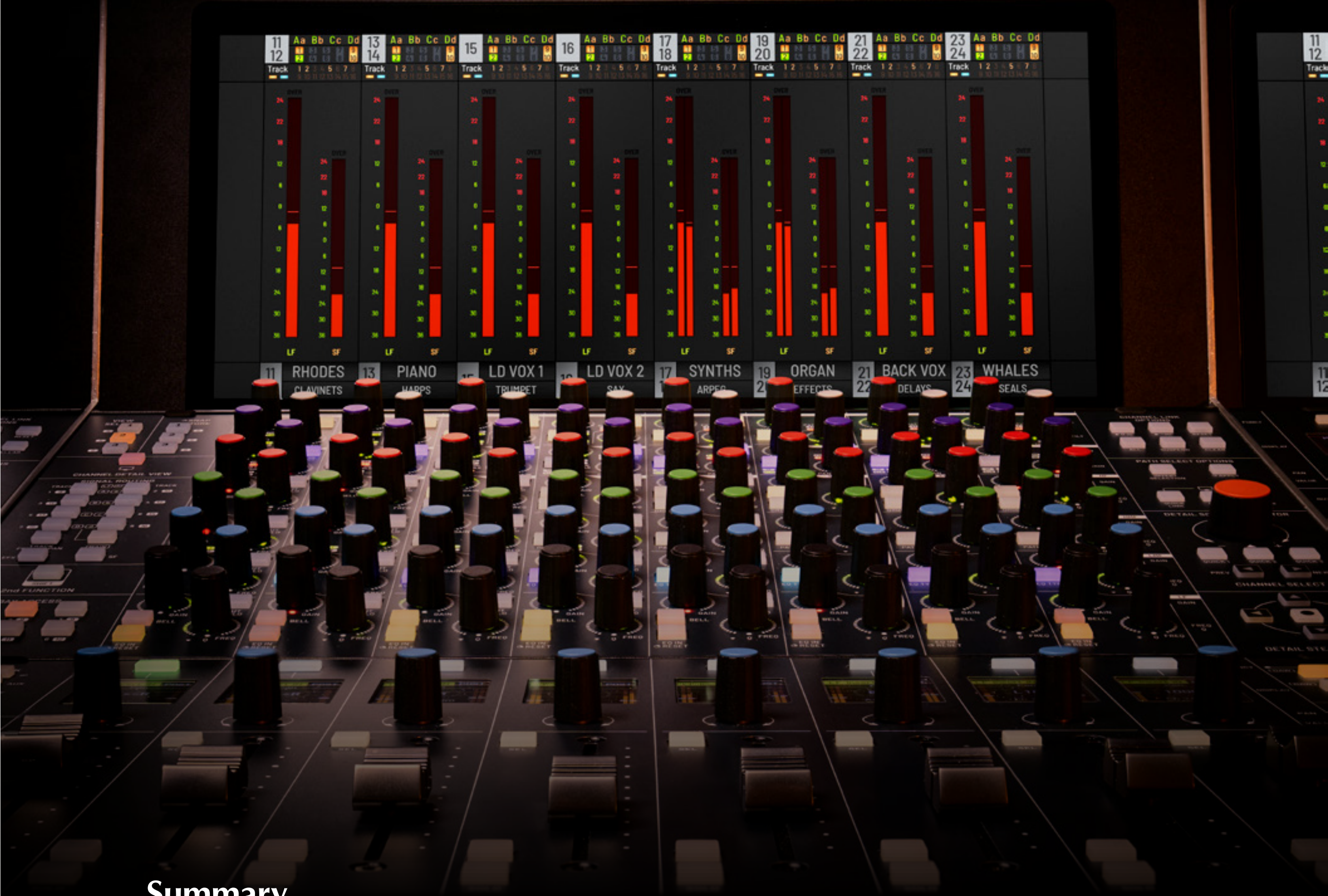
EQ

At the heart of every Oracle channel is a production tool that has remained a staple feature of nearly every SSL console since it first appeared in the 4000 E: the iconic ‘242 “Black Knob” E Series EQ. Relentlessly chosen by professionals to shape extraordinary mixes, this four-band parametric EQ offers switchable sonic characteristics, allowing you to toggle seamlessly between the constant-Q, ‘aggressive’ sound of the E Series and the variable-Q, ‘smooth’ character of the G Series.

Both modes provide a dedicated high-pass filter, selectable high-and low-frequency shelf/bell curves, and fully parametric mid-frequency bands, delivering the distinctive tonal signatures of SSL’s acclaimed EQ design legacy. Oracle’s EQ can be instantly moved and recalled between the Small Fader and Large Fader paths.

All this per-channel processing power can be ‘linked’ in odd/even channel pairs to provide a simple, unified control set for handling stereo sources.

Advanced EQ workflow features unique to Oracle include ‘band solo’, which allows the user to solo a specific EQ frequency band they’re working on by cutting any signal outside the selected band. This is especially useful for quickly identifying resonance build-ups or energy swells in a signal that require processing.



Summary

First envisioned in 1985, ORACLE brings to life SSL’s long-standing ambition: a fully recallable, digitally controlled analogue mixing console. Deemed unfeasible at the time due to cost and technical limitations, this bold concept is now a reality, made possible by both technological advancements and four decades of SSL innovation in analogue and digital console design.

ORACLE is the first SSL analogue console with full recall capability, able to switch between mixes as quickly as

loading your next DAW project. Featuring only the very best of SSL’s analogue innovation, including PURE DRIVE mic preamps, the iconic E Series ‘242 “Black Knob” EQ with switchable G Series curves, and an integrated BUS+.

ORACLE seamlessly fuses the warmth and character of SSL’s legendary analogue sound with the precision and flexibility of ActiveAnalogue™ technology, marking a new era in console design for Solid State Logic.

Solid State Logic

O X F O R D • E N G L A N D