

Klanghelm DC8C 3

Klanghelm DC8C 3 Expert A B piano ◀ ▶ SIZE 100% OS 1x / 4x METER PEAK CAL -18

EXT. SC LISTEN **SATURATION**

HPF TILT LPF MODE AMOUNT

29 0.3 12702 5.8

12 dB 12 dB PRE POS

LEVELS AGC **DETECTOR**

INPUT OUTPUT MIX CH SEP RMS TIME

0.2 1.7 66.3 100 2.5

CLIP SMOOTH

THRESHOLD FB-MIX

AMOUNT 100 25.0

SHAPE NOSE -12.4

RATIO RANGE

GR SMOOTH 30.0 50.0

NEGATIVE OPERATION 14.3 NORMAL

ATTACK PROG DEP

PRE ATTACK 0.0 22

x 10 S-CURVE 1.02

RELEASE PROG DEP

HOLD 0.0 18

650 S-CURVE



NOISE SHAPE 100 52.0

NEGATIVE OPERATION 30.0 20.0

x 10 S-CURVE 0.0 55

650 S-CURVE 0.0 18

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Installation

Windows:

Plugins (64-bit VST, VST3, AAX)

- download and unzip the installer from the user area
- Run DC8C3-installer.exe and follow the instructions
- If you're using a VST host, make sure, that you specify the correct VST-plugin-folder during install

Troubleshooting:

If you get an error message before or during the installation process, it is very likely due to a false positive from your active virus scanner. In this case either add DC8C3-installer.exe to your whitelist or temporarily disable the scanning during the install process.

Apple macOS:

Plugins (64-bit AU, VST, VST3, AAX)

- download and unzip the installer from the user area
- open the DC8C3.dmg, run the included DC8C3-installer.pkg and follow the instructions.

Troubleshooting:

- in case you're getting a message, that the installer can't be executed, because it is „not downloaded from the App store“, do the following:
 - Go to System Preferences -> Security & Privacy
 - In the General Tab of the Security & Privacy window click on the lock icon in the bottom left to be able to make changes.
 - select "Anywhere" in the section "Allow applications downloaded from:"
- Now install DC8C3 again.

Top Bar & Preset System

The diagram illustrates the top bar and preset system of the Klanghelm DC8C 3 plugin. The top bar includes the logo, mode (Expert), states (A/B), a preset name (piano), and various parameters (SIZE, OS, CAL, METER, PEAK).

Top Bar Callouts:

- click on the Klanghelm logo to enter the global settings (see page 13)
- click to switch between EASY and EXPERT mode
- click to enter the preset menu.
- go to next preset
- select the oversampling factors for realtime and for offline render operation
- GUI size
- Meter mode: VU or Peak
- Sets the reference level not only for the VU meter but also for the saturation. Drag or use your mouse wheel to change the value. You can also click to enter a value with your keyboard.

Menu Callouts:

- Click to switch between two plugin states. To copy one state to the other enter the preset menu and select "copy A to B" or "copy B to A" depending on which state is active. The states are saved with the session.
- copies the current plugin state to clipboard. You can use „paste from clipboard“ in another instance of the plugin to apply these settings to that instance or you can paste that into a text document to share it with other users.
- click on „paste from clipboard“ to apply a copied state to the current plugin instance.
- factory preset categories
- click to load a preset file from disk
- resets the plugin to its default state
- saves the current state as a preset onto your hd. Please make sure, that the preset is saved into your UserPresets-folder in order to make it visible in the USER category
- saves the current state as the default state, that is recalled whenever you load a new instance
- your own presets can be recalled from here. In case you want to delete (some of) them, they are located here:
 macOS: /Users/<username>/Library/Klanghelm/DC8C3/UserPresets/
 Windows: C:/Users/<username>/AppData/Roaming/Klanghelm/DC8C3/UserPresets/

Menu Structure:

- LOAD
- SAVE
- COPY TO CLIPBOARD
- PASTE FROM CLIPBOARD
- COPY A->B
- PRESETS
 - DRUMS
 - BASS
 - GUITARS
 - KEYS
 - VOCAL
 - MASTERING
 - STYLE
 - USER

Sub-menu Options:

- FROM FILE...
- RESET TO DEFAULT
- SAVE TO FILE
- SAVE AS DEFAULT

Note: SIZE, OS, CAL, METER and AGC parameters are excluded in the factory presets. The DEFAULT preset include these parameters. There's an option in the global settings, whether or not the aforementioned parameters are being recalled with the user presets and A/B states. See page 11

Upper controls

Saturation: 3 states:
 Off: no saturation
 Orange: light saturation
 Red: heavier saturation

Activate external side-chaining

Side-chain listen incl. filters

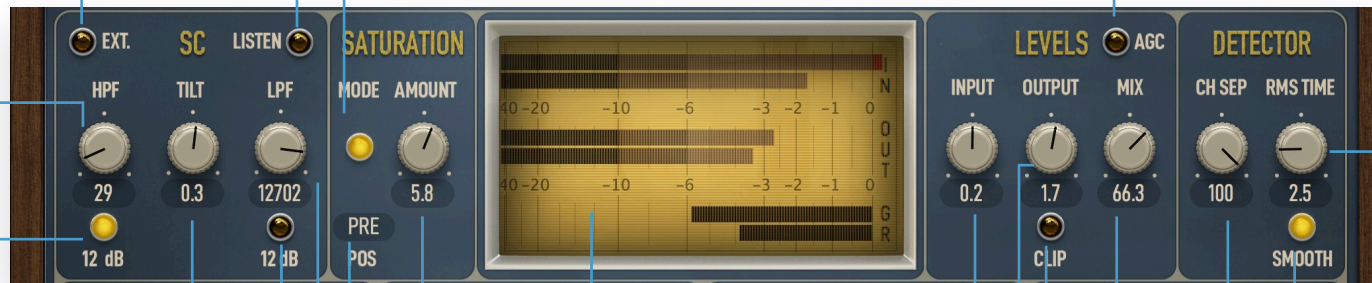
side-chain-highpass cutoff frequency in Hz

Switches the steepness of the side-chain high-pass filter from 6 to 12dB

side-chain-tilt in dB:
 If set to negative values:
 - bigger influence on the gain reduction by low frequencies
 if set to positive values:
 - bigger influence on the gain reduction by high frequencies

Switches the steepness of the side-chain-lowpass filter from 6 to 12dB

side-chain-lowpass cutoff frequency in Hz



Click to enable **Automatic Gain Compensation**:
 The calculated output level is based on the RMS-difference between input level and compressed signal. It gets recalculated (and applied) each time when a gain affecting control is being changed. This calculated output gain level is saved with the session. It is recommended to leave AGC OFF when using automation, since it might lead to undesired results when automating.

- NOTE:
- When AGC is ON and you quickly move controls, that influence the gain reduction amount, big output level changes can occur when the new calculated output volume is being applied after your control move
 - When AGC is ON, you can still fine-tune the output level with the make-up control
 - When **switching AGC off**, the output control is set to the AGC-calculated output level plus the fine-tuned output level to avoid level jumps
 - When **switching AGC on**, the output control is being reset to 0 to avoid level jumps
 - The output control is also being reset to 0, when you're switching presets and AGC is on.

Saturation amount

Click on the meter to bypass the plugin

Position of the saturation: pre-compression, post-compression or side chain only

Clean input gain in dB

output/make-up gain in dB
 See also **AGC**-description

Enables a soft clipper at the output of the plugin

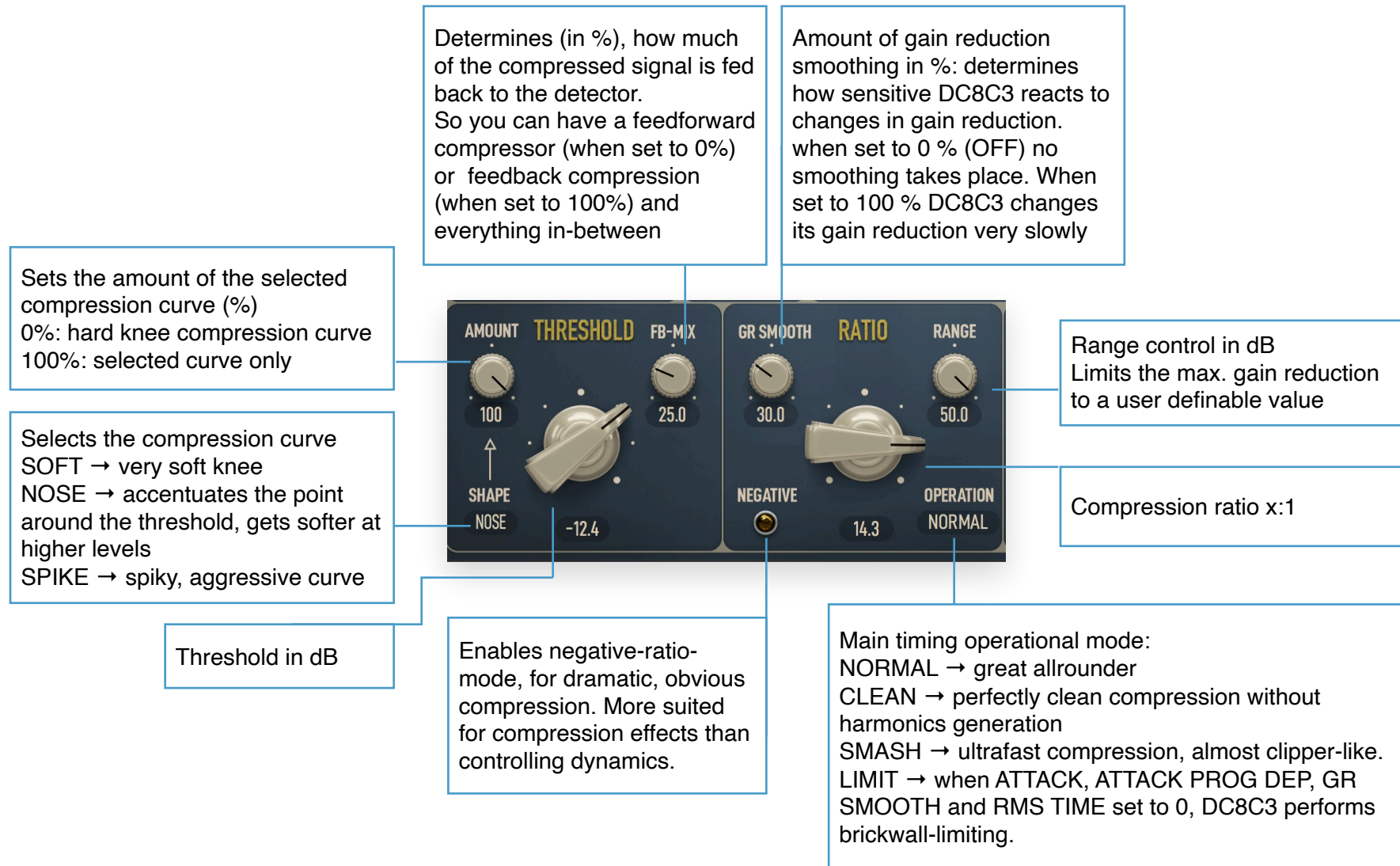
mix control in %:
 0%: dry signal,
 100%: compressed signal

RMS detection time in ms,
 When set to 0.0 DC8C3 acts as a peak compressor

When engaged, the release of the detector and the actual compression release time depend on each other. This allows a smoother release characteristic.

Channel separation of the gain reduction in %
 0%: mono/stereo
 100%: dual mono

Lower left controls



Lower right controls

Pre-delay of the compressor in ms, Determines the time, before the compressor reacts to the input signal

Multiplies the currently chosen attack time by a factor of 10

Controls the program dependency of the Attack
When set to negative values, the attack gets slower the higher the signal level is, if set to positive values the higher the signal level – the faster the attack

Sets the time in ms, the compressor hold its gain reduction before the release kicks in

Controls the program dependency of the release
When set to negative values, the release gets faster the higher the gain reduction level is, if set to positive values the higher the gain reduction – the slower the release
If set to zero no release program dependency is taking place



Attack time in ms

when engaged, the attack curve changes from a standard logarithmic curve to a s-shaped curve, letting more of the transients pass

If pressed, the release curve changes from a standard logarithmic curve to a s-shaped curve, resulting in a more relaxed release behavior

Release time in ms

EASY mode controls

Click to enable **Automatic Gain Compensation**:

The calculated output level is based on the RMS-difference between input level and compressed signal. It gets recalculated (and applied) each time when a gain affecting control is being changed. This calculated output gain level is saved with the session. It is recommended to leave AGC OFF when using automation, since it might lead to undesired results when automating.

NOTE:

- When AGC is ON and you quickly move controls, that influence the gain reduction amount, big output level changes can occur when the new calculated output volume is being applied after your control move
- When AGC is ON, you can still fine-tune the output level with the make-up control
- When **switching AGC off**, the output control is set to the AGC-calculated output level plus the fine-tuned output level to avoid level jumps
- When **switching AGC on**, the output control is being reset to 0 to avoid level jumps
- The output control is also being reset to 0, when you're switching presets and AGC is on.

Saturation amount

Activate external sidechaining

side-chain-highpass cutoff frequency in Hz

Threshold in dB



When lit, DC8C3 operates in dual mono configuration

mix control in %:
0%: dry signal,
100%: compressed signal

Release time in ms

Compression ratio x:1

Select an easy mode.
See page 9

Attack time in ms

output/make-up gain
in dB

NOTE: when switching modes, the selected attack and release time don't change. However, the position of the controls might change, since each Easy mode has its own attack and release time range.

Description of the four EASY-Modes

THE FOUR EASY MODES

To get a feeling for different compression character of each style, set all controls to its default value (double click on each knob). Then lower the threshold until you get around 4-5 dB gain-reduction. Now switch through the four styles. The differences in character should be obvious now.

NOTE 1: when switching modes, the selected attack and release time don't change. However, the position of the controls might change, since each Easy mode has its own attack and release time range.

NOTE 2: As opposed to earlier versions of DC8C3 you can now switch to EXPERT mode without changing the sound. EXPERT isn't a fifth mode anymore, but just offers you more control over the compression, you've started in one of the Easy modes.

However, if you make adjustments in EXPERT mode and then switch back to EASY mode, the EASY mode is fully adapted again and overrides changes done in EXPERT mode to keep the selected EASY mode intact. Bear in mind, that the EASY mode controls function as macro controls, tweaking multiple parameters dynamically at once, e.g. the attack control can also change the amount of program decency depending on the selected EASY mode.

So if you want to do deeper tweaking by switching to EXPERT it is advised to stay in EXPERT mode.

SMOOTH

The slowest of the 4 easy modes. Invisible compression action, smooth gain riding / leveling

Suited for bus duties, vocals, strings, synth pads

PUNCH

Set and forget punchy, natural compression, great all-purpose, workhorse compressor. Go-to track compressor. Shines on the drum bus too.

SNAP

String VCA-style compression. This is the transient spitting machine. a gain reduction around -2 dB might already be enough to spice up drums.

Also suitable to emphasize the attack of guitar/bass guitar signals. Be careful with the output knob: the differences between transients and the rest of the signal can be huge.

CRUSH

The opposite to SMOOTH mode. Lots of compression artifacts (distortion). You can use it to completely destroy the dynamics and/or misuse DC8C3 as a distortion device. Very fast compression characteristics, similar to FET-style compression. CRUSH is based on the SMASH operational mode from the EXPERT view.

Tips and tricks

Please try out the presets. They should give enough starting points for your own explorations into the various compression flavors you can get out of DC8C3

DC8C3 is able to perform very clean compression even at very fast settings (In CLEAN mode)

When doing massive gain reduction you should know, that from time to time transient information will pass (popping) through. You can compensate for that by increasing RELEASE and/or HOLD TIME.

When CLEAN COMP is off, you can reach true zero attack, i. e. Transients can be killed completely if desired

If you want true 0.0 ms attack you should also set the RMS TIME, PRE-ATTACK and GR-SMOOTH to 0.

The LIMIT mode is not intended to replace your favorite mastering limiter. Think of it as analog style limiting. Best used in conjunction with the soft clipper at the output (click on the LED below the OUTPUT control to activate).

If you set ATTACK, PRE ATT, PROG DEP (attack) and GR SMOOTH to 0 DC8C performs brick-wall limiting.

When switching on the DETECTOR SMOOTH and THE S-RELEASE CURVE you can lower the distortion more.

Global Settings

CREDITS	GLOBAL SETTINGS
KLANGHELM	knob-mode <input type="text" value="vertical"/>
model: DC8C3	mouse-drag sensitivity <input type="range" value="50"/> (high to low)
version: 3.3.0	<input type="checkbox"/> enable tooltips
DSP: Tony Frenzel	Recall when switching user presets and A/B states:
GUI: Tony Frenzel	<input checked="" type="checkbox"/> SIZE <input type="checkbox"/> OS <input checked="" type="checkbox"/> CAL <input type="checkbox"/> AGC
	<input checked="" type="checkbox"/> equal OS settings for Realtime and Offline
	<input type="checkbox"/> disable dynamic latency reporting
	<input type="checkbox"/> use OpenGL GUI rendering (experimental) requires closing/reopening the GUI. Can improve GUI performance. Make sure that you have the latest OpenGL drivers installed, if you use this option.
www.klanghelm.com	<input type="button" value="save"/>

Sets the mouse drag behavior when moving a knob on the GUI

Sets the mouse drag sensitivity when moving a knob on the GUI

when ticked, an explanation is shown, when hovering over a control

Use this option to determine, whether or not the GUI Size, oversampling options, calibration setting and AGC are being recalled with AB-states and user presets

If your host doesn't support different latencies for realtime and offline processing, you can use this option to apply the realtime OS setting during offline rendering too to keep things in sync. If you want to benefit from different OS settings for realtime and offline and your host doesn't apply latency changes for offline processing, you need to disable the dynamic latency reporting (see below)

If your host doesn't support different latencies for realtime and offline processing, you can also disable the dynamic latency reporting completely to keep things in sync. In this case the reported latency of the plugin is being set to fixed 128 samples regardless of the OS settings.

Enable OpenGL GUI rendering

Click on the hyperlink to visit the Klanghelm website

Click to save the global settings and close the menu. The global settings are saved to:
macOS: /Users/<username>/Library/Klanghelm/DC8C3/settings.xml
Windows: C:/Users/<username>/AppData/Roaming/Klanghelm/DC8C3/settings.xml
If running into issues, simply delete this file and the factory default global settings will be used again.

Credits

Code and GUI: Tony Frenzel

Manual: Tony Frenzel

Special thanks to the beta testers.

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