RO-SPR

VINTAGE SPRING REVERB

A SONIC REVOLUTION

RO-SPR | VINTAGE SPRING REVERB

The RO-SPR is a vintage spring reverb with six different spring types, bass cut, a three-band EQ, as well as spring length and mode control, for the ultimate customizable reverb unit.

HISTORY

It was the year 1939, when Laurens Hammond applied for the first patent of an innovative, synthetic reverberation unit, that was about to revolutionize the sound of recorded music. With a simple transducer at one end of a metal spring, and a pickup at the other.

Mr. Hammond further implemented his idea of a mechanical, spring-based hall processor, that found its way into the legendary Hammond organs (from 1960), as well as into standalone hardware units like the Accusonics Type 4 SR. Leo Fender made the concept famous, with his introduction of the 1963 Fender Vibroverb.

The Spring Reverb is one of the most used hardware reverbs in studio history, but unlike bulky plate reverbs that could easily cost thousands of dollars, and weighed around 600 pounds each, most spring reverbs are more space- and cost-efficient.

Soundwise, spring reverbs are often described as being 'bouncy' or 'ringy', due to their mechanical layout, which tends to be low-end heavy. The spectrum used to be corrected by an EQ to maintain a natural room feel - yet many mix engineers used that exact low-end boost to add to their guitar, vocal, or synth tone. This sound design trick, combined with the renowned characteristics of a spring can be heard across many hit records - from The Doors to QOTSA.

The RO-SPR will throw you back in time with its very unique collection of classic spring types, while adding modern-day features to tailor each section precisely to your needs.

Add that vintage spring sound to your guitar, bass, vocal, drum, brass or synth tracks, or try it on any bus or mix channel. The result is a familiar, yet mysteriously mechanical roomy reverb that you'll love!

FEATURE OVERVIEW

6 SPRING TYPES

The RO-SPR is coming with 6 very unique springs, that have been faithfully modelled after their real-life counterparts covering 4 decades of sound experiments, innovation and heavy studio usage.

* A - Late 1970s British stereo spring reverb unit
* B - 1960s classic dub tube spring reverb unit
* C - Home hi-fi spring reverb unit from the 1970s
* D - Medium size spring reverb from a 1980s echo
    Japanese unit
* E - 1960s Austrian large oil bath spring reverb
* F - American guitar amplifier with large spring
    reverb unit

ADJUSTABLE LENGTH & DECAY

Fine-tune your spring reverb experience by adjusting the length and decay, taking you all the way from classic room reverberation to psychedelic space design.

MONO, STEREO AND M2S MODE

We have implemented a versatile signal routing system that allows for mono and stereo processing as well as an M2S mode, which creates width from mono/stereo sources. In stereo mode, the left/right signal is sent to independent springs, whereas in M2S mode, the mono signal is sent to non-identical springs to create bespoke width.

3-BAND EQUALIZER

In order to further tame the very specific spectral behavior of the spring, we have added a 3-band EQ to this plug-in. As springs tend to be naturally low-end heavy, with less mids or high-end, this can be equalized in the EQ section.

ADJUSTABLE GAIN-STAGING

The adjustable gain-staging gives you the ability to control the pre-processing input gain level, as well as the post-processing output gain level. Moreover, we have separated the stereo channels, to fine-tune the amplitude for the natural stereo image of multiple springs. These can vary based on the spring material and the signal's frequency spectrum.

SSE2 OPTIMIZED CODE

DSP operations are pipelined using the SSE2 instruction set. This ensures a high-performance operation despite its very complex computations.

HIGHDPI/RETINA SUPPORT

The user interfaces support high pixel density on both Windows and Mac OS systems, giving you the most enjoyable user experience on high DPI displays. Please refer to your DAW manual to learn whether it is HighDPI compatible if you're working on Windows.

FURTHER INFO

PLUGIN ACTIVATION & SYSTEM REQUIREMENTS

All Black Rooster Audio plug-ins are equipped with a straightforward and easy to use, serial-based activation system. We did our best to ensure that our system works well for both online and offline users. By supporting USB key activation, mobile use is supported.

For detailed information on activation and the current system requirements of our plug-ins please refer to blackroosteraudio.com/en/faq
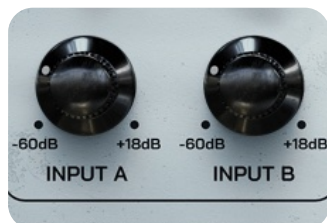
» INPUT/OUTPUT GAIN STAGING

The RO-SPR allows you to separately control the left/right channel (except for mono/linked mode). Manipulate the gain with a **right-click** (or left-click + Ctrl; Mac Only) in order to have both inputs/outputs linked.

» SPRING MODE

You can choose between Mono, Stereo or Mono 2 Stereo mode, where Stereo sends the left/right signal to independent springs, whereas in M2S mode, the mono signal would be sent to non-identical springs.

» SPRING TYPE
* A - Late 1970s British stereo spring reverb unit
* B - 1960s classic dub tube spring reverb unit
* C - Home hi-fi spring reverb unit from the 1970s
* D - Medium size spring reverb from a 1980s echo Japanese unit
* E - 1960s Austrian large oil bath spring reverb.
* F - American guitar amplifier with large spring reverb unit

» SPRING LENGTH

You can choose between seven stepped spring lengths, depending on your preference. In combination with the six spring type algorithms, the setting allows for a fascinating variety of sounds - from 'tight' to 'atmospheric'.

» BASS CUT

As with many other Black Rooster Audio plug-ins, you can control the natural/authentic low-end of the circuitry with the high-pass bass cut control. A lot of historic (spring reverb) recordings used the uncut spring signal to add more low end to their dry signals.

» 3-BAND EQ

In order to further tame the very specific spectral behaviour of the spring, you can utilize the 3-band EQ. The natural characteristic of springs to contain less mids or high-end can further be equalized in this EQ section.

» PRE-DELAY

This control allows you to change the amount of delay between the wet and dry signals.

» DECAY

The decay setting will further allow you to manipulate the decay time of the processed signal to reduce amplitude over time. The effect will manipulate the perceived 'room size' of the selected spring.

» DRY/WET

Use this control to determine the amount of reverb in your signal. The higher the percentage, the more reverb your output signal will carry and the less dry it will be, and vice versa.

» DRY MUTE

In order to quickly listen to the processed signal and to use the plug-in as a send effect only, you can suppress the dry signal by switching the setting from 'normal' to 'dry mute'.

» GAIN STAGE LINK

Input A/B and Ouput A/B can be linked (left-right only), with this control.

» VU METER

The metering section can be used for a basic amplitude check and to visualize heavy resonance in your signal (springs each have their own characteristics and heavy resonant frequencies) or over-EQing. Make use of the input/output gain stage to control your signal further.

RO-SPR VINTAGE SPRING REVERB
PREFS & INSTRUCTIONS

ADDITIONAL PLUG-IN PREFERENCES
(GEAR ICON MENU AT THE BOTTOM)

GUI SIZE

In the GUI size menu, you can select your preferred GUI ranging from a list of four settings, if you're looking to change the default sizing. Please note that the GUI size setting is a global preference that affects all Black Rooster Audio plug-ins installed on your system. If you are stuck with large GUI sizes, please right click on any non-control section of the plug-in for the regular settings menu to adjust GUI size.

KNOB BEHAVIOUR & KEYBOARD SHORTCUTS

Use the plug-in settings menu to select your preferred knob mode globally. Please note that all of our plug-ins share the same settings across all DAW applications. Choose between "Host Setting", "Circular", "Relative Circular" and "Linear".

• By default, the knob mode is set to "Host Setting", which means that the knob mode is dictated by the DAW application. Some VST hosts allow you to change the knob mode setting in their preference menu. Our plug-ins will respect the host knob mode in that setting.
• In "Circular" or "Relative Circular" mode, all knobs will react to circular mouse gestures and you have to drag your mouse in a clockwise or counter-clockwise direction to change its value.
• In the "Linear" mode you have to drag your mouse up or down when selecting a knob to change its value. Use the knob sensitivity menu and adjust it to your liking. Please note that this function is only available in linear mode.

ALL OF OUR PLUGINS SUPPORT THE FOLLOWING KEYBOARD SHORTCUTS

AU Hosts on Mac OS
Alt + Click - Reset control to its default value Shift + Drag - Fine control
Shift + Mousewheel - Fine control

VST Hosts on Mac OS
CMD + Click - Reset control to its default value
Shift + Drag - Fine control (only a applicable in linear knob mode) Shift + Mousewheel - Fine control

VST Hosts on Windows
Ctrl + Click - Reset control to its default value
Shift + Drag - Fine control (only a applicable in linear knob mode) Shift + Mousewheel - Fine control

6