

Solid State Logic



G+ SERIES ANALOGUE SOLUTIONS



PERFORMANCE AND PEDIGREE

The G+ Series from Solid State Logic is a step forward in console technology. Offering more than just a mixing desk, the G+ Series philosophy is to create a studio control system whose familiar ergonomics and quality audio performance inspire confidence and creativity in every user.

The unprecedented popularity of SSL consoles started many years ago with the E Series, and continued more recently with the world-renowned G Series. G+ builds on this success, with a range of console systems founded on G Series design and quality, and offering many additional features, upgrades and improvements. It has evolved through an extensive research and development programme designed to meet the changing needs and expectations of today's audio professionals. The result is a range of consoles whose pedigree is proven, whose design is tried and tested, and whose features provide a unique balance of flexibility and cost-efficiency.

Solid State Logic has forged long-standing relationships with many of its clients. This has facilitated a deep understanding of specific needs in the fields of music, film and broadcast, which in turn has enabled SSL to refine its products continuously in order to meet the distinctive and particular audio requirements of these markets.

If you have ever wondered why there are more SSL console installations around the world than any other large format professional audio system, then please read on.

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THE DESIGN PHILOSOPHY

THE COMPLETE STUDIO CONTROL SYSTEM

Intrinsic to the design of the G+ Series is the integration of crucial elements of the recording process with the console itself; the creativity of recording, overdubbing and mixing sessions is not compromised by tedious technical distractions. The inherent flexibility of signal flow in all G+ consoles combines with a standard feature set that offers a full dynamics section and in-line multitrack monitoring in every channel. This design philosophy allows routine tasks to be performed effortlessly, and creates a system which is highly intuitive and easy to master.

ANALOGUE SOLUTIONS

The G+ Series offers solutions for the requirements of the most discerning user. All G+ consoles exhibit the same sonic excellence, and they share a comprehensive range of features and facilities that equips them to satisfy a broad range of audio recording and mixing needs.

BUILT TO LAST

Inherent in any Solid State Logic console is a build quality that cannot be rivalled by any other manufacturer. A Solid State Logic equipped studio will reap the benefits of less down time, lower maintenance costs, higher resale values, and most importantly a longer product life.

WHY ANALOGUE?

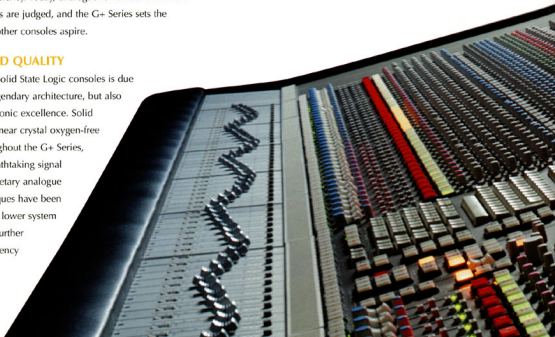
Analogue retains the critical resolution and definition of the original source material throughout the modern music production process. SSL analogue solutions combine creative power, natural sound and cost-efficiency. Today, analogue remains the standard by which all formats are judged, and the G+ Series sets the standard to which other consoles aspire.

SUPERB SOUND QUALITY

The desirability of Solid State Logic consoles is due not only to their legendary architecture, but also to their renowned sonic excellence. Solid State Logic's own linear crystal oxygen-free cable is used throughout the G+ Series, and provides a breathtaking signal fidelity. New proprietary analogue engineering techniques have been used to achieve yet lower system noise levels and a further extended low frequency response.

GLOBAL FEATURES

- Advanced in-line console architecture meets diverse requirements: the SL 4000 G+, the G+ Classic, the SL 8000 G+ and the SL 8000 GB provide the finest analogue solutions for music, film and broadcast.
- Available in a variety of frame sizes up to 112 channels, within a wide range of architectural shapes, allowing the precise configuration to be specified for the work requirements and room size.
- The G+ Series Studio Computer, integral to the G+ range, provides the world's most familiar session management and console automation software - the exclusive choice of leading artists, engineers and producers in over 45 countries.
- Choice of classic E Series or more recent G Series EQ.
- G+ Master Studio sub-systems provide additional control of external equipment, adding functions such as track arming and multiple machine control for total studio integration.
- Ultimatum™ moving fader and VCA automation systems are available optionally; Ultimatum™ is included as standard on the G+ Classic.
- Total Recall™ snapshot and recall software is available as an option, and is included as standard on the G+ Classic.



- Metering can be via mechanical VU meters, or mechanical PPMs.
- All G+ Series consoles feature a highly flexible output bus structure as well as four master mix busses. The SL 4000 G+ has 32/64-track routing, the SL 8000 G+ and SL 8000 GB have 24/48-track routing and four additional stereo busses, and the G+ Classic has 24/48-track routing and eight free busses to be used as additional aux/multitrack sends or as additional mix busses to support 5.1 production for DVD.
- Console-wide preset status selections (Record, Replay, Mix/Broadcast) enable rapid console set-up, eliminating unproductive session time.
- Full independent dynamics processing in every channel; multi-channel linking and patch free side-chain keying provide features such as frequency selective de-essing and triggered gate functions.
- Flexible auxiliary system with dedicated aux busses (one stereo and four mono) and the option to create additional aux sends using the routing matrix. The G+ Classic includes the extended aux system as standard.
- 8 automated VCA control groups with dedicated faders, Solos and Cuts, and 4 patchable automated stereo VCAs. The SL 8000 GB has four subgroup faders in place of the patchable VCAs.
- 13 external source inputs available for control room or studio monitor selection.
- Audio phase scope provides a continuous visual display of the amplitude and phase of a stereo signal.
- Remote controlled wireless talkback system via PCM encoded infra-red handset.





G+ FOR MUSIC

THE CONSOLES THAT CREATE SUCCESS

Solid State Logic consoles are established the world over as the most sought-after recording and mixing systems in today's music business. A recent industry survey concluded that more than 75% of US No.1 singles were produced on SSL consoles. G+ delivers a combination of creative power and cost-efficiency that simply cannot be equalled in music production.

FULLY INTEGRATED STUDIO SYSTEM

Offering more than just a mixing desk, the G+ Series delivers central control of all crucial elements of the recording process including session management, machine control, track arming and communications.

IN-LINE DUAL SIGNAL PATH ARCHITECTURE

The advanced in-line design of the G+ Series means that every module can simultaneously function as channel input, audio subgroup, and multitrack monitor. The result is a very space-efficient console, and one which is highly intuitive. The in-line monitor section provides additional line level returns during mixdown, thereby doubling the number of available inputs.

FLEXIBLE MULTITRACK ROUTING

Music recording and mixing requires total flexibility in audio signal routing. G+ Series consoles offer different output bus structures according to the number of recording tracks available. Full 48-track routing can be accessed as well as four main outputs. The SL 8000 G+ includes four additional stereo subgroups.

INTEGRAL CONSOLE AUTOMATION SYSTEM

The G+ Series Studio Computer is globally recognised as the industry standard mix automation system (see page 21). The Ultimotion™ moving fader system and the Total Recall™ data snapshot and restore system (see page 22) can provide yet higher levels of automation.

GLOBAL CONSOLE STATUS SWITCHING

Console-wide preset status selections (Record, Replay, Mix) enable rapid console set-up. Tracking and overdubbing sessions flow seamlessly into mixing.

SUPER CUE OVERDUB SWITCHING

Status controlled switching automatically sources headphone cue mixes with the required mix of off-tape and to-tape signals before, during and after a drop-in, making the G+ Series the most musician friendly tracking consoles available.

REMOTE TRACK ARMING

Large red illuminated buttons on every channel module provide remote track arming for all professional multitrack machines from the most logical and convenient point in the room.



G+ CLASSIC

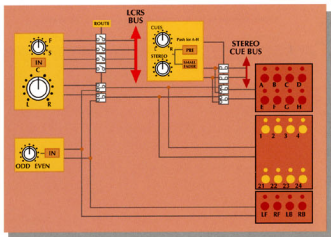
The G+ Classic includes, as standard, many custom options specified by leading SSL users, together with specific new features designed to further enhance the effectiveness of the console in today's demanding Surround environment. Ultimatum™ moving fader automation and Total Recall™ (see page 22) are included as standard and equip the G+ Classic for the most critical recording and mixing sessions. The flexible 24/48-track multitrack routing system provides 8 additional auxiliary sends (see signal flow diagram below), which can in turn increase the console's mix busses to support DVD production in 5.1 surround; LCRS output routing optimizes the G+ Classic blend of creative control with modern technology and formats.

SL 4000 G+ MASTER STUDIO SYSTEM

The SL 4000 has been a world-renowned music production system for many years, and the advanced electronics offered by the G+ have further cemented this reputation. A split cue auxiliary system doubles the number of available cue sends, and options such as Ultimatum™ and Total Recall™ can be installed as desired to make the SL 4000 G+ the perfect combination of creative power and cost-efficiency.

SL 8000 G+ MULTI-FORMAT PRODUCTION SYSTEM

For multi-format requirements in music recording, such as in film scoring or soundtrack production for DVD, the SL 8000 G+ is ideal. Four stereo busses combine with 24/48-track multitrack routing and LCRS outputs to create a multi-format mixing console with an added level of flexibility.



G+ CLASSIC EXTENDED AUXILIARY SEND SYSTEM





G+ FOR FILM

THE CONSOLES THAT CREATE CLASSICS

The name of Solid State Logic has been synonymous with excellence in film sound production for many years. The G+ range brings together outstanding sound quality with design features which make the challenging art of film mixing a creative pleasure. That is why SSL consoles are in daily use in leading film studios around the world, including Warner Bros., Todd-AO and 20th Century Fox.

CUSTOM CONSOLE CONFIGURATIONS

The techniques employed in film mixing differ hugely between countries and even the engineers themselves, and the G+ range is sympathetic to this by offering custom configurations to suit your way of working. Single or multiple operator systems and custom frames may be specified to ensure that every essential control is precisely situated, perfectly within reach.

FILM PANNING

Each channel features a left-centre-right pan pot and a separate front-back pan pot for mixing in LCRS mono surround formats and, along with the dedicated routing bus pan pot, LCRSS formats with a stereo surround track.

FLEXIBLE BUS STRUCTURE

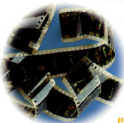
As well as the highly flexible 24/48-track routing system, each channel can also access any combination of the four stereo busses A, B, C and D, as well as the main LCRS outputs.

FILM MONITOR INPUT AND FORMAT

A 56:4 (optionally 56:8) summing matrix feeds the monitor outputs, allowing up to 99 pre-programmed user-selectable input source formats.

FILM MATRIX MONITOR INSERT

The extended monitor output provides switchable monitor inserts for film coders, simplifying encode-decode monitoring when mixing stereo optical soundtracks or digital 5.1 formats for cinema release.



PROGRAMMABLE JOYSTICK PANNING

The fully programmable joystick spatial panning module allows sweeps to be recorded and replayed by the studio computer. Eight output modes are provided, from 2-channel stereo through to 8-channel SDDS format.

RECORDER CONTROL PANEL

Control of individual machines is assigned to four columns of switches, each of which can control four stereo pairs or four individual tracks on up to 7 machines. Automated record on / off can be performed by the G+ Series Studio Computer.

DUAL LINE INPUT MODULE

Input / output modules can be specified with two line inputs in place of the standard mic / line inputs, allowing patch-free changeover between two replay machines.

SL 8000 G+ MULTI-FORMAT PRODUCTION SYSTEM

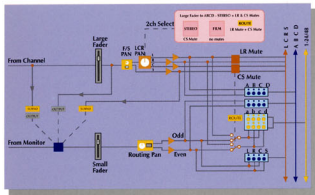
The SL 8000 G+ is an advanced audio production system for film, television and video. Built specifically for the post-production environment, it is designed to meet the ever more exacting demands of film sound formats such as Dolby EX, SR-D and DTS, as well as new multimedia formats such as AC-3 for HDTV and Digital Versatile Disc (DVD). The SL 8000 G+ is the fusion of exceptional software, superb quality hardware, and features such as film chain record control, centralised bus / tape switching, and external machine control. It is ideal for mixing situations where the output format requirements are complex, and therefore require a console with an added level of flexibility.

SL 4000 G+ MASTER STUDIO SYSTEM

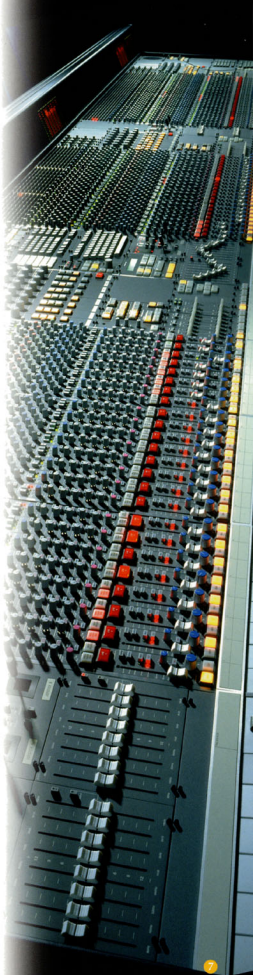
The SL 4000 can be a cost-effective solution for those wishing to diversify into the field of film sound production. Stereo optical formats require the LCRS panning option, together with dual 24/48 output routing for stem and premix production. Eight additional busses are complex, and used as an 8x8 monitor re-assign matrix for pre-mix monitoring and for mixing to digital formats.

G+ CLASSIC

The Classic is the most versatile, fully specified, flexible multi-application console in the G+ range. The features included as standard make it ideal for a wide range of mixing, tracking and multi-format production work. Ultimotion™ moving fader automation and Total Recall™ data snapshot and restore software are included as standard, along with LCRS panning.



SL 8000 G+ ROUTING SYSTEM





G+ FOR BROADCAST

THE CONSOLES THAT CREATE CONFIDENCE

The proliferation of SSL consoles among national broadcasting networks continues throughout the world. The addition of G+ features, many of which are designed in conjunction with leading broadcasters, ensures the continued success of these systems. In a discipline where quick thinking is essential, G+ technology works alongside you all the way. With dedicated broadcast features and the space efficiency created by the in-line modular architecture, the G+ Series is ideal for fixed or mobile analogue broadcast applications.

UNINTERRUPTED BROADCASTING LIVE TO AIR

An additional redundant power supply can be specified which, in the unlikely event of the failure of the main unit, will seamlessly take over.

RAPID ON-AIR CONFIGURATION

Console-wide status selection allows the instantaneous switching of system setup, maximising operational flexibility in meeting production schedules.

FLEXIBLE BUS STRUCTURE

All G+ consoles feature a highly flexible bus structure which can create clean feeds, audio groups, multitrack sends, or main mixes. The unique Subgroup feature allows any channel to be configured as audio group master complete with full processing.

CLEAN FEED / MIX MINUS SYSTEM

The multitrack routing busses can be used to create mono or stereo mix minus / clean feed mixes with switched talkback and monitoring.

WIDE RANGE OF METERING OPTIONS

Centre section metering is provided by 200-segment plasma bargraphs, switchable between VU and PPM and available in SSL or IEC 268-10 scales. Channel meters can be specified as mechanical VU or mechanical PPM.

STATUS LOCK MODE

Status Lock mode locks master statuses and disables all global functions which could interfere with the main outputs. An essential function for consoles employed in live transmission applications.

POWERFUL COMMUNICATIONS SYSTEM

The internal console mic or external microphone input can be routed to the studio headphone or loudspeaker outputs, the multitrack tape sends, the main outputs, or to the switched talkback output.



SL 8000 GB ON-AIR PRODUCTION SYSTEM

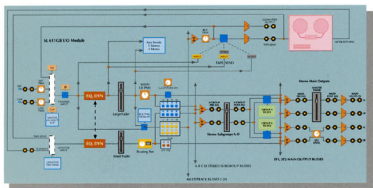
The SL 8000 GB is specifically designed to provide a high level of functionality as an on-air production console. The input / output modules provide all the sound quality and signal processing capabilities of the G+ Series, with additional functions tailored to meet broadcast requirements. Console-wide master status switching allows the system to be instantly configured for on-air production - with or without multitrack backup - including up to 24 mono or 12 stereo clean feed mixes via the dedicated bus outputs. The main console statuses are Broadcast, Remix and Record, and these can be protected with the Status Lock function. These features are of course combined with the usual outstanding G+ sonic performance.

SL 8000 G+ MULTI-FORMAT PRODUCTION SYSTEM

If you need multi-format capability in the broadcast environment, the SL 8000 G+ is the console of choice. 24 clean feed sends, 4 stereo busses and LCRS outputs are all accessible from every channel and provide total flexibility.

SL 4000 G+ MASTER STUDIO SYSTEM

Cost-efficient solutions for broadcast requirements are available with the SL 4000 G+. The multitrack routing system provides access to plenty of clean feed mixes, and the split cusp system provides additional foldback mixes by dividing auxiliary sends between the left and right sides of the console.



SL 8000 GB ROUTING SYSTEM





Solid State Logic · Oxford · England **SL4000G+**



THE **G+** SERIES

The four consoles in the G+ Series range are designed to meet the specific requirements of all areas of sound production and feature an in-line design, with 4 band parametric EQ and dynamics processing on each channel. A number of options and automation features can be specified, tailoring each G+ console to exact requirements.

G+ CLASSIC MASTER STUDIO SYSTEM

The new G+ Classic is a fully-featured flexible console, ideal for all recording and multi-format production applications. It includes Ultimotion™ moving fader automation, Total Recall™ data snapshot and restore software and LCRS panning as standard. The Classic's mix busses support 5.1 surround, making this the ideal choice for DVD production.

SL 4000 G+ MASTER STUDIO SYSTEM

The SL 4000 G+ music production system offers a highly-practical and cost-effective recording, production and broadcast solution. It features a split cue auxiliary system, which doubles the number of available cue sends, while options, including Ultimotion™ and Total Recall™, can be installed to suit the most demanding of applications.

SL 8000 G+ MULTI-FORMAT PRODUCTION SYSTEM

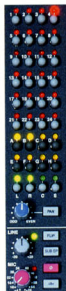
The SL 8000 G+ Multi-Format Production System has advanced post-production features, making it ideal for large-scale custom installations. It has four additional stereo mix busses, 24/48-track multitrack routing and multichannel outputs, facilitating the creation of separate mixes for use in music scoring and mixing projects for film, television or DVD.

SL 8000 GB ON-AIR PRODUCTION SYSTEM

The SL 8000 GB console is specifically tailored for on-air production, combining the exceptional sound quality and performance of a music console with the dedicated functionality of a broadcast console. Its flexible master control section, together with master status switching, provide three modes of operation for broadcast, recording and remixing. Dedicated bus outputs allow up to 24 mono or 12 stereo clean feeds/mix minus outputs.



THE **G+** CLASSIC MONO INPUT / OUTPUT MODULE



- 24 bus output matrix, providing 24/48 track multitrack routing and additional aux sends.
- 8 A-H buses provide additional aux sends (with routing control from switched stereo cue control) or as mix busses to support 5.1 surround production.
- Switchable independent pan control.
- Transformerless mic and line channel inputs with independent gain controls and phantom power switching.
- Switchable subgroup input from group mix amp.
- Phase reverse on selected input.

‘E Series’ * equaliser and filters. All controls are continuously variable with shelf/bell switching on the HF and LF band sections for extended control.

*Also available, G Series EQ and filters with variable range switching on the HMF and LMF mid band sections for extended overlap.

Filters can be split away from the EQ or placed in the dynamics sidechain.

HMF and LMF sections feature continuously variable Q, gain and centre frequency controls.

Insert point; selectable pre or post EQ.

EQ is bypassed when not in use.

EQ routing buttons allow the EQ to be placed in the channel or monitor signal path, or in split configuration to both.



- SSL's renowned on-board dynamics processing with stereo linking, patch-free sidechain keying and pre/post EQ routing.
- Compressor / limiter with variable ratio, threshold and release controls, and switchable fast attack.
- Expander / gate with variable range, threshold and release controls, and switchable fast attack.
- Gate switches expander to act as a noise gate.
- Separate compression and expansion gain reduction meters.
- Dynamics routing switches for pre or post EQ assignment in either channel or monitor signal path.

Overload indicator monitors levels at three points in the module.

The push/push switch on the pan control routes the stereo send to eight additional buses (A-H) via the routing matrix.

One stereo and four mono Cue/Aux sends selectable pre or post either fader.

All auxiliary sends are individually switchable pre or post the large or small fader.

Large Record, Ready Group and Ready Tape buttons for track arming and selecting multitrack monitor signals to fader and Cue sends.

Linked to tape machine status, SSL's unique SuperCue provides consistent headphone and control room mixes for drop-ins and overdubs.

Solo isolate, and Route switch for track bouncing and sub-grouping.

Tape send level trim with Channel Direct option.

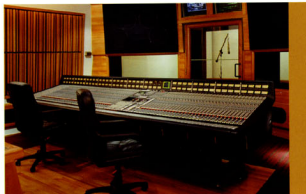
Channel Cut and Solo, switchable to Stereo AFL or mono PFL.

Short throw fader, used for either Channel or Monitor signals during tracking. In mixdown, the fader becomes an extra line input or an additional FX send via the routing matrix.

Surround button routes the output of the front-surround pan pot to the small fader, which in turn can access the stereo mix busses (A, B, C, D) or multi-track busses for stereo surround mixes.

Output button allows the small fader to pick up post large fader signals for additional sends.

Mix bus pan pot provides conventional stereo panning or true 3 channel LCR panning. Switchable Front/Rear mono surround panning.



THE **G+** CLASSIC CENTRE SECTION

The G+ Classic offers the console architecture and centre section that is most admired by, and familiar to, literally thousands of engineers and producers. The new features of the G+ Classic serve to enhance its functionality and versatility in today's demanding studio environments.

- 1 Power supply tallies for the console's 48V, +18V, +11V and -18V DC power rails.
- 2 Oscillator can be sent to the multitrack or main outputs, and has switched frequencies and calibrated or variable level control.
- 3 Communications master controls for talkback, slate and listen mic levels.
- 4 Additional Cues Master panel, with level control, LF/HF EQ, and AFL soloing for additional busses A-H.
- 5 Master cue aux send section provides output level and shelving EQ control for the six dedicated auxiliary busses. 15dB of boost or cut is available for HF and LF EQ.
- 6 Four stereo echo returns feature: cue send controls for routing to auxiliaries 1, 2 and stereo; left-right panning and front-back or width control; independent left and right cut; and stereo AFL.
- 7 Large illuminated individual Monitor Mute switches for the monitor outputs.
- 8 Mix Bus compressor allows dynamic control over the main and additional mix outputs. Threshold, Make-up, Attack, Release and Ratio controls are complemented by a mechanical gain reduction meter.
- 9 Master Status buttons provide instantaneous, one-touch switching of global console status. Status Lock function protects outputs in broadcast or live situations.
- 10 External Source Selector allows 13 stereo monitor inputs to be routed to the control room or studio monitors.
- 11 Independent controls for external source playback to studio loudspeaker and headphones.
- 12 Monitoring section with a stepped main level control, separate mini loudspeaker / dim levels, stereo / mono monitor matrix switching, Main, Cut and Dim switches, plus an automated main fader.
- 13 Auto-fade and AFL switches, with associated controls for level adjustment and fade duration.
- 14 Additional mix bus to Master fader and compressor sidechain controls.
- 15 A bank of 9 communications switches provides comprehensive talkback and listen facilities with hands-off AutoCue mode.
- 16 Automated Main Mix bus fader with multichannel compressor functionality and timed Autofade feature.



- * Eight master control group faders, with Solo and Cuts. True group solo and stereo AFL of all channels assigned to the selected group.
- * Four stereo 'patchable' faders, with Solos and Cuts. Normalised to provide additional automated mix busses for 5.1 production; may alternatively provide control and automation of aux returns or sends.
- * Moving coil VU meter bridge.

The G+ Classic is designed for expansion to the specific requirements of individual customer's needs:

- * Machine control options combined with SSL's multi-machine software, enable direct control of not just conventional multitracks but also 9-pin devices and can provide virtual timecode master operation for chase-only recorders.
- * A number of multichannel surround monitoring systems can be fully integrated within the console's control surface via SSL's multi-mode surround system or through a number of compliant third-party options.

THE SL 4000 **GT** MONO INPUT / OUTPUT MODULE



- 32-bus matrix with 32/64-track routing capability.
- 4 main busses; Left Front, Right Front, Left Back and Right Back.
- Switchable independent pan control.
- Transformerless microphone input with individual 48V phantom power and 74dB stepped gain control.
- Mono line input with ± 20 dB gain trim and centre detent at unity gain.
- Switchable subgroup input from group mix amp.
- Phase reversal switch.

Four band fully parametric equaliser with separate HP and LP filters.

Filters can be split away from the EQ or placed in the dynamics sidechain.

± 20 dB boost/cut for all four frequencies.

HF and LF feature shelving equalisers with variable turnover frequency.

HMF and LMF sections feature continuously variable Q, gain and centre frequency controls.

Insert point; selectable pre or post EQ.

Switchable frequency ranges (G EQ) allow extended overlap of EQ sections.

EQ is bypassed when not in use.

EQ routing buttons allow the EQ to be placed in the channel or monitor signal path.



- Independent dynamics processing in every channel.
- Compressor / limiter with variable ratio, threshold and release controls, and switchable fast attack.
- Link switch for stereo and multi-channel dynamics.
- Expander / gate with variable range, threshold and release controls, and switchable fast attack.
- Gate switches expander to act as a noise gate.
- Separate compression and expansion gain reduction meters.
- Dynamics routing switches for pre or post EQ assignment in either channel or monitor signal path.
- Sidechain input switchable to monitor path for external keying.

Overload indicator monitors levels at three points in the module.

One stereo and four mono dedicated auxiliary sends.

All auxiliary sends are individually switchable pre or post the large or small fader.

Float button for track bouncing and patch-free subgrouping.

Group level to tape control.

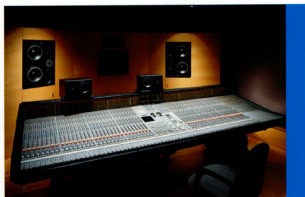
Switchable Direct post fader output.

Unique SuperCue overclub monitoring for pre monitor fader sends.

Small fader switchable between the channel or monitor signal path.

Fader can control external or subgroup returns for additional mixdown inputs.

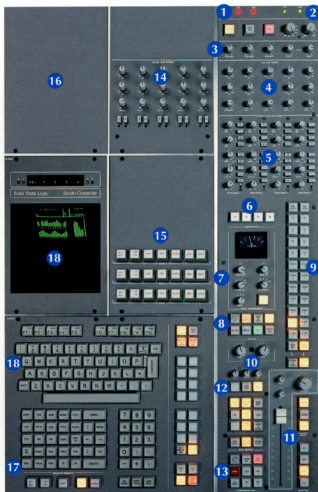
Dedicated Solo and Cut.



THE SL 4000 *G+* CENTRE SECTION

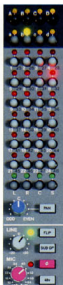
The G+ Series centre section houses the console master module which contains the controls for the console's main outputs, status switching, control room and studio monitoring, and communications. The extensive feature set ensures that the console's creative power is accessed in its entirety by the engineer, and the inspired ergonomics create a logical interface found on no other large format mixing console.

- 1 Power supply tallies for the console's 48V, +18V, +11V and -18V DC power rails.
- 2 Oscillator can be sent to the multitrack or main outputs, and has switched frequencies and calibrated or variable level control.
- 3 Communications master controls for talkback, slate and listen mic levels.
- 4 Master cue aux send section provides output level and shelving EQ control for the six dedicated auxiliary busses. 15dB of boost or cut is available for HF and LF EQ.
- 5 Four stereo echo returns feature: cue send controls for routing to auxiliaries 1, 2 and stereo; left-right panning and front-back or width control; independent left and right cut; and stereo AFL.
- 6 Large illuminated individual Monitor Mute switches for the monitor outputs.
- 7 Quad compressor allows dynamics control over the main outputs. Threshold, Make-up, Attack, Release and Ratio controls are complemented by a mechanical gain reduction meter.
- 8 Master Status buttons provide instantaneous, one-touch switching of global console status.
- 9 External Source Selector allows 13 stereo monitor inputs to be routed to the control room or studio monitors.
- 10 Independent controls for external source playback to studio loudspeaker and headphones.
- 11 Monitoring section with a stepped main level control, separate mini loudspeaker / dim levels, stereo / mono monitor matrix switching, Main, Cut and Dim switches, plus an automated main fader.
- 12 VCA Trim, Auto-fade and AFL switches with associated controls for level adjustment and fade duration.
- 13 A bank of 9 communications switches provides comprehensive talkback and listen facilities.



- 14 The split cues system allows you to divide your auxiliary sends between the left and right sides of the console. This system effectively doubles the number of available sends.
- 15 The Tape Remotes panel provides transport control over several tape machines simultaneously.
- 16 A blank panel is provided, into which custom options can be inserted. See page 23 for available options.
- 17 Multitrack transport control and dedicated command keyboard interface to the G Series Studio Computer.
- 18 Qwerty keyboard, macro command keys and built-in monitor for the G Series Studio Computer.
- * Below the centre section are 8 master control group faders and 4 patchable stereo VCA faders.

THE SL 8000 *G+* MONO INPUT / OUTPUT MODULE



- 4 additional stereo busses A, B, C and D with access from both small and large faders.
- 24-bus matrix with 24/48-track routing capability.
- 2 or 4 channel (Left, Centre, Right, Surround) master mix bus.
- Switchable independent pan control.
- Transformerless microphone input with individual 48V phantom power and 74dB stepped gain control.
- Mono line input with ± 20 dB gain trim and centre detent at unity gain.
- Switchable subgroup input from group mix amp.
- Phase reversal switch.

Four band fully parametric equaliser with separate HP and LP filters.

Filters can be split away from the EQ or placed in the dynamics sidechain.

± 20 dB boost/cut for all four frequencies.

HF and LF feature shelving equalisers with variable turnover frequency.

HMF and LMF sections feature continuously variable Q, gain and centre frequency controls.

Insert point: selectable pre or post EQ.

Switchable frequency ranges (G EQ) allow extended overlap of EQ sections.

EQ is bypassed when not in use.

EQ routing buttons allow the EQ to be placed in the channel or monitor signal path.



- Independent dynamics processing in every channel.
- Compressor / limiter with variable ratio, threshold and release controls, and switchable fast attack.
- Link switch for stereo and multi-channel dynamics.
- Expander / gate with variable range, threshold and release controls, and switchable fast attack.
- Gate switches expander to act as a noise gate.
- Separate compression and expansion gain reduction meters.
- Dynamics routing switches for pre or post EQ assignment in either channel or monitor signal path.
- Sidechain input switchable to monitor path for external keying.

Overload indicator monitors levels at three points in the module.

One stereo and four mono dedicated auxiliary sends.

All auxiliary sends are individually switchable pre or post the large or small fader.

Unique SuperCue overdupe monitoring for pre monitor fader sends.

Surround button routes the output of the front-surround pan pot to the small fader, which in turn can access the stereo mix busses (A, B, C, D) or multitrack busses for stereo surround mixes.

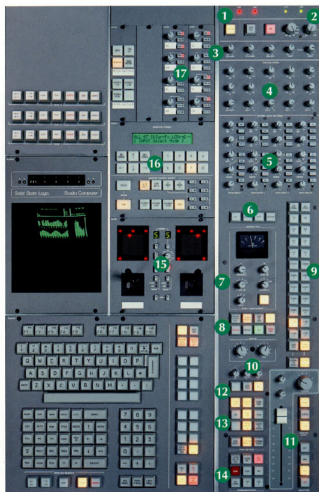
Output button allows the small fader to pick up post large fader signals for additional sends.

Two pan controls provide total flexibility over front-surround and stereo-LCR panning.



THE SL 8000 *G+* CENTRE SECTION

- 1 Power supply tallies for the console's 48V, +18V, +11V and -18V DC power rails.
- 2 Oscillator can be sent to the multitrack or main outputs, and has switched frequencies and calibrated or variable level control.
- 3 Communications master controls for talkback, slate and listen mic levels.
- 4 Master cue aux send section provides output level and shelving EQ control for the six dedicated auxiliary busses. 15dB of boost or cut is available for HF and LF EQ.
- 5 Four stereo echo returns feature: cue send controls for routing to auxiliaries 1, 2 and stereo; left-right panning and front-back or width control; independent left and right cut; and stereo AFL.
- 6 Large illuminated individual Monitor Mute switches for the monitor outputs.
- 7 Quad compressor allows dynamics control over the main outputs. Threshold, Make-up, Attack, Release and Ratio controls are complemented by a mechanical gain reduction meter.
- 8 Master Status buttons provide instantaneous, one-touch switching of global console status.
- 9 External Source Selector allows 13 stereo monitor inputs to be routed to the control room or studio monitors.
- 10 Independent controls for external source playback to studio loudspeaker and headphones.
- 11 Monitoring section with a stepped main level control, separate mini loudspeaker / dim levels, stereo / mono monitor matrix switching, Main, Cut and Dim switches, plus an automated main fader.
- 12 VCA Trim, Auto-fade and AFL switches with associated controls for level adjustment and fade duration.
- 13 Selector switches control all centre section metering options.
- 14 A bank of 9 communications switches provides comprehensive talkback and listen facilities.
- 15 The fully programmable Joystick Spatial Panning module allows sweeps to be recorded and replayed by the studio computer. Each joystick visually displays spatial position; link and delay facilities allow the second joystick to track the first with a delay of up to 5 seconds. Eight output modes are provided, from 2-channel stereo through to 7-channel formats (e.g., SDDS).



- 16 The Monitor Input and Format panel provides a 56:4 (optionally 56:8) monitor switching matrix, allowing feeds to be pre-programmed with 99 user defined routing formats. Dedicated buttons offer instant selection of the eight most commonly used formats, with the current format shown in the LCD display.
- 17 Level trims and solo switches for the stereo busses A, B, C and D are provided. Each side of the stereo signal can be adjusted independently.
- 18 Below the centre section are 8 master control group faders.

SL 8000 *G+* RECORDER CONTROL PANEL

The Recorder Control Panel is positioned just below the centre section, alongside the 8 master control group faders. Control of individual machines is assigned to four columns of switches on the right of the panel. Automated record on / off can be triggered by the *G+* Series Studio Computer.



THE SL 8000 GB MONO INPUT / OUTPUT MODULE



- 4 additional stereo buses A, B, C and D with access from both small and large faders.
- 24-bus matrix with 24 clean feed / multitrack routing capability.
- 2 main stereo outputs ST1 & ST2.
- Switchable independent pan control.
- Transformerless* microphone input with individual 48V phantom power and 74dB stepped gain control.
- *Optional transformer balanced mic input for mobile applications.
- Mono line input with ± 20 dB gain trim and centre detent at unity gain.
- Switchable subgroup input from group mix amp.
- Phase reversal switch.

Four band fully parametric equaliser with separate HP and LP filters.

Filters can be split away from the EQ or placed in the dynamics sidechain.

± 20 dB boost/cut for all four frequencies.

HF and LF feature shelving equalisers with variable turnover frequency.

HMF and LMF sections feature continuously variable Q, gain and centre frequency controls.

Insert point; selectable pre or post EQ.

Switchable frequency ranges (G EQ) allow extended overlap of EQ sections.

EQ is bypassed when not in use.

EQ routing buttons allow the EQ to be placed in the channel or monitor signal path.



- Independent dynamics processing in every channel.
- Compressor / limiter with variable ratio, threshold and release controls, and switchable fast attack.
- Link switch for stereo and multi-channel dynamics.
- Expander / gate with variable range, threshold and release controls, and switchable fast attack.
- Gate switches expander to act as a noise gate.
- Separate compression and expansion gain reduction meters.
- Dynamics routing switches for pre or post EQ assignment in either channel or monitor signal path.
- Sidechain input switchable to monitor path for external keying.

Overload indicator monitors levels at three points in the module.

One stereo and four mono dedicated auxiliary sends.

All auxiliary sends are individually switchable pre or post the large or small fader.



Unique SuperCue overlub monitoring for pre monitor fader sends.

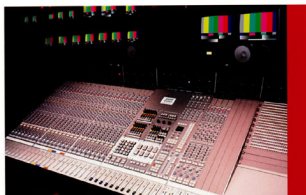
Dedicated bus output for clean feed.

Clean feed send can be sourced from: channel input, immediately pre-fade (post EQ and dynamics), post-fade, or from multitrack bus.

Group AFL button provides an instant check on the clean feed output.

Monitor Bus button switches the small fader source from tape return to tape send.

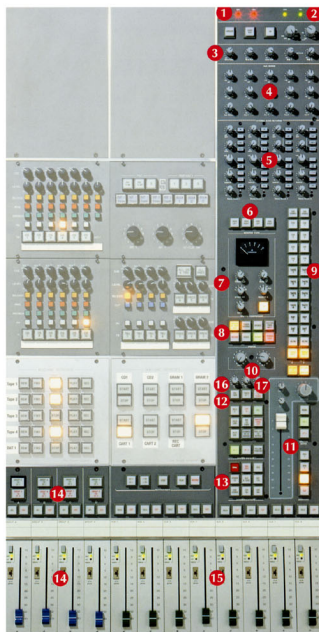
Main pan pot can feed one, both or neither of the main outputs via the routing switch.



THE SL 8000 GB CENTRE SECTION

The centre section of the SL 8000 GB can be specified to be either 8 faders (four subgroups plus four VCA groups) or 12 faders (four subgroups plus eight VCA groups) wide. Opting for the wider centre section allows you to install more options (see page 23) and custom panels. The SL 8000 GB may also be specified with G Series computer, Total Recall™ and Ultimatum™.

- 1 Power supply tallies for the console's 48V, +18V, +11V and -18V DC power rails.
- 2 Oscillator can be sent to the multitrack or main outputs, and has switched frequencies and calibrated or variable level control.
- 3 Communications master controls for talkback, slate and listen mic levels.
- 4 Master cue aux send section provides output level and shelving EQ control for the six dedicated auxiliary busses. 15dB of boost or cut is available for HF and LF EQ.
- 5 Four stereo echo returns feature: cue send controls for routing to auxiliaries 1, 2 and stereo; left-right panning and front-back or width control; independent left and right cut; and stereo AFL.
- 6 Large illuminated individual Monitor Mute switches for the monitor outputs.
- 7 Quad compressor allows dynamics control over the main outputs. Threshold, Make-up, Attack, Release and Ratio controls are complemented by a mechanical gain reduction meter.
- 8 Master Status buttons provide instantaneous, one-touch switching of global console status.
- 9 External Source Selector allows 13 stereo monitor inputs to be routed to the control room or studio monitors.
- 10 Independent controls for external source playback to studio loudspeaker and headphones.
- 11 Monitoring section with a stepped main level control, separate mini loudspeaker / dim levels, stereo / mono monitor matrix switching, Main, Cut and Dim switches, plus an automated main fader.
- 12 VCA Trim, Auto-fade and AFL switches with associated controls for level adjustment and fade duration.
- 13 A bank of 9 communications switches provides comprehensive talkback and listen facilities.
- 14 Four stereo subgroups A, B, C and D are provided, each with faders, AFL and Cut. A bank of 8 large illuminated switches allows the engineer to independently route each control group to main output busses ST1 and ST2. Routing is protected by Status Lock, preventing accidental de-assignment while on air.
- 15 A bank of VCA control groups, each with Solo and Cut facilities, can be either four or eight faders wide depending on the width of centre section specified.
- 16 Overpress / back-stop PFL on all mono and stereo channels with dedicated PFL speaker output.
- 17 Channel solo modes switchable between PFL, AFL and destructive solo in place.



CUSTOMISATION TO SUIT YOUR REQUIREMENTS

The blank panels in the centre section of the SL 8000 GB can be used for the insertion of custom panels, designed to meet requirements which are specific to the equipment in your studio. SSL will be glad to help and advise in the design and



construction of these solutions, such as the machine remote panels shown here courtesy of BBC Scotland.

THE **G+** STEREO INPUT/OUTPUT MODULE

For stereo line return requirements, stereo modules may be fitted to all G+ consoles in place of mono modules. Please note that a version of the SL 4000 G+ stereo module is available for the G+ Classic console.



SL 4000 G+

- 32-bus matrix with 32/64-track routing capability.
- Main mix bus routing in pairs to busses A (Left Front and Right Front), B (Left Back / Centre and Right Back / Surround) and C (unassigned).
- SL 4000 G+ stereo module can be installed into the G+ Classic.



SL 8000 G+

- 24-bus matrix with 24/48-track routing capability.
- 4 additional stereo busses A, B, C and D.
- 2 or 4-channel (Left, Centre, Right, Surround) master mix bus.



SL 8000 GB

- 24-bus matrix with 24 clean feed / multitrack routing capability.
- 4 additional stereo busses A, B, C and D.
- 2 main stereo outputs ST1 and ST2.



- Stereo line input with ± 20 dB gain in 5dB steps and ± 5 dB continuously variable trim.
- Switchable M/S input decoder.
- ± 10 dB left-right balance control.
- Independent left-right phase reversal and mono switching.
- Stereo compressor / limiter and expander / gate.
- Separate compression and expansion gain reduction meters.
- Sidechain can be sourced pre or post EQ signals, or the insert return.
- 12dB / octave high and low pass filters which can be placed in the channel input or the dynamics sidechain.
- True stereo tracking 3-band parametric EQ.
- Gain control range of ± 15 dB.
- MF section has switchable HI-Q (filter width) control.
- HF and LF sections switchable between shelf and bell curves.
- Stereo insert point switchable pre or post EQ, or post VCA fader.
- Stereo overload indicators.



- One stereo and four mono aux sends.
- All sends are individually switchable pre or post fader.
- Stereo link capability for sends 1, 2, 3 & 4.
- Channel meter switchable to read either left, right or the greater of the two channel signals. Stereo bargraphs are also available.
- Start, Stop and Fader Start buttons activate internal relays for remote control of playout machines in broadcast applications.
- Width pot controls stereo image width from normal through to mono out to full L/R reverse.
- Extra Wide button routes the signal through SSL's width enhancement circuit.
- Filter inserts and elliptical high pass filter in the width circuitry for low frequency control.
- Pan allows movement of a stereo image narrowed by the Width control.
- Solo Isolate and PFL are provided in addition to the standard Cut and Solo buttons.

The G Series Studio Computer is the most widely used session management and console automation system in the world. Proprietary hardware and software, designed specifically for the task and fully integrated as part of the console, completely eliminate third party elements. The resulting reliability and speed of use have firmly established the system as the industry standard.

The entire recording process is automated; drop-ins to timecode, overdubbing, project information, track listings, reel and track information, and cue points can all be stored along with the automated mix, and transported to another SSL-equipped facility where they can be re-loaded. All G Series computers will read data from their predecessor, the E Series.

- Dynamic automation of faders, cuts and solos, as well as session management and machine control.
- Dedicated control surface, with logical command keys and a full-size Qwerty keyboard eliminates the need for a mouse, trackball or touchscreen.
- Advanced autolocation system with precision timecode cueing.
- Fully compatible with mix data stored using E and G Series consoles.
- On-board monitor with video switcher allows a single external monitor to show studio computer or Total Recall™ displays, and up to four additional composite sources.
- Ultimotion™ channel and group mutes are automated to 1/4 frame accuracy.
- Advanced fader status and automation modes.
- G Series automation data can be re-instated on both the SL 9000 | Series SuperAnalogue™ and the MT Digital Multitrack consoles.



G+ CUSTOMISATION AND OPTIONS

A series of specialist options is available to allow you to tailor your G+ system to your individual specifications. The system is governed principally by its mainframe size; G+ Series consoles are available in frame sizes accepting multiples of 8 modules, up to a maximum of 112, with combinations of mono and stereo modules in any layout.

CUSTOM FRAMES AND PANELS

Classic 4K 8K GB



Frames may be specified for integrating angles and custom wings, to create 'L' or 'U' shaped consoles. Wings can house 19" rack mounting effects units, additional input / output modules, or can be used for producer's tables.

PATCHFIELDS

Classic 4K 8K GB

Multiple patch integral and remote patchfields can be specified, providing elegant patching solutions in a variety of sizes and widths.



PPM OR VU METERS

Classic 4K 8K GB

Metering can be specified to be mechanical VU meters, or mechanical PPMs (BBC or Nordic scales).



DUAL MICROPHONE AMPLIFIER SYSTEM

Classic 4K 8K GB

A rackmountable set of dual microphone amplifiers can interface with the small fader, thereby doubling the number of mic inputs for live applications.

E/G SERIES EQUALISATION

Classic 4K 8K GB

A choice of sound treatment styles is afforded by the choice of classic E Series EQ or the latest G Series into the input / output modules.

REDUNDANT PSU

Classic 4K 8K GB

A backup redundant power supply unit, with auto-sensing seamless changeover, can be specified.

SYNCHRONISER INTERFACE

Classic 4K 8K GB

Software for interfacing the G+ Series Studio Computer with a synchroniser system from Motionworks or Timeline, providing integrated control of up to five machines from the computer.

PATCHABLE VCAs

Classic 4K 8K GB

Four automated stereo VCAs can be located at the central mixing position and made available at the patchbay, allowing automation of echo return levels and providing four additional group faders. These are fitted as standard on the G+ Classic, where control voltages can be switched to the Master Fader and outputs can



be fed to the mix bus compressor to enable 5.1 surround sound production.

SSL A SOLID INVESTMENT

INNOVATION

Solid State Logic has a history of innovation that has kept SSL consoles at the forefront of audio technology since the introduction of the first automated console over twenty years ago. Since then, SSL has developed into a worldwide corporation. But SSL has not ascended to this position by accident. Total dedication to product excellence, unique after-sales service care, and unequalled commitment to client training remain the axioms of SSL's philosophy.

COMMERCIAL ADVANTAGE

Owners of Solid State Logic consoles enjoy an excellent return on their investments. The demand for SSL equipped facilities virtually guarantees bookings and the built-in reliability of the systems ensures they retain their value over the years. The sheer volume of hit records, movie successes and prestigious broadcast events produced on SSL consoles is a testament to their growing popularity, and ability to deliver a great production with a great sound.

OUTSTANDING CUSTOMER SUPPORT

SSL has a network of sales and service centres throughout the world, including its own subsidiaries in New York, Los Angeles, Tokyo, Singapore, Toronto, Paris and Milan. Through these offices, and appointed distributors in other countries, a full programme of backup and technical support is guaranteed. Underpinning all this local expertise is the global support from SSL's service centre at company headquarters near Oxford, England.

DOCUMENTATION

A full set of supporting documentation, including comprehensive service and operator manuals, is included with every console. In addition, operator information is available via the World Wide Web.

TRAINING

Operational training is provided at the client's facility free of charge with each new installation. Additional training courses are held at SSL's fully equipped studio facility in the UK. These courses are available to both clients and freelance engineers. Maintenance technical training is also available.

GLOBAL COVERAGE

Wherever you are in the world, there is a Solid State Logic equipped facility close by. All the territories shown here in red have active SSL installations. There are now literally thousands of SSL consoles across the globe.



Solid State Logic



Solid State Logic

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Actual configuration of products may differ from the units illustrated. As Solid State Logic has a policy of continual product enhancement, we reserve the right to alter specifications without notice.

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