

DrumStar User's Guide

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Sampler

Overview

When a sample is triggered by the sequencer, the sampler will search in that track for all samples whose split parameters match those of the sequencer. That sample is then processed and sent to the outputs.

Signal flow

1. find matching sample
2. load from disk
3. sample rate conversion/tuning
4. AHDSR envelope
5. drive
6. equalizer
7. output

Samples

Browser

Browse

Find your samples in the browser.

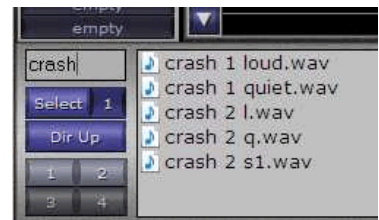
Preview

Right click on a sample to preview it. Your host will probably need to be playing in order to hear the samples.

Add Samples

Double-click on a sample to add a single sample.

Drag selected samples to the sample editor to add one or more samples to the editor.



Load Presets

Double-click on DrumStar presets to load them.

Filter

Type text into the filter box to show only files that match the text.

Select

The number box to the right of the *select* button makes creating round robin groups easy by selecting every third sample if for example the value is set to 3. Clicking on the *select* button multiple times will rotate which set of the samples is selected. Each set of samples can be added to a different group and assigned different rotate values in the sample editor.

Dir Presets

Save

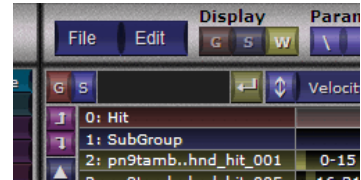
Right-click to save one of the four directory presets.

Load

Left-click to recall one of the four directory presets.

Groups and Subgroups

Groups and Subgroups can be used to organize samples. Any parameter settings that are applied to a group or subgroup will affect all samples within that group. For example, you could set all sample in a group to a trigger only if the velocity is between 0 and 10.



Add

Groups

Click on the red button labeled 'G' at the top left corner of the sample editor to add a group. Groups are displayed in red.

Subgroups

Click on the blue button labeled 'S' at the top left corner of the sample editor to add a subgroup. Subgroups are displayed in blue.

Display

Groups only

Click on the red button labeled 'G' at the top-right of the window to display only groups.

Groups or Subgroups


Click on the blue button labeled 'S' at the top-right of the window to display only groups and subgroups in the sample editor.

Waves

Click on the yellow button labeled 'W' at the top-right of the window to display all samples and groups.

Parameters

There are multiple screens of parameters. Click on the up/down arrow button at the top of the sample editor to rotate through the displayed parameters.



G	S	Velocity	Alternate	Rotate	CC Range
0:	Ord		1		
1:	SubGroup		1	0-31	
2:	cy18cra...stx_ord_001	0-18	1	0-31	
3:	cy18cra...stx_ord_005	19-36	1	0-31	
4:	cy18cra...stx_ord_009	37-54	1	0-31	
5:	cy18cra...stx_ord_013	55-72	1	0-31	
6:	cy18cra...stx_ord_017	73-90	1	0-31	
7:	cy18cra...stx_ord_021	91-108	1	0-31	
8:	cy18cra...stx_ord_025	109-127	1	0-31	
9:	SubGroup		1	32-63	
10:	cy18cr...stx_ord_002	0-18	1	32-63	

Splits

Splits are used to control when samples when fire. Normally you will want to have a set of sample that covers the full range of values. For example if I have two samples of a snare drum, one at low velocity, and the other at high velocity, I would map the low velocity to 0-63 and the high velocity to 64-127.

There are tools in DrumStar to automatically generate evenly divided sample splits. At the top of the screen, you will see some blue buttons labeled '/', ' ', and '\'. These are used to quickly create splits.

Creating a split

Select a cell. The column will determine which parameter you are using, the row will determine which group of samples the split applies to. The click on the '/' button to create an evenly increasing split, or the '\' to create an evenly decreasing split. The button with no label clears the current split setting for the current parameter.

Sort

Click on the sort box to toggle between sorting by name and level.
Click on the left button to apply the sort to the currently selected group of samples.

Velocity

Specifies a velocity range where the samples will be triggered.

CC Range

Specifies a control range where the samples will be triggered. There is a purple button labeled 'CC Range' at the right of the window that specifies which of 4 control values to use. These settings apply only to triggering.

CC XFade

Similar to control values, but samples will crossfade from one sample to another anytime the control value changes. These can be used to model a high hat that opens or closes while it is playing.

Round Robin

These can be used to prevent the same sample from triggering twice in a row, and avoiding drums that sound like machine guns. After a sample triggers, it sets the next

trigger to be 1+ the higher value in the current range. So, if a sample is played and is in round robin group 0-10, the next sample to trigger will be in the group starting with 11.

Alternate

Alternate groups can be used to map different hit types to a group of samples. For example one group might be a regular hit, and another a rim shot.

The name of the group or subgroup will show up in the sequencer as a hit type. If there are multiple groups with the same value, only the first name will show up in the sequencer.

Midinote

This value is used to assign a midi note to samples or groups of samples. You can quickly assign this value by clicking on a cell in the midinote category and pressing a midi note on your controller.

MixLayer

The mix layer parameter lets you assign samples to any combination of 4 mix groups. These groups can be independently mixed in the sequencer. You could assign dry samples to mix group 'a', overhead samples to mix group 'b', and room samples to mix group 'c.' You'll be able to adjust the mix between these groups of samples at mix time. To do so, right click on a track and adjust the sliders labeled: 'mix a', 'mix b', 'mix c' or 'mix d.'

Effects

Tune

The tune can adjust the tuning of the drum. It can be used to make drums sound brighter or darker. If you tune every other kick drum sample differently, it can sound like a double bass drum.

Drive

The drive is a saturation control that can make a sample sound louder. Use it on instruments that you want to cut through the mix.

AHDSR

This effect applies to the current track and is at the right of the sample editor window. Use it to adjust the volume envelope of samples in the current track. The stages are attack, hold, decay, sustain, release. The graph should show you how roughly what the envelope is doing.

Equalizer

The 5 band equalizer is a track level effect as well, and can be used to change to make your instrument sound brighter, darker, etc.

Exclusive groups

Exclusive groups are used to specify that a sample will stop a previous sample from playing. This can be used to mute open high hats with a pedal, or to stop drumrolls if another hit occurs.

Exclusive

Assigning a sample to an exclusive group means that sample will stop playing when a sample in the same exclusive off group is triggered.

Excl. Off

Assigning a sample to an exclusive off group means that when the sample is triggered, it will mute another sample assigned to the sample exclusive group

MuteTime

This is with the 'excl. off' sample. It specifies how quickly a muted sample fades out. A setting of 0 means instantly. Typically settings of 15-20 usually sound about right for high hat pedals.

Outputs

Gain

Adjust the output level of the sample.

Pan

Adjust the panning of the sample.

Aux Sends

Send the samples to one of the aux outputs. These can be used for using other effects in your host on parts of the drum kit.

File Menu

The file menu lets you load and save files. Note, if you store similar instruments to the same directory, you can quickly try out different instruments by simply double clicking on the track. For example, create a folder for kick drums. Then, you'll be able to quickly switch between kick drums while a pattern plays without using a load file dialog box.

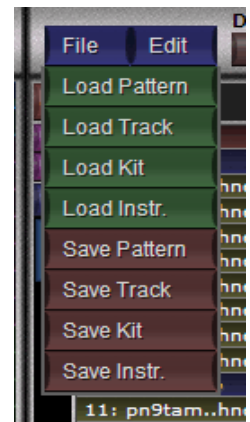
All files are stored in text format, so you can edit them.

Instruments

Select tracks using the track editor along the left. Note that you can use shift to select multiple tracks if you use multiple tracks for the same instrument.

Click on the save instrument button to save the sample mappings for the selected instrument or instruments.

Kits



Kits are the list of instruments that are currently loaded. You should save all instruments before saving kits.

Sequencer

Add/Delete Notes

Pattern Editor

Click on an empty location to add a note.
Right-click to delete a note.



Parameter Editor

Click on an empty location to add a note.
Right-Click to delete a note.

Note Editor

Click on the insert/note button to add a note a selected location.
Right click on the Insert/note button

Editing Parameters

Pattern Editor

Grid Settings

Click on the beats to change the number of beats in the current pattern.
Click on the steps to change the number of steps in the current pattern.

Color Settings

Click on the buttons labeled 'FG' or 'BG' to change the color of the foreground or background colors respectively.

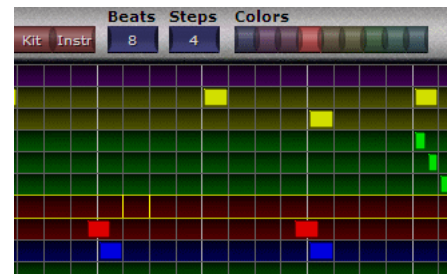
Shift-Click to select the current color for all existing notes in a track.

Adjust Velocity

Click on an existing note and drag it up or down to change the velocity. The parameter editor will temporarily switch to display velocity.

Timing

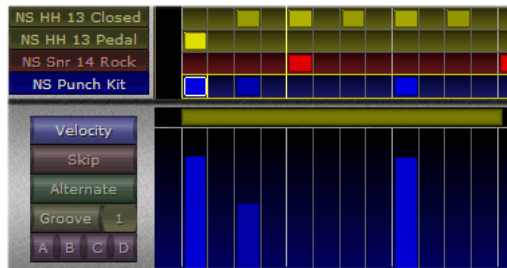
Click on an existing note and drag it left or right to change the timing. In the lower right corner, you can see a larger view of the start time within the current step.



Parameter Editor

Velocity

The velocity controls how loud the note will be. If there is a velocity split defined, this will determine which sample gets triggered.



Skip

Skip determines how often a note does not play. You can create some quiet snare notes that are on some of the 16th notes that play occasionally to make more patterns more dynamic.

Alternate

This parameter controls how often the alternate hit is played versus the regular hit. Multiple hit types must be defined in the sample editor before this will work. The lower green box in the lower right corner should be set to a different sample than the upper green box, or it will have no effect. A parameter setting of 50% means that half of the time, the regular sample will be triggered, and the other half of the time, the alternate sample will be triggered. As an example, this could be used to randomly change a regular hit to a rim shot.

Groove

Groove settings can be used to change the timing of individual steps in the pattern editor. Drag the edges of the steps that you want to change in the parameter editor. If you hold shift down while dragging, you can adjust the timing for related steps at the same time. For example, shift drag the start of the first eighth note to the right, to create a swing feel.

To the right of the groove button is a groove preset button. By default each pattern is assigned to itself. If you want to copy the groove from another pattern, click on the groove preset button, until the pattern number you want to copy the groove from is displayed. You will notice that the differences are highlighted in the parameter editor. Click on the groove button again to snap all the notes to the new groove setting.

Control A, B, C and D

These are used to adjust the custom control values. These can affect sample triggering and/or crossfading depending how the samples are mapped. You can use crossfading to adjust the openness of high hats.

Note Editor

The note editor is located in the lower right corner of the window, and contains settings for the currently selected note, and some track level settings. You can use the arrow keys to select samples and set parameters in this area if you prefer more of a tracker style editing mode. (Note that not all hosts pass keyboard commands to plugins, if the arrow keys don't work, your host is one of them.)



If no note is selected, these can be used to set the default values for future notes.

For most parameters holding shift while editing will adjust all values within the track to the same value.

Random Group

Every time a pattern starts, one of four random groups is selected. If the corresponding corner of the random group is highlighted, the notes can play.

This can be used to generate mutually exclusive events. For example, you may want to occasionally have a tom fill randomly occur. But, when it occurs, you want to prevent the drummer from playing the high hat and snare. To do this, you could turn on one of the random groups for the toms (upper left for example), and turn off that random group for the snare and high hat samples that occur at the same time. (upper left is off, all others would be on in this case) The tom fill would happen on average about 25% of the time.

Hit Type

Specify the hit type to trigger. Requires that hit types are defined in the sample editor.

Alternate Hit Type

Specify the alternate hit type to trigger. If the alternate slider is adjusted above zero and hit types are defined in the sample editor, the hit type will change from pattern to pattern based on the probability assigned by the slider. You would use this to randomly switch between a regular hit and a rim shot for example.

Info Bar

Describes what the note parameters are as you click on them, and shows more detailed timing information when adjusting groove and note timing settings.

Velocity Slider

Specify a note's velocity.

Skip Slider

Specify how often a note is skipped.

Alternate Slider

Specify how often the alternate hit type is triggered. If multiple hit types are defined in the sampler, and different hits are specify in the hit type and alternate hit type boxes.

Patterns

Name

You can type a name into the blue bar at the top to assign a name to the current pattern.

Select

Click on a pattern button to select a pattern.

Copy

Right click to copy the currently selected pattern to the pattern you click on.

Bank

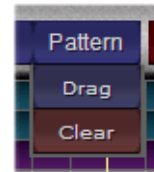
Click on the bank to increment the pattern bank. Right click to decrement.



Pattern Menu

Drag and Drop

Drag a pattern onto your host using the drag button. The pattern will be converted into a wavefile which can be used within the host. This can be a way to save processor power.



Clear

Clear the current pattern by clicking on the clear button

Arranger

The arranger can be used to chain patterns together for a song.

Add

Insert current pattern in a chain by double-clicking on an arrangement button. Or, double-click on a pattern to insert the pattern at the currently selected arranger location.



Play

Left-click on an arrangement button to start playing the arrangement starting at the point clicked on. The arrangement will loop through the arrangement until you click on a pattern button.

Bank

Click on the bank to increment the pattern bank. Right click to decrement.

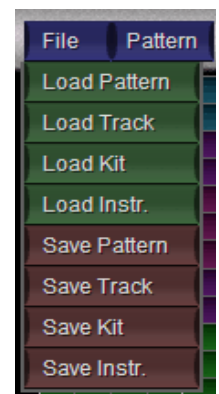
Load/Save

Tracks

Loading and saving tracks can be used to copy parts from one set patterns to another. Click on tracks to select them. You can use shift to select multiple tracks. Then save them.

Patterns

Patterns are where the sequencer settings are stored.



Track Editor

The track editor is located at left edge of both the sequencer and sampler screens.

Select Tracks

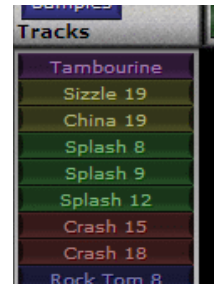
Click on a track to select it.

Name Tracks

Start typing after selecting a track to change the name.

Switch Instruments

Double-click on a track to load other instruments from the same directory as the current instrument. You can do this while tracks are playing to hear what different instruments sound like in a given pattern.



Track Mixer

Right click on a track to bring up the track mixer. You'll be able to adjust various levels for the track.

Random Velocity

Specify the amount of velocity variation for notes on the current track. Can be used to vary note velocities, so that patterns sound more dynamic.

Random Time

Specify the amount of timing variation for notes on the current track.

Random CC

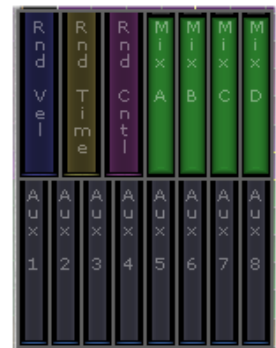
Adjust the amount of variation in CC levels. Note that this parameter is a global parameter, and is not track specific.

Mix A-D

Mix controls for the 4 mix groups of the current track. To use them, you will need to map samples to these groups in the sample editor.

Aux Levels

These sliders can be used to adjust how much signal is sent to each of the eight aux outputs from the current track.



Pattern Timing Slider

The slider between the pattern editor and parameter editor displays the start and end of the current pattern. This allows you to adjust a pattern that is recorded using midi that didn't match the pattern length.



Adjust Pattern Timing

You can drag the bar to slide the whole pattern forward or backward in time. Hold down shift for finer control.

Stretch Pattern Timing

Drag the right edge of the bar to stretch the pattern to the right.

Config File

Included in the download is a default.dsconfig file. If you wish to change the colors in DrumStar, copy the file to a new same with the same extension and open it in a text editor. Once you have finished making changes. Locate the new file using the browser in the sample editor, and double-click on it to update the settings in drumstar.

Changing colors

Each of the colors is specified as a hex RGB code. The first pair of characters specifies the red level, the next pair specifies the green level, and the third pair specifies the blue level. If your not sure how to set hex values, ask in the forum.

Background

To change the background, specify the full path the background images you want to use. The images are 905 x 495 pixels, and either jpeg or bmp images should work.

Contact Info

Website

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info@drumstarhome.com