Solid State Logic
SOUND || VISION

made for MX4

SSL Console Bundle for MX4

User Guide V1.1







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SSL Console Bundle for MX4

User Guide V1.1

English Edition V1.1

Plug-Ins included:
SSL Console EQ and Filters V1.5 / SSL Console Dynamics V1.01 / SSL Console Bus Compressor V1.0

Congratulations on your purchase of the SSL Console Bundle, the real SSL processing solution for your SSL Mixer V6 or SSL Soundscape V6 Software.

As you're sat here reading this, the chances are high that you have a pretty good understanding of who we are and our outstanding reputation in audio recording technology.

How did we get here?

Well, there were no great plans to make SSL into a major manufacturer of mixing consoles when it all started back in the seventies - the company began with nothing more than an enthusiasm for music and the concept of recording.
Along the way that spirit, coupled with a passion for excellence in music recording tools, helped build a multi-million dollar international business. SSL's HQ may be a little bigger now than it was in the seventies, but passion and innovation still lies at its heart.

Building on the technology of the former Soundscape Audio Workstation, whose parent company Sydec we acquired in 2006, we decided to embark on a technology project to include the SSL Mixing and processing facilities on a PCIe Audio Card, useable right inside the SSL Soundscape V6 DAW and also inside a standalone virtual Mixing Console (SSL Mixer Software), enabling any PC DAW User to benefit from the abilities of an SSL Console „in the box".

So the SSL MX4 Card was born, enabling demanding DAW users, who don't have the budget (or the floor space!) required to install a large-format SSL console, to entirely mix „in the box" with the workflow benefits and Sonic DNA, that made SSL famous.

The **Double Precision** Algorithms of the SSL Console Bundle Plug-Ins give you the true SSL Sound, not available from any other manufacturer than SSL.

With 128 Ins and Outs per Card and a truly powerful realtime DSP Engine with the latest generation DSP and Processing Plug-Ins, based on the digital technology behind SSL's C-Series consoles, MX4 delivers the complete SSL mix experience – powerful channel EQ's/Filters, Channel Dynamics and the legendary Bus Compressor, all useable with class leading low latency performance to form a complete system for Tracking/Monitoring, Mixing (including fine Outboard Gear), all tightly integrated into the heart of a DAW based production.

The SSL Console Bundle Plug-Ins gives you the tools to get the sound heard on 90% of all Hit Records from the past 3 decades.
We hope you will enjoy recording and mixing your music with the SSL Console Bundle and your MX4.

Please store your MX4 User Registration Card in a safe place, since it contains the Authorisation Codes for the Console Bundle.

Please also register your product on our website.

For product news and software updates please register at ***www.solidstatelogic.com***

To run the SSL Console Bundle Plug-Ins you need a host PC equipped with an **SSL MX4 PCIe Card** or **SSL Mixpander/5** (or Soundscape Mixpander/9) and the latest Version of the SSL Mixer V6.x or SSL Soundscape V6.x Software.

In order to get the most out of the SSL Console Bundle plug-ins, your system needs the following minimum specification:

- Working SSL Mixer V6 or SSL Soundscape V6 Installation
- Windows XP or Vista 32-bit (NT, 95/98, ME, 2K are NOT supported)
- 32-Bit Graphics Mode and Card with DirectX8 or higher
- Pentium, Core2, i7 or equivalent based System with at least 2.2GHz (or equivalent overall CPU power in Multicore Systems)
- 512MB or more of Ram (2GB min recommended)

DSP Resources:

Double Precision 48-Bit DSP Memory:

Since the whole processing chain inside the EQ-Filters and major processing blocks of the Console Dynamics and Bus Compressor plug-ins are fully 48-bit double precision, only 48-bit DSP memory can be used to run each instance of the plug-in without additional latency inside the SSL V6 DSP architecture.

Only a limited amount of the memory inside the mixpander 5/9 DSP platforms is available for direct 48-bit operations.

The MX4 PCIe Cards however provides a huge amount of 48-bit memory needed to run multiple instances of the plug-ins.

Especially with Mixpander based Systems you therefore may encounter situations where you are not able to load more SSL Console Bundle plug-ins because there is no more 48-bit memory available (indicated by the [M] parameter in the Mixers caption bar).

However, you may well have enough DSP resources to be able to load other standard or optional plug-ins which utilise 24-bit memory only.

The tables below show the max. number of simultaneous mono and stereo instances of one Plug-In at **44.1 kHz**, inserted on an individual Mono to Mono or Stereo to Stereo Channel Strip with Output Fader.

Note: For higher sample rates (48kHz, 88.2kHz and 96kHz) more Processing-Cycles are required for calculation, meaning less instances will be available.

MX4 PCIe

Plug-In	Mono	Stereo
SSL Console EQ-F	92	48
SSL Console Dyn	88	48
SSL Bus Comp	-	164

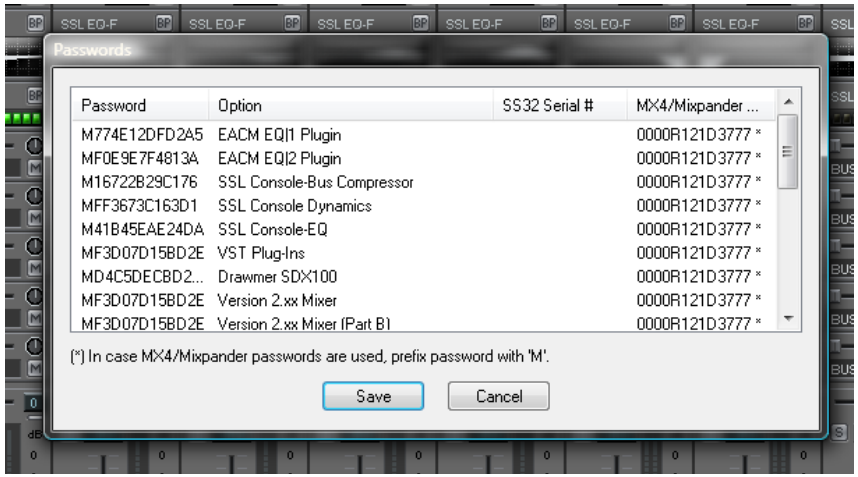
Mixpander 9

Plug-In	Mono	Stereo
SSL Console EQ-F	40	32
SSL Console Dyn	56	32
SSL Bus Comp	-	100

Mixpander 5

Plug-In	Mono	Stereo
SSL Console EQ-F	20	16
SSL Console Dyn	28	16
SSL Bus Comp	-	50





NOTE: The SSL Console Bundle Plug-ins are automatically installed with the SSL Mixer & Soundscape V6 (or later) software. The installation procedure below is only required for previous Software Versions.

Installation Procedure:

- Please close all SSL Mixer or SSL Soundscape V6 software
- Double-click on the **SetupSSLbundleV1.0.exe**
- Please follow the instructions given by the installation wizard
- Restart your SSL Mixer V6 or SSL Soundscape V6 software

Password authorisation code

In order to use the SSL Console Bundle Plug-Ins, an authorisation code must be filled into the Software's OPTION Menu for each individual Plug-In. You will find these codes on your **MX4 Owners Registration Card** or on your SSL User Account, if you purchased the Plug-Ins for a **mixpander** Card in our online shop. You can look up the passwords in the electronic Invoice or also inside your SSL User account.

The unique 12-Digit password's only authorises the plug-in it has been generated for and also only work's with the unique Unit ID (DSP serial number) of the MX4 or Mixpander card. But it will work on every PC with this device and Plug-In installed. To use the plug-in on multiple systems working under the same software instance, please use Password Sharing as described in the SSL Mixer or Soundscape V6 software manual.

In order to use the SSL Console Bundle plug-in's on different SSL or Soundscape platforms that do not run inside a single Software instance, it will be necessary to purchase additional licenses for each device or software instance.

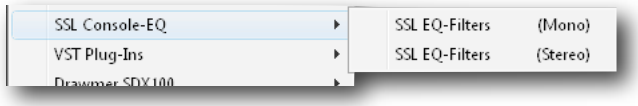
Your SSL authorised dealer or national distributor will be happy to answer any question you might have regarding authorisation codes and licensing issues.

After installation the SSL Console Bundle plug-ins appear as new entries (SSL Console xx...) in the Mixer plug-in drop down list.
Please activate the hierarchical plug-in view in your software.

TIP: As with all other SSL Mixer plug-ins you first have to create an appropriate channel in the mixer and insert the plug-in into the main channel area.

Included Plug-ins:

SSL Console EQ and Filters V1.5



Two different Plug-In versions are included; mono to mono and stereo to stereo.



Once inserted into the Mixer Software, the SSL Console EQ and Filters plug-in will appear as a small graph preview window inside the mixer column.

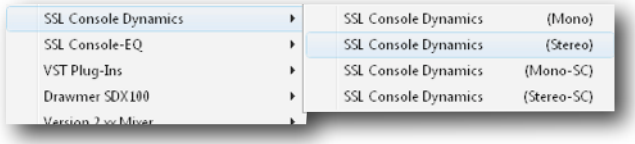
Each different EQ plug-in on the SSL Mixer will exhibit a different colour set in this window, matching the graph in its main plug-in window.
This makes it is easy to differentiate between the different models used in the channel.



The small EQ filter graph gives a preview of the equalisation curve. Once the curve turns red, the plug-in is indicating that clipping is occurring in either the input stage or somewhere inside the serial filter chain.
Lowering the input gain or individual band gains may then be necessary to prevent the algorithm from producing audible distortion.

TIP: As with all other Soundscape level displays, the SSL Console EQ and Filters plug-in indicates 1 sample at 0dbFS as clipping. Under certain circumstances audible distortion may only be introduced when a multiple of consecutive samples at 0dBFS are present.

SSL Console Dynamics V1.0



Four different Plug-In Versions are included:
mono to mono, mono to mono with side chain input, stereo to stereo and stereo to stereo with side chain input.

The Mono Version with side chain (SC) is in fact a 2Ch In, 1CH Out Plug-In, the Stereo Version with side chain (SC) is a 4CH IN, 2 CH Out Plug-In.
The SC Input is derived from the last Input(s), meaning that the Mono Version uses In1 for the Audio Input and In2 for the SC Key Input.

In the Stereo SC Version CH3+4 are used to derive the SC Key from.

TIP: In order to use a SC Version, you need a Stereo to Mono Channel Column for the Mono SC Version and a 4CH to Stereo Column for the Stereo SC Version.



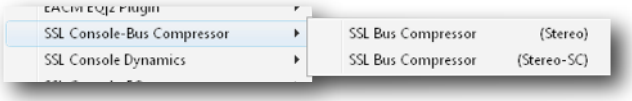
Once inserted, the SSL Console Dynamics plug-in will appear as a small preview window with 2 LED Areas displaying the Gain Reduction or Gate/Exp Reduction inside the mixer column.



Once the LED background turns red, the plug-in is indicating that clipping is occurring in either the input stage or somewhere inside the processing chain or at the Output. Lowering the input gain or output gain may then be necessary to prevent the algorithm or Output stage from producing audible distortion.

Like on real SSL Consoles the Channel Dynamics use Auto-Makeup to compensate for the reduced Gain in the Compressor stage.

SSL Console Bus Compressor V1.0



Two different Plug-In Versions are included:
Stereo to Stereo and Stereo to Stereo with Sidechain (SC).

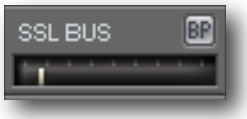
The SSL Bus Compressor is always Stereo.

In the SC Version Input 3+4 are used to derive the SC Key signal from.



TIP: In order to use a SC Version, you need a 4CH to Stereo Column to insert the Plug-In.

Once inserted, the SSL Console Bus Compressor plug-in will appear as a small preview window with a little needle showing the Gain Reduction inside the mixer column.



The Bus Compressor does not have a Clipping detection circuit, in order to detect overloads in the Input or Output stage, please use the standard Mixer PPM's before or after the plug-in.

Due to the internal Design of the Bus Compressor circuit, process internal clipping cannot occur (given that the Input is not already clipping).

Tip: When you want to process a mono channel with the Bus Compressor, please insert the Plug-In on a Bus Channel/AUX utilising a Mono->Stereo send in the Instruments Channel to route to the Bus Compressor AUX.

General Plug-In Controls

Double Clicking on any SSL Console Plug-In in the Mixer opens its GUI („Big Window") to control all the parameters of the processes with your mouse. Before we dive deeper into the specific Plug-In Controls, let's have a look at the more general functions shared across all SSL Console Bundle Plug-Ins:

Rotary Pots

Hovering with the mouse over any rotary will immediately activate it and a read out of it's parameter value appears above the pot. The rotary pots can be controlled by clicking and dragging in a rotation manner. Moving the mouse pointer away from the pot being "held" allows finer adjustments… as you move further away the "resolution" increases, i.e. the pot responds more slowly. You can also use the scroll wheel to adjust settings. Clicking, dragging and scroll wheel tuning can be used simultaneously.
In order to type in values using the PC keyboard, simply double-click on a rotary pot which will open a value input box. Precede the value with a minus sign to indicate a negative value, and press CANCEL or use ESC on the keyboard to cancel the typing. Use the left and right cursor keys to navigate between digits and the DEL and BACKSPACE keys can be used as in any standard Windows application.

CTRL+Double Click resets a Rotary to the default position.

Buttons



All Buttons can be clicked to switch, a lit LED or illuminated Button indicates the pressed position in combination with a smaller shadow cast on the panel.

The Out Position shows a bigger shadow and the LED or illumination is off.



Peak Meters



The peak meters in the input and output sections contain a clip indication light. This can be reset using CTRL+double click anywhere on the peak meter area (this does not have to be exactly over the LEDs). This will also reset the clip indication in the small plug-in window in the mixer once the EQ curve or LED Background of the Dynamics have turned red.

The peak meters also have a right click menu. Here the clipping indicators can be reset and an automatic clip reset time can be selected. By default this is set to 1 second, meaning that the clip indication will be automatically reset after 1 second.

TIP: The EQ curve in the big graph window also indicates clipping; the whole EQ curve turns to a deep red colour once clipping has occurred. This indication is set to a fixed reset time of 1 second and is not affected by the clip reset settings.

Automation

Any „knob“, Rotary, Button or EQ-Graph Node exposes its GUI position to the build-in Automation interface. This is not the case for the Clip Reset Menu and the general Controls in the GUI Topbar.

Plug-In GUI in Focus

Tweaking parameters with the scroll wheel needs the respective GUI to be „in Focus“, which means it has to be the active Window.

In order to prevent erratic parameter changes, you therefore have to first click on the GUI you want to change, before the Mouse Over and Scroll-wheel are able to detect the Knobs.

Details on Rotary Knob Precision

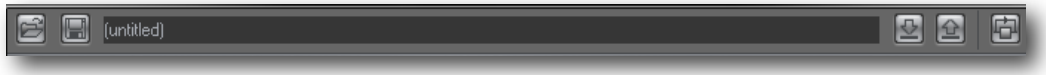
All rotaries inside the SSL MX4 Plug-Ins and Mixer Applications follow the rotational Click&Drag principle, which allows the control resolution to be defined by the distance from the centre of the rotary control.

Take your time to get used to this behaviour. Compared to Up/Down Click&Drag, where you cannot alter the knob precision without additional controls (ie. pressing CTRL), the Rotation approach gives you a stage less precision using the mouse only.

In addition while you click&drag the Scroll-wheel is also active, providing very fast simultaneous adjustment.

Plug-in top bar

The Top bar of the main Plug-In GUI is common between all SSL Console Bundle Plug-Ins.



Loading a Preset



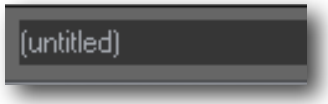
By pressing the LOAD FILE button, a standard Windows dialogue opens allowing you to browse through the factory presets and load them. All 3 SSL Console Bundle plug-in‘s come with presets that are intended to work as a useful starting point.

Saving a Preset



After pressing the SAVE FILE button you can browse to a folder, type in the name and press SAVE to store the preset.

Current Preset Name



Displays the name of the currently loaded Preset, or (Untitled), if the Setting hasn‘t been stored yet.

NOTE: The def.SEF, def.SCD and def.SBC presets restore the factory defaults, so we advise you to not overwrite them.

TIP: In order to copy the EQ settings from one channel to another, we recommend creating a new folder for each project. Within this folder, you should store the settings as a preset with the channel number in the name.

Instant Compare Function



This is used to store a Plug-In setting temporarily without having to save it as a preset.



Press the STORE TEMP button to store the current plug-in setting to a temporary memory.



After further tweaking the current setting can be compared with the temporarily stored setting by pressing the RECALL TEMP button.

In pressed state the recall button recalls the temporarily stored version.
Clicking the recall button again to non pressed state reverts to the current status. If there is not a temporarily stored setting present (store has not yet been pressed), pressing the recall button will reset to the default factory settings of the plug-in.
The recall button will pop out once the plug-in is tweaked and the current setting is lost. The stored version is not overwritten in the temporary memory until the button is STORE TEMP pressed again.

TIP: The temporarily stored version will not be saved with a preset, but it can be saved as a separate preset by pressing the recall button and then saving as a preset.

Plug-In Bypass





Pressing the BYPASS button removes the Plug-In from the signal chain to easily compare the original and processed sound.
The BYPASS button in the top bar and in the little Mixer Window of the plug-in are connected and perform exactly the same function.

In some SSL Console Plug-Ins it is also connected to a GUI Button (ie. DYN IN in Console Dynamics).

TIP1: As an alternative to Bypass you can also use „DSP-Muting“, to remove the actual process from the DSP‘s and free up Cycles for other Plug-Ins. Please refer to the SSL Mixer V6 or SSL Soundscape V6 Manual for more details.

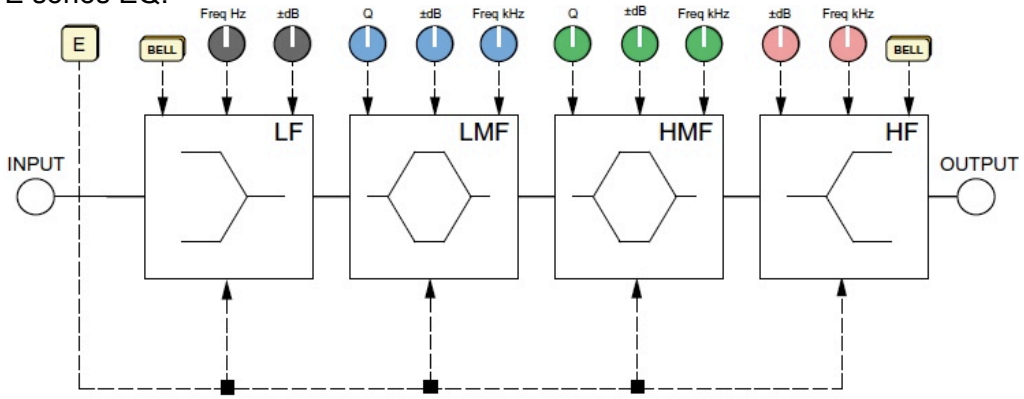
TIP2: If you wish to bypass for example only a single EQ band, the recommended method is to use the STORE TEMP to save the settings and then reset the band gains to take them out of the signal chain. By now pressing the RECALL TEMP button, the band will be brought back into the signal chain. This can be done for single or multiple bands.

SSL Console EQ and Filters



EQ-Section

Based on the EQ algorithm of the SSL C200 Console family, the equaliser is a four band parametric EQ. The distinctive Sound that was truthfully modelled on XL 9000K EQ circuit and includes two distinct EQ curves, one based on the SSL G series EQ and another based on the latest version of SSL's classic E series EQ.

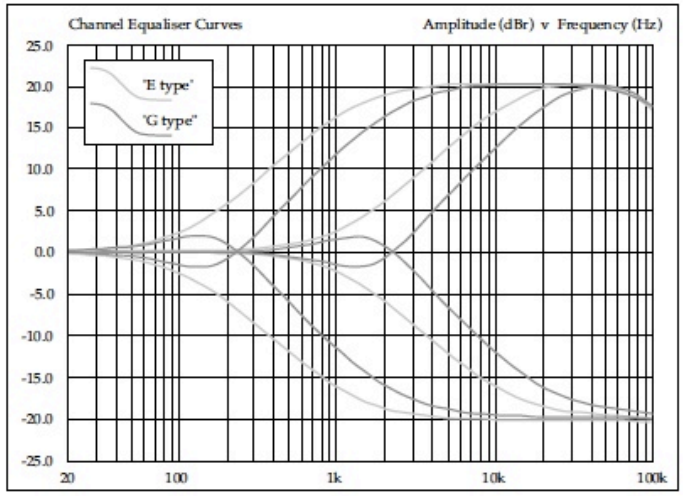


The plug-in includes high and low frequency shelving equalisers (which can be switched to peaking curves via the BELL button) and two overlapping equalisers with adjustable Q.

The Low Frequency section operates over a frequency range of 40Hz - 600Hz and is capable of up to 16.5dB of cut or boost.
The HF section operates over a frequency range of 1.5 kHz - 22 kHz and is capable of up to 20dB of cut or boost.
Normally these shelving curves have a degree of overshoot/undershoot (depending on whether you are boosting or cutting) below the selected HF frequency or above the selected LF frequency.

De-selecting the E button removes the overshoot/undershoot effect and provides a slightly gentler slope.
Selecting BELL in either mode switches the equaliser to a peaking curve.

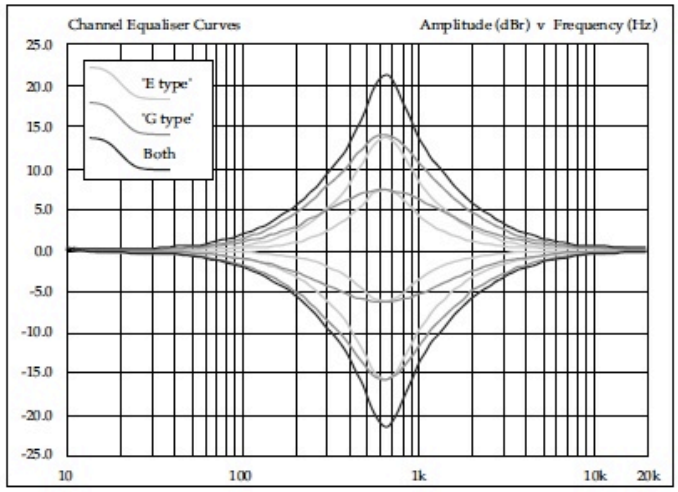
The Low Mid Frequency section operates over a frequency range of 200Hz - 2 kHz and is capable of ±20dB of gain with a continuously variable Q from 0.5 to 2.5.



The High Mid Frequency section operates over a frequency range of 600Hz - 7 kHz and is capable of ±20dB of gain with a continuously variable Q from 0.5 to 2.5.
Normally, at any Q setting, the bandwidth of the HMF and LMF sections varies with gain, whereby an increase in boost or cut increases the selectivity of the EQ.
This type of EQ can sound effective when used at moderate settings; the gentle Q curve lends itself to the application of overall EQ on combined sources and subtle corrective adjustments to instruments and vocals.

When the EQ is switched to 'E' operation, the bandwidth of the HMF and LMF sections remains constant at all gains, so at lower gains the EQ curves are comparatively narrower for a given Q setting.

This is particularly useful for drums, since relatively high Q is available at low gain settings.



However, it is not so suitable for overall EQ or subtle corrections, as you need to adjust the Q to maintain the same effect when the gain is changed.

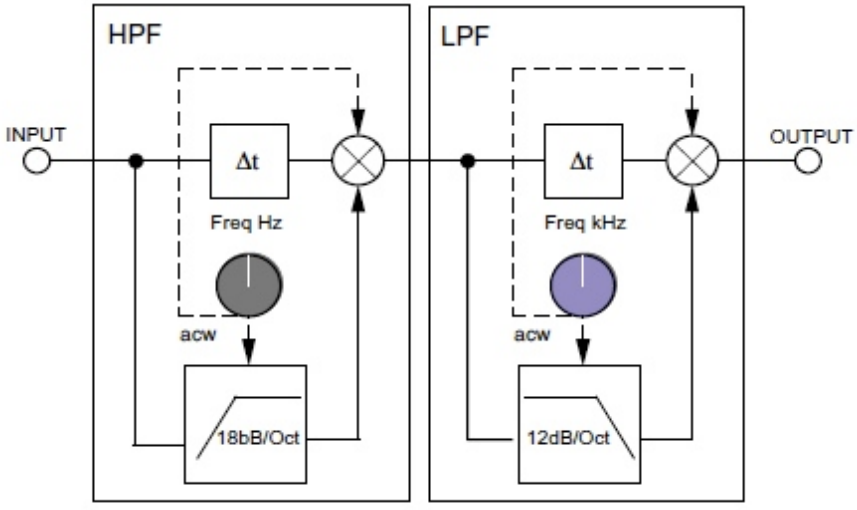
Filters Section

The filter section of the SSL Console EQ and Filters plug-in includes a 12dB/octave low pass filter and an 18dB/octave high pass filter.

The low pass filter operates from 3kHz to 22kHz and the high pass filter operates from 20Hz to 500Hz. In addition, each filter has an OUT position which bypasses the filter.

The filter section can be placed in two different places in the signal chain; post or pre equaliser. When the INPUT button in the filter section is pressed, the filters are placed before the equaliser section.

When the INPUT button is pressed, the filters come after the equaliser section.



Special EQ Controls

Filter Knobs



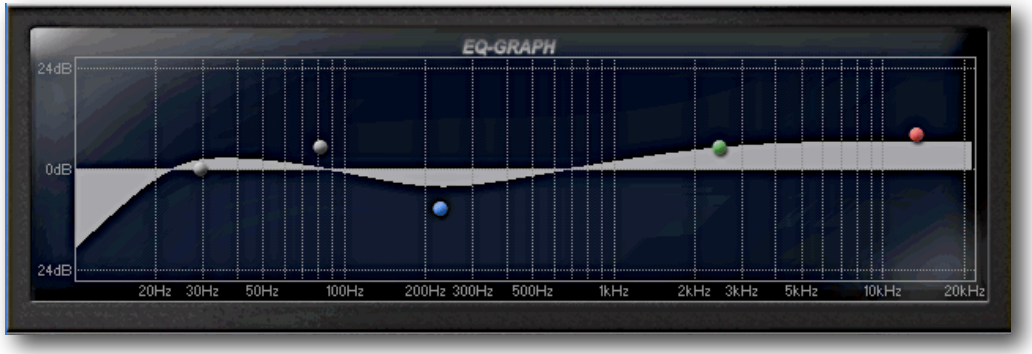
The filter pots have an OUT position, which removes the filters independently from the signal chain.

The LP filter potentially has a maximum frequency of 35kHz.

According to the Nyquist theorem, the possible bandwidth of a digital system is 0.5 x sample rate. This means that with sample rates below 70 kHz the LP maximum of 35kHz can not be reached.
Therefore moving the LP filter above 0.49 x sample rate will switch the filter directly to the OUT position. At 44.1kHz this will happen if the pot is turned further than 21.609 Hz.

EQ Graph

This area contains the equalisation curve and the EQ band nodes. The nodes allow you to control frequency, gain and Q-Factor simultaneously. The EQ-Graph can be switched On/Off with the GRAPH button.



The graph provides an accurate readout of the current equalisation curve.

Changing Frequency Gain and Q-Factor

- For the filters, the X-axis is used to change the cut-off frequency
- The low and high EQ bands use the X-axis to change frequency and the Y-axis to change gain
- The low-mid and high-mid bands additionally have the Q-Parameter.
- The Q-Factor can be changed with the **scroll wheel** of the mouse whilst the X and Y axis are used to change frequency and gain respectively.

TIP: The Graph Edit Window allows the user to very quickly manipulate the plug-in, as it reduces mouse movements significantly and allows very quick adjustment of multiple bands. To reset a whole bands parameters in the EQ graph window simply press CTRL+double click on the band node or by using the Instant Compare Function.

TIP2:The EQ curve in the graph window also indicates clipping; the whole EQ curve turns into a deep red colour once clipping has occurred. This indication is set to a fixed reset time of 1 second and is not affected by the settings made in the clipping right click menu.

SSL Console Channel Dynamics



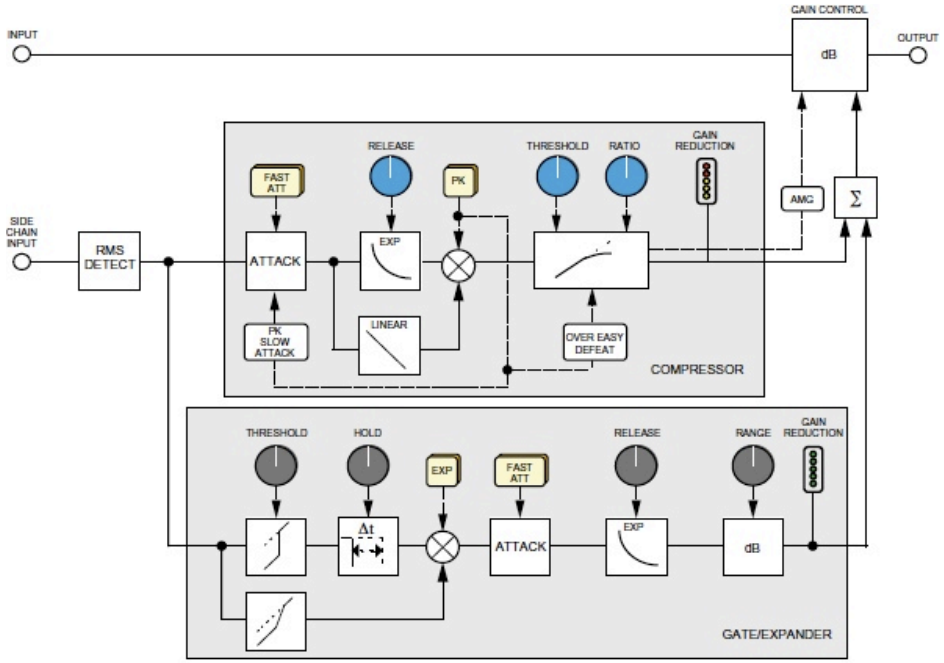
The SSL Channel Dynamics Plug-In comprises separate sections for compressor/limiter and an expander/gate. Both sections work independently, but can be operational at the same time, providing sophisticated control of signal levels.
The Mono and Stereo Version are both also available as a Version with side chain Input for advanced processes like de-essing, ducking, rhythmic level modulation etc.

Both sections are based on the Dynamics Section of a real SSL Console Channel Strip.

Compressor/Limiter Section

The Channel Compressor/Limiter Section has a number of key features including a variable compression ratio from 1:1 to Inf:1, a variable threshold from –20dB to +10dB, auto sensing attack time (or selectable 1ms attack time), and a variable release from 0.1 to 4 seconds.

The Compressor/Limiter has two modes of signal detection, Peak and RMS. These modes of detection either act on peaks of the incoming signals or on their RMS average levels. This gives two very different modes of compression and limiting with Peak Mode giving far more dramatic compression characteristics.



DYN IN



In pressed state the Compressor and Gate/Expander Sections are active. In non pressed state the Channel Dynamics is bypassed. This button is directly connected to the Bypass Button in the Top Bar.

RATIO



When turned to 1:1, the Compressor/Limiter section is inactive. Turning the control clockwise increases the compression ratio to give a true limiter at the fully clockwise position. The compressor normally has an ‘over-easy’ characteristic.
Selecting **PEAK** changes this to peak sensing, and replaces the ‘over–easy’ characteristic with a hard knee, providing an alternative for some instruments.



THRESHOLD



Whenever a signal exceeds the level set by this control, the compressor will start to act at the ratio set by the RATIO control. This control also provides automatic make-up gain, so as you lower the threshold and introduce more compression, the output level is increased, maintaining a steady output level regardless of the amount of compression.

TIP: The Auto Make Up of the Dynamics on SSL Consoles provides a very intuitive and fast way to change compression on multiple channels. Before applying the proper level balance between channels with the faders, experienced SSL Operators start with activating the dynamic sections and roughly adjusting it individually on all channels. It is then a lot easier and quicker to achieve a first good sounding rough mix.

RELEASE

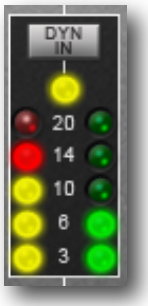
Sets the time constant (speed) with which the compressor returns to normal gain settings once the signal has passed its maximum.

FAST ATT



Provides a fast attack time (3mS for 20dB gain reduction). When off, the attack time is program dependent between 3mS – 30mS.

Gain Reduction Meter



The yellow and red LEDs, on the bottom of the LED display area, indicate the amount of gain reduction (*compression*).

The green LED Meters indicate the amount of gain reduction on the expander/gate. (next section)

Gate/Exp Section

The gate/expander section contains a number of useful features including a variable range from 0 to 40dB, a variable threshold from -30dB to +10dB, a fixed attack time (switchable to Fast Attack of 100µs), a variable hold time from 0 to four seconds and a variable release time from 0.1 to 4 seconds.

By default, the Gate/Expander section functions as an ∞:1 gate. When the EXP button is pressed, the section becomes a 2:1 expander.

RANGE



Determines the depth of gating or expansion. When turned fully anticlockwise (Range = 0), this section is inactive.

When turned fully clockwise, a range of 40dB can be obtained.

THRESHOLD



A Variable hysteresis is incorporated in the threshold circuitry. For any given ‘open’ setting, the Expander/Gate will have a lower ‘close’ threshold. The hysteresis value is increased as the threshold is lowered. This is very useful in music recording as it allows instruments to decay below the open threshold before gating or expansion takes place.

RELEASE



This determines the time constant (speed), variable from 0.1 to 4 seconds, at which the Gate/Expander reduces the signal level once it has passed below the threshold. Note that this control interacts with the Range control.

FAST ATT



Provides a fast attack time (100µs per 40db). When off, a controlled linear attack time of 1.5ms per 40dB is selected.
The attack time is the time taken for the Expander/Gate to 'recover' once the signal level is above the threshold.
When gating signals with a steep rising edge, such as drums, a slow attack may effectively mask the initial 'Thwack', so you should be aware of this when selecting the appropriate attack time.

HOLD



Determines the time after the signal has decayed below the threshold before the gate closes. Variable from 0 to
4 seconds.
Note that when the Dynamics Section is not in circuit, its side chain input is also bypassed.

Input/Output Section



The Input and Output Sections consists of a ± 20dB output gain control and a 6-segment LED meter.

When using a version with side chain the Input Section contains the SC IN button, which in pressed state forwards the signal from the side chain input to the level control module of the Compressor and Gate/Expander Section.



SC Versions also have an S/C LISTEN button in the Output Section, which in pressed state routes the side chain audio directly to the output, so you can monitor and audition the side chain signal easily.

Both Input and Output Gain Controls always apply Level Control to the Audio Input, not the side chain Signal.

SSL Console Bus Compressor



The SSL Console Bus Compressor plug-in is a stereo version of the legendary centre section bus compressor found on the XL 9000K Series console. It provides high quality stereo compression, giving you critical control over the dynamic range of audio signals.

Used on a stereo mix or instrument group has the effect of 'gluing' the mix together and „make it sound like a Record“.

The dynamics of drum overheads or whole drum kits can be controlled very effectively with the bus compressor .

The Plug-In is available in Stereo only. An additional Version with Stereo side chain offers creative options to control the compressor module with other audio signals.

The Bus Compressor can practically be used for any application that requires superior compression.

Bus Compressor Parameters

Compression Meter



Shows Gain Reduction with a simulated moving coil meter, that mimics the real ballistics of the SSL Bus Compressor meter found on thousands of SSL Consoles around the world.

For experienced SSL Operators this Meter provides an authentic Gain Reduction feedback and should allow them to instantly feel at home.

THRESHOLD



Continuously variable from –20dB to +20dB. Sets the Threshold of the Input level for the compressor module to start to work.

ATTACK



Six switchable ranges 0.1, 0.3, 1, 3 , 10 and 30ms.
Determines the time taken for the Compressor to actually kick in, once the signal level is above the threshold. Higher times do let transients (or Attacks) slip through.

RATIO



Three switchable ranges ranges 2:1, 4:1 and 20:1.
Defines the Ratio of compression or in other words how steep the compression curve will be, once the Threshold level is reached.

RELEASE



Five switchable ranges 0.1, 0.3, 0.6, 1.2 seconds and ‘Auto’. (With Auto selected, the release time is dependant upon the duration of signal peaks).
Determines the time it takes for the compressor module to ‘recover’, once the incoming signal level is becoming lower.

MAKE-UP



Level compensation to compensate for compressor action, continuously variable from –5dB to +15dB.

COMPRESSOR IN



Switches the compressor IN/OUT of the signal path. This Button is NOT connected to the Bypass Button in the Top bar and inside the Mixer little Window, since even when the COMPRESSOR switch is in off position the AUTOFADER still works.

SC IN (only active in SC Version)



In non pressed state the compressor module is driven by the main stereo channel signal(s), whereby the loudest L/R signal wins.

In pressed state (SC IN illuminated) the external (mono or stereo) signal applied to the SC INPUT drives the compressor stage.

This opens up the possibility to use the plug-in as a ‘ducker’ (for audio-follow applications) or, with external EQ, as a ‘deesser’.

AUTOFADE and RATE



The final part of the compressor is the AUTOFADE switch and the associated RATE rotary control which provides a timed fade down or up with a fade time of 1 to 60 seconds.

Pressing the switch will fade out the audio in the time set with RATE, pressing the switch again will fade the audio back up at the same rate – however the fade time can be adjusted with RATE at any time (including when a fade is in progress).



The AUTOFADE switch will be illuminated whilst the signal is fading down (so the button appears to be pressed).

Tip: During Fade Out you can always press the button to Fade In again.



Once the Fade Out is done and the level has reached -Infinity, the button illumination turns red and remains in pressed state.
At this stage, you will not hear ANY signal on the Output of Bus Compressor!



Pressing the Button again will bring the audio signal back, during Fade In, the button will appear non pressed but will be illuminated with an orange light until the signal has returned to unity gain.



CTRL + Double Click on the Auto Fade Button always resets the button to normal (Off) state, no matter if any Fade In or Out was active.

The status of the Auto Fade button is NOT saved with a Preset.

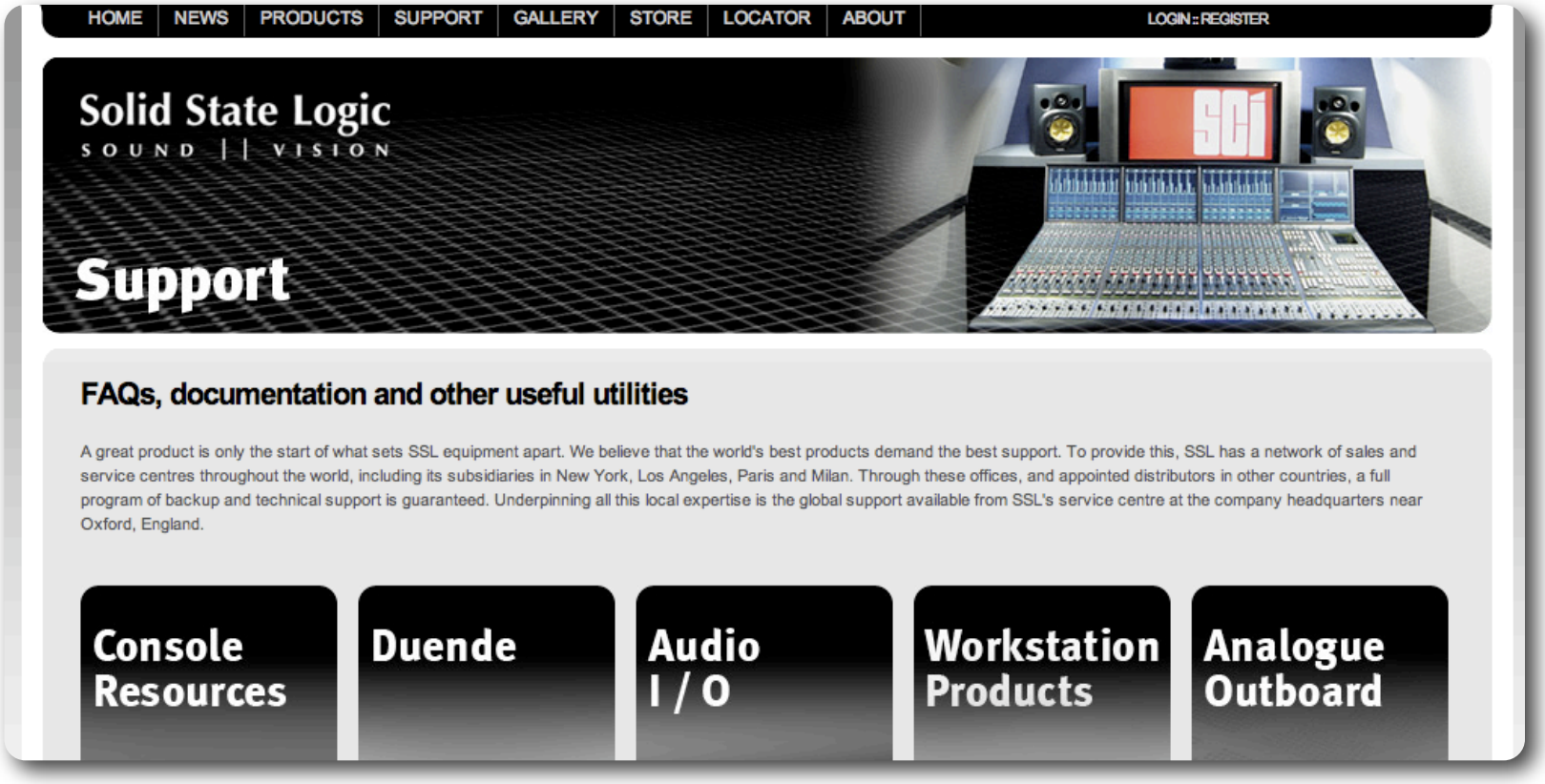
Tip: The Auto Fade produces very smooth Fades. Since both Rate and the AF Button Status can be dynamically automated, the Auto Fade Section provides a huge potential for creative Level Manipulation that always sounds very smooth.

Support, FAQs and Online Help Center

To access the latest support information on MX4 or the SSL Console Bundle, please visit our online support site.
The information there is kept up to date by our support staff to make sure all information is accurate.

All information is available to you 24/7/365.
If you can't find your answer or a solution to your issue, you can submit a question via the site to our support staff for resolution.

URL: **http://www.solidstatelogic.com/support**



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