

# ReCycle

## MENU & DIALOG REFERENCE



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# **Chapter 1**

## **The ReCycle Menu**

### **(Mac)**

# About ReCycle...

Selecting this brings up a window showing you the version of the program and a list of the fine people involved in creating it.

- To close the About ReCycle window, click the close button.

## Preferences (Mac OS)

The Preferences dialog is used to make audio settings, to set some general options for how the program operates, and to customize the look of the waveform display.

### Preferences - General

- **When “Always move left locator to first slice point” is activated, ReCycle will automatically place the Left Locator on the first slice point when you Open or Receive a sample.**  
If this is not activated when you Open or Receive a sample with no loop setting, or the loop start is just at the beginning of the sample, a dialog appears suggesting you should let the program move the Left Locator to the first slice point. This is to avoid very short slices at the beginning of the sample, it is recommended that you do this, unless you have a good reason not to.
- **If “Set “Bars” to 1 in new documents” is selected, any new audio file will open up with Preview mode activated, and the Tempo calculated to the length being one bar.**  
Note that this will lead to files playing back at the wrong tempo if the loop isn't exactly one bar! You can always change the number of bars later of course, and the tempo will be recalculated according to the bars setting.
- **If “Export as one sample will crop to loop” is activated, the end of a file will be cropped exactly at the Right Locator position, omitting any stretch tail that may be present beyond this point.**
- **If “View stereo files as sum of L+R” is selected the left and right channels of stereo files will be visually summed to one channel, instead of being stacked on top of each other.**  
Note that this is a display option only, the actual audio material is not affected.

### Preferences - Audio

#### Selecting an Audio Device

All available Audio Devices are listed on the Audio Device pop-up menu.

- **If you are using audio hardware for which there is a specific CoreAudio driver, you should select this.**  
With a CoreAudio driver written specifically for the audio hardware, ReCycle can communicate more or less directly with the audio hardware.
- **If you plan to use the internal audio outputs on your computer, select “Built-In Output”.**

#### Sample Rate

Select Sample Rate from the pop-up. 44.1 kHz is normally sufficient to get great sound quality.

## Setting the Buffer Size

You can adjust the latency value by using the Buffer Size slider. The highest and lowest possible values depend on the CoreAudio driver. A setting around 256-512 samples is sufficient in most situations and won't cause any strain on your computer.

## Channels...

- **If you have an audio card with multiple outputs, you can select which output pair you wish ReCycle to use by clicking the “Channels...” button.**

This item will not be selectable if you use a card with only a regular stereo output.

## Clock Source

- **Select Internal or External depending on if your external audio interface uses its own clock source or your computer's internal clock.**

## Control Panel

- **Click this to open the control panel for the selected Audio Device.**

Here, you can normally set the bit depth and other parameters of your audio interface.

# Quit ReCycle

This simply quits the program. If you have any unsaved changes you will be asked whether you want to save them before quitting.





## **Chapter 2**

### **The File Menu**

# Open...

This dialog is used to load audio files from disk. The dialog is a standard file dialog with some additions.

## File Info

When you select a file in the list, information about file type, length, etc is shown in the lower part of the Open dialog.

For all recognized audio file formats, the following information is displayed:

- **Type:** (see **About The Different File Formats**).
- **Channels;** mono or stereo (1 or 2).
- **Length;** in minutes and seconds.
- **Bits;** bit depth.
- **Freq;** sample frequency.
- **Size;** in Bytes (For REX2 files the data compression ratio is displayed in parentheses. For example, 2.4:1 means that the file was 2.4 times larger before it was compressed).

If the file is a ReCycle file, the following additional information is displayed:

- **Tempo;** in BPM.
- **Sign;** time signature.
- **Length;** in bars and beats.
- **Slices;** the number of slices in the file (only available if a REX2 file is selected).
- **Usage;** which tells you the size of the loop (i.e the audio between the locators) in relation to the total file size in percent.
- **Exp. Size;** tells you the size of the file if exported (only available if a REX2 file is selected).

## Play and Stop buttons

When you click the Play button, the selected file will be played back. If you wish to stop playback before the file ends, click Stop.

## Auto Play

If this option is on (ticked), playback will start automatically as soon as a new file is selected from the dialog. If a new file is selected during playback, the previous selection will stop and playback of the new selection will start directly.

You will not be able to play a file under the following conditions:

- **If the file is in a format ReCycle doesn't support.**
- **If there isn't enough memory (RAM) left to load the sample.**
- **If the sample is longer than 30 seconds it won't play automatically (but you can audition it with the Play button).**

## About The Different File Formats

ReCycle can load mono or stereo files that meet the following criteria:

- **The bit depth can be 8, 16 or 24 bits.**
- **Sample rates between 11.025 kHz to 1.0 MHz are supported.**



The table below shows the supported file formats.

| Name             | Extension   | Comment   |
|------------------|-------------|---|
| ReCycle          | RX2/RCY/REX | REX2 is the native file format created when you save in ReCycle. RCY/REX are ReCycle files that were created with previous versions of ReCycle. |
| Wave             | WAV         | The standard Microsoft file format for audio. May be in formats other than 16-bits.   |
| Audio IFF (AIFF) | AIF         | Audio Interchange File Format; Apple's standard audio file format. May be in formats other than 16-bits.  |

## About Split Stereo Files

ReCycle can load Split stereo files (commonly used in Logic and Pro Tools). Split stereo files have the extension "L" or "R". If you load a file with one of these extensions, ReCycle will automatically scan for a opposite match and load this at the same time. For the match to work, the split files have to have the same name (apart from the extension), size, bit rate and be located in the same folder.

# Open Recent (Mac OS)

Here you will find a list of recently opened files (if any). Selecting one of the files in the list will open the corresponding file in a new window.

## Close

This closes the active document. If there are unsaved changes, you will get the option to save the changes or to cancel the operation. Under Windows, closing the last open document will automatically exit the program.

## Get Info

This brings up a dialog with information about the open file:

- **Sample format (mono/stereo, sample rate and bit depth)**
- **Loop length (number of slices, loop length and file size)**

## Save

This saves any changes made to the file since you last saved. If the file hasn't been saved before, the Save dialog comes up asking you to specify a name and location for the file. Files are saved as REX2 files, the native ReCycle file format.

# Save As...

This dialog box allows you to save as a REX2 file to disk and specify the name and location for the file.

# Export...

The Export dialog is used if you want to save your files in other formats for which the program saves audio files on your computer's hard disk.

## File Formats

The File Format pop-up is where you select the file format you wish to export the file as. The following file formats are supported:

| Name                   | Ext. | Comment   |
|------------------------|------|---|
| Standard MIDI File     | MID  | Allows you to export a Standard MIDI file. This can be used if you <i>only</i> want to create a MIDI File (for example when using ReCycle to create "groove maps").   |
| Audio IFF (AIFF)       | AIF  | Audio Interchange File Format; Apple's standard audio file format. Exports one or several files, with one slice in each file, depending on the "Export as One Sample" setting on the Process menu.<br><br><b>! Tempo data for Reason is embedded in the file!</b> |
| Wave                   | WAV  | The standard Microsoft file format for audio. Exports one or several files, with one slice in each file, depending on the "Export as One Sample" setting on the Process menu.<br><br><b>! Tempo data for Reason is embedded in the file!</b>                      |
| SoundFont File         | SF2  | SoundFont is a file format for storing wavetable synthesized sounds. Effectively, this turns an ordinary sound card into a sampler. Creates a single SF2 file when exported, with the option to export a MIDI file with the same name.                            |
| Akai .akp Program File | AKP  | Exports a program file together with one or several audio files, with one slice in each file, depending on the "Export as One Sample" setting on the Process menu.  |

## Export Settings

Before exporting a file in one of the supported formats, the Export Settings dialog is shown. This contains the following options:

- **Two pop-up menus allows you to change the sample rate and/or bit depth when Exporting.**
- **An "Export MIDI File with Same Name" checkbox.**  
When checked, a MIDI file with the specified name will be generated together with the exported file.

# File Quick Selection List (Windows)

The most recently loaded files are listed on the File menu. Selecting a file automatically opens it.

## Exit (Windows)

This simply quits the program. If you have any unsaved changes you will be asked whether you want to save them before quitting.



## **Chapter 3**

### **The Edit Menu**

# Undo/Redo

Virtually all actions in ReCycle can be undone. You can undo up to 10 actions.

- ➔ **To undo the latest action, select “Undo” from the Edit menu or press [Command]/[Ctrl]-[Z].**

The action to be undone is indicated next to the Undo command on the Edit menu.

- ➔ **To redo the last undone action (“undo the undo operation”), select “Redo” from the Edit menu or press [Command]/[Ctrl]-[Y].**

Similarly, the action to be redone is shown on the Edit menu.

## Copy Loop

You can use “Copy Loop” to copy the entire loop (i.e. all waveform data between the left and right locators) to the Clipboard. You can also use the key command [Command]/[Ctrl]-[C] for this item.

## Paste as New Document

If the Clipboard contains data, this can be pasted into a new (automatically created) document window by using the “Paste as New Document” menu item. You can also use the key command [Command]/[Ctrl]-[V] for this item.

## Delete

“Delete” will delete all selected slice markers. You can also use the [Delete] button on your computer keyboard for this.

## Select All

The “Select All” menu item will select all slice markers in the active document. You can also use the key command [Command]/[Ctrl]-[A] for this.

## Invert Selection

If you have a selection of markers, you can invert the selection by using “Invert Selection”. After this operation, the markers that were previously selected are now deselected, and vice versa. This is mainly useful together with Silence Selected, to extract individual sounds from a loop.

# Preferences (Windows)

The Preferences dialog is used to make audio settings, to set some general options for how the program operates, and to customize the look of the waveform display.

## Preferences - General

- **When “Always move left locator to first slice point” is activated, ReCycle will automatically place the Left Locator on the first slice point when you Open or Receive a sample.**  
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- **If “Set “Bars” to 1 in new documents” is selected, any new audio file will open up with Preview mode activated, and the Tempo calculated to the length being one bar.**  
Note that this will lead to files playing back at the wrong tempo if the loop isn't exactly one bar! You can always change the number of bars later of course, and the tempo will be recalculated according to the bars setting.
- **If “Export as one sample will crop to loop” is activated, the end of a file will be cropped exactly at the Right Locator position, omitting any stretch tail that may be present beyond this point.**
- **If “View stereo files as sum of L+R” is selected the left and right channels of stereo files will be visually summed to one channel, instead of being stacked on top of each other. Note that this is a display option only, the actual audio material is not affected.**

## Preferences - Audio

### Selecting an Audio Card Driver

All available drivers are listed on the Audio Card Driver pop-up menu. You should select one based on the criteria listed below:

- **If you are using audio hardware for which there is a specific ASIO driver, you should select this.**  
With an ASIO driver written specifically for the audio hardware, ReCycle can communicate more or less directly with the audio hardware.
- **If there is no ASIO driver, you should select the Direct Sound driver for the audio hardware.**  
This makes ReCycle communicate with the hardware via Direct Sound (a part of the Microsoft DirectX package). For this to be possible, you need to have DirectX installed on your computer, and there must be a Direct Sound driver for the audio hardware.
- **If the audio hardware doesn't support Direct Sound (i.e. there is no Direct Sound driver for the audio hardware), select the MME driver for the audio hardware.**  
This makes use of Windows Multimedia Extensions, the part of Windows that handles audio, MIDI, etc. Using MME may result in a noticeable *latency*, causing the audio playback to be slightly delayed. In the case of ReCycle, you would notice this in that playback started slightly after you clicked the Play button, for example.

Regardless of which type of audio hardware or drivers you are using, you should follow these basic steps:

- 1. Make sure you have the latest drivers for the audio hardware!**  
Please check the manufacturer's website for the latest versions.
- 2. Install the audio hardware and its drivers as described in its documentation.**



**3. Connect the stereo outputs of your audio hardware to your listening equipment (speakers, mixer, headphones or similar).**

For information about how to use multiple outputs (i.e. more than a stereo output), see the electronic documentation. For now, we stick to standard stereo connections.

**4. If possible, test that audio plays back properly with the audio hardware.**

In the case of audio hardware with ASIO drivers, you will need some test application for this (often included with the audio hardware). If you are using DirectX or MME drivers, you can use Windows' Media Player application for this.

## **Setting the Audio Card Buffer**

It is important that you trim the buffer setting properly. The buffer setting is a balance between fast response to playback commands on one hand and "safe" audio playback on the other.

**1. Select "Open" from the File menu.**

**2. In the dialog that appears, navigate to the ReCycle program folder.**

Make sure the "All Files" option is selected on the "Files of type" pop-up menu.

**3. Open the file "Drum Tools Demo.aif".**

**4. Activate Playback by clicking the Play button.**

**5. Open the Preferences dialog from the Edit menu and select the Audio tab.**

**6. In the Audio Preferences dialog, locate the Buffer Size slider and drag it all the way to the right.**

**7. Now drag the Buffer Size slider to the left, a bit at a time. Try positions further and further to the left, until the sound starts "breaking up".**

**8. Drag the slider a little bit to the right, so that the sound is OK again.**

**9. Close the dialog.**

**→ If you are using an ASIO driver specifically written for the audio hardware, you can in some cases make settings for the hardware by clicking the Control Panel button.**

This opens the hardware's ASIO Device Control Panel, which may or may not contain parameters for adjusting the number and/or size of the audio buffers - the fewer and smaller the audio buffers, the lower the latency. Please consult the documentation of your audio hardware and its ASIO drivers for details!

You are now finished with your audio settings for ReCycle. The settings you just made are stored automatically.



# **Chapter 4**

## **The View Menu**

# Magnify to Fit /Magnify to Fit Loop

If you select Magnify to Fit from the View menu, the display will zoom out so that the entire sample fits the window. If Magnify to Fit Loop is selected, the display will zoom in (or out) so that the area between the left and right locators will fit the window.

## Jump to Cursor

If this is selected, the window will scroll to the current play position, maintaining the current magnification factor.

## Scroll During Playback

When you play back, the current position is indicated by the Song Position Pointer travelling across the waveform display. If the option "Scroll during Playback" is checked on the View menu, the current position will always be displayed in the waveform display. This option can also be toggled on or off by pressing [F] on your computer keyboard. The Navigator frame indicates which area of the waveform is currently displayed in the Waveform Display.

# **Chapter 5**

## **The Process Menu**

# Export as One Sample

## Deactivated

When Export as One Sample is turned *off*, the audio gets sliced into individual samples when exported, and the MIDI files created will contain one note for each of those slices.

**! This is the preferred mode if you want to use your MIDI sequencer to edit the loop, change its tempo or use the MIDI file as a groove.**

## Activated

When Export as One Sample is turned *on*, the program will save/export the part that stretches from the Left Locator to the Right as one sample. Also, in this mode, the MIDI File will only consist of one event, with the length set using the Bars and Beats settings.

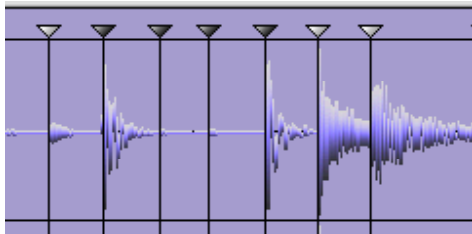
## When should Export as One Sample be Activated?

One obvious application of exporting as one sample (as opposed to separate slices) is when you simply want to change the properties (like pitch and/or tempo) of an audio file without otherwise changing it. Say you have an audio file (Wave, Aif etc.) that you wish to use in a song. The problem is that the tempo and/or the pitch of the file is wrong for the song, and you wish to fix this. The solution is to open the file in ReCycle, then slice it up and set the length of the loop using the normal techniques. Enter Preview mode, set the new tempo and/or pitch, and lastly export the file (with Export as one Sample activated) in it's original format but with a new tempo and/or pitch etc.

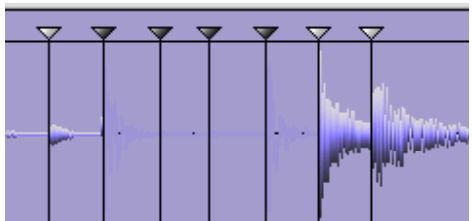
Export as One Sample can also be used in conjunction with Silence Selected to separate sounds from a loop.

# Silence Selected

When this function is activated, the slices that have *selected markers* will be silenced when exported or saved. Preview mode can be used to audition this function.



*When Silence Selected is turned on, the slices which have selected markers...*



*...will be replaced by silence.*

This feature is probably best used when Export as One Sample is turned *on*, to silence individual sounds in a longer sample. It can also be used to simply skip unwanted sounds, when slicing.

But, Silence Selected works even if Export as One Sample is turned *off*. In this case, the selected slices will simply be skipped when creating MIDI Files. This will then create a "gap" in the MIDI File.

## Normalize

Normalize will change the gain to ensure maximum level.

- **When Normalize is selected, a dialog box appears asking if you want to Normalize the whole file or each slice.**

If you select the latter, and the selected file is a rhythmic loop, the normalizing will disrupt the inherent dynamics of the loop, since the gain of each slice will be changed to more or less equal level. Therefore, normalizing the whole file is probably what you would normally select.

- **Normalizing each slice can be used when you use ReCycle to process individual sounds that don't belong to a loop.**

- ! **Normalize can't do miracles. If your recording contains unwanted noise, normalizing will increase the noise level together with the other audio material.**

# Convert to Mono

This item will convert stereo files to mono. It is only selectable for stereo files.

- **The dialog lets you decide which channel(s) you wish to use as the basis for the converted file.**

The options are Left, Right or a Mix of both Left and Right channels.

# Convert Sample Format

This item allows you to convert the sample rate and/or the bit depth of a file. Lowering the sample rate will make files smaller, but it will also lower the fidelity of the recording (less high frequency material will be present).

On the other hand, increasing the sample rate will not raise the fidelity of the sample in any way. It is therefore not recommended to convert from a low rate to a higher one, unless it is required by the application.

The same applies to bit depth; converting from 24 to 16 will reduce the size of the file (at the expense of slightly lower fidelity) and converting a sample's bit rate from 16 to 24 bits will not increase the fidelity of the original sample.

Selecting this menu item brings up a dialog box. You select the format you wish to convert to using the respective pop-up menus.

# Crop Loop

- **Crop Loop allows you to trim files, by removing all audio data outside the left and right locators.**

If you have set up a perfect loop with the locators, and the file contains audio outside this locator range you can use Crop Loop to remove this superfluous data.

# Remove DC

This function will remove any DC offset in the audio. DC offset is when there is too large a DC (direct current) component in the signal, sometimes visible as the signal not being visually centered around the "zero level axis". DC offset can introduce clicks and it also affects zero crossing detection and certain processing functions such as Re-Analyze and Normalize.

# Re-Analyze

Re-Analyze re-runs the slice-detection algorithm on the waveform data. You may have deleted slices that were detected when the file was first analyzed. This command will "re-discover" those slices.

- **All slices discovered by Re-Analyze that lies on a position in the file not already occupied by a slice will be added.**

Note that these may or may not be visible, as this depends on the Sensitivity setting!

## Add Slices at 1/16ths

This function automatically inserts slices at every 1/16th note between the left and right locators.





# **Chapter 6**

## **The Window Menu**

# Minimize (Mac OS)

Select this to minimize the current document window.

# Zoom (Mac OS)

This toggles the selected window between the default and the user defined size and position, according to the Apple guidelines.

# Bring All to Front (Mac OS)

This will bring all open ReCycle windows in front of any other open application's window(s).

# Stay on Top (Windows)

When this is activated, the ReCycle window will always stay on top of other program's windows.

# Document List

The Document List shows all currently open ReCycle documents. Selecting a document will make it the active document.

## **Chapter 7**

### **The Help Menu**

# Search (Mac OS)

On the "Search" tab, you can perform keyword searches.

## On-line Documentation

This menu item takes you to the Propellerhead website and brings up the html version of the Operation Manual.

## Go to the Propellerhead Homepage

This menu item brings you to the homepage of Propellerhead, where you will find information about possible new ReCycle versions, etc.

## ReCycle Tech Info and Support

This menu item brings you directly to the ReCycle Support pages on the Propellerhead web site. Use this option if you are having trouble with ReCycle and need help!

## About ReCycle (Windows)

Selecting this brings up a window showing you the version of the program and a list of the fine people involved in creating it.

→ **To close the About ReCycle window, click the close button.**