LEAPWING

AL SCHMITT

Al Schmitt

MANUAL



WELCOME TO LEAPWING AL SCHMITT

Thank you for choosing Leapwing. We are a small team of highly passionate people, devoted to developing easy to use digital audio tools that achieve rapid results with the highest possible quality. We've built an active community of loyal and engaging users and appreciate all the feedback we receive from our customers. We encourage every user to stay in touch, so please don't hesitate to contact us if you need any further assistance or want to show your support. To get the most out of your Leapwing Al Schmitt plugin, we highly recommend you to read this manual.

Product Overview

Leapwing Al Schmitt is an innovative audio processor for mixing and mastering that incorporates the unique techniques and equipment used by multi-award winning engineer, Al Schmitt. Scanning Al Schmitt's discography-which takes a long time, by the way-it's tough to settle on a singular high point. That's because Schmitt's decades of award-winning work read like a trip through musical history. Up one aisle you'll find Frank Sinatra, Henry Mancini, Sam Cooke, Ray Charles, and Miles Davis; up another you'll bump into Jefferson Airplane, Jackson Browne, Neil Young, Johnny Cash, Willie Nelson, Kenny Rogers and Steely Dan. Round a corner and you'll encounter Barbra Streisand, Natalie Cole, Madonna, and Quincy Jones mingling with Michael Jackson, Diana Krall, Celine Dion, Paul McCartney, and Michael Buble. We worked with Al to analyze the tools and the workflows he uses to bring you this set of unique processors perfect for recording and mixing duties.

Features:

- 6 unique profiles to process vocal, piano, bass, brass, strings and mix bus. Honed by Al over the years, they represent how he approaches music.
- Each profile has a set of parameters controlling harmonics, EQs, compression and echos
- Instrument profiles are low latency, making it perfectly suitable to use for recording
- All algorithms are meticulously tuned with the highest quality achievable and a pristine sound
- Beautiful re-sizable Retina interface with a unique design focused on the optimal workflow
- Sample rates supported up to 384kHz (DXD).
- Available as 64-bit plugins in VST, VST3, AAX, and AU formats for macOS (10.10 and higher) and Windows 8 and 10.

Authentication

When opening the plugin for the first time, you will be asked to enter your email address and serial number to authenticate the plugin. The email address should be the same one as you used to create your online Leapwing user account. The serial number has been sent to you via email after your purchase, and can also be found on your Leapwing account page.

https://www.leapwingaudio.com/my-account/

On the Leapwing account page you can manage the Hardware ID (computer) connected to your license key. If you want to move the license to another computer you own, you can do this by deleting the current Hardware ID and activating the license on the other computer.

Note that only online authentication is currently available and requires your computer to be online at least once every 30 days. Leapwing Al Schmitt will try to reauthorize in the background (whenever you're using the plugin), and if 30 days have elapsed since the last authentication you'll get a popup message asking you to connect to the Leapwing site. If you are using an offline computer and purchased a license, we have an experimental feature to provide offline authentication. Please contact our support team for help with this.

Applications

Leapwing Al Schmitt includes profiles for six audio source types, Bass, Brass, Mix, Piano, Strings and Vocal. The profiles are based on Al's chosen equipment and processing techniques and are optimized for the listed instrument profiles, but as

with any audio processing, you may find other instrument types respond well to one of these profiles. Although several profiles include three Echo Types (A, B and C) the actual reverberation characteristics are tuned differently for each profile and are based on Al's use of both real echo chambers (which many pro studios still use) and outboard gear.

Note that Leapwing Al Schmitt is intended to be used as an insert effect on an individual track and not in an FX bus. The Mix Profile is an exception since it is intended to support multiple instruments, but should still be used as an insert and not bused to the master track in parallel with the source signals.



Main Interface

The illustration of the main user interface shows the basic controls and displays (identified by number):

1 – IN: Input gain control
The IN slider controls the level of the signal that enters the processor chains. The integrated level meter shows the K-weighted loudness in LUFS and has a 4-second-hold peak bar.
Default setting is 0 dB (unity gain).

2 – Source Type
Selects profile to be used with six choices – Bass, Brass, Mix, Piano, Strings and Vocal.

3 – Main GUI
Control area for chosen profile – one of six profiles will be shown here – see details for each profile below in **Profiles** section.

4 – Bypass
This is a full bypass switch that maintains the plugin latency.

5 – Undo/Redo
The Undo/Redo arrows provide undo and redo functions for all parameters in the plugin, apart from changing presets. When a preset is changed, the undo/redo history will be cleared.

6 – A/B Comparison
A/B comparison can be used to quickly store 2 different sets of parameters, and toggle between them to evaluate them in detail. At initialization, both A and B are set to the same "Default Setting" state. When you start making changes to parameters, the latest settings will be stored under A, while B keeps the original values. A is highlighted to show it is active. You can toggle between state A and B by clicking the A/B button. When A is active, any changes are stored under A; however, if B is made active, changes are stored under B. Clicking the Copy button will set both A and B states to the current active set of parameters.

7 – Presets
Leapwing Al Schmitt comes with 14 factory presets using a dropdown menu accessed by clicking on the preset name. You can also cycle through them by clicking the left and right arrows (< and >). The factory presets include the selected source instrument, input and output gain, and all applicable settings.

It is possible to save your own presets; use the "Save as.." option for this. User presets will be automatically added to the list in the dropdown menu. And you can make your own subfolders in the preset folder – they will be displayed in the dropdown menu as subcategories. Note that only preset files stored in the default preset folder are shown in the Preset menu.

To change the default preset folder location, first copy all presets to the desired new location, and then click Options > Set Preset Folder in the preset menu and select the new folder.
Clicking Restore Factory Presets will reset all factory presets in the current preset folder.

Location of default preset files:
- MacOS: /Users//Library/Audio/Presets/Leapwing Audio/Al Schmitt
- Windows: C:\Users\\Documents\Leapwing Audio\Al Schmitt

8 – OUT: Output gain control
The OUT slider controls the output level of the plugin to allow gain staging in a DAW. The integrated level meter shows the K-weighted loudness in LUFS and has a 4-second-hold peak bar.
Default setting is 0 dB (unity gain).

9 – Info menu
The info button opens a convenient list of following information:
• Version number of the plugin
• License Info: See Authentication section above
• Check for updates... connects to Leapwing if system is online
• Website: link to www.leapwingaudio.com if system is online
• Manual: links to the handy local pdf of this user manual

Profiles

Each Leapwing Al Schmitt profile includes a unique set of controls. These controls often affect multiple parameters of the equipment that Al actually uses and each profile models exclusive FX chains that differ from one profile to another. Thus a compressor for one profile is not the same as one for another profile, EQ are unique to each profile, and Echos (reverb) are tuned for each instrument. The combined results have been designed to yield excellent results without worrying about a multitude of settings. Some profiles also provide a unique set of harmonics that are affected by both the incoming signal level and settings of the particular profile used.

Bass
The Bass profile has three controls – Compression, Body Level, and Air Level. Compression is a single knob compressor control that affects multiple compressor parameters – higher levels of the input signal will generally yield higher compression ratios, but the effect of the Compression setting is complex. Higher Compression settings lower the threshold level and change the ratio. There is a yellow-gold dot to the left of the compression slider that appears as gain reduction starts and brightens as the gain reduction level increases. If this dot does not light up, there is no compression being applied.

The Body Level and Air Level EQ controls likewise do not just adjust a single EQ curve, but have been designed to provide adjustments that Al has found optimal in treating bass instruments. The Body Level provides approximately +4/-3 dB variation in the 20 Hz to 200 Hz range. The Air Level provides approximately +5/-3 dB at 5 kHz. However, these EQ controls interact with each other so the results are not straightforward.

Harmonic characteristics vary with input level, and higher signal levels will provide more saturation with considerable color available at any useful level. Total Harmonic Distortion varies from under a percent at low input levels to well over 10% for high input levels. If your source signal level is low and not creating the saturation you want, increasing the IN control setting will drive the signal chain harder.

Brass
Brass includes just two controls – Echo Level and Echo Type. Al does not use compression when recording or mixing brass, so there is no compressor in this profile. And since Al has worked with audio since before hardware and software reverbs were invented, and he works in studios with real echo chambers, he uses the term echo rather than reverb. The Echo Level selects the reverb level mixed in with the dry signal and the Echo Type selects the combination of chambers and outboard gear that Al has found to work well. Note that this profile is very clean with no measurable distortion characteristics at any input level which fits brass sounds well since they already have extensive harmonics.

Mix
This profile is intended for use on a mix bus and includes eight controls plus a link switch. EQ effects include a Sub Boost and an Air Boost. Sub Boost provides a bell curve with boost only, up to +5 dB centered at about 25 Hz. It should be used with caution since very low frequencies can eat up headroom. Air Boost provides increasing gain with frequencies above 3 kHz yielding approximately 3dB of gain at 10 kHz.

There is a 3-band compressor with dual knob controls for low-frequency, mid-frequency and high-frequency bands, and there is a link switch to link the compression parameter for the bands. The levels on each of the bands are make-up gains for each band. This allows you to rebalance them. The Low Comp control acts on frequencies up to about 500 Hz and affects both threshold and compression ratio – higher settings lower the threshold level and affect the ratio in complex ways. The Mid Comp control covers the 500 Hz to 5 kHz range while the High Comp is effective above 5 kHz. Compression ratios range up to about 2:1, but are complex functions of level and frequency. Attack is fast while release is relaxed, in the range

of a second. In each case there is a yellow-gold dot to the left of the compression slider for each frequency band that appears as gain reduction starts and brightens as the gain reduction level increases. If any of these dots does not light up, there is no compression being applied in that frequency band. The harmonic distortion levels with this profile are extremely low, even with high input levels.

Piano
The piano profile has just three controls – Compression, Echo Level and Echo Type. The threshold and the ratio are affected by both the Compression control setting and the input signal level with ratios running from 2:1 to about 4:1 – high input levels and high Compression settings create the highest ratios. There is a yellow-gold dot to the left of the compression slider that appears as gain reduction starts and brightens as the gain reduction level increases. If this dot does not light up, there is no compression being applied.

Echo Type selects one of three combinations of echo chambers and hardware tuned to enhance piano sounds while Echo Level adjusts the reverb level mixed in with the dry signal. Note that the piano profile includes a fixed EQ curve that favors the mid-range and compliments piano tones. Harmonic distortion for the piano FX chain is very low, but does increase with higher input levels and higher compression levels.

Strings
This profile is aimed at string sections such as you might find in a symphony or Big Band, and has only two controls, Echo Level and Echo Type. Echo Level adjusts the reverb level mixed in with the dry signal and Echo Type selects one of three combinations of echo chambers and hardware tuned for strings. As with the other profiles, echo is a combination of different reverberation sources and is uniquely tuned to match Al's choices for enhancing strings. Harmonic distortion for this profile is extremely low.

Vocal
The Vocal profile includes six controls – two EQ Levels (Body and Air), an EQ Type control for the Air band (5 kHz, 8 kHz and 16 kHz), Echo Level and Echo Type controls, and a single knob Compression control. The EQ curve with both Body Level and Air Level at the center (0) has a broad, gentle hump favoring 500 Hz to 5 kHz, and the Body Level control enables boosting or lowering the response below 1 kHz with some frequency interactions above 500 Hz. Its control range is approximately +4.5 dB to -3 dB at 100 Hz. The Air Level, when using positive gain, provides a peaking filter, up to +6 dB, at the three frequencies listed in the Air Type control (5 kHz, 8 kHz and 16 kHz), but when used to reduce gain, the filter acts as a low pass filter with different slopes depending on the Air Type, with reductions from 1 dB to 2.5 dB at 5 kHz and 2.8 dB to 3.4 dB at 10 kHz.

Echo Level adjusts the reverb level mixed in with the dry signal and Echo Type selects one of three combinations of echo chambers and hardware tuned for vocal use. This reverb chain can enhance many vocal types with complimentary ambiance.

The single knob Compression control provides a range of compression ratios and thresholds which are also affected by the input level. Ratios vary from 1:1 up to about 3:1 and thresholds can be as low as -35 dBFS. Attack is fast while release is relaxed, in the range of a second. There is a yellow-gold dot to the left of the compression slider that appears as gain reduction starts and brightens as the gain reduction level increases. If this dot does not light up, there is no compression being applied.

Saturation characteristics vary with signal level, with Total Harmonic Distortion ranging from under 0.01% to over 10% if the input level is driven hard. With many voices high levels of saturation can sound excellent, so feel free to experiment with high input levels (and compensate as needed using the OUT control).

Animation

The center section also shows an animation of the selected profiled intstrument. The rings light up when signal is present, based on a momentary LUFS measurement. The amount of rings is controlled by the selected Echo Type. Body, Air and Sub EQ control the color of the rings. The gain reduction of the compressor is shown by making the outer rings dark blue. One dark blue ring means 0.5dB of gain reduction.

Inputs/Outputs/Automation

Leapwing Al Schmitt has two inputs (Input L/Input R) and two outputs (Output L and Output R). If a mono input is used (Left=Right) the output will still be stereo since processing such as echos (reverb) always creates stereo results.

Leapwing Al Schmitt includes access to automation inputs for all the controls of any profile used, and these controls may be varied during playback for special effects. Note that Profiles and Presets are not controlled by automation, and for any given Profile used you will still have access to the full set of automation lanes, even controls not used in the Profile you are using. Only the lanes applicable to the Profile used will be active. To most effectively select a parameter to be controlled, use the "automated" mode of your DAW to set up automation lanes so that you can simply move a Leapwing Al Schmitt control to create a new control lane. And be sure to turn off the automated mode if you wish to change any settings without setting up more automation tracks.

Installation Locations

After running the Leapwing Al Schmitt installer with default folder paths, you will find the different plugin formats in the following locations:

MacOS:
AAX - /Library/Application Support/Avid/Audio/Plug-Ins
VST - /Library/Audio/Plug-Ins/VST
VST3 - /Library/Audio/Plug-Ins/VST3
AU - /Library/Audio/Plug-Ins/Components

Windows:
AAX - C:\Program Files\Common Files\Avid\Audio\Plug-Ins
VST - C:\Program Files\Steinberg\VstPlugins
VST3 - C:\Program Files\Common Files\VST3

You may choose alternate locations if you do not use these default locations, although be sure you know what you are doing since placing files in the wrong location will create problems.

*VST PlugIn Technology by Steinberg Media Technologies

Contact Us

If you have questions, need any further assistance or want to share your thoughts about our plugins, please don't hesitate to contact us by email on support@leapwingaudio.com or join the Leapwing Users group on Facebook.

Thanks again for choosing Leapwing and we look forward to hearing from you.







