PSP E27

Operation Manual
Acknowledgements

PSP E27 plug-in based on Avedis E27 by Avedis Audio Electronics
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Thanks to all our customers around the world for ideas and help in development of new plug-ins!
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PSP E27 introduction

Thank you for your purchase of the PSP E27!

PSP E27 is multistage equalizer plug-in inspired by the analog equalizer E27 produced by Avedis Audio Electronics. E27 offers three-band equalization with nine selectable frequencies in a standard 500x package. This equalizer offers +/-16dB of boost/cut at musically selected frequency ranges, and offers gentle saturation. Low and high filters can work in bell or shelf mode with a single click. E27 is suitable for both mixing and mastering. PSP E27 an offers additional preamp stage for global level control. This EQ plug-in catches nonlinear behavior of analog devices.
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 Power button, but they refer to the concrete channel. 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 stere 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 E27 filters are disabled, sound is still processed through some parts of the analog-modeled circuit. Keep in mind that digital bypass can be only enabled in the main panel section (check BPS and Power controls).

LS
The LowShelf 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 HighShelf button is located between IN and LowShelf 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 E27. Click on PA11 on the right side of the plug-in to active PA11.

**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 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.

**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 active filter circuit emulation in the E27 module.
Protection system

Limitations of the demo version
The demo will operate without any limitations for 14 days from its initial installation. During the demo period you will just need to click on the GUI to engage processing once the plug-in is inserted. After the end of evaluation time you would not be able use the plug-in without authorization.

Authorization
Each PSP plug-in has to be authorized using an automatic authorization application or a batch authorizer downloaded from the user's account page on our site.

The About Screen
Each PSP plug-in offers an About window. This screen contains your authorization details, as well as the version number of the plug-in. To access each plug-in’s about box, click on the name of the plug-in. To return to the controls view, click the name of the plug-in again (or anywhere in the about screen).
System Requirements

Before installing PSP E27 on your Windows or Macintosh computer, please make sure your system meets these minimum requirements:

**PC**

- **VST**
  - Windows x32 or x64 (XP Service Pack 2, Vista or 7)
  - VST 2.4 compatible application

- **VST3**
  - Windows x32 or x64 (XP Service Pack 2, Vista or 7)
  - VST 3 compatible application

- **RTAS**
  - Windows x32 or x64 (XP Service Pack 2, Vista or 7)
  - ProTools LE 8.0.0 or ProTools TDM 8.0.0 (or later)

- **AAX**
  - Windows x32 or x64 (XP Service Pack 2, Vista or 7)
  - Pro Tools 11 or Pro Tools HD 11

**MAC**

- **AudioUnit**
  - Mac OSX 10.5 or later
  - 32 or 64-bit host application capable of running AudioUnit plug-ins with Cocoa view

- **VST**
  - Mac OSX 10.5 or later
  - 32 or 64-bit VST 2.4 compatible host application

- **VST3**
  - Mac OSX 10.5 or later
  - 32 or 64-bit VST 3 compatible host application

- **RTAS**
  - Mac OSX 10.5 or later
  - ProTools LE 8.0.0 or ProTools TDM 8.0.0 (or later)

- **AAX**
  - Mac OSX 10.8 or later
  - Pro Tools 11 or Pro Tools HD 11

Please keep in mind that these CPU and RAM specifications are *minimum* requirements. For the best performance, you will want a faster CPU and as much RAM as possible!
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 electronical elements. The difference between sound on the left and right setting is gentle, but audible (about 1dB).
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.
Bypass

There are different types of bypass buttons in PSP E27 plug-in (in descending order):

- **Power** – disables main audio processing. Even when the Power is disabled, E27 keeps oversampling to prevent unpleasant clicks.
- **BPS** – works similarly to the Power button, but this refers to one (or both) of the channels. IBPS buttons do not disable MONitoring mode.
- **PA11** – removes PA11 from processing chain. Disables everything that was set in PA11 (Drive, HPF, Output boost, 28k, Polarity, etc.).
- **x2** – removes the extra E27 module from the processing chain.
- **IN** (E27 button) – disables the analog simulated filters within the module, but keeps the signal processing through some parts of the circuit.
- **OFF** (PA11 and E27 knobs) – turns off the current filter processing.
Preset Handling

PSP E27 is provided with a factory set of presets.

The main aim of the included presets is to show you the features of the plug-in and help you to learn how to use the controls. In addition, the presets can be used as a starting point for further adjustments or as quick fix presets.

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, as well as load and save individual presets or banks of presets. There are three sections to this bar, the PRESET section, the Preset window, and the BANK section.

**BANK SECTION**
Click the green arrow icon to load a saved bank. Click the red arrow icon to save a bank. Double click the BANK label to permanently store the default preset bank. Press Command (Mac) or Control (PC) and double click to restore the factory default bank.

**PRESET SECTION**
Click the green arrow icon to load a preset. Click the red arrow icon to save a preset. Double click the PRESET label to permanently store the default preset. Press Command (Mac) or Control (PC) and double click to restore the factory default preset.

**PRESET EDIT BOX**
Click the menu button to the right of the preset edit box to see and the popup menu of all the presets in the currently loaded preset bank and to choose a preset from the list. Click the name of the preset to rename it. Use mouse wheel to switch to a next/previous preset.

**PRESET SELECTION**
Click on the bright left arrow to switch to a previous preset on the list. Click on the bright right arrow 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 green arrow icon to load a preset from memo A or B. Click the red arrow icon to save a preset to memo A or B.

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

If you have any questions about the principles or operation of our plug-ins, please visit our website http://www.pspaudioware.com where you can find the latest product information, free software updates 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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User Comments

We welcome any opinions and comments related to PSP E27. We would also be grateful if you shared with us your experiences using PSP E27. For example, if you’ve created a useful preset then let us know.

Please, contact us at:
contact@PSPaudioware.com