

white label

www.roughdiamondproductions.com/whiteLABEL

SidePRESS MK I



© 2008 Rough Diamond Productions

sidePRESS is a hard-knee compressor with lookahead feature and selectable sidechains capable of operating in stereo, dual mono, and serial modes.

Update : 05/03/08

- new envelope follower copes with sub 30ms attack times
- more control over drive

Update : 18/02/08

- autogain on right channel now displaying correctly
- autogain levels adjusted
- attack link button now working
- presets improve a little

First release : 02/02/08



Input and sidechain selection, operating mode and channel view. **SidePRESS** has 4 inputs. Use this section to decide which inputs become the carriers and which the sidechains. To change these, click on the numbers below 'audio' and 'chain'.

To change operating mode, click on the bottom button. This will toggle between stereo, parallel and serial. In parallel and serial modes, the next button up become usable - click it to toggle between viewing the left and right channels. In stereo mode you can only see one set of controls - the left channel as these controls affect both left and right channels.

About modes : in stereo mode, the sidechain inputs are summed, and one set of controls affects both channels. In parallel mode, sidePRESS operates as 2 independent channels, and in serial mode, the output from the left channel is used as input for the right channel giving two runs through the compression channel. Serial mode is used to compress a mono signal twice, parallel mode is used to compress 2 mono signals independently, and stereo mode is used to compress a stereo pair of signals.



Sidechain filter - a simple 2 pole 6db/octave high and low pass filter affecting only the sidechain. Use to let for example bass frequencies *not* trigger compression.



Attack time [ms] - the time it takes for gain reduction to reach its full amount as described by threshold and ratio.

Threshold [db] - when the sidechain reaches the threshold, compression is applied.

Link [on/off] - when activated, attack time is automatically set to the delay time [see below] to generate a 'just-in-time' look-ahead gain reduction curve.



Release time [ms] - When the sidechain falls below the threshold, this is the time it takes for gain reduction to return to 0.

Ratio [1 to 20] - the amount of gain reduction applied once the threshold is crossed.



Gain - amount of makeup gain to apply post compression.

Auto switch [blue led] - sidePRESS attempts to add a similar amount of gain to the signal as was removed by gain reduction to output a nice hot signal after compression. When the amount of gain reduction increases, so does the auto gain amount. However, this amount is held and doesn't return when gain reduction falls. If you feed a very hot signal into sidePRESS and use auto gain, expect a very hot signal out.

Reset switch [blue led] - press this to reset auto gain to 0 db.

Delay - the amount of delay applied to the carrier. Using this allows sidePRESS to operate in lookahead mode. **THIS WILL AFFECT ATTACK TIME AND ADD LATENCY !!** With a delay of e.g. 25ms, compression starts to be applied 25ms before the sidechain reaches the threshold, so with an attack time of 25ms, as the sidechain reaches the peak, the compression will be at its full extent. A delay of 25ms and Attack of say 10ms will result in gain reduction reaching its full extent 15ms before the peak occurs. Look ahead does not affect the release time / tail - this happens as normal.



Drive - as gain reduction increases, so does the amount of drive applied. The maximum drive is set by the red knob, and the threshold adjusted using the blue knob. Clicking on the pre/post button switches between applying drive before or after gain reduction.



Output / monitoring : The meter shows : input, sidechain, output or gain reduction. To toggle between these, click in the lower half of the meter. The text tells you the mode. The main sidePRESS outputs get toggled too, so if you need to say monitor the sidechain filtering, use the meters to switch between listening to source, sidechain, and outputs. When the meter shows gain reduction, audio output is the the same as when it displays output.

How to ...

STEREO COMPRESSION : set the inputs to 1 and 2, the sidechains to 1 and 2, and the mode to stereo. SidePRESS now operates as a normal stereo compressor using the sum of channels 1 and 2 as the sidechain and channels 1 and 2 as the carriers.

STEREO + SIDECHAIN : as above, but using 3 and 4 for sidechains. SidePRESS now listens to inputs 3 & 4 for sidechains and compresses channels 1 & 2

How do I configure this in my host ?

The short answer is that I don't know - what host are you using?

If you're using cubase sx (r, tm, etc), then create a quadro group and load sidePRESS as an insert. Now, route your audio to channels 1 and 2 of the group using the surround panner in y mirror mode. Route your sidechain mix(es) to 3 and 4 in the same way. The quadro group now outputs compressed signals on channels 1 & 2 according to the sidechain information arriving at inputs 3 & 4.

LOOKAHEAD COMPRESSION : This is used when you want compression to be gradually applied leading up to a rise in sidechain level that crosses the threshold. This will have an impact on the meaning of attack time however ... with an attack time less than the delay time, full compression is achieved before the threshold is crossed. When attack time is greater than delay time, compression is still applied in advance of the threshold being crossed, but it is not full until after the peak has occurred. The Link button is provided to simplify matters when considering the timelines involved ...

ATTACK TIME minus DELAY TIME equals time after peak that full compression occurs

[negative numbers mean that full compression occurs before the peak]

PARALLEL COMPRESSION : switch mode to parallel, and select the audio and chain channels you want. SidePRESS now operates as two separate mono compressors. To toggle between left and right channels, use the left/right switch located above the mode switch.

SERIAL COMPRESSION : with mode set to serial, sidePRESS compresses one mono input twice, feeding the output from the (first) left channel into the (second) right channel. This can be used to for example, compress a bass guitar and then sidechain compress it using a bass drum as the sidechain, eliminating the need to run 2 plugins. As with parallel mode, toggle between channels using the left/right switch. If using lookahead in serial mode, currently no compensation for delay between channels is used, so you may get unexpected results.

Credits :

sidePRESS was designed & built by Daz Disley using SynthEdit.

sidePRESS makes use of modules by David Haupt and Peter Schoffhauzer.

sidePRESS © 2008 Rough Diamond Productions.
SynthEdit © 2006 by Jeff McClintock. All Rights Reserved.
VST and ASIO are trademarks of Steinberg Soft- und Hardware GmbH.

This software is licenced, not sold, so, by installing and running sidePRESS you agree to the following terms and conditions :

If its personal, use is free.

*If you make money using sidePRESS you must make a minimum donation of £5.
[If a plugin is incomplete or in BETA stage of development your £5 will entitle you to the full version when released.]*

You may copy / distribute sidePRESS privately ONLY if distributed with this document, and in its original archived form, along with any other accompanying files.

*You may not copy / distribute sidePRESS commercially, or as a promotional item, via any medium, without the prior consent of Rough Diamond Productions.
This may cost money, but not much.*

*You will not reverse engineer, disassemble, hack or otherwise p*** about with sidePRESS.*

As well as sidePRESS, you agree to respect the copyright, trademarks and other sensitive stuff that made the wonderful tools that made sidePRESS.

If anything whatsoever happens thats even the slightest remotest bit bad when you are using sidePRESS then well, that's tough. Rough Diamond Productions will not be held responsible for any damage or loss that results from the use of sidePRESS.

You use sidePRESS entirely at your own risk.