

Audio Morpher

Manual

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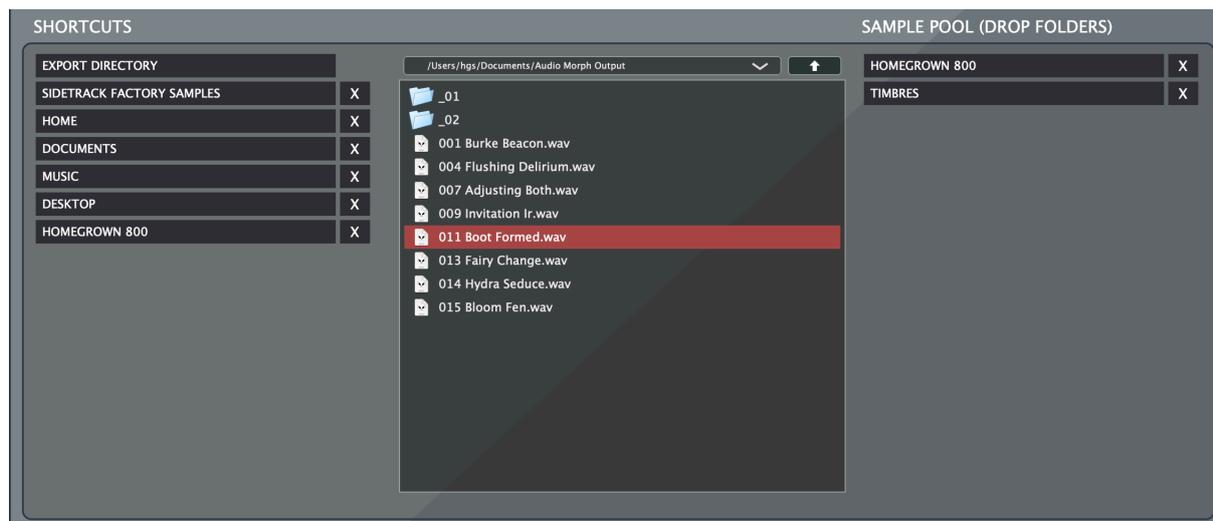
Introduction



Audio Morpher is an application for generating samples by using an assortment of different methods. It has an import Sample Rate & Bit Depth separate from the export Sample Rate & Bit Depth. It can either generate WAVs 1 at a time or it supports batch processing by choosing an export number higher than 1. It can export with embedded Meta data, either as a defined loop (110%) or as CUE sliced Data and optionally Octatrack Sample chain Export.

Names are auto generated with a number as well as a randomised name which uses an included wordlist.

Sample Pool/Sample Browser



The Sample Browser is used for navigating to Sample Folders & managing the Sample Pool; which is a list of folders containing samples which are then used to generate Morphed WAVs.

Shortcuts

The Shortcuts folder on the left is a convenient area where you can drop folders which you want quick access to. Clicking on one of them will take the browser to that location. These can be deleted using the 'X' button. Folders can be dropped via dragging the internal browser or from an external file browser such as Finder/ Explorer. You can drag these shortcuts and drop them elsewhere in the list to change the order.

The 'EXPORT DIRECTORY' shortcut is fixed at the top and cannot be deleted. This is handy if you have used the batch export and want to preview/sort the generated files.

Sample Pool

The Sample Pool is similar to the shortcuts list but folders dropped here will be scanned and used for generating Morphed WAVs. The Morph cannot work until there are some folders containing Samples here. You can add as many as you want and a scroll bar will appear when needed.

There's no limit to how many Folder you can have but bear in mind the more WAVs the more time it will take to scan.

Sample Preview & Sample Organiser

A very useful Sample organiser is built into the Sample Browser which may not be apparent at first. It's designed to be a quick & easy way of organising samples into sub folders or deleting. It's useful for the batch Exported files, but also just a useful general purpose function for using on any folder of WAVs.

Clicking on a file will load it instantly into the player.

It works via the following shortcut keys:

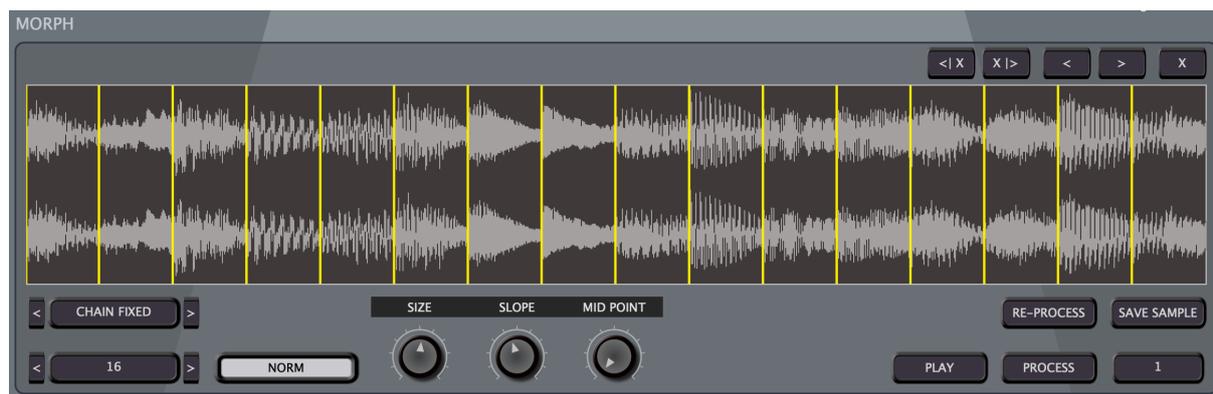
- **UP/DOWN ARROWS** - Navigates the file list auto loading the newly selected file.
- **D** - This will send file to Recycle Bin/Trash
- **NUMBERS 1-9** - Pressing one of these numbers will instantly move the file to a sub folder named after the number pressed, ie; '**01**' so allowing files to be sorted very quickly into folders you want. If playback is enabled, you can listen whilst doing this activity. Once a file is moved, the next file in the list will be loaded automatically.

General Keyboard Shortcuts

Audio Morpher supports the following shortcuts:

- **SPACE** - Switches Playback mode On/Off.
- **M** - Restarts Playback from the start.
- **,** - Starts Playback from 50%.
- **.** - Starts Playback from 80%.
- **[** - Slows down the playback speed by 1/2
- **]** - Speeds up the playback speed x 2.
- **;** - Resets Playback Speed to Normal.
- **P** - Starts the processing of a new Morph File/Batch.
- **R** - Rescans the Pool Folders.
- **F** - xFade Enable.
- **S** - Save File.

Morph/Create Panel



This area is where the processing settings are selected. The Layer Popup menu allows selecting one of the many modes which are used to generate WAVs. Each mode uses unique settings which are described on the following pages.

The controls on the right are for starting the processing and playback (also see the keyboard shortcuts).

- **PLAY (Space Bar)** - Starts playback of the current file.
- **PROCESS/RE-PROCESS** - This will start the generation, Re-Process will start the generation but keep the last selection of samples, although this isn't applicable to every mode.
- **SAVE SAMPLE** - This manually saves a WAV, a random number & filename will be generated and the WAV is saved to the selected Export directory.
- **BATCH AMOUNT** - When 1 is selected Batch mode is not used and the generated file must be saved manually. However if more than 1 is selected Audio morpher will batch produce WAVs based on the current settings & automatically save them to the export folder.
- **SLICE CONTROLS** - Even slices are always generated for files when processing even if they are not visible (which depends on the selected **META OPTION** at the top and whether the data is saved). So the slices are used by the following controls:
 - **<| X X |>** - This will delete the first or last slice.
 - **< >** - This will shift the WAV Left/Right to enable getting it to start in the place you want.
- **X** - This will unload the currently loaded file.



Creation/Edit Modes

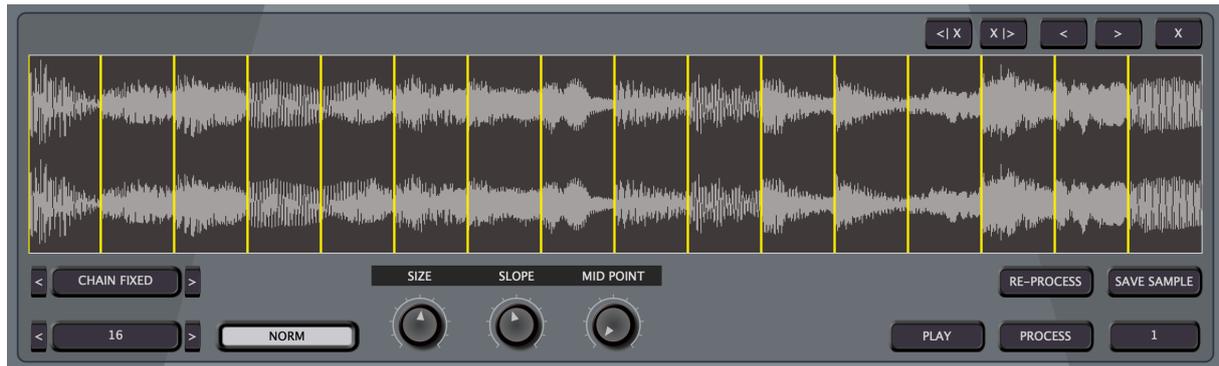
This menu selects the main processing method.

Resample Only



This mode is only used for **editing files that exist on disk & are loaded via the browser**. It allows using the input/output resampling features on existing files. The in/Out Bit Depth/Sample Rate Settings are what are used.

Chain Mode Fixed/Variable

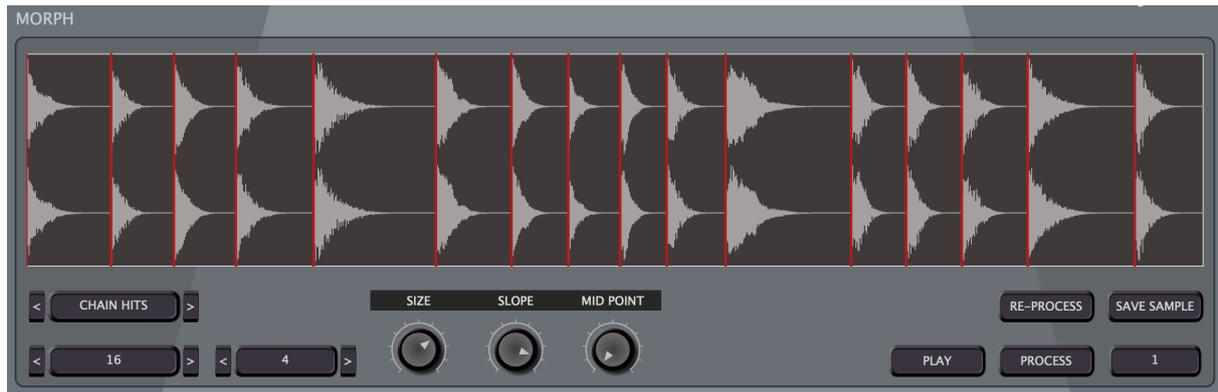


The Chain Modes takes a percentage based section of the file from the centre, applies an Attack/Decay Volume slope with mid point control and then chains the WAVs together, each starting on the middle of the previous.

The Fixed Version uses a fixed size for every slice, Vari (variable) uses a randomised size for each slice.

- **WAV NUMBER** - This selects how many random WAVs are used by the processor. If this number is larger than the amount of samples in the pool it will be truncated.
- **SIZE** - This sets the percentage of each input sample file should be used.
- **SLOPE** - This sets the curve/slope of the volume shaping, 1 = linear, less than 1 = convex and great than one is concave.
- **MID POINT** - The Volume shape of the input files is Attack to Full Level & Full Level to zero. This sets the mid point for the full volume point, so for example 0.5 will have an equal fade in and fade out, 0.0 will have no Attack & a full length decay from full level to zero.

Chain Hits



This mode layers up to 4 samples and then applies a volume curve based on the parameters. It's primary purpose is to create a kit of hits which can be used in Synths/Apps that recognise CUE Markers such as SideTrack or the Octatrack (if sample chain export is selected).

- **SLICE NUMBER** - This selects how many random Slices are used by the processor. If this number is larger than the amount of samples in the pool it will be truncated.
- **SAMPLE STACK TOTAL** - Select between 1-4 Samples to be used for the Slice. This requires this **STACK TOTAL x SLICE NUMBER** amount of WAVs, so can require many WAVs, make sure your Pool has plenty of available samples.
- **SIZE** - This sets the percentage of each input sample file should be used.
- **SLOPE** - This sets the curve/slope of the volume shaping, 1 = linear, less than 1 = convex and great than one is concave.
- **MID POINT** - The Volume shape of the input files is Attack to Full Level & Full Level to zero. This sets the mid point for the full volume point, so for example 0.5 will have an equal fade in and fade out, 0.0 will have no Attack & a full length decay from full level to zero.

Cycle Mode Fixed / Variable



Cycle Mode takes a defined number of samples from a random place in the audio file to create a single cycle Waveform. This waveform is then repeated to make a longer tone decided by the Size. The same Volume shaper used by Chain Mode is used to shape the sound with definable midpoint and then the files are mixed together, each starting in the centre of the previous one.

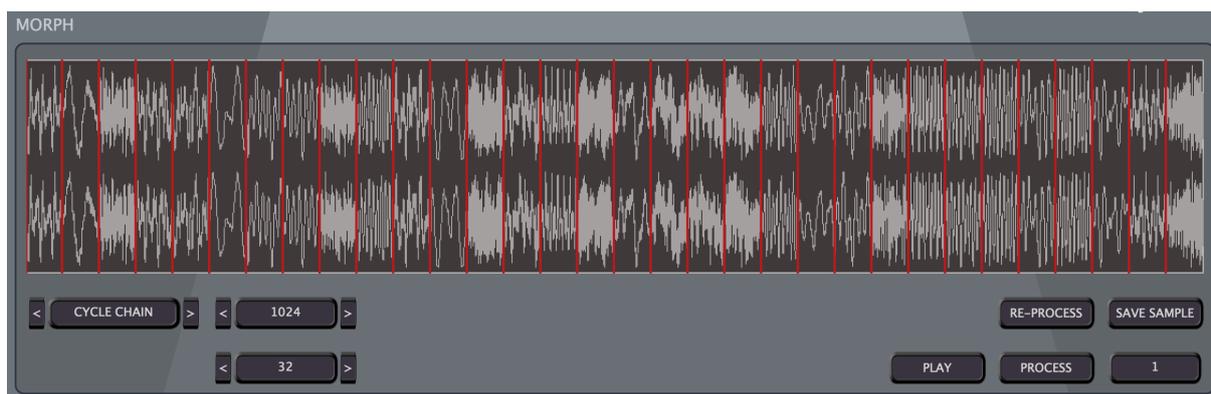
The controls are the same as Chain Mode with the exception of the cycle size (in samples) used.

Fixed uses a fixed size for each slice whereas Variable uses a randomised size per slice.

CYCLE SIZE

32
64
128
256
512
✓ 1024
2048

Single Cycle Chain Mode



This mode is about creating sample chain/CUE WAVs that contains single cycles designed to be looped. The cycles are pulled randomly from the source WAVs. Anyone who has used an Octatrack & sample chains knows that these are useful as a set of oscillators selectable by an index which can be automated. SideTrack also supports these via the **CHAIN IDX** playback mode.

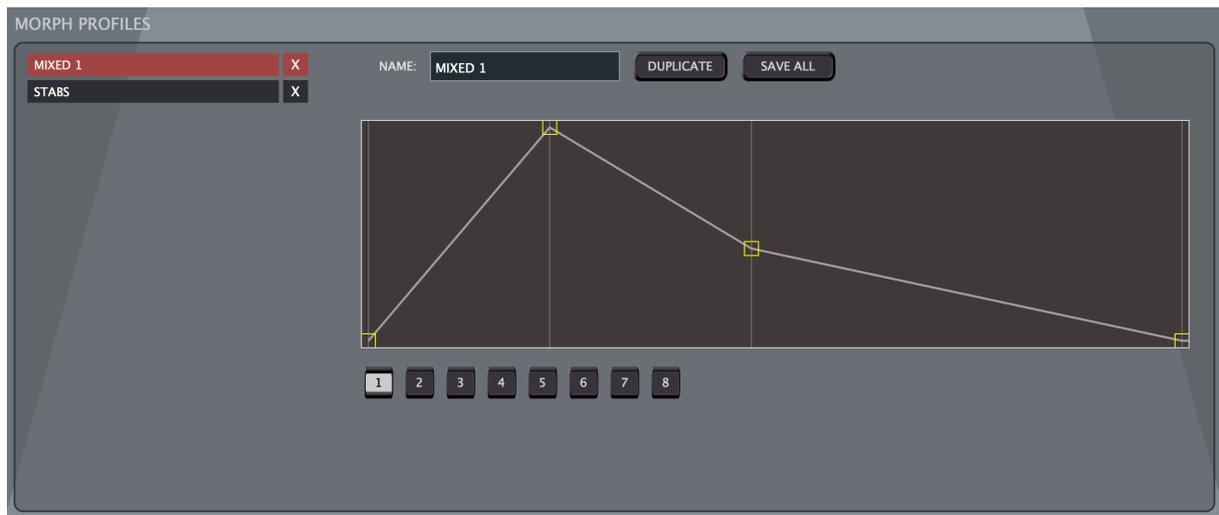
- **CYCLE SIZE** - This determines the size of the looped cycle, higher numbers will be lower pitched. Whilst it is generally best to use multiples of 32, the random Mode will use absolutely random sizes which will produce random pitches.
- **SLICE NUMBER** - How many slices will be created.

RM Single Cycle



This is the same as Single Cycle Chain except it use 1 single WAV & uses the other x number of WAVs to multiply the volume to achieve Ring Modulation.

Morph Profiles & Modes



The Morph profiles are used by **MORPH PROFILE & MORPH RANDOM** Layer Modes. A Profile consists of 8 Volume Shapes which are applied to samples. Whilst there are 8 available in each profile, the actual number used is set by the Morph Layer setting in the Main section when either of the supported modes are selected. Note that 8 WAVs are always selected and loaded, so that the ReProcess function can be used to safely reuse the same WAVs.

The current Profiles are listed on the Left and **DUPLICATE** can be used to add a new one. The profiles are saved when the application is exited, however can be saved manually by using the **SAVE ALL** Button. They are stored in the applications documents folder in an xml file.

The number buttons will display on of the 8 Volume shapes where it can then be edited by dragging the nodes. In Morph mode a WAV is selected randomly from the pool for each shape, all of these WAVs will use the smallest size, so they are all the same size and then they are mixed together and these Volume Shapes are applied.

Morph Mode/Random Morph



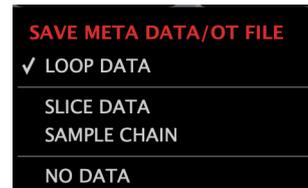
The Morph Mode is a great mode for making seamless looped WAVs that can be loaded into a sampler & played chromatically. See the previous section for the details on the profiles that are used to shape the sound of up to 8 layers.

- **LAYER TOTAL** - How many of the 8 layers will be used. Random will select a random number and also randomise which of the volume shapes will be used.
- **XFADE/AMT** - When enabled, the **XFADE AMOUNT** value will determine an amount of sacrificial data that will be used to generate an xFade for a seamless loop. The higher the value the smaller the end file will be.
- **NORMALISE** - This will normalise each of the input files as well as the final output.
- **SLOPE** - This sets the curve/slope of the volume shaping, 1 = linear, less than 1 = convex and great than one is concave.

Import/Export

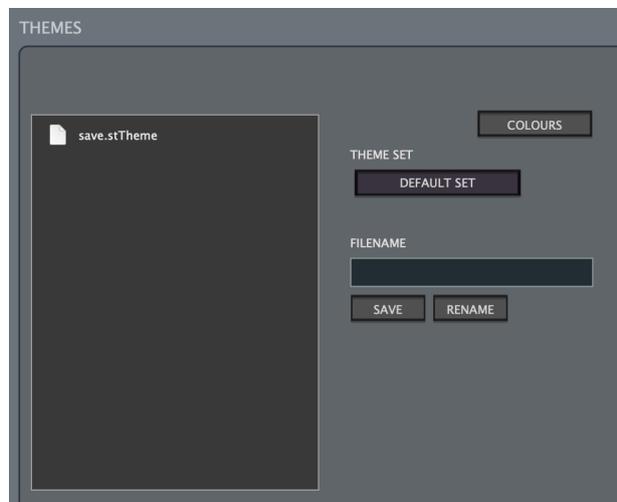


- **EXPORT PATH** - Click to locate a directory to use for saving the output files.
- **META DATA** - Loop or Cue markers can be save to the saved WAV files:
 - **LOOP DATA** - This will set a loop start/end for the entire WAV which will be read by Samplers & software that can read them.
 - **SLICE DATA** - This mode saves embedded CUE markers to denominate slice points. These can be read by SideTrack, but also other software such as Wavelab & Sound Forge. When loaded into SideTrack they can be played as a Kit of in IDX Mode which re-pitches chromatically and the slice is determined by the index knob.
 - **OCTATRACK SAMPLE CHAIN** - .ot files can also be exported which are small binary files that sit alongside the WAV and are used by the Elektron Octatrack.
 - **IMPORT SETTINGS** - When WAVs are imported they are converted to the bit Depth & Sample Rate set here. When WAVs are imported they are converted to these settings and then converted to the output settings prior to processing. This allows using ridiculous settings to generate LOFI sounds, but then have a workable & supported rate for processing.
 - **EXPORT SETTINGS** - This determines the final Bit Depth and Samplerate of the WAV.



Theme

Audio Morpher supports the same Theming system as SideTrack so far although it needs a bit more development.



Changelog

- 0.9
 - **New Modes Menu** - along with some new Modes.
 - **Morph Modes** - Now uses up to 8 envelopes, with selectable number used and random mode which also shuffles the layer indexes to use a random envelope. The old system of individual xml files has been scrapped in favour of a single xml file with multiple profiles. Editing xml is no longer necessary as there is now has a front end Profile manager.
 - **Morph Profiles** - New section which allows creating/selecting Profiles with 8 Envelopes using an easy to use on screen envelope editor.
 - **Chain Modes** - Chain Mode takes a percentage of material from the centre of each input WAV. It then applies a Fade in/Out to the sound with adjustable Mid Point. These are then mixed together in a chain with each starting in the centre of the last added. There are Fixed & Variable size modes.
 - **Cycles Modes** - This pulls out random cycles of a specific size, ie; 1024 samples, smooths the edges and then repeats them to make solid tones. These are the mixed together in the same way as Chain Mode. There are Fixed & Variable size modes.
 - **RM Mode** - Same as Cycle mode except the WAVs are used to modulate the volume of the underlying waveform. There are Fixed & Variable size modes.
 - **Sample Kit Mode** - This mode makes a sample chain by layering up to 4 samples for each slice and applying volume parameters.
 - **Cycle Chain Mode** - Designed to create a sample chain of single cycle waveforms pulled out of a random selection of WAVs. This ends up with a CUE Meta sliced WAV and/or Octatrack .ot file. In usage in SideTrack or an Octatrack these single cycles become oscillators switched/Modulated by the Index.
 - **RM Chain Mode** - Similar to Cycle Chain Mode but uses a single WAV for all slices and then uses random cycles to multiply the amplitude to create Ring Modulation single cycles.
 - Added **Resample Only Mode** to the Morph Profiles. This can be used to just use the input/output options for a loaded file, Save will save it to the export folder in the same way as any other generated file.
 - **Manual Chain Mode** - This allows manually building a basic Sample Chain by loading/dropping WAVs. Handy for making Drum Kits for loading in Sidetrack or for an Octatrack.
 - **File Organiser** functions added for quickly auditioning sorting files in the browser with the following shortcuts:

- **'D'** - Delete File to Trash/Recycle Bin.
- **Numbers 1-9** - Moves currently selected file to a named Sub Folder based on the number pressed. A file must first be selected for this to work. If the folder doesn't exist it will be created.
- **UP/DOWN Arrows** - navigate up & down the file list.
- Input files are now resampled using the input Samplerate settings and then resampled to the output size before they are Morphed.
- Added **RANDOM MODES** for the Input Samplerate & Bit Depth which is calculated on a per file basis which should lead to some interesting results.
- **Slice Markers Export Option** in exported files with optional Octatrack Sample Chain export.
- Added 500hz & 100hz to the Samplerate options.
- Added **RANDOM OPTION** to the Morph Profiles, a random Mode out of all loaded will be used each time.
- Added a **Limitter** to the output.
- Added Support for loading ".aif/.aiff" Files.
- Shortcut to the SideTrack factory Folder if it's installed.
- File browser now auto refreshed when batch processing,
- Files are now auto scanned when needed so the button has been removed, however the shortcut key ('R') will still work if ever necessary to scan manually.
- Fixed: Key Focus should now always be global so Key shortcuts always work.
- Fixed: Now possible to delete top Pool Item.
- Fixed: Export Folder Shortcut is now fixed and can't be removed.
- Fixed: Filename Text box for Theme now keeps focus.
- 0.51
 - Reworked the Sample Browser, it now has the shortcuts the same as in SideTrack which is an area to drop folders which you use often. There is now a second place on the right for the Sample Pool Folders which are used to create the WAVs.
 - Added Keyboard Shortcuts;
 - [- Reduce Playback Speed by 1/2
 -] - Increase Playback Speed x 2

- ; - Reset Playback Speed
- M - Restart Playback
- . - Go to 80% Position
- , - Go to 50% Position
- Fixed Reader Memory leak
- Implemented some Logging (log.txt)
- Fixed a possible crash when loading WAVs from the browser.
- Display now consistently updates when WAVs are loaded via the browser.
- Various fixes/changes.
- 0.5
 - Initial Release.

