



d16 group
AUDIO SOFTWARE

PunchBOX

BASS DRUM SYNTHESIZER



User Manual

Requirements

Software and hardware requirements of the product

Windows PC

OS version	Win 7, Win 8, Win 10
CPU	2.0 Ghz with SSE (Multicore system 2.4 Ghz recommended)
RAM	4 GB (8 GB Recommended)
Software	VST / AAX compatible host application (32bit or 64bit)

Mac OS X

OS version	OS X 10.7 or newer
CPU	Intel based 2.0 Ghz (2.4 Ghz recommended)
RAM	4 GB (8 GB Recommended)
Software	AU / VST / AAX compatible host application (32bit or 64bit)

Overview

Punchbox is an advanced monophonic Kick generating instrument that utilizes overlaying sound sources to produce final kick tone; 4 generators that can play samples or synthesized sounds. In addition, it offers a number of effects for further processing. The instrument is supplied with a substantial factory sample and preset content developed exclusively by *Sounds of Revolution* and *CFA Sound* labels.

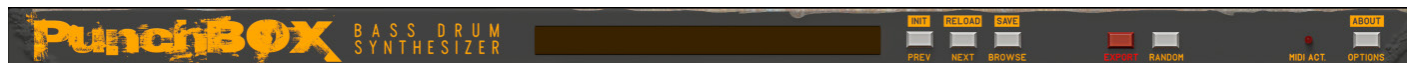
When the plug-in is running you can see its interface:



Puchbox User Interface

The following functional sections are available:

Control Panel



Punchbox control panel

Used to manage **Master Presets** (presets of the entire device) namely their loading and saving. It also manages presets import / export to exchange them between the users. It controls the default plug-in configuration, exporting current setting to a wave file and the parameter randomization.

Generators Section



Generators section

Controls the section that produces the sound in **Punchbox**.

Effects Section

Including the **Master/Limiter** block, which processes the signal produced by generators before it's sent to the plug-in's output.



FX section

Description of operation

4 generators that produce the **Kick** tone components are the heart of the instrument. Their outputs are mixed and sent to the effect cascade (series), and then to the plug-in audio output. The instrument is monophonic and may respond to the *pitch* and/or *velocity* of the MIDI tones depending on the settings.

Generators Section

The **generators** section consists of 4 independent modules (generators) which when mixed constitute the *Kick* instrument. Each generator has a specific function in the process:

- **Click** – Generates the bass drum’s accents; initial, short clicks.
- **Tops** – Responsible for the delivery of the accent’s sustain (slightly longer tones present typically in the higher frequencies).
- **Tools** – Additional rumbles, background sounds etc. that accompany the primary tone.
- **Kick** – Basic/primary tone that is the body of the bass drum.

Click, **Tops** and **Tools** generate the auxiliary components of the final tone. They are based only on the samples. Each of them has a substantial factory sample bank.

Kick generates the primary tone (body) component. It may serve as a **Sampler** or **Synthesizer** (with a few available alternative generator engines that may be selected). Similarly to the other generators, **Kick** is also provided with substantial factory content (samples and presets).

The open architecture of the instrument allows you to import the external samples as the user resources.

Click, Tops and Tools Generators

Clicks, Tops and Tools generate the auxiliary/side components of the Kick tone. Each generator has almost identical interface;



Click, Tops and Tools generators

And it is controlled with the following set of parameters:

- **Active/Solo** – A LED operating in the toggle mode to activate the specific generator or other (except for the specific one) generators if used with **CTRL** ▣
- **Volume** – The generator's output volume from **-inf [dB]** up to **+12 [dB]**.
- **Smp. Start** – (only for **Tools**, **Tops**) specifies the starting point (offset) from which the sample is played. This parameter can be set from **0%** up to **100%**, where **0%** means that the sample is played from the beginning with the value range referring to the sample duration.

DESCRIPTION OF OPERATION • GENERATORS SECTION

- **St. Spread** – Wider or narrower stereo image of the played sample. The central position (**Normal**) is a neutral setting that plays the sample without processing.
- **Panning** – (Stereo) panning.
- **High Cut** - Low-pass filter cut-off frequency. The parameter operates from **2 [Hz]** up to **22 [kHz]**.
- **Low Cut** - Hi-pass filter cut-off frequency. The parameter operates from **2 [Hz]** up to **22 [kHz]**.
- **Decay** – Decay time relative to the overall sample duration. **Max** means that the decay time is the same as the sample duration.
- **Tune** – Relative sample tuning from **-6** up to **+6 semitones**.
- **Send (Click send, Top send, Tools send)** – Controlling the proportion between the signal sent to the effect cascade and directly to **Master / Limiter** (with the effect cascade bypassed). For the minimum value (**0%**) the whole signal is sent only to **Master / Limiter (Effects)**. For the medium value (**50%**) the generator output is sent in half to the effect cascade and in half to **Master / Limiter** with the effect cascade bypassed. For **100%** the signal is sent only to the effect cascade.

Each generator provides an additional **Sample Management** subsection to browse and load the samples from the **Factory** or **User** content, import the user samples and reset the generator settings.



Generator's Sample Management section

The subsection contains the following controls:

- **Sample Name** – A display with the name of the currently loaded sample, “---” – if no sample is currently loaded.
- **Prev / Next** - Used to navigate through the generator sample bank, load the next or previous sample from the bank.
- **Browser** – Opens the **Sample Browser** window to browse the available sample bank more precisely e.x. by filtering the results etc. (the function is described in details in the **Preset Management** chapter).
- **Init (Prev + CTRL ▣)** – Restoring the initial generator settings and deleting a sample from the generator’s memory.
- **Reload (Next + CTRL)** – Restoring the most recently loaded master settings (**Master Preset**) for the generator section, with the original sample loaded if it differs from the current sample.

Kick Generator

Generates the **Kick** tone body/base and offers a few generator engines that may be selected:

- **Sample** - A sampler where you can load samples from the substantial factory content and import your own samples.
- **909** – A percussion synthesizer based on *kick* model available in the *TR-909* drum machine
- **808** – A percussion synthesizer based on *kick* model available in the *TR-808* drum machine
- **606** – A percussion synthesizer based on *kick* model available in the *TR-606* drum machine
- **Sine** - A percussion synthesizer based on the sine waveform with amplitude and frequency modulation

DESCRIPTION OF OPERATION • GENERATORS SECTION



A Kick generator with "Sample", a selected generator engine

Mode allows you to select the generator engine:



Mode parameter

Below **Mode** you can find the **Preset/Sample Management** section



Preset / Sample Management section of the Kick generator

Used to browse the **Factory / User** content (samples or presets) for the currently selected generator engine. This section contains the following controls:

- **Prev / Next** – Used to navigate through the sample or preset bank (depending on the selected generator engine) by moving to the next or previous item.
- **Browse** – Opens the **Sample/Preset browser** – for more information on the **Browser** operation please refer to the **Preset Management** chapter.
- **Init (Prev + CTRL)** – Restoring the initial generator settings and deleting a sample from the memory if the **Sampler** is used as a generator engine.
- **Reload (Next + CTRL)** – Restoring the most recently loaded master settings (**Master Preset**) for the active generator engine and loading the sample used in the master preset if the **Sampler** is used as the generator engine .
- **Save (Browse + CTRL)** – A function available only when the generator engine is one of the synthesizers and used to save the current engine settings as a user's preset.

DESCRIPTION OF OPERATION • GENERATORS SECTION

At the bottom of the **Kick** section you can find a few common parameters (available regardless of the active generator engine):



Kick's common parameters

- **Kick Send** – Decides on the part of the **Kick** signal to be sent to the effect cascade and directly to **Master / Limiter** with the effect cascade bypassed. For the minimum value (**0%**) the whole signal is sent only to **Master / Limiter (Effects)**. For the medium value (**50%**) the generator output is sent in half to the effect cascade and in half to **Master / Limiter**. For **100%** the signal is sent only to the effect cascade.
- **Velocity** – A switch that decides on whether **Punchbox** should respond to the velocity of the incoming MIDI notes. It is a global parameter that affects all generators including **Tops, Tools** and **Click**.
- **Keytrack** – A switch determining whether **Kick** responds to the pitch of the incoming MIDI notes.

Generation Engines

Kick generator allows you to select one of a few available generator engines. You can select them with **Mode** parameter. When a generator engine is selected the interface part that refers to the generator engine is changed:



Generation engine highlighted in the Kick section

Sample

A **Sampler** allows to use the samples as a sound source for **Kick**. To use it select **Sample** for **Mode**. The **Sampler** contains the following parameters:

- **St. Width** – Wider or narrower stereo image of the played sample. The central position (**Normal**) is a neutral setting that plays the sample with the stereo image unchanged.
- **Pitch** – Relative sample tuning from **-4** up to **+4 semitones**.
- **Sample Start** - Defines a starting point from which the sample is played. This parameter can be set from **0%** up to **100%**, where **0%** means that the sample is played from the beginning.
- **Level** – Output generator volume.
- **High Cut** - Low-pass filter cut-off frequency. The parameter operates from **2 [Hz]** up to **22 [kHz]**.
- **Attack** – Amplitude's attack time from **0 [ms]** up to **200 [ms]**
- **Attack Curve** - Amplitude attack's curve - from concave, through linear to convex
- **Decay** – Amplitude envelope decay time relative to the overall sample duration. **Max** means that the decay time is the same as the sample duration.
- **Decay Curve** - Amplitude decay curve - from concave, through linear to convex



909

909 is a generator engine that is a faithful TR909 kick emulation - a classic bass drum used in techno since 1990s. The panel contains all knobs used in the original device and two additional knobs expanding its sound shaping capabilities:

- **Level** - Output volume
- **Attack** - Initial accent's volume
- **Tune** - Decay time of the Kick frequency modulation (falling envelope)
- **Decay** - Amplitude decay time
- **Pitch** - Base frequency
- **Tune depth** - Kick frequency modulation (falling envelope) depth



808

808 is a generator engine that is a TR-808 bass drum emulation - a classic electro sound. The panel provides the following parameters

- **Level** - Output volume
- **Tone** - Bass drum attack characteristics
- **Decay** - Amplitude decay time
- **Sweep Time** - Bass drum frequency change rate



606

606 is a generator engine that is a TR-606 bass drum emulation - a typical short electro/hip-hop bass drum. The following parameters are used to shape the sound:

- **Volume** - Output volume
- **Decay** - Amplitude decay time
- **Tune** - Bass drum tone
- **Attack** - Initial accent's volume



Sine

Kick tone body generator based on amplitude and frequency modulation of the sine waveform.

The first row provides the parameters to control the amplitude envelope:

- **Attack**
- **Hold** - From 1 [ms] up to 1[s]
- **Decay**

The next row provides the parameters to control the oscillator frequency modulation:

- **Start Freq** - Initial frequency from 5 [Hz] up to 8 [kHz]
- **End Freq** - Final frequency from 5 [Hz] up to 115 [kHz]
- **Sweep Time** - Modulation rate from 1 [ms] up to 1[s]

The last row provides the parameters to control the amplitude and frequency modulation characteristic:

- **Attack Curve** - Amplitude attack curve
- **Decay Curve** - Amplitude decay curve
- **Sweep Curve** - Frequency modulation characteristics / curve

The last parameter, **Level**, controls the generator's output volume.



Generator Signal Routing - Send

By using **Sends** you can determine the proportion of the signal to be sent from each generator to the effect cascade or bypassed, i.e. Sent directly to **Master / Limiter**. The **Send** parameters act as a cross-fader that determines the proportional relation between the signal sent to the effect block and the signal that bypasses this block.

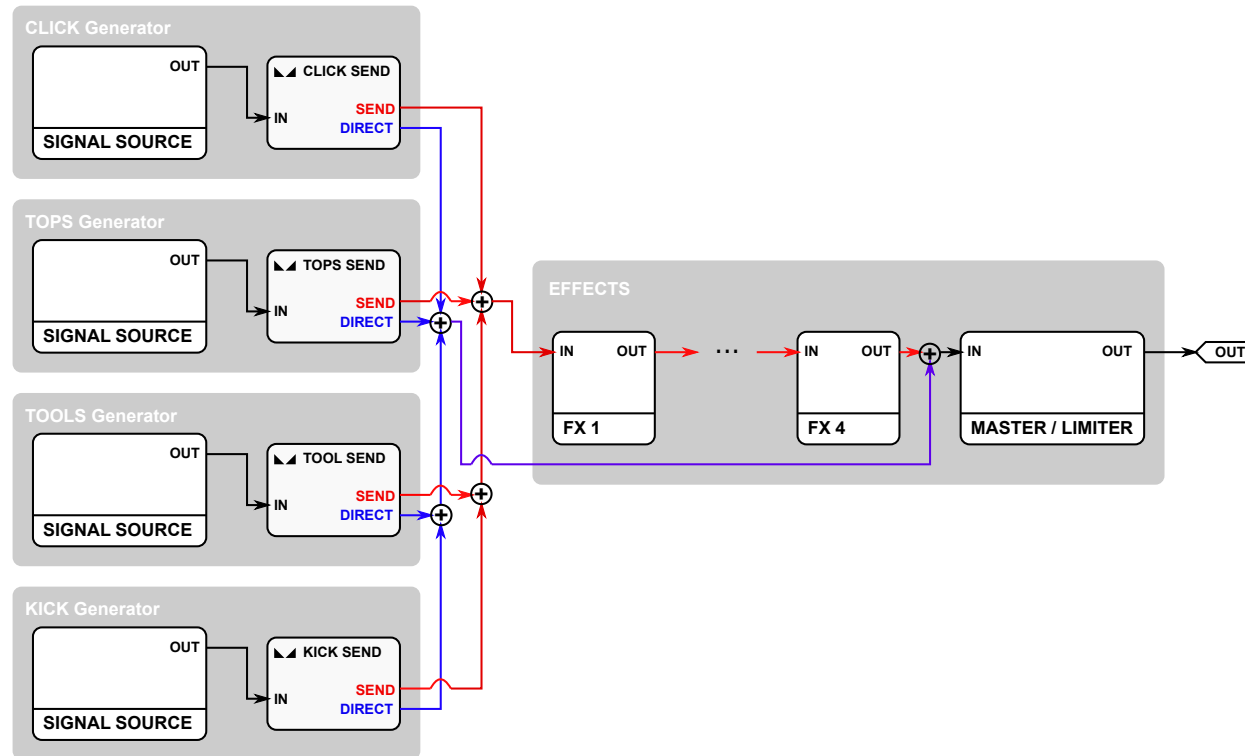


Send controls in the generators section

The minimum value means that the whole signal of the specific generator is sent directly to **Master / Limiter**. The maximum value means that the whole signal is sent to the first cascade effect. The medium values determine the proportions between these two send variants.

The diagram below presents the topology of the send and direct outputs of the generators connected with the effects section:

DESCRIPTION OF OPERATION • GENERATORS SECTION



Signal flow from Generators through the FX chain

The **red line** refers to the sent signal flow to the effect cascade. The **blue line** refers to the unprocessed signal flow (with the cascade bypassed) directly to the **Limiter**.

The cascade point where the direct signal (**blue flow**) is joined may be changed to obtain more complex topologies but it is not the subject matter of this chapter. For more information please refer to the effect block description section.

Randomization

If you lack of inspiration some of the parameters in the **Generators'** section can be randomized. To open **Randomization dialog** click the **Random** button in the top **Control panel**:



Random button

Effects Section

The available **Effects** section is used to further shape the bass drum tone. 5 available modules are responsible for cascade (in series, one after the other) signal processing. The cascade signal flows from left to right (from the extreme left effect to the right **Master / Limiter** effect).



Effects section

The last effect in the series or **Master / Limit** has a fixed position at the end of the cascade.

The sequence of the remaining four effects is controlled (with the *drag'n'drop* technique) [see next chapters].

You can control the effect activity by clicking **Label** – the effect status is shown by a LED (active/inactive, toggle).



Effects section - Labels with the activity LEDs

Available Effect Block Specifications

The effects section provides the following algorithms:

- Bitcrusher
- Distortion
- Multimode Filter
- Equalizer
- Limiter

Bitcrusher

Bitcrusher is controlled with the following set of parameters:

- **Preamp** – Input signal's amplitude gain from 0 [dB] up to 48 [dB]
- **Lowcut** – Cut-off frequency of the passive high-pass filter that processes the signal before it is sent to the quantizer. The filter operates from 3 [Hz] up to 300 [kHz].
- **Quantize** – The number of bits the signal is reduced to. **Off** means that the quantizer block is disabled.
- **Sampling Freq** – Resampler frequency from 44 [Hz] up to 44 [kHz]
- **Resampling Filter** – Activation of the image filter that processes the resampled signal.
- Bitcrusher preset management section
 - **Next/Prev** – Navigation through the **Bitcrusher** preset bank. Loading of the next or previous preset
 - **Browser** – Opens the **Preset Browser** (for more details on the operation please refer to the **Preset Management** chapter)
 - **Init (Prev + CTRL)** – Restoring the initial effect values
 - **Reload (Next + CTRL)** – Restoring the last loaded master preset (**Master Preset**) values for the **Bitcrusher** section
 - **Save (Browse + CTRL)** – Saving the current effect settings as a preset
- **FX Amount** – Proportions between the **Dry** and **Wet** signals that will be sent to the next cascade effect.



Distortion

Distortion is controlled with the following set of parameters:

- **Shape – Clipping curve selection**
 - Tanh
 - Atan
 - Hard clip
 - Crossover
 - Asymmetric hyperbolic tangent
 - Mixed Tanh and linear hard clip
- **Dynamics** – Signal compression ratio before sending it to the **Clipper**
- **Preamp** – Signal amplification before it gets onto the **Clipper**. Amplification range: from 0 [dB] up to 48 [dB]
- **Low Cut** – Cut-off frequency of the passive high-pass filter that operates before the **Clipper**
- **Contour** – **Clipper**'s kneespan
- **Tone** – Overdrive tone characteristics
- **Volume** – The resulting signal level from $-\infty$ [dB] up to 12 [dB].
- **Distortion preset management section**
 - **Next/Prev** – Navigation through the **Distortion** preset bank. Loading of the next or previous preset
 - **Browser** – Opens the **Preset Browser** (for more details on the operation please refer to the **Preset Management** chapter)
 - **Init (Prev + CTRL)** – Restoring the initial effect values
 - **Reload (Next + CTRL)** – Restoring the last loaded master preset (**Master Preset**) values for the **Distortion** section
 - **Save (Browse + CTRL)** – Saving the current effect settings as a preset
- **FX Amount** – Proportions between the **Dry** and **Wet** signals that will be sent to the next cascade effect.



Multimode Filter

The Multimode filter is controlled with the following set of parameters:

- **Cutoff** – Filter cut-off frequency from 1 [Hz] up to 22 [kHz].
- **Resonance** – Filter emphasis
- **Mode** – Filter slope: 12 [dB] or 24 [dB]
- **Type** – Filter type
 - **LP** – Low-pass
 - **BP** – Band-pass
 - **HP** – High-pass
- **FX Amount** – Proportions between the **Dry** and **Wet** signals that will be sent to the next cascade effect.



Equalizer

The Equalizer is controlled with the following set of parameters:

- **High** – High frequency gain (5 [kHz] and higher) from -24 [dB] up to +24 [dB]
- **Middle** – Medium frequency gain (parametric equalizer) from -24 [dB] up to +24 [dB]
- **Middle Freq** – Middle band (parametric equalizer) frequency from 100 [Hz] up to 10 [kHz]
- **Low** – Low frequency gain (100 [Hz] and lower) from -24 [dB] up to +24 [dB]



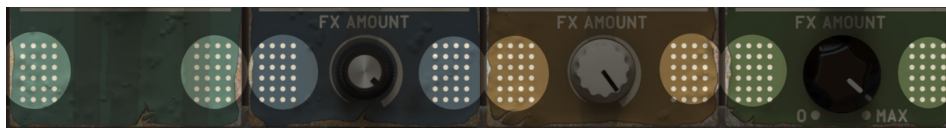
Master / Limiter

The final processing block consists of the optionally activated limiter with the built-in auto-makeup. When the limiter is active **Threshold** determines the value of the amplitude that should excite the compressor whereas **Output** determines the amplitude value the signal should be gained to. The limiter compression ratio is **1:inf** and its operation is indicated by the **Gain Reduction**. When the **Limiter** is disabled the **Output** knob operates as normal gain. The **Output Clip** LED shows whether the output does not exceed **0 [dB]**.



Changing the cascade effect sequence

The cascade sequence of the first 4 section effects can be determined by using the *drag'n'drop* technique.



Drag'n'drop activity areas in the effects section

At the bottom of each effect, on both sides, you can find active areas marked with spots that you can use to *grab*, *drag* and *drop* any of the 4 effects at the desired position.



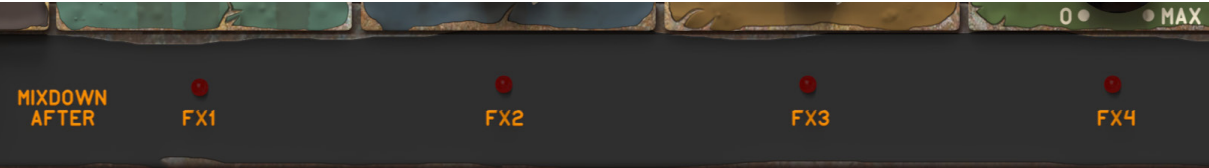
Dragged Equalizer

The positions of the dragged effect and the effect the dragged effect is dropped on are interchanged in the cascade.

DESCRIPTION OF OPERATION • EFFECTS SECTION

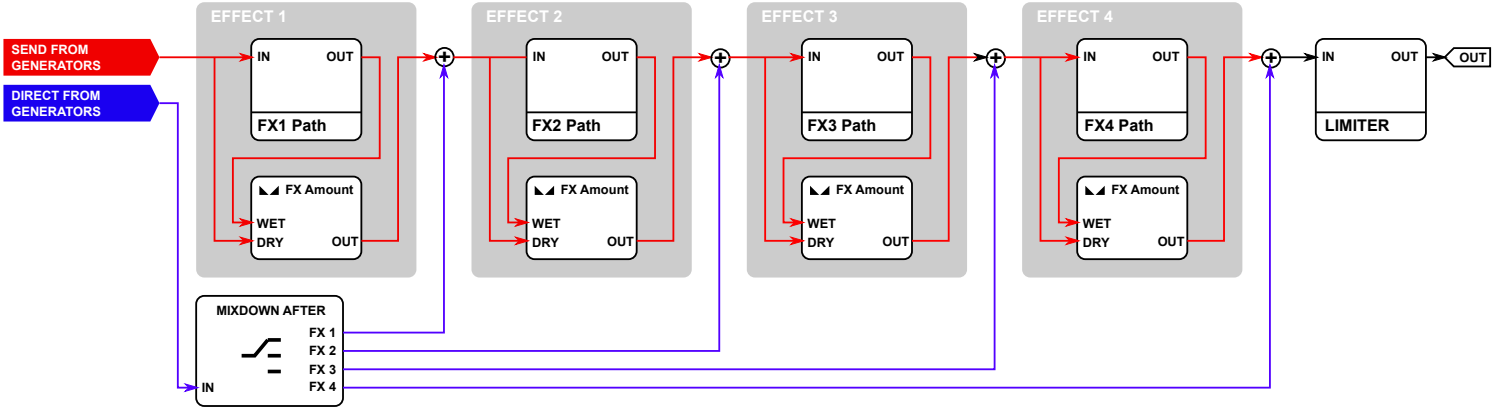
Mixdown After

The **Send** parameters of the **Generators** section decide on the signal proportions sent to the effect cascade and directly to **Master / Limiter**.



Audio Mixdown in the Effects section

Mixdown After can modify the position where the generator signal joins (mixes with) the processing path in the effects section.

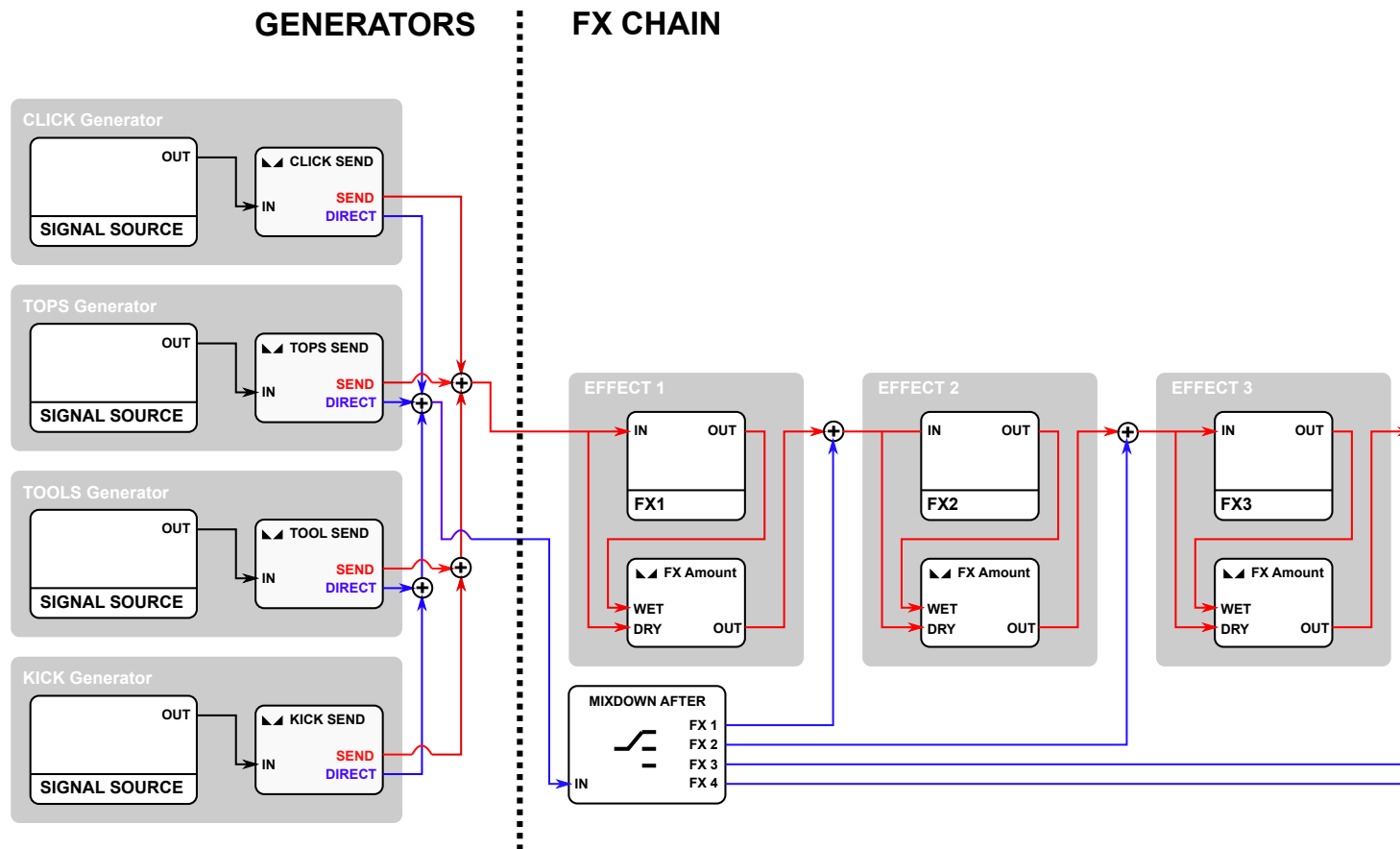


Signal effects section flow diagram with Mixdown After

By default, **Mixdown After** is set to **FX4**. It means that the generator signal flows over two paths; the primary generator signal bypasses the effect block and is sent to the **Master / Limiter** (blue path), the send generator signal is sent to the effect block and processed by the effects before it enters the **Limiter** (red path). **Mixdown After** controls the position where the primary signal joins (sums up with) the send signal.

Punchbox Signal Flow

The diagram below presents the whole signal flow in the instrument (with the joining direct generator output controlled by **Mixdown After**).



Punchbox signal flow

Exporting plug-in's setting to a sample

To preserve processing power of your CPU you can save current sound setting as a sample and it use instead in your music project. If you're satisfied with your kick sound, click the **Export** button in the top **Control panel**:



Export button

to open **Sample export** dialog.

Preset and Sample Management

Preset Structure and Types

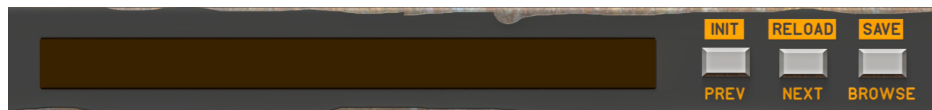
Punchbox is based on the multi-level preset structure which means that the presets are arranged in the instrument according to a specific hierarchy. Thus, **Punchbox** provides the following types of presets:

- **Master Preset** – It is a global preset that includes all available (generator and effect) parameters as well as the loaded sound samples. Below are the sub-types of presets (or the presets including the sub-sets of parameters constituting the **Master Preset**):
 - **909 Preset** – Includes the parameters of **909** included in **Kick**.
 - **808 Preset** – Includes the parameters of **808** included in **Kick**.
 - **606 Preset** – Includes the parameters of **606** included in **Kick**.
 - **Sine Preset** – Includes the parameters of **Sine** included in **Kick**.
 - **Bitcrusher Preset** – Includes the parameters of **Bitcrusher**
 - **Distortion Preset** – Includes the parameters of **Distortion**

Each preset type is stored as separate content (divided into the User and the Factory resources) and available in the dedicated **Preset Management** section of GUI as well as managed with the dedicated **Preset Browser**.

Browsing Presets

Preset Management sections enable quick navigation and browsing the presets structure:

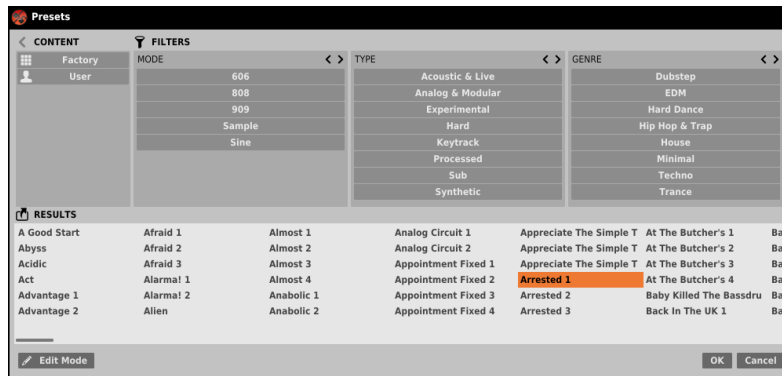


Preset Management section for Master Presets

Each **Preset Management** section (for each **Preset** type) contains following common controls / functions:

- **Preset Name** – Displays the name of the currently loaded preset.
- **Prev / Next** – Buttons that allow for linear browsing of items list (depending on currently set filters – see sections below)
- **Init (Prev + CTRL ▣)** – Simultaneous use of the **Prev** button and the CTRL key restores initial settings of plug-in parameters.
- **Reload (Next + CTRL)** – Simultaneous use of the **Next** button and the CTRL reloads from the most recently loaded parent preset or if it's used in **Master Preset Management** section reloads the most recently loaded preset.
- **Save (Browse + CTRL)** – Simultaneous use of the **Browse** button and the CTRL key saves current parameters as a new preset or allows for overwriting of the existing one (see sections below).
- **Browse** – Expands the **Preset Browser** panel at the bottom of GUI section.

A Preset Browser looks as follows:



Preset Browser

One can see three main sections:

- **Content** – Sources from which presets can be read.
- **Filters** – Configuration of presets **Filters** (non-active by default).
- **Results** – List of presets from resources that meet criteria set by **Filters**.

Resources

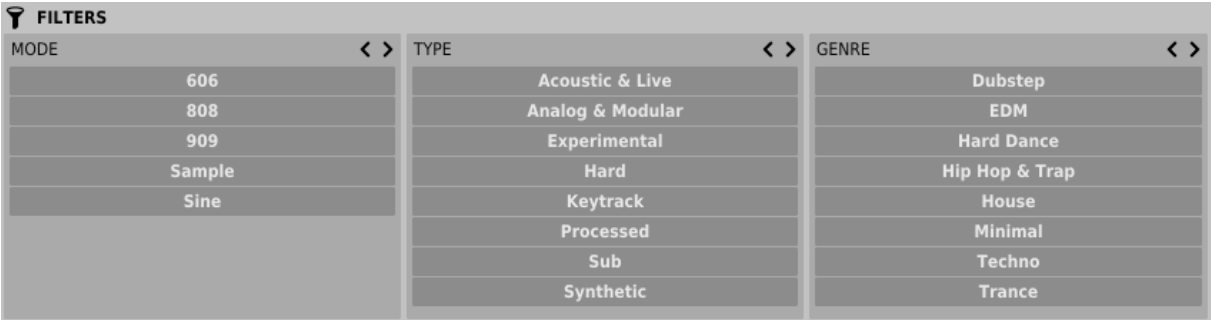
In this section you can choose a resource / resources in which you want to browse presets. There are two resources to choose from:

- **Factory** – Delivered together with the plug-in, cannot be modified (read-only).
- **User** – Created by the user during using the plug-in and can be freely modified, shared with other users etc.

Choosing any of them will cause narrowing the results to the presets from one resource.

Preset Filters

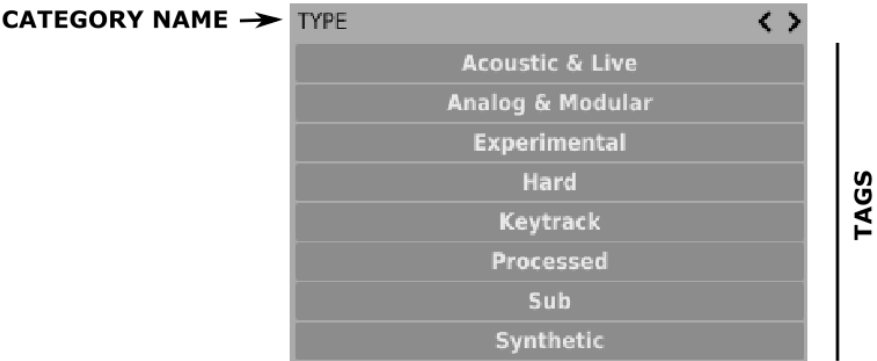
The plug-in enables classification of presets with the use of **Categories** and **Tags** system, whose aim is to facilitate the process of browsing the content by filtering.



Preset Browser Categories Filters

Categories and Tags

Each preset is described by a few common **Categories**. Within each of them there may be one or more **Tags** from a particular set.



A single category in a filter with a description of its elements

Presets from **Factory** resource were described by **Categories** and **Tags** during the stage of its creation. **Categories** and **Tags** are chosen in such a way so as to describe the content in the best possible way, taking into account the plug-in purpose.

Edition of **Categories** and **Tags** in case of **Factory** content is not possible – it is blocked. **User** presets may be described only with **Categories** and **Tags** from **Factory** content or, alternatively, the users may define their additional **Tags** in order to describe their own presets.

Results

This is a list of presets from chosen resources that meet the filtering criteria. The basic function of this section is browsing and loading presets (in **Browsing Mode** – by default).

^ RESULTS						
A Good Start	Afraid 1	Almost 1	Analog Circuit 1	Appreciate The Simple T	At The Butcher's 1	Ba
Abyss	Afraid 2	Almost 2	Analog Circuit 2	Appreciate The Simple T	At The Butcher's 2	Ba
Acidic	Afraid 3	Almost 3	Appointment Fixed 1	Appreciate The Simple T	At The Butcher's 3	Ba
Act	Alarma! 1	Almost 4	Appointment Fixed 2	Arrested 1	At The Butcher's 4	Ba
Advantage 1	Alarma! 2	Anabolic 1	Appointment Fixed 3	Arrested 2	Baby Killed The Bassdru	Ba
Advantage 2	Alien	Anabolic 2	Appointment Fixed 4	Arrested 3	Back In The UK 1	Ba

Results Section in Preset Browser

Click any name to choose and load the preset.

Double-click the name to enter preset name edit mode. ▶

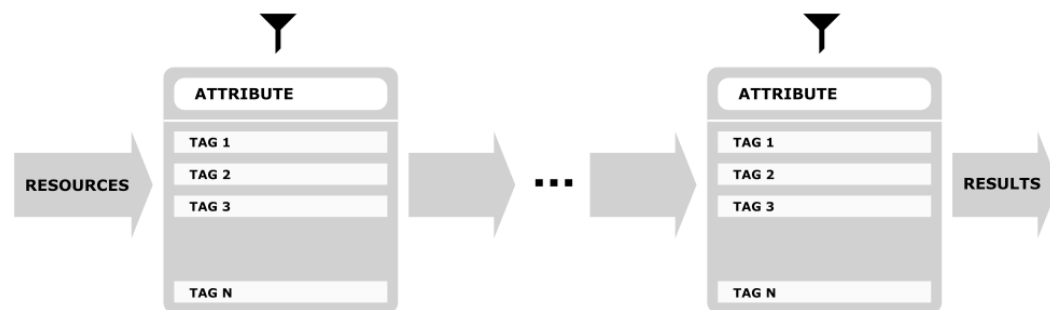
Preset Filtering

Filters section columns represent particular **Categories** – **Category filters**, while rows in each of these columns represent **Tags** available within each **Category**.

FILTERS		
MODE	TYPE	GENRE
606	Acoustic & Live	Dubstep
808	Analog & Modular	EDM
909	Experimental	Hard Dance
Sample	Hard	Hip Hop & Trap
Sine	Keytrack	House
	Processed	Minimal
	Sub	Techno
	Synthetic	Trance

Preset Browser Categories Filters

Filtering results have a form of a cascade (columns), from left to right. This means that all presets available in the selected resources are filtered as to presence of **Tags** from the first **Category** (first column from the left), next a set of presets being a result of filtering by the first **Category** is filtered by the **Category** represented by the second column etc., until it is filtered with the last active **Category Filter**.



Presets Filtering with the use of Categories Tags

The result of a cascade filtering process (presets that meet the criteria of each filter) is listed below, in the **Results** section.

Basic Actions on Filters

Tag buttons in **Filters** work in toggle mode. Click to activate/deactivate **Tag** (Grey color means that the **Tag** is inactive, teal blue means that the **Tag** is active). If at least one **Tag** in a column (**Category**) is active, then the **Filter** also becomes active.

For example, if the first column represents **Type Category** with a set of the following **Tags**: {*Acounstic & Live, Analog & Modular, Experimental, Hard etc.* }, clicking the *Experimental Tag* will activate the **Category Filter Type** and narrow down a list of presets to the items in case of which the *Experimental Tag* appeared in the **Type Category**.



Enabling Experimental tag in Type Category

If you click the *Experimental* item again, you will deactivate the **Filter**, so all presets from the content will be displayed again.

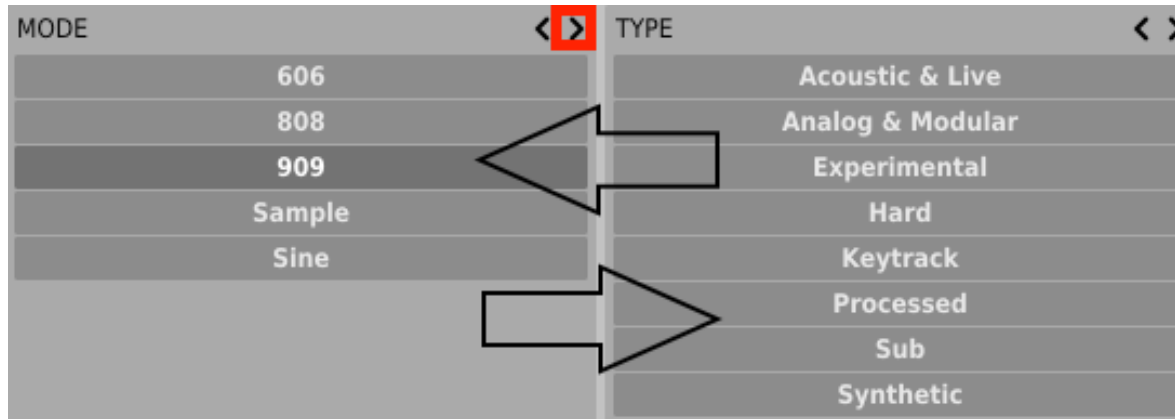
Reordering Categories

To the right of the **Category Filter** header there are buttons with arrow icons:



Filter reordering

They enable moving the **Category** to the left or right in a cascade. Clicking the right arrow replaces the current **Category** with the **Category** on the right. Clicking the left arrow replaces the current **Category** with the **Category** on the left.



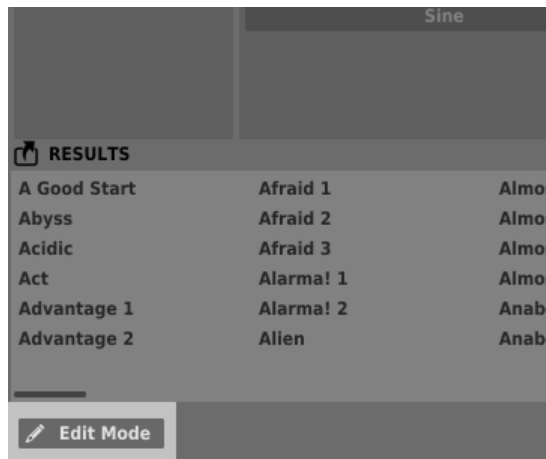
Presets Filtering with the Use of Categories Tags

Clicking the left arrow for the **Category** located on the far left does not change anything. The same is true for the **Category** located far to the right and right arrow (as the column has no predecessor/successor with which it could be replaced).

Presets Editing - Edit Mode

An active **Edit Mode** in **Preset Browser** changes its function (enables the change of presets names, edition of **Categories** or **Tags**, deletion of presets as well as their export or import. One should bear in mind, however, that these operations are not allowed in case of **Factory** presets, but only for the **User** presets.

Edit Mode can be activated with a button located in the bottom left-hand corner (click again to deactivate):



Edit mode button

In this mode Preset Browser slightly changes its appearance (not only function):



Preset Browser in Edit mode

- The **Filters** section changes into the **Edit Tags** section, whose appearance is almost identical, but the function is different. The section is used not as a filter, but as an editor of **Tags** of chosen presets.
- The role of the **Results** section is to choose presets for edition (edition is possible only for user presets).
- At the bottom of the screen there is **Delete**, button used to delete selected **User** presets.
- The choice of the resource in the **Content** section does not work, as edition is possible only for user presets.

Selection of Presets for Edition

You can edit both single preset and a set of presets. Using the functionality of the **Results** section, you can choose a preset or a set of presets in the following way:

- **Click the preset** – Choose the preset from the list,
- **Click the preset + press CTRL** – Add another preset to an already chosen preset or a set of presets,
- **Click the preset + press SHIFT** – Select a part of a list of presets from the last chosen preset to the item clicked together with **SHIFT** button.

Tags Edition

Change of Tags status in Presets

Tag buttons work in toggle mode, similarly as in case of filtering. Clicking them you can respectively set **Tag** or erase them from chosen presets.

MODE	TYPE	GENRE
606	Acoustic & Live	Dubstep
808	Analog & Modular	EDM
909	Experimental	Hard Dance
Sample	Hard	Hip Hop & Trap
Sine	Keytrack	House
	Processed	Minimal
	Sub	Techno
	Synthetic	Trance

Filters' tags

Choosing a greater number of presets, in which the **Tags** were already defined, enables their re-edition. Consequently; in case when a specific **Tag** appeared in all selected presets, it will be marked with an intensive teal blue color.

When a specific **Tag** is set only in a part of chosen presets, then it is codified with a pale teal blue. The **Tag** that does not appear in any of the presets is marked with grey color:

TYPE
Acoustic & Live
Analog & Modular
Experimental
Hard
Keytrack
Processed
Sub
Synthetic

Notification about Tags Status in Chosen Presets

The change of the **Tag** status for one or more chosen presets sets or erases this **Tag** in all these presets. The status change is signaled

with an **Asterisk** located to the left of the **Tag** buttons .



Notification about Changes in Tags Status in Chosen Presets

Elements / **Tag** buttons highlighted with pale teal blue color (meaning different values of a particular **Tag** buttons for the highlighted presets) work in a three-state system; erasing the **Tag** (grey color), setting of the **Tag** (intensive teal blue color) or no changes (pale teal blue) for all selected items.

Changes introduced during edition do not have to be confirmed, they are signaled by **Asterisks** located by **Tag** changed for particular presets.

Presets Names Editing

Double-click the name of a preset to enter name editing mode.

Deleting Presets

Selection of one or more presets activates **Delete** button at the bottom left corner. It can be used to delete the selected presets

Saving the current settings as Preset

To save plug-in parameters settings as a user preset use the **Browse** button pressed together with CTRL button in **Presets Management** section. This action automatically opens the **Preset Browser** with an active **Edit Mode**.



Saving the Settings as Preset

Additionally, at the bottom there will be a textbox into which you should enter a name of a newly created preset, and then confirm it by clicking **Save** or cancel by clicking **Cancel**.

As the **Preset Browser** is in the **Edit Mode** before confirmation of the newly created setting as preset, we can straightaway categorize a particular setting, using functionality of the **Edit tags** section, even just before saving it as **Preset**.

Samples

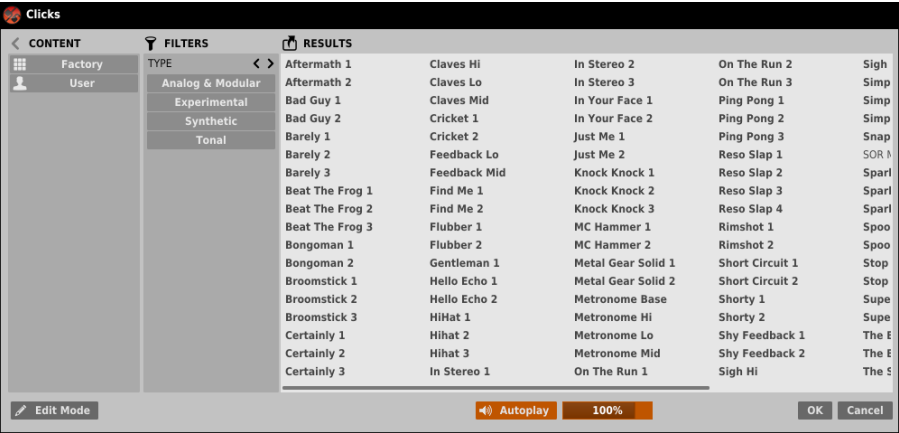
Arrangement of the Sample Resources in Punchbox

Click, Tops, Tools and Kick (operating as a **Sampler**) provide separate (factory and user) sample resources. Each generator has access to its resource through its own **Sample Management** section:



Sample Management sections

Clicking **Browse** button opens **Sample Browser** window:



Sample Browser

As you can see at first sight there are almost no differences between the **Sample Browser** and the **Preset Browser** and it is also true when it comes to their functionality. These browsers have the same components which operate exactly in the same manner, e.x.: **Content** to select the browsed (**User** or **Factory**) resources. There are also **Filters** based on the **Category** and **Tag** system like the presets. And the **Results** displaying the **Samples** (similarly to **Presets** in the **Preset Browser**) from the selected **Resources** that meet the criteria specified in **Filters**. Thus, this chapter presents only the functions that differentiate the **Sample Browser** from the **Preset Browser**.

Auto-Play

Auto-play allows you to play the browsed samples to listen to them before confirming their loading with **Ok**.

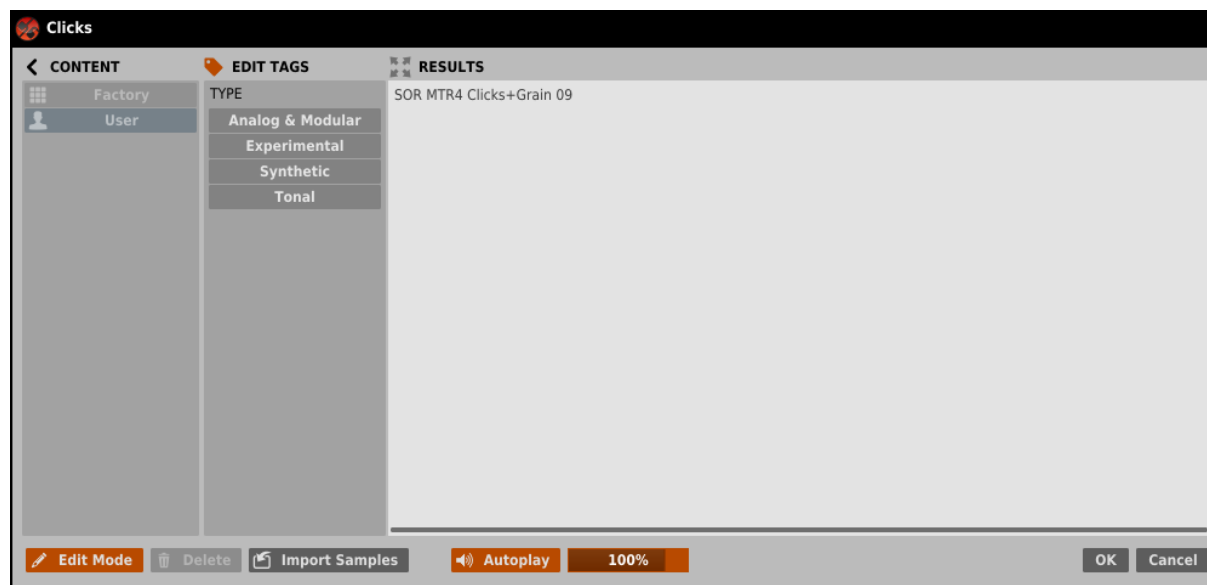


Autoplay button in the Preset Browser

Press **Autoplay** (the button operating in the toggle mode) to enable/disable this function. What's more, when this function is enabled you can use the slider on the right side to control the played sample volume.

User samples Import

When the **Edit Mode** of the **Sample Browser** is active you can import the external samples to the user resources from wave files with the **Import Samples** button displayed at the bottom of the **Sample Browser**:



Import Samples in the Sample Browser

This button opens the file browsing system dialogue box. Acceptable file formats are: **.wav**, **.aif** and **.aiff**. both **mono** and **stereo**. There are no restrictions as to the sampling frequency of the imported sound clips.

The dialogue box allows you to import more clips at the same time and not just single clips.

Configuration

Parameter settings

Right-click any plug-in parameter to open the context menu



Closed Context Menu

It allows for:

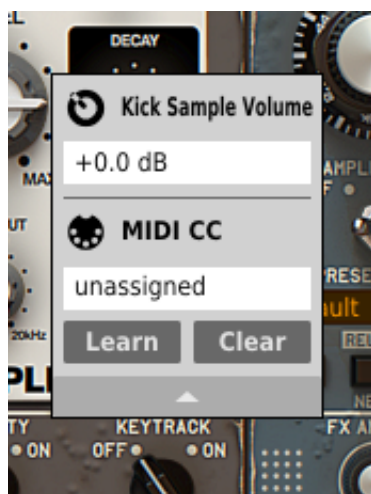
- Checking the name and current value of a parameter,
- Checking if the parameter is attributed to MIDI CC controller, and if it is – to which number,
- Linking the parameter to MIDI CC controller.

Clicking the arrow in any area of the menu expands it and displays all available options. Next right click on the parameter or left-click outside the menu area closes it automatically

MIDI Learn

MIDI Learn function enables a quick assignment of physical controllers (from MIDI controller) to plug-in parameters. The assignment can be divided into a few steps:

1. Right-click the parameter which you want to attribute to physical MIDI controller in order to expand the context menu.
2. Click arrow at the bottom in order to expand the context menu



Expanded Context Menu

3. Click the **Learn** button to put the plug-in into a pending state until you move any MIDI CC controller
4. Click **OK** to save the change or click the **Cancel** button to restore the previous setting.

MIDI Unlink

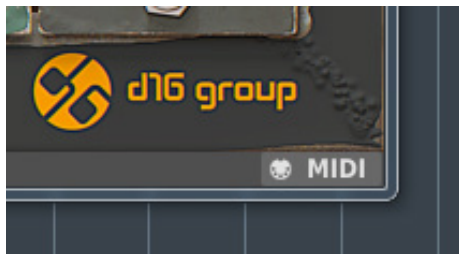
You can also delete MIDI CC code attributed to plug-in parameter from the context menu:

1. Open the context menu, right-clicking the parameter attributed to a particular MIDI CC
2. Expand the menu, using the arrow at the bottom
3. Click the **Clear** button
4. Confirm with **OK** button

Plug-in's current settings

Current settings are relevant to a specific instance of a plug. They are initialized with the **Default settings**, when the plug-in is loaded (see the next chapter).

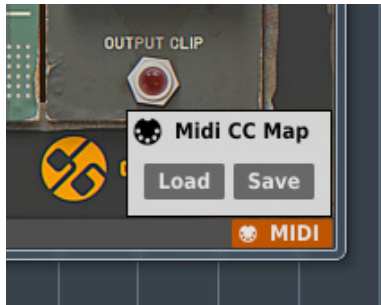
At the bottom of UI there is a status bar that enables the change of **Current settings**, in a case of PunchBOX it's Saving / Loading the MIDI CC Map.



Current Settings in a Status Bar

Saving / Loading the MIDI CC Map

This item enables to save current parameters of MIDI CC codes as MIDI Map in a file or to load them.



Saving / Loading the MIDI CC Map

Plug-in's default settings

The **Options** panel allows us to change the **Default settings** of the plug-in. Every time the plug-in is loaded in the host application (new instance is created). **Default settings** are used for initialization of the **Current settings**.

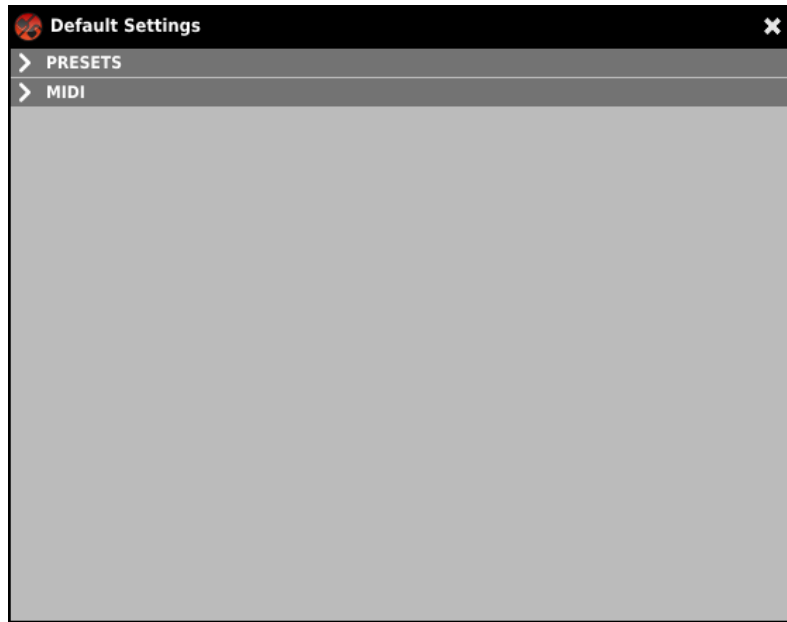
Default settings are stored within a configuration file of the plug-in. This file is updated at the moment of unloading any of active plug-in instances from the host application.

Use the **Options** button on GUI to open the panel:



Options button

The **Options** panel operates as an accordion where you can click a specific section to expand it:

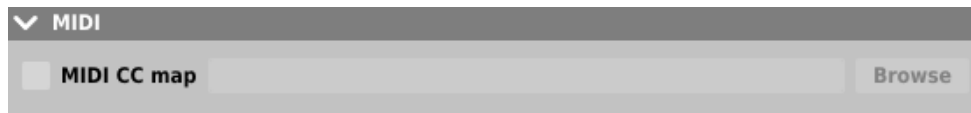


Options Panel

Plugin default settings

- MIDI
- Presets

MIDI



Default MIDI Map Choice Section

This section allows for setting of a path to a file with a default **MIDI Map** that was prepared before. Clicking MIDI CC Map check box activates load of **MIDI Map** and the possibility of pointing it (**Browse** button).

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- **Michał Wolski / WEF**
- **Dada Life**
- **Twolegs Toneworks**
- **Олег Ершов**

About

D16 Group



<http://www.d16.pl>

D16 Group Audio Software officially launched in 2006 with the aim of producing virtual instruments and effects for producers and musicians who required top quality and inspiration in their music. Today, D16 Group have become a premium audio plug-ins vendor.

Continuously high level of quality and will of improvement allow D16 to deliver virtual instruments that set the new standard of sound perfection and effects that take creativity to the next level. Solid trust from audio community and respect for products fruitful in many rewards make the D16 Group company of choice for many musicians around the globe.

Sounds of Revolution



<http://www.sounds-of-revolution.com>

In search of the latest and greatest sounds of tomorrow, Oliver Schmitt works hard to make the slogan Quality made in Germany shine. Nowadays mostly known for his high-end sample series, it's probably safe to say that numerous musicians worldwide already got the special SOR touch on their hard drives, ready to be infused into the latest dancefloor smashers. But don't you get it wrong: synthesizer patches and some intriguing upcoming projects are just as much worth a try!

Besides this shameless self-advertising, Sounds Of Revolution mastermind Oliver doesn't fear critical public feedback: be it press articles, reviews by the heavyweights of music business or discussion platforms on the web – SOR has come a long and hard-earned way to meet your every need as a producer of electronic music, regardless of the subgenre preferred, and keeps on working hard to become even better.

CFA Sound



<http://www.cfa-sound.com>

CFA-Sound is operated by the german sound designer Martin Breuhahn. Following first soundset releases on Vengeance-Sound and Sounds of Revolution under the alias Cyforce, he founded in spring 2008 his own sound label CFA-Sound -this step opened the doors for establishing his very own sound and style. While first taking care of all kinds of modern dance music by delivering soundsets for various synthesizers as well as sample packages and plugins, he continuously expanded his concept to sample collections and self-programmed plugins, always sticking to the slogan of CFA-Sound – “Discover the sound of tomorrow” – by being just the special bit different from “bread & butter” sound design and edm focused. Next to the own products, CFA-Sound is active in sound design for well-known companies like MOTU, Camel Audio, Loopmasters and others.

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