

# BLACKASH SC-5

## CLASSIC AMERICAN COMPRESSOR



## **OVERVIEW & INSTRUCTIONS**

WWW.BLACKROOSTERAUDIO.COM

# BlackAsh SC-5

## **OVERVIEW & FEATURES**

#### About the BlackAsh SC-5

#### Classic VCA Compressor

Accurately modeled after the "black frontplate" revision of a classic and sought-after VCA compressor the SC-5 opens up a whole world of versatility:

You're going for super gentle compression to sweeten up the signal on your masterbuss? You're looking for a distorted, smashed-up sound on your drum buss? You want to tame lively and dynamic material? The BlackAsh SC-5 handeles it all.

Compared to its brother, the BlueAsh version of the SC-5, the BlackAsh SC-5 brings you slightly different compression behaviour, a different harmonic structure paired with a darker sounding audio-path and the option to feed in external sidechain signals.

#### **Plugin Activation & System Requirements**

Black Rooster Audio plug-ins are equipped with a straightforward and easy to use challenge-response activation system. We did our best to make sure our system works well for both online and offline users. By supporting USB key activation, mobile use is supported and just as easy as permanent activation of your computer's hard disk.

For detailed information about the activation process and the current system requirements of our plugins please refer to: blackroosteraudio.com/faq.html

#### **Key features**

#### External sidechain input

The BlackAsh SC-5 adds an external sidechain input that can be engaged by depressing the "Ext SC" button. The BlackAsh SC-5 is a feedback compressor design, thus feeding an external sidechain input into the existing feed-back loop circuit would result in feed-forward topology, which would result in different compression behaviour. To overcome this problem, the external sidechain input is treated just like the normal audio signal, while the resulting control voltage is fed into a mirror VCA that modulates the audio signal. This way feed-back operation can be retained in both the normal and external sidechain modes.

#### Authentic circuit emulation

Our real time SPICE type component based circuit simulation approach allows to authentically capture the sound and feel of the analog counterpart in all nuances. Every crucial part of the circuit, including the custom VCA design, the detector circuit, the feedback compressor loop and the audio path have been faithfully modeled.

#### SSE2 optimized code

DSP operations are pipe-lined using the SSE2 instruction set. This ensures highest possible performance operation despite very complex computations.

# Auto-adjusted oversampling for maximum audio transparency

Aliasing artifacts are efficiently attenuated using a low latency linear phase Dolph-Chebyshev poly-phase design. The oversampling is auto adjusted to your session's sample rate to save valuable CPU power while offering the most transparent sound possible.

#### HighDPI / Retina Support

All our plug-Ins support high pixel density on Mac OSX and Windows to bring you the most enjoyable user experience on high DPI displays. Please refer to your manual to find whether your DAW is HighDPI capable if you're working on Windows.

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## **CONTROLS & USER INTERFACE**

#### » Power

Engages or bypasses the processing altogether.

#### » Limit

Toggling this button engages or bypasses the circuit's compressor path. Using this switch allows you to monitor the effect of your current setting. The output stage as well as the meter LEDs (see below) will remain active also when bypassed.

#### » Link

This is an addition to the original circuit. Sets the unit into stereo linked operation when depressed or dual-mono compression, otherwise. Only available in stereo instances.

#### » Gain

Controls the amount of gain in the compressor path. The BlackAsh SC-5 is a fixed threshold compressor: The more you drive the gain stage the more compression will be applied to your signal. *Drag the knob with the right mouse button and the Output knob will move into the opposite direction, this function allows for adding compression without increasing the volume.* 

#### » Ratio

Use this knob to adjust the ratio of the compressor in the range from 1:2 to  $1:\infty$ .

#### » Attack

Use this knob to dial in the attack time from 200us to 20ms.

#### » Release

Controls the release time in the range from 100ms to 2s.

#### » Output

Use the output gain knob to compensate for volume changes applied by the compressor stage in the range between  $-\infty$  and +18 dB. Drag the knob with the right mouse button and the Gain knob will move into the opposite direction, this function allows for adding compression without increasing the volume.

#### » Ext SC

Depress this button and the compressor will react to external sidechain signals instead of the audio inputs. This allows for de-essing, ducking or other effect compression tasks. *ATTENTION: Be careful with strong compression settings and high output gains when engaging the external sc signal. This may result in high volume jumps when the external signal is un-*

### » Gain Reduction LED Meter

The red LEDs monitor the gain reduction applied by the compressor stage.

#### » Threshold LED

routed/silent.

The yellow LED monitors by which amount the compressor's threshold is exceeded by the incoming signal. The brighter the LED lights up, the more compression will be applied.

























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## **PREFERENCES & SHORTCUTS**

#### GUI Size

In the GUI size menu you can select your preferred GUI scaling from a list of four settings, if the default mode (Normal) is too big or too small for your taste. Please note that the GUI size setting is a global preference that affects all Black Rooster Audio plug-ins installed on your system.



#### Check for updates

Click the Check for updates entry to see if the plug-ins installed on your system are up-to-date. This function requires internet access.

#### Knob behaviour & keyboard shortcuts

Use the plug-ins settings menu to select your preferred knob mode globally, i.e. all of our plug-ins share the same setting among all DAW applications. Choose between "Host Setting", "Circular", "Relative Circular" and "Linear":

- By default the knob mode is set to "Host Setting" which means that the knob mode is dictated by the DAW application. Some VST hosts allow to change the knob mode setting in their preference menu. Our plug-ins will respect the host knob mode in that setting.
- In the "Circular" or "Relative Circular" modes knobs will react to circular mouse gestures and you have to drag your mouse in clockwise or counter-clockwise direction to change a knob's value.
- In the "Linear" mode you have to drag your mouse up or down when selecting a knob to change its value.

Use the knob sensitivity menu to adjust the knob sensitivity to taste. This function is only available in linear mode.

#### All of our plugins support the following keyboard shortcuts

AU Hosts on Mac OS Alt + Click - Reset control to its default value Shift + Drag - Fine control Shift + Mousewheel - Fine control

*VST Hosts on Mac OS* CMD + Click - Reset control to its default value Shift + Drag - Fine control (only a applicable in linear knob mode) Shift + Mousewheel - Fine control

*VST Hosts on Windows* Ctrl + Click - Reset control to its default value Shift + Drag - Fine control (only a applicable in linear knob mode) Shift + Mousewheel - Fine control

