

# Rescue MK2

MANUAL

revision 1.0

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# 1 Introduction

## 1.1. LICENSE

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## 1.2. DISCLAIMER

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## 1.3. INSTALLATION

### Requirements:

- Win32 compatible system with SSE2 (or higher) instruction set support.
- The software is tested and known to work in many VST compatible hosts.

### Installation on Windows 32bit systems:

Put the DLL files contained in this archive in the VST plug-in folder of your host.

### Installation on Win7 64bit systems:

Put the DLL files in the VST plug-in folder in the *Program Files (x86)* part of the file system. If you would like to use it in a 64bit host just use a wrapper, e.g. jBridge.

## 1.4. CREDITS

Many thanks to Paddy for the original UI design.

Many thanks to Patrick Barca, [www.subpixel.ch](http://www.subpixel.ch), for creating the VoS logo.

## 1.5. OVERARCHING TOPICS

Warning: Lower your listening volume while operating the plug-in to avoid hearing damage or damage of speakers or any other equipment.

### Usage tips:

- Use the power switch on the left side for handy A/B comparisons.
- Use <ctrl> + *mouse left click* on a knob or switch, to restore default position.
- Use <shift> + *mouse left click* on a knob to fine adjust values.
- Use this plug-in as an insert effect in any stereo channel of your VST host.

# 2 Reference

## 2.1. DIFFERENCES TO THE MK1 VERSION

Beside the new tech under the hood and the according sonic improvements, there are two differences which affects the work-flow also:

- Disabling the yellow MID or SIDE switch does not mute the channel anymore but just disables the DSP processing for that channel.
- The routing for each channel is now: PUNCH/WIDTH → LIMIT → GAIN.

Beside that, numerous minor changes were made, ranging from omitting any noise from the signal path up to having all additional analog style processing switchable with the ANALOG button.

There is a new option for adjusting gain-staging – see chapter 2.3.

## 2.2. BASIC OPERATION AND ADVICE

Use this plug-in as an insert effect in any stereo or mono channel of your VST host. Be aware that some of the sonic effects which are introduced by Rescue just work on full stereo program material. However, it can be operated both as a mono or as a stereo plug-in.

Assure the On/Off switch is in On position and both, MID and SIDE channels are activated. Dial in small amounts of the WIDTH knob to apply subtle stereo widening to your audio. A mono signal or the mid audio information of a stereo signal remains untouched. Dial in the

PUNCH knob to apply more upfront presence to a mono signal or the mid section of a stereo signal.

Alternatively, use the GAIN knobs in the MID or SIDE section to perform basic mid/side altering or to compensate for level changes. Use the LIMIT option to limit the dynamics of each channel. Use both to alter the audio signal to taste but remember: a little goes a long way. In some mix situations you will obtain better results by focusing on either improving the mid OR improving the side information of the audio content but don't hesitate to use both on full program material.

Use the VOLUME knob to adjust the overall output volume as needed and to obtain equal in/out loudness impression for handy A/B comparisons.



## 2.3. INTERNAL ARCHITECTURE AND GAIN STAGING

*RescueMK2* performs its main processing in an internal mid/side matrix configuration:

- Each channel in the matrix features its very own stateful saturator (controlled by PUNCH/WIDTH), limiter (LIMIT) and gain control (GAIN).
- The RAMP control modifies the lag time of both stateful saturators.

In addition, each channel has its own clipping indicator LED which roughly indicates if internal clipping occurs (which doesn't have to be a bad thing).

This behavior is heavily affected by the gain-staging chosen with the MIX-LEVEL control. It's recommended to match the MIX-LEVEL setting with your actual mixing preference to get the device performing in its sweet-spot. In other words: The MIX-LEVEL is about to adjust the internal gain-staging to the mixing levels outside the plug-in.

On top, the DEPTH control applies stereo field processing which imparts additional depth perception to the original signal and the ANALOG switch adds further analog style *Mojo*: By simply turning this switch on the device introduces authentic signal alterations just like the real deal – adding frequency and phase response shifts or crosstalk just as an example.

## 2.4. ADVANCED USAGE

Use the yellow MID and SIDE buttons to activate or disable the DSP processing on a specific channel. If you want to mute one channel then turn the GAIN dial of the channel to its left-most position.

The internal signal flow within each channel goes: PUNCH/WIDTH → LIMIT → GAIN. The clipping indicator LED basically shows if some limiting actually occurs (roughly).

Start with some gain adjustments on both channels using the GAIN knobs in each section to alter the signals center or side information. Use the special PUNCH and WIDTH knobs to alter the gain structure based on the signal transient information. Combine both as needed. There might be less effect if no transient information is available in the actual audio content.

Each channel contains a limiter function. Turning LIMIT clockwise performs more and more internal limiting. Compensate by increasing the individual channels GAIN if needed.

## 2.5. FURTHER IMAGING CONTROL

The DEPTH and RAMP control both further affects the 3D imaging of the sound but in a different fashion.

Utilize the RAMP control: Increasing the RAMP parameter increases a more natural transient response of the underlying stateful saturator and thus increases the naturally perceived ambience impression. RAMP only works in conjunction with the mid/side processing and adjusts the lag time of the stateful saturator in each channel. A higher RAMP setting lets more transient information through, which increases the spatial imaging of the source.

Further ambience recovery can be applied by the DEPTH control which works independently of the mid/side processing by increasing the ambience information in the actual audio content.

Combining all different approaches in the right fashion is the key to create a rather natural or even super realistic stereo image.

# 3 Addendum

## 3.1. GETTING THE MOST OUT OF IT

Use the device as if you would use some good old analog gear to drive a signal into its sweet spot where it just gets fat and focused but more '3D' sounding the very same time.

Don't overdo it on just one single channel – instead:

*RescueMK2* is heavily CPU optimized to allow high instance counts in a mix. It's a good practice to use it in varying, slight doses on a couple of channels instead of applying just one instance on a bus and expecting miracles.

## 3.2. KNOWN ISSUES

If ANALOG is activated, switching the plug-in On/Off can cause crackles in some cases.

## 3.3. UPDATES AND FURTHER INFORMATION

Refer to my Blog at <http://varietyofsound.wordpress.com> for some additional information and updates on this plug-in, or leave a note there if any issues did occur.

Peace,  
Herbert