Duality δelta
Large-Format Analogue Console with SSL δelta and DAW Control
Welcome to the world of Duality Delta, the large-format analogue console designed for the modern studio environment. Installed in some of the world’s most prestigious studios, Duality allows producers and engineers to harness the clear sonic advantages of SSL SuperAnalogue™ processing and the workflow benefits of advanced DAW integration.

- The analogue console for the modern studio
  Full analogue console with latest generation SuperAnalogue™ technology
- NEW! Delta control automates your console within your DAW like a plug-in
  Cue, FX, EQs, Cut, Insert switches and analogue faders can be automated
- Complete SSL analogue processing toolkit
  SuperAnalogue™, VHD™ Mic Pres, E Series EQs, Dynamics and Master Bus Compressor
- Unrivaled levels of visual feedback
  TFT screens provide metering, process order, routing and Eyeconix™ for every channel
- Integrated console processing within the DAW signal path
  Innovative SPLIT channel signal path architecture
- Fully equipped for multichannel production
  Multiple Stereo buses and full 5.1 functionality
- Ethernet connected multi-layer control of all major workstations
  Controls two DAWs simultaneously

The hybrid studio standard
δelta Control (δ-Ctrl)

The unique new SSL console automation system unites the very best of automation in the analogue console domain with DAW based workflow.

δ-Ctrl is a native AAX/RTAS/AU/VST/VST3 plug-in that allows automation of Duality as if it were a DAW Plug-in. The automation system in the DAW is used to record and playback control data from the δ-Ctrl and synchronises the console replacing the SSL legacy automation system in Duality.

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Automation data can be viewed and edited as normal plug-in data in the DAW tracks. The δ-Ctrl plug-in supports all Pro Tools, Logic, Reason, and Nuendo control automation features. Aδ-Ctrl retains all the key operational elements of SSL's Signature Mix System with much loved features such as JOIN, REVISE, MOTOs OFF and SNAP Override all actioned from dedicated front panel switches. The MOTOs OFF mode offers the full non-moving fader SSL VCA mix experience as preferred by key industry remixer. The New MOTOs OFF, Touch Write mode is available to SSL Series A mixers.

Duality. This is SSL.
The Duality channel strip

Input
Duality features two switchable Mic Preamps on every channel, allowing you to choose from the unrivalled purity of SuperAnalogue™, or the creative possibilities of Variable Harmonic Drive (VHD™). The VHD™ circuit introduces controlled and yet harmonic distortion to add warmth or grit. Solid state level signals can also be fed into the VHD™ circuit to creatively colour and enhance sterile DAW stems. Both inputs offer 48V Phantom Power, Phase and Pad switches.

Dynamics
The classic SSL Dynamics processor features three sections; the Compressor (switchable between traditional RMS and Peak Sense modes), the Gate (with variable hold time) and the Expander. There is also a side chain listen feature for full creative control.

EQ
Duality offers a 4-band, twin-curve SuperAnalogue™ EQ design, switchable between E Series operation and G Series curves and control interaction. The HF and LF Section feature a K+V Curve option to allow a fixed Q parametric response. Additional HF and LF Attenuate the EQ section. Flexible routing options allow the channel processing elements to be re-ordered in a wide variety of configurations.

Solo + Cut and Fader
Control your traditional analogue channel level, your DAW’s channel faders or both at the same time! Through SSL’s unique approach, Duality offers unbridled integrations of today’s DAWs within the analogue console paradigm. You can even add to the analogue mixer and the DAW mixer simultaneously. Depending on which SSL integrated parameter you want to control, you can “flip” into the faders for enhanced real-time control. Duality features high-quality motorised faders with “fader linking”, Automation extraction, and DAW function display. Cut, FC, Cue, FC and even channel assign labels for automation.

S-1 Panner
The most comprehensive analogue surround panning ever seen. In addition to standard Left/Right pan, every console channel features separate controls for Front/Rear positioning, a dedicated LFE send and an LCR divergence control.

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CUE & Sends
Each channel has a dedicated Stereo CUE send, and four mono FX sends. The innovative and flexible EFX feature manages external FX and sends to the Track Buses and CHOP Channel output independently. Solid state, low latency, as well as efficiency saving zero latency monitoring stems for personal headphone mixes.

Channel TFT Screens
The amount of visual feedback provided by the console’s large innovative TFT meter bridge screens is unsurpassed. Featuring Level display (for both console and DAW channels), Track Bus Routing assignment, Channel Processing, Level Set, Dynamics metering (for both Gain reduction and Gate), and Automation display. A new innovation, SSL’s unique E-View system allows operators to globally assign their chosen stems onto the meter bridge, adding track recognition and enhancing workflow.

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Centre Section and Routing

Duality features a comprehensive and elegantly organised mix environment control section that enables the operator to set up and manipulate routing, monitoring and transport from a single location.

Centre Section

The fully-featured centre section includes:

- Trackball, Group + Master Faders, DAW Transport & Numeric Location panel
- Comprehensive monitoring section with external feeds and full monitor speaker calibration
- Oscillator, Delay and Noise Generator
- Main Output Bus functions (eg. Inserts, Summing, Mix Bus routing etc.)
- Talkback Mic and associated communications switches
- Four dedicated Stereo returns
- Classic SSL Main Bus Compressor (both Stereo & L-R)
- Monitor controls for Track, Foldback and Cue/RT returns
- Centre section TFT Metering
- Dedicated VU meters and moving coil phase meter
- DAW control TFT displays show DAW status and plug-in parameters
- Four encoders and five buttons assignable to plug-in editing

Routing Title

The central Routing Tile provides centralised control of channel routing, signal processing order, and other facilities for a selected channel or across multiple channels. Selections can be a contiguous range or selection of individual channels whose states can be controlled together. The Routing Tile provides a speed and comfort of operation not previously seen on an analogue console and allows operators to view the central monitoring ‘sweet spot’ while having full access to channels positioned away from their reach.

Mix Reassign Matrix

A powerful and extremely useful tool, allowing assignment of the CUEs (A+B) and Track Buses 1-24 to the main mix, which doubles up the number of inputs on Monitor or Monitor returns while recording. A unique Stereo Downmix panel allows complete control of the fold-down of a multichannel 5.1 mix to Stereo, allowing the operator to seamlessly move between surround and Stereo. Further enhancement is provided by the inclusion of LFE filter frequency selection ideal for cross platform 5.1 work.
Duality is a self-contained system with no remote power supplies. Because the console is convection cooled it has no need of fans and is silent in operation. Consoles are available fitted with 24, 48, 72 or 96 channel strips in standard or ‘Pro-Station’ configurations.

Total Recall™
SSL’s unique Total Recall system uses patented control technology to enable the operator to quickly and accurately reconfigure the analogue control positions of the console to a snapshot of stored settings.

Configuration and options

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Patch = 35” Racking
Integral 35” racking units with slides to a space are available as an option. These may be used for outboard effects units or to house the optional bantam patchbay. This can be fitted internally in the console frame or may be remotely mounted by the console maker.

Angled Frames
An addition to the Pro-Station option, standard consoles can be ordered with angled sections at split points to achieve curved console configurations.

Speaker Shelves
A flat shelf that fits over the top trim of the console, suitable for the placement of near field monitors can be retro-fitted to existing consoles without modification.

TFT Monitor Arm
The Duality TFT monitor arm attaches to the rear of the console and holds either one or two monitors. It is the most elegant way to securely position your preferred DAW monitor close to the control surface.

Our Commitment to Customer Support
A great product is only the start of what sets SSL equipment apart. We believe that the world’s best products deserve the best support. To provide this, SSL has a network of sales and service centres throughout the world, including offices in New York, Los Angeles, Paris, Milan and Tokyo. Through these offices and our distributors in other countries, a full program of backup and technical support is guaranteed.

Commissioning and Training
When you buy a console, you have the right to peace of mind. When you buy our Duality, you have the confidence that your Duality works the same as you expect from SSL. Our training will provide you with the skills and confidence to make the most of your investment.

SSL Extended Warranty & Support
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GPI .I/O
25-way D-sub with connections for Red Light relays & switches, Monitor Cut & Dim, Slate & Listen switches, Talkback & Foldback switch and tally lights.

Track Buses
Outputs for the 24 console Track Buses. Each has a front panel Level control along with a dedicated AFL switch.

ECHO RETURNS
Four stereo line inputs with dedicated Foldback outputs. These are fed to the Foldback Outputs using Master Bus Level and AFL.

TALKBACK/LISTENBACK
Outputs for the two Foldback outputs (A+B), along with a dedicated External Talkback Test, Listen Mic input with monitored SSL LMC circuitry.

MCU VOLTAGE
Multi channel input with voltage control. These are fed to the Foldback Outputs using Master Bus Level and AFL.

METER OUTPUT
A dedicated multichannel metering output for use with third party metering options.

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