

Lexicon®

PCM NATIVE | STRINGBOX
OWNER'S MANUAL



The Lexicon® Legacy
continues...

Congratulations and thank you

for purchasing the PCM Native Stringbox plug-in. With decades of legacy products to pull from, the PCM Native plug-ins include the finest collection of factory presets available. Designed to bring the highest level of sonic quality and functionality to all of your audio applications, the PCM Native plug-ins will take center stage in your DAW.

Quick Start

- Open your DAW and choose the Lexicon plug-in from your list of plug-ins
- In the plug-in's window, select a category
- Select a preset
- Adjust parameters (optional)
- Save the preset (optional)

It can be as simple or as in-depth as you'd like. The included presets work well for most situations, but you can easily adjust any parameter and save any preset. See the "Factory Presets" section for more information on editing, loading and saving presets.

Included Items

- PCM Native Stringbox software CD
- iLok license code
- This manual

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Installation

Install the Plug-in

Insert the CD into your CD-ROM drive. The Installer should start automatically.

If the Installer doesn't start automatically, you can start it manually by opening the appropriate file on the CD:

Mac®: Use the ".dmg" installation file

Windows®: Use the "32-bit.exe" or "64-bit.exe" installation file

Once the Installer is open, follow the on-screen instructions to install the software.

iLok License

You must download the license to your 2nd Generation iLok USB smart key before running any program that might use this plug-in. If a valid iLok license is not present, the initial plug-in validation scan will fail and you may not be able to run the plug-in without digging into your system. For more information go to www.iLok.com.



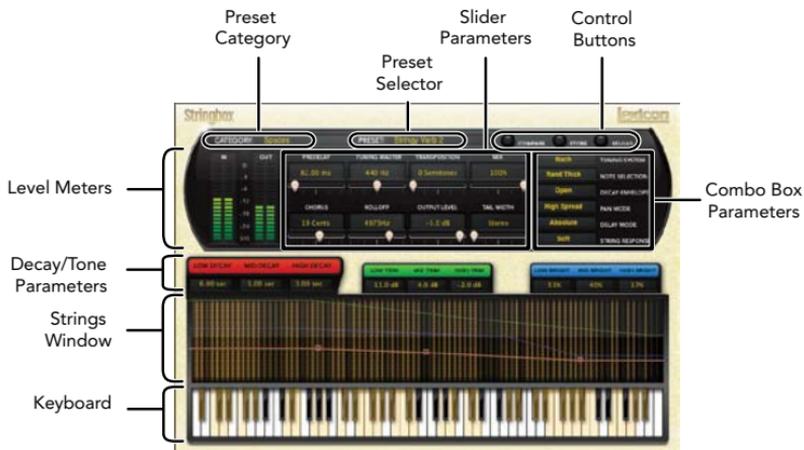
Important! Your PCM Native Plug-in will not work without an authorized 2nd Generation iLok USB smart key inserted in your computer's USB port!



First Look—The User Interface

Overview

When the plug-in is instantiated, you will see a window that looks something like this:



Keyboard

When the Note Selection parameter is set to Keyboard this keyboard section becomes active. This full piano keyboard allows you to select which keys are held down by clicking on each key. When pressed, the key will turn yellow indicating that the key is being held down. Any combination of keys can be held down and there is no limit to the number of keys that can be held.

Note: The keyboard area in the Stringbox algorithm does not respond to midi note commands

Strings Window

Stringbox has a unique metering system that shows just which strings are resonating. The strings window is a real time visual representation of the piano strings vibrating based on the energy in each resonator. There is a string image for each note. If that string is resonating, then the string image brightens.

The Decay/Tone parameters can also be adjusted in this graphical display by selecting the group of Decay/Tone parameters, then left clicking and dragging the nodes on the corresponding colored line.

Decay/Tone Parameters

Filtering, decay and level can be set here in each of 3 bands. The resulting curve is displayed in the strings window, represented by matching color coded lines.

Level Meters

Shows the input, output and feedback levels. The Feedback meters measure the energy level being fed back into the beginning of the delay line.

Preset Category

Presets for the algorithm are grouped into categories to make them easier to find. Clicking in this area will show the list of categories. Selecting a category will load the presets for that category in the Preset Selector.

Preset Selector

Displays the list of presets within the selected category. Selecting a preset from the list will cause the preset to be loaded into the plug-in.

Slider Parameters

These are the fader type parameters.

Control Buttons

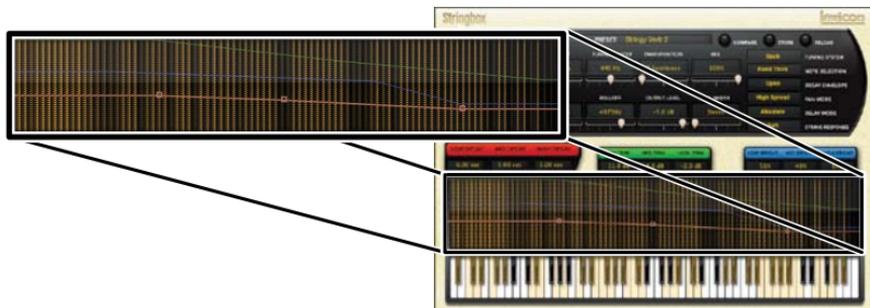
These buttons are used to compare, reload and store presets. This is explained in more detail in the "Control Buttons" section of this manual.

Combo Box Parameters

These are the combo box type parameters. Each parameter is described in the "Parameters" section starting on page 18.

The Realtime Display

The realtime display window allows you to visualize the effect. While your ears will always be the primary tool in choosing and adjusting presets, the display provides a direct way to see what's going on. Click anywhere in the realtime display window to change the view.



Off

This display mode is the default view for the plug-in and requires the least amount of CPU cycles.



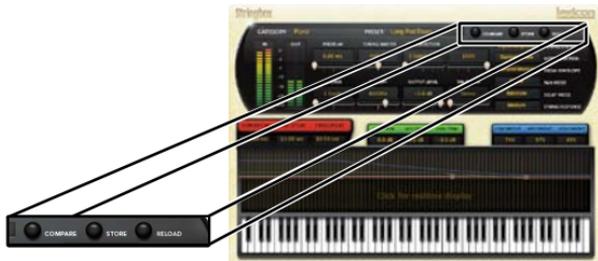
String Resonance View

This display mode shows a visual representation of the piano strings vibrating based on the energy in each resonator.



The Control Buttons

These buttons let you access all of a preset's parameters, manage presets, and compare changes you've made to the original settings.



Compare

The Compare button temporarily resets all parameters to the original preset value. It is used to get back to the original preset and quickly audition your edits versus the original preset. When compare is on, all parameters are frozen and cannot be changed. Turning compare off returns you to your edits. Choosing a different preset cancels compare mode.

Store

The Store button allows you to create and manage user presets. See the "Storing and Managing Presets" section for more information.

Reload

Clicking the Reload button reloads the current preset, overriding all user edits.

Storing and Managing Presets

When you load a Lexicon® plug-in, the overall appearance may be something like this:



You will notice that the Lexicon plug-in (with the gold border) is embedded within a larger window provided by the DAW. Appearance will differ from host to host (this example is from Logic®). Oftentimes, the DAW itself provides the ability to save presets. The presets saved by the DAW can only be used with the DAW that saved them. If you work with multiple DAWs, this would be a problem. However, Lexicon® solves this problem with the use of Portable Presets.

Portable Presets

When you store presets with the Lexicon Store button (shown below), your presets are available to all DAWs on your machine. With only a little effort, you can also share them with other machines, even when going between Mac and PC.

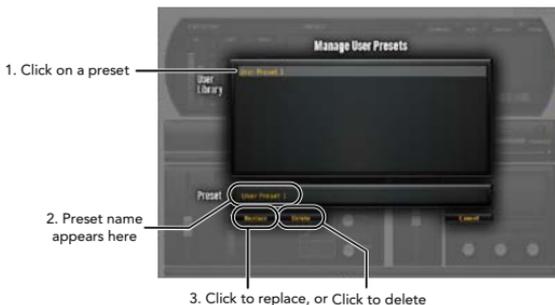
If you've made some edits you'd like to save as a User Preset, press the Store button on the upper portion of the plug-in editor. You'll see a screen that looks like this:



The upper field contains the list of User Presets that have already been created for this algorithm. Presets appear in alphabetical order. Click the name field to edit the name of the preset. Once done, click the Store button.

The lower field contains the name of the preset that was loaded before you began editing. You can easily click in this field and change the name to anything you like. Once you have the appropriate name, click the Store button and the preset will be saved. If you decide not to save the preset, pressing the Cancel button will return you to the editor without saving the preset.

If you select one of the existing presets in the library, you can replace or delete that preset.



Where are presets stored?

On the **Mac**, User Presets are stored in:

"Home"/Library/Application Support/Lexicon/Native/User Presets/"AlgorithmName"
(*"Home"* is the name of the account you're logged in under. *"AlgorithmName"* is the name of the plug-in.)

On **Windows Vista/Seven**, User Presets are stored in:

**Users/"Username"/AppData/Roaming/Lexicon PCM Native/
UserPresets/"AlgorithmName"**

(*"Username"* is the name of the account you're logged in under. *"AlgorithmName"* is the name of the plug-in.)

On **Windows XP**, User Presets are stored in:

**Documents and Settings/"Username"/Application Data/Lexicon PCM Native/
User Presets/"AlgorithmName"**

(*"Username"* is the name of the account you're logged in under. *"AlgorithmName"* is the name of the plug-in.)

Note: The AppData and Application Data folders are Windows system folders and are hidden by default. Windows must be configured to "show hidden files and folders" to view these folders.

Tempo Mode Presets

Some presets will contain "(T)" in the preset name. These are tempo mode presets. The delays in these presets respond (or are synced) to the tempo of the DAW. They are best used when the tempo of the project actually reflects the tempo of the musical material (MIDI sequences and such). In those cases, the tempo component of the preset will reinforce the tempo in some way.

Getting the most out of your computer

The PCM Native plug-ins are written to be efficient, and most computers will run more copies than you may need. But if you find yourself needing to squeeze a little bit more out of your CPU, you can take the following simple steps:

- Turn off the active realtime display. The active display window can represent your effect in real time. However, this display consumes some of your computer's processing power. If you click until you reach the static display, your computer will have more CPU power available.
- Close the plug-in editor. Unless you're actively controlling your mix in realtime, you don't need the editor after you've made the appropriate settings. All those knobs, faders and displays require processing power. You can always reopen the editor if you need to edit.

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The
lexicon[®]

Heritage



Lexicon® occupies a unique position as a leading innovator in both professional and consumer audio industries. Since the release of the first digital delay, Lexicon has stood at the forefront of digital audio with a reputation as a manufacturer of exceptional audio and home theater products and an inventor of new technologies. Years of research, development, and learning allow us to continue expanding the boundaries of the listening experience.

Our professional products are prominent in the creation of worldwide music, television, and film productions. These products have won numerous awards, including an Emmy® and numerous TEC awards, including a TEC Hall of Fame award for the Lexicon Delta T-101, the world's first digital delay. Lexicon processors have been embraced as the standard in professional signal processing since the introduction of the 480L Digital Effects Processor, which has retained tremendous popularity for the past 22 years. It has since been replaced as the standard in professional signal processing by the 960L Multi-Channel Digital Effects System and the PCM96 Series Reverb/Effects Processors, which have themselves garnered an impressive following of producers, artists, and engineers.

Growing demand for proprietary Lexicon technologies has led to its appearance in numerous applications, with dramatic results. Our processing is relied upon to enhance the sound of prestigious live halls and venues.

Knowingly or unknowingly, you experience Lexicon products and technologies on a daily basis. Chances are that Lexicon processing was involved in the television program you watch at home, the film you see at the cinema, or the song you listen to on the radio. From the initial tracks to your listening room or automobile, Lexicon is part of the process that brings these recordings to life. Our commitment to the audio professional and content delivery ensures an unbroken chain between the artist and the audience. Now hear this...

The Algorithm



Stringbox

If you've ever made a sound near a piano, then you know what Stringbox is. The strings of the piano vibrate by sympathetic resonance. If there is sound energy at the frequency of a string (or a multiple of that frequency), that string will vibrate. By holding down different combinations of keys, a ghostly harmony can be created.

The Stringbox algorithm is a resonator that reacts to whatever energy it sees. It has 88 courses of virtual strings, with each course consisting of three strings. The strings can be tuned in several ways and those strings may be detuned relative to one another. The characteristics of the strings, the material from which they are made, can also be easily adjusted.

The Parameters

The PCM Native plug-ins contain presets covering a wide range of needs, but you can refine and customize any preset by adjusting its parameters. Parameters are the building blocks within each preset that determine how it sounds and behaves.

Each PCM Native plug-in contains a set of parameters, and a variety of those parameters are combined to create a preset.

Following are all the algorithm parameters you can edit in the PCM Native Stringbox Plug-in.

Chorus

Controls the amount of detuning in each course of strings.

Decay Envelope

Controls how the note rings after a key is deselected. Open means that the note will ring until it dies away. The Damped settings causes it to die more quickly.

Delay Mode

Determines whether the predelay uses an absolute value (milliseconds) or a note value related to the tempo of the mix.

Keyboard

This region shows which keys of the virtual piano have been pressed, indicating which pitches will be resonated. If the Note Selection parameter has been set to Keyboard, then notes may be selected by clicking on keys.

Low Bright, Mid Bright, High Bright

This parameter controls the target brightness of strings in each of four zones. This is the brightness of the string as it reaches the end of its decay. Lower brightness means that the string becomes duller as it decays. This may be adjusted by selecting the blue tab and then shaping the blue line above the keyboard.

Low Decay, Mid Decay, High Decay

This parameter controls the decay time in each of four zones. This may be adjusted by selecting the red tab and then shaping the red line above the keyboard.

Low Trim, Mid Trim, High Trim

This parameter controls the level of strings in each of four zones. This may be adjusted by selecting the green tab and then shaping the green line above the keyboard.

Mix

Mix is the proportion of wet (processed) signal to dry (unprocessed) signal.

Note Selection

Controls which strings are allowed to resonate. There are several preset selections, such as Damper Down, White Keys, and Black Keys. The Keyboard setting allows you to select any pattern of notes by simply clicking on the keyboard. There are even several random modes which will play the keyboard for you.

Output Level

Controls the level of the signal out of the plug-in.

Pan Mode

Determines how the strings are panned across the stereo field. Piano places strings low-to-high from left to right. Reverse Piano flips that orientation. Low Spread alternates notes, with the lowest notes at the farthest left and right position. High Spread places lower notes in the center (just the way organ pipes are distributed). Random continually moves the positions of the strings.

Predelay

This parameter is found only in the Stringbox algorithm. Your piano doesn't have this, but this parameter allows the resonated signal to be delayed. Operates in either absolute or tempo mode.

Rolloff

This parameter is found only in the Stringbox algorithm. This is a lowpass filter that is applied to the complete resonated signal.

String Response

This parameter is found only in the Stringbox algorithm and controls the virtual material (soft, hard, just right) that the string is made from.

Tail Width

This parameter is found only in the Stringbox algorithm. A matrix is used to mix the output signal. This controls the impression of signal width. Very spacious signals should be monitored with both a surround decoder and in mono, in order to maintain compatibility. All settings in factory presets are safe for any application.

Transposition

In the Stringbox algorithm, this parameter transposes the resonance relative to the keyboard. For example, if a C is depressed on the keyboard and the transposition is 2 semitones, that string will resonate a D.

Tuning Master

In the musical world, the tuning reference is A=440. This means that the note A (above middle C) is equivalent to 440 Hz. However, that's not the way it always works in the real world. In the Stringbox algorithm, this parameter allows you to change the base tuning to something other than A=440.

Tuning System

Controls the way the strings are tuned. Many choices are available. Equal-tempered is best for most applications, but several forms of just-intonation are available for Baroque musicians. Quarter-tone is available as are several non-tonal tuning plans.

Lexicon Plug-Ins & Upgrades

Available Lexicon Plug-Ins

Please visit www.lexiconpro.com for the latest information on available Lexicon plug-ins.

Upgrading

Please visit www.lexiconpro.com for the latest information on upgrading to the PCM Native Effects Bundle or PCM Total Bundle.

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