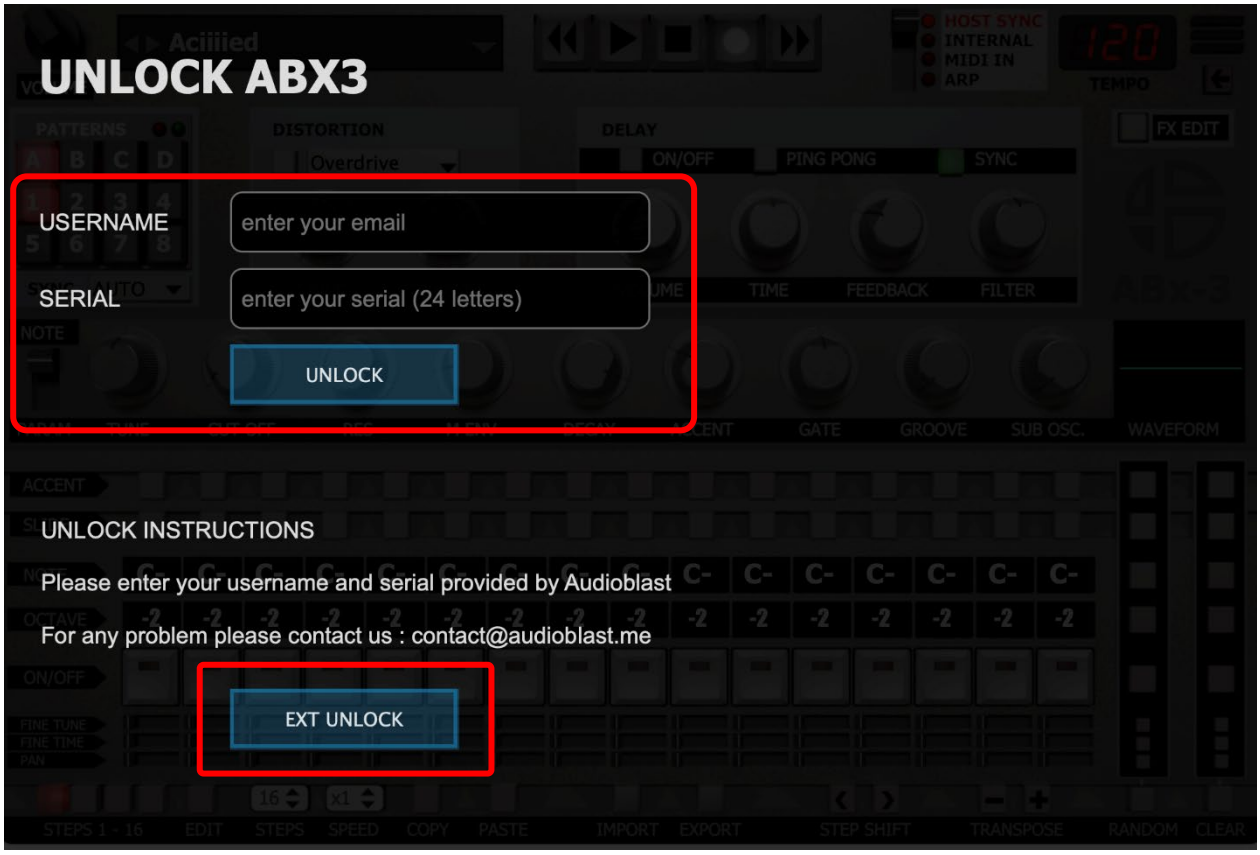
Audio Blast

ABx-3

User Manual

Table of contents

1. Activation



Enter your username and the serial you received by e-mail then press Return.
Username = email
Be careful to copy and paste or type without any spaces before or after. If copy and paste shortcuts don't work, right click the field then copy or paste.

Until the Plugin is unlocked you will have no sound!

Note: Logic and Garage Band users must press "Return" or "Enter" key on the keyboard after pasting or typing on each text field.

Or

Click on **Ext Unlock** to launch GetAbx3Serial.app located:

/Library/Application Support/Audioblast/Abx3/GetAbx3Serial.app

Need any assistance?
Write to us at: contact@audioblast.me

2. Main features

Welcome to the Acid Box!

Abx-3 is a cutting-edge bass line synthesizer, designed as a modern tribute to the legendary TB-303 bass line synthesizer from the 1980s. With a completely redesigned interface, Abx-3 makes it easier than ever to craft real-time sequences and dynamically adjust them during live performances.

Key Features:

- You can use it as a standalone application, or as a plugin with a host software.
- 4 control modes: Host Sync, Internal Sync, MIDI In, Arp.
- Up to 32 patterns with different sounds, you can also load patterns banks and trigger them in studio or live situations.
- 8 Distortion units with different sounds.
- 1 Delay, with Sync and Ping Pong mode.
- 1 Sequencer, with MIDI in keyboard input for simple sequencing.

Full Features:

- 32 Oscillator Shapes.
- Sub Oscillator (Sin/Square).
- 8 Distortion Types.
- Parameter Sequencer: Independent Speed/Parameter control.
- Sequencer Speed: Ranging from /4 to x8 with various time divisions.
- Reverse MIDI Functionality: Backward MIDI control for creative flexibility.
- Pattern Browser for quick and easy access.
- Random Scale Selection
- 3 FX Slots with 7 Effects Available: Reverb, EchoVerb, SynthVerb, Stereo Chorus, Mono Chorus, 4 Band Fuzz, Flanger
- Effect Automation in the parameter sequencer.
- 5 distinctive GUIs to match your workflow.

3. Transport Bar

3.1 Main volume

Adjusts the main volume level of each pattern using the volume knob.

3.2 Display

This window displays the name of the current pattern.
Use the left and right arrows to browse the previous and next preset.

3.3 Browse patterns

Click on down arrow on the right of the display to open the pattern list, then you can choose a folder to expand to see all the patterns inside.

3.4 The Play Bar

In **“Host Sync”** mode, Play and Stop buttons are controlled by the host, in the other modes, they are independent.

By pushing the **Record** button, you can record a sequence of notes and parameters in real time with an external MIDI keyboard.

3.5 Backwards and Forwards Playback

Press **Backward** button to reverse the notes sequences.

Press **Forward** to revert to forwards playback. Press again to cycle through pattern speeds.

Note: Pattern Speed can be modified on the bottom of the GUI, this parameter is automatable in the built-in parameter step sequencer.

3.6 Synchro

There are 4 ways to use the Abx3:

- "**Host Sync**" mode, to synchronize the plugin to the host.
- "**Internal**" mode, to use the plugin in the host but without synchronisation, with the internal tempo of the plugin.
- "**MIDI in**" mode, to use the plugin without the integrated sequencer.
- **"ARP"** mode, to use the plugin in arpeggiator mode:

You can play the sequence displayed with a MIDI keyboard, the sequence will stay synchronized to the host tempo, and will be triggered by MIDI notes and transposed according to the height of the note triggered.

3.7 MIDI IN

In “**MIDI IN**” a keyboard will appear instead of the sequencer.

In this mode use the **Abx3** as a traditional synth, playing MIDI notes with an external keyboard or editing sequences with a DAW.

MIDI notes become an Accent if velocity is over 82 (see settings).
MIDI notes become a Slide if you overlap two notes.

Note: The parameter sequencer is still available in **MIDI IN** mode.

3.8 Tempo

In **“Host Sync”**, tempo is set by the host, in the **“Internal”** mode, it is independent.

In **“MIDI IN”** mode the internal note sequencer is not used, but the parameter sequencer is still used and is synchronized to the host or external clock.

4. Patterns

Elements	Description
Pattern Selector	Click on the A/B/C/D bank buttons to display the patterns 1-8, 9-16, 17-24, 25-32. Click on the number to display/trigger the corresponding pattern.
Pattern Sync	Choose the sync options for triggering the patterns: - Free: Immediate trigger (may lose sync with the host). - Auto: Wait for current pattern to finish before triggering. - Step/Beat/Bar: Sync the trigger to step or beat or bar. Click on the drop-down box to choose the trigger synchronisation of the patterns: - AUTO: Starts the next pattern at the end of the current pattern. - Free: Starts the next pattern immediately. - 1 Step: Starts the next pattern one step after launch. - 1 Beat: Starts the next pattern one beat after launch. - 1 BAR: Starts the next pattern one BAR after launch.

4.1 Pattern Selector

There are 32 patterns in the Acid Box:

- **A**: 1 to 8
- **B:** 9 to 16
- **C:** 17 to 24
- **D:** 18 to 32

Use the **A-D** buttons to select a pattern bank, and the number buttons to select a pattern.

4.2 Pattern Options

You can right click (Control+Click on Mac) on the Patterns buttons to edit another pattern while the selected pattern continues to play.

From the right click menu, you can Copy, Clear, Random, Import or Export any pattern while the selected pattern continues to play.

You can Random All patterns and Clear All patterns.

4.3 Pattern Launch

Click on the drop-down box to choose the trigger synchronisation of the patterns.

- **AUTO:** Starts the next pattern at the end of the current pattern.
- **Free:** Starts the next pattern immediately.
- **1 Step:** Starts the next pattern one step after launch.
- **1 Beat:** Starts the next pattern one beat after launch.
- **1 BAR:** Starts the next pattern one BAR after launch.

4.4 MIDI Launch

Abx-3's MIDI Launch functionality lets you launch patterns using MIDI notes.

Chromatics notes from **C-2** to **G0** launch patterns **A1** to **D32.**

These notes can be programmed in a MIDI sequence on a DAW to launch the selected pattern from **A1** to **D32.**

To change patterns, program the corresponding MIDI note at the start of a MIDI clip.

5. Distortion Section

To activate or deactivate the Distortion, push the led button to the left of the drop-down list.

The Distortion section contains two knobs. Depending on the selected distortion type, the knobs control different parameters. For some distortion types, the right knob is disabled.

5.1 Select a distortion

Click on the "**drop down list**" of the distortion to open the selection menu.
There are **8** types of distortion you can select:
Overdrive: A simple overdrive with Drive and Dry/Wet control
Clip Inferno: A double clipping unit. Use the Drive control to add distortion, and Scream for a resonant fuzzy effect.
Hot Valve: An old-school overdrive effect with Drive control.
Ultracrunch: Use Drive to add distortion and adjust Thrsld to change the sound of the distortion.
Bit Reducer: Reduce the sample rate from your DAW's sample rate down to 2000Hz with the Reduce knob. With the Dry/Wet knob at 0%, the effect is bypassed. At 100%, you get maximum sample rate reduction.
TurboFuzz: Applies fuzz distortion. Adjust the Drive knob to get a more corrosive sound.
RageClip: A clipping distortion with a Hi-Pass pre-filter. Adjust the Tune parameter to filter the input of the clipper.
Brutal Bill: A sinus remapper which resembles an FM modulation distortion type. Use the Tune knob to adjust the Hi-pass pre filter.

Note:

- **Ctrl + Click or double click** on each knob to reset the knob to their default value.
- The **Drive** knob is automatable in the built-in parameter sequencer.

6. Delay

To activate or deactivate the delay, push the On/Off button at the top left of the Delay section.

To use the "**Ping Pong**" mode, push the led button next to the label.

To use the "**Sync**" mode, push the led button next to the label.

There are 4 knobs to adjust the delay parameters:

- **VOLUME:** Sets the level of the delayed signal.
- **TIME:** Sets the delay time.
- **FEEDBACK:** Sets the level of signal reinjected in the delay line.
- **FILTER:** Turn left for lowpass filter, turn right for high pass filter.

Note:

- **Double click or Ctrl + Click** on each knob to reset the knob to their default value
- The Delay **Volume, Time and Feedback** can be automated in the built-in parameter sequencer.

7. Note Sequencer

Elements	Description
Accent	Adds or removes accents on notes
Slide	Adds or removes the slides between notes
Note	To change the note values on the sequence
Octave	To change octave on notes from -2 to +2 per step
On/Off	Adds or removes notes in your sequence
Fine Tune	Adjusts the fine tune from -1 to +1 semitone per step
Fine Time	Adjusts the micro time of the step
Fine Pan	Adjusts the stereo position per step

7.1 How to Write a Sequence

Write a Sequence in Abx-3:

The first method is to manually program the sequence with a mouse.

1. Select the Pattern and Variation you want to edit, then click and drag a step's note up or down to change the note.
2. You can also click on the note box and scroll with the mouse wheel to edit the note. The octave box is working as a note box.
3. To activate or deactivate a note, click on the pads of the "on/off" row.
4. You can adjust your sequence with slides and accents on their specific row by clicking on the LEDs buttons above to activate or deactivate them.

7.2 Record a Sequence on the Fly

Record a Sequence in Abx-3

The second method is to play your sequence in live using a MIDI keyboard:

1. Activate the Rec. button to record a sequence on the fly with an external MIDI keyboard.
2. Once this mode is activated, you can play notes from **C1** to **A#5** and they will be recorded in the sequencer.
3. You can also maintain a chord on the keyboard, and the chord will be written on the sequencer as a simple arpeggio.

Notes:

- Notes **under C1** and **over A#5** insert silence on the sequence.
- The velocity of the notes while recording defines the accents on the sequence.
- Velocities of up to **82** will create normal steps. Velocities of **82** and over will create accented steps on recorded notes.
- You can adjust the velocity threshold for accents in Abx-3's Settings page.
- Using the pitch-bend while recording adds or removes slides in the sequence. Pitch-bend up to add slides, pitch-bend down to remove slides on the sequence.

- **Available notes: C1 to A#5**
- **Available silent notes: C-2 to B0 and B5 to G8**
- **Velocity to get notes without accents: 0 to 81**
- **Velocity to get accents on notes: 82 to 128**
- **Pitch bend up: add slides**
- **Pitch bend down: remove slides**

Note: With the Record button engaged, you can adjust parameters to record parameter automation into your sequence.

8. Tool Bar

8.1 Edit steps

To edit the measures during playing, you can push the **"Edit"** button to freeze the selected measure to edit.

Steps: Edit the length of the pattern from 1 to 64 steps.

8.2 Copy/Paste

Pushing the **"Clear"** button will clear the entire sequence.

On the **Clear** section you can **Clear** parameters by row
There are 8 rows of parameters to clear: Accent, Slide, Note, Octave, On/Off, Fine Tune, Fine Time and Pan.
Push the main **Clear** button at the bottom right of the clear all the rows and erase the entire sequence.

To copy the current pattern or sequence to another pattern, push the **"Copy"** button, then change pattern and push the **"Paste"** button on the new pattern to paste all pattern data.

Note: If your pattern contains 6 steps and you decide to increase the length to 12 to modify the second part of the sequence, just click Copy, increase the length of the pattern to 12 then click Paste. The first 6 first notes will be duplicated – this works for patterns of any length.

8.3 Import

To import a pattern or bank of patterns, click on the **“Import”** button.

A dialog box will appear, then you can select the path of your patterns or bank of patterns.

8.4 Export

To export a pattern or bank of, click on the **“Export”** button.

A dialog box will appear and then you can select the format and the path to save your patterns or bank of patterns.

8.5 Step Shift/Transpose

You can shift the MIDI notes left or right on the sequence pushing the "**Step Shift"** buttons.

To transpose the entire sequence up and down, push the **"Transpose"** buttons, all the sequences will be transposed.

8.6 Random

To simply randomize a single parameter in **Abx-3,** you can press the **"Random"** button in the corresponding row. You can also randomize all parameters using the All-Random button.

Head to section 9.5 for information on how to configure the All-Random feature.

Parameter	Description
Accent	Press this button to randomize only the accents
Slide	Press this button to randomize only the slides
Note	Press this button to randomize only the notes
Octave	Press this button to randomize only the octaves
On/Off	Press this button to randomize only the on/off steps
Fine Tune	Press this button to randomize only the fine tune
Fine Time	Press this button to randomize only the fine time
Pan	Press this button to randomize only the pan
Random	Press this button to randomize all parameters as assigned in the settings view

8.7 Clear

To simply clear a single parameter in **Abx-3,** you can press the **"Clear"** button in the corresponding row. You can also clear all parameters using the All-Clear button.

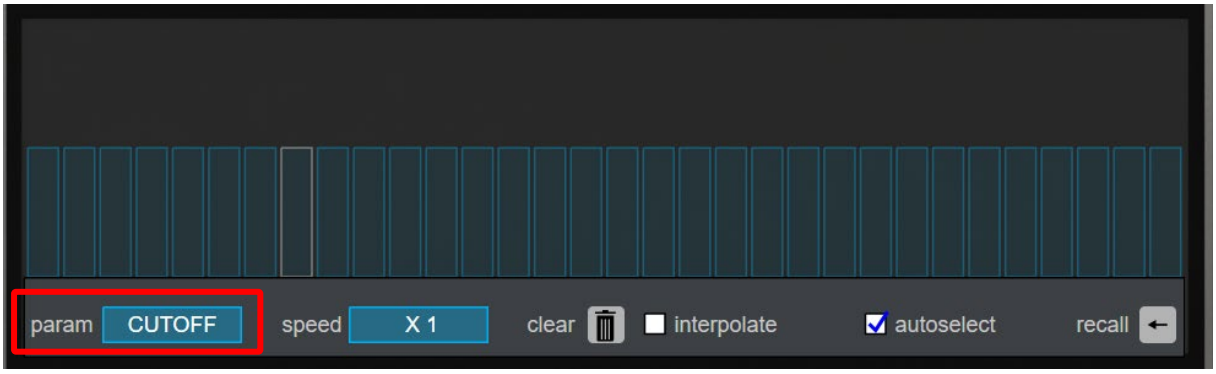
Parameter	Description
Accent	Press this button to clear only the accents
Slide	Press this button to clear only the slides
Note	Press this button to clear only the notes
Octave	Press this button to clear only the octaves
On/Off	Press this button to clear only the on/off steps
Fine Tune	Press this button to clear only the fine tune
Fine Time	Press this button to clear only the fine time
Pan	Press this button to clear only the pan
Clear	Press this button to clear all the parameters as assigned in the settings view

9. Parameter Sequencer

Click on the **Note/Param** switch to access to the Parameter Step Sequencer view.

9.1 Edit a Parameter Sequence:

Click on the parameter drop-down list to select a parameter. Alternatively, you can click on the parameter control to select it in the Parameter Step Sequencer view.



There are 15 automatable parameters. These are:

Volume, Tune, Cutoff, Resonance, M Env, Decay, Accent, Gate, Sub-Osc, Waveform, Drive, Delay Vol, Delay Time, Delay Feedback, Seq Speed.

9.2 Select Speed

Click on the **Speed** drop-down list to select the speed of the sequence from /8 to x2.

Note: Each sequence has its own independent speed. You can use this feature to create interesting and evolving movement in your sequences.

9.3 Draw

Right Click on the sequencer to display the pre-draw sequences menu. There are 6 pre-draw sequences available:

Ramp up, Ramp down, Triangle, Sinus, Square, Dirac Train.

Note: You can also Reverse, Invert, Clear, Copy and Paste sequences from this menu.

OR

Click directly in the sequencer to draw the sequence you want!

Note:

- **Mouse Wheel:** You can also use the mouse wheel to draw.
- Hold **Ctrl + Click** and move mouse to draw reset values.
- **Ctrl + Click** to reset default values.
- **Shift + Click** on a step then move the mouse UP or Down to modify the whole sequence.

9.4 Sequence on Play

When a sequence is playing, the sequenced parameter is highlighted in blue.

Note: You can access any the sequence for any automatable parameter by clicking on the corresponding control in the main plugin interface.

Note: You can right-click on any automatable knob to show its automation on the parameter sequencer view.

9.5 Record Parameter Sequence in Real Time

Click on the record button then turn an automatable parameter's knob to record the modulation in real time (shown here with the Gate parameter)

The **Interpolate** control lets you choose between smooth and stepped modulation for each automated parameter.

- **Interpolate On**: Stepped modulation
- **Interpolate Off**: Smooth modulation

9.6 Recall

When an automation was playing and you click on the knob again (shown here with the Gate parameter), the automation is disabled.

The knob (Gate) is no longer highlighted, and instead the recall button is highlighted in orange. You can access the recall button in two locations: In **Note** and **FX Edit** view.

The recall button is on two different places to have access to it in **note** and **FX edit** view too).

To recall the automation, **Click** on the **Recall** button and the modulation restarts in sync with the tempo of the host.

Once recalled, the automation will play in sync again. The automated knob is highlighted in blue, and the recall buttons are off again.

9.7 Clear

To clear automation for any parameter, **click** on the C**lear** button. Alternatively, you can also **right-click** on any highlighted parameter then select **Clear Automation.**

Note: You can clear all pattern automation of the pattern by **Shift + Clicking** on the **Clear** button.

10. FX Section

10.1 FX Edit

Click on the **FX Edit** button to open and close the FX section. Once **FX Edit** is activated, the display is locked on the **FX Edit** view.

3 FX tabs are available. **Click** on **FX1/FX2/FX3** tab to set up your FX Chain.

To close the FX section and return to the Step or Parameter sequencer views, click on the **FX Edit** button or the small cross at the top right of the FX section.

10.2 Select FX

Click on the drop-down FX list to select the FX you need on each FX Tab.

7 effects are available:

- Reverb
- Echo verb
- Synth verb
- ST Chorus
- Mono Chorus
- 4Band-Fuzz
- Flanger

Note:

- Once an effect is selected in one FX slot, it will not be available in the other two.
- **Click** on the “bypass” check box to bypass the corresponding effect.

10.3 Reverb

DRY: Adjusts the input signal's level.

WET: Adjusts the effect output's level.

ROOM SIZE: Use this knob to set the size of the simulated room. A high value will simulate the reverberation effect of a large room and a low value will simulate the effect of a small room.

LO CUT: A Hi-Pass filter for removing low frequency information.

HI CUT: A Low-Pass filter for removing high frequency information.

Note: Use Reverb to create spatial effects.

10.4 Echo Verb

DRY: Adjusts the input signal's level.

WET: Adjusts the effect output's level.

ROOM SIZE: Use this knob to set the size of the simulated room. A high value will simulate the reverberation effect of a large room and a low value will simulate the effect of a small room.

ABSORPTION: Use this knob to set the absorption rate. At high value you will get less high frequencies on reverberation.

Note: Use Echo Verb to create spatial effects morphed between a permanent echo with diffusion and a reverberation.

10.5 Synth Verb

DRY: Adjusts the input signal's level.

WET: Adjusts the effect output's level.

ROOM SIZE: Use this knob to set the size of the simulated room. A high value will simulate the reverberation effect of a large room and a low value will simulate the effect of a small room.

ABSORPTION: Use this knob to set the absorption rate. At high values, you will get less high frequencies on reverberation.

Note: Use Synth Verb to get more metallic sounds with aggressive high frequencies.

10.6 Stereo Chorus

LEVEL: Adjusts the level of the de-phased signal.

DELAY: Adjusts the delay of the input signal against the de-phased signal.

RATE: Adjusts the rate of pitch modulation in the de-phased signal.

DEPTH: Adjusts the depth of pitch modulation in the de-phased signal.

SPREAD: Adjusts the stereo width of the effect. Spread works like a stereoizer to increase the stereo image of the outputted signal.

10.7 Mono Chorus

The mono Chorus has no adjustable parameters and is set with default parameters.

Selecting it will apply a mono chorus to your signal. This may be preferable when creating basses and sub-basses with Abx-3.

10.8 4Band-Fuzz

The input signal is separated on 4 band.

LOW DRIVE: Adjusts the drive amount on low frequencies.

MID LO DRIVE: Adjusts the drive amount on mid-low frequencies.

MID HI DRIVE: Adjusts the drive amount on mid-high frequencies.

HIGH DRIVE: Adjusts the drive amount on high frequencies.

10.9 Flanger

DRY/WET: The Dry/Wet control adjusts the balance between the processed and dry signals.

DELAY: Adjusts the delay of the input signal against the de-phased signal.

RATE: Adjusts the rate of pitch modulation in the de-phased signal.

DEPTH: Adjusts the depth of pitch modulation in the de-phased signal.

FEEDBACK: The feedback parameter controls how much output signal is fed back into the flanger's input.

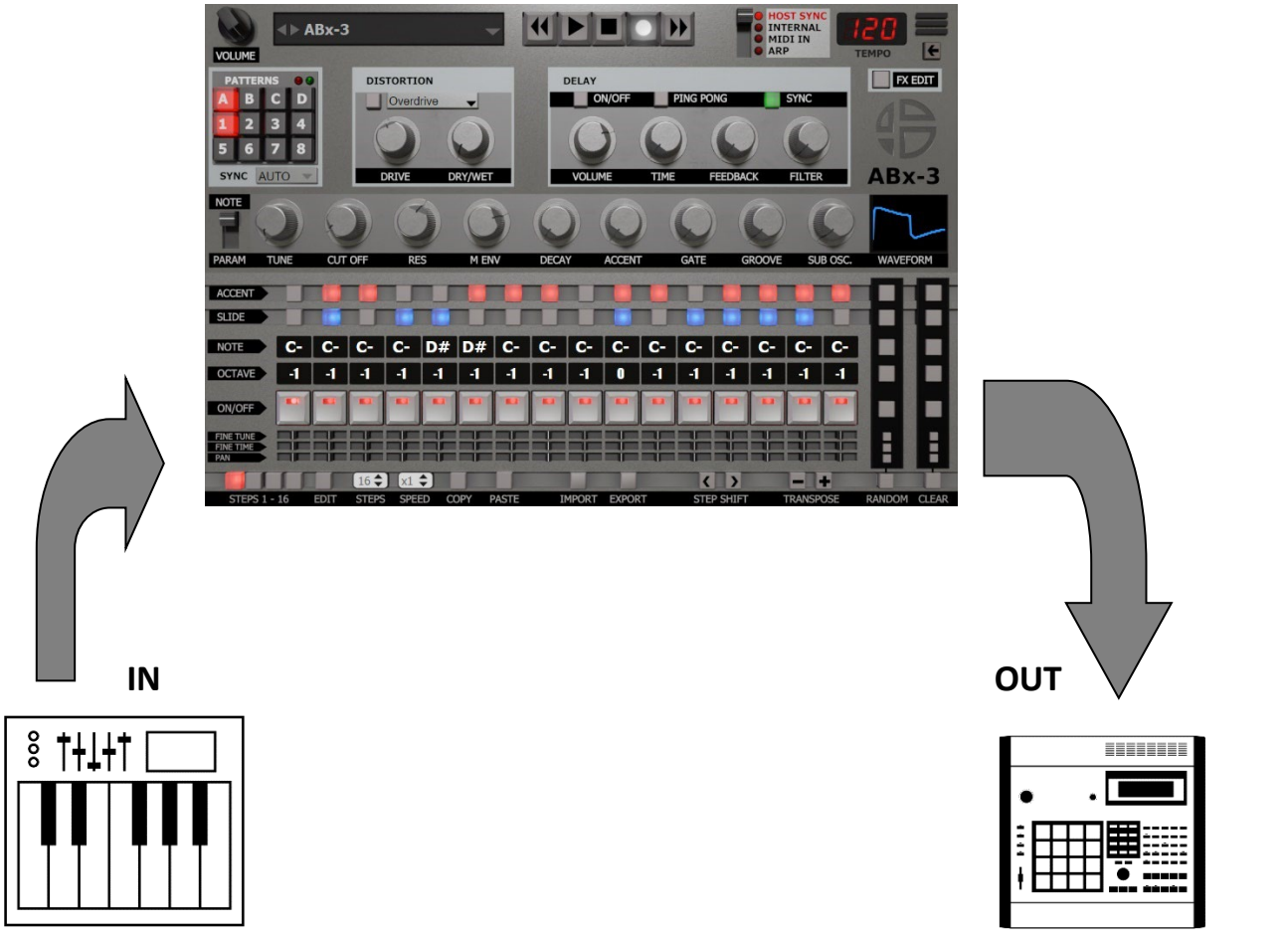
11. MIDI

11.1 MIDI in

With the Abx-3, you can use an external keyboard to play and record sequences on the fly.

11.2 MIDI out

You can also send MIDI OUT from Abx-3's sequencer to virtual instruments or external hardware instruments.



(MIDI In external keyboard)

(MIDI out external device)

12. Settings

12.1 Sound Settings

Legacy Sound: Check this box to get the sound of the AcidBox V2. You can use Legacy Sound to get more mid-frequency from Abx-3's filter. Uncheck Legacy Sound to get more low frequency from the filter.

Note: Abx-3 has a new sound because we updated the filter.

Cut Off Raise: Check this option to activate the Cutoff Raise.
Cut Off Raise creates an automatic raise up of the cutoff when you have multiple accents chained on the sequence. Uncheck this option to get the standard behavior of the Cutoff.

Retrig OSC: The oscillator is trigged on each step, which can create more attack on each step depending on the selected Oscillator shape.

Sub OSC Waveform: By using this switch, you can set the sub-Oscillator waveform to either a Sine wave or Square wave.

Notes:

- **Sinus:** The Sine OSC work more as a Sub-harmonizer, and it's applied at the end of the chain post distortion. This allows you to get heavy harmonic distortions and to keep powerful loudness and clarity at the same time.
- **Square:** The Square OSC is located post distortion on the chain. This creates more gain on low and mid frequencies once the signal is distorted.

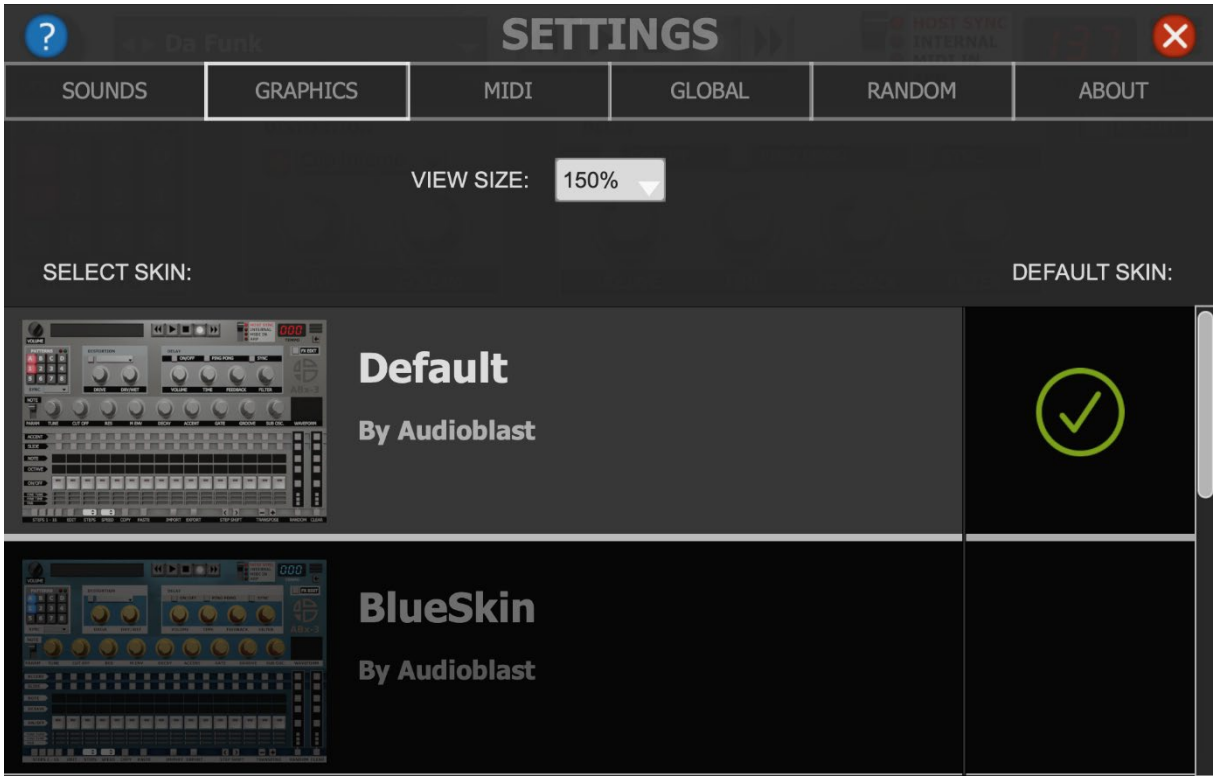
Remove DC OFFSET (SUB): With this parameter selected, Abx-3 removes the SUB OSC DC offset you can encounter at low cutoff values. With this parameter unchecked, you'll get more powerful subs, but some DC offset may occur when moving the cutoff at low positions.

Note: Generally, it is preferable to turn off DC Offset. However, turning on DC Offset and engaging the 4Band-Fuzz can give you some interesting results. Try it for yourself!

CUTOFF CHANGES: You can set how the cutoff changes when adjusted or automated.

- **Tight:** Very fast real-time cutoff movement
- **Smooth:** Slower cutoff movement for a more natural feel

12.2 Graphics Settings

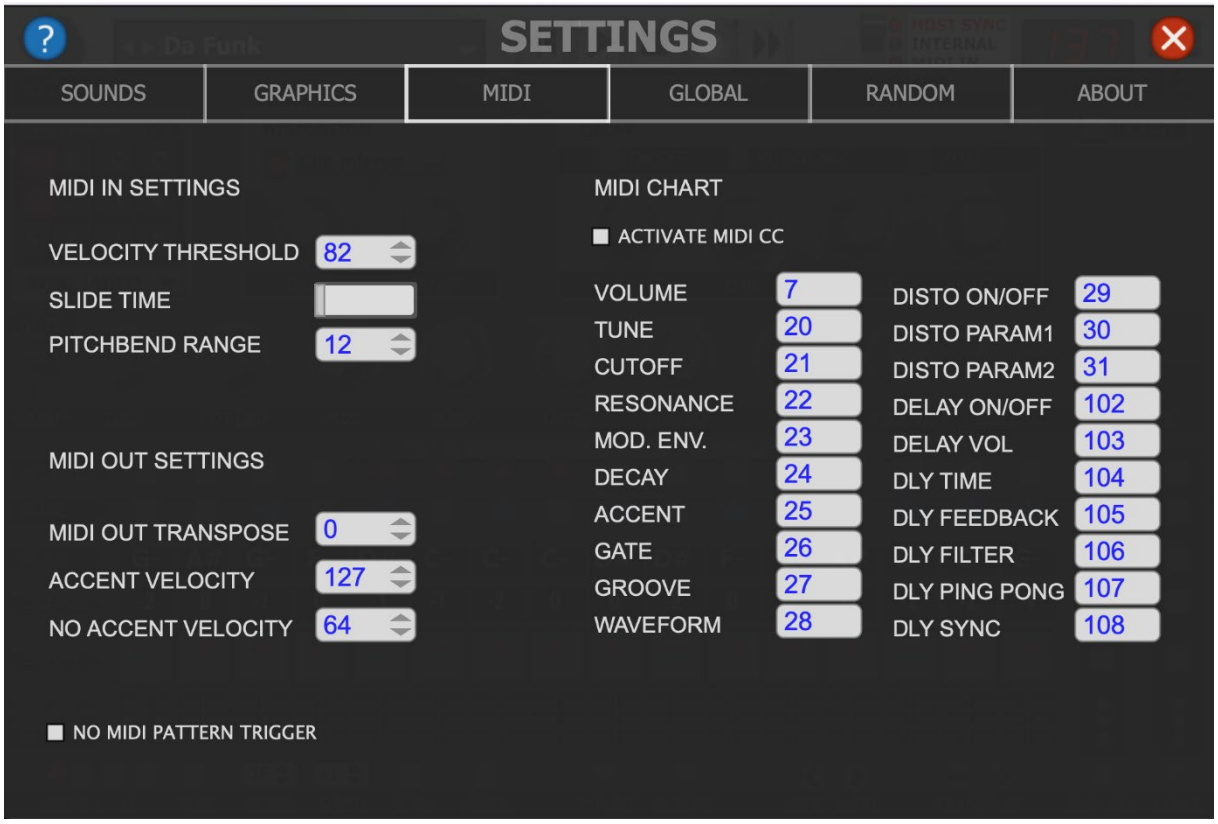


View Size: Click on the drop-down list to select one of the 4 sizes: 75%, 100%, 150%, or 200%.

Select Skin: Click on the skin you want to use, there are 5 unique GUIs to choose from.

Default Skin: Select your preferred skin to appear by default when you launch Abx-3.

12.3 MIDI Settings



Velocity Threshold: When using an external keyboard to write MIDI notes in the built-in sequencer, this parameter allows you to define the accent velocity range.
Example: If the parameter is set to 64, you will get no accent between 0 and 64. If your note velocity is above 64, notes will be accented in the sequencer.
Note: Velocity Threshold parameter is used in **MIDI In** and **Host Sync** mode.

Slide Time: This parameter defines the time of the slide (portamento) between two notes in **MIDI in** mode. To hear the **Slide** effect in this mode, you must overlap two notes.
Example: If the fader is near the maximum value the slide time will be longer, if the fader is near the minimum value the slide time will be shorter.

Note: Slide Time parameter only applies to the **MIDI in** mode.

Pitch Bend Range: This parameter defines the range of the pitch bend wheel of your MIDI keyboard. You can set the Pitch Bend range from 0 to 12 semitones. At 0, Pitch Bend is deactivated.

MIDI Out Transpose: This parameter transposes all the MIDI out notes of Abx-3 from -24 to +24 semitones.
Example: All external hardware or software synthesizers which receive MIDI from Abx-3 will receive the MIDI as transposed according to the MIDI Out Transpose value.
Note: Set to, 0 the **MIDI Out Transpose** has no effect.

Accent Velocity: Set the value from 0 to 127 to define the velocity for accented notes on MIDI output and MIDI export.

No Accent Velocity: Set the value from 0 to 127 to define the velocity for non-accented notes on MIDI output and MIDI export.

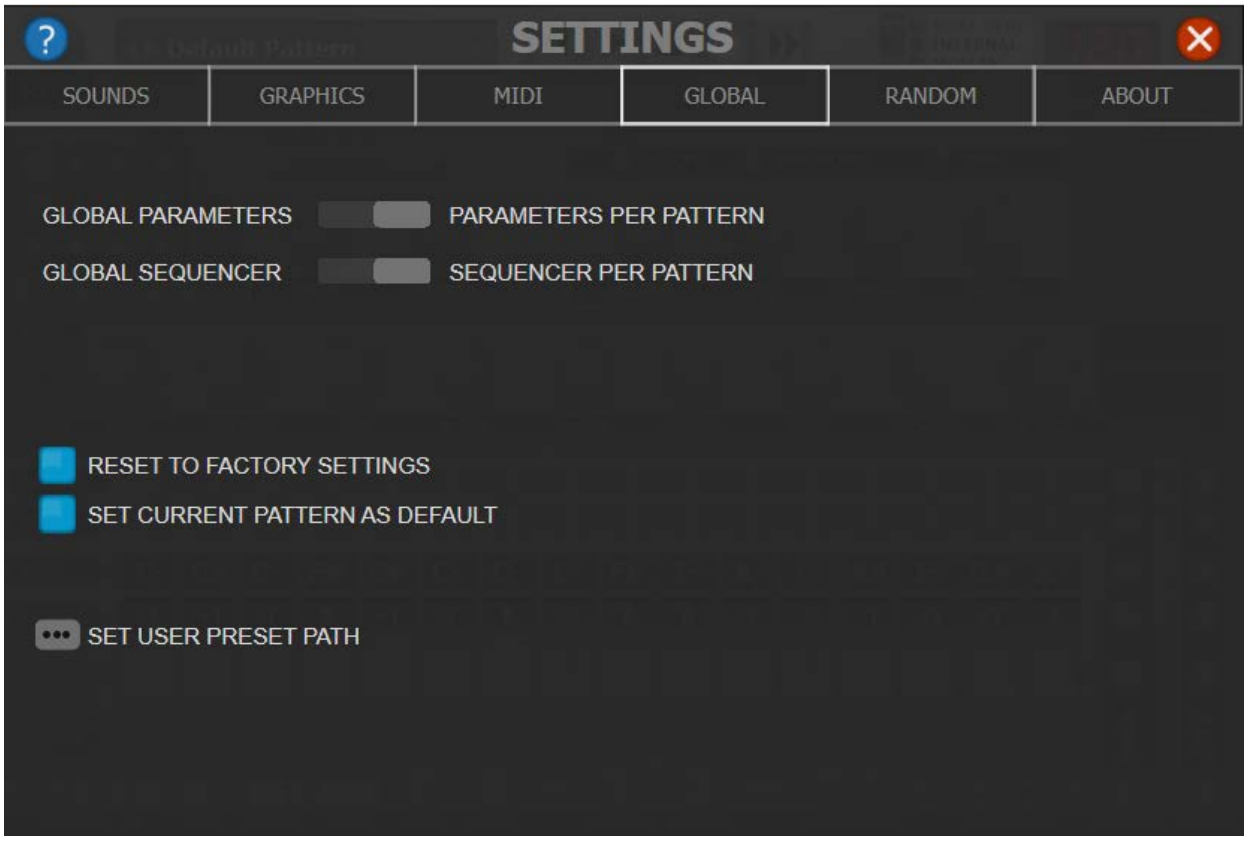
No MIDI Pattern Trigger: Check this box if you want to disable the lowest notes from 0 to 32 of the keyboard to trig the Abx-3 patterns.

MIDI CHART

Activate MIDI CC:

Check the “Activate MIDI CC” box to apply the factory default MIDI mapping.

12.4 Global Settings



Global Parameters: The plugin parameters are set and controlled globally for all patterns of Abx-3. This setting is useful for switching between patterns when you want to keep the same sound.

Parameters Per Patterns: The parameters are independently set for each pattern. This setting is useful for setting different sounds for each pattern, for example in a live show.

Global Sequencer: The parameter sequencer will be global for all patterns within Abx-3.

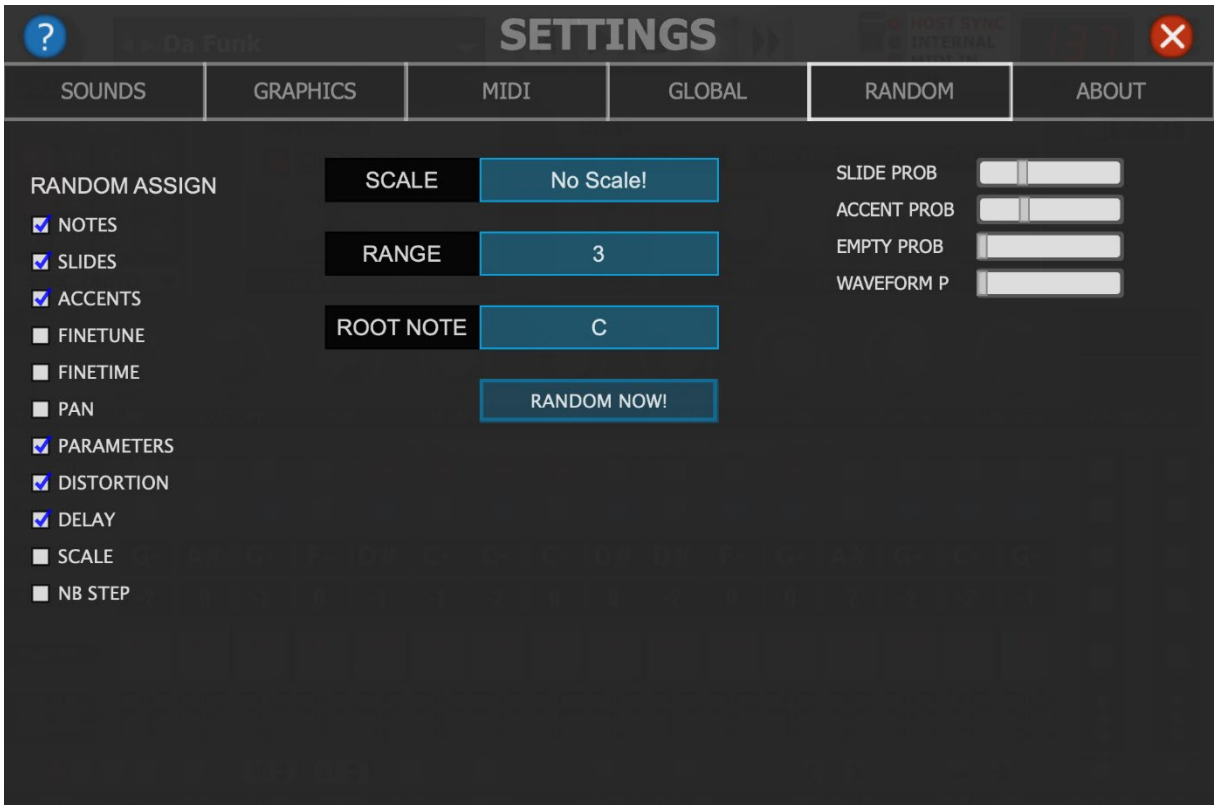
Sequencer Per Pattern: The parameter sequencer is independent for each pattern.
On the whole Abx-3 you can save up to 480 independent sequences.
(15 parameter sequences x 32 Patterns)

Reset to Factory Settings: Press this button to reset all settings and parameters to their default state.

Set Current Pattern as Default: Press this button to set the current pattern as default.
This recalls all current settings each time you launch Abx-3.

Set User Preset Path: Click this button to set where user patterns are saved. It also sets the folder that is shown in the Pattern window.

12.5 Random Settings

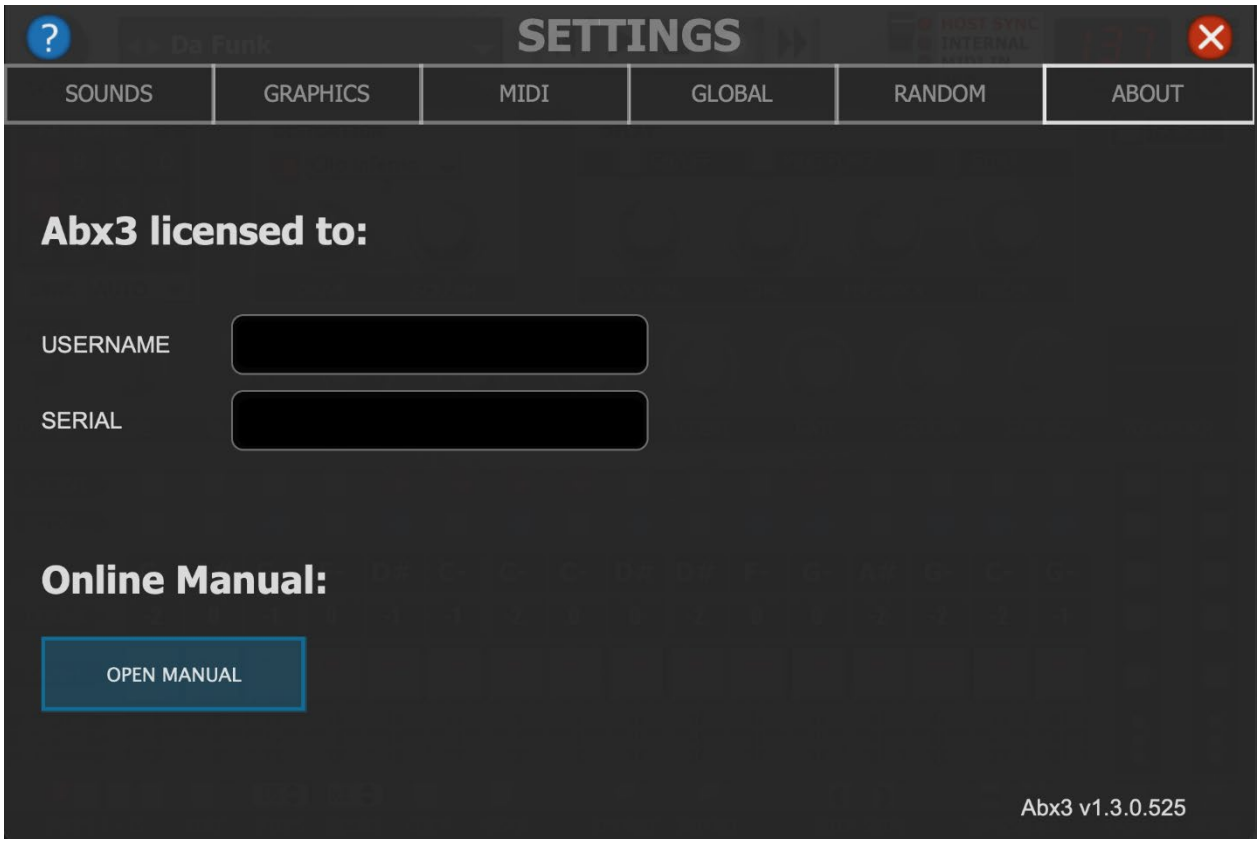


You can set all the following parameters below to random:

- Notes
- Slide
- Accents
- Fine Tune
- Fine Time
- Pan
- Parameters
- Distortion
- Delay
- Scale
- Number of Steps
- Scale (selects the root note of the scale)
- Range of Notes

- Slide Probability
- Accent Probability
- Empty Probability
- Waveform Probability

About



In this view you can view your credentials and open the online user manual.

Thank you for purchasing Abx-3 – we hope you enjoy the plugin!

If you have any questions or feedback, feel free to contact us at contact@audioblest.me

Check out our full range of creative music production tools at the Audio Blast website.