

# PSP Echo

## Operation Manual



PSPaudioware.com

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## PSP Echo

PSP Echo is a high quality echo processor. PSP Echo's powerful and unusual features combined with its smooth operation makes it ideal for all kinds of creative uses from simple slap back and sustain effects through ping-pong delays and spacious echoes. Use the delay sliders to add special tape echo effects for even more unique effects. The tape wow control and built in ducker further extend the creative potential of PSP Echo. Internally, the Echo is like a combination of four mono tape delays—two for the initial ping-pong pre-delay and two for the main stereo echo. PSP Echo includes a set of extremely useful factory presets that cover a wide range of this plug-in's settings.



## Top controls



(pitch variation) frequency.

**Wow Depth:** Sets the depth of wow (pitch variation) effect.

**Input:** Sets the input level of the entire effect.

**Tape Speed:** Controls the speed of all the built in tape delays. The reference speed is 15".

**Ping-Pong:** Sets the amount of the ping-pong effect. There is no ping-pong delay present in the C(enter) position. Moving the control to the left from C sets the plug-in's left delay shorter than the right one. Moving the control to the right from C sets the right delay shorter than the left one. For a standard, balanced ping-pong effect set this control to 3R or 3L.

## Ducker



**Ducker button:** Click on the round Ducker button to open the Ducker view.

**Ducker LED:** Indicates the state of the ducker. Green indicates the ducker is in the opened or opening state red indicates the ducker is closed or closing. If the ducker is disengaged the LED will not illuminate.

**Ducker In/Out:** Use this button to engage (In) or disengage the ducker.

Ducker working with internal and external (side chain) source signals.  
See the Side Chain Bar section for the required signal routing.

**Ducker Threshold:** This knob controls the threshold of the ducker.

**Ducker Range:** Sets the amount of attenuation when the signal on the input is above the threshold.

**Ducker Open:** Controls how long it takes the ducker to open when the input signal goes below the threshold.

**Ducker Close:** Controls how long it takes the ducker to close when the input signal goes above threshold.

## Center Panel



**ms/bpm switch:** Sets the display mode to milliseconds or to beats per minute. In both settings the reference is 15" speed and a quarter note on sliders.

**man/snc switch:** Sets the source of time and tempo. When set to the man (manual) mode the time base or a tempo can be set manually. In snc mode the time base or tempo is synchronized to the host tempo. In either setting the reference is 15" speed and a quarter note on sliders.

**Time/Tempo display:** Sets the overall delay (echo) time or tempo referenced to 15" speed and a quarter note. Click on a selected digit and drag the cursor up or down to change values of individual digits.

**Note Sliders:** Use sliders to set the musical note value used for the delay. The reference note is a quarter note, which also refers to the denominator when synchronized to the host's tempo. You can glide to shorter or longer values during silence or when there is signal present as a way to mimic -unstable tape like effects.

Freely click on the scale (on the side of the handles) to set value in quantized steps of 1/32 of a note.

Click on a label above the scale to drop down music notes menu for directly settings.

**Echo LEDs:** These LEDs blink green when a wet signal on the corresponding echo channel occurs. They will blink red when a tape is noticeably saturated.

**Tap Tempo/PSP Echo:** Click on the Echo label below the words "tap tempo" to tap out the tempo you wish for PSP Echo.

**Panic:** Click and hold for at least 0.5s on the Echo label to reset all delays' signals.

**Swap:** Click to swaps all settings of channels.

## Left and Right channel settings



**FB-Pan:** Sets the feed back panorama for this channel's echo effect. This allows for various cross-feedback and echo-narrowing effects.

**FeedBack:** Controls the amount of feedback of this channel.

**FILTERS (high pass):** Use this to set the high pass filter for the processed signal. The range is 20Hz to 2kHz. A setting of 20Hz bypasses the filter.

**FILTERS (low pass):** Use this to set the low pass filter for the processed signal. The range is 200Hz to 20kHz. A Setting of 20kHz bypasses the filter.

**FILTERS (combined):** Use this combined filter control to change the cut-off frequency for both filters by a horizontal mouse move or to change the frequency distance for both filters by a vertical mouse move.

**Drive:** Sets the amount of tape-like saturation on the delayed signal. Experiment with various drive and filter settings to mimic analog tape echo effects.

**Level:** Controls the gain of the echo effect's output.

## Output section



**Link switch:** Turns channel linking on or off. You can switch the link on and off during setting up PSP Echo without losing independent settings of channels, however if you want to retain your independent settings please remember to turn it to the Off position before saving the project or closing your audio application. When a project is stored and PSP Echo is in Linked mode all independent settings of channels will be lost.

**Dry Spread:** Controls the stereo spread of a dry signal. Values to the left of M(iddle) reverse the stereophony, settings close to M makes the signal narrow. Setting it to S+ provides a normal stereo dry signal on the output.

**Dry Balance:** Sets the balance between dry left and right channels.

**Dry Level:** Sets the dry (unprocessed) signal gain to the output.

**Dry label:** Click to add/remove the dry signal from the output.

This parameter is global, setting is stored in all presets.

This is useful if you want to always use the same configuration in all your presets.

**Wet Level:** Sets the wet (processed) signal gain to the output.

**Wet label:** Click to add/remove the wet (processed) signal from the output.

**Wet Balance:** Sets the balance between wet left and right channels.

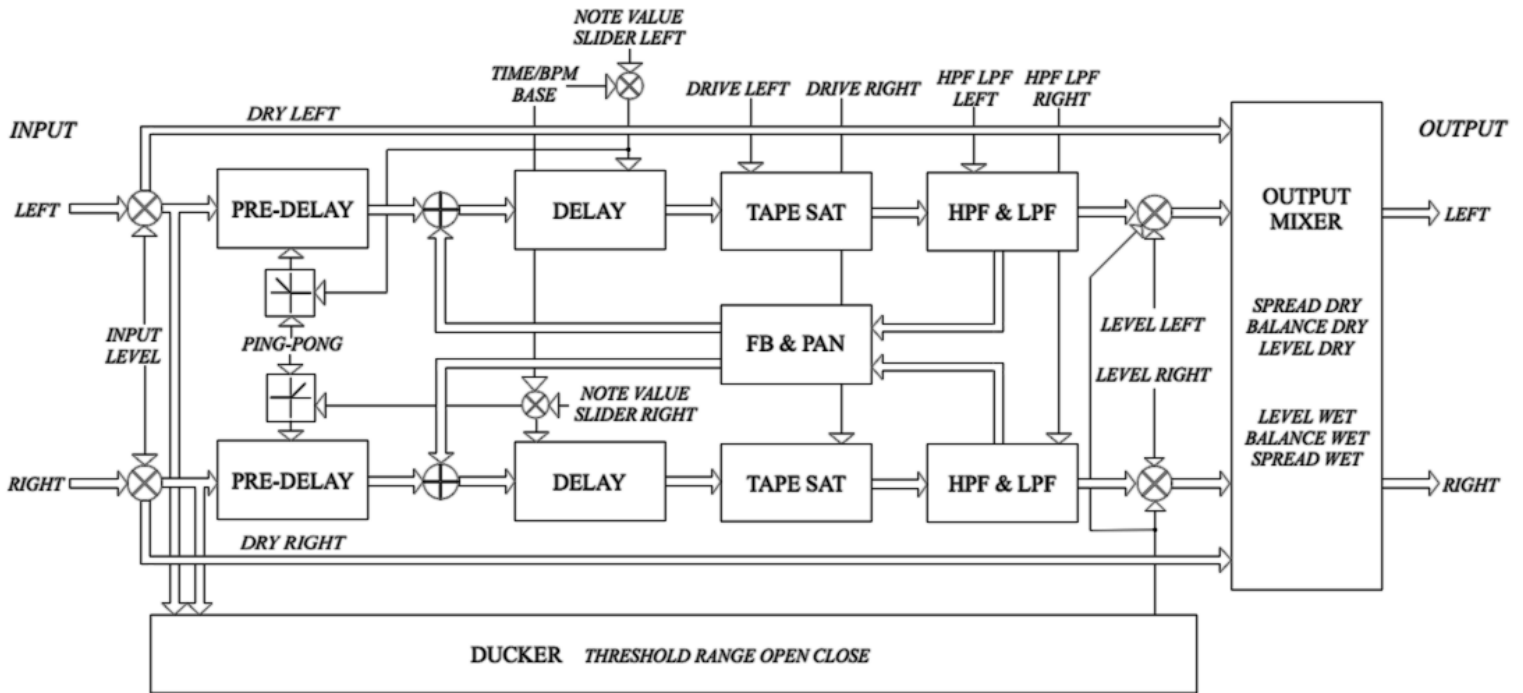
**Wet Spread:** Controls the stereo spread of the wet signal. Values to the left of M(iddle) reverse the stereophony, settings close to M makes the signal narrower. Set it to S+ for a normal stereo wet signal on the output.

**In-Bypass switch:** This switch engages or disengages entire Echo effect.



**PSPaudioware.com label:** Click on this label to open the about box with a version number and authorization details. Click anywhere in the about box over the preset bar to switch back to a normal view.

# Block diagram



## Side Chain Bar

We provided PSP plugins, especially processors, with the PSPaudioware standard SIDECHAIN BAR. You access it at the bottom of the plug-in interface. Here you can select (mix) the sidechain source and switch a plugin to the sidechain listening (cue) mode.



### INTERNAL/EXTERNAL Mix

The INTERNAL/EXTERNAL Mix slider sets the proportion of internal to external signal in the final sidechain audio channel.

If DAW don't providing the external sidechain source, the sidechain audio channel is always set to internal, independent of the mix slider position.

### INTERNAL

Click to quick set 100% of internal source.

### EXTERNAL

Click to quick set 100% of external source.

### MONITOR

Click to switch a plugin to the side chain listening (cue) mode.

If it is on, you hear the side chain audio which is processing by a plugin and all area of a plugin GUI is covered by the amber colored shell, only for information that the side chain input is being monitored.

### SIDE CHAIN LEVEL METER

Show the signal level of the side chain input.



## Preset Handling & View Options

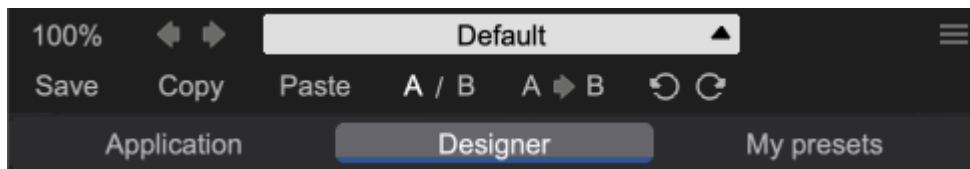
We provided all PSP plugins with a bunch of factory presets. These presets can be used as a starting point for further adjustments, or for quick fixes.

You access presets from the PSPaudioware standard PRESET BAR at the top of the plug-in interface.



## Preset Browser

The PSP Echo edition features a comprehensive new preset management and browser system. To access the preset browser, you click the preset name window at the top of the plug-in (which displays 'Default' when the plug-in loads).



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

**Application** - shows all factory built-in presets grouping by application.

*< Factory presets are built into the plugin and cannot be directly edited!  
You can adjust them and save separately as user presets >*

**Designer** - shows all factory built-in presets grouping by designer.

**My presets** - shows only user presets.

This view shows all of the presets you have created and saved, or downloaded and added to your custom presets for PSP Echo.

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

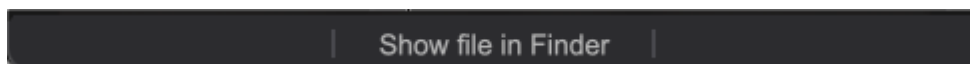
For Windows users, this is located at:

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

For Mac users, this is located at:

**~/Documents/PSPaudioware.com/User Presets/PSP Echo**

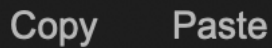
*< You can always check the exact path by clicking on the "Show file in Finder" tab at the bottom of the preset browser window >*



To select a preset, you can click a preset name in the right window. When clicked, the preset will be applied so that you can audition it. To confirm the preset choice, you can click the preset name once more to load it.

Each preset has own picture, click on it for open a designer www site.

## Copy / Paste

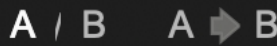
A dark rectangular button with the text 'Copy' and 'Paste' in white, separated by a small gap.

The **Copy/Paste** feature to the plugin for quickly transferring settings between instances of the plug-in.

To use this feature, you can click '**Copy**' at the top of the plugin below the preset browser window. Then, open a new instance of the plug-in on another track (or, on the same track) and click '**Paste**' to paste the settings to the new instance of the plug-in.

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

## 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** for quickly checking and auditioning changes to the plugin settings.

The **A/B Button** at the top of the interface below the preset browser window allows you to A/B between the current and previous setting of the plug-in. This can be used to audition changes made to your mix, or to audition between two presets.

The **A>B Button** quickly copies the settings of the **A** setting to the **B** setting. This allows you to save your place and apply further tweaks and the audition them with the **A/B Button**.

## Undo / Redo

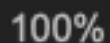


The **Undo/Redo** feature to the plugin to quickly navigate between setting changes.

To use this feature, you can use the undo/redo buttons (CCW and CW arrows, respectively) located below the preset browser window.

These buttons will undo changes to the current plug-in settings, or allow you to undo a preset change depending on the last action in the plug-in.

## 100% GUI resizing

A dark rectangular button with the text '100%' in white.

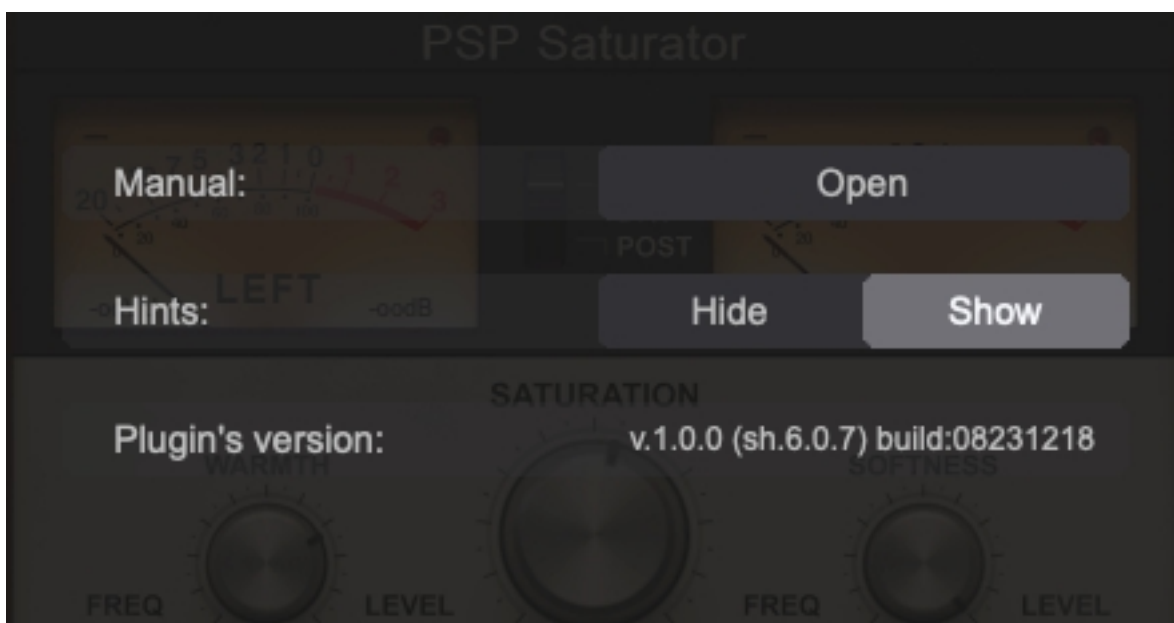
Scroll (by the mouse wheel or use two finger tap on the touchpad) this percentage up or down to change the GUIs zoom factor. Double click to reset its state to the default size (100%).

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

## CONFIG section



When clicking three parallel lines - the **CONFIG** menu will open and it allows you to open the manual, check the current plugin version number and turn on/off hints.



## Minimum System Requirements

### PC

#### VST3

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

#### VST

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

#### AAX

- Windows 7 – Windows 11
- 64-bit Pro Tools 11, 12 or Pro Tools HD 11, 12 or Pro Tools Ultimate

#### All DAWs

- The latest iLok License Manager application installed (an iLok dongle not required)

### Mac (macIntel or arm AppleSilicon processors)

#### AudioUnit

- macOS 10.12 – macOS 12 Monterey
- 64-bit AudioUnit compatible host application

#### VST

- macOS 10.12 – macOS 12 Monterey
- 64-bit VST compatible host application

#### VST3

- macOS 10.12 – macOS 12 Monterey
- 64-bit VST3 compatible host application

#### AAX

- macOS 10.12 – macOS 12 Monterey
- 64-bit Pro Tools 11, 12 or Pro Tools HD 11, 12 or Pro Tools Ultimate

#### All DAWs

- Up to date iLok License Manager application installed (an iLok dongle not required)



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## Processing

- All internal processing done with 64 bit double precision floats.
- 32 and 64 bit floating point audio streams supported
- Sample rates up to 384 kHz supported.

## Limitations of the demo version

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

# Support

If you have any questions about any of our plug-ins, please visit our website:  
[www.PSPAudioware.com](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.

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

You can also contact us by e-mail: [support@PSPAudioware.com](mailto:support@PSPAudioware.com).  
We will gladly answer all of your questions.

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