✖ Devine **Machine**

OSR 2.0

user manual

Thanks for Purchasing OSR !

This tool will help you in many ways by letting you concentrate on sound rather than on tedious editing, slicing and sorting operations.

In this manual you will find everything about OSR functions and some tips regarding how some of those functions can be used.

We are confident that OSR will help you save time and enhance your workflow.

Nicolas Lacoumette

Efflam Le Bivic

Devine Machine

Table of contents

Recording

1 - Route your audio through OSR.

Check its level using the plug-in's peak meter display. The meter is labeled in decibels. Adjust the level of your audio at source so that it does not reach 0 dB FS (the rightmost point on the meter).

2 - MagicSens mode.

OSR has two metering modes for determining the start and stop point for each sample recording:

- **Normal**: OSR's standard peak meter display is used. It shows the current peak volume of the audio and it is that peak volume (in relation to two thresholds) that determines the start and stop point for each sample recording.

- **MagicSens**: With MagicSens switched on, the display in OSR becomes a hit detection meter, analysing the audio for 'hits' (rapid increases in volume). Every time a 'hit' occurs, the meter shoots over to the right. It is this hit detector (in relation to two thresholds), that determines the start and stop points for each sample recording.

When to use MagicSens ?

If you have tried sampling audio in a live situation (whether in the studio or on stage), you'll know that it can be difficult to set the thresholds on a sampler; the volume of a performance can vary considerably over time.

MagicSens provides an answer to this problem, as it is the relative changes in volume that are monitored, variations in the overall volume matter less.

You can spend less time setting thresholds, and more time sampling! (Of course, you are free to use this MagicSens mode in other situations as well.)

3 – Set recording settings *

- When recording in mono, it is the left channel of the audio that is recorded.

- You can choose later to export in mono any samples that were recorded in stereo.

- You can also change this setting while recording is under way.

4 - Tresholds

Once recording begins, each sample recording starts when the meter level exceeds the RECORD TRIG threshold, and stops when the meter level falls back below the RECORD GATE threshold.
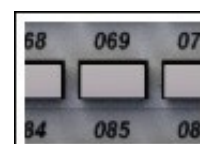

5 – Slot selection

When you select it, it will turn red.

The plug-in's GUI contains a block of 128 buttons, representing the 128 available slots that samples can be recorded to.

Only one sample can be recorded to each button. You can only record to an empty button, which is indicated by the button being coloured grey or coloured red.

6 – Record !

OSR will now begin recording samples until you press this button again. Each time the meter level exceeds the RECORD TRIG threshold, a sample recording begins. When the meter level then falls below the RECORD GATE threshold, that recording stops.
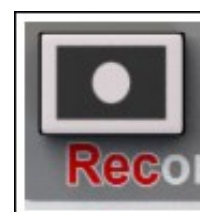
This process repeats for as long as the Record button is lit, and there is still space for new samples.

You can adjust the two thresholds while the recording process is under way.

7 – Check clipping

Once a button has been recorded to, it turns yellow. However, if the level of the audio input reached 0 dB FS at any time during the recording on a particular button (so potentially the audio has clipped), it turns purple instead to indicate this.

- You can click on the buttons while recording is under way to chnge the location at which the next sample is to be recorded at.

- You can also select the buttons via MIDI using a MIDI keyboard. *(See page 6 for the details)*

8 – Repeat the same process over and over.

Note that the combined duration of all the sample recordings within OSR at any one time cannot exceed fifteen minutes in total.

IMPORTANT! The samples that you record are not saved when you use your host to save the project that OSR is being used in. You will lose the samples when you exit your host. To save your samples, you need to use the export function in OSR to save your samples to disk as audio files. See pages 8 and 9 for the details of this export function.

An alternative recording method: Force Record

You may want to manually control when each sample recording begins and ends, as opposed to letting OSR do this automatically for you. You can achieve this by controlling two 'switches' called 'Use Force Record' and 'Force Record'. These switches are accessed via two VST parameters (called 'Use Force Record' and 'Force Record') or via two MIDI Control Change assignments (MIDI CC #64 is 'Use Force Record' and MIDI CC #65 is 'Force Record').

The 'Use Force Record' switch is used to turn the force record ability on and off. When it's on, you can then use the 'Force Record' switch to actually start and stop a sample recording.

If you want to use the two MIDI CC values, then you have to be able to route MIDI data to OSR. (See page 6 for the details.) Alternatively, to use the two VST parameters, your host has to be able to generate automation data.

Here's an example of force recording via the two VST parameters. To the left is a screenshot of an example of force recording in Cubase SX version 3. The idea here was to play a single bar of a sequence (in this example, bar nine), and to sample separately the first beat and the third beat of that bar.

Two automation lanes were created, one for each of the two VST parameters. The upper lane was for the 'Use Force Record' parameter, and was set to turn the force record ability on for the duration of this single bar.

The lower lane was for the 'Force Record' parameter, to switch recording on during beats one and three of the bar. All that was then required was to click on the Record button in OSR and start playback within Cubase.

Performance

Sample playback

You can click on a recorded sample button to play back its sample. Only one sample can be played at a time. Clicking on a sample button when a sample is already being played will cleanly silence that previous sample.

Mono or stereo playback

- If you play a stereo sample in mono, it is the left channel of the stereo sample that is played.

- If you play a mono sample in stereo, that mono sample is simply duplicated on both the left and right channels.

- You can use this facility to hear what the exported version of each sample will sound like, if you were to export with this same mono/stereo setting.

Using a MIDI keyboard

To control OSR with a MIDI keyboard, your host audio application has to be able to route MIDI to the VST audio effect plug-ins. If you are unsure as to how to do this, please check your host's documentation, or read the Devine Machine OSR forum.

The block of 128 buttons in the OSR user interface corresponds to the 128 notes of the MIDI note range; playing a note on an attached MIDI keyboard will select one of those sample buttons. As an example, the button labelled '060' can be selected by playing the note C3 ('middle C') on your MIDI keyboard.

In addition, OSR responds to seven MIDI controller numbers:

MIDI CC #060: RECORD GATE   *adjusts this threshold*

MIDI CC #061: RECORD TRIG   *adjusts this threshold*

MIDI CC #062: RECORD   *button Record on/off*

MIDI CC #063: MAGICSENS   *button MagicSens on/off*

MIDI CC #064: USE FORCE RECORD *see page 5*

MIDI CC #065: FORCE RECORD   *see page 5*

MIDI CC #127: RESET ALL   *button use with caution!*

Performance ideas

MIDI control of OSR makes it very easy to automate the sampling of synthesisers and other MIDI-controlled audio sources. You can create a MIDI sequence that starts OSR recording, plays the desired series of MIDI notes (each possibly at various velocities) and then switches recording off.

Try the following:

Create a 1-bar sequencer pattern consisting of 16 16th notes that trigger the first 16 OSR sample buttons. Play some audio into OSR and record a sample to each of those 16 slots. Now start the 1-bar sequence playing and route those MIDI notes to OSR. Those samples will now be played, but because OSR can only play one sample at a time, the result is not a disaster - it's great! Try making a bass line with several programs from a synthesiser this way, changing programs on the fly as you record the samples.

Functions

Selecting a slot

A sample is selected when its slot button is coloured in green. Selecting a sample is useful for marking it (for your information) as being good, but it is also an important step when using some of the functions in OSR, to indicate the samples that you want a function to act upon.

Individual sample selection

You can select an individual sample by:

- SHIFT + **click** or CTRL + **click** on the button.

- **Right-click** on the button (PC only).

SELECT buttons

You can also select samples using the three SELECT buttons.

- **ALL**: All the slots with samples are selected.

- **NONE**: Any selected slots are unselected.

- **INVERSE**: The inverse of the current selection.

REORDER buttons

OSR incorporates a variety of ways to reorder the recorded samples. Reordering affects all samples, not just the selected samples.

Five reordering methods

- **PEAK**: Reorders the samples from loudest to quietest, based on their individual peak volume levels.

- **RMS**: Reorders the samples from loudest to quietest, based on their individual RMS volume levels. (RMS is a measure of average loudness.)

- **LENGTH**: Reorders the samples from longest to shortest.

- **DATE**: Reorders the samples from earliest to the most recent, based on their date and time of recording.

- **NOTE**: Reorders the samples from the lowest pitched to the highest pitched.

Note : There is also an extra button here labeled Inverse. If it's lit, the reordering will be in the opposite direction.

The 'Note' reorder option in detail The 'Note' reorder option detects the pitch of each selected sample. That pitch is then displayed on each sample's button as a MIDI note value. When exported, each audio file will contain this note information, to be used by an audio program that understands it. (The note name will also be appended to the file name.)

This option will only yield useful results when it's used on sounds with a distinct pitch. Also, if the detected pitch that's displayed for a button is incorrect, you can edit it by Alt-left click (PC)/Alt-click (Mac) to increase the note and Alt-right click (PC)/Alt-Control-click (Mac) to decrease it.

Another tip: Once reordering has taken place, you can shift-click on the Note reorder button to cause each sample to reposition itself based on the MIDI note number that was detected for it.

FUNCTION buttons

NORM - All selected samples are normalised.

Normalising raises the volume of each sample such that its peak level just reaches 0 dB FS.

If no samples have been selected, then all of the samples will be normalised.

DEL - All selected samples are deleted.

RESET ALL button

Use the RESET ALL button to reset the plug-in to its initialised state.

WARNING! All the current samples in the plug-in will be lost!

Exporting audio

Export options

All selected samples are saved to disk as individual 32-bit float wave files.

All selected (green) samples will be exported. If no samples have been selected, then all the samples will be exported.

When you click on the Export button, a dialog will appear and you are able to enter a name for the set of samples you are saving.

The actual name of each file is formed from the name that you supply and the number of the button that the sample is located on.

Mono / Stereo export.

- If you export a stereo sample in mono, it is the left channel of the stereo sample that is exported.

- If you export a mono sample in stereo, that mono sample is simply duplicated to both the left and right channels.

Batch export

OSR 2.0 let you export all the recorded samples at once.

There are two ways to export.

1 - By pressing the export button : a contextual window will appear and let you browse to the location you wish.

2 - By dragging the selected samples and dropping them directly into a folder or in your sequencer project.

For the curious

...you may be interested to know how OSR edits each sample recording:

OSR examines the waveform at the start of each sample recording in order to best preserve the audio around that point.

If it can, it will adjust the sample start point to an appropriate zero crossing point in the immediate vicinity. For example, when sampling a single drum hit, OSR will try to preserve the full attack transient of that hit by - if necessary - shifting the sample start point slightly back in time. (If no appropriate zero crossing point can be located, OSR will apply a very short fade-in to the start of the sample.)

And to prevent a click occurring at the end of a sample, a very small fade-out is applied. (Clicks would particularly occur if the audio being sampled was noisy or if the RECORD GATE threshold was set quite high.)

If you have any question regarding this products or if you simply want communicate with us, you can do it through our forum at :

www.devine-machine.com

Or contact us at :

info@devine-machine.com

VST Plugin technology by Steinberg

VST is a trademark of Steinberg Media Technologies GmbH All other copyrighted trademarks belong to their respective owners.

Audio Units is a trademark of Apple Inc.

This program is compatible with Pro Tools/HD(r) as RTAS. Pro Tools and Digidesign are registered trademarks of Digidesign, a division of Avid Technology, Inc.