



Ampeg SVT-3 PRO

Physically Modeled Bass Amp, Speaker Simulation and FX Rack

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Introduction | Ampeg SVT-3 PRO



INTRODUCTION:

The Ampeg SVT-3PRO combines the classic tone of the SVT with a tighter, modern sound and tons of tone sculpting tools, and the Brainworx Ampeg SVT-3PRO plug-in is all about tone.

By working directly with Ampeg, Brainworx has produced an exacting plug-in emulation of this amazing amp, adding to their growing collection of classic bass amps for Universal Audio's UAD platform. The SVT-VR plug-in with Unison preamp technology faithfully provides the legendary fat, smooth and hearty sound that bassists and recording professionals have grown to depend on.

In the FX Rack view you can access a noise gate, 26 world-class Recording Chains and a power amp simulation including an onboard power soak.

Played through a real bass guitar cabinet (via a standard studio power amp) this plug-in rocks like the real thing. This is certainly not your average amp sim.

The Main Applications for this Plug-in Are:

1. Recording DI bass into the SVT-3 PRO using Apollo's Hi-Z input with Unison technology, then editing and processing them in the DAW completely.
2. Recording hardware preamps through the power amp simulation and Recording Chains.
3. Practicing at home with minimal latency (in Apollo's Console, for example), via your studio speakers, a home stereo system, headphones or a real bass guitar amp and cabinet.
4. Playing live via a real power amp and speaker setup.
5. Playing LIVE, plugged straight into a live console and / or an in-ear system.
6. Re-Amp less than perfect DI bass guitar tracks, previously recorded with other bass amp simulations.

The Basics | Ampeg SVT-3 PRO

THE BASICS:

You can use the amp section of this plug-in exactly like you would operate the real Ampeg SVT-3PRO tube amplifier.

Plug in your bass guitar (via your computer audio interface in this case), adjust Gain, Tone and Volume... and Rock'n'Roll!

Unison Technology

The Ampeg plug-in was developed with the Apollo series interfaces in mind and made compatible with Unison preamp technology. Of course the SVT-3PRO will work with any UAD-2 device, but to experience ultra-low latency along with important impedance, gain 'sweet spots', and circuit behaviors of the real amp, you need an Apollo interface. In order to do this, you should insert the SVT-3PRO in the preamp insert position of Apollo's Console application. This will greatly enhance your experience, making the tone and behavior of your sound an exacting replication of a physical bass amp.

The Ampeg plug-in was developed with the Apollo series interfaces in mind. Of course the SVT-3PRO will work with any UAD-2 device, but to experience the ultra-low latency (desirable for playing in real-time) you need an Apollo interface.

A good producer's trick is to use a real bass guitar amp (a small combo, for example) for real-time monitoring in the control room during tracking while recording only the DI bass guitar signal. Then use the Ampeg plug-in when you play back the recorded tracks together with the rest of your music. You will need to split the dry bass signal so it can be recorded in the computer and routed to the real bass amplifier input at the same time.

To play and record dry DI bass tracks with the lowest latency and the highest quality possible, connect your bass to the Hi-Z Input of the Apollo interface or connect a quality DI Box and Mic Preamp to a line input of your Apollo Series interface.

If you insert the SVT-3PRO plug-in in the Console software mixer (to use the plug-in with the lowest possible latency) you have to decide whether you want to record processed bass guitar amp sounds (click the INSERT EFFECTS switch to REC in the Apollo console) or whether you only want to record the dry DI bass signal, while monitoring the processed amp sound during tracking, of course (click the INSERT EFFECTS switch to MON in the Apollo console).

The advantage of only monitoring the processed sound is that you can alter the settings of your amp and FX completely during mixdown. If you find out later that less or more Gain would sound better for your song you can still make that happen.

The advantage of recording pre-processed bass tracks might be that you will need fewer plug-ins during mixdown, as your bass tracks will be ready to be mixed. All you can do then is EQ and compress the recorded bass tracks, or add effects, just like you would with traditional bass guitar amp recordings. Once you know 'your sound' you may even save some time by recording processed bass tracks and using them without further tweaking or fiddling around... your band mates or your producer may even appreciate this. ;-)

The Amp Section | Ampeg SVT-3 PRO



THE AMPLIFIER SECTION:

BRT (Bright): When this switch is engaged, a livelier top-end response [+6 dB at 2 kHz] is added to the input signal.

-15 dB: Press this switch in to reduce the input signal by 15 dB and compensate for higher output sources. This attenuation is suited for use with basses that have active electronics or high-output pickups. Use this pad if you notice that the peak/mute LED comes on regularly. It will reduce the chance of overdriving the preamplifier stage and allow more usable range and fine adjustment of the gain control.

PEAK/MUTE LED: This red warning LED will come on if: the mute switch is engaged, or if the input signal is too high, the gain control is set too high, or there is too much boost from the bass, midrange and treble controls. If it comes on regularly, even when these controls are low, try engaging the -15 dB pad.

GAIN: This varies the amount of signal driving the preamplifier. If a small clockwise rotation from minimum leads to overloading and the peak LED illuminating, try engaging the -15 dB pad. This will give more usable range with the gain control.

HI: This switch, when engaged, enhances the amount of high frequency output by 6 dB at 5 kHz.

LO: This switch, when engaged, enhances the amount of low-end output by 2 dB at 40 Hz and -10 dB cut at 500 Hz.

BASS: Use this to adjust the low frequency level of the amplifier. This provides up to 12 dB of boost, or 12 dB of cut at 50 Hz. The low frequency output is flat at the center position.

MIDRANGE: Use this to adjust the midrange frequency level of the amplifier. This provides up to 15 dB of boost, or 15 dB of cut at the center frequency selected by the frequency control. The midrange frequency output is flat at the center position. Rotate the control counter clockwise for a “contoured” sound (more distant, less midrange output) or clockwise for a sound that really cuts through.

FREQUENCY: This control allows you to select the center frequency for the midrange control, giving you a choice of five “voices” for the midrange. The numbers correspond to the following center frequencies: 1=220 Hz, 2=450 Hz, 3=800 Hz, 4=1.6 kHz, 5=3 kHz.

TREBLE: Use this to adjust the high frequency level of the amplifier. This provides up to 14 dB of boost, or 19 dB of cut at 5 kHz. The high frequency output is flat at the center position.

MASTER: Use this to control the overall output level. Use it wisely and turn it down when making connections or trying something new.

TUBE GAIN: The tube gain control varies the gain of the preamp tubes allowing for a variety of tonal response characteristics. At “10” the gain is at maximum, providing a dynamic, highly responsive tone. At “0” the voltage is at minimum, offering a thickened, more compressed tone. This tone may also be distorted, depending on volume level. The effect of this control increases from moderate to dramatic as the power amp is driven harder.

Graphic EQ | Ampeg SVT-3 PRO



GRAPHIC EQ:

When this switch is engaged, the 9-band graphic EQ is enabled. A footswitch overrides this switch.

ACTIVE LED: This LED illuminates when the EQ is on.

9-BAND GRAPHIC EQ: These sliders control the output frequencies indicated above each control. The center position of each control is flat [no boost or cut].

LEVEL: This slider is the output volume control for the Graphic EQ and only affects the signal when the EQ is engaged. If the EQ'd signal is too soft, slide the level control up; if it's too loud, slide this control down. This is very useful for correcting for differences in level generated by graphic EQ settings.

ON LED: This LED illuminates when the plug-in is active.

POWER SWITCH: Use this switch to engage or bypass the plug-in.

FX RACK Dynamics | Ampeg SVT-3 PRO



(1) NOISE GATE:

'CLOSED' LED

When lit this LED indicates that the Noise Gate is CLOSED. This means the THRESHOLD setting is higher than the incoming bass signal and the noise gate dims the output signal of the amplifier by the amount adjusted with the RANGE control (e.g. 15dB in the picture above).

NOISE GATE ON/OFF: Enable or disable the Noise Gate completely. Switch up ('on') means the Noise Gate is activated.

THRESHOLD: The Noise Gate will dim the output signal of the amplifier as soon as the input signal (your bass signal) falls below a certain level. This level is called Threshold. Adjust the Threshold so the noise of the overdriven amp will be reduced, but make sure you don't cut fading notes or chords.

RANGE: The output level of your amplifier will be reduced or muted when the input signal is lower than the Threshold setting. You may dim the output level only by a few decibels (dB), or completely mute the output in pauses by setting the RANGE to its maximum.

(2) AMP FILTERS:

(switchable pre/post)

TIGHT FILTER:

With the TIGHT filter you can cut LOW frequencies of either the DI bass signal (PRE) or the processed amp output (POST).

PRE: If your pickups produce an unintentional rumbling bass sound you can filter the low end before the DI sound even hits the amplifier.

POST: If you want to cut some of the low end of your amplifier setting (maybe even only temporary) you can use this studio quality high pass filter to reduce the bass.

OFF: When set to OFF the TIGHT filter is in bypass mode.

SMOOTH FILTER:

With the SMOOTH filter you can cut HIGH frequencies of either the DI bass signal (PRE) or the processed amp output (POST).

PRE: If your pickups catch a lot of hiss or noise you can filter the high end before the DI sound even hits the amplifier.

POST: If you want to cut some of the low end of your amplifier setting (maybe even only temporary) you can use this studio quality high pass filter to reduce the bass.

OFF: When set to OFF the SMOOTH filter is in bypass mode.

FX RACK Input

Ampeg SVT-3 PRO



(3) INPUT GAIN:

If you want to drive the input of the Ampeg preamp harder or softer you may adjust the input gain to your liking. Some single coil pickups from older or vintage basses may deliver low level output that can be compensated with the INPUT GAIN.

The opposite goes for a lot of heavy metal style humbuckers. If you have recorded the DI signal too hot or if you are using other plug-ins before entering the Ampeg amp plug-in you may want to dim the input signal.

With most standard bass guitars you can and should leave the INPUT GAIN at 0 (zero) though.

INTERNAL POWER SOAK:

In the real world, power soaks are being used to reduce the volume of a bass power amp. This way you can crank up a (tube) power amp to drive it until it starts clipping, and still record at a volume which will protect your hearing and keep the neighbors friendly.

A clipping tube power amp adds distortion and harmonics to the bass amp signal. A fully cranked up tube amp tamed in volume with a power soak will sound different than the same amp with the master volume turned down.

We have modeled the behavior of the Ampeg power amp, so you may experiment with different settings of the Master Volume of the amp and the internal POWER SOAK. We recommend a setting of roughly -10dB for most scenarios.

FX RACK Rec Chain | Ampeg SVT-3 PRO



(4) REC CHAINS:

Simply select a speaker and a complete studio setup by browsing through the REC CHAINS pull-down menu!

In the past two decades Brainworx owner Dirk Ulrich has produced and recorded with members of DREAM THEATER, TOTO, MICHAEL JACKSON, and with many more famous and infamous acts. The Brainworx Studio in Germany (www.brainworx-studio.de) is equipped with one of only nine NEVE VXS 72 consoles ever made, and it also hosts some of the finest outboard EQs and mic pre-amps available.

Using this impressive setup Dirk has produced a huge variety of customized 'Recording Chains' for the Ampegs amplifiers, which you can apply to your plug-in amp settings. Imagine a selection of 26 perfectly mic'd and EQ-ed cabinets that you can select and use instantly with a single mouse click!

Many bass guitar amp simulations give you some captured impulses of a selection of cabinets and microphones, then they leave it up to you to EQ and further process these incomplete setups by mixing different microphone setups, adjusting phase and EQ, and so on. But this really is not an easy job; it takes years of experience to get it right.

Now all you have to do is select the Recording Chain that sounds best for your amp channel and setting, adjust the Tone Stack and Gain and you're good to go! Recallable, reliable, flexible and fast.

And if for any reason you should not like any of the Recording Chains the plug-in offers, you may use the very last setting (labeled CABINET BYPASS) and use your own mic'd cabinet. This setting will give you the sound of a tube amp wired straight into a console, which also may be a nice effects sound.

+/- SWITCHES (PLUS / MINUS):

Browse through the REC CHAINS by either using the pull-down menu of the REC CHAIN text box (see above) or just click through the settings using the + and - symbols.

AUTO & BAR selection:

If you are trying to find the best sounding REC CHAIN for your actual song it can be tiring having to play a few chords, then grabbing the mouse to select the next REC CHAIN, playing a few notes again, grabbing the mouse again, etc.

For this reason the Ampeg amp plugin offers you the AUTO mode:

Just select a pattern (1 Bar, 2 Bars or 4 Bars) and the plug-in will activate the available REC CHAINS automation, following the actual tempo setting of your DAW. You can now play uninterrupted and simply listen to the sound of the various REC CHAINS as the plug-in switches through all of them every single bar, every two bars or every four bars, depending on your setting.

As soon as you hear the speaker setup you like best just stop AUTO mode by clicking the AUTO button again and manually select the desired REC CHAIN. Afterwards, just fine-tweak the TONE STACK and GAIN and there you are.

HORN on/off:

The Ampeg SVT-3PRO's matching 8x10 speaker cabinet included a piezo horn which contributed that classic attack tone. We've created a separate impulse response for the horn and added this on/off switch so the sound of the horn can not only be added to the impulse responses of the 8x10 cabinet, but any of the provided cabinets whether the original had the horn or not.

THE TOOLBARS | Ampeg SVT-3 PRO



PLUGIN SETTINGS TOOLBAR:

BYPASS: Bypasses processing done by the Ampeg SVT-3 PRO

UNDO/REDO (arrows): You can undo and redo changes you made to the controls of the Ampeg plug-in at any time. The undo / redo will work for as many as 32 steps. This makes experimenting and tweaking knobs easy. If you don't like what you did... just undo it.

SETTINGS A / B / C / D: The Ampeg amp plug-in offers four internal settings (A/B/C/D) that will be stored with every preset. So, one preset can contain up to 4 amp and effects settings. The settings can be automated (!) in most DAW hosts. This way it's possible to switch from a clean picked sound to a grungy slapped sound, for example.

COPY/ PASTE / RESET A : To set up variations of similar sounds you don't have to dial in all the parameters several times. Let's say you like your setting A and want to use the same sound, just with less Tube Gain, as SETTING B:

Simply press COPY while you are in SETTING A.
Switch to SETTING B by pressing 'B' in the SETTINGS section.
Press PASTE, now SETTING B is identical to SETTING A.
Reduce the Tube Gain. Done.

Now you can switch between A & B to hear the different flavors of tone you have created.

FX RACK: Toggle between FX Rack and Standard view.

ABOUT: Information about the development of the plugin.

FACTORY PRESETS:

These presets are only intended to give you an easy start and to demo some of the tones you can get out of the Ampeg amp plug-in.

CREATING YOUR OWN SOUNDS & PRESETS: When you start to create your own sounds the most important elements to adjust are the DRIVE, TONE SECTION and the REC CHAINS.

Dial in as much GAIN or Distortion as you like.
Play through as many REC CHAINS as you like and pick the one that sounds closest to what you are looking for without altering the TONE SECTION.
NOW start tweaking the TONE SECTION to fine-tune your amp settings.

Experiment, be creative. We are confident that the numerous presets and huge selection of REC CHAINS will offer you many possible combinations that will sound great on a big variety of musical styles and genres.