



d16 group

DRUMAZON

Drum Machine



User Manual

Overview

Interface

The graphical interface of the Drumazon is divided into two main parts:

- **Control panel** – Used for main plug-in, preset, pattern and audio output management.



Control panel

- **Drum machine module** – Essential part – responsible for editing sequence patterns and generating the sound.



Drum module

Work modes

Drumazon works in two modes:

- **Internal** – The drum patterns are entirely stored in the internal sequencer of the plug-in.
- **External** – Drumazon acts as a sound module playing drum sounds. Patterns are played by sending Midi notes from host sequencer.

Audio outs

Drumazon is a multi-output plug-in. It has 12 stereo (or mono – configurable) outputs. Instruments can be freely mapped to each of those available outputs according to their individual volumes setting.

By the default, outputs are set to be stereo. That can be changed in a **Options** panel (described later).

When Drumazon is loaded, the 11 individual drum sounds (+ 1 extra trigger out sound described later) are mapped to first output. To change the output assignment, just click and drag on the LED above the drum sound settings.



Audio outputs configuration

Sounds can be mapped to any available output (one of 12). For example, the Open and Closed Hi Hats could be assigned to a single output 2 together or the Clap could appear on output 1 etc. It is fully configurable.

➔ Note: drum sound mapping is compatible with General Midi Standard. However, mapping can be changed by user.

➔ Note: Being able to change the above settings may depend on the host sequencer.

When Drumazon is playing, it is possible to turn on or turn off individual channels (instruments) using the **Mute / Solo** LED switches:



Mute/Solo switches

These stop the triggering of the instruments but allow the sounds to play until the end of the envelope. This stops a rapid cut in the sound making the transition sound more natural.

Preset management

All the parameter settings (level, tuning, decay etc) for a complete Drumazon drum kit are stored in a **Preset**. Drumazon can store a total of 128 presets.



Sound parameters

The **Preset browser** tool is provided to simplify the organization and use of Presets. The **Preset** section on GUI is used for navigation through the preset bank. To read more about preset management go to chapter **Preset Management**.



Preset section

Play modes

External sequencer mode

Clicking the **Int.Seq** diode in the **Seq** box will switch it off:



Play mode settings

Drumazon will now act as a sound module. MIDI Notes corresponding to the **Instrument** (drum sound) note numbers are sent from the host sequencer to play drum patterns. The mapping follows the General Midi standard, the same as the original 909.

Note velocity is used to determine how loud notes are played. To play back accented notes in this way, set the velocity to 127. For normal parts, set the velocity to a lower value (e.g. 100). Although, notes can be played back with any velocity from 0 to 127.

In **External** mode, only the controls from **Synthesis section** and **Control module** functions work.

Step buttons located on Drumazon's GUI serve only to trigger individual sounds in this mode.



Step buttons

However from the host application, We aren't able to decide about, which one note will be played accented and which one won't. It depends on the velocity value of each midi note. As the result of it, We obtain smooth transition between not accented and accented instruments (127 levels).

Internal Sequencer mode

➔ Note: If a pattern is started using the Drumazon's **Start** button and the host sequencer has not been started then, playback can only be stopped using the **Stop** button on Drumazon.

Internal Sequencer (**Int.Seq** LED turned on) mode allows Drumazon to act as a fully functioning drum machine within the host sequencer. Pressing **Play** on the host sequencer, or **Start** on Drumazon, will start play back of the default internal patterns.



Start, stop buttons

Drumazon can be set to synchronise perfectly to the host tempo (by setting the **Int.Sync.** led to off) or to play to its own tempo (set by turning the **Int.Sync.** led on).



Play mode settings

With internal synchronization turned on, each of the internal patterns has its own **Tempo** value, which can be adjusted by tweaking the Tempo dial (Only in the **Pattern write** mode, described later):



Tempo dial and lcd display

Internal Pattern Storage

The patterns for the internal sequencer are stored in 8 banks with each bank holding 12 patterns. This gives a total of 96 patterns which can be stored in Drumazon's memory at any one time.

Patterns can be selected using the notes on a connected Midi keyboard (**Host** mode described later). Bank 1 pattern 1 starts at note C-1. The patterns are stored 1 bank per octave (that gives 12 patterns per octave and cover 8 octaves=96). The **Step buttons** (below) can also be used to select patterns (**Native** mode). The first 12 buttons correspond to all the half-tones in an octave (notes are under the buttons). The last 4 buttons are used to select the bank. The buttons toggle between the lower banks (dimly lit red LED) and the upper banks (brightly lit red LED).



Step buttons

The currently selected pattern is shown on the Drumazon's interface:



Pattern display and navigation

After loading Drumazon, the pattern corresponding to the C-1 note is chosen (first in a bank). The current pattern is marked by a blinking LED on one of the first 12 **Step buttons**. The bank is marked by dark or bright red LED on one of the last 4 Step buttons.

When the **Start** button is pressed, the LED on the **Step Buttons** will indicate the current step in the pattern. To select another pattern whilst playing, select it using the combination of **Step Button** and **Bank button** or select it using the keys on a connected MIDI keyboard. The next pattern will start when the current pattern comes to the end of its final step.

Internal sequencer has two internal **Play** modes:

- **Native mode** – available when the **Host mode** LED is turned off:



Play mode settings

- **Host mode** – when this LED is turned on.

Native mode

Drumazon is in this mode when it is first loaded. This is the default mode. It allows a range of patterns (or single pattern) to be selected and for Drumazon to continually cycle through these patterns.

To select the start pattern, press the appropriate **Step button** with the mouse. To select the last pattern in the range, select another pattern **WHILST** holding down the **CTRL** key on the keyboard (On **MacOS** use **Apple CMD** key instead of **CTRL** key). Drumazon will now cycle up through the range and repeat. A MIDI keyboard can be used to select a range to play. To do this, press the two notes on the keyboard, which cover the range, at the same time. Drumazon will now cycle through this range and continually loop.

Whilst playing back in **Native** mode, selecting a different pattern (either using a **Step key** on the interface will cause Drumazon to play that pattern next after coming to the last step in the currently playing pattern. It will then continue to play the new pattern until stopped.

The currently playing pattern is shown on the Drumazon interface:



Pattern display and navigation

In format:

[BANK NUMBER] - [PATTERN IN BANK NUMBER]

Below it is displayed the pattern name (in **Pattern name** text box).

Host mode

In **Host mode**, patterns are triggered using a MIDI keyboard. A **Note on** causes the corresponding pattern to play. This mode is recommended for creating drum line arrangement in host application. Releasing the key and sending a **Note off** will eventually stop the pattern. It depends on whether the **Note Off Mode State** is set in configurational panel is checked. To change **Note Off Mode** open configurational window by clicking **Options** button:



Options button

Go to **Sequencer** tab and check or uncheck the **Note Off Mode State** checkbox in **Current Settings** group.

➔ Note: In this mode the pattern structure is the same as it is in Native Mode. 96 patterns mapped to midi keyboard as notes: C-1 to B-7.

The pattern will play back at the tempo of the host sequencer (if internal sync turned off – **Int.Sync.**) or at the tempo which Drumazon’s **Tempo** function is set to (if using internal sync). This happens while a key is pressed and held.

This is a very creative mode which, by recording the notes into the host sequencer, can allow very complex percussion structures to be created using patterns in Drumazon’s internal pattern memory.

It should be noted that in **Host mode** the **Start, Stop** and **Step buttons** on Drumazon’s don’t function. Patterns are only played back while a key on a connected MIDI keyboard is pressed (and held).

In this mode, currently playing pattern is indicated by display unit:



Pattern display and navigation

In format:

[TONE NAME][– or #][OCTAVE NUMBER]

Midi output

Drumazon has permanently active MIDI output, which allows to control external instrument (virtual or hardware) by Drumazon’s internal sequencer. It works either in **Native** or **Host mode**. Plug-in sends a midi note codes accordingly to the current drum map configuration to its Midi output. Velocity values of Midi notes sent by Drumazon are calculated on a basis of **Step attributes** (accented or non-accented) and value of **Global accent**.

When you set the Drumazon into **External** mode, it just passes MIDI notes through itself unchanged. So basically the same notes you redirect into a plug-in you will get on the MIDI output.

Sound editing

Instruments section is for sound editing in Drumazon:



Sound parameters

There are available parameters for 11 drum sounds like:

- Bass Drum
- Snare Drum
- Low Tom
- Middle Tom
- High Tom
- Rim Shot
- Hand Clap
- Closed Hihats
- Open Hihats
- Crash
- Ride

For each of these instruments there is one common parameter:

- **Level** – Volume level of each instrument

And specific parameters:

- Bass Drum
 - **Tune** – Release time of the frequency envelope,
 - **Attack** – Amplitude value of the initial click sound,
 - **Decay** – Decay time of amplitude,
 - **Pitch** – Base frequency of the instrument,
 - **Tune depth** – Range of the frequency envelope.
- Snare Drum
 - **Tune** – Release time of the frequency envelope,
 - **Tone** – Noise amplitude release time,
 - **Tune depth** – Range of the frequency envelope,
 - **Decay** – Decay time of amplitude,
 - **Snappy** – Amplitude value of the noise.
- Low Tom, Middle Tom, High Tom
 - **Tune** – Base frequency of the instrument,
 - **Tune depth** – Range of the frequency envelope,
 - **Decay** – Decay time of amplitude,
 - **Tone** – Noise amplitude release time,
 - **Tune decay** – Decay time of the frequency envelope.

- Rim Shot
 - **Tune** - Base frequency of the instrument,
 - **Decay** - Decay time of amplitude.
- Hand Clap
 - **Decay** - Decay time of amplitude,
 - **Reverb** - Reverb time.
- Closed Hihats
 - **Tune** - Base frequency of the instrument,
 - **Ch decay** - Decay time of amplitude.
- Open Hihats
 - **Tune** - Base frequency of the instrument,
 - **Oh decay** - Decay time of amplitude.
- Crash
 - **Tune** - Base frequency of the instrument,
 - **Crash decay** - Decay time of amplitude.
- Ride
 - **Tune** - Base frequency of the instrument,
 - **Ride decay** - Decay time of amplitude.

Trigger out

There's possible to make audible a trigger sound, which occurs in analogue machines. By default this signal is off. To turn it on you need to decide which track (instrument) will be triggering this sound. Check out further chapters for the details.

Master volume

To change the Drumazon's output volume just tweak the **Volume** knob:



Volume knob

Drumline editing

Pattern editing

To edit the currently selected pattern, press the **Patt write** button (it's not necessary in **Host Mode**, since **Pattern write** is the only possible mode there).



Pattern write button

To edit another pattern other than the current one playing, use the **Prev** and **Next** buttons. The playing pattern won't change but the edited pattern will be the newly selected one.



Pattern display and navigation

Every pattern comprises of 11 tracks, one for each instrument. The parts are edited using the **Step buttons**:



Step buttons

These keys work in toggle mode and for most instruments have 3 states:

- **Accented** - LED on the key lights with a bright red color
- **On** - LED on the key lights with darker red color
- **Off** - LED on the key is off

The main difference between a non accented and accented sound is the volume but, it also causes subtle changes to the sound character in other ways.

The **Rim Shot**, **Hand Clap**, **Crash** and **Ride** have only two possible step values: **On** or **Off**.

To select an instrument (track) to edit, use the **Instr.Sel** knob.



Instrument selector

However, the LEDs below the **Step buttons** can also be used:



Instrument LED selector

We can select a single instrument by clicking on it in the **Track selector** bar. However, to select more than one instrument (for editing purposes), press and hold **CTRL** on the keyboard whilst clicking.

Flam mode

In addition to the 3 states mentioned above, every step can also have another state is a **Flam**. A **Flam** is a double triggering of a sound with a short delay between each trigger. The delay value can be set using the **Flam** knob.



Flam parameter

➡ Note: The delay is always shorter than the duration time of the whole single step.

To enter **Flam edit** mode, press the **Flam** button whilst in **Patt.Write** mode.



Pattern editing functions

The steps are entered as for normal parts mentioned above (with values **Accented, On, Off**). Also note, any sound playing on a step as a normal sound will be overwritten if a **Flam** is set for that measure (and vice versa). For example, having a snare playing on step 5 and then putting a **Flam** on that step would delete the normal snare hit at that point. **Flam** parts can be mixed with normal parts for a given instrument as long as they don't occur on the same step.

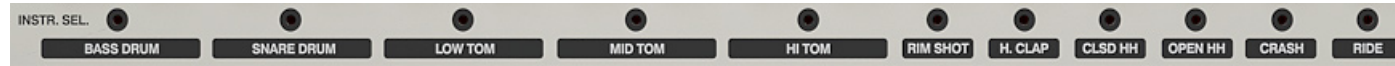
Tap mode

Tap mode allows patterns to be **TAP**ped in using the **Step buttons**.



Step buttons

Each of **Step buttons** corresponds to particular instrument from a **Instr.Sel.** The bar below **Step buttons**:



Instrument LED selector

E.g. Steps 1 and 2 correspond to **Bass drum** track. First five instruments are represented by two buttons each (paired), if you press the left one of pair, the tapped instrument is entered as non-accented, if you tap using the right button of the pair, the sound will be entered as accented. The remaining six instruments have only two states (**on** or **off**), so they're represented by a single buttons.

The notes are quantized to the nearest step.

1. To enter **Tap** mode, press the **Tap** button whilst in **Patt.Write** mode.



Pattern editing functions

2. Press **Start** button.
3. Pressing the **Step buttons** will trigger the **Instrument** listed below them.

Editing functions

Standard editing functions (buttons in **Pattern Edit** section)



Pattern editing functions

- **Shift left / right** – Shifts steps on the selected track left or right. The shifting is cycled. This means if the last step on the right side (during the shifting right) it will appear on the first step on the left side. Similarly it happens while shifting left. Pressed with **CTRL** key, shifts whole pattern.
- **Copy** – Copies selected tracks to buffer. After pressing this button, LEDs in **Track selector** start to blink to indicate that there is data in the buffer. Pressed with **CTRL** copies whole pattern to a buffer.
- **Paste** – Pastes buffer to the selected tracks. If do not change destination tracks, they'll be copied in the same place (in the same or other pattern). But you can change it, by a selecting some other tracks on the **Track selector**.
- **Clear** – Clears selected tracks. Pressed with **CTRL** key, clears whole pattern.

➡ Note: Copying can be also performed for the tracks assigned to the different instruments.

To select the destination pattern (for copying), use the **Prev** and **Next** buttons:



Pattern display and navigation

Length of the pattern

The default length of the pattern is 16 steps. But, it can be changed using **Length** function. Whilst in **Patt.Write** mode, press the **Length** button, which will light up.



Pattern editing functions

LED's above **Step buttons** indicate the number of steps in the pattern:



LEDs indicating pattern length

Pressing a **Step button** will make it the last step in the pattern. To leave this mode, just press the **Length** button again.



Step buttons

Total accent

The **Total accent** track is used to accent **All** parts on a given step.

The steps to accent are selected the same as any other track using the **Step buttons**.

The value is either **On** or **Off**. If an **Instrument** has an accent on a step and **Total accent** is added to that step, the two accents will be combined to give the loudest possible value for that instrument at that step.



Instrument selector

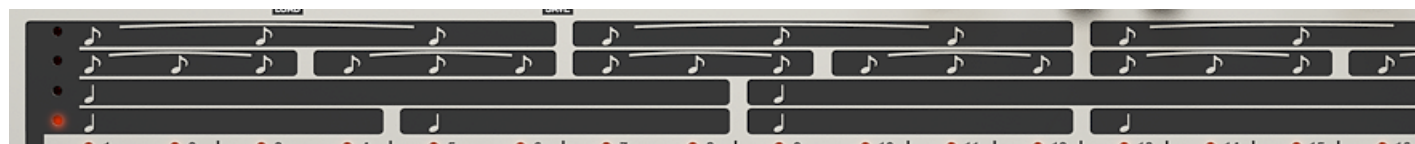
The **Total accent** knob controls how much extra volume is added to a step. Set to zero, no **Total accent** is added.



Total accent knob

Tempo scale

On the **Active scale** bar, the lit LED marks the current **Tempo scale** (one of four):



Active scale bar

Tempo scale can be described as the number of steps per quarter note. Default value is four steps per quarter note. Successively counting from the bottom there are: 8 steps per quarter note, 4 steps per quarter note, 6 steps and 3 steps per quarter note. Tempo scale is switched by the Scale LED's on Scale bar:



Tempo scale selecting

Shuffle

Shuffle is also called Syncopation or Swing, It is added by turning the Shuffle knob when in **Pattern write** mode.

Shuffle value is stored per pattern independently.



Shuffle parameter

Pattern follow

Auto follow button works only when the **Pattern write** mode is active.



Pattern follow

With **Auto follow** button turned off, to choose a pattern to edit we need to navigate through all the available patterns using the **Prev** and **Next** buttons.

With **Auto follow** turned on, currently playing pattern becomes the edited one immediately. Switching between patterns using keys **Prev** and **Next** is disabled.

Loading and saving patterns

It is possible to save or load a single pattern or a complete bank of patterns.

Saving patterns

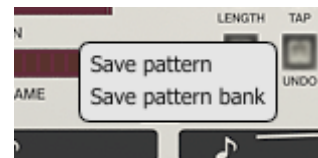
1. Before saving, the pattern should be named (click on **Pattern name** display):



Pattern display and navigation

Just click on it and enter the name for the newly created pattern. Pressing enter ends the editing process.

2. To save pattern just click **Next** button with **CTRL** key pressed on keyboard. The menu should appear.



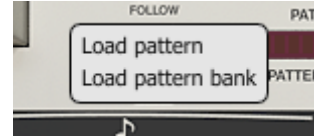
Saving pattern

Choose the **Save pattern** option to show file save dialog. To save all patterns currently stored in Drumazon, choose **Save pattern bank** option.

➔ Note: On MacOS use **Apple CMD** key instead of **CTRL** key.

Loading patterns

1. To load pattern click **Prev** button with **CTRL** key pressed on keyboard. The menu should appear:



Loading pattern

2. Choose the **Load pattern** option to show file dialog. To load whole bank of patterns to Drumazon's memory, choose **Load pattern bank** option.

Following file types are saved and loaded by Drumazon:

- **.drptrb** – Bank consisting all 96 patterns.
- **.drptr** – Single pattern.

➡ Note: Files saved by Drumazon are in standard XML format and can be easily edited within any text editor.

Randomizing drum lines

Randomize

To randomize a pattern, we need to select **Rand.Mode** while in **Patt.Write** mode. In **Rand.Mode**, the GUI functionality changes slightly:



Rand mode button

The **Track selector** LEDs select which instrument will be included in the randomization. Clicking will turn them on or off. The same principles apply as during instrument selection (using **CTRL** key on keyboard).



Instrument LED selector

To randomize the pattern, press the **Next** button. **Prev** will function when we have randomized a few patterns and wish to go back to a previous randomization.



Pattern display and navigation

The LEDs near by the **Level** knob for each selected instrument will flash. This indicates that they are now assigned to **Rand.Mode**. They are used to determine the intensity of the randomization for that instrument. That is, how much randomization will occur across the selected steps.



Level knobs in instruments' parameters

To accept the current randomized pattern, just press **Accept** button:



Pattern editing functions

If you wish to leave unchanged drum line after randomization, because you don't like the result, just press **Undo**.
To leave **Random mode** press **Rand.Mode** button once again.



Rand mode button

Preset Management

Browsing presets

Presets in the plug-in are hierarchically organized in groups and, contrary to the linear structure, this setting is not compatible with the native methods used within the host application. The user can see the presets assigned to particular groups in the **Preset Browser**. Groups can be also defined by the user.



Preset management section

Controls available in the preset selection section:

- **Preset name** – Displays the name of the selected preset. Allows editing of the preset name before saving the preset. Clicking on the control causes a shift into edit mode. After applying changes through the keyboard, confirm the new name with the Enter button.
- **Prev/Next** – Buttons used to navigate through the preset bank. **Next** button moves the browser to the next preset. If the current preset is the last preset in a group, pressing **Next** moves the browser to the first preset in the subsequent group. **Prev** button moves the browser to the previous preset. If the current preset is the first preset in a group, pressing **Prev** moves the browser to the last preset in the preceding group.
- **Prev + CTRL** – **Prev** button pressed while holding **CTRL** copies the edited preset to the buffer.
- **Next + CTRL** – **Next** button pressed while holding **CTRL** pastes the buffer to the current preset with postfix “_copy” added to its name.
- **Browse** – Opens a **Preset Browser** menu.

➔ Note: On MacOS use Apple CMD key instead of CTRL key.

Changes in the preset bank are not permanent. After removing and reloading the plug-in, the default preset bank will be loaded. However, saving the project within the host application will also save the status of the plug-in including changes in the preset bank. After reloading the project, all changes in the current parameter settings and in the preset bank will be restored.

Preset Browser

As it was mentioned, the preset bank in the plug-in has a hierarchical structure i.e. presets are organized in groups. Presets can be selected by Next/Prev buttons, which navigate through the structure in a linear way or by using the **Preset Browser**. The **Preset Browser** is a tool which allows to easily manage the preset structure. To open it, click **Browse** in the preset selection section:



Preset management section

The Preset Browser will be displayed on the GUI:



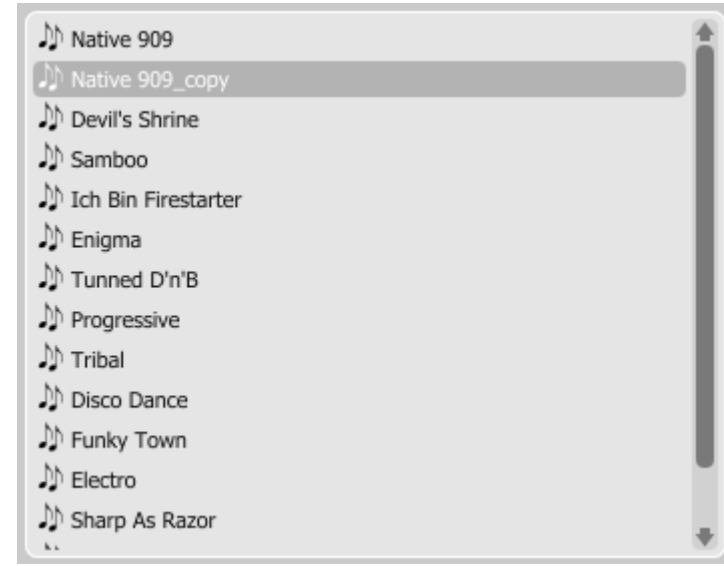
Preset browser

The left side shows the list of groups in the preset bank:



List of groups in the preset bank

The right side shows the list of presets in the selected group:



List of presets in the selected group

Actions available in the **Preset Browser**:

- Clicking on a slot in the preset list loads the selected preset.
- Clicking on a slot in the group list selects a group of presets.
- Both presets and groups can be renamed. Double clicking on a slot toggles edit mode. After entering the new name, press enter to finish.
- The bank of presets has exactly 128 items. The number of presets cannot be changed. This means that there is no possibility of adding or removing presets. Only relocating them between groups or changing their order is possible.

By dragging the preset you may:

- Change its position in the group by dropping it in a different slot in the list of presets in a selected group.
- Move the preset to a different group by dragging and dropping it in the chosen slot in the group list.



Holding CTRL or SHIFT and using the mouse button allows to select more presets:

- Holding CTRL and clicking on presets selects single items.
- Using SHIFT allows to select a range of presets. The first click marks the beginning of the range and the second click marks the end.

When more than one presets are selected, it is possible to drag them to a different group.

➔ *Note: Changing the order of presets in a group is possible for a selected single preset. Changing the order by dragging several presets in a group is inactive.*

On the left side of the **Preset Browser** there are function buttons located:





-  - Adds a new empty group to the preset bank.
-  - Removes a group from the preset bank, but only if the selected group is empty. Before removing a group, remaining presets should be relocated to different groups. An empty group can be recognized by the lack of bold font and the lack of a pointer on the right from its name.



Function buttons of the Preset Browser



Empty group in the Preset Browser

-  - Pastes the edited preset to the buffer; works exactly like the combination of **Prev** and **CTRL**.
-  - Overwrites the selected preset with the buffer content; works exactly like the combination of **Next** and **CTRL**. The postfix “_copy” is added to the name of the preset pasted from the buffer.
-  - Works exactly like **Prev** on GUI; allows to move backwards on the hierarchical structure of presets.
-  - Works exactly like **Next** on GUI; allows to move forward on the hierarchical structure of presets.

Loading and Saving presets

At the bottom of the **Preset Browser** there are function buttons which allow to save/load presets on/from the hard drive.



Loading and Saving presets from the hard drive functions

Four buttons are available:

- Preset **Load** – loads a single preset from a file (file .drprs – Drumazon preset).
- Preset **Save** – saves the current preset to a file.
- Bank **Load** – loads the entire bank of presets from a file (file .drprb – Drumazon bank).
- Bank **Save** – saves the entire bank of presets to a file.

➤ Note: Before saving the preset to a file, save it in Drumazon using **CTRL + Browse** when **On demand** function is selected in the plug-in configuration.

➤ Note: Files saved by Drumazon are compatible with XML format, which enables their edition in any text editor.

Configuration



Options button

After clicking on **Options** in the upper-left corner of GUI, a configuration panel unfolds. The panel has several tabs:



Configuration panel tabs

- **Outputs** – configures audio outputs.
- **Sequencer** – configures sequencer's work mode.
- **Presets** – indicates personal resources loaded instead of default presets.
- **Patterns** – indicates personal pattern banks loaded with every new instance of the plug-in in the host application.
- **Drum map** – configures the drum map for **External** mode.
- **Midi control** – configures MIDI communications with the plug-in.

Clicking on **Options** while holding **CTRL** opens a window with information about the version and the license owner.

Outputs tab

Configures audio outputs from the plug-in.

Default output assigns

Setting the default internal audio outputs mapping.



Default output assigns

If you have your favorite audio output configuration:



Audio outputs configuration

You may set it to be the default one, recalled after each time when you load the plug-in into host application.

You may set a default audio output configuration using combo boxes under instruments' abbreviations by choosing one of twelve available audio outputs for every instrument.



Default output assigns – selecting outputs

Or map the output using the GUI accordingly to your preferences and then use **Set from current assignments** option. Then your map becomes the default one.

The content of the **Default outputs assigns** group is saved in the Drumazon configuration file and applies to all new instances of the plug-in. When removing any instance of the plug-in from the host application the configuration file is saved.

Default outputs type

This is responsible for choosing the type of outputs.



Default outputs type

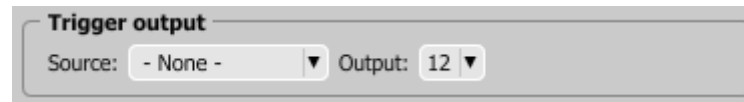
➔ Note: The plug-in in the AU version allows only **Stereo** outputs

We're allowed to choose one of the two available types: **Stereo** or **Mono**.

The content of the group is saved in the Drumazon configuration file and applies to all new instances of the plug-in. When removing any instance of the plug-in from the host application the configuration file is saved.

Trigger output

There's possible to make audible a trigger sound, which occurs in analogue machines. By default this signal is off (**Source** combo box set to **- None -**). To turn it on you need to decide which track (instrument) will be triggering this sound, by selecting it from **Source** combo box:



Trigger output

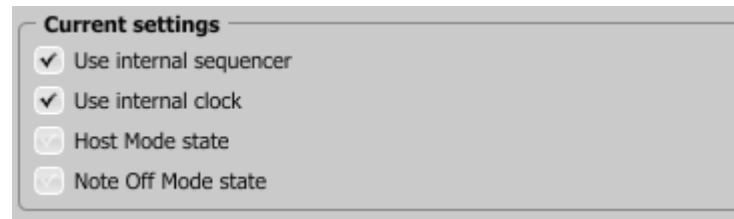
Chosen track (instrument) apart from regular role will also be responsible for controlling trigger out sound.

Trigger out will be mixed into the selected output (one of twelve available). Use the **Output** combo box to select the audio output for Trigger out.

Sequencer tab

Current Settings

Current Settings checkboxes:



Current settings

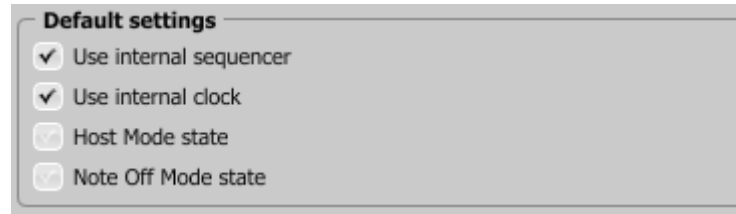
reflect the state of controls from the **Seq.Settings** section on GUI.



Play mode settings

The **Note Off Mode** state checkbox is an exception and it is not available on GUI. It is only available in this tab (**Host** mode – description available in earlier chapters).

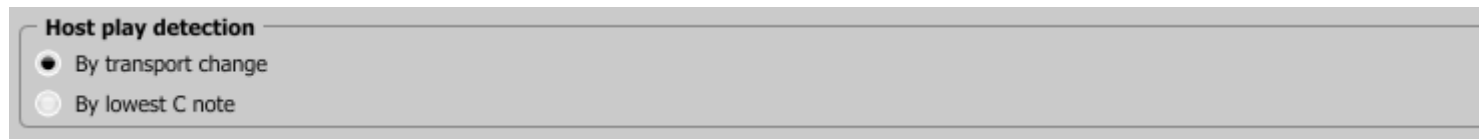
Default Settings



Default settings

Default Settings group contains checkboxes with default flag values for the **Current Settings** group. In every new instance of the plug-in, in the host application, the **Default Settings** flags are overwritten on the **Current Settings** flags. **Default Settings** values are saved in the Drumazon configuration file and applies to all new instances of the plug-in. When removing any instance of the plug-in from the host application the configuration file is saved.

Host play detection



Host play detection flag

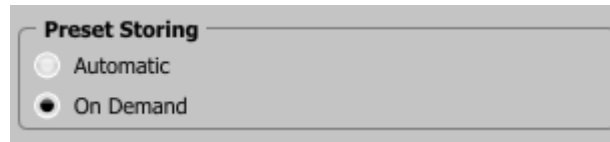
This solves sync problems with some hosts. It mainly concerns **Native** mode. The properly written host should send a **Transport Change** code to the plug-in after pressing the **Play** button in the host application.

When the **By Transport Change** option is selected, then don't need to add an extra Midi track to force the plug-in to start to play. It should start to play automatically. In some cases it doesn't work. If this happens, choose the **By The lowest C Note** option. Then, add a Midi track with output set to Drumazon and place the Midi note (lowest C note) in the Midi clip. As soon as the Midi **Note On** is sent to the plug-in, Drumazon will start playing.

Presets tab

Preset Storing

Using **Prev**, **Next** buttons or the **Preset Browser** navigates through the preset bank. Any change in the current preset can be stored automatically or on demand. Depending on the selection one of the two options is active:



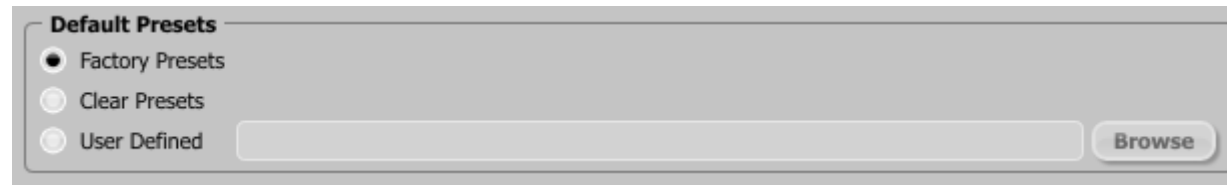
Preset Storing flag

- **Automatic** – Any change of a parameter in the current preset is automatically stored.
- **On Demand** – If any parameter is changed, the change is not saved in the current preset until the **Store** option is used (**CTRL + Browse**). Selecting a different preset from the bank causes irreversible loss to changes applied to the parameters, unless the **Store** option is used.

The **Preset Storing** flag is saved in the Drumazon configuration file and applies to all new instances of the plug-in. When removing any instance of the plug-in from the host application the configuration file is saved.

Default Presets

D16 provides a set of default presets with Drumazon. They are applied to every new instance of the plug-in. If a bank of presets is created which should be applied every time instead of factory presets, it is possible to select such an on option **Default Presets** section:



Default Presets selection

Options available in the **Default Presets** section:

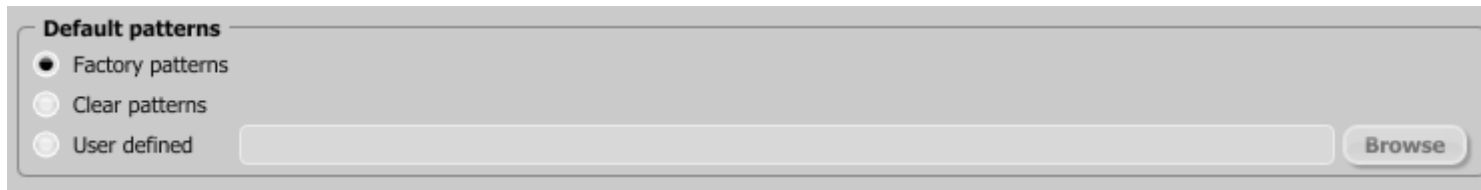
- **Factory Presets** – Default value after installing Drumazon. Choosing this option loads the factory presets with every new instance of the plug-in.
- **Clear Preset** – Zeroed parameters with every new instance of the plug-in.
- **User Defined** – Preset bank selected by the user. When choosing User Defined option, the **Browse** button on the right side is activated. Using this button opens a dialog box in order to select a path to the user's preset bank. Confirming the path saves it in the Drumazon configuration file. The selected preset bank will be loaded as default.

The text box on the left from the **Browse** button shows the path to the user's preset bank.

Patterns tab

There're included some default patterns and drum kits with Drumazon. These are loaded every time it is started. This can be changed to point to user default patterns and kits.

If a bank of patterns is created which should be applied every time instead of factory pattern bank, it is possible to select such an on option **Default Pattern** section:



Default patterns

Options available in the **Default Patterns** section:

- **Factory Patterns** – Default value after installing Drumazon. Choosing this option loads the factory patterns with every new instance of the plug-in.
- **Clear Patterns** – With every new instance of the plug-in an empty preset bank is loaded.
- **User Defined** – Patterns bank selected by the user. When choosing User Defined option, the **Browse** button on the right side is activated. Using this button opens a dialog box in order to select a path to the user's patterns bank. Confirming the path saves it in the Drumazon configuration file. The selected patterns bank will be loaded as default.

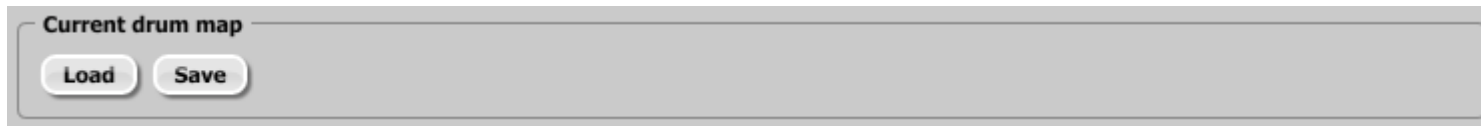
The text box on the left from the **Browse** button shows the path to the user's preset bank.

Drum map tab

In **External** mode, Drumazon by default works with General Midi drum mapping, but it's possible to load your own drum map using an options in this tab.

Current Drum map

In order to load or save the current drum map, use the Load/Save buttons from this group:



Current drum map

- **Load** – Loads a custom drum map from a file (.drdrmap – Drumazon drum map).
- **Save** – Saves a current drum map to a file.

➔ Note: There's no way to re-edit drum map using a Drumazon's UI. you need to save default drum map to a file first, and re-edit it within any text editor. Files saved by Drumazon are XML compatible.

Default Drum map

To set **Default Drum map**, choose options available in this group.



Default drum map

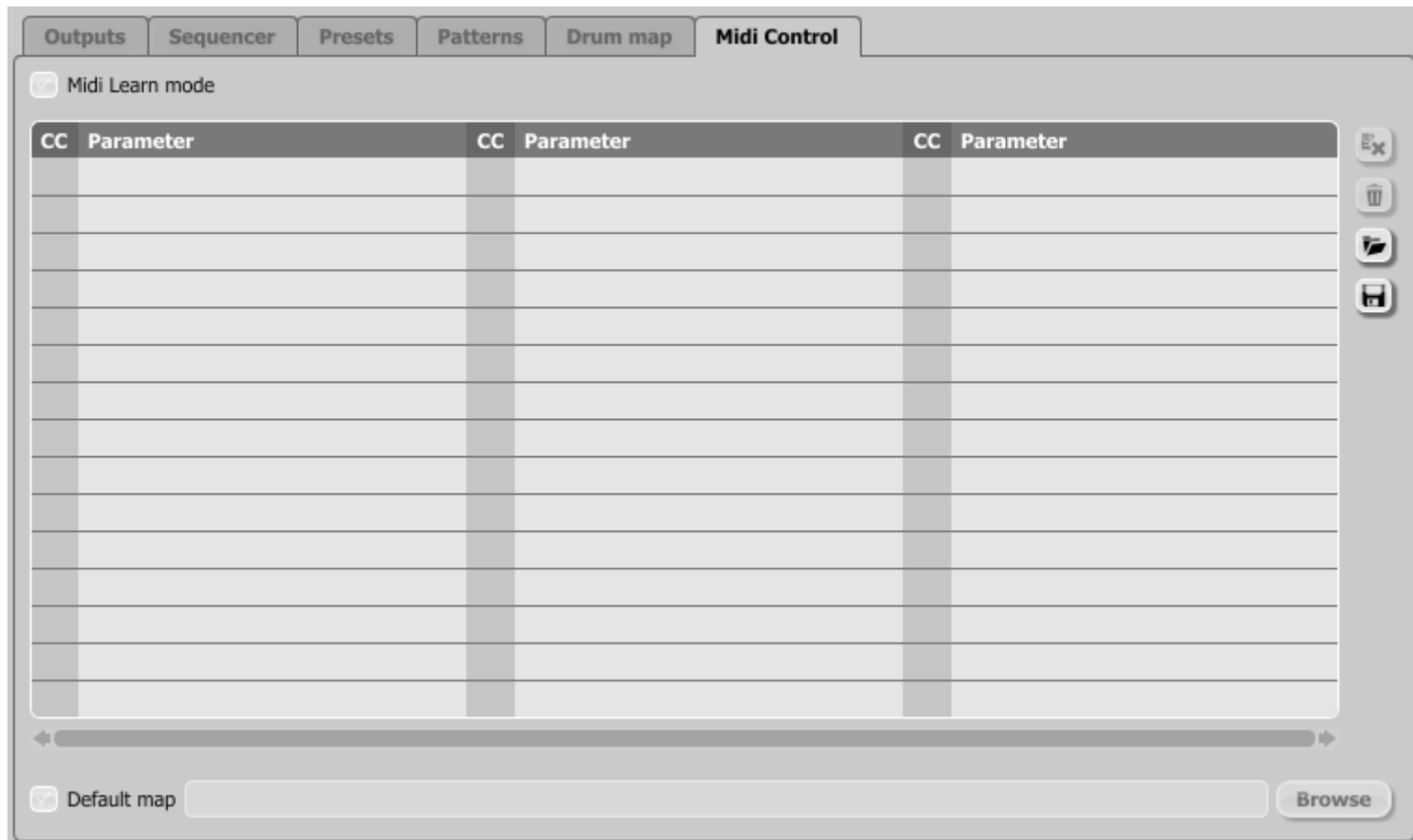
We can choose one of following options:

- **Factory map** – It means the default factory mapping (**General midi** compatible) is applied to the **External** mode available after loading Drumazon into the host application.
- **User defined** – This option is used to set the new default **Drum Map**, which will be loaded every time we load Drumazon in the host application. When choosing User Defined option, the **Browse** button on the right side is activated. Using this button opens a dialog box in order to select a path to the user's drum map. Confirming the path saves it in the Drumazon configuration file. The selected drum map will be loaded as default.

The text box on the left from the **Browse** button shows the path to the user's preset bank.

Midi control tab

Drumazon can assign its controls (on GUI) to any MIDI CC (Midi Control Change), allowing the control of the plug-in using external hardware or software.



Midi control tab

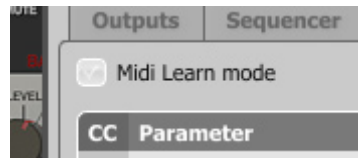
Controls included in the tab:

- **Midi learn mode** – Checkbox which activates Midi learn mode.
- A list of active MIDI CC links containing pairs comprising of a CC code and the name of the plug-in parameter.
- **Default Map** – Checkbox which activates a default MIDI CC map. When the map is activated it will be loaded with creating a new instance of the plug-in.

Midi learn

Assigning a Drumazon control to the MIDI controller requires:

1. Checking **Midi Learn Mode** checkbox in the **Midi Control** tab:



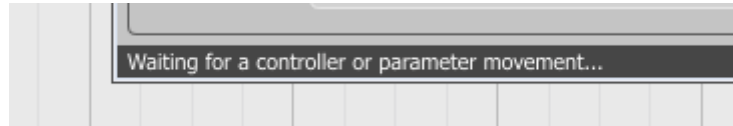
Midi Learn Mode selection checkbox

or press the **Midi Learn** button in the **Midi** section on GUI:



Midi section

2. In the status bar in the bottom section of GUI a message should appear “waiting for a controller or parameter movement...”:

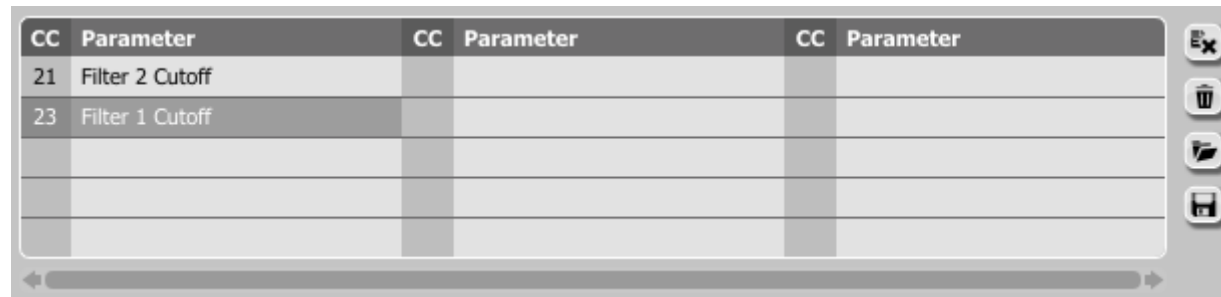


Status bar

In this mode the plug-in waits for any change in the parameter value (movement of any control on GUI) and for the movement of any MIDI CC control from the external MIDI controller, which operates on an active MIDI input channel directed to Drumazon. The order of these actions is irrelevant.

During the above-mentioned actions, the status bar informs about the currently changing values of controls and provides their names.

When a MIDI control <-> GUI control link is established, a line is added to the MIDI CC link list:



CC	Parameter	CC	Parameter	CC	Parameter
21	Filter 2 Cutoff				
23	Filter 1 Cutoff				

MIDI CC link list and function buttons

When a link is established for a controller, it is possible to repeat the operation for the next MIDI CC and parameter pairs. Subsequent links will be created and added to the list.

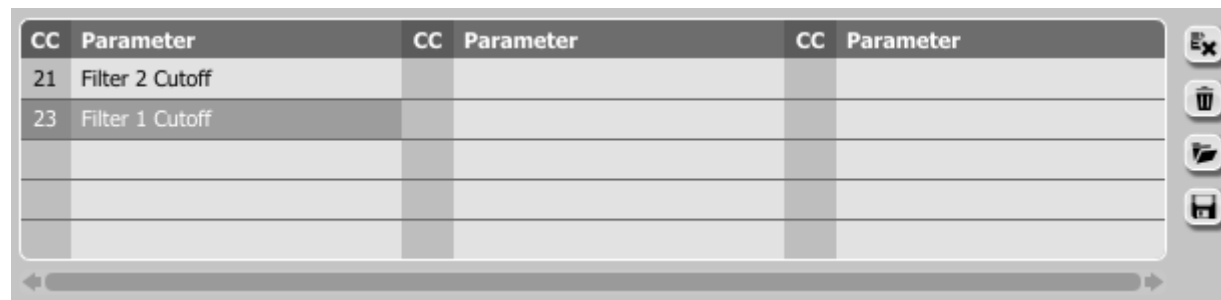
3. When all the needed links are created, uncheck the **Midi Learn Mode** checkbox or press the **Midi Learn** button in the **Midi** section on GUI again.

In order to create new links, it is possible to reactivate the **Midi Learn Mode** at any time.





The links are always sorted in an ascending manner in relation to the CC column according to the MIDI CC code.

Unlinking and midi link management

On the right side of the link list there are 4 function buttons located:



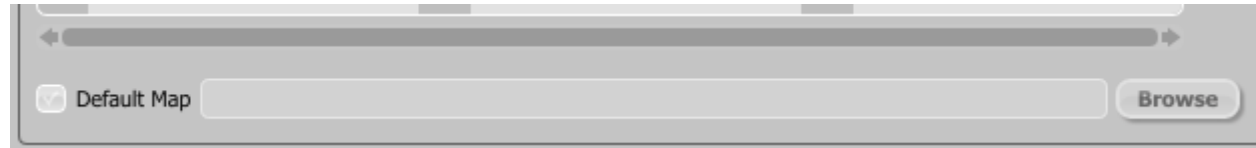
MIDI CC link list and function buttons

-  – Removes a selected link; choosing any link from the list and clicking on it highlights the selected link. Using this button removes the selected link.
-  – Removes all MIDI CC links.
-  – Loads link lists/MIDI maps from file (.drccmap – Drumazon MIDI CC Map).
-  – Saves link lists/MIDI maps to file.

➔ Note: MIDI map files are saved in XML format, which enables their edition in any text editor.

Default MIDI Map

Selecting a default MIDI Map:



Default MIDI Map selection

1. Check the **Default Map** checkbox, which activates the **Browse** button on the right.
2. Click **Browse** and select a file with a saved MIDI Map.

After selecting the MIDI map the text box on the left from the **Browse** button shows the path to the active map file. A default MIDI map is loaded each time when the plug-in is loaded.

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