What's New in 2.5?

Version 2.5

14 Channel Expandable Mixer • Analog Polysynth • Granular Polysynth • Digital Samplers • REX-loop Player • Drum Machine • ReBirth Input Device • Multiple Effects Processors • Shelving and Parametric EQs • Master Song Sequencer • Pattern Sequencer • 64 Channel Audio Output • 64 Channel ReWire Output • 512 Band Vocoder • CV Processing Tools • Full Automation • Total Recall
Welcome!
This document provides brief descriptions of the new features in Reason 2.5. New features introduced in version 2.0 are also listed for users upgrading from Reason 1.0 - see "New features in Reason 2.0". For detailed descriptions of all features, functions and procedures, please refer to the Operation Manual.

New features in Reason 2.5

New Device - BV512 Vocoder
The BV512 is an advanced vocoder device with a variable number of filter bands. It also has a unique 1024-point FFT vocoding mode (equivalent of 512-band vocoding) for very precise and high quality vocoded speech. By connecting the BV512 to two instrument devices, you can produce anything from vocoded speech, singing or drums to weird special effects. See the Operation Manual for details.

New Device - Scream 4 Sound Destruction Unit
This is an extremely versatile "sound destruction" device, featuring various kinds of distortion, signal warping and transformation effects. There are three main sections: “Damage” (where you select a sound mangling algorithm and make settings), “Cut” (a three band EQ) and “Body” (a resonant body or cabinet simulator, excellent for making the sound come alive). See the Operation Manual for details.
New Device - RV7000 Advanced Reverb

The RV7000 is a high quality reverb processor with nine different reverb and echo algorithms, ranging from rooms and halls to special effects. The RV7000 also contains an equalizer and a gate section, making it possible to get virtually any kind of reverb character, including gated reverb. See the Operation Manual for details.

New Device - UN-16 Unison

The UN-16 simulates the sound of several detuned voices playing the same notes simultaneously, producing a rich chorus-like effect with the voices spread across the stereo field if you like. See the Operation Manual for details.

New Device - Spider Audio Merger & Splitter

This is not an effect device, but a utility. With the Spider Audio you can merge up to four audio input signals into one output, as well as split one audio input signal into four outputs. This makes audio signal routing much more flexible and allows for very creative patching and connections. See the Operation Manual for details.

New Device - Spider CV Merger & Splitter

Again, this is not an effect device, but a utility. With the Spider CV you can merge up to four CV input signals into one CV output, as well as split CV or Gate inputs into several outputs (one of which can be inverted). One use for the Spider CV is to split Gate and Note CV to control several instrument devices with one Matrix. See the Operation Manual for details.

New features - Mixer 14:2

Stereo Aux sends

The four auxiliary sends in the Mixer are now stereo. You can of course still use sends in mono (to save CPU power). The “Chaining Aux” inputs are also stereo.

Pre-fader Aux send

Aux Send 4 can now be switched to tap the signal “pre-fader”. When pre-fader mode is activated the send level is independent from the fader level.

Improved EQ

The EQ section in the Mixer has been redesigned. To ensure backwards compatibility (i.e. that songs created with earlier versions sound exactly the same), there is a “Compatible”/“Improved” EQ switch on the back of the Mixer. Songs created with earlier versions will open with “Compatible EQ” mode activated.
New features in Reason 2.0

For users upgrading to Reason 2.5 directly from the 1.0 version, here follows a list of the features introduced in version 2.0.

Full support for Mac OS X and Windows XP
Reason now offers full support for Apple’s and Microsoft’s latest operating systems.

Support for playback of high resolution samples
Reason now has the capability to play back audio in higher resolution than the CD standard 16-bit. This means that if for instance 24-bit samples are loaded in a sampler, the Redrum or the Dr. REX loop player, the samples retain their high resolution. Proceed as follows:
1. Open the Preferences from the Edit menu, and select the General page.
2. Under “Miscellaneous” at the bottom of the page, make sure the option “Use High Resolution Samples” is checked.
   
   If this is activated, and if your audio card supports it, Reason will play back high resolution samples in their original resolution. If this is deactivated, Reason will play back all samples in 16-bit resolution, regardless of their original format.

SoundFont support
It is now possible to load and use SoundFonts (presets and single samples) in the following devices:
- The NN-XT.
- The NN-19.
- The Redrum (single samples only)

See the Operation Manual for details.

New device - Malström Granular Synthesizer
The Malström is a polyphonic synthesizer featuring two oscillators, two modulators, two filters, a waveshaper and a large number of modulation and routing options. It is based on the concept of Granular Synthesis and makes it possible to produce amazingly abstract, sharp, distorted, undulating sounds. In fact - we dare to say that it can produce sounds quite unlike anything you’ve ever heard from a synthesizer before! See the Operation Manual for details.

New device - NN-XT Sampler
The NN-XT is a complement to the NN-19. Just like the latter, the NN-XT lets you load samples to create a multi-sample key map and modify the sound with synth-type parameters; LFOs, envelopes filters. However, the NN-XT also has more possibilities. For instance, it allows you to create layered sounds, where two or more samples can be played simultaneously. It also allows you to set up velocity switched key maps so that you control which samples in a layered key map will actually sound depending on how hard or soft you play on your MIDI keyboard. See the Operation Manual for details.
LFO sync

A number of devices and effects now feature LFO sync. This means that you can synchronize their respective LFO:s to the song tempo, in one of 16 possible time-divisions.

The following devices and effects feature LFO sync:
• The Subtractor synthesizer.
• The Malström synthesizer.
• The NN-19 sampler.
• The NN-XT sampler.
• The Dr. Rex loop player.
• The CF-101 chorus/flanger.
• The PH-90 Phaser.

See the Operation Manual for each device for details.

Detachable sequencer window

The sequencer window can now be detached from the rack and used in a separate window. This could be useful for instance if you are working with a large number of tracks or if you are viewing many sequencer lanes at once.

The separate sequencer window can be positioned and resized freely both horizontally and vertically using the basic windows techniques.

To detach the sequencer from the rack, either click the corresponding button in the top right corner of the rack, or pull down the Windows menu and select “Detach Sequencer Window”.

Similarly, to reattach the sequencer window to the rack, either select “Attach Sequencer Window” from the Windows menu or click the button.

Note that the button for detaching the sequencer window is only available in the rack. The button for reattaching the sequencer though, is available both in the rack and in the sequencer.

About the Transport

You’ll notice that when detaching the sequencer from the rack, there will be two instances of the transport on the screen - one in the rack and one in the sequencer window. This is for convenience since it allows you to control playback and recording regardless of which window is the active one.

Should you wish however, you can fold one of the transports in the same manner as with any other device in Reason. Folding and unfolding devices is described in the Getting Started book.

To make the rack or the sequencer the active window when they are separated, you can use the key commands [Command]-[1] (Mac)/[Ctrl]-[1] (Windows) and [Command]-[2] (Mac)/[Ctrl]-[2] (Windows) respectively.
A note about using Reason with two monitors

If you have a computer system with two monitors, you can do the following:

✦ Use one monitor for viewing and managing the rack only.
✦ Detach the sequencer as described above, and dedicate one of your monitors to the sequencer only.

To be able to use two monitors, you must have an operating system and a graphics card that supports it. Please refer to the documentation for your operating system and possibly the graphics card for instructions on how to set up your system for using two monitors.

Support for mouse wheel scrolling

If you’re using a mouse equipped with a scroll wheel, this can be used for the following scrolling and zooming operations:

✦ Scrolling up and down in both the rack and in the sequencer.
✦ By simultaneously holding down [Shift] you can scroll left and right in the sequencer.
✦ By holding down [Command] (Mac)/[Ctrl] (Windows), you can zoom in and out vertically in the sequencer.
✦ By holding down [Shift]-[Command] (Mac)/[Shift]-[Ctrl] (Windows), you can zoom in and out horizontally in the sequencer.

New tools in the sequencer toolbar

You now have access to an eraser tool - for deleting events, a line tool - for creating velocity ramps etc., a magnifying tool - for zooming, and a hand tool - for scrolling.

In addition, there is now only one button for toggling between Arrange mode and Edit mode, and the button “Hide all controllers” has been removed.

Below follows a rundown of the various tools and their use.

The Eraser tool

You can use the Eraser tool to delete Events and Groups in the Arrange view, as well as Notes, Controller sections and Pattern Change sections in the Edit view.

About Snap and the Eraser tool

With Snap activated, clicking directly on events with the Eraser tool will not only delete the events “touched”, but all events within the set snap value (e.g. 1 bar). The Eraser tool can also be used for making selection rectangles and these will be magnetic to the snap value as well.

✦ If you hold down [Shift] when making a selection rectangle, direction is restricted to horizontal or vertical only.

Deleting Events and Groups in the Arrange view

✦ Select the Eraser tool and click on an Event.

As described above, you can also draw selection rectangles with the Eraser tool, encompassing several Events and delete them all at once. Note that if Snap is on, the selection rectangle will be magnetic to the Snap value positions. Also note that an Event or Group doesn’t have to be fully enclosed to be selected - the selection rectangle only needs to intersect or touch the Event/Group.
Deleting Notes in the Edit view

- Select the Eraser tool and click on the notes you want to delete.
  You can also drag a selection rectangle with the Eraser tool and delete all notes encompassed by the rectangle.

When using the Eraser tool to delete notes with Snap on, the following applies:
- When single clicking, all notes of the same pitch within the set Snap value will be deleted. The "area of effect" is indicated in a dark gray color.
  In this case, with Snap set to "Bar", a single click will remove all the instances of the note C 2 on bar 6.
- If a selection rectangle is drawn, it will be magnetic to the nearest snap value positions. For example, if Snap is set to "Bar", dragging a rectangle will select all notes within an exact range of bars.

Deleting Controllers and Pattern Changes in the Edit view

- Select the Eraser tool and click on the section you want to delete.
  If Snap is on, you can single click to immediately erase the shaded area which corresponds to the set Snap value (e.g. Bar). You can also make a selection range by clicking and dragging.

Using the Line tool

The Line tool can be used in the Edit view. More specifically, it can be used in the Velocity lane and the Controller lane, for drawing Velocity ramps and editing Controllers respectively.

Creating Velocity ramps

- To draw a velocity ramp, drag the Line tool across the bars, at the desired height.

While this can also be accomplished using the Pencil tool, the Line tool is probably the preferred method for creating regular, smooth ramps, or for giving all the notes the same velocity (by drawing a straight line). The Pencil tool can be used for creating more irregular curves.
Drawing and editing Controllers

Drawing and editing controllers with the line tool is done exactly like drawing velocity ramps, as described above. You will probably want to use the line tool to create smooth, even controller ramps, and the pencil tool for creating more irregular controller curves.

Note that when using the line tool, you can hold down [Shift] when drawing to restrict movement to horizontal only.

The Magnifying Glass tool

A new way of zooming in the sequencer is to use the Magnifying Glass tool. This tool lets you zoom in and out both horizontally and vertically just like the magnification sliders do. However, the Magnifying Glass tool offers more possibilities. The following applies:

- By clicking once in a lane with the Magnifying Glass, you zoom in by the same amount as when clicking the “+” icon on the magnification slider twice.
- To zoom out with the Magnifying Glass, click while keeping [Option] (Mac)/[Ctrl] (Windows) pressed. You’ll notice that the “+” sign in the Magnifying Glass tool changes to “–”.
- If the lane has a vertical magnification slider as well, clicking with the Magnifying Glass will also zoom in/out vertically by the same amount as when clicking the “+” and “–” icons on the magnification slider once.

By holding down [Shift] when clicking, you disable vertical zooming.
You can also click and drag with the Magnifying Glass to create a selection rectangle.
The view will then be zoomed in so that the selected area fills the lane.

The Hand tool
In the sequencer, you can use the Hand tool for scrolling. Select the Hand tool and click in a lane, press the mouse button and drag in the desired direction.

Settings are saved with song documents
Various settings for how you have set up your workspace are now saved along with the song document, so that it will open in exactly the same state as when you last saved and closed it.
This includes - but is not limited to:
• The state of the sequencer window (detached or not).
• The position and size of windows.
• The visual state of the rack (front or back, position of scroll bars etc.).
• The magnification factor in the sequencer.
• Etc.

New Orkester Sound Bank CD
In addition to the Reason Factory Sound Bank CD, Reason 2.0 also features the Orkester CD. This contains a large collection of patches and samples of orchestral instruments for the NN-XT.