

PSP Flare

compressor



Operation Manual

PSPAudioware.com

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Thanks to all our users around the world for ideas and help in the development of new plug-ins!

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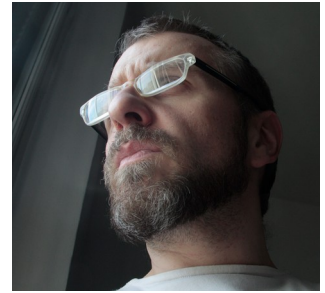
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PSPaudioware.com s.c.
Bugaj 12;
05-806 Komorów,
Poland.

Preface

Why another compressor? Why now?

There are countless dynamic processors out there, right? And most of them sound good – *really* good. And yet...



Working in the broadcast sector, especially with dialogue and Voice Over, I often found myself grappling with a simple fact: the color and impact that all these wonderful compressors provided didn't solve a consistent problem – they didn't notice the *perceived* level of the input signal, but only a strict value for the level at a given moment. Filtering the side chain sometimes gave me acceptable results, but often I had to settle for levels that were still inconsistent with what my ears suggested. The solution was often a tedious volume automation session even if the waveform was actually stable – "compressed".

How could I solve the problem of a dynamic processor that worked on the *density* of the signal and not just on its level?

That's how FLARE was born.

From the very first prototype made with real-time DSP, the results were promising, and my ears finally heard what they wanted to hear: consistency!

A shout was compressed much more than a whisper, even at the same input level. A distorted guitar was controlled more aggressively than a clean guitar. And it was almost frightening to see how the resulting waveforms visually seemed to have even *more* dynamics than those at the input.

But my ears told me a completely different story. It was all controlled... in some way, it was just *right!*

There was a problem, though: the standard envelopes I was using were "bare bones" and lacked musicality – and so begins my story with the wizards at PSPaudioware.

After some initial demo exchanges and ideas, the PSP Flare project was launched. It combined my minimalist and psychoacoustic approach with the immense knowledge of the audio processor world from the incredible folks at PSP, who embraced my initial vision, expanding it and turning it into a powerhouse.

The initial idea was respected, nurtured, and grown into a compressor capable of delivering tens of decibels of "psychoacoustic" compression – my record is 70 dB of compression! – while remaining extremely musical and coherent.

Thanks to PSP, one of my dreams has come out of the drawer and into the studio.

[Paolo Pasquariello](#) – sound designer, mix and broadcast engineer

Overview

Thank you for your purchase of the PSP Flare compressor plug-in!

PSP Flare is a new kind of psycho-acoustic compressor that provides exceptional volume consistency without the usual audible side effects associated with heavy compression. Developed with insights from post-production engineer [Paolo Pasquariello](#) PSP Flare uses a psychoacoustic approach inspired by advanced post-production techniques to subtly maintain track level consistency. This ensures that your audio remains naturally dynamic without the perceptible effects of compression. While it was specifically designed for film and TV/video post-production, its unique behavior can deliver excellent results in almost any application, and is excellent at leveling elements in a dense mix.

Features

- Single-band unique probability compression algorithm.
- Wide compression knee.
- Peak or RMS level detector.
- Optional automatic release readjustment.
- Wide range of threshold and ratio settings.
- Lookahead for reduction of transients through the compressor.
- Smooth control of the side chain high pass filter and link.
- Optional automatic makeup gain.
- Dry/Compressed Mix control.
- Output brick wall limiter with adjustable ceiling level and release time.
- 64-bit double precision floating point math for ultra-low cumulative errors in the filters and proper filter characteristics across the entire frequency spectrum.

PSP Flare front panel



PSP Flare provides advanced control over its parameters in a transparent and straightforward layout. It provides compression and limiting sections that can be enabled/disabled individually.

PSP Flare Controls

Compressor controls:

Timing – attack slider: controls the attack time of the compressor.

Timing – release slider: controls the release time of the compressor.

rms button – enables the RMS level detection mode.

auto release button – enables the auto release time readjustment. Please note that the release slider is always fully functional will always control the release time of the detector. However, when auto release mode is engaged, the precise release time is constantly being modified in the context of the audio being processed.

COMP button: enables the entire compressor section. When COMP is turned off, all of the compressor controls are greyed out.

Compress – threshold slider: controls the compression threshold. Please note that due to the compressor's wide knee, the compression starts considerably below the threshold.

Compress – ratio slider: controls the compression ratio.

lookahead knob: sets the lookahead as a percentage of a lookahead time calculated from the Attack time.

sc hpf knob: controls the high pass filter's cutoff frequency.

sc link knob: controls the amount of linking between the compressor's two channels when it is working in a stereo mode.

Levels – makeup slider: controls the amount of makeup gain.

auto makeup button: enables the automatic makeup function. Please note that the makeup slider remains fully operational, and adds its gain to what the auto makeup function provides.

Levels – gain slider: controls the overall post compressor level. This gain is located post mix in the compressor's chain.

mix knob: controls the mix between uncompressed and compressed signal. The mix is located post makeup and pre gain.

Limiter controls:

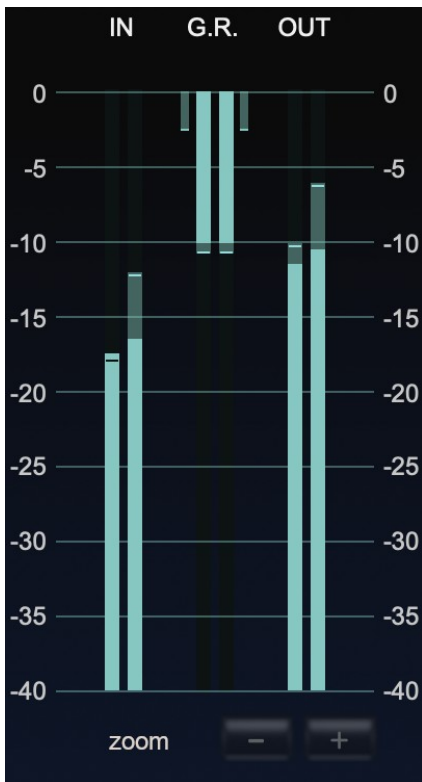
Limit – ceiling slider: controls the ceiling level of the limiter. Please note that the ceiling is meant as a maximum digital level after the limiting section.

Limit – release slider: controls the release time of the limiter.

link button: links the limiter's channels when processing a stereo signal.

LIMIT button: engages the brick wall limiter on the output of the plug-in. When LIMIT is turned off, all of the limiter controls are greyed out.

Meter section:



IN meter: indicates the peak and RMS levels on the plug-in's input. Wide bars indicate the RMS level while single horizontal lines show the momentary peak level.

G.R. meter: indicates the gain reduction (compression and limiting) of the plug-in. Wide bars indicate the RMS and peak compressor reduction while narrow bars show the output limiter peak reduction.

OUT meter: indicates the peak and RMS levels on the plug-in's output. Wide bars indicate the RMS level while single horizontal lines shows the momentary peak level.

Zoom – and + buttons: step through the available range of meter magnification settings.

Side Chain Bar

We provide PSP plug-ins, especially dynamics processors, with the PSPaudioware standard SIDE CHAIN BAR. You access this bar at the bottom of the plug-in interface. Here you can select (mix) the side chain source and switch the plug-in into side chain listening (cue) mode.



INTERNAL/EXTERNAL Mix: The INTERNAL/EXTERNAL Mix slider sets the balance of internal to external signal in the final side chain audio channel.

If your DAW does not provide an external side chain source or is turned off for the plug-in, the side chain audio channel is always set to internal, independent of the mix slider position.

INTERNAL: Click this word to quickly set the mix to 100% internal source.

EXTERNAL: Click this word to quickly set the mix to 100% external source.

EXT LEVEL: Adjusts the +20dB gain of the external side chain level.

MONITOR: Click this word to switch the plug-in into side chain listening (cue) mode. When this mode is on, you'll hear the side chain audio that is being processed. To make it even more clear that the side chain input is being monitored, the entire plug-in GUI is covered by an amber colored shell.

SIDE CHAIN LEVEL METER: Shows the signal level of the side chain input.

Rear panel

Clicking on the front panel's PSP Flare label opens the rear panel About box, on the Plug-in Settings tab. Click on the link to open the PSPaudioware.com website. Click on any label other than the web site link to close the rear panel and return to the front panel.

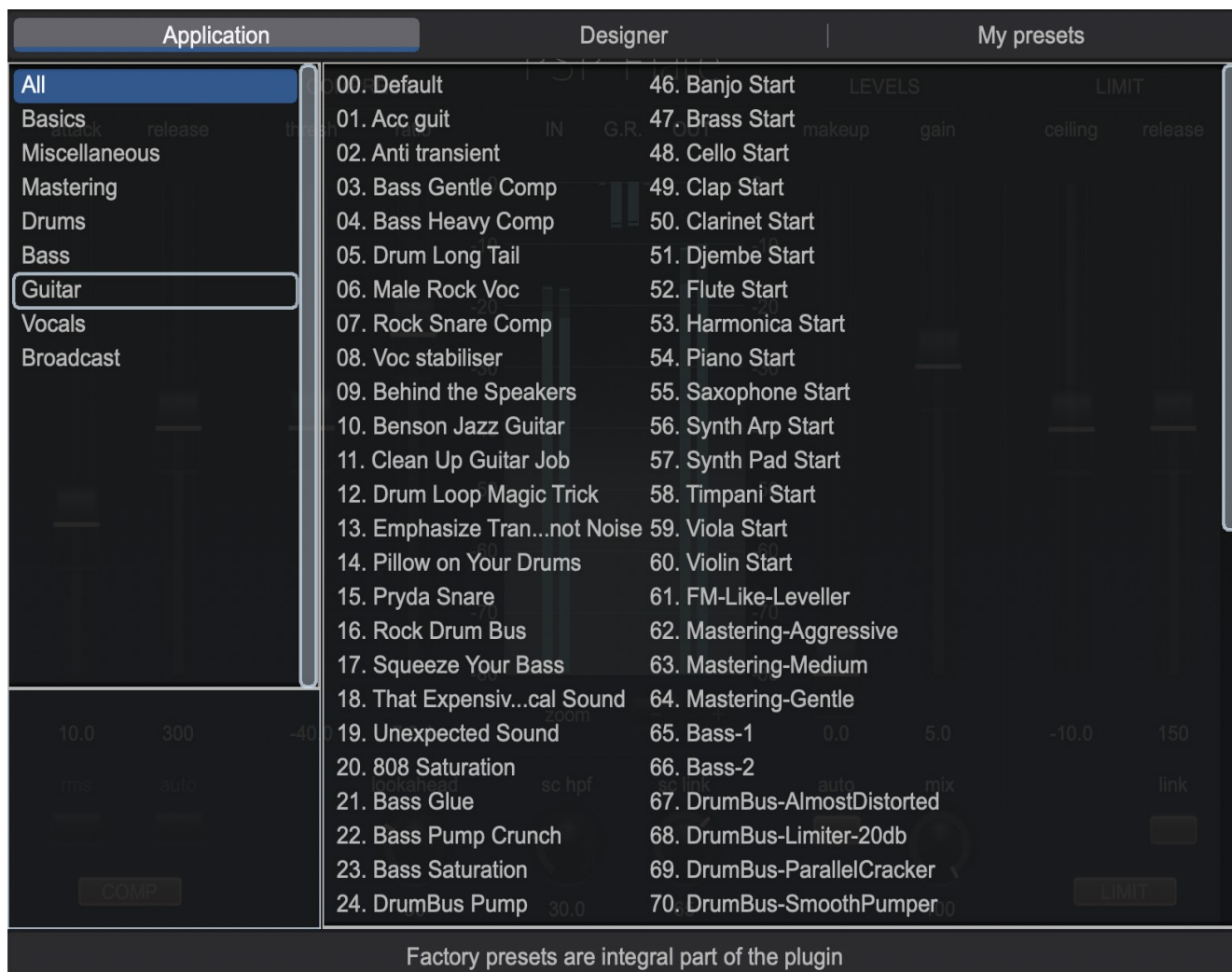


The Global Settings tab lets you access this manual or set whether Hints (floating information boxes that appear when hovering over a control) are visible or not. It also shows the installed version of the software, for help with troubleshooting. Please go to the **Config** section of this manual for more details.

PRESET HANDLING AND VIEW OPTIONS

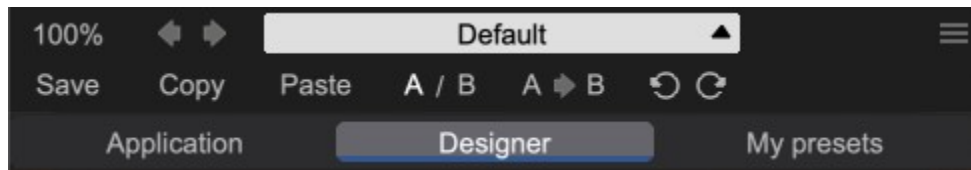
Every PSP plug-in comes with a large library of factory presets. You can use them as a starting point for experimenting with your own sounds, examine them to understand how the various features work, or keep them handy for when a track or mix needs a quick and high-quality way to create an effect or fix a problem.

To access the preset library, just click on the Preset Bar along the top of the plug-in window. If you're familiar with other PSPaudioware plug-ins, you'll find that this one works exactly the same way.



Preset Browser

PSP Flare features a comprehensive preset management and browser system. To access the preset browser, simply click on the preset name window at the top of the plug-in (which displays 'Default' when the plug-in loads).



The new preset manager has three main categories which can be accessed via the tabs at the top of the preset browser: **Application**, **Designer**, and **My presets**.

Application – shows all factory presets, sorted by application or type of effect. These can be selected from a list on the left side of the preset browser.

Designer – shows all factory presets, sorted by designer. A photo of the designer is displayed for each of their presets. Click on the photo to open the designer's website.

My presets – shows only the presets you have created and saved, or downloaded and added to your custom presets for PSP Flare.

NOTE: The Factory presets are built into PSP Flare. While you can't edit them directly, you can make adjustments to them, and then save the result as a user preset.

To add categories to the preset list, you can create new subfolders in the preset directory.

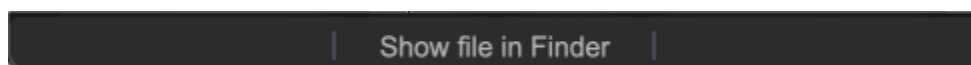
For Windows users, this is located at:

C:\Users\Username\Documents\PSPaudioware.com\User Presets\PSP Flare

For Mac users, this is located at:

~/Documents/PSPaudioware.com/User Presets/PSP Flare

NOTE: You can find the exact file location by clicking on the **Show File in Finder** button at the bottom of the preset browser window.



To select a preset, simply click a preset name in the right window. On the first click, the preset will be temporarily loaded so that you can audition it while still in the preset browser. To confirm the preset choice and get back to the main user interface, double-click the preset name again.

Copy / Paste

A dark rectangular button with the text "Copy" and "Paste" in white, separated by a small gap.

The **Copy/Paste** feature is useful for when you're running two or more instances of PSP Flare and you want them to have identical settings.

Of course, you can always open a new instance and load the same preset as your first instance has, but this only works if your first instance hasn't been tweaked at all since the preset was loaded. To share your tweaks between instances, use **Copy** and **Paste**.

To use this feature, simply click the **Copy** button, open a new instance of PSP Flare where it's needed, and click the **Paste** button to load the first instance's settings.

This feature can be particularly useful for processing similar instruments or sounds, when only a few minor tweaks are needed for each instance.

A/B System

A dark rectangular button with the text "A / B" and "A ➔ B" in white, separated by a small gap.

The **A/B system** lets you quickly audition changes to your settings. You can compare how different tweaks work in a track or mix, or even audition two different presets on the fly.

The **A/B Button** allows you to quickly switch between the current plug-in settings (**A**) and a previous group of settings that you've previously stored (**B**).

The **A>B Button** copies the **A** settings over to the **B** slot. This lets you temporarily 'bookmark' your current settings, make more tweaks, and then compare the new tweaks with your 'bookmarked' settings using the **A/B Button**.

Undo / Redo



The **Undo/Redo** feature can be extremely important when designing presets! We all know the frustration when we make one too many edits and ruin a previously great sound. With the **Undo** and **Redo** buttons (the counterclockwise and clockwise arrows as shown above), you can step backward and forward through your edit actions until you're back where you wanted to be.

These buttons will let you undo a preset selection, returning you to your previous preset with all settings as they were when you stopped editing it.

GUI resizing



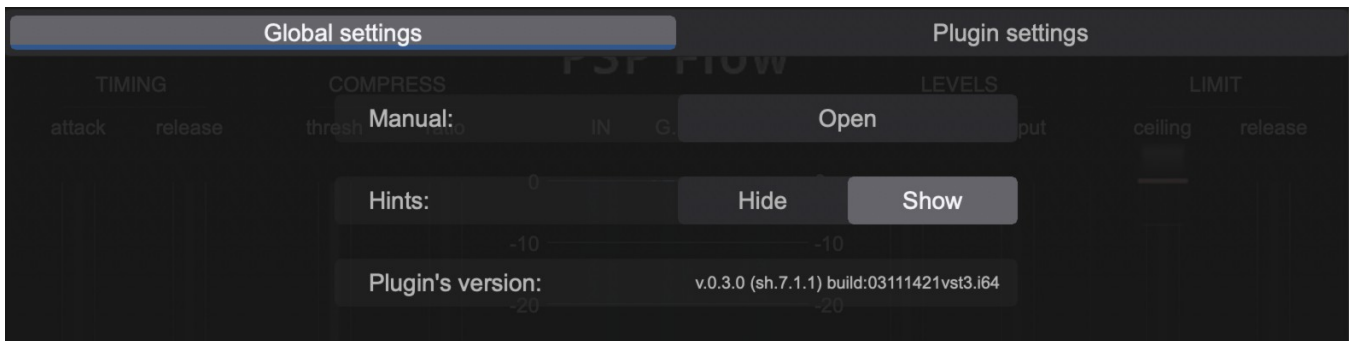
The percentage at the top left shows the current user interface size. Click on it to reveal a dropdown menu of size choices, or hover your mouse on it and scroll up and down to change the size quickly. Double-click to reset it to the default size (100%).

You can also resize the plug-in interface by click- dragging the right bottom corner of the plug-in to any size you like.

Config section



Click the icon with three parallel lines in the top right corner to open the **CONFIG** menu. You will find controls to open the manual, hide or show mouse-hover tool tips (Hints), and check your current plug-in version with build number.



These functions are also available in the **Global Settings tab** on PSP Flare back panel, which is accessed by clicking the PSP Flare name on the front panel.

Clicking the Plug-in Information and Settings tab returns you to the main view.

Minimum System Requirements

In order to run PSP Flare, you'll need to install the free [iLok License Manager](#) application, but you don't need a hardware dongle. By default we provide 3 licenses, which can be activated in 3 separate locations, each of which can be either a computer or an iLok dongle (2nd generation or later). You can move these licenses at any time using PACE's iLok License Manager software.

Windows

VST

- Windows 7 – Windows 11
- 64-bit VST3 compatible application

VST3

- Windows 7 – Windows 11
- 64-bit VST3 compatible application

AAX

- Windows 7 – Windows 11
- 64-bit Pro Tools

All DAWs

- Up to date iLok License Manager application installed

macOS Intel or macOS AppleSilicon

AudioUnit

- macOS 10.14 – macOS 14 Sonoma
- 64-bit AudioUnit compatible host application

VST

- macOS 10.14 – macOS 14 Sonoma
- 64-bit VST3 compatible application

VST3

- macOS 10.14 – macOS 14 Sonoma
- 64-bit VST3 compatible host application

AAX

- macOS 10.14 – macOS 14 Sonoma
- 64-bit Pro Tools

All DAWs

- Up to date iLok License Manager application installed



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Processing

- All internal processing is done with 64-bit double precision floats.
- PSP Flare supports 32-bit and 64-bit floating point audio streams.
- PSP Flare supports sample rates up to 384 kHz.

PSP Flare and Plug-in Latency

In order to achieve the highest quality results, PSP Flare requires a small buffer containing a number of samples in order to process your audio material properly and provide a sensible lookahead. The latency of PSP Flare is around 39ms. The final latency in samples varies based on sample rate.

That said, most modern DAWs include plug-in delay compensation, which eliminates the effect of the delay incurred by PSP Flare on playback. PSP Flare fully supports the latency compensation of all host DAWs (meaning it accurately reports its samples of delay to the host). Note that some host DAWs have limitations regarding their delay compensation, so be sure to refer to your DAW's user guide for more information. For your convenience, the latency of the plug-in is reported on its bottom bar in both samples and milliseconds.

Limitations of the demo version

We offer a 30-day evaluation period without any audio interruptions or control limitations. To get access to the plug-in and your unique authorization details, simply login to your account at our [user area](#).

Enjoy!

– the PSP team

Support

If you have any questions about any of our plug-ins, please visit our website:

www.PSPAudioware.com

The website is where you can find the latest product information, free software updates, online support forum and answers to the most frequently asked questions.

Problems with the installation, activation or authorization?
Please watch our [troubleshooting video tutorials](#) on our YouTube channel.

You can also contact us by e-mail: support@PSPAudioware.com.
We will gladly answer all of your questions. As a rule we respond within 24 hours.

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