

PSP oldTimerMB

Multi Band Compressor



Operation Manual

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Overview

PSP oldTimerMB is a vintage-style multi-band compressor designed for demanding track processing, buss and mix compression, and mastering. Our aim in developing this plug-in was to design a high end multi-band processor based on the algorithm from our best-selling PSP oldTimer compressor. The result is a musical and warm sounding processor with a range of controls making it a vital tool for virtually any kind of music. Switchable and adjustable output valve emulation give you a choice of additional color to the sound.

Thank you, and please enjoy the versatility and quality of PSP oldTimerMB!



Controls

Most of PSP oldTimerMB's controls are typical for compressor and should be intuitive. The plug-in provides you with cross-over controls, three sets of band parameters such as Attack, Release, Auto release, Ratio, Compress, Gain, Width, Solo/Mute and Processing. It also includes advanced controls like a channel processing mode switch, side chain high pass filter frequency, side chain link and balance. Finally, you can set up the Valve operation depth and side chain filter cut-off frequency.

Cross-over

Mid-High

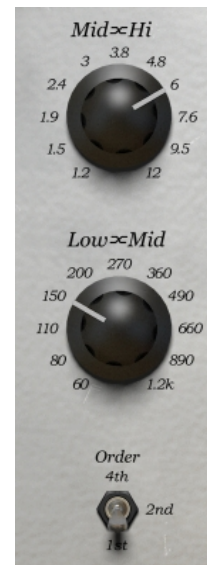
This knob selects the middle to high bands' cross-over frequency.

Low-Mid

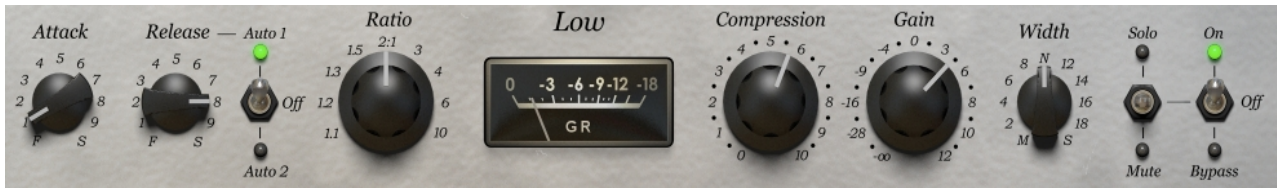
This knob selects the low to middle bands' cross-over frequency.

Order

Selects the cross-over's order. You can select between 1^{st} , 2^{nd} and 4^{th} order. The 1^{st} order selection results in a very smooth transition between bands making it easy to keep them consistent. In this mode the compressor's reaction falls somewhat between a single band and multi-band compressor. The 2^{nd} order is a standard and the most universal settings. The usage of 4^{th} order gives an instant sharpness and exactness to the way the compressor operates.



High, Middle and Low bands



Attack

Attack time is set by a knob with eleven discrete steps. Its settings range from:

F(fast)-2: Very fast attack times

3-7: Medium attack times typical for opto or valve compressors

8-*S*(slow): Long attack times

If you need to adjust Attack values of all three bands at once please press Command (Mac) or Control (PC) prior to or while using the mouse. Then all three Attack knobs will follow the same value.

Release

Release time is set by a knob with eleven discrete steps. Its settings range from:

F(fast)-2: Very fast release times

3-7: Medium release times typical for opto or valve compressors

8-*S*(slow): Long release times

If you need to adjust Attack values of all three bands at once please press Command (Mac) or Control (PC) prior to or while using the mouse. Then all three Attack knobs will follow the same value.

Auto release

This switch sets the auto release mode. You can choose the legacy *Auto 1* mode, a new analog modeled mode - *Auto 2* or to disable the auto release. Please note that with *Auto 1* or *Auto 2* modes engaged the release still sets up the nominal release time; however, the release response changes and the real release time is adjusted by the properties of the processed signal.

Ratio

PSP oldTimerMB features “over-easy” transition characteristics between ratios *1.1:1* to *1.5:1*, and old-school peak-through-soft-knee characteristics for higher ratios. The specific amount of compression possible at the maximum compression depth depends on the ratio and ranges from about 6dB at a *1.1:1* ratio setting to about 30dB for a *10:1* ratio setting.

If you need to adjust Ratio values of all three bands please press Command (Mac) or Control (PC) prior to or while using the mouse. Then all three Ratio knobs will follow the same value.

Gain Reduction Meter

This meter gives you a readout of how much gain reduction is being performed by a specific band in PSP oldTimerMB. In general, you’ll want to keep the compression values shown on the meter between 3-5dB when mixing, or even lower during mastering. The meter is illuminated or off depending on the specific band’s status or the overall Bypass.

Compression

Compression controls the amount of gain reduction by adjusting the threshold point. The greater the compression value the lower the threshold point, resulting in more compression. Even if the Compression is set to 0 the compressor may still influence the sound depending on its level and the settings of other parameters.

If you need to adjust Compression values of all three bands at once press Command (Mac) or Control (PC) key prior to or while using the mouse. Then all three Release knobs will follow relatively the movement of the adjusted knob.

Gain

The Gain knob sets the post compression gain. PSP oldTimerMB offers a band gain in the range of -∞dB to +12dB.

If you need to adjust Gain values of all three bands at once press Command (Mac) or Control (PC) prior to or while using the mouse. Then all three Release knobs will follow relatively the movement of the adjusted knob.

Width

This knob adjusts the stereo width of the band. You can turn it down to *M* to make the band monophonic, set it to the *N* (normal) stereo setting, raise the amount of *S* (side) component of the stereo signal, or anything between depending on needs and the processed stereo signal.

The width control works by attenuating or boosting the side component of the stereo signal. Turning the knob fully counter clockwise results in monophonic signal. Properly recorded stereo tracks benefit from boosting the side component no more than up to (10.4 to 11). Only if the side component is hardly present in the stereo signal will values greater than 11 be necessary.

The maximum value of this parameter results in 200% of the side component (+6dB).

We don't recommend that you boost low frequency side component, as doing so may lead to various technical issues without audible benefits. In some cases narrowing the low end range all the way down to mono (after properly setting up the low-mid cross-over frequency) may be a good solution. This technique is used in the vinyl mastering process, for example.

Solo/Mute Switch

When set to its middle – neutral position, the band is processed and routed normally to the output. When set to *Solo* – only soloed bands are routed to the plug-in's output. When set to *Mute* the band is muted and not heard on the output.

On/Off/Bypass Switch

This switch sets the status of the band.

When set to *On* the band processes the incoming audio signal normally.

When set to *Off* (only available for High and Low bands) the band and its cross-over is disabled and the amount of active bands is reduced. Thus, when one (High or Low) status switch is set to *off* the compressor operates as two band compressor, when two switches are set to off the compressor process in a single band mode.

When set to *Bypass* the processing of the band is bypassed, the cross-over of the band still operates and the band's signal gets through to the Output.

Overall controls



s.c.HPF

Side chain High Pass Filter knob sets the frequency of the low cut filtering of the control signal routed to all band compressors. It allows you to reduce the compressor's response to very low frequency content.

s.c.Link

Side chain Link knob sets the amount of channel linking of the control signal. While typical stereo signals require 100% (10 on the scale of this knob) linking, in some cases moderate linking (5-7) may work better or, on occasion, totally unlinked processing (0) may do the job.

Channel processing mode switch

Use this switch to select the channel processing mode. The “OO” setting configures standard stereo linked processing. To process the left or right channels independently, please use two instances of the PSP oldTimerMB in series and set the *L* mode on one of them and *R* on another. To process Middle and Side signals please use two instances of the plug-in in series and set the *M* mode on one of them and *S* mode on the other.

On/Bypass switch

Use this switch to engage (*On*) or disengage (*Bypass*) the entire compressor.

About Screen

The PSP oldTimerMB plug-in offers an About window. To access it click on the name of the plug-in. To return to the controls view, click anywhere in the about screen. This screen contains your authorization details, as well as the version number of the plug-in.

Band Link LED

To engage band linking of controls click on this LED or press the Command key (Mac) or Control key (PC) to temporary link controls. When the link mode is engaged you can use the Command/Control key to temporary disengage it.

Blend knob

The Blend knob sets the ratio between *dry* (uncompressed) and *cmp* (compressed) sound. When the value is not set to *cmp* position the mixing is enabled.

Blend LED

The Blend LED indicates the mixing mode when the Blend mode is not set to its *cmp* position. The color of the LED changes from green through yellow to red depending on how much uncompressed signal is mixed with reduced amount of compressed one. Clicking on the Blend LED resets the Blend knob to its default *cmp* position.

Output gain knob

The Output knob sets the amount of output signal gain. It ranges from $-∞$ dB to $+12$ dB.

Balance

Sets the output channel balance with the channel difference up to 10dB.

Valve level

Use this screw pot to set up a valve processing depth.

Valve/Off

Use this switch to engage (*Valve*) or disengage (*Off*) the output valve emulation.

When enabled the Valve LED is dimmed green and changes into bright green, yellow and red depending on the signal's level thus the amount of saturation introduced by the valve emulation.

Preset Handling & View Options

We provided PSP plugins with a factory sets of presets. These included presets demonstrate the features of the plug-in and can help you to learn to use its controls. In addition, these presets can be used as a starting point for further adjustments, or for quick fixes.

You access presets from the PSPaudioware standard PRESET BAR at the top of the plug-in interface. Here you can select from among the factory presets, and load and save individual, as well as banks of presets.



100%

Scroll this percentage up or down to change the GUIs zoom factor. Double click to reset its state to the default size (100%).

A single click on the percentage opens a menu with the following options:

- - decrease size
- + increase size
- 100% click to see a popup menu with a few predefined zoom factors

MANAGE

Click to open this menu which contains common preset management options:

- *Load Preset* - loads a preset from *.psp file into the currently chosen preset slot
- *Save Preset* – stores the currently chosen preset as a standard *.psp file
- *Load Bank* – loads a *.psb bank file into all available preset slots
- *Save Bank* – stores all presets as a single *.psb bank file
- *Reset All To Factory* – double click to reset all presets to their initial factory state

COMPARE

Click to switch between the current parameter setup and the initial preset setting.

PRESET NAME

Click the preset name button to see the popup menu of all the presets in the currently loaded preset bank. Select a preset name to choose that preset from the list. Right-click the name of the preset to rename it.

PRESET SELECTION

Click on the left arrow when illuminated to switch to the previous preset in the list. Click on the right arrow when illuminated to switch to the next preset in the list.

A/B

Click to open a menu with MEMO A and MEMO B actions:

Both A and B are permanently stored on your disk. This allows you to compare alternative settings or share a preset between various instances of the plug-in in the same project or even between various projects. Click the left (red) arrow icon to save a preset to memo A or B.

Click the right (green) arrow icon to load a preset from memo A or B.

?

Click to open a menu with basic help options:

- *Open Manual* – choose this whenever you need to open the operation manual
- *Show Hints* – choose this to turn off/on the onscreen hints.
- Version number – shows the plug-in's version and the API engine's version.

Technical Specifications

Processing

- All internal processing done with 64 bit double precision floats.
- 32 and 64 bit floating point audio streams supported
- Sample rates up to 392kHz supported.

Minimum System Requirements

Windows

- Contemporary Intel processor
- Windows 8 or newer
- AAX, RTAS, VST3 or VST compatible audio application

Macintosh

- Contemporary Intel processor
- Mac OS X 10.8 or newer
- AU, AAX, VST3 or VST compatible audio application

Please keep in mind that these CPU specifications are minimum requirements. For the best performance, you will want the fastest CPU and as much RAM as possible!



Support

If you have any questions about any of our plug-ins, please visit our website <http://www.PSPAudioware.com> where you can find the latest product information, free software updates, online support forum and answers to the most frequently asked questions.

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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