
SSL Live
Ultimate Sonic Performance
Solid State Logic
OXFORD • ENGLAND

SSL *Live*

Something Special

Solid State Logic has been at the leading edge of audio console design for more than 40 years. Many of the concepts, features and creative approaches to audio production taken for granted today as 'the way things are done' in music, broadcast and film post production came to life on an SSL. Our name has always been synonymous with design innovation, with inventing intelligent, ergonomically superior audio production tools that enable talented audio engineers to work efficiently, creatively and to make music sound great.

SSL Live consoles carry all of that DNA. We are confident that when you try them for yourself you will agree… SSL Live consoles carry forward the SSL tradition and deliver something special. As with everything we do, we have looked carefully at how the world's leading live engineers work, got under the skin of live audio and then taken a fresh approach. SSL Live consoles present a truly superb user interface that can work the way you work today and introduce a collection of powerful new features that could change the way you work tomorrow.

Six different consoles – the L100 Plus, L200 Plus, L350 Plus, L450, L550 Plus and the L650 – offer a selection of configurations and power to suit a wide range of live applications. Originally built for the demands of touring and live event sound for theatre and house of worship, SSL live consoles have been adopted in installed audio for corporate, media, education, and utilised for online streaming and OTT delivery, helping our customers provide an outstanding audience experience.

Additional tools – such as SOLSA, the SSL On/Off Line Setup Application – provides both off-line pre-preparation of showfiles and real time remote control from any suitably equipped PC. The TaCo Tablet Control application provides an additional option for on-stage personal monitoring control on an iOS or Android tablet.

Control Surface

Up Close and Personal

SSL Live control surfaces consist of four main elements; a multi-gesture touch screen, Fader Tiles, a Channel Control Tile and a Master Tile. The quantity, availability and layout of these elements differs but their functionality is common to all six SSL Live consoles.

Multi-gesture Touch Screen

A super bright, high resolution central touch screen is the hub of the console, giving constant visual feedback and access to Channel View & Overview interfaces, system configuration menus, the Layer Manager and the Effects Rack. The screen offers true tablet style multi-touch gesture control, delivering an unprecedented degree of on screen parameter manipulation.

Fader Tile

Fader Tiles are freely configurable to control any signal path, with clear bright colour coding. Users can lay out channel/path types across the console to precisely match their own workflow. Fader Tiles are independent. Each Tile features 12 fader strips, with six layers of 30 banks of faders per Tile. Layer and Bank keys with LCD displays provide rapid layer and bank navigation. Each strip includes a touch sensitive 100mm motorised fader, Solo, Mute, Query and Select buttons, individual LCD display and a set of Quick Controls. Alongside each channel fader are 14 segment level meter and separate gate and compression meters. A collection of menu buttons select various aspects of the Tile's functionality, including 'Swap' which allows any bank to be set as a 'Home' set of strips. A 'Screen' key assigns the entire Tile to the main screen.

Quick Controls

At its upper edge each Fader Tile has a row of twelve 'Quick Controls' (a push/select control and three buttons). The Quick Controls can be assigned to the same single parameter for all channels console wide (eg Input section, Aux's etc). Alternatively, the entire row of Quick Controls in the Fader Tile below the touchscreen can be used in Follow Detail mode as individual parameter controls for EQ, Dynamics, or Effects parameters etc. The Quick Control rotary functions can be flipped onto the faders.

Channel Control Tile

The Channel Control Tile (L650, L550 & L350 only) provides instant physical control for a selected path. The tile has a high resolution 5.7" touch screen surrounded by colour-coded push/select controls that map to adjacent screen functions. A collection of rapid access buttons instantly call various functions to the Tile, including; EQ, Dynamics, Insert Effects, Panning, Input section, All Pass Filter, Line Delay, Aux, Stem Group, Master, Fader, Talkback, VCA and Mute Group controls. 'Press and hold' on these rapid access buttons also calls the function to the Quick Controls across all the Fader Tiles. The Channel Control Tile combines with the Focus Fader in the Master Tile to form a 'Focus Channel'.

Master Tile

The Master Tile gathers together Automation controls & Mute Group buttons alongside a Main Fader (which can be assigned and locked to any signal path), the Focus Fader (which can either follow the selected path or be locked to a specified path), and a set of assignable user keys. The Tile also features our flexible Solo and Talkback system. Two individual Solo Buses, each with dedicated push/select level controls, feed three Solo Channels which might be used for example with a wedge, headphones and in ear feeds. A mini matrix of Solo Select and Output Select buttons allow routing of either or both solo buses to any or all solo outputs quickly and easily. There are two Talkback channels, each of which can feed Auxes and/or direct outputs and have dedicated controls and routing buttons that follow the same logic.

Peripheral Interfaces

An optional sprung boom arm enables a VESA screen or laptop mount to be positioned on either the left or right side of the console. Screens can be used to display the Console Overview or Automation interface. Any standard monitor can be used for display only, or an SSL supplied touch screen can be specified. SSL's TaCo iOS or Android application can also be used to provide additional tablet control interfaces.

Workflow

The Big Screen

The main touch screen is the heart of the console and can be used for system & I/O configuration, creating surface layouts using the Layer Manager, the Automation interface, the Effects Rack and two different views of your project; The Channel View and Console Overview.

The Channel View provides a clear and logically organised overview and interface for detailed channel information. This GUI lines up with the faders in the Fader Tile and provides touch access for all path functions. SSL Eyeconix displays ensure that channel identification is immediate. The meters can be expanded to give a large-scale view. Double tapping individual channels opens up detailed GUI's that provide intuitive configuration and multi-gesture control for a menu of operations including; routing assignments, VCA's, Aux's, Stem Groups, EQ, Dynamics, the All Pass Filter and Panning. SSL Live allows changes in path processing order and bus architecture on the fly through straightforward drag and drop actions.

An at-a-glance view of the whole console's signal flow is essential. The Console Overview provides this on a touchscreen that enables the operator to immediately identify and access a channel or bus that needs attention. Selection of any channel or bus to the Focus Fader and Channel Tile is literally one press away at all times. With meters and bright red overload indicators for every input and output, identifying issues is easy and a single press brings a full set of path controls to hand.

Super-Q

SSL's acclaimed Super-Q system offers unprecedented workflow flexibility from the touch of a single button. Super-Q allows the user to 'spill out' the contributing elements or destinations for a selected fader/path across the control surface. It works for all path types; pressing a channel's 'Q' button in the Fader Tile, in the touchscreen or TaCo Screen Query interfaces, shows the mix buses to which the channel is routed. Querying a mix bus will show only the channels that are contributing to that mix. Pressing a VCA's Q button will show all channels under its control.

Super-Q also shows the send levels to and from mixes, allowing instant and accurate mix control, either from a channel or mix centric view. These contributions can be displayed either on the rotary encoders at the top of each fader strip or automatically 'flipped' onto the faders.

Super-Q has two modes; 'Compressed' mode shows a focused view of only the audio paths contributing to or from the Queried path. 'Expanded' mode offers user-defined layers and banks, allowing the user to lay out exactly where they want each channel to appear on the surface. The modes are configurable on a per-path type basis, giving the user complete control of their workflow.

A new "Query to Focus Fader" option assigns the queried path to the Focus Fader. A new Clear Query User Key provides a rapid method of exiting Query mode from the same button every time.

"It's the best console I've ever heard; there's no two ways about it. It has a big, fat, wide, pleasant sound with lots of separation."

Gareth Darlington, FOH – Brit Floyd

Stem Groups

SSL Live consoles introduce a new and enormously powerful type of signal path which we are calling the Stem Group, offering incredibly flexible routing options not found on any other live console. A Stem Group is a unique type of hybrid mix bus that combines the key functions of a subgroup, an Input, an Aux, and a Matrix. Stem Groups provide 6 different routing feed points (post trim, pre/post fader, post insert A/B, post all processing) and can route to Aux's, Masters, Matrices and even other Stem Groups to create nested subgroups. As with all other path types they can be configured in mono, stereo, LCR, 4.0 or 5.1. Both full and dry versions are available. Stem Groups offer truly new and powerful ways to think about mixing and offer flexible solutions to manage your creative environment.

The Focus Channel

The Channel Control Tile and the Focus Fader in the Master Tile both follow the selected channel and effectively combine to form a 'Focus Channel'. The Focus Fader places a full single fader strip in an optimal ergonomic position on the console to provide the fastest possible means of addressing issues with any selected channel. The Channel Control Tile provides its own independent combination of multi-gesture touch screen and hardware control. It provides a streamlined way to assign all of the parameters of a specific processor on a selected channel to a set of hardware controls that will be immediately familiar to analogue console users.

Configurable Surface

What You Want Where You Want It

Managing Your Session

Keeping control of even the largest sessions is very straightforward with Live. The control surface layout is completely configurable allowing users to place any Channel, Stem Group, VCA, Aux, Master etc anywhere on the available Fader Tiles. This is done using a beautifully straightforward drag and drop Layer Manager interface. Whether at FOH or Monitors, Live allows you to create your own personal perfect layout. The combination of elegant Layer & Banking and Super Q hardware controls with excellent touch screen layouts, makes navigating and controlling sessions extremely fast and superbly comfortable.

Colour Function

Our consoles use colour beautifully. Within the fader strips a single large LED strip is used to identify and organise the type of signal path (VCA, Aux etc) or the instrument group (drums, vocals etc) assigned to the fader. The colours used are user definable. Controls designed for parameter editing (Aux send levels, EQ & Effect parameters etc) in the fader strips and in the Channel Control Tile also use colour coding. What is selected in the touch screens and the various sets of edit control hardware can be made to follow each other.

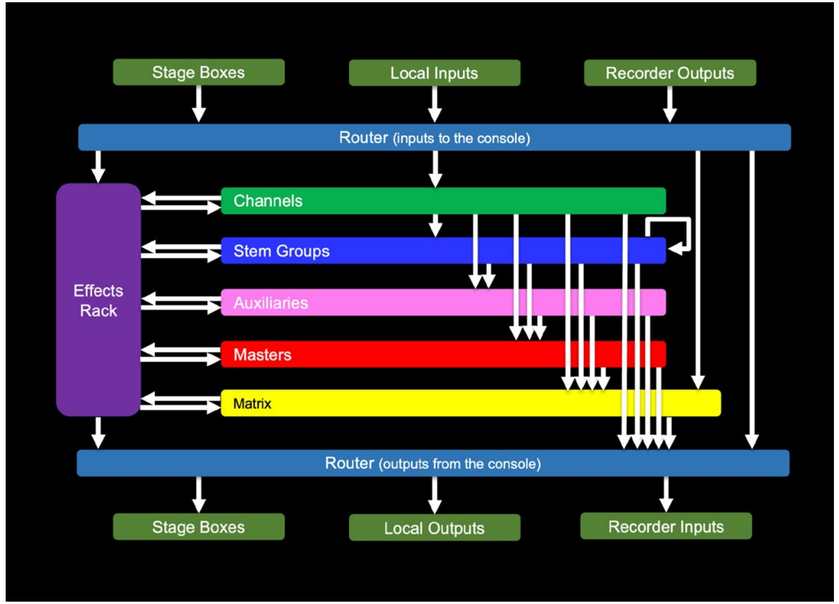
Flexible Open Architecture

Absolute Power and Ultimate Flexibility

SSL Live console processing power allocation is extremely flexible. Each console has a ‘Path Pool’, a maximum number of mix paths that can be used as required to suit each production. These paths can be assigned as Channels, Stem Groups, Auxes and Masters to suit demands and configured as mono, stereo, LCR, 4.0 or 5.1. A mono Channel consumes one path, a stereo two, an LCR three a 4.0 path four and a 5.1 six.

To make most efficient use of available processing resource, consoles can have a proportion of full and dry processing paths, which can be allocated to suit different applications. Insert Effects have their own dedicated processing which is also dynamically allocated.

An Output Matrix also has its own dedicated processing and can be segmented into four separate smaller matrices if desired. All Matrix Output paths have High and Low Pass Filters, 4 band EQ, 2 seconds of delay and our unique All Pass Filters available. This is in addition to two inserts that can be used with both the internal Effects Rack and external processing.



Processing Plus Pack

Processing Power in Harmony With Your Production Requirements

Inventory which can scale with your production requirements has never been more important. Alterations in event location, artists' technical requirements and the growing need to provide dedicated mixes for broadcast and OTT/streaming often present additional processing overheads on your mixing console. Plus Processing Packs are available for all existing L100, L200, L350 and L550 consoles, and are pre-installed as standard in new models, increasing the SSL Live consoles DSP in key areas, including: Input Channels, Stem Group, Auxes and Masters.

Speak to your SSL Live representative about installing a Plus Pack on your L100, L200, L350 and L550 console inventory.

SSL Live consoles	L100		L100 Plus		L200		L200 Plus		L350			L350 Plus		L550			L550 Plus	
	Full	Total	Full	Total	Full	Total	Full	Total	Full	Dry	Total	Full	Total	Full	Dry	Total	Full	Total
Input channels	64	64	96	96	96	96	144	144	168	48	216	216	216	240	48	288	288	288
Stem groups	12	12	24	24	24	24	36	36	36	12	48	48	48	72	12	84	84	84
Auxes	36	36	48	48	48	48	84	84	108	24	132	132	132	156	48	204	204	204
Masters	4	4	6	6	6	6	8	8	12	6	18	18	18	24	6	30	30	30
Total max path count	96	96	128	128	144	144	144	144	168	48	216	216	216	240	48	288	288	288
VCAs	12				24				36					48				
Matrix	4x 32 in, 12 processed outputs				4x 32 in, 24 processed outputs				4x 32 in, 36 processed outputs					4x 32 in, 36 processed outputs				
Effects processing	24 instances max		48 instances max		48 instances max				48 instances max					96 instances max				

Integrated Immersive Audio Control

Going Beyond Stereo

With the introduction of object-based mixing, live shows and events have a whole new multidimensional layer to inspire an audience. Within a multi-array loudspeaker configuration, an object-based mix enables instruments, speech, or audio effects to be positioned and controlled in an exact location beydond the traditional stereo field.

Shaping Your Sound Space From the Console

To support this increase in immersive audio across touring, installed sound and HOW, Solid State Logic have partnered with key loudspeaker manufacturers to deliver tightly integrated control of immersive audio loudspeaker systems. L-Acoustics L-ISA System Control and Meyer Sound Spacemap Go APPs are integrated into all SSL Live consoles, from L100 to L650, and offer ease of use and more coherent workflow for operators, all without leaving the SSL Live ecosystem.

Third Party Device Control

Shure Wireless Control

The Shure ULX-D and Axient Digital ranges of wireless microphones are now capable of being remotely controlled from the SSL Live console interface, providing further integrated control. Aside from control, battery and RF status is also reported in the console interface.

Gain and mute control of Dante-enabled Shure ULX-D and Axient Digital wireless mics is now available when routed to console Input Channels. Battery and RF status is also shown in the Channel View and I/O Setup pages.

Shure ULX-D and Axient Digital wireless receivers can be added as Dante devices and routed from as normal.

This is a licensed feature in console software and can be enabled at the SSL factory or in the field. However, the licence is included with all Plus pack upgrades purchased and all new console sales.

DAW Control

For live playback and recording, SSL Live software supports DAW control via the HUI™ protocol and is optimised for use with the industry standard Pro Tools™ but also compatible with Reaper™, Logic Pro™ and any DAW that supports HUI control. DAW Control can be configured in banks of 8 consecutive channels with a maximum of four banks providing 32 physical console faders for DAW Control. The system also supports control for up to four separate DAWs.

With Pro Tools, the majority of the core functions can be controlled via dedicated front panel controls or touch screen access on the control surface. There is no limit to the number of tracks in a Pro Tools session that can be accessed as tracks can be scrolled or banked on to the console faders as required using the on screen scroll and bank keys or via front panel user keys. Pro Tools Memory Locations can also be used to recall specific track layouts, and Master transport keys are assignable to User Keys and Events. These will control whichever DAW has the Transport Master option selected in the setup page.

Superior Audio Performance

The Finest Studio Sound on Stage

SSL has always set the audio performance benchmark for others to reach and sound quality is the primary design consideration of SSL Live consoles. Nothing is sacrificed so that the ultimate sonic performance can be delivered. The Live local I/O and Stageboxes use SSL's patented mic amp technology to deliver SSL SuperAnalogue™ performance with better than industry standard studio grade mic pre's combined with 24 bit/96 kHz ADC's to deliver a frequency response that is within 0.25 dB from 20 Hz to 20 kHz (within 1.3 dB down to 10 Hz) and a THD of 0.005%. The circuitry is DC coupled (no electrolytic capacitors in the signal path) and high input impedance. Mic amp gain is controlled with extreme precision in more than 16,000 steps ensuring totally smooth control, very good common mode rejection and extremely low distortion. 64-bit internal processing is used throughout guaranteeing maximum precision to support the highest standards of audio performance within all our processors. It all adds up to an exceptionally detailed sound we are sure you will love.

Legendary SSL Processing

SSL Live consoles provide the audio processing toolkit that generations of SSL mix engineers have used to create countless hit recordings along with a suite of freshly developed processors. The full processing paths include a four band parametric EQ that can be switched between a precise constant Q mode and 'SSL Legacy EQ' with our signature tonal character, hi- and lo-pass filters with selectable slopes, SSL dynamics presented as separate compressor, analogue style tube emulator, expander/gate as well as a delay line and cleverly configured All Pass Filter. Our Live consoles also feature precision analysis tools such as the fixed point per octave spectrum analyser and the acclaimed Dialogue Automix system from SSL's broadcast consoles.

Channels

SSL Live channel architecture is easy to configure and extremely flexible. Channels have their own dedicated processing power and can be full with complete processing or dry and consume less processing power. There are two insert points. Dry channels have no processing tools, two inserts and use less processing power. The Channel setup panel in the touch screen makes configuration and routing fast and intuitive. Channels can be mono, stereo, LCR, 4.0 or 5.1 and there are configurable foldown options.

Effects Rack

SSL Live consoles feature an internal effects rack that can be accessed via the insert points of Channels, Stems, Auxes and Masters as well as from the router. Designed to emulate a studio setup, the effects rack allows engineers to feel immediately comfortable creating complex effect routings with every parameter stored as part of the console automation. There are seven categories of studio quality mono, stereo and multi-channel, and ultra low latency effects designed specifically for live use. Reverbs, Delays, Modulation effects, EQ and even the famous SSL Stereo Bus Compressor are all included in a suite of more than 45 effects and tools. The effects rack has its own dedicated processing core with adaptive processing that intelligently reduces the overall processor overhead as you increase the effects load. Depending on the effect type, up to 48 effects can be used in the L100 Plus / L200 Plus / L350 Plus models, with up to 96 in the L450 / L550 Plus / L650 consoles.

"This console is the most analogue-correct digital console I've ever encountered. It sounds phenomenal."

Kenny Kaiser, FOH - The Killers

L650 - The New Live Benchmark

The Most Powerful SSL Live Console To Date

Developed to support the most demanding large-scale productions, where multiple live, broadcast and OTT stream mixes are required, the L650 is the new jewel of the SSL Live crown, built on a foundation of superior sonic performance.

L550 Plus - The Big One

Grand Production Masterpiece

The L550 has cut its teeth on global tours for some of the world's biggest stars. It offers a large scale control surface for operators who require the power and agility to handle the grandest productions.

Solid State Logic :: Live

L450 - Control and Power

More Power For Your Production

Based on the acclaimed triple-wide fader tile configuration of the L200 Plus, the L450 console utilises the same ergonomic layout but features larger 19" high resolution touch screen and more DSP power to comfortably handle larger productions. The SSL Live hammerhead just got a bigger bite.

"A lot of the new album was recorded onto 16-track analogue, and then moved onto Pro Tools. I love the feel of the album, and I love the sound of it, and I wanted to recreate that. So the SSL was a no-brainer... It sounds like an analogue console, and it has a Save button!"

Jim Ebdon, FOH - Sam Smith

L350 Plus - Compact Powerhouse

All the Power and Grace in a Smaller Frame

The L350 Plus is a deceptively powerful console. It packs a 24 fader control surface into a compact frame and delivers ample power for the majority of mid to large scale productions. It offers SSL's premium performance and streamlined mixing experience in a format that is a perfect fit for demanding productions where space is restricted.

"Everything just falls into place... There's tonnes of headroom, and I never have to push it hard at all to get exactly what I want out of it."

Charlie Izzo, FOH - Portugal The Man

L200 Plus - Dare To Be Different

The Unique Layout of the L200 Plus

The L200 Plus is the ideal mid-scale production console with a superb balance of processing power and plenty of hands on control. The L200's striking design is driven by ergonomic considerations, placing all essential controls within easy reach. L200's unique layout allows for screen arms or laptop mounts to be attached to either or both sides of the console creating a compact yet extremely versatile working environment.

"I've used SSL Live since 2014, when they started to come online. My view was that it sounded way better than anything else out there — and it still does. Every time I plug an SSL Live console in with a new systems engineer, they go, 'Wow, this is by far the best console for making the PA sound its best."

Simon Thomas – Halsey, Ariana Grande, Porter Robinson

L100 Plus - Little Beauty

Introducing the L100

The L100 Plus provides a physically smaller premium solution for customers who prioritise outstanding sonic performance in space restricted installations, for sub-mix positions or corporate production. L100 sets itself apart with its compact, 12 + 2 fader configuration frame, while retaining the same fast access layer / bank switching and Super-Q technology to ensure no channel, group, aux, VCA or master is ever far away from the engineer's fingers. Users who require more faders can expand the L100 with the addition of SSL's Remote Tile and more screen space can be added via external touchscreens and tablet control.

"I really love the preamps and I don't need to touch the gain, because it instantly sounds amazing. The separation I can get between the instruments allows me to generate real width in my mix,"

Juan Payan, FOH – Los Temerarios

Which One?

Six Consoles, One Soul

There are six models available in the SSL Live console range – the L100 Plus, L200 Plus, L350 Plus, L450, L550 Plus and the L650. At SSL we believe that offering differently sized and specified consoles should not mean compromising on quality or features.

All consoles use the same Remote I/O, use identical audio conversion and internal audio engine technology. The combination and layout of Fader Tiles, Master Tile and Channel Control Tile varies but the controls available and feature set are identical. The consoles use the same software with identical architecture, routing capability and of course audio processing tool kit – so a full channel on the L550 is the same as a full channel on the other consoles, plus they all offer exactly the same outstanding collection of insert effects.

The differences between the models centre on physical size, layout, available channel paths and processing power, and available local I/O. The differences are so straightforward they are summed up in the comparison table opposite.

"You want something that will work every day, sound good, and travel on the truck... So SSL is the only choice."

Antony King, FOH - Depeche Mode

	L100 Plus	L200 Plus	L350 Plus	L450	L550 Plus	L650
Paths	128	144	216	240	288	312
Input Channels	96	144	216	240	288	312
Stem Groups	24	36	48	60	84	96
Auxes	48	84	132	156	204	210
Masters	6	8	18	24	30	32
Matrix	4 x 32 inputs / 12 outputs	4 x 32 inputs / 24 outputs	4 x 32 inputs / 36 outputs	4 x 32 inputs / 36 outputs	4 x 32 inputs / 36 outputs	4 x 32 inputs / 36 outputs
VCAs	12	24	36	36	48	48
FX slots	48	48	48	60	96	96
Sample rate	96kHz or 48kHz	96kHz or 48kHz	96kHz or 48kHz	96kHz or 48kHz	96kHz or 48kHz	96kHz or 48kHz
Local analogue I/O	12 mic/line, 2 TB, 3.5mm input, 12 line out, 2x headphone	12 mic/line, 2 TB, 3.5mm input, 12 line out, 2x headphone	16 mic/line, 16 line out, 2x headphone	16 mic/line, 16 line out, 2x headphone	32 mic/line, 32 line out, 2x headphone	16 mic/line, 16 line out, 2x headphone
Local AES/EBU I/O	4 pairs (with SRC)	4 pairs (with SRC)	4 pairs (with SRC)	4 pairs (with SRC)	8 pairs (with SRC)	4 pairs (with SRC)
MADI ports	4 coax	6 coax, 2 optical	6 coax, 2 optical	6 coax, 2 optical	12 coax, 4 optical	6 coax, 2 optical
MADI FX loop	Optical in/out x 1	Optical in/out x 1	Optical in/out x 1	Optical in/out x 1	Optical in/out x 1	Optical in/out x 1
SSL Blacklight II	1 optional redundant pair *	1 redundant pair *	1 redundant pair	1 redundant pair *	1 redundant pair	1 redundant pair *
SSL X-Light	1 optional redundant pair *	1 optional redundant pair *	1 optional redundant pair *	1 optional redundant pair *	1 optional redundant pair *	1 optional redundant pair *
Local Dante @ 96 kHz	Opt. 32x32 redundant pair	Opt. 32x32 redundant pair	Opt. 32x32 redundant pair	Opt. 32x32 redundant pair	Opt. 32x32 redundant pair	Opt. 32x32 redundant pair
Maximum I/O @ 96 kHz	Up to 472 in/out	Up to 600 in/out	Up to 600 in/out	Up to 856 in/out	Up to 1136 in/out	Up to 856 in/out
Local MIDI & GPIO	Not Available	MIDI I/O/THRU, 12 GPIO	MIDI I/O/THRU, 12 GPIO	MIDI I/O/THRU, 12 GPIO	MIDI I/O/THRU, 12 GPIO	MIDI I/O/THRU, 12 GPIO
Channel Control Tile	Not Available	Not Available	Standard	Not Available	Standard	Standard
Main touch-screen	17" 600 Nits	17" 600 Nits	19" 1500 Nits	19" 1500 Nits	19" 1500 Nits	19" 1500 Nits
Power Supply	One (redundant option)	Two redundant	Two redundant	Two redundant	Two redundant	Two redundant
Width	691mm (27.2")	1370mm (54")	923mm (36.3")	1376mm (54.2")	1191mm (46.9")	1376mm (54.2")
Weight	52kg (115 lbs)	85kg (187 lbs)	86kg (190 lbs)	85kg (188 lbs)	90kg (198 lbs)	85kg (188 lbs)

**Usage restricted to Blacklight II or X-Light*

Expansion

More Faders for Your Fingers

Remote Tile

The new SSL Live Remote Tile is a self-contained 12-fader extension for any console in the Live range. It features a Fader Tile identical in operation to those found within the consoles and requires just USB and IEC mains connections to function. Up to two Remote Tiles can be connected to each console. A rotary switch sets the ID of each Remote Tile. VESA mounting points are also provided on the underside of the Remote Tile for securely mounting to heavy duty VESA arms or furniture. The Remote Tile can be used to expand the capabilities of an L100 Plus console or be added to L200 Plus, L350 Plus, L450, L550 Plus or L650 consoles to create very large configurations.

Remote Expander

The Remote Expander feature 24 or 36 faders and one touch screen and provides remote hardware control for a main console. Multiple Expanders can be connected remotely using a standard Ethernet connection. Expanders can also be connected to a console in parallel with SOLSA, for a highly flexible remote control solution. Remote Expander does not add more audio processing capacity!

Remote Control & Offline Setup Software

Your Show Preparation and Remote Control Toolkit

Offline Preparation

SSL's SOLSA (SSL On/Off Line Setup Application) can be used for preparation of show files 'offline' when access to a console is not possible. SOLSA allows creation and editing of Live console Showfiles on your laptop or desktop PC.

Almost anything that can be done on a console can be manipulated and configured using SOLSA. This includes console architecture configuration and setup of Fader Tile Layers and Banks. Stageboxes and I/O routing can also be assigned along with the creation of scenes and other automation editing. SOLSA also allows you to add effects, manipulate channel processing settings, bus routing and VCA assignments.

‘TaCo’ Tablet Control App

On-Stage Mix Control for Artists and Engineers

The SSL Live TaCo (Tablet Control) mix app provides wireless* tablet control of SSL Live consoles from iPad and Android devices.

On stage TaCo can be used by both monitor engineers and artists. The app can be limited to control an individual Aux mix or unlocked to quickly and easily control all mixes from a single screen. Multiple tablets can be connected simultaneously for providing mix capabilities to each performer on stage. TaCo utilises the same Query technology as the Live console, meaning only the channels routed to the selected Aux are displayed. Using the Live console’s Stem groups, input channels can be combined into logical sub groups to provide the performer with a simplified set of faders.

TaCo’s Engineer Mode offers the ability to remote control all channel processing parameters for every path. This includes filters, EQ, dynamics and time-based processing. TaCo can also control bus, Mute Group and VCA assignments as well as Input parameters. TaCo is especially useful for L100, L200 and L450 users when it is positioned on the Tablet Tile, providing a channel processing control interface within easy reach. Selecting a path on the console will display that path’s channel processing on the tablet. L100 and L200 users now have a choice between adjusting processing parameters from the main screen, quick controls or a tablet running TaCo. L650, L550 and L350 users can also benefit from TaCo as an extra control surface in this way. A Link Channel Control Tile setting can be used in conjunction with Focus Fader lock to keep one path displayed on the tablet screen at all times.

**Wireless access point required*

SSL Live Connected Ecosystem

Built with connectivity at its core, SSL Live provides enhanced access and control to your console and the integrated series of I/O solutions in situ or remotely, no matter the application.

Network access for Remote Production

SSL's sophisticated control architecture supports access and control remotely over network connections. Whether using remote access software for file access and updates, or remote control over high bandwidth VPN connections, SSL's Live systems provide new options for control of streamed performances or remote file access.

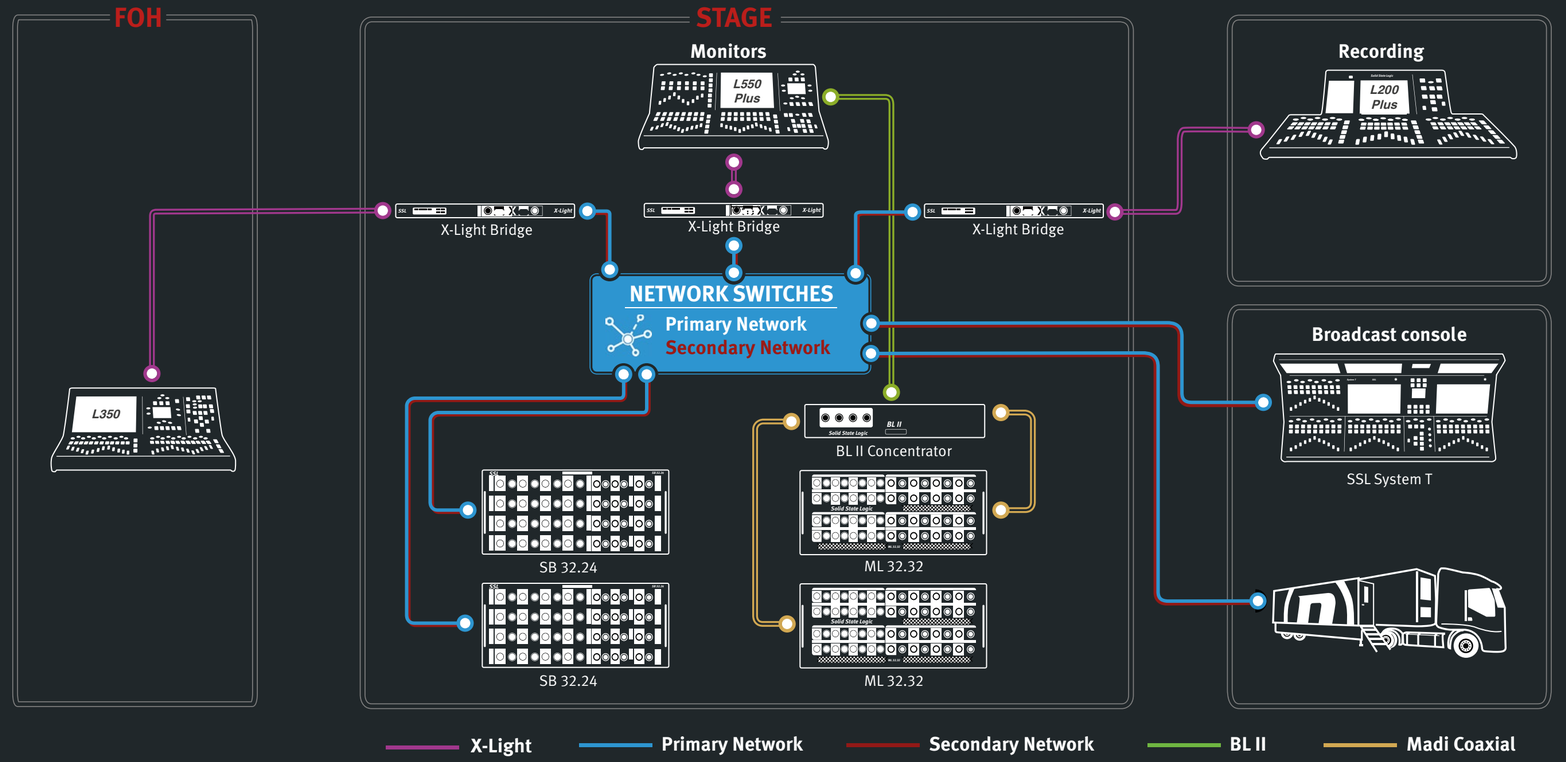
Leading-edge high bandwidth networked I/O

SSL Network I/O and interfaces provide a range of devices which facilitate use of MADI, AES, SDI and IP Audio networking for live audio production. Opposite is an example of an SSL combined audio ecosystem showing integration of MADI, Blacklight II, X-Light and Dante protocols to provide an extremely flexible and robust distributed audio network for live sound reinforcement, recording and simultaneous broadcast.

In this example, SSL Live consoles connect to the main Dante I/O system via SSL X-Light Bridges to provide each console with 256 low latency Dante 96 kHz audio channels and control via a pair of redundant connections. A pair of Primary and Secondary network switches are used to create a redundant Dante network with SSL Network I/O stageboxes connected as required. SSL Blacklight II connectivity is used to provide a 256 channel @ 96 kHz connection between the monitor console and a BL II.D Concentrator. Standard MADI is used for distribution between the BL II.D Concentrator unit and SSL ML MADI stageboxes for additional Monitor channels and outputs on stage. SSL System T broadcast consoles and OB/Recording units connect via Dante and can be provided with gain compensated splits from each SSL Dante stagebox, with Mic amp control arbitrated between all consoles on the network.

Mic Amp Control with ownership and sophisticated Gain Sharing

SSL Live incorporates sophisticated tools for shared and ownership managed control of stagebox mic inputs. Both control and ownership is available at a box by box, or even an input by input basis including gain compensation capabilities where sources are shared between multiple systems, such as Front of House and Monitors.



Remote I/O - MADI

Flexibility and Scalability

A fully scalable set of remote I/O units are available for SSL Live consoles including analogue, AES/EBU digital, MADI and Dante devices. Interconnection between console and stage is via MADI or Dante. Remote gain control data can be carried by either MADI or Dante. For simpler systems standard coaxial MADI can be used to connect the console directly to analogue and/or digital AES/EBU Stageboxes.

For higher channel count MADI based systems, SSL's proprietary Blacklight II high bandwidth multiplexed MADI can be used to provide point to point connectivity with a single or redundant pair of cables. Blacklight II carries 256 @ 96kHz audio signals, equivalent to eight MADI connections, bi-directionally down a single multimode fibre (single mode fibre option also available). A MADI Concentrator box located at the stage is then used to distribute standard coaxial MADI to MADI based analogue and AES/EBU Stageboxes, a second SSL Live console or other MADI devices. When two or more SSL Live consoles are connected to the same I/O, arbitrated gain sharing allows specification of which console has master gain control. All I/O stageboxes are fitted with dual redundant power supplies.

ML 32.32 - Analogue Stagebox

The 5U ML 32.32 analogue stagebox has 32 remote controlled SSL SuperAnalogue™ mic/line inputs and 32 line outputs on the front panel. Multiple units can be used to create larger systems. Remote switchable phantom power is available to all inputs. A/D D/A conversion takes place within the stagebox and the standard unit has two pairs of coaxial MADI In/Out configured as a redundant pair on the rear panel. I/O sharing between SSL Live consoles is made possible via an additional pair of coaxial MADI outputs. There is an optional rear-mounting 32 analogue mic output split panel. There are sample rate and clock setup buttons and a pair of wordclock connections. MIDI and GPIO connections are also supplied for alternative remote control methods.

D 32.32 - AES/EBU Stagebox

The D 32.32 is a 2U digital stagebox providing 16 x AES/EBU pairs via front panel XLRs. The unit offers sample rate conversion from the standard 96 kHz operating rate to other rates. The rear panel features exactly the same connectivity as the analogue stagebox.

BL II.D - MADI Concentrator

This 2U unit features two redundant pairs of SSL's proprietary Blacklight II connectors on the front panel. Each connection carries 256 channels of audio at 96 kHz and is used for efficient cable connection to the console. The rear panel provides 8 redundant pairs of coaxial MADI connectors. This high density MADI I/O device delivers digital audio interconnection between any configuration of analogue and digital stageboxes and facilitates I/O sharing.

Network I/O: MADI-Bridge

Provides an interface between a Dante IP Audio Network and MADI. It has on board Sample Rate Conversion so can deliver 32 channels at 96 kHz into a 48 kHz Dante network. It has dual MADI, IP Network ports and PSU which can be used as a fully redundant solution or in Split Mode to connect two 96kHz MADI streams to a 48kHz Dante Network (and vice versa). It also offers a unique front panel headphone confidence monitoring system.

Remote I/O - Dante

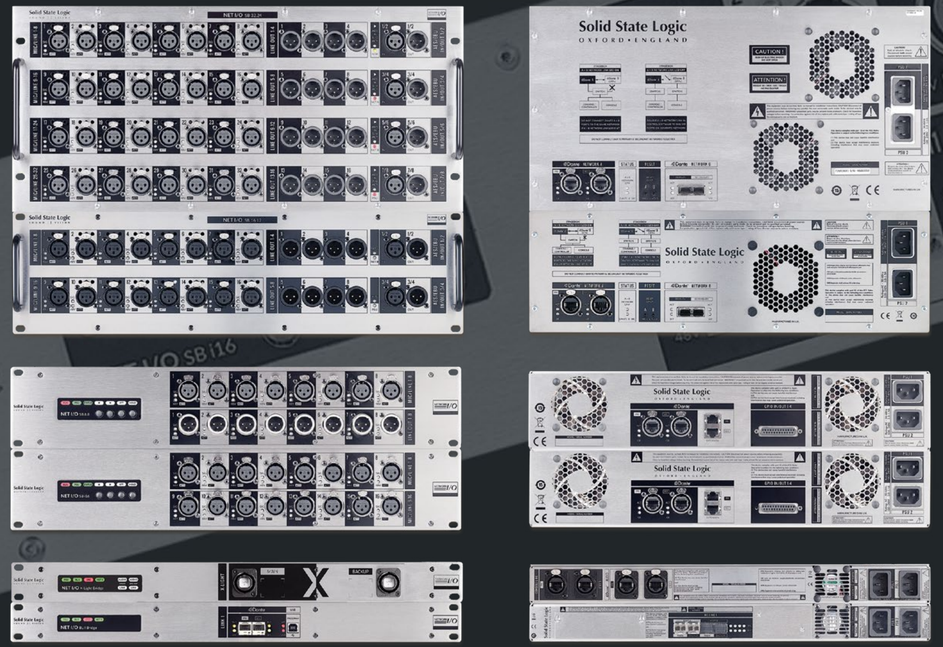
Built for a fully networked world

A fully scalable set of remote I/O units are available for SSL Live consoles including analogue, AES/EBU digital, MADI and Dante devices. Interconnection between console and stage is via MADI or Dante. Remote gain control data can be carried by either MADI or Dante.

SSL's Network I/O range of Dante devices provide analogue, AES digital or even embedded SDI bridging. Dante networks offer an extremely flexible and powerful solution to audio routing and asset sharing in a wide range of on stage and installed systems. SSL Network I/O Stageboxes place the exemplary audio performance of SSL's renowned SuperAnalogue™ mic pre technology at the heart of your system. When two or more SSL Live consoles are connected to the same I/O, arbitrated gain sharing allows specification of which console has master gain control. All I/O stageboxes are fitted with dual redundant power supplies.

For larger productions where high channel count, 96 Khz 24-bit audio is required, X-Light provides an ultra-low latency interface, carrying 256x256 channels of audio and control data between SSL Live console sand dante devices via a single cable. X-Light features ruggedised connectors and cable redundancy and is designed to offer a solution that is reliable and quick to deploy in the field.

SSL's Network I/O range is also fully compatible with our System T broadcast audio technology, making truly cross-functional system design possible. Broadcast oriented Network I/O units provide SDI Embed-De-Embed options if required.



SB 32.24 & SB 16.12 - Stageboxes

SB 32.24 is a 5U unit featuring, 32 mic/line inputs, 16 analogue line outputs and 8 digital inputs and outputs on 4 AES/EBU input/output pairs. **SB 16.12** is a 3U unit featuring, 16 mic/line inputs, 8 analogue line outputs and 4 digital inputs and outputs on 2 AES3 input/output pairs. Both units have redundant RJ45 Dante network connections in addition to a user configurable SFP ports that can be fitted with RJ45 or optical connectors. These can be used for network extension or to provide network separation for a gain-compensated Dante "split", for connection to a second Dante-equipped console or appropriately equipped device on a different network. They have individual signal present, clip and phantom power LED's as well as global indication of PSU, Network A and B and Hardware status. They can operate at 96 kHz or 48 kHz sample rates.

SB 8.8 & SB i16

These 2RU units offer slightly different configurations but share identical features. The **SB 8.8** offers eight mic/line inputs and eight line outputs. **SB i16** offers sixteen mic/line inputs. Both have a pair of redundant RJ45 Dante connections, a pair of network extension connections, and GPIO. They have individual signal present, phantom power and attention LEDs. They feature inbuilt limiters and SSL's innovative AutoPad system that automatically applies a Pad according to gain setting. An Aud (Audition) feature allows for automatic gain setting: Hold Aud while audio is present to automatically set the gain based on the source level.

X-Light Bridge & BL II Bridge

SSL's **X-Light Bridge** is a 1U unit that provides a bridge between any Live console and a wider Dante network using SSL's proprietary high bandwidth X-Light protocol. This delivers 256 channels of ultra low latency 96 kHz audio in and out of the console via a redundant pair of touring-grade ruggedised connections; perfect for taking Dante on the road. X-Light carries Dante audio and control data using a single connection.

For fixed installations where ruggedised connections are not required, the **BL II Bridge** also offers 256 channels of 96 kHz audio between a Live console and a Dante network by utilising SSL's proprietary high bandwidth Blacklight II protocol.

Automation

New improved advanced scene control

As you would expect from the company that first introduced console automation over 35 years ago, SSL Live consoles feature an automation system that benefits from our unrivalled studio and broadcast background. Automation is controlled via a full hardware interface in the Master Tile or via a software interface that can be manipulated via the main touchscreen or Channel Control Tile screen. The Automation interface can also be displayed on the optional external monitor.

The system can store virtually unlimited automation scenes. Extensive filters enable the user to choose exactly what settings the console stores or recalls, not just on a global basis but also on a per scene basis. Scene groups enable absolute or relative editing of all selected scenes in a single operation. Scenes can be triggered manually or from external triggers. Scenes even include the Eyeconix images and display brightness settings.

Event Manager

For those of you familiar with our System T broadcast console, we have taken the core of the event manager and bridged this to the Live platform. Most engineers are used to macros that consist of programming a single input action to a single output action; the Event Manager takes this to another level. Events can consist of one or more sources that can change the event state, the event state is then applied to one or more destinations. This means that a single trigger can activate multiple output actions, or multiple triggers can activate a single output action, making the workflow much more flexible for the engineer in operation. Source options range from GPI and MIDI inputs, User Keys and various switch functions. Destination options are similar, ranging from GPO and MIDI outputs, console switch functions, tap tempo, next/previous scene fire and so on.

Built For The Road

Ready for the All-Weather Hard-Knocks Life of the Road

SSL has a global reputation for the highest standards of build quality and first class support. With our Live consoles we have taken things to the next level. At their heart is a stainless steel chassis that is expecting a life on the road and it is well balanced with weight distributed carefully and well placed lifting points to make them a comfortable and safe two man lift. They are also designed for life in a wide range of environments… they aren't waterproof but are ready for any level of non-condensing humidity planet earth has to throw at them. They are designed to operate in a complete spectrum of lighting conditions. They have the brightest touch screens available on a live console and powerful colour change LEDs throughout with the punch to remain crystal clear even in full daylight. There is a concealed light strip along the top of the front panel to illuminate the control surface in low lighting conditions. With the L350 Plus, L450, L550 Plus and L650, there are three front panel rotary controls to adjust brightness of the console: one each for the screens, control LEDs and light strip. These brightness controls respond to automation to aid blackouts.

The consoles are not the only ones who live on the road so there is a front panel USB port which is there to enable complete show files to be saved and loaded via a USB drive. SSL Live showfiles can be moved between all SSL Live consoles without the need for any external conversion process. The automation system features an extremely powerful filter system which allows the operator to define on a global or per scene basis which settings will be recalled, so that, for example, everything except Master Output EQ settings can be recalled for the show.

Solid State Logic

OXFORD • ENGLAND

International HQ: Begbroke, Oxford, OX5 1RU, England · Tel +44 (0)1865 842300 · sales@solidstatelogic.com · www.solidstatelogic.com

Los Angeles: Tel +1 (818) 643 7040 · lasales@solidstatelogic.com
New York: Tel +1 (212) 315 1111 · nysales@solidstatelogic.com
Tokyo: Tel +81 (0)3 5474 1144 · jpsales@solid-state-logic.co.jp