# SSL Live

**Ultimate Sonic Performance** 



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### **Something Special**

Solid State Logic has been at the leading edge of audio console design for more than 35 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.

Four different consoles, the L100, L200, L350 and L550, offer a selection of configurations to suit a wide range of applications in Live, Theatre and Houses Of Worship. 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 control option or 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 L550, L350, L200 and L100 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 five layers of five banks giving up to 25 banks of 12 faders per Tile. Layer and Bank keys with LCD displays provide rapid layer and bank navigation. Each strip includes a touch sensitive 100 mm 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 (eq 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 (L550 & L350 only) provides instant physical control for a selected path. The tile has a high resolution 5.7" touch screen surrounded by colourcoded 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. 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.



Jason Decter, FOH - Blink 182



#### **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.

### **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.

What you want where you want it

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.

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### **Configurable Surface**

#### Managing your session

## **Stunning 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<sup>™</sup> 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.

### Classic 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 analyzer and the acclaimed Dialogue Automix system from SSL's broadcast consoles.

### Channels

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, 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 96 effects can be used in an L550 and up to 48 in an L350 or L200 and 24 in an L100.



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

Kenny Kaiser, FOH - The Killers

## L550 - The Big One

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### Grand production masterpiece

The L550 is the largest and most powerful console in the SSL Live range. It has cut its teeth on global tours for some of the world's biggest stars. It offers a large scale control surface and the power to handle the grandest and most complex productions.



Solid State Logic :: Live

"A lot of the new album was recorded onto 16-track analogue, and then moved onto Pro Tools. Hove 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 - Compact Powerhouse Explore Online

### All the power and grace in a smaller frame

The L350 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.





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"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."

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Charlie Izzo, FOH - Portugal The Man

### L200 - Dare To Be Different

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### The unique layout of the L200

The L200 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.



"The layout of the console really helps. I like having the 36 faders up front as I have a lot of balancing to do and a lot of mics to deal with. I also use the FX Rack Automix tool pretty heavily for our big theatrical productions. Not having to eat up faders to make it work is a big win for us."

Chris Trowbridge, Technical Director - Victory Church

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## L100 - Little Beauty

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### Introducing the new L100

L100 is the latest addition to the SSL Live console family. It 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.





"It was the only console that I thought could exceed the beautiful analogue sound that I had been used to.... Not just match it, but exceed it. There's a clarity and a transparency that comes from the SSL platform that I have never experienced before."

Andrew Stone, Production Manager - Church On The Move

### Which one?

#### Four consoles one soul

There are four models available in the SSL Live console range, the L550, the L350, the L200 and the L100. At SSL we believe that offering differently sized and specified consoles should not mean compromising on quality or features. All four 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 and they all offer exactly the same outstanding collection of insert Effects. The differences between the four models centre on physical size, layout, available channel paths & processing power, and available local I/O. The differences are so straightforward they are summed up in the comparison 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

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	L100	L200	L350	L550
Paths	96 (all full)	144 (all full)	216 (168 full, 48 dry)	288 (240 full, 48 dry)
Input Channels	64 (all full)	96 (all full)	216 (168 full, 48 dry)	288 (240 full, 48 dry)
Stem Groups	12	24	48 (36 full, 12 dry)	84 (72 full, 12 dry)
Auxes	36	48	132 (108 full, 24 dry)	204 (156 full, 48 dry)
Masters	4	6	18 (12 full, 6 dry)	30 (24 full, 6 dry)
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
VCA's	12	24	36	48
FX slots	24	48	48	96
Sample rate	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 mic/line, 2 TB, 3.5mm input,	16 mic/line, 16 line out	32 mic/line, 32 line out
	12 line out , 2x headphone	12 line out , 2x headphone		
Local AES/EBU I/O	4 pairs (with SRC)	4 pairs (with SRC)	4 pairs (with SRC)	8 pairs (with SRC)
MADI ports	4 coax	6 coax, 2 optical	6 coax, 2 optical	12 coax, 4 optical
MADI FX loop	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 optional redundant pair *	1 optional redundant pair *	1 Optional redundant pair
SSL X-Light	1 optional redundant pair *	1 optional redundant pair *	1 optional redundant pair *	1 Optional redundant pair
Local Dante @ 96 kHz	Optional 32x32 redundant pair	Optional 32x32 redundant pair	Optional 32x32 redundant pair	Optional 32x32 redundant pai
Maximum I/O @ 96 kHz	Up to 472 in /out	Up to 600 in /out	Up to 600 in /out	Up to 1136 in /out
Local MIDI & GPIO	Not Available	MIDI IN, OUT & THRU. 12 GPIO	MIDI IN, OUT & THRU. 12 GPIO	MIDI IN, OUT & THRU. 12 GPIO
Channel Control Tile	Not Available	Not Available	Standard	Standard
Main touch-screen	17" 600 Nits	17" 600 Nits	19" 1,500 Nits	19" 1,500 Nits
Power Supply	One (redundant option)	Two redundant	Two redundant	Two redundant
Width	691mm (27.2")	1370mm (54")	923mm (36.3")	1,191mm (46.9")
Weight	52kg (115 lbs)	85kg (187 lbs)	86kg (190 lbs)	90kg (198l bs)

\*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 or added to L200, L350 or L550 consoles to create very large console 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 Explore Online

#### **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.





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MG VCA	MG VCA Fader Master	MG VCA	MG VCA Fader Master	MG VCA	MG VCA Fader Master	MG VCA	MG VCA	MO VCA Fader Master	Fader Master	MO VCA Fader Master	MG VCA Fader Master	Page OO Copy
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### **'TaCo' Tablet Control App**

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### 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 and L200 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. 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 Networked I/O Ecosystem**

### Leading edge high bandwidth system technology

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 System T broadcast consoles and OB/Recording units connect via Dante and can be provided with gain compensated splits from each SSL Dante stagebox. Mic amp control is arbitrated between all consoles on the network.

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.



### **Remote I/O - MADI**

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### 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<sup>™</sup> 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 rearmounting 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 Explore Online

### 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<sup>™</sup> 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.

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 30 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.



## **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 LED's 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 L550 and L350 there are three front panel rotary controls to adjust brightness of the console: one each for the screens, control LED's 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 f 🎔 🗄 f in 🛗 🔘

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