PulpoAudio

# Sampling Session

Version 0.9.0.0

Manual

# 1 Introduction

## 1.1 Apologies

...for my modest language skills in English. I am neither a native speaker nor do I have the financial means to pay a translator. If one of these two circumstances changes in the future, I promise improvement (I doubt it will be the native speaker thing).

## 1.2 What is Sampling Session

Sampling Session is a software that enables you to record and prepare samples for the usage in a sample player:

- Record or import individual samples

- Find and edit attack / silence positions within the samples

- Trim samples

- Process samples to a certain extent ( fadeIn/fadeOut/normalize)

- Export processed samples to be used e.g. in a sample player

## 1.3 What it is not

Sampling Session is not a Sample Editor that would give you abilities to edit and cut recordings or to apply effects of any kind. It is neither a software that creates patches/programs ready to be used in samples players

## 1.4 Requirements

On Mac:  Mac OS Catalina (10.15)

On Windows:  Windows 10

In general:

- Screen resolution minimum 1200 by 840 pixels.

- Sound card (internal or external) with minimum 1 input and 1 output.

- Available disk space minimum 20mb plus space for samples

- Samples are kept in RAM, so RAM requirements depend on your projects / number and length of samples. 8 GB should be sufficient for medium-sized projects.
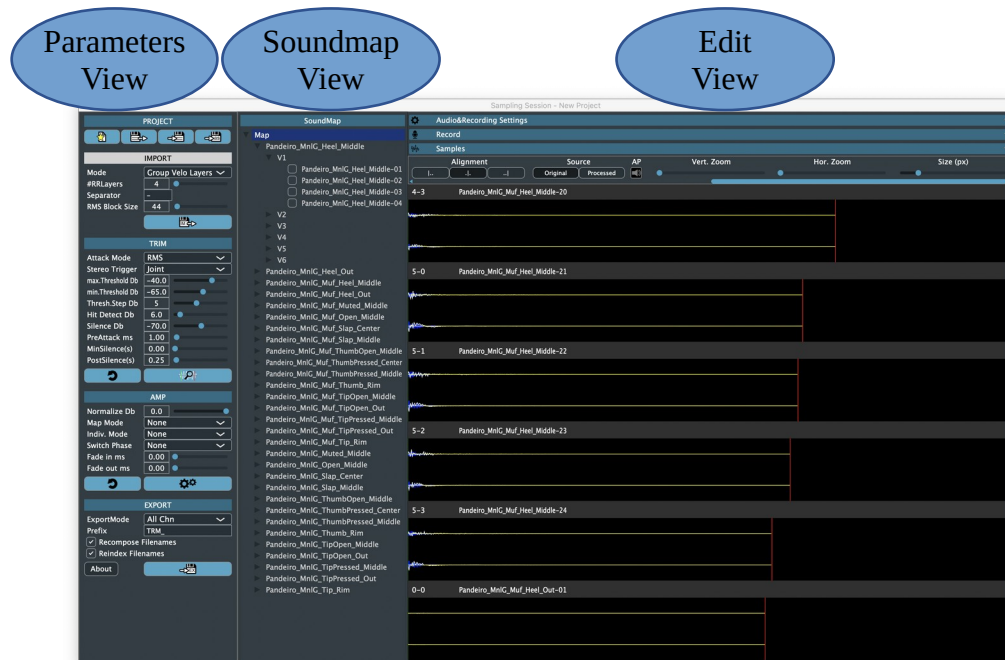
## 1.5 About this manual

This manual is basicaly devided into 2 parts.

The fist part (2 The User Interface) is more like a reference guide and describes all settings, parameters, functions and their dependencies to (hopefully) full depth.
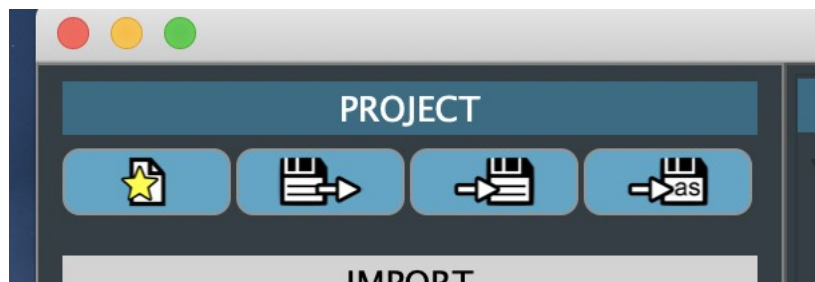
The second part (3 Use Cases) will try to guide you through simple projects, explain best practices and give tips.

# 2 The User Interface



## 2.1 Parameters View

### 2.1.1 Project Section



#### *2.1.1.1 New Project Button*

Creates a new (empty) Sampling Session project. You will be asked if you are sure to lose all data of your current project. If your current project contains data that you would like to keep, save it first. However, already existing samples or such that you have recorded with this software will NOT be deleted from disk.

#### *2.1.1.2 Load Button*

Loads a previously saved Sampling Session project. You will be asked if you are sure to lose all data of your current project. If your current project contains data that you would like to keep, save it first. However, already existing samples or such that you have recorded with this software will NOT be deleted from disk.

A file-select dialog box will appear so that you can find and choose the desired project file. Sampling Session project files have the extension „.ssp".

### 2.1.1.3 Save Button

Saves the current project.

If you have never saved the current project before, a file-select dialog box will appear so that you can choose the folder and file name. Otherwise, the project will be saved to the previously saved (or loaded) project file.

The default extension for Sampling Session Project files is „.ssp".  In case that you save your project to a file that already exists, this will be renamed to „.ssb" first, so that you have a backup of the previous project data.

Be aware that the samples for your projects are individual wav / aif files on your disk. The project files only refer to these samples with a path relative to the location of the project file. Be really careful when you move a project file around on your file system.  You will have to move also the referred sample files accordingly.  Good practice in some cases would be to save your project into the same folder where the sample files are located.

### 2.1.1.4 Save-As Button

Saves the current project into a file with different name/location. A file select dialog box will appear so that you can choose the folder and file name.

## 2.1.2 Import Section
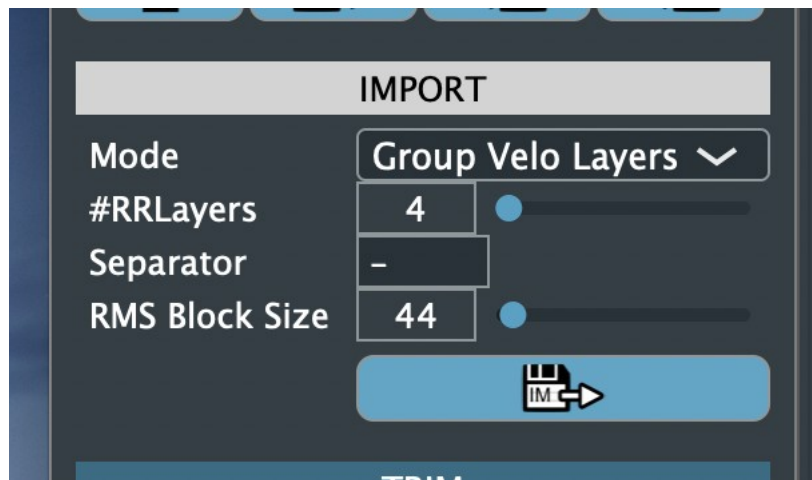


In the Import Section you will find parameters and controls to import existing samples into the current project  (e.g. samples that you have exported from a DAW or from sample editors).

### 2.1.2.1 Mode

Here, you can choose the mode of importing existing samples:

### 2.1.2.1.1 1Sound1Sample

Each sample will be imported to an individual Sound (and a velocity layer named „V1"). Use this setting if „Group Velo Layers" / „Standard" do not apply, e.g. when your samples have random/individual names and do not apply to a naming convention.

### 2.1.2.1.2 Group Velo Layers

Samples that are named to this specific naming convention will be imported and grouped into Sounds / Velocity Layers / RoundRobin Layers automatically.

The naming convention is:

Soundname-SortKey.aif/wav, where

- Soundname is the name of the sound that the sample will be assigned to

- Sortkey may be an alphabetically ordered key that allows the software to assign the samples to velocity layers, according to the #RRLayers setting.

Example 1:

Foo-01.aif , Foo-02.aif, Foo-03.aif, Foo-04.aif, Foo-05.aif, Foo-06.aif, Foo-07.aif, Foo-08.aif with a #RRLayers setting of 4 will import the samples to a sound named Foo, with 2 velocity layers V1 and V2, where V1 contains Foo-01 to Foo-04 and V2 contains Foo-05 to Foo-08.

Example 2:

Foo-V1S1.aif, Foo-V1S2.aif, Foo-V1S3.aif, Foo-V1S4.aif, Foo-V2S1.aif, Foo-V2S2.aif, Foo-V2S3.aif, Foo-V2S4.aif with a #RRLayers setting of 4 will import the samples to a sound named Foo with 2 velocity layers V1 and V2, where V1 contains Foo-V1S1 to Foo-V1S4 and V2 contains Foo-V2S1 to Foo-V2S4.

### 2.1.2.1.3 Standard

Import samples with the Sampling Session naming convention. Samples that you export with this software will have file names according to this naming convention:

SoundName-VelocityLayerName+SampleNumber.aif/wav

where the SampleNumber is a 2-digit numerical index.

E.g.: Foo-Soft+01.aif

SoundName and VelocityLayerName can be set in the SoundMap view.

### 2.1.2.2 #RRLayers

Sets the number of RoundRobin layers (samples) that are expected in one velocity layer. This setting applies to

- importing existing samples (please read also 2.1.2.1 Mode)

- recording samples with the „Continue Recording in Velo Layer" / „Continue Recording in Sound" options activated.

### 2.1.2.3 Separator

Sets the expected separator character for importing in „Group Velo Layers" mode (please read also 2.1.2.1 Mode).

### 2.1.2.4 RMS block size

Sets the RMS analysis block size.

Each sample (imported or recorded) will be analysed regarding its RMS power in order to detect attack / silence positions. The RMS power will be also visible as blue areas behind the samples in the samples list.

A good starting point (default setting) is 44 samples, which corresponds to around 1ms at 44100Hz sampling rate. If the default setting does not work for you, you can try to experiment with this setting, although very small or very large settings will probably give results that are useless for attack detection.

Keep in mind that the measured RMS blocks will overlap by block size / 2, so with the default settings 44 samples will be taken to measure a block, but the next block starts only 22 samples behind the previous one.

## 2.1.3 Trim Section
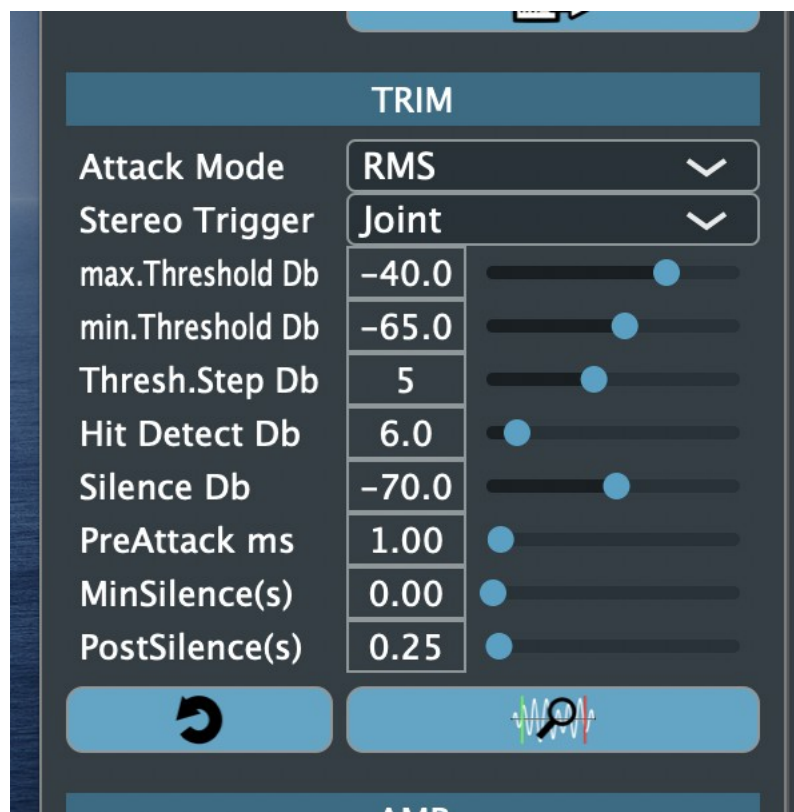


In this section you can set the parameters with which the attack / silence detection works. In most cases you should be able to detect suitable attack / silence positions with the default settings, adjusting only Max.Threshold dB and Silence dB.

### 2.1.3.1 Attack Mode

### 2.1.3.1.1 RMS

Detect attacks by RMS power. As described above, each sample will be analysed regarding its RMS power in blocks of n (default=44) samples. When the RMS power of a block exceeds the

setting of the threshold  (see 2.1.3.3 Max. Threshold dB / min. Threshold dB / Threshold step dB )
then an attack position is found. The Stereo Trigger Mode (2.1.3.2  Stereo Trigger Mode) will also
have an impact on this process.

## 2.1.3.1.2 Peak

Detect attacks by its peak values (not RMS but the values of individual frames). When a frame
value exceeds the the threshold  (see 2.1.3.3 Max. Threshold dB / min. Threshold dB / Threshold
step dB) then an attack position is found. The Stereo Trigger Mode (2.1.3.2  Stereo Trigger Mode)
will also have an impact on this process.

## 2.1.3.1.3 RMS + Hit

Works roughly similar to the RMS mode, only that the detection of an attack also requires an RMS
power increase of n dB (see 2.1.3.4 Hit detect dB) from one RMS block to the next.  It is very
unlikely that you will have to use this mode, but it could be useful for samples with a higher
background noise energy.

## *2.1.3.2 Stereo Trigger Mode*

In the case that you are using stereo samples, you can define here in which way the attack detection
uses the RMS / Peak values to trigger attacks:

## 2.1.3.2.1 Joint

Use the average of left plus right RMS or Peak value.

## 2.1.3.2.2 Left

Use the RMS or Peak value of the left channel only.

## 2.1.3.2.3 Right

Use the RMS or Peak value of the right channel only.

## 2.1.3.2.4 First

Trigger an attack when the first of left/right channels exceeds the threshold settings.

## 2.1.3.2.5 Both

Triggers attack only when both channels exceed the threshold settings.

## *2.1.3.3 Max. Threshold dB / min. Threshold dB / Threshold step dB*

The attack detection will start with a threshold of „Max.Threshold dB".  If no attack can be detected
with this settings, then it will try again with a smaller threshold  (-Threshold step dB),  until an
attack could be detected or until the threshold reaches „min Threshold dB".

Keep in mind that thresholds smaller than -60 dB can already trigger with background noise, so the
default of -40 dB is a good starting point.

## *2.1.3.4 Hit detect dB*

Set here the desired increase of dB from one RMS block / frame to the next,  when using the „RMS
+ Hit" attack mode (see 2.1.3.1.3 RMS + Hit).

### 2.1.3.5 Silence dB

Set the RMS power in dB that triggers silence.

After an attack has been found, the attack detection will also look for silence in the sample, in order to trim a sample towards its end. Silence will be triggered when the joint RMS power ((left+right)/2) falls below this threshold.

### 2.1.3.6 Pre Attack ms

Set how many ms the attack trim marker should be set before the RMS value goes actually beyond the threshold. Usually, recorded samples have a ramp time of at least a few samples (percussive) to several hundreds of milliseconds until the threshold matches to find an attack. In order to keep those samples before reaching the threshold, set the pre-attack time to some reasonable value. For percussive sounds 1ms should do fine, otherwise set it to a higher value.

### 2.1.3.7 Min Silence (s)

Set how many seconds the RMS power must stay below "Silence dB" in order to finally detect silence. This setting may be helpful when you try to record sounds that have unsteady RMS power or such that may have short gaps (like when somebody talks).

### 2.1.3.8 Post Silence (s)

Set how many seconds after detected silence should be taken over into the processed sample.
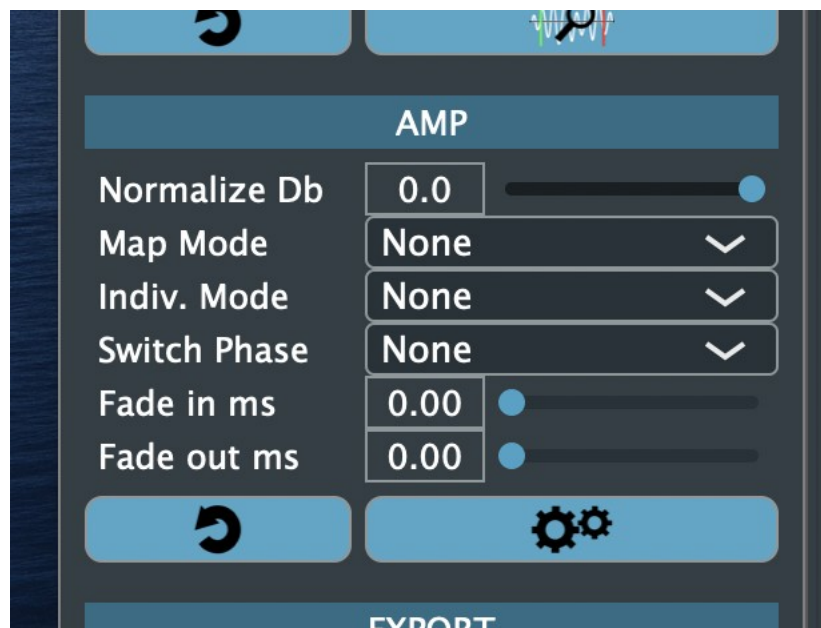
### 2.1.3.9 Find Trim Button

Searches trim positions for all selected samples (see 2.2.2 Item Selection).

### 2.1.3.10 Reset Trim Button

Resets trim positions for all selected samples (see 2.2.2 Item Selection).

## 2.1.4 Amp Section



The Amp Section will give you a few possibilities to normalize, fadeIn/Out or phase-switch samples.

The particular functions will not be process immediately as you select a mode. You have to set all desired modes and parameters, select the items in the Soundmap for which you want to process these settings, and then click the Process button.

### 2.1.4.1 Normalize dB
Normalize samples to this dB power  (single frame values, not RMS) with the selected mode (2.1.4.2 Map Mode / 2.1.4.3 Indiv. Mode).

### 2.1.4.2 Map Mode
The Map Mode will first detect the sample frame with the highest power across the entire Soundmap, calculate the difference to "Normalize dB" and then amplify all samples by this difference.

Note: this Map Mode will actually only work, if "Indiv. Mode" is switched off as both functionalities would work against each other.  Note also that Map Mode works on the entire Soundmap, regardless of which items you have actually selected in the Soundmap view.

### 2.1.4.2.1 None
Function is switched off.

### 2.1.4.2.2 All Chn
Does the normalisation for all channels of the samples, if you are working with stereo samples.  So, if e.g. the highest power of the Soundmap is -3 dB on the left channel (and supposed that "Normalize dB" is set to 0.0),  3 dB will be added to left AND right channels.

### 2.1.4.2.3 Indv Chn
Does the normalisation for left and right channels individually, if you are working with stereo samples..   So, if the highest power of the Soundmap is -5 dB on the samples left channel and -3 dB on the samples right channel (and supposed that "Normalize dB" is set to 0.0),  5 dB will be added to the left channel and 3 dB to the right channel of all samples.

### 2.1.4.3 Indiv. Mode
The Individual Mode will normalise each sample individually to "Normalize dB".

Note: this Map Mode will actually only work, if "Indiv. Mode" is switched off as both functionalities would work against each other. Note also that this mode, in contrast to "Map Mode", will work only on the items that you have selected in the Soundmap view.

### 2.1.4.3.1 None
Function is switched off.

### 2.1.4.3.2 All Chn
Does the normalisation equally for all channels of each sample.  So, if e.g. the highest power of a particular sample is -3 dB on the left channel (and supposed that "Normalize dB" is set to 0.0),  3 dB will be added to left AND right channels of the particular sample.

## 2.1.4.3.3 Indv Chn

Does the normalisation for left and right channels individually.   So, if the highest power of a particular sample is -5 dB on the left channel and -3 dB on the right channel (and supposed that "Normalize dB" is set to 0.0),  5 dB will be added to the left channel and 3 dB to the right channel of the particular sample.

## *2.1.4.4 Switch Phase*

Use this function to switch phases of the samples.

If you plan to export left and right channels to separate audio files in order to use them as individual layers in your sample player, you could get into the situation that the signal of both layers played together in mono would (almost) cancel themselves out. So you'd maybe like to switch the phase of a channel.

Note that this functionality works only on those items that you have selected in the Soundmap view.

## 2.1.4.4.1 None

Function is switched off.

## 2.1.4.4.2 All Chn

Switch the phases of both (left & right) channels.

## 2.1.4.4.3 Left

Switch the phase of the left channel only.

## 2.1.4.4.4 Right

Switch the phase of the right channel only.

## *2.1.4.5 Fade in ms*

Set the time for the fade-in that will be applied to the samples (0.0 = no fade-in).

The purpose of this function is to apply a (usually) very short fade-in ramp to samples in order to avoid clicks, e.g. when the attack trim position is not at absolute silence. Usually, when you record acoustic instruments you won't have absolute silence at the start of a sample and a harsh cut at such a position could lead so a clicking sound.

## *2.1.4.6 Fade out ms*

Set the time for the fade-out that will be applied to the samples (0.0 = no fade-out).

The purpose of this function is to apply a (usually) very short fade-out ramp to samples in order to avoid clicks or to control the room ambiance.

## *2.1.4.7 Process Button*

Processes all items that are selected in the Soundmap view (see 2.2.2 Item Selection).  This includes

- applying trim

- applying amplification  (Normalisation, phase-switch, fade-in/out)

The processing has no impact on the original samples. Instead, the processing will work on a copy. This processing copy can be viewed and listened to in the sample list by clicking the "Processed" toggle button (2.3.4.1.4 Source)after the processing is done.

Note: the processed samples will neither be saved within your project nor be later available as audio files. Although possible, the process step is not intended for individual, artistic changes. You may give your samples (in best case to the entire Soundmap) a final, technical touch and then export the samples (2.1.5 Export Section), so you'll have the resulting audio files on disk.

### 2.1.4.8 Reset Processing Button

Resets / deletes the processed samples for all the selected items in the Soundmap (see 2.2.2 Item Selection). This will obviously leave the sample list with gaps, when viewing processed samples.

## 2.1.5 Export Section
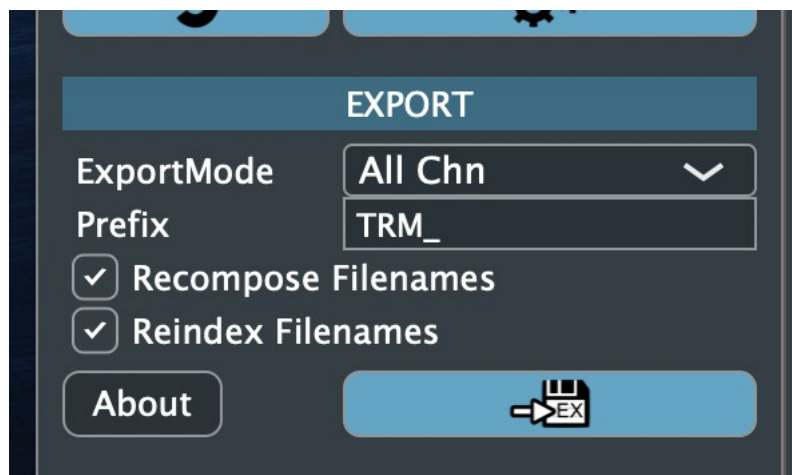


Settings for the export of processed samples.

Note that the export process will not run on just making any settings for the below parameters, but when you've made all settings, selected the items to export in the Soundmap and clicked on the "Export" button.

### 2.1.5.1 Export Mode

Sets how export should handle stereo samples.

## 2.1.5.1.1 All Chn

Exports all channels into one audio file (Stereo, when working with stereo samples).

## 2.1.5.1.2 Splt Chn

Creates an audio file for the left and one for the right channel separately, adding the extensions "_L" and "_R" to the file names.

### 2.1.5.2 Recompose Filenames and Reindex Filenames

If both options are deactivated, the export process will use the original sample names (as imported or recorded) for export. You can see the sample names in the sample list.

Setting the "Recompose Filenames" option active, Sampling Session will recompose the file names for export as:

- Sound name + "_" + velocity layer name + "-" + sample index in velocity layer.

This corresponds to the standard naming convention (see 2.1.2 Import Section).

In this case, the real index of a sample in its velocity layer will be used. So, if you have a velocity layer with 6 samples and only samples 1,3,5 and 6 are checked for export, the indexes used will be "01","03","05" and "06".

Setting the "Reindex Filenames" option active, the used sample indexes for the above example will be "01","02","03" and "04" for the above example, leaving the original sample indexes or names int the Soundmap as they are. These indexes will then not longer correspond to the order (or naming) of the source samples, but this could be of advantage for importing the processed samples into a sample player.

### 2.1.5.3 Prefix

In order to make a difference between the source sample file names and the exported sample file names (especially if you would export samples to the same folder where the source samples are located … source samples could be overwritten!), the name prefix set in this edit field will be added to the export file name.

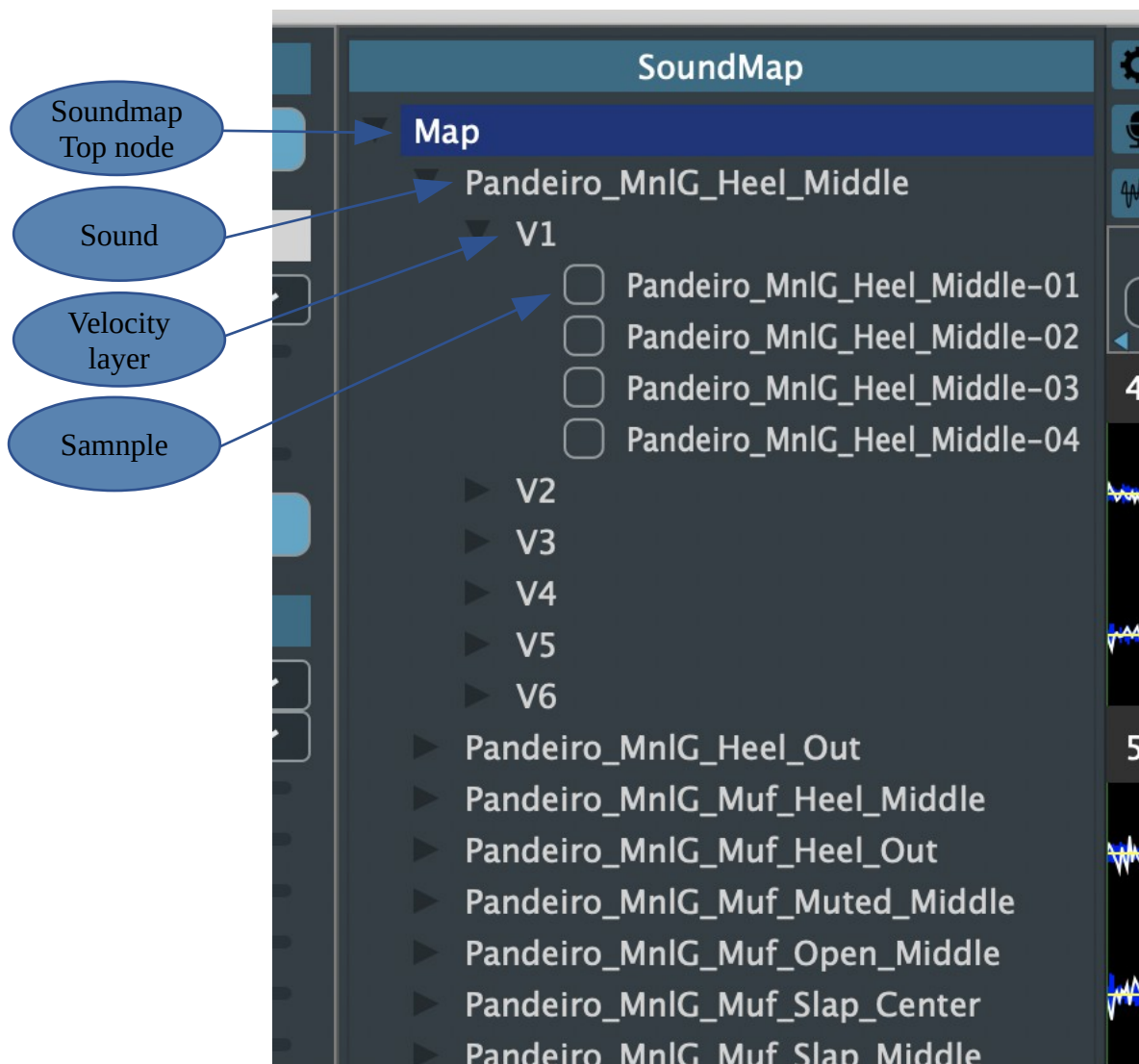So, if "TRM_" is set in this field, all file names of exported samples will start with "TRM_".

### 2.1.5.4 Export Button

Exports all processed samples which are selected for export. Please refer to 2.2.2 Item Selection to learn about selecting samples for export.

### 2.1.5.5 About Button

Displays some information (version number, contact) in a popup window.

## 2.2 Soundmap View



The Soundmap view displays a hierarchically grouped list of all the samples contained in the project.

It is also the place where the selection of samples/velocity layers /sounds for trimming or processing, and the selection of samples for export takes place.

### 2.2.1 Hierarchy
The Soundmap is divided hierarchically into sounds, velocity layers and samples, where

- Sound represents a real sound/articulation that you would assign to one or several midi keys. A sound may contain various velocity layers, obviously at least one.

- Velocity Layer is a group of samples that share the same intensity/pressure. A velocity layer can contain as little as one sample, but also more than one in order to have some almost identical samples for implementing RoundRobin in a sample player.

- Sample is …. a sample ….is a sample.

### 2.2.2 Item Selection
All actions that you perform (this would be finding/resetting trim prositions, processing/resetting samples, recording samples and also dragging items around) depend on what you've selected here:

- Soundmap: actions apply to all samples contained in this sound map.

- Sound: actions apply to all samples within this sound.

- Velocity layer: actions apply to all samples of this velocity layer.

- Samples: actions apply to this individual sample.


You can select multiple items in the Soundmap (shift-click). Actions will then apply to all selected items.

Note: by selecting multiple items you will probably mix hierarchical layers. If you select 2 velocity layers while they are opened (so you can see the contained samples), the visible selection will range from the first velocity layer item across some sample items to the second velocity layer. The logical selection will contain items from only ONE hierarchical layer. So, if you've first marked a velocity layer, then the list of logically selected items will only contain velocity layer items….you've marked first a sound item, then only sound items will be part of the selection. Only the logically selected items will apply to actions.

### 2.2.3 Drag Move
If you've selected one or more samples in the Soundmap (see 2.2.2 Item Selection) you can drag them into a different velocity layer or to a different position within the current velocity layer.

### 2.2.4 Drag Import
You can import samples directly from a finder / file explorer window into the Soundmap. There are two options:

- Drag into a velocity layer
  All samples that you've selected in the finder/file explorer window and dragged into a velocity layer item will be imported here with their original file names.

- Drag into Soundmap
  All samples that you've selected in the finder/file explorer window and dragged into the Soundmap item will be imported taking into account the import parameters (see 2.1.2 Import Section). This kind of import will behave exactly as importing samples by clicking the Import button.

### 2.2.5 Selecting Samples for Export
Only those samples which are selected for export (checkbox at the left of each sample item) will actually be exported. This way you can select the best samples of a velocity layer without having to delete those samples that you consider to be not-the-best (at a later point you may change your mind and select different samples).

Just click the checkbox at the left of the particular sample item to select/deselect for export. You can also use the context menus (see 2.2.6 Context Menus) to select or deselect all samples of a velocity layer, a sound or the Soundmap.

## 2.2.6 Context Menus

Each item node in the Soundmap view offers a context menu, accessible through a right mouse-click.

### 2.2.6.1 Soundmap
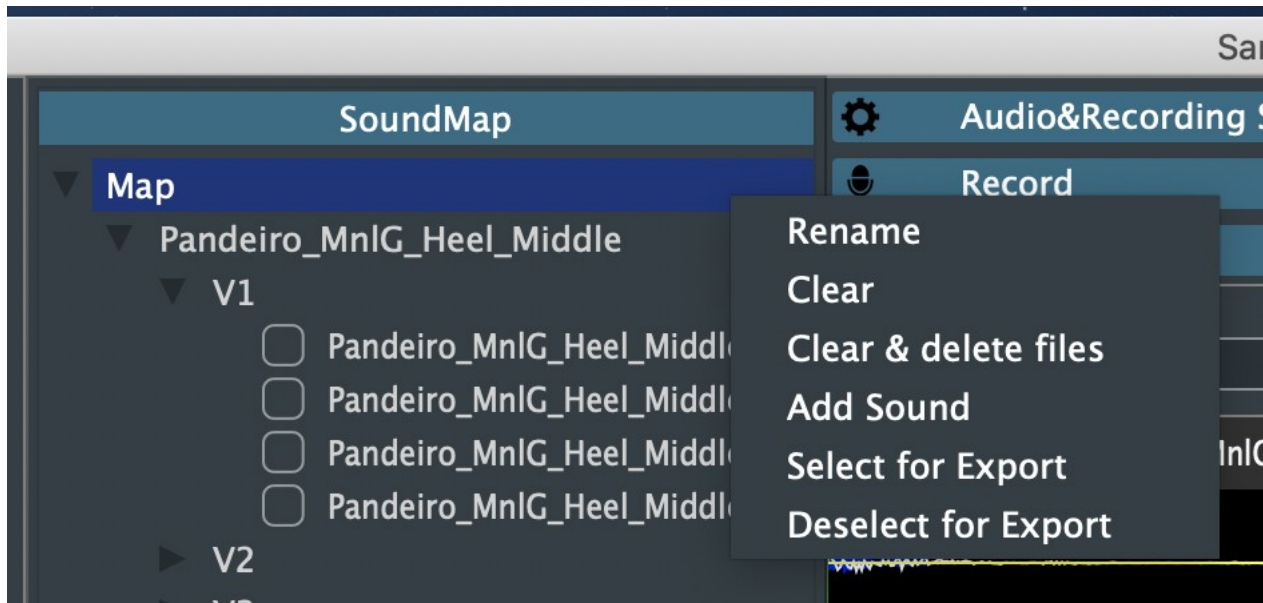


## 2.2.6.1.1 Rename

Rename the Soundmap from default="Map" to a different name. This has no further impact as the name of the Soundmap is only use for display.

## 2.2.6.1.2 Clear

Clears the entire content of the Soundmap (leaves it empty) but does not delete the corresponding audio files from your file system.

## 2.2.6.1.3 Clear & delete files

Clears the entire content of the Soundmap (leaves it empty) and deletes all corresponding audio files from your file system .... IF (and only if) these were recorded with Sampling Session (audio files which were imported will not be deleted !).

## 2.2.6.1.4 Add Sound

Adds a new sound to the Soundmap. The new sound will be named „Sound_n"  (where n is the next non-existent index).

## 2.2.6.1.5 Select for Export

Select all samples within the Soundmap for export.

## 2.2.6.1.6 Deselect for Export

Deselect all samples within the Soundmap for export.

## 2.2.6.2 Sound



## 2.2.6.2.1 Rename

Rename a sound. The sound name is part of the file/sample name when recording new samples. The sound name becomes important also for exporting processed samples (please refer to the Export Section, above)

## 2.2.6.2.2 Remove

Removes this individual sound as well as its contained velocity layers and samples from the Soundmap. The corresponding audio files will not be deleted from the file system.

## 2.2.6.2.3 Remove & delete files

Removes this individual sound as well as its contained velocity layers and samples from the Soundmap. The corresponding audio files will also be deleted from the file system…. IF (and only if) these were recorded with Sampling Session (audio files which were imported will not be deleted !).

## 2.2.6.2.4 Add Velocity Layer

Adds a new velocity layer to the sound. The new velocity layer will be named „Vn" (where n is the next non-existent index).
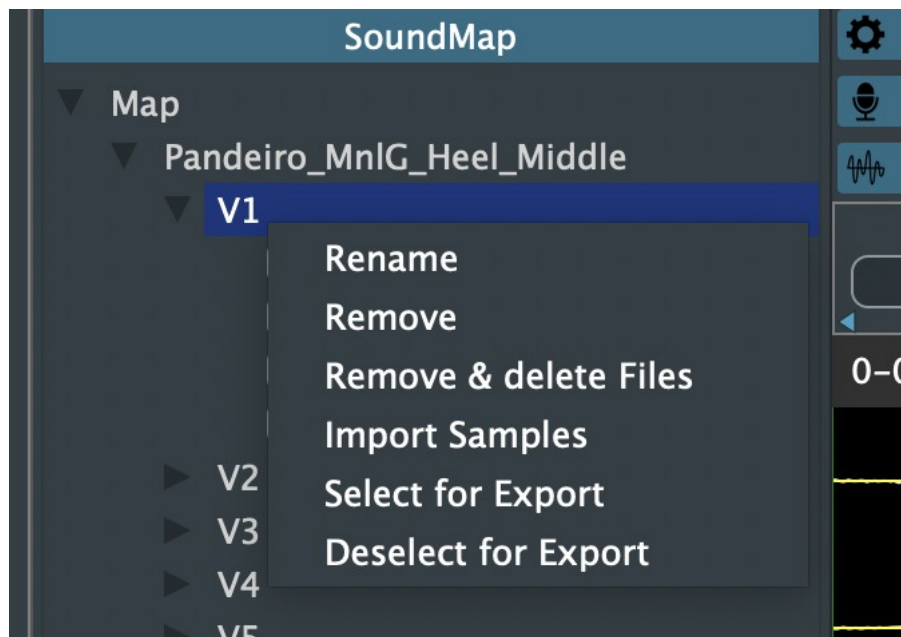
## 2.2.6.2.5 Select for Export

Select all samples within the sound for export.

## 2.2.6.2.6 Deselect for Export

Deselect all samples within the sound for export.

## 2.2.6.3 Velocity Layer



## 2.2.6.3.1 Rename

Rename the velocity layer. The velocity layer name is part of the file/sample name when recording new samples. The velocity layer name becomes important also for exporting processed samples (please refer to the Export Section, above)

## 2.2.6.3.2 Remove

Removes the velocity layer and all its contained samples from the Soundmap. The corresponding audio files will not be deleted from the file system.

## 2.2.6.3.3 Remove & delete files

Removes the velocity layer and all its contained samples from the Soundmap. The corresponding audio files will also be deleted from the file system…. IF (and only if) these were recorded with Sampling Session (audio files which were imported will not be deleted !).

## 2.2.6.3.4 Import Samples

Lets you import existing samples from the file system into this particular velocity layer. A file dialog will open and you can select there one or more samples to import.

Keep in mind that imported samples cannot be deleted from file sytem or re-recorded.

## 2.2.6.3.5 Select for Export

Selects all samples within the velocity layer for export.

## 2.2.6.3.6 Deselect for Export

Deselects all samples within the velocity layer for export.

### *2.2.6.4 Sample*



## 2.2.6.4.1 Rename

Rename this particular sample. This will not rename the corresponding audio file on the file system. Renaming a sample will have no further impact, not even for exporting process samples.

## 2.2.6.4.2 Remove

Remove this particular sample from the Soundmap. The corresponding audio file will not be deleted from the file system.

## 2.2.6.4.3 Remove & delete files

Remove this particular sample from the Soundmap. The corresponding audio file will also be deleted from the file system…. IF (and only if) it was recorded with Sampling Session (audio files which were imported will not be deleted !).
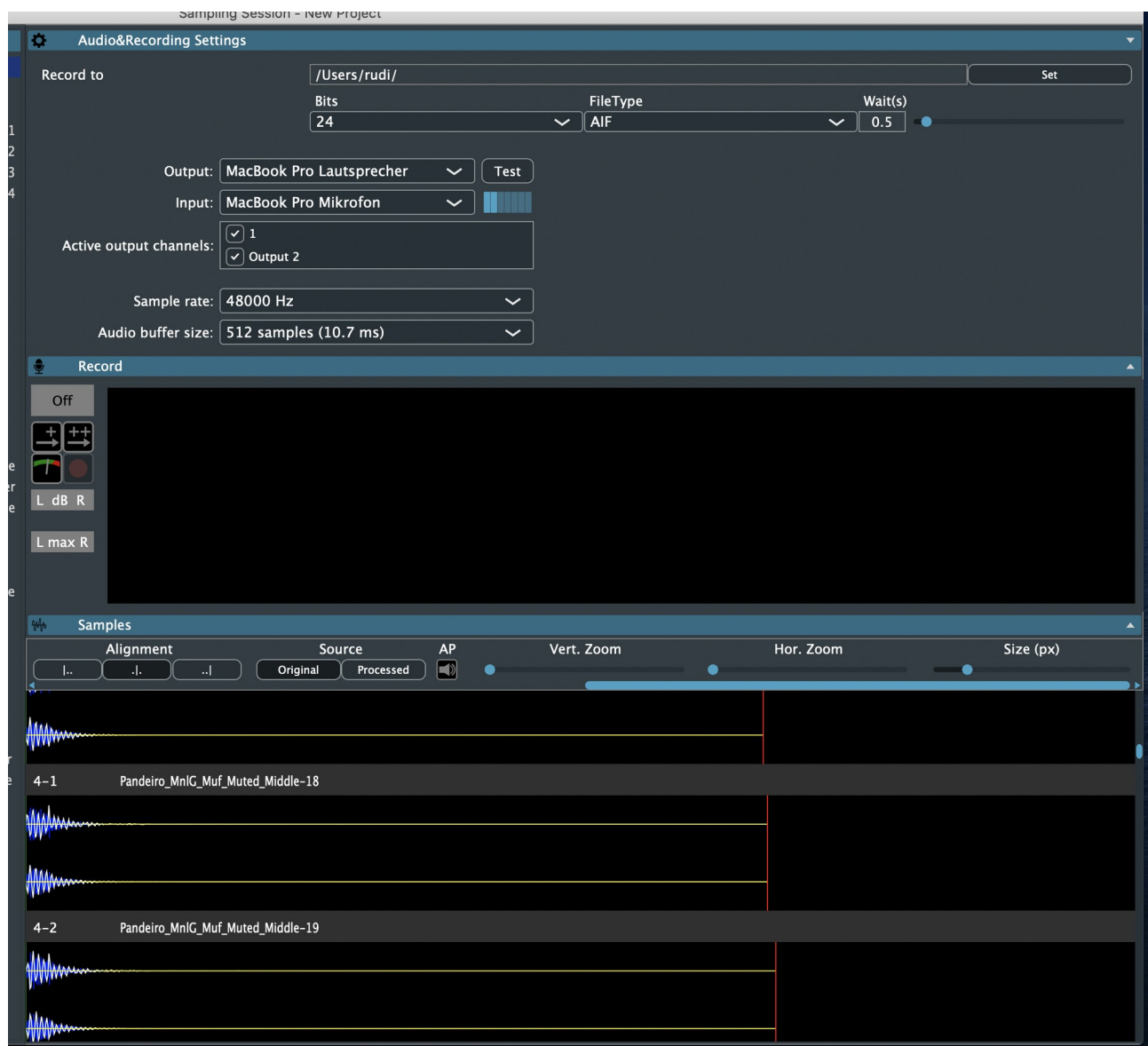
## 2.2.6.4.4 Select for Export

Selects this particular sample for export.

## 2.2.6.4.5 Deselect for Exported

Deselects this particular sample for export.

## 2.3 Edit View



The Edit View provides functionalities to
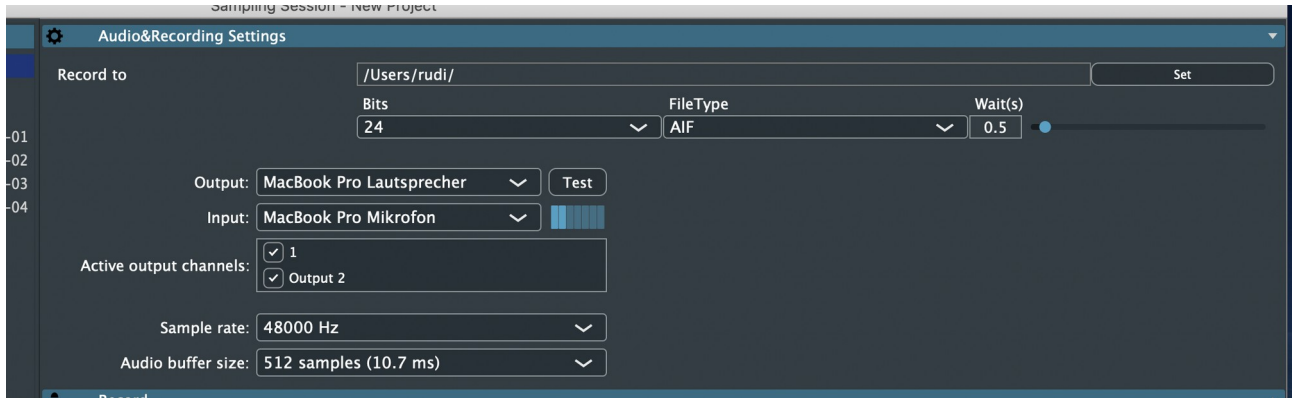
- Modify audio settings
- Record samples
- Browse through the sample list and listen to samples
- Set the trim positions (attack/silence) manually for each sample

### 2.3.1 Opening and resizing Sections

The Edit View is made of a Concertina (or Accordion) component which allows you to adapt the size of each section.  Simply click and drag the section headers to change the size of sections.

You can also click on the white triangle icon on the right edge of a header to maximize the corresponding section.

## 2.3.2 Audio & Recording Settings Section



In this section you can modify your audio settings and some basic settings for the recording process.

### 2.3.2.1 Recording Settings

### 2.3.2.1.1 Record-to Path Setting

The label shows the current location on the file system to which new recordings (audio files) will be written.   To change this location, click on the Set button to the right. A file dialog will appear and you can select a different folder.

It would be wise to think about locations for your projects and recordings before you actually start recording, as the project files contain only relative references to the audio files. Moving audio files later across the file system means that you have to move also the project file to a valid location.

### 2.3.2.1.2 Bits & File Type Selection

Set bit depth and audio file type for your recordings. These two settings refers only to the kind of audio file that will be written to the file system, not to any properties of your audio device.

Available bit depths are 8, 16 and 24 bit  (24 bit is default).

Available file types are WAV and AIF (AIF is default).

### 2.3.2.1.3 Wait Time Setting

In case that you record samples with one of the "Continue Recording…" options (see 2.3.3.4 Continue Recording in Velo Layer Button, and following ), you may want to set the wait time to a suitable value.

The wait time indicates the time that the recording process pauses between the recording of 2 consecutive samples.  So, if one recording has been made, the system waits for this time (like maybe 1 or 2 seconds) before it goes into listening status again.  This way you'll find some time to breathe or scratch your cheeks in between.

The default wait time is 0.5 seconds, please adapt this to your liking.

Please refer to "Recording Section" to learn about the recording process and its statuses.

### 2.3.2.2 Audio Settings
Select the audio device(s) to use and modify their settings

## 2.3.2.2.1 Output
Select the output audio device. The content of this combo box depends on which output audio devices you have in (or connected to) your system.

## 2.3.2.2.2 Input
Select the input audio device. The content of this combo box depends on which input audio devices you have in (or connected to) your system.

## 2.3.2.2.3 Active output channels
Check the channels of the selected output audio device that you want to use for playback. Sampling Session plays in Stereo (2 channels) by default,  so you may want to check 2 output channels.

## 2.3.2.2.4 Active input channels
Check the channels of the selected input audio device that you want to use for recording. Sampling Session can record in mono (1 channel) or stereo (2 channels).

The active input channels – selector will only appear if you actually have a choice. If you've selected the mic of a notebook as input device, this selection will probably not appear in the audio settings as the mic is mono and you don't have a choice.

## 2.3.2.2.5 Sample rate
Set the sample rate that you want to use for recording or playback. The available options and the default setting may vary from system to system.

Note: if you work with samples that were recorded with a different sample rate than set here, playback will produce the sound with the correct pitch through linear interpolation. However, linear interpolation is not the holy grail of audio processing and may lead to some audible artefacts while playing the samples, so better adapt this setting to your needs.

## 2.3.2.2.6 Audio buffer size
Set the audio buffer size.  The available options and the default setting may vary from system to system.

This setting should not lead to any noticeable differences, better stick to the default setting.

## 2.3.3 Record Section
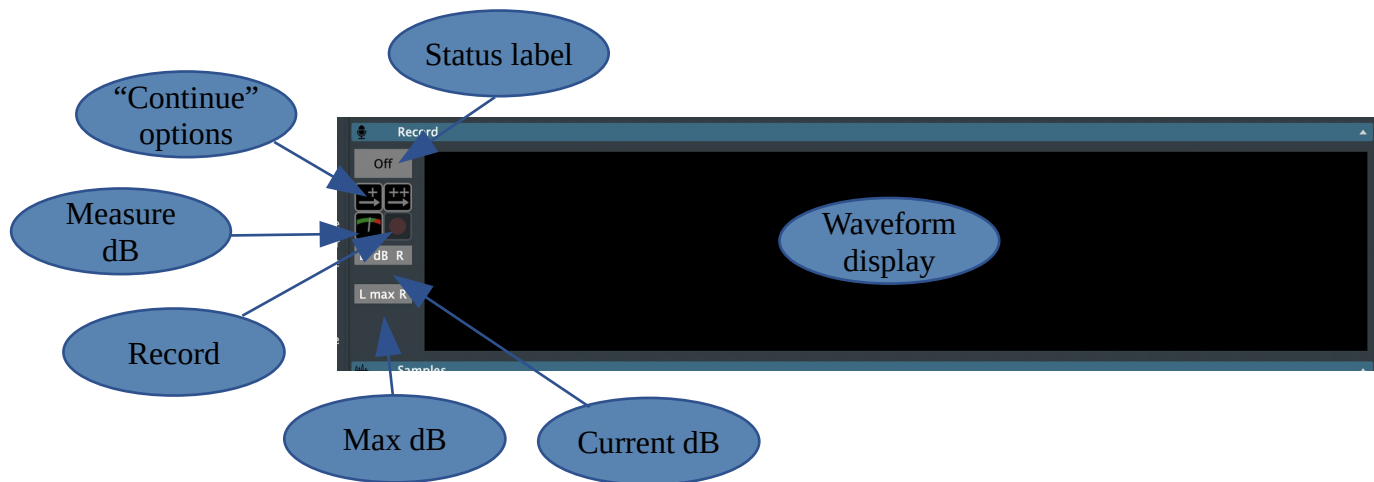


This is the place where you control the recording of samples.

### 2.3.3.1 Input Waveform

The big black square shows the incoming audio signal, when the recorder is set to either "Measure dB" or "Record" mode (see 2.3.3.6 Measure dB Button and 2.3.3.7 Record Button).

In all other cases the big black square will show itself as big black square.

### 2.3.3.2 Recording Status Label

The recording status label shows the status of the recording process at the moment. If you don't record at all, it should display "Off".

### 2.3.3.3 Recording Status

Read this section carefully, it is probably the most important section of this manual.

As you surely can guess from previous descriptions in this manual, the recording process consists of several statuses, of which one follows another according to certain conditions:

- Off:
  inactive, not recording or listening.
  This state is set

  ○ before you click on the record button, or

  ○ for a very short period between two consecutive recordings (see 2.3.3.4 Continue Recording in Velo Layer Button, and following). This is the time that the recorder needs to finalize recording and update the UI (you won't probably even notice).

- Wait:
  once a recording starts, either by clicking the Record button or when consecutive recordings happen (see 2.3.3.4 Continue Recording in Velo Layer Button, and following ), the recorder will pause a certain amount of time (see 2.3.2.1.3 Wait Time Setting) in order to give you the chance to get prepared before things become serious.

- Listen:
  when the wait status has ended, the recorder will switch to listening status. In this status the recorder waits until the incoming signal satisfies the conditions of an attack. This happens when the RMS power exceeds the setting of the "Threshold dB Max" parameter (see 2.1.3 Trim Section). It will then switch to Record status….otherwise it'll remain listening until you stop recording by clicking the Record button again.

- Record:
  once the recorder switches into Record status, it will actually record the audio signal and write it to an audio file.

  - It will also (initially) write to file a portion of the audio signal that happened right before the attack has been detected (see 2.1.3.6 Pre Attack ms). So, if you've set this parameter to 10ms, you will finally have a recording that starts with around 10ms of silence (or surrounding noise, or whatever) before the actual instrument sound. Longer pre-attack times can be helpful when you try to record instruments which, by nature, have no percussive attack and raise the RMS power over a certain amount of time (like strings).

  - The recording will continue until the audio signal satisfies the conditions of silence. This will happen when the RMS power becomes less than "Silence dB" for "Min Silence (s)" seconds (see 2.1.3.5 Silence dB and 2.1.3.7 Min Silence (s)).

  - Even then, the recording will continue for "Post Silence (s)" seconds (see 2.1.3.8 Post Silence (s)) in order to avoid a harsh cut or to catch also some natural reverb from your room.

  - When all this is done, the recording process will go into Off status again, the UI will be updated and possibly a new recording will be started (see 2.3.3.4 Continue Recording in Velo Layer Button, and following ).

### 2.3.3.4 Continue Recording in Velo Layer Button

It may happen that you don't want to get your hands off your instrument while recording a series of RoundRobin-samples for a velocity layer and to click the Record button for each new sample.

In this case you can activate the "Continue Recording in Velo Layer Button" option. If done so, the recorder will automatically restart recording (going into Wait→Listen→Record statuses) when the prior recording is done. This will happen until you stop recording by pressing the Record button again.

When using  this option is it important that you are very disciplined, and try to avoid all background noises that would trigger listening status into recording status, like when you accidentally touch your instrument, or even when you make noises clicking the mouse. You may find the Wait (s) setting helpful in this scenario.

### 2.3.3.5 Continue Recording in Sound Button

It may also happen that you don't only want to record a series of RoundRobin samples for a specific velocity layer,  but continuously all samples for all velocity layers of a particular sound.

In this case activate the "Continue Recording in Sound" option.

The prerequisites to work with this option are:

- all velocity layers for the particular sound must be already added to the Soundmap. You have to do this manually, except when you work with an imported set of samples.

- you have to set the "#RRLayers" parameter (see 2.1.2.2 #RRLayers) to your needs. So, if you've set "#RRLayers" to 4, then 4 samples will be recorded for each velocity layer.

- You have to select the velocity layer to start with, in the Soundmap.

Apart from that, this mode works like the "Continue Recording in Velo Layer" mode, only that it continues recording for the next velocity layer when the prior one is full.

You can use this mode also when velocity layers already contain some samples (e.g. when you've manually stopped recording in this mode). In this case the recorder will try to find gaps. Like when #RRLayers is 4, there are 3 samples already existing in the velocity layer, then only one additional sample will be recorded before switching to the next velocity layer.

Once all of the predefined velocity layers are filled, recording stops automatically.

### 2.3.3.6 Measure dB Button

Before you actually start to record you may want to know a few things about your acoustic environment and your instrument.  So, in order to set "Silence dB" to a feasible value, you need to know the RMS power of the background noise in your room. In order to set "Attack dB max." you need to know the RMS power of your instrument in different velocities.

By clicking the Measure dB button, you start measuring the incoming audio signal. Current RMS power values will be displayed below the "L dB R" label  (left / right) and the maximum dB of the last second (*) will be displayed below the "L max R" label (also left / right). All values will be displayed in full dB, as this may only give you a rough idea of what's happening acoustically and not drive you mad with decimal places.

Along with the dB values, the waveform corresponding to the incoming waveform will be displayed in the big black square.

*) You'll probably notice that the max dB values change more frequently than once per second. This is because any current RMS dB value that is higher than the current max. dB will interrupt the one second interval and display the new max. dB immediately.

### 2.3.3.7 Record Button

This button will start the recording process.  Please refer to 2.3.3.3 Recording Status and 2.3.3.4 Continue Recording in Velo Layer Button (and following) to learn how the recording process works.

Each sample that has been recorded will then appear in the sample list and in the Soundmap view.

Recording is only possible if you have a velocity layer or a sample selected in the Soundmap. In the first case all recorded samples will be added to the velocity layer.

In the latter case you will re-record the selected sample.  **Important (!!): there is no undo. Once you have re-recorded a sample, the prior version is lost. Please be sure what you are doing here and IF you really re-record a sample, be sure that you can actually make it better. Otherwise just record new samples with a velocity layer selected and deal with the waste samples later.**

Press this button again to stop the recording process manually.

## 2.3.4 Samples Section
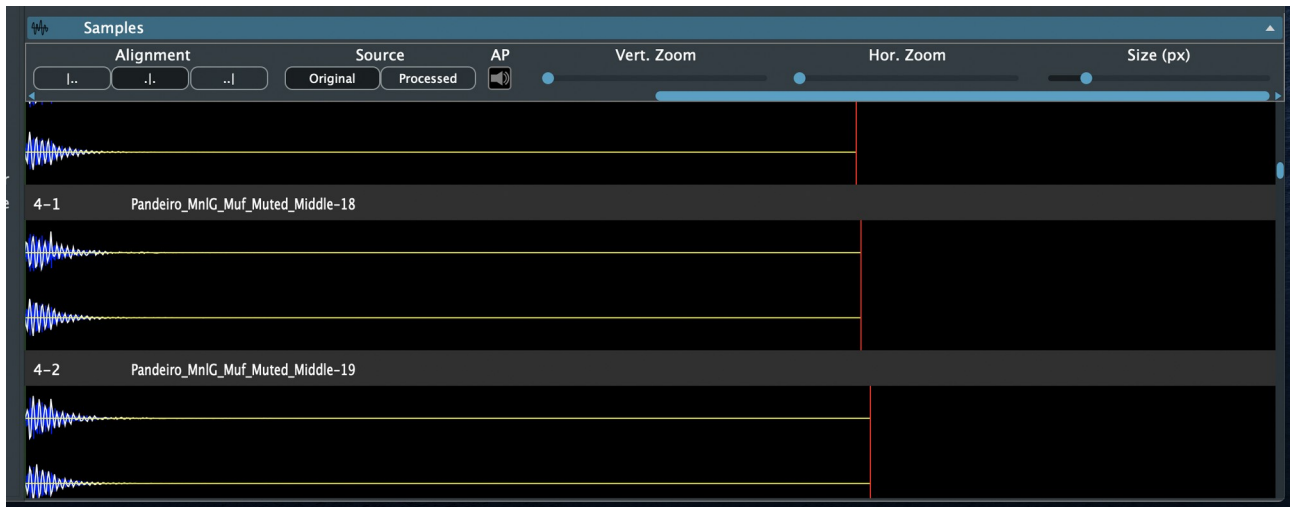


In the Samples Section (or sample list) all the samples that match your selection in the Soundmap will be displayed.

So, if you select the top-node ("Map"),  ALL samples will be displayed; if you've selected a sound, all samples belonging to the sound will be displayed; if you've selected a velocity layer, all samples belonging to the velocity layer will be displayed;  and finally, if you've selected a sample, this particular sample will be displayed. This makes it easier to find samples (or groups of samples) when you are working on projects with many hundreds of samples.

Note: The graphical representation of the samples fills initially only the right half of the horizontally available space of the sample list canvas. You won't see it at first glance because the viewport will be moved according to see the samples...but move the horizontal scrollbar left and right and you'll see that the samples are only visible in the right half of the canvas. This is not a bug, there's a good reason behind this, which will be explained in the "Alignment" section below (see 2.3.4.1.5 Alignment).

### *2.3.4.1 Sample List Header*
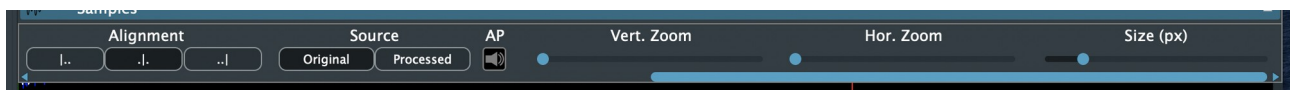


You will find a few controls in the header of the sample list which let you control in which way the samples are displayed.

## 2.3.4.1.1 Size

Adapt the vertical size of each sample in the display. Minimum (and initial) size is 50 pixels.

## 2.3.4.1.2 Hor. Zoom

Move this slider to zoom into the sample horizontally. The initial setting is chosen to fit all samples entirely in the width of the sample list.

The way how samples are painted will change as you zoom in/out.  If the signal is very dense (many frames within a few pixels) the sample will appear more like a power graph. The more you zoom in, more details and individual frames will appear.  The maximum zoom will give you a representation of one frame per pixel.

## 2.3.4.1.3 Vert. Zoom

This slider allows you to zoom the samples vertically, leaving the vertical size as is. Consider this as an „add gain" function. Zooming in you will see more details of low-power frames, while high-power frames will disappear from the view.

## 2.3.4.1.4 Source

Select what you want to see in the samples view.  The original samples (as recorded or imported), or the processed samples. Keep in mind that the processed samples will only be displayed if you have actually processed them before.

## 2.3.4.1.5 Alignment

Continuously scrolling around in order to locate start points, attack points and silence points of samples was one of the biggest pains when I edited samples in a DAW. Furthermore, it took some effort to make samples comparable...this means obtaining a nice graphical representation that lets you decide if samples are more or less even in power ,and if the attacks are more or less at the sample place of the sample… or if maybe some attacks are at 1ms after sample start,  others at 10ms.

The alignment options should give a bit of help here.

There are 3 different alignment options, of which the middle one ( .I. ) is default. Propose that you've recorded or imported a few samples of which the largest is about 2 seconds. Then the canvas will range from -2s to 2s  (double of maximum length) and the samples will initially be painted starting from 0s  (from the center of the canvas to the right border). Let's propose also that you've already set attacks and silence positions (manually, or using the „Find Trim" function. See 2.1.3 Trim Section) :

### 2.3.4.1.5.1    .|.  (Align at begin of sample)

Using this option, all samples will be painted starting from the 0s (centre) position, leaving the left half of the canvas empty. The attack positions are shown as green vertical lines,  some more to the right (later) than others.

### 2.3.4.1.5.2    |.. (Align at attack)

Choosing this option the samples will be aligned at the currently set attack positions,  so all attacks (green lines) are located at the centre of the canvas, and the pre-attack portions of the samples are

moved to the left half of the canvas. This way, all attack positions are aligned to one vertical line at centre and you can decide if you have to edit attack positions for some samples.

Note: This is also the explanation for the double canvas size. Imagine you have accidentally recorded a 5s sample that has its actual attack at 4s. Then, 4s of this sample have to be painted in the left half of the canvas, thus the left half has to be (technically) as large as the right one.

### 2.3.4.1.5.3 ..| (Align at silence)

This option will display all samples aligned at their silence position at the centre of the canvas, leaving everything before silence at the left half.

Dont confuse the icons |.. .|. ..| with fingers, especially the middle one….a hand has 5 of them ...at least usually ;-)

## 2.3.4.1.6 Autoplay

You can listen to each sample selecting it and pressing the space bar (see 2.3.4.2.2.1 Selecting a Sample and 2.3.4.2.2.2 Playing a Sample). When this option is activated, each newly selected sample is played automatically.

## 2.3.4.1.7 Scrollbar

This is the scrollbar that allows you to scroll left and right within the canvas where the samples are painted.

## 2.3.4.2 Sample List
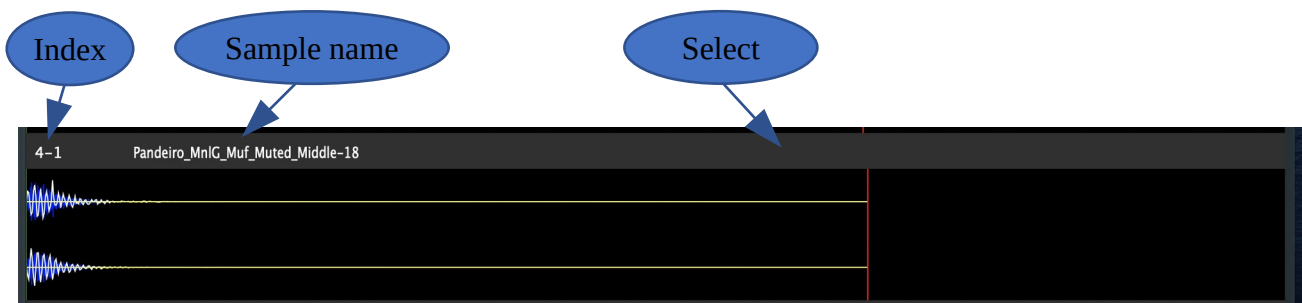


## 2.3.4.2.1 Sample Header

The sample header will display

- a velocity layer number / sample index like "0-1" (just for a rough guidance)

- the sample name (usually containing sound/group/sample name) which corresponds to the file name of the particular sample.

## 2.3.4.2.2 Sample Waveform

The waveform will be painted below the sample header. It depends on the horizontal zoom what you exactly see here. This can range from a dense power-graph style to a detailed "one sample per pixel" style.

Additionally to the waveform you'll notice a blue shadow behind the waveform. This represents the measured RMS power. Zoom in to see this more detailed.

### 2.3.4.2.2.1    Selecting a Sample

Clicking into the right half of the sample header (right to the sample name), you can select a particular sample for playback. Unless the autoplay option, which plays the sample immediately, is activated you'll have to click the space bar to play it.

### 2.3.4.2.2.2    Playing a Sample

Once you have selected a sample in the sample list (see 2.3.4.2.2.1 Selecting a Sample), press the space bar to play it. Hitting the space bar again, will stop playback.

# 3 Use Cases

In this section you'll find general (and therefore incomplete and not very detailed) walkthroughs of how you would practically work with Sampling Session. In any case, refer to the reference in the above sections to learn things in detail.

## 3.1 Working with existing Samples

So, you have already recorded a set of samples from a DAW or sample editor, but you are not fully satisfied with the attack/silence trimming.

### 3.1.1 Import existing Samples

First see what naming convention you have used for the samples and decide the import mode:

- If the samples were already recorded with Sampling Session, but you've somehow lost the project file, or you'd like to rework a set of those samples, use "Standard mode". Sampling Session will name the files according to its "Standard" naming convention while exporting, so this may be the appropriate mode.

- If your samples are named like Soundname-AnyAlphabeticallySortedIndex.wav/aif (where "-" is the separator character), then choose "Group Velo Layers", set the separator character and also set how many samples will be part of one velocity layer (here: #RRLayers). During import, Sampling Session will automatically create sounds and velocity layers and assign as many samples to a velocity layer as #RRLayers indicates.

- If your samples don't apply to any naming convention, you can still use the "1Sample1Sound" mode. Then, each sample will occupy one sound and one velocity layer. This is not the nicest way of importing samples because it makes you click around a lot in the Soundmap …. but it'll import literally everything.

Then click the Import button, and

- browse to the folder of your file system where your samples are located,

- click "Open" and the import will start. You can also select individual or multiple samples instead of an entire folder. Then, only these samples will be imported.

Once the import is done, you'll find all of the samples in the Soundmap. Just click on the triangle icon to the left of each item to open its children.

Keep in mind that you will NOT be able to delete or re-record the audio files if they were imported. Although technically possible, you could accidentally delete audio files that you've maybe recorded with huge effort.

### 3.1.2 Save and load Projects

Once you have imported or recorded samples, you should save the project.

Just click on the Save or Save-As button. Clicking Save on a not previously saved project will do a Save-As, then select the location in file system, give it a name (extension ".SSP" will be automatically added, if not given) and click "Save" in the file dialog.

The magic of saved projects consists in the fact that you can load them again. If you want to do so, click the Load button, browse to where the desired ".SSP" file is located, select it and click "Load" in the file dialog.

Keep in mind that the .SSP project files do no contain the audio data, only relative references to the sample files. If you move folders or project files manually with the finder / file explorer, ensure that the locations of the files are valid afterwards.

### 3.1.3 Browse the Sound Map and Sample List
So, you have a set of samples to work with…

The Soundmap view in the centre of screen will contain all samples grouped into sounds and velocity layers, just as you've decided to import/record. The Soundmap is initially closed, so you'll have to open the child items manually by clicking the triangle icon to the left of the Soundmap items.

Once you've selected something in the Soundmap, you'll see the corresponding samples displayed in the sample list. This would be

- ALL samples if you click the Sounmap top node,
- all samples of a sound if you select a sound,
- and all samples of a velocity layer if you select a velocity layer.

Not to mention that you can also select a set of individual samples, then those will be displayed.

The displayed samples in the sample list will consist of the waveform and a RMS representation that will appear in blue "behind" the waveform.

Select a sample in the sample list (not Soundmap), click the space bar and the sample will be played. Consider activating the AutoPlay option, so you can navigate through the sample list (Cursor Up/Down) and the samples will be played automatically.

### 3.1.4 Find Trim Positions
Now we'll chase some attack and silence positions in the available samples.

Whether you've recorded the samples with Sampling Session or imported them, many of them are not that good trimmed as to use them directly in a sample player.

Read 2.1 Parameters View first, so you get an idea of the parameters. We will not discuss them in detail in this walkthrough.

- Set the "Threshold dB max." parameter to a feasible value. You know best what RMS power your samples have, so make a few experiments. Usually -40dB should be a good starting point. This value provides enough distance to the background noise, and if your samples are not of extremely low power, you'll catch attacks for almost any sample.
- Set the "Silence dB" parameter. I think -70dB is a good value, provided that the background noise of the samples doesn't exceed this value …. if so, you'll never find a silence position.

Then better set it to a slightly higher value.  Anyway, if a signal goes below -60dB, you'll probably not spot it in a mix.

- Set the "Pre Attack (ms)" and "Post Silence (s)" parameters to feasible values. I usually do percussion and drum samples, so I don't need large a pre-attack time. 1 ms is usually good for my applications.  Post silence time can be important when you maybe want to keep a bit of room ambience after "Silence",  but it'll also increase the sample size.

Everything set ?  Then select in the Soundmap for what exactly you want to find trim positions (entire map, one or more sounds, one or more velocity layers, one or more samples…) and click the "Find Trim" button.

Once the find-trim process has ended, you'll see the samples with their new trim positions  (vertical green line = attack,  vertical red line = silence) in the sample list.

- Use the "Align at Attack" option to see if all attack positions are more or less at the same place.

- Select samples in the sample list and play them clicking the space bar. You'll hear only the portion of the sample from attack to silence position.

Not good ?

- Ctrl-Click on the desired position of the sample to set a new attack position manually.

- Ctrl-Shift-Click on the desired position of the sample to set a new silence position manually.

Want to reset attack and silence positions for samples ?

- Select in the Soundmap for what you want to reset trim positions (entire map, one or more sounds, one or more velocity layers, one or more samples…)

- and click the "Reset Trim" button. Then all attacks are reset to start and all silence are reset to end positions of the selected samples.

- Continue with different parameter settings then.

Everything fine? Go on with processing the samples.

## 3.1.5 Process Samples

I usually want to have

- a very short fade-in (maybe 0.1 ms) and a short fade-out (maybe 5ms) just to avoid clicks.

- A individual normalize with "Indv Chn" mode to -0.1dB. This way, every sample gets normalized individually, and also every channel (if you work with stereo samples) gets normalized individually. I do this because I like to control sample volume with the velocity sensitivity of the sample player and because I usually make seperate layers of left channel / right channel, that I'd like to volume-control individually. If you want to preserve the gain differences between left/right, just use individual normalize with "All Chn" mode. If you want to preserve the gain differences between samples, just don't do an individual normalize.

- Sometimes it happens that you record stereo samples where the left and right signal almost phase-cancel themselves  (can e.g. happen with 1 mic above the drum, 1 mic below the

drum). Then I would set the "Switch Phase" parameter for one channel. You don't have to do this, it depends on your needs...

Everything set ? Then

- select in the Soundmap what exactly you want to process (entire map, one or more sounds, one or more velocity layers, one or more samples…)

- and click the "Process" button.

When processing has happened, click on the "Processed" button in the header of the sample list and you'll see the processed samples. You can also play the samples selecting a sample in the sample list and clicking the space bar.

Not good ? Then

- select in the Soundmap what exactly you want to revert (entire map, one or more sounds, one or more velocity layers, one or more samples…)

- and click the "Revert Process" button.

All the processed samples for the selection will be deleted.

Note: At this point there is one thing to mention. The processed samples will not be saved with the project (let this message gel for a while). The processed samples are those which you should actually export manually in the next step. The "Process Samples" step gives you the opportunity to give the samples a last technical polish...hopefully to all of them. Then you take a look, export all of them and have the result as audio files on disk. It is not conceived to make individual, artistic, mutable changes to samples. This is what sample editors a for. Saving processed samples along with the project would add an additional complexity to your work: additional audio files that either the software or you have to deal with afterwards, while the exported samples should already reflect all this. In any case, if saving processed samples should really be needed, I am open for requests.

## 3.1.6 Export processed Samples
Once you've processed the samples, you can export them to audio files.

- Set the desired file name prefix (default is "TRM_") and the export mode in case you deal with stereo samples ( export all channels or split them. In the latter case, two audio files will be exported for each sample. One for the left channel with the suffix "_L" and one for the right channel with suffix "_R").

- Personally, I like to export with the "Recompose Filenames" and "Reindex Filenames" options activated, as they'll provide you nicely indexed/sorted filenames to use in a sample player afterwards.

- Then check in the Soundmap what exactly you want to export. See the little checkboxes at the left of each sample ? Check/uncheck them or use the context menus to check/uncheck all samples for the Soundmap, a sound or a velocity layer.

- Then click the "Export" button, select an export location on you file system and hit "Save".

## 3.2 Recording Samples
You start with a blank project and want to record, and then process samples.

### 3.2.1 Adapt audio and recording Settings
First step, set up your audio environment and recording settings.

The set-up of the audio environment should be easy:

- select your input and output device, check/uncheck the channels and select a sample rate. Any doubts, refer to 2.3.2.2 Audio Settings.

- Select the location in your file system where audio files will be written to. Click on the "Set" button and select a folder.

- Set the wait time (pause between continuous recordings) to your liking.  Short wait times may help you to stay "in the flow" when you try to record several RoundRobin-Samples with equal intensity/pressure, but also may put a bit of stress on you because you have no time to relax or prepare. Longer wait times give you some time to breathe between recordings, but make it more difficult to repeat equal intensity.

- Set of which file type (AIF/WAF) and of which bit depth you'd like to write the audio files to disk.

### 3.2.2 Set up Soundmap Structure
Then you'll need to create a structure in the Soundmap. The underlying hierarchy is

- Soundmap contains sounds

- Sound contains velocity layers

- Velocity layer contains samples (n samples for RoundRobin).

So, a sound is something that we would map to one or more midi keys in a sample player. This may be "Piano_C4toEb4" or "Conga_Slap" or even "Trumpet_Shake_C4toEb4". There is no additional hierarchical layer for the midi key range. If you feel better creating separate projects for individual articulations like "Trumpet_Sustain"/"Trumpet_Shake"/"Trumpet_Fall"  …. do so.

- In any case, give the items in your Soundmap reasonable names. Do this by double-clicking and typing in a name. You can as well use the "Rename" option of the items context menu. These names will be part of the audio file names that are written to disk.

### 3.2.3 Record Samples
Time to do the recordings.

- Press on the "Measure dB" button and keep silent. It'll show you the current background noise of your acoustic environment (some ignorant people also say "room" :-D  ).

- Set the "Max Threshold dB" parameter accordingly. If you have a background noise power of around -40dB,  you should not set it to -45dB as it will trigger immediately… set it to some value higher than the background noise power.

- Set also the "Silence dB" parameter to a greater value than the background noise power, otherwise you'll never reach this silence threshold and recordings will not stop automatically.

- At this stage you should also play around a bit with your instrument and see what RMS power you'll get for different velocities, so you can adjust the "Max. Threshold dB". You may check also if the signal clips (> 0dB) or if it is to week overall. In this case you should adjust the gain of your preamp.

- Set the "Pre-Attack ms" parameter to a suitable value. Percussive Instruments will probably need only a short pre-attack time like 1 or 2 ms.  Other instruments (e.g. strings) may build up RMS power over a longer time before they reach "Max. Threshold dB" and trigger recording. In order not to lose the pre-threshold portion of the sample, set the pre-attack time to a higher value … it depends on the instrument.

Set the "Post-Silence (s)" parameter to a suitable value. If you are satisfied with short samples that end exactly where "Silence dB" is reached, leave it at (or near) 0s.  In other cases, if you want to catch some resonances or room ambiance after "Silence dB" is reached,  set it to a higher value.

Even for percussive instruments I usually set "Pre-Attack ms" to around 5ms and "Post-Silence (s)" to 0.5s,  so I have something to play with when I try to find trim settings in a later step.

### 3.2.3.1 Case 1: Record one sample only
- Do not check the "Continue Recording…" options.

- Select the velocity layer in the Soundmap for which you want to record.

- Click the Record button.

The recording process will wait the specified "wait (s)" time  (Label will show "wait"), then switch into "listen" state  (Label shows "listen"). Now play your instrument. When the RMS power goes beyond "Max. Threshold dB", it'll start recording  (including the pre-attack time).  When you stop playing and RMS power falls below "Silence dB" recording will be stopped (after additionally recording post-silence time). The freshly recorded sample will appear in the sample list and in the Soundmap.

### 3.2.3.2 Case 2: Re-record a sample
In case that you are not satisfied with a sample that you've recorded previously, you can

- select the particular sample in the Soundmap and

- press the Record button.

The recording itself will work as explained in Case 1.

Keep two things in mind:

- There is no undo, so once you re-record a sample, the previous version is gone.

- You cannot re-record samples that were imported.

### 3.2.3.3 Case 3: Record continuously a number of samples for a velocity layer

- Check the "Continue Recording in Velocity Layer" option.

- Select the velocity layer in the Soundmap.

- Click the Record button.

Recording will take place as is described in Case 1. When a sample has been recorded, the recorder will restart this process automatically for the next sample, going through the wait/listen/recording statuses as explained. You can stop the process any time by clicking the Record button again.

### 3.2.3.4 Case 4: Record continuously all samples for a sound

- Check the "Continue Recording in Sound" option.

- Select the sound in the Soundmap.

- Set the parameter #RRLayers to the number of RoundRobin-Samples that you actually want to record for a velocity layer.

- Click the Record button.

Recording will take place as is described in Case 1. When a sample has been recorded, the recorder will restart this process for the next sample, going through the wait/listen/recording states as explained. When #RRLayers have been recorded for a velocity layer, the process will continue recording for the next velocity layer, until all samples for all velocity layers of the sound have been recorded. Then, the recording process will end automatically.

You can stop this recording process any time by clicking the Record button again.

You can continue this recording process later on and it will automatically find in which velocity layers is still place  (compared to #RRLayers) and continue recording from there.

From here you can refer to

3.1.4 Find Trim Positions

3.1.5 Process Samples

3.1.6 Export processed Samples

# 4 Epilogue

This is it for version 1 of Sampling Session.

The software with its current functions is what eases my very individual pain when I sample acoustic instruments, and helps me to get through the recording and editing process in a fraction of the time that I've needed with other software and tools. It may be of little use for some of you, it may lack of functionalities required by other users… However, I am open for any kind of requests. In this case, or if have doubts, have questions, find errors... don't hesitate to contact me ( see 7 Contact).

# 5 Copyright and Disclaimer

## 5.1 Copyright

Published by Rudi Leitner (PulpoAudio).
This publication is copyrighted. No part of it may be reproduced, stored in retrieval systems or transmitted in any form (electronic, mechanical, microcopying, photocopying, recording or otherwise) without the prior written permission of the copyright owner. Adress enquiries by e-mail to PulpoAudio: pulpo@pulpoaudio.com

## 5.2 Disclaimer

The information in this document have been carefully checked for accuracy by PulpoAudio and are presumed to be reliable. The content of this manual is subject to change without notice. Inconsistencies due to changes in the documented instrument (for example due to new or improved features in new versions) may occur, therefore this manual should be used as a guide only.

This manual is published and distributed on the basis that the publisher is not responsible for any actions taken by users on the basis of information contained in this document, nor for any error, gap or deficit in this manual.

PulpoAudio expressly disclaims any liability and responsibility to any person in respect of claims, losses, damage or any other matter. At this it is of no importance if the accusation arises direct or consequential, out of the use or in relation to the use of this document or the documented software.

It is PulpoAudio's goal to supply an accurate and reliable documentation. If you discover deficits in this manual, please contact PulpoAudio by e-mail: pulpo@pulpoaudio.com.

# 6 EULA

## 7 Contact

- Find us in the web: http://www.pulpoaudio.com

- For support contact us by e-mail: pulpo@pulpoaudio.com