Mac OS X • Windows XP/Vista • RTAS/Audio Units/VST • 32/64 bit

redline reverb

112dB

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INTRODUCING...

Redline Reverb is a musical reverb based on a completely new and original concept that excels in both warmth and transparency at extremely low CPU usage. Its core algorithm is based on the ***Rev-6*** and ***Space Master*** Reaktor ensembles by Martijn Zwartjes. With its many sound enhancements, an intuitive and attractive new user interface, and much optimized CPU usage, Redline Reverb represents the next generation of these celebrated algorithms.

Redline Reverb is a fully algorithmic and true stereo reverb with possibilities far beyond the conventional—just check out the 112 factory presets for a comprehensive showcase of what it can do. Unlike conventional algorithmic reverbs, Redline Reverb does not need separate plate, hall, and room algorithms. Instead it features a comprehensive yet intuitive parameter set that allows you to easily recreate any given reverb characteristic, leaving you free to create lush smooth vocal reverbs, convincing room simulations, almost infinite reverb tails, synth pad and delay effects, and everything inbetween.

You will find that its separate early/late reverb sections and modulation options make it an excellent choice for expensive hardware-style reverbs, while its extensive tweakability renders it equally suited for more experimental reverb and delay effects.

But most of all: it's red!

Installation

Redline Reverb comes in the form of a single installer for all available plugin formats: RTAS, VST, and Audio Units.

Mac OS X

1. Download the Redline Reverb disk image and double click the icon to mount it. A window similar to the one shown appears.
2. Drag the icons for the plugin formats you want to install into the corresponding folder alias directly to the right of it. In other words, the `component` needs to go into the `Audio Units` folder, the `dpm` into the `RTAS Plugins` folder, and the `vst` into the `VST Plugins` folder.

3. After the installation finishes you may safely eject the disk image.

Windows XP/Vista

1. Run the Setup program to launch the installer.
2. Make sure to read the license agreement. This is in your best interest, as it is a description of your rights and limitations as a user.
3. There are two installation options: *Default* and *Custom*. *Default* uses typical settings and is fine for most configurations, but if you like more control over your installation choose *Custom*. Steps 4–7 below are skipped in the *Default* setup.
4 The setup program detects whether you already have VST or RTAS plugins on your system

and selects the plugin formats it installs accordingly. If you wish you may override this choice and manually select your desired plugin formats.

5. By default Redline Reverb installs to `\Program Files\112dB\Redline Reverb`. In general, it is not recommended to change this but if you have a compelling reason to do so, either type in the desired directory in the *Destination Folder* box, or click on the *Browse* button to the right of the *Destination Folder* box and select the directory within which you would like Redline Reverb installed.
6. If you opted to install the VST plugin, the *Choose VST Location* step is one you should pay attention to. The setup program *should* detect your default plugin folder, but you may prefer another directory for your plugins—particularly if you use multiple hosts—in which case you will need to manually direct the installer to the desired directory. The process for this is identical to that in the previous step.
7. The *Start Menu Folder* step is for convenience and for quick access to troubleshooting files. Currently, it points to the readme, the error log, this manual, and the uninstaller executable. It should be noted that all of these files are directly accessible in the Redline Reverb program folder (wherever the installer was directed in Step 6, and under `\Documents and Settings\[current user]\Local Settings\Application Data\112dB`). In addition the uninstaller for Redline Reverb will be listed under *Control Panel » Add/Remove Programs*, so if you like to keep your start menu clean, you can safely select *Do Not Create Shortcuts*.
8. After Redline Reverb installs, Setup is complete and you may click the *Finish* button. It is recommended to view the readme if this is a new installation or an update, as it may contain important last-minute information that was not available at the time of writing.

Authorization

Our plugins do not rely on a dongle or challenge/response authorization for copy protection, as these schemes place an unnecessary burden on the customer. Instead we protect our plugins by means of a *keyfile*—a text file that holds your personal authorization. Unlike challenge/response authorization our keyfiles are *not* tied to a specific computer system. Thus you can use the same keyfile for authorizing a copy of our plugins on any system, now and at any point in the future.

Unlike most challenge/response authorization schemes, you do not need our permission to change your hardware, upgrade to a new operating system, or even to install the plugin on your studio setup, your home computer, **and** your travel notebook all at the same time. You will find that this is one of the least intrusive forms of copy protection you are likely to encounter.

The authorization process itself is equally simple. With your purchase you should have received a license in the form of an XML keyfile. To authorize, save this keyfile to your desktop, fire up your preferred host, and load the plugin. Redline Reverb now prompts you to select the license file. Navigate to the folder where you saved the keyfile and click *Ok*. That's all there is to it, Redline Reverb is now fully functional.

If you encounter any problems during the authorization process please contact our support staff by email at <support@112dB.com>. We will accommodate you as soon as humanly possible.

System Requirements

Redline Reverb is compatible with any host that adheres to the RTAS, VST, and/or Audio Units protocol.

Required Configuration

Operating System

- Windows 2000/XP/Vista
- Mac OS X 10.4 (Tiger)/10.5 (Leopard)

Processor

- AMD Athlon 800+
- Intel Core @ 1.6 GHz
- Intel Pentium 3 @ 850 MHz
- PPC G4 @ 1.2 GHz

System Specifications

- 256 MB RAM / 10 MB free disk space
- Sound card with MME, ASIO, or Core Audio compatible drivers
- Graphics card with 800x600 resolution and 16-bits color depth

Recommended configuration

Operating System

- Windows XP/Vista (32 or 64-bit)
- Mac OS X 10.4 (Tiger)/10.5 (Leopard)

Processor

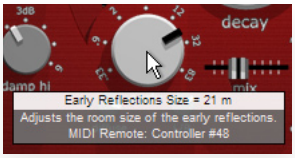
- AMD Athlon 64 2800+
- Intel Core Duo @ 1.6 GHz
- Intel Pentium 4 @ 2.8 GHz
- PPC G5 @ 1.2 GHz

System Specifications

- 1 GB RAM or more / 500 MB free disk space
- Sound card with ASIO or Core Audio compatible drivers
- Graphics card with 1280x1024 resolution and 32-bits color depth

Operation

The Redline Reverb interface has been designed to be as intuitive and easy to operate as possible. However, in the interest of innovation, some functions operate in ways that may be initially unfamiliar. This section will cover the less obvious aspects of the interface.



Tooltips

If you're lost, hovering over any item of the interface for approximately one second brings up a floating tooltip window with a brief description of that control's function.

Reset to Default Value

<*Ctrl*>-clicking knobs and sliders will reset them to their default value. This is handy if you would like to undo some programming you have done.

Numerical Value Entry

Double-clicking knobs will open a small edit window that allows you to type the desired value from the keyboard for maximal value control. To dispose of the edit window either hit <*Enter*> or click anywhere outside the window.

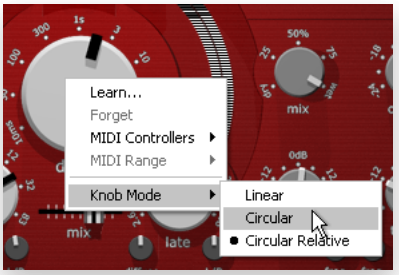
Mousewheel

All interface controls—knobs, sliders, even buttons—support mousewheel control. If your mouse is equipped with a scrollwheel simply hover the mouse pointer above the control you want to adjust and move the wheel up (to increase its value) or down (to decrease it).

Knob Modes

By default all knobs are in ***Linear*** mode: clicking and moving the mouse up (or down) turns the knob clockwise (or counterclockwise). Moving either left or right also turns the knob but in a slower fashion for more precise control.

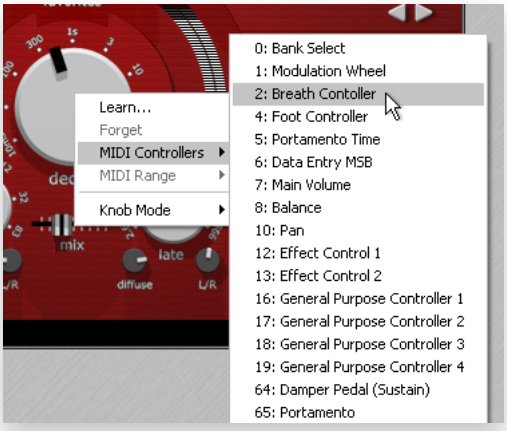
If you prefer you can change the knob control mode to either ***Circular Absolute*** or ***Circular Relative*** mode by right-clicking a knob and opening the ***Knob Mode*** menu. In either of the circular modes knobs function like hardware knobs; click and drag clockwise or counterclockwise to turn the knob accordingly. The difference between the two circular modes is that in circular absolute mode the knob turns to the exact same position of the mouse pointer—for example, moving the mouse pointer to a 3 o'clock position also moves the knob to the same position.



In contrast, in circular relative mode the knob turns from its initial position (from before you clicked it) by the amount that you move the mouse clockwise or counterclockwise. For example, clicking a knob with the mouse pointer at the 12 o'clock position and moving the mouse pointer to the 3 o'clock position—or one quarter turn—will also turn the knob by one quarter turn relative to its initial position. This is more confusing to explain than to see it in action!

Detents

Sliders and knobs have a built-in detent that remembers their previous position. For example, consider a knob at its 12 o'clock position. When moving the knob back and forth you will notice that it snaps to its previous (the 12 o'clock) position. This allows you to easily try simple adjustments and still revert to the previous position in case the adjustment turns out not to be an improvement.



MIDI Automation

In addition to host-based automation, all "useful" controls can be controlled by an external MIDI keyboard or MIDI controller. To assign a MIDI control simply right-click on the control in question and a menu will pop up. You can either directly choose a MIDI control from the MIDI Controllers submenu, or choose Learn... and move the control you want to assign on your external MIDI keyboard or controller within ten seconds. Redline Reverb will automatically assign the control.

Alternative Skins

Redline Reverb supports custom skins that modify the look and feel of the plugin. At present it comes with one additional skin—Vintage by Scott Kane—but additional skins may be made available as downloads from the 112dB site.

Drag And Drop

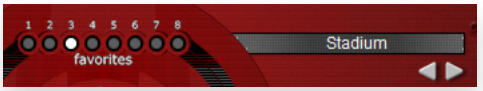
112dB authorization keyfiles can be dropped into Redline Reverb for convenient one-click authorization. Simply locate an authorization file (on your desktop or any other location on your filesystem), click and drag it over an open Redline Reverb editor window, and release the mouse button. Note that you may need to quit and restart your host for the new license to take effect.

An alternative way to authorize an evaluation version is to right click anywhere in the editor window and select **Authorize with license**... Locate and select the authorization file from the file dialog to fully unlock the demo.

Controls and Setup

This section describes the various interface controls and how to get the most out of Redline Reverb.

Presets

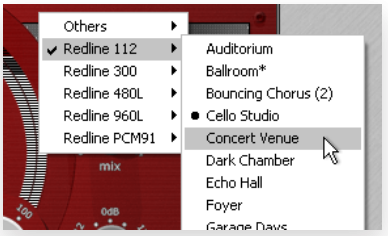


Redline Reverb comes with 128 carefully selected factory presets, and the name of the currently selected preset is displayed in the preset display.

Favorites

Up to eight presets can be marked as favorite and stored under the eight Favorites buttons for quick access. To select a favorite preset simply click the corresponding button.

Selecting Presets



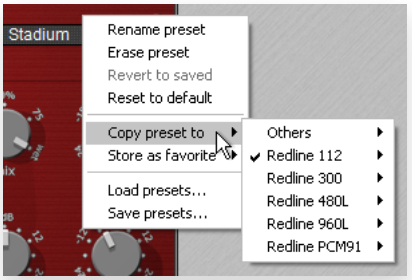
Left-clicking the preset display control brings up a complete list of currently loaded presets, optionally organized by category, from which you can select a new preset. The currently selected preset (***Cello Studio***) is shown with a bullet (•) in front of it, and the category folder in which it resides is indicated by means of a checkmark (√). Additionally, favorite presets have the favorite slot number in brackets after it—***Bouncing Chorus*** is assigned to favorite slot #2 in the example. Finally, if any of the controls have been changed since loading a preset it is considered modified, which is indicated by an asterisk (*) directly following the preset name. As a reminder the asterisk appears in the popup presets lists too (***Ballroom*** in the example).

Organizing Presets

Right-clicking the preset display gives you a number of options to manage the presets.

Rename preset pops up a window where you can type a new name for the current preset. You can assign a preset to a category—***Others***, ***Redline 112***, ***Redline 300***, and so on—by separating the category and the preset name itself with a slash (/). So to move the current ***Stadium*** preset from its current ***Redline 112*** category to ***Redline 480L*** instead, you should rename it to

Redline 480L/Stadium. Presets without category will automatically be assigned to the ***Others*** menu.



Revert to saved discards all edits that were made to a preset since it was last saved.

Reset to default resets all controls to their default value—useful if you want to start a new preset from scratch.

Copy preset to stores a copy of the current preset in a new preset slot. The current preset in that slot will be overwritten and thus lost!

Store as favorite assign the preset to one of eight favorite slots, allowing you quick and easy access to your favorite presets.

Load presets... loads a preset bank from a previously saved file on your disk. This action overwrites all current presets, so make sure to save your current presets first!

Save presets... stores the current preset bank as a file on your disk. This allows you to maintain your own library of Redline Reverb presets, and carry your presets to a different location such as your studio or notebook setup.

Decay

The big knob sets the time it takes for the reverb to reduce 60dB in level (often called RT60 time). Longer decay times result in larger and more reflective artificial spaces, and increasing the decay time gives a larger virtual room—the difference between a small stone church and a massive cathedral.

However, that is not the only contributing factor. For example, placing additional objects inside an empty space reduces the decay time, which is why the presence of an audience dries out the acoustic in a venue compared to that experienced at the soundcheck Furthermore, the less enclosed a space is, the shorter its reverb decay time—an open field is much less reverberant than a barn.

Early Reflections

The first echoes of the sound source directly bouncing off the walls, ceiling, and floor are usually called early reflections. These come before the complexity of the main reverberation, and allow us to subconsciously determine the size, proximity, location, and material composition of the surfaces they have reflected from, as well as the relative position of the sound source in relation to these surfaces. In other words, early

reflections provide a sense of both the room we're in and our location inside that room. The more detailed a reverb simulates the pattern of early reflections, the more realistic it becomes.

Size

The size parameter determines the distance of the nearest surfaces to the sound source and is adjustable from 0.33 to 83m. Increasing sizes often make the signal more intelligible.

Diffuse

The diffusion parameter determines the number of reflections produced by the early reflections. Values near the default center setting provide the most natural-sounding effect, but more extreme settings can yield interesting results.

L/R

This control adjusts the left/right placement of the nearest surfaces. At center position the surfaces are equally spaced from the sound source and all early reflections are heard exactly in the center. Positions away from the center place the sound source closer to the left (or right) surfaces, resulting in a progressively wider stereo image.

Late Reverb

The late reverb consists of the sound source interacting with all room surfaces in a complex diffuse pattern, and is what is normally called ***reverb***. It is much more complex than the early reflections and provides a sense of the entire space the sound source exists in.

Size

This parameter determines the overall size of the room and is adjustable from 2.6 to 666m, allowing you to recreate every imaginable space from a tiny vocal booth to a huge canyon.

Diffuse

The diffusion parameter sets the number of reflections produced by the late reverb. As before, values near the default center setting provide the most natural-sounding reverb, but feel free to experiment.

L/R

This control adjusts the left/right placement of the sound source within the room. At center position the sound source exists at the exact center of the room, while positions away from the center move it more to the left (or right).

Mix

The Mix slider controls the relative loudness of the early and late reverb. At the extreme left setting only the early reflections are heard. Moving the slider towards the right increases the late reverb and has the effect of pushing the sound source away from the listener and further back into the room.

Damping

The damping section controls the absorptive properties (both air and surface) of the virtual space. Making the high-frequency decay time shorter than the overall decay time simulates a real room, but higher low-frequency damping can be used to simulate spaces that reflect mainly high-frequency sounds. These effects can also be combined to produce other subtle effects.

Many other reverbs do not have independent control over the individual damping parameters, but provide a choice of reverb models (such as ***Room***, ***Hall***, and ***Plate)*** that provide different preset damping combinations. Redline Reverb does not restrict you to a few preset models and leaves you free to adjust damping as you see fit.

Damp Lo

Adjusts the amount of low-frequency damping. Most natural spaces have some amount of low-frequency damping, but little (or even no) damping can create dramatic booming spaces.

Damp Hi

Adjust the amount of high-frequency damping. Higher damping factors create more absorptive and muffled spaces. For natural-sounding results some amount of high-frequency damping is essential.

Freq

For both the low- and high-frequency damping sections, the frequency control sets the -3dB cutoff point below (or above, respectively) damping is applied.

Bass/Treble

For additional flexibility and extreme or special room effects, Redline Reverb features a separate output equalizer section with two 6dB/octave shelving filters. The two Frequency controls controls set the -3dB midpoint frequency below (or above, respectively) which the equalization is applied, whicle the boost or cut amount is determined by the Bass and Treble controls.

Pre-delay

Pre-delay delays the reverb tail with respect to the incoming dry signal and is adjustable from 0 ms (no pre-delay) to 200 ms. Use this to simulate a distance between the sound source and the reflecting surroundings. Setting a pre-delay creates an illusion of increasing room size and helps to keep the original sound distinct from the reverb, useful for vocals and other sound sources that need to remain intelligible.

L/R

This control moves the direct sound towards the left (or right) while simultaneously panning the pre-delayed signal in the opposite direction.

Modulation

Modulation serves to slightly detune both the early and late reflections. Higher modulation values result in stronger detuning and result in a fuller and richer sound, especially on longer reverb tails.

Freq

Adjust the modulation speed and can be adjusted from 0 Hz (static modulation) to 2 Hz. Season to taste.

Mix and Output Volume

The Mix knob balances the dry (direct incoming) and wet (processed) signals and can be used to apply more or less reverb when Redline Reverb is used as an insert effect. Setting Mix maximally wet mutes the direct signal, effectively turning Redline Reverb into a send effect. The Output knob adjusts the overall output level, either for extreme reverb settings or as a simple gain control.

Updates and Support

Any updates for Redline Reverb will be made available at

http://112dB.com/download

For product support, questions, comments, feature suggestions, and anything you feel is worth sharing, please visit our forum at

http://112dB.com/forum

Alternately, for more individual product support you may contact our support staff by email at

support@112dB.com

Concept Martijn Zwartjes | ***Core*** Leo Degen | ***Design*** Jules Vleugels.

Vintage skin by Scott Kane <s0nkite@hotmail.com>.

Special shouts to our dedicated beta testers.