

PSP E27



Operation Manual

www.PSPaudioware.com

Credits

PSP E27 plug-in based on Avedis E27 by Avedis Audio Electronics

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Acknowledgements

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

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

PSP E27 Introduction

Thank you for your purchase of the PSP E27!

The PSP E27 is a multistage equalizer plug-in inspired by the analog equalizer E27 produced by Avedis Audio Electronics. It features three-band equalization with +/-16dBs of boost/cut at musically selected frequencies having gentle saturation. Low and high frequency filters can work in bell or shelf mode with a single click. There is also an additional preamp stage for global level control, and a selectable high-pass filter. The PSP E27 plug-in captures the non-linear behavior of analog circuitry and is suitable for both mixing and mastering.



Avedis E27

The E27 was created to fill the need for a high quality modular equalizer. High performance, versatility, ease of use, and simplicity is at the core of the E27's design. Some of the best analog gear from the past was the inspiration for its characteristic sound. Outstanding quality and most suitable parts are used throughout – gold-plated switches, high performance capacitors, high-quality transformers, and custom machined aluminum knobs.

Today's engineers deal with many different types of recording equipment from older high-end analog gear to the newest digitally controlled recording equipment. With this in mind, the E27 can interface easily with many types of gear including balanced or unbalanced sources, high or low impedance loads, even unbalanced loads.

The level knob controls up to 16 db's of cut and boost but for those who only need a few db's, the travel of the pot starts slow and speeds up at the extremes giving the user more fine control at levels of 6 db's or less. Knob positions are not only easy to see from a distance but are also felt – the level pot knob has a small point so you know where you are without looking at the eq. The outer frequency control knob has a knurl texture for ease of grip.

- Avedis Kifedjian



PSP E27 specification

Bit depth

PSP E27 supports 32- and 64-bit processing precision.

Channel setup

PSP E27 supports mono-mono, mono-stereo and stereo-stereo channel setup.

- Stereo-stereo: both channels are processed through PSP E27 plugin.
- Mono-stereo : mono track is copied as two independent channels
- Mono-mono - only left channel is processed.

Sample rates

PSP E27 supports from 44.1 kHz up to 384 kHz sample rates.

Latency

PSP E27 produces ultra low latency. Plugin sends info to the host application for proper latency compensation. Click **PSP** label under POWER button to check current latency info.

PSP E27 controls

PSP 500 launchbox

Control section is located on the right side of the plug-in.



Power

The Power button turns off the main audio engines, but keeps the oversampling algorithm active in order to prevent unpleasant clicks. Toggling the Power button is the fastest way to check PSP E27 plug-in influence on the sound.



BPS

These two buttons work similarly to the Power button, but they refer to channels independently. Use the Power button or BPS buttons to disable the E27 and PA11 modules. Click the BPS label to bypass both channels instantly.



MON

These options let you choose which channel (or channels) within the stereo field you wish to monitor. Click or scroll to select between available monitoring options: Middle/Left/Stereo/Right/Side.



MS

MS shows the current stereo processing mode: Left/Right or Middle/Side. Click on MS to activate Middle/Side processing instead of Left/Right. The processing mode is also displayed on the tape label under the 500x modules.



PA11

Click this label to add PA11 modules to the processing chain. Please read the PA11 description for more details.



2x

Click on 2x to duplicate E27 modules in the processing chain.



LINK

Click LINK to engage link mode between channels. Activating link mode maintains the original settings of all parameters. To force the same setting (clear the difference between controls) for all linked channels, press cmd (MAC) or ctrl (PC) while moving a knob.



Tape label

Label shows current processing mode and module assignment to the supported channel. Click on this control to change stereo mode from LR to MS.



PSP

Click on PSP label to check version number, authorization and latency info.



E27

E27 has three band sections and one control section.

IN

Click on the IN button to process sound through the E27 Module. The button state is indicated by the red LED. When the E27 filters are disabled, sound is still processed through some parts of the analog-modeled circuit. Keep in mind that digital bypass can only be enabled in the main panel section (check BPS and Power controls).



LS

The Low Shelf button is located on the left side of the E27. Click on this button to engage the shelf filter characteristic instead of the bell filter characteristic. Low shelf mode is available for five different frequencies: 63/82/120/200/300 Hz.



HS

The High Shelf button is located between IN and Low Shelf buttons. Click on this control to engage the shelf characteristic for the high band filter (all nine frequencies).



Filter knobs

Click on the red (internal) part of the knob and drag (or scroll) to set the desired gain level: from -16 dB (cut) to +16 dB (boost) per band. Scrolling increases or decreases gain at +/- 1dB. Double click on the gain knob to return a band to its default value (0dB). Hold the shift key while adjusting for more precise scrolling.

Click and drag (or scroll) to move the external part of the knob. Alternatively, click on the description of the desired frequency control. Click on the OFF label to turn off the filter. Click a second time on OFF to set the filter to the last used frequency.



PA11

PA11 is a special module for preamp processing and external control of the E27. Click on PA11 button on the right side of the plug-in to make it active.

Drive

Click and drag (or scroll) to control output distortion. Setting the Drive to 0dB offers a nominal level of saturation from PSP E27. The Drive knob allows you to increase or decrease the amount of saturation.



HPF

Click and drag (or scroll) to set the high-pass filter frequency. Use this knob to get rid of unwanted low frequencies in the mix.



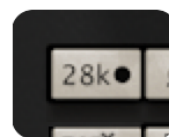
Output

Click and drag (or scroll) to set the Output level for the channel. The signal will be boost or cut after being processed in E27 modules. Use this knob to make up lost level, or cut back to compensate for boost.



28k

Click the 28k button to enhance high frequencies. This button turns on special bell filter processing at 28kHz, which causes a gentle and musical boost in audible bands.



Polarity

Click to change the polarity on the current channel. This button engages a special algorithm with less noise and clicks than the normal algorithm .



TrafoX

Click to bypass input and output transformers in the channel chain. It disables the harmonics production typical for audio transformers. There is only one input and output transformer per PSP E27 plug-in instance.



AmpX

Click to disable distortion produced by the operational amplifier and active filter circuit emulation in the E27 module.



Tips and Tricks

Filter dependency



Filters within a single E27 module are interdependent and they affect on each other, due to the hardware's internal construction and the relationship between capacitors and other electrical elements. The difference between sound on the left and right setting is gentle, but audible (about 1dB).

Linearity



Enable TrafoX and AmpX buttons to disable the non-linear behaviour of PSP E27. This is the easiest way to get rid of distortion. This option is especially useful for mastering if there is a need to work on bands with clean linear filters. Keep in mind that the filters' characteristics and interdependency won't change.

Mono-Stereo processing



PSP E27 plugin supports three channel modes: Mono-Mono, Mono-Stereo and Stereo-Stereo. Set mono-stereo channel support in your DAW and use PSP E27 plugin with slightly different settings for Left and Right channel processing to create wide stereo field from a mono track.

PSP E27 SINGLE EDITION

The PSP E27se is a simplified version of PSP E27 audio plugin. It is based on the same great audio engine, but it has a redesigned, smaller GUI for quick adjustments. The PSP E27se is equipped with one E27 and one PA11 module. It is suitable for both mono tracks and stereo stereo in which there is no need to use separate settings for the Left and Right channel.



Preset Handling

PSP E27 is provided with factory sets of presets.

The main aim of these included presets is to show you the features of the plug-in and 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.

The PSP E27 presets can be accessed from the PSPaudioware standard PRESET bar at the bottom 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.



MANAGE

Click to open menu with basic preset actions:

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

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. You can select a preset name to choose that preset from the list.

You can right-click the name of the preset to rename it.

PRESET SELECTION

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

MEMO A and B

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 on the question mark whenever you need to open the operation manual.

BULB

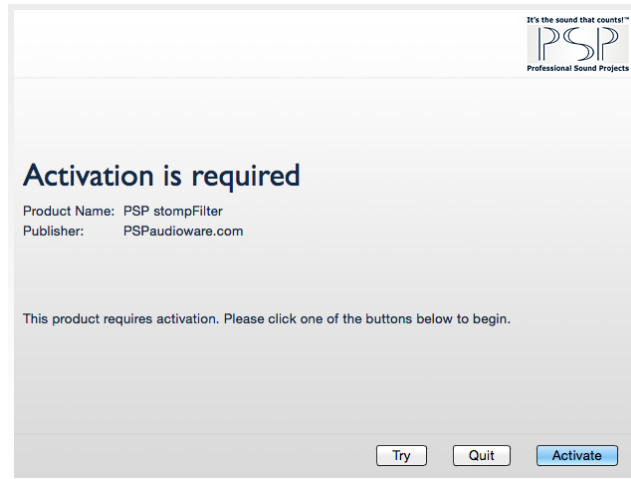
Click on the bulb icon to turn off/on hints' appearance.

Trial Activation Instructions

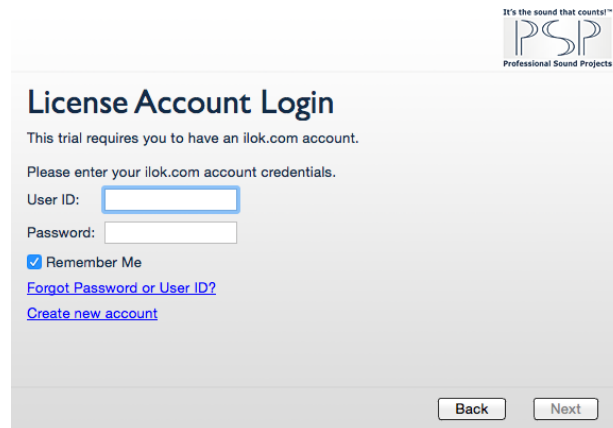
In order to run a plug-in in 30 day demo mode, you need an **iLok user ID** which you can create free at <https://www.ilok.com/>, and you need to install the free **iLok License Manager** application.

A hardware USB iLok dongle is **NOT** required, however it is optional.

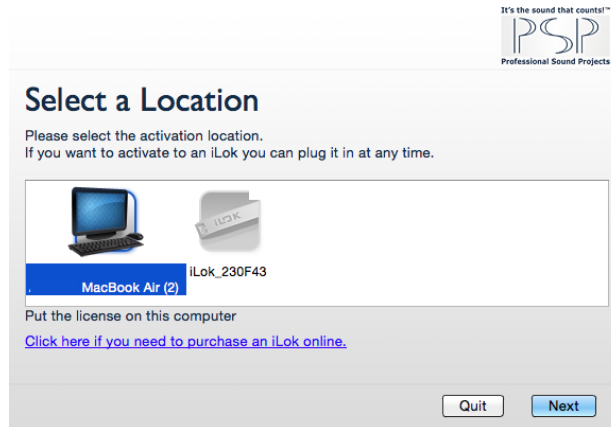
1. Run the installer on your computer and follow the steps to complete the installation.
2. Launch your host application (Pro Tools, Logic, Cubase, Sonar, Live etc.), which will scan your plug-ins and prompt you with an activation window.



3. To run a plug-in demo click "Try" in the PSP activation window and then enter your iLok account details.



4. Select the activation location. You can activate the license in three separate locations, each of which can be either a computer or an iLok dongle (2nd generation or above). You can move these licenses at any time using PACE's iLok License Manager software.

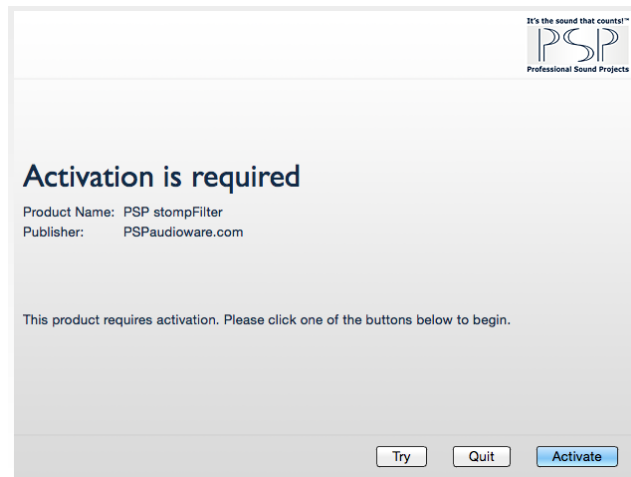


5. Enjoy using our plug-in for next 30 days without any limitation!

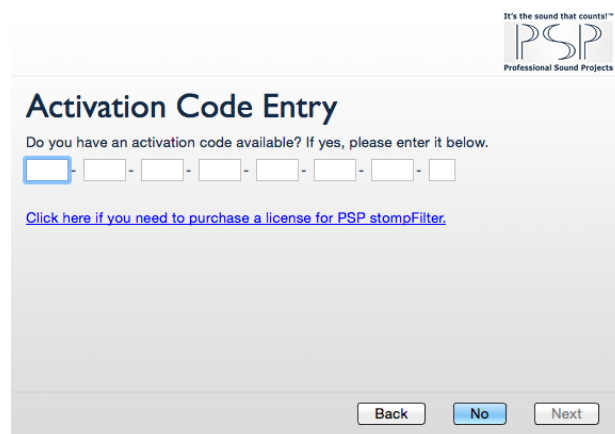
Full Version Activation Instructions

In order to activate the plug-in, you need an **iLok user ID** which you can create for free at <https://www.ilok.com/>, and you need to install the free **iLok License Manager** application. A hardware USB iLok dongle is **NOT** required, however it is optional.

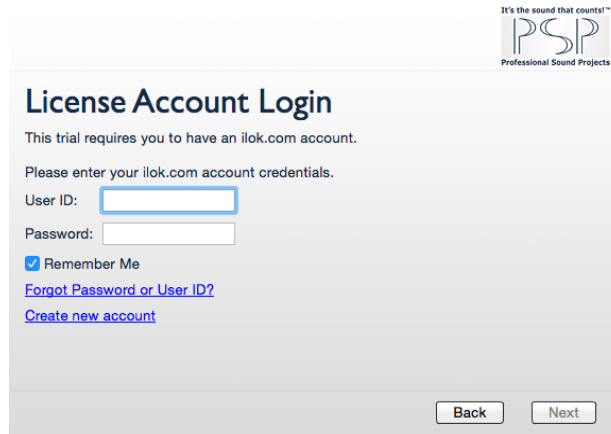
1. Download the PSP installer from your PSP user area account.
2. Run the installer on your computer and follow the steps to complete the installation.
3. Launch your host application (Pro Tools, Logic, Cubase, Sonar, Live etc.), which will scan your plug-ins and prompt you with an activation window.



4. Click the **Activate** button and enter your activation code, which is listed in the product table for your account in our user area (in the column authorization details). Click next.

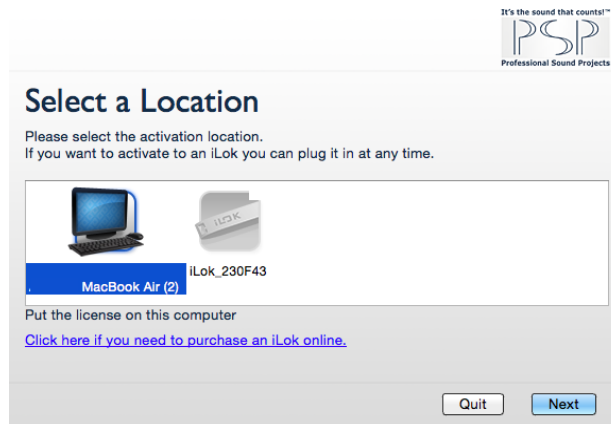


5. Type in your iLok account user ID and password. Click next.



The screenshot shows the 'License Account Login' window. At the top right is the PSP logo with the tagline 'It's the sound that counts!' and 'Professional Sound Projects'. The main heading is 'License Account Login'. Below it, a message states: 'This trial requires you to have an ilok.com account. Please enter your ilok.com account credentials.' There are two input fields: 'User ID:' and 'Password:'. A 'Remember Me' checkbox is checked. Below the fields are three links: 'Forgot Password or User ID?', 'Create new account', and 'Back' and 'Next' buttons at the bottom.

6. Select the activation location. You can activate the license in three separate locations, each of which can be either a computer or an iLok dongle (2nd generation or above). You can move these licenses at any time using PACE's iLok License Manager software.



The screenshot shows the 'Select a Location' window. At the top right is the PSP logo with the tagline 'It's the sound that counts!' and 'Professional Sound Projects'. The main heading is 'Select a Location'. Below it, a message states: 'Please select the activation location. If you want to activate to an iLok you can plug it in at any time.' There are two icons: a computer monitor and an iLok dongle. Below the icons, a blue bar highlights 'MacBook Air (2)' and 'iLok_230F43'. Below this bar, the text says 'Put the license on this computer' and a link: 'Click here if you need to purchase an iLok online.' At the bottom are 'Quit' and 'Next' buttons.

7. Activation is complete. Enjoy using our plug-ins! We hope you find them useful in your productions.

Minimum System Requirements

PC

VST3

- Windows x32 or x64 (7, 8 or 10)
- VST3 compatible application

VST

- Windows x32 or x64 (Vista, 7, 8 or 10)
- VST 2.4 compatible application

RTAS

- Windows x32 or x64 (XP Service Pack 2, Vista, 7 or 10)
- ProTools 8.0.0 (or later)

AAX

- Windows x32 or x64 (XP Service Pack 2, Vista, 7 or 10)
- Pro Tools 10, 11, 12 or Pro Tools HD 10, 11, 12 or Pro Tools 2018

All DAWs

- Up to date iLok License Manager application installed

Mac

AudioUnit

- Mac OSX 10.8 - 10.14 or later
- 32 or 64-bit compatible host application

VST

- Mac OSX 10.8 - 10.14 or later
- 32 or 64-bit VST 2.4 compatible host application

VST3

- Mac OSX 10.8 - 10.14 or later
- 32 or 64-bit VST3 compatible host application

RTAS

- Mac OSX 10.8, 10.9, 10.10 or 10.11
- ProTools LE 8.0.0 or ProTools TDM 8.0.0 (or later)

AAX

- Mac OSX 10.8 - 10.14 or later
- Pro Tools 11, 12 or Pro Tools HD 11, 12 or Pro Tools 2018

All DAWs

- Up to date iLok License Manager application installed



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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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