

BADASS

FILTER DISTORTION EFFECT

user manual



Badass

USER MANUAL

Revision 1.1

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Overview

Thank you for choosing Badass, Tek'it Audio filter distortion effect. Badass can give to your sounds this little bad grain or destroy them completely with the help of distortion effects, filters, lowfi effect and ring modulator. Each effect can be used individually, but combined they become a powerful tool to distort your sound.

We hope you enjoy this software, and spices the music you created with him. Please, take the time to read this manual and learn how to exploit all the feature of Badass.

Feature highlights

- 7 Effects: filter, cut, drive, lofi, ring, shape and boost
- Each effet can be disabled
- 8 Filter types: 24dB low-pass, 24dB digital low-pass, 24dB VCF Ladder low-pass, Modulo low-pass, 36dB State Variable, 12dB High-pass, 24dB High-pass, Bandpass
- Full MIDI automation and MIDI learn on all parameters
- Phase inverter and effect bypass
- Preset manager, rename, copy, save, load...
- Undo your changes to initial preset value
- One click Randomize
- Works in mono or strereo
- 44 Factory presets

Requirements



This software is a "Virtual Studio Technologies" plugin (VST), he work only with VST 2 compatible host software or on other host through the use of a VST adapter.

System requirements:

Operating System

- Microsoft® Windows® 7, XP (SP2 or later), or Vista™

CPU

- 1GHz with SSE

Memory

- 512 Mb RAM

Graphics

- 800x600 32 bit

Audio

- High quality audio interface with minimum 44kHz samples rates

MIDI

- To use the automation a Host with automation features and for MIDI learn a MIDI interface and an external MIDI control device is required.

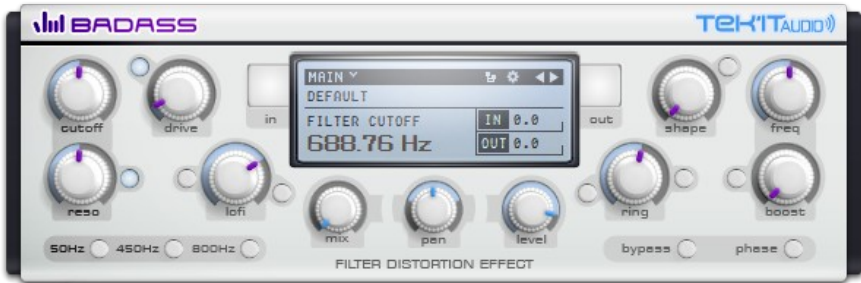
Installation

1. Simply run the installer program by double-clicking it, and follow the on-screen instructions.



2. Run your host software and load TKA - Badass. Consult your host documentation for information on how to do this.

Using



Badass can be used in stereo or mono as an insert effect or as send/return effect. Channel and Mode menu help you to configure Badass to your needs (see "Screen" section for details on this).

Each effect can be activated/desactivated by a switch. Turning off an effect that you don't use reduce CPU use.

Badass is by nature extremely dependent from the signal entering, he can easily overload if you enter to loud. You can help you from the "In LED" on the left of the screen to adjust the input signal.

Control Types

While using Badass, you will find that many parameters have similar controls. Hovering your mouse over controls will bring up a tooltip with its name or description.



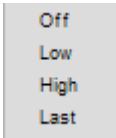
Knobs

Work like hardware rotary encoder. To Turn a knob, click it and when dragging upwards to move the knob to the right, dragging downwards to move the knob to the left. You can use high precision control by using Ctrl+Mouse. Double-click on it, reset it to the initial value of the patch.



Switch

A two position switch, click on it to change the position.



Popup Menu

Appear on left-click or right-click for select a value.

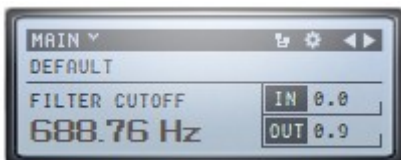


Peak LED

A LED indicator that light when the signal is overloaded.

In Depth

Main Screen



To change a value on the screen, click on it and a popup menu appears where you can choose a new value.

Patch

Displays the name of the current patch. Click on it for select a patch in the loaded patch bank. See the Preset Manager chapter (Page 23) for detailed information on the preset management.

You can also use the left and right arrow to change the current patch.

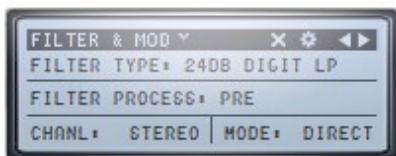
Central Readout

Displays the name and the value of the control being used.

In / Out dB Readout

Displays the highest dB (VU) of the input and output channels, to help you adjust the mix and the level. Can be reseted on click.

Channel and Filter Options Screen



Click on the channel icon to enter in channel and filter options mode.

Filter Type

Select one of the 8 different filter types, described in the table below.

Name	Description
24dB LP	24dB/octave low-pass filter with built in overdrive
24dB digit LP	24dB/octave classic digital low-pass filter
VCF Ladder LP	24dB/octave Ladder low-pass filter
Modulo LP	Similar to VCF Ladder but sound more digital
36dB SV LP	36dB/octave State Variable low-pass filter
12dB High-pass	12dB/octave State Variable high-pass filter
24dB High-pass	24dB/octave State Variable high-pass filter
Band-pass	12db/octave State Variable band-pass filter

Filter Processing

Select between Pre or Post processing. Pre is before all other processing, Post is after other processing but before the Cut effect and the Amplification.

Channel

Select the internal channel operation mode, Mono or Stereo. It is only the internal processing, the in and out are always in stereo (or two channel) except if your host treat the signal in mono (on send/return for example).

In Mono mode all channels are mixed, which means that if you come in stereo, left and right channel are mixed, processed on a single channel and then amplified in stereo. In Stereo the left and right channel separation is preserved.

Mode

Direct or Mix. In Direct mode the sound is fully processed, in Mix mode the effect is mixed with the original sound. The Direct mode reduced a little the CPU usage if you don't want to mix the effect internally.

Patch Edition and System Options Screen

Click on the gears icon to enter in Patch Edit and system options mode.



Click on the patch name to rename it.

Click on "Undo Changes" to reset all parameters to their initial patch value (except 'Pan'). If you change the patch before it does not work, because your changes are automatically saved on "Patch Change".

Click on 'Randomize' to randomize all knobs except 'Level, Mix and Pan'.

Click on "Peak LEDs" for activate or deactivate them.

FILTER

Cutoff

Change the cutoff point of the filter. For low-pass filters, this means that frequencies above the cutoff point are attenuated. For high-pass filter, this means that frequencies lower than the cutoff point are attenuated. For a band-pass filter, this means that frequencies outside a certain range upper and lower than the cutoff point are attenuated.

Reso

Controls the resonance of the filter. The frequencies around the cutoff frequency are raised.

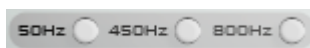
DRIVE

This is a very hard distortion with a lot of saturation and adds harmonics. Turning the knob to the right increase the amount of distortion applied to the signal.

LOFI

Downgrade sound quality by a re-sampling effect, that produce distortions and artifacts. The render of this effect is extremely dependent of the sampling frequency of your system. From a soft effect on the left, to a completely degraded sound to the right. The switch on the right activate the antialiasing.

CUT



Attenuates frequencies within a range around the cutoff frequency. There are three cutoff frequencies available, 50Hz, 450Hz and 800Hz. Press their respective switch to activate them.

SHAPE

Shape distortion, very similar to a fuzzbox effect. Turning the knob to the right increase the amount of distortion applied to the signal. This distortion is softer than the Drive.

RING

Mix

Change the mix level of the ring modulator. Ring modulator produces mettalic bell-like sounds, by multipling the incoming signal with a sine-wave, this resulting in a ringing sound. Turning this knob clockwise increase the intensity of the effect.

"Ring" refers to the arrangement of diodes originally used to implement this effect in analog circuits.

Frequency

Click on the switch on the left to pass the "ring" knob to frequency mode. This knob change the frequency (pitch) of the effect, from 30Hz on the left to 4000Hz on the right.

BOOST

Frequency

Change frequency around which the boost is applied, in a range of 35Hz to 800Hz from left to far right.

Boost

Change the level of the boost.

BYPASS

Bypass all the internal processing. The sound out is the same as the sound in, leaving the sound unaltered.

PHASE

Invert the phase of the sound before the amplification stage. Can be very usefull in "Mix mode".



TIPS: Apply a different effect on 2 voices with the same sound, and reverse the phase on one can produce interesting effect.

AMP

Mix

Mix the effect with the original signal from dry (no effect) to wet (only the effect). Work only if the plugin is in "Mix mode".

Pan

Control the panoramic, the knob show you the placement off your sound in the stereo field. Can be reset to center on double-click.

Level

Control the output gain within a range of -72dB to +12dB. If you turn the knob to high the sound can be distorted.

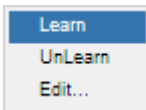
MIDI

Badass have integrated MIDI learn and full automation on all parameters.

Integrated MIDI learn

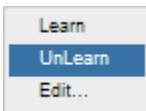
All controls can be controlled by an external MIDI controller easily, simply right clic on the parameters you want to control and the Learn popup menu appear.

Learn



Click on Learn, move a control on your MIDI device and it will automatically assigned.

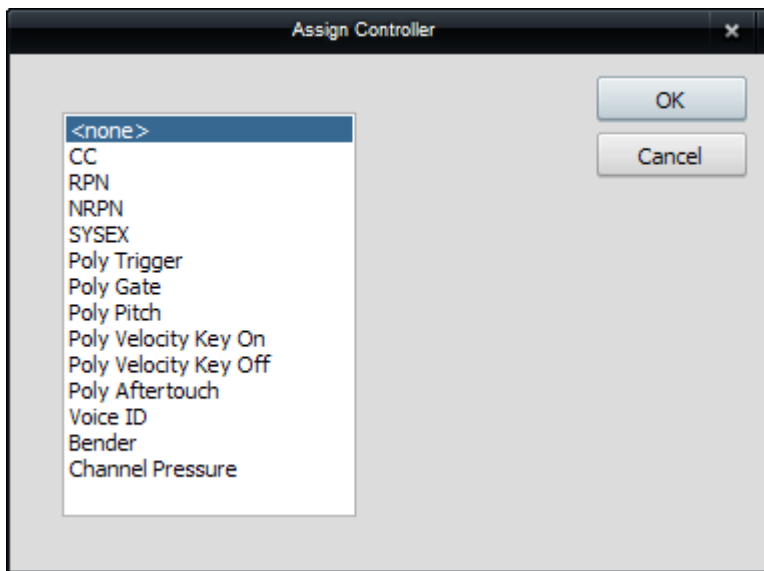
Unlearn



Click on UnLearn will clear the controller.

Edit...

Click on Edit will open the Assign Controller dialog. You can change manually the MIDI controllers.



Automation

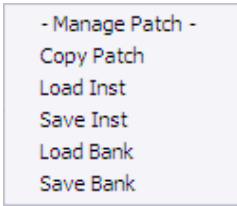
Each controls can be automated using your host automation features. Consult your host documentation for information on how to do this.

Overview of MIDI CC Assignment

MIDI CC	Name	Target	Ignore PC
7	Volume	Amp - Level	
8	Balance	Amp - Mix	
10	Pan	Amp - Pan	
84		Boost - Frequency	
85		Boost - Level	
86		Boost - On/Off	
87		Cut - 50Hz	
88		Cut - 450Hz	
89		Cut - 800Hz	
102		Drive - Level	
103		Drive - On/Off	
80		Effect - Bypass	Yes
81		Effect - Channel	
82		Effect - Mode	
83		Effect - Phase Invert	
75		Filter - Cutoff	
77		Filter - On/Off	
79		Filter - Process	
76		Filter - Resonance	
78		Filter - Type	
110		Lofi - Antialiasing	
104		Lofi - Rate	
105		Lofi - On/Off	
117		Patch - Randomize	Yes
118		Patch - Undo Changes	Yes
111		Ring - Frequency	

106	Ring - Level	
107	Ring - On/Off	
112	Ring - View Frequency	Yes
108	Shape - Level	
109	Shape - On/Off	
119	System - LEDs state	Yes

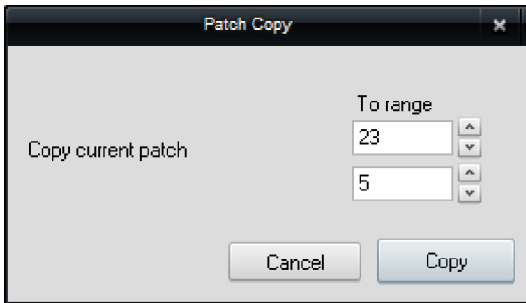
Preset Manager



Badass have an integrated preset manager.

Click on the folder icon to open the preset manager popup menu.

Copy Preset



Copy the current preset to another preset or a range of preset.

Load Preset

Load a preset (*.fxp) on the current preset

Save Preset

Save the current preset in (*.fxp) file format.

Load Bank

Load an bank (*.fxb).

Save Bank

Save the bank of preset s in a file (*.fxb).

Updates And Support



Updates will be made available at
<http://audio.tekit-studio.eu/badass/>

Check the related pages for more information on the updates.



Additionally you can follow us on Twitter for instant updates and news at

<http://twitter.com/TekitAudio>



For product support, ideas, complaints, testimonials, sound demo, patches and anything you feel is worth sharing, please use our contact form at

<http://audio.tekit-studio.eu/contact-us/> .

If you prefer, you can contact our team directly by email at

contact@audio.tekit-studio.eu

Other Products

Some products to come or already available.

8KUT 8 PADS
frequencies cutter



8kut is a 8 bands frequencies cutter freeware, designed with Dj's and live performance in mind. Cuts frequencies with the 8 pads, from bass to mids range, high mids and treble.

KUTTER
frequencies cutter effect



Kutter is a frequencies cutter effect. Cuts frequencies on the 12 bands easily and synchronizes the effect on the beat with the 16 steps modulation sequencer.

GENOBASS
monophonic bass synthesizer



Genobazz is a free monophonic bass synthesizer plugin, designed to be simple to use, for all your bass need, from simple bass to acid bassline.

GENOBASS R
monophonic bass synthesizer



Genobazz R is the anniversary edition of our free monophonic bass synthesizer plugin, with more bass, more acid, more fat sound, inside.

8EQF 8 BAND semi-parametric eq



8eqf is a semi-parametric 8 band eq with selectable bandwidth between narrow and wide. Each band offers center frequency, gain, bandwidth and bypass parameters.

APC punk CONSOLE



Virtual re-creation of a popular DIY circuit the Atari Punk Console. APC is a square wave synthesizer that creates fun "low-fi" sound, and comes with users MODs.

Polyphonic superwave synthesizer from tek'it audio.

<http://audio.tekit-studio.eu/sp-8/>



Genobazz eXTended, more bass, more fun ! Integrated sequencer, distortions and a lot more to discover...

<http://audio.tekit-studio.eu/genobazz-xt/>



Visit audio.tekit-studio.eu for more information !

Credits

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Patch Design:

SinKA [Polyforme Record.]

Software Test:

Michaël Dubois

Manual:

Michaël Dubois

Special Thanks to:

BitGlitch

SaTRiP [Polyforme Record.]

SoundCloud.com

Pascal Rinaldi [www.pascalrinaldi.ch]

And everyone else who has contributed to the development in any way.

Create, play !



<http://audio.tekit-studio.eu>