

SVT-3PRO Bass Guitar Amplifier



Owner's Manual



TABLE OF CONTENTS
What's in the Box
Introduction
Features
The Front Panel
The Rear Panel
Suggested Settings8
Personal Settings
Rack Mounting
Block Diagram11
Technical Specifications
Troubleshooting
Warranty and Support

Supplier's Declaration of Conformity 47 CFR § 2.1077 Compliance Information

Unique Identifier: Ampeg SVT-3PRO

Responsible Party - U.S. Contact Information:

Yamaha Guitar Group, Inc. 26580 Agoura Road Calabasas, CA 91302-1921 (818) 575-3600 https://ampeg.com/

FCC Compliance Statement:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



What's in the Box

SVT®-3PRO Amplifier, Power Cable, Quick Start Guide.

Introduction

Congratulations! You are now the proud owner of an Ampeg SVT-3PRO bass guitar amplifier. This compact, yet dynamically powerful, bass amplifier delivers a searing 450 watts of unsurpassed quality, offering the classic vibrance of tubes, as well as contemporary features.

The SVT-3PRO amplifier is an ideal companion to the Ampeg Classic Series, Pro Series, or PF speaker cabinets, available separately.

Like all Ampeg products, your SVT-3PRO amplifier is designed by musicians and built using only the best of components. Each amplifier is tested to confirm that it meets our specifications, and we believe that this amplifier is the absolute best that it can be. In order to get the most out of your new amplifier, please fully read this *Owner's Manual*, as well as the *Important Safety Instructions* included with your SVT-3PRO amp, before you begin playing.

And thank you for choosing Ampeg!

Features

- 5-POSITION MIDRANGE FREQUENCY SELECTOR: Take your pick from five available center frequency points to get just the right midrange voice (see page 4).
- **TUBE GAIN:** Control the dynamics of the tonal response characteristics from the power amp from punchy to compressed (see <u>page 5</u>).
- 9-BAND GRAPHIC EQ: Use as a "second channel" for bass solos, or to shape the sound to your own exacting standards. An independent level control also allows you to adjust the Graphic EQ volume (see <u>page 5</u>).
- **TRANSFORMER BALANCED LINE OUTPUTS:** One balanced XLR and one balanced/unbalanced 1/4" Line Out jack, including Line Out level control, to patch into house consoles, mixing boards, or external power amplifiers (see <u>page 6</u>).
- EFFECTS LOOP: Connect effects here for increased intensity and quieter operation (see page 7).
- POWER AMP IN AND PREAMP OUT: A separate preamp may be connected to the Power Amp In jack, and the Preamp Out jack may be connected to an external amp (see page 7).



The Front Panel



- INPUT: The signal output from an instrument (active or passive) may be connected to this 1/4" Input by means of a shielded instrument cable.
- BRIGHT: When this switch is engaged, a more lively top end response (+6 dB at 2 kHz) is added to the input signal.
- 3. -15 dB Pad: 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 [4] comes on regularly. It will reduce the chance of overdriving the preamplifier stage and provide more usable range and fine adjustment of the Gain control.
- 4. PEAK/MUTE LED: This red warning LED will come on if: the Mute switch [14] is engaged, 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 [3].
- 5. GAIN: This varies the amount of signal driving the preamplifier. If a small clockwise rotation from minimum leads to overloading and the Peak LED [4] illuminating, try engaging the –15 dB Pad. [3] This will provide more usable range with the Gain control.
- ULTRA HI: This switch, when engaged, enhances the amount of high frequency output by 6 dB at 5 kHz.

- ULTRA LO: This switch, when engaged, enhances the amount of lowend output by 2 dB at 40 Hz, and –10 dB cut at 500 Hz.
- 8. BASS: Use 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.
- 9. MIDRANGE: Use 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 [10]. 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.
- 10. FREQUENCY SELECT: This control allows you to select the center frequency for the Midrange control, providing a choice of five frequencies for the midrange. The numbers correspond to the following center frequencies: 1=220 Hz, 2=450 Hz, 3=800 Hz, 4=1.6 kHz, or 5=3 kHz.
- 11. TREBLE: Use 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.
- 12. MASTER: Use to control the overall output level. Use it wisely and turn it down when making connections or trying something new.



The Front Panel - Continued



TUBE GAIN: The Tube Gain control varies the high voltage supply to the driver tubes. This allows a variety of tonal response characteristics from the power amp, and replaces the limiter found on typical solid state power amps. At "10" the voltage 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. In between settings are best for preventing harsh distortion when driving the power amp to its limits. The effect of this control increases from moderate to dramatic as the power amp is driven harder.

NOTE: When adjusting the Tube Gain control from "10" to "0" rapidly, a low frequency hum and muting of the output signal occur simultaneously. This is due to shifting of the DC bias point of the tubes and is no cause for concern. Adjusting the control quickly from "0" to "10" brings a moderate delay due to the power supply capacitors charging.

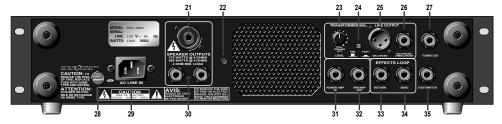
14. MUTE: Press this switch in to mute all outputs, except the Tuner Out. The footswitch may also control muting if the Mute switch on the front panel is left in the "out" position. (The front panel switch is still active with the footswitch connected. This is excellent for tuning your bass with an electric tuner without having to adjust any levels to turn down the sound). The Peak/Mute LED [4] will illuminate when this switch is engaged.

- **15. GRAPHIC EQ SWITCH:** When this switch is engaged, the 9-band Graphic EQ is enabled. A footswitch overrides this switch.
- **16. EQ LED:** This LED illuminates when the FQ is active.
- 9-BAND GRAPHIC EQ: These sliders control the output frequencies indicated above each control. The center position of each control is flat Ino boost or cutl.
- 18. EQ 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.
- **19. POWER LED:** This LED illuminates when the power is on.
- 20. POWER SWITCH: Use this switch to turn the overall system power on or off. Press the top of the switch to turn on the power. Press the bottom of this switch to turn the amp off. To remove AC power, either turn off the AC mains supply, or unplug the power cord from the amplifier and the AC mains supply.

NOTE: There is a delay during power up until the protection relay enables the power amplifier output.



The Rear Panel

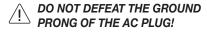


21. SPEAKON® JACK: Use of this heavyduty connector is recommended when playing at full output levels, due to its incredibly high current handling capability. Connect the amplifier to the speaker cabinet(s) using heavy gauge speaker cables, terminated with the appropriate connectors.

The pin connections for this jack are:

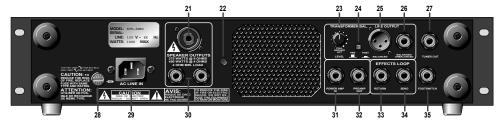
- 1+ = Positive
- **1** = Negative
- 22. RACK SUPPORT FASTENER: For the most secure rack installation, it is recommended that a supplemental support be fabricated and fastened to the amplifier via this threaded insert. Use a 1/4–20 threaded bolt that will not protrude more than 1/2" into the amplifier to connect the strap.
- 23. LINE OUTPUT LEVEL / GROUND LIFT: This control adjusts the output level at both Line Output jacks [25, 26]. This control works independently from the front panel Master control. If necessary, pull this knob to engage the Ground Lift and eliminate hum.
- 24. POST-EQ / PRE-EQ: The signal at the Line Out jacks [25, 26] can be set to either Pre-EQ or Post-EQ with this switch. With the switch in the OUT position, the signal at the jacks is Pre-EQ. This is a direct output not affected by any EQ or boost settings. With the switch in the IN position, the signal is Post-EQ and is controlled and modified by the tone controls, Graphic EQ and the Effects Loop.

- 25. TRANSFORMER XLR LINE OUTPUT &
- 26. TRANSFORMER 1/4" LINE OUTPUT: These jacks supply a balanced XLR or balanced/unbalanced 1/4" preamp output signal for connecting to a house mixing board, recording console, or external amplifier. The signal can either be set to Pre-EQ or Post-EQ with the selector switch [24], and its level is controlled by the Line Out Level control [23].
- 27. TUNER OUT: This jack supplies the only live output when the Mute switch [14] is engaged. This allows for silent tuning through an electronic tuner, or killing the house send with a monitor mixer send still active.
- 28. FUSE: The fuse protects the unit from damage due to overload conditions or AC power line surges. If the fuse blows, replace it only with the same size and type.
- **29. IEC POWER INPUT CONNECTOR:**This is where you connect the supplied AC power cord.





The Rear Panel - Continued



30. SPEAKER OUTPUTS: These mono, 1/4" TS output jacks supply speaker-level power to the speaker cabinet(s). The rated power output is 275 Watts RMS into 8 Ω ,or 450 Watts RMS into 4 Ω .

The two identical outputs are wired in parallel, and you can use either one, or use both. Make sure the total speaker impedance load is 4 Ω or greater. For example, you could connect:

- Two 16 Ω speakers (an 8 Ω load),
- Two 8 Ω speakers (a 4 Ω load)
- One 4 Ω speaker

Use only non-shielded speaker cables with 1/4" TS ends to make the connections. Do not use shielded instrument cables as they may overheat.

We recommend using the Speakon jack [22] whenever playing at full output levels.

- 31. POWER AMP IN: This jack connects directly to the internal power amp for use with an external preamp. When using an external source, connect the OUTPUT of the source to this jack using a shielded instrument cable to feed the signal into the SVT-3PRO power amp section. The internal signal is disconnected when a plug is inserted into this jack.
- **32. PREAMP OUT:** This jack is a direct post Master preamp output for use with an external power amp. Connect the external amp's input to this jack using a shielded instrument cable.

- 33. EFFECTS LOOP RETURN: When using an external signal processor, connect the OUTPUT of the effect to this jack using a shielded instrument cable to feed the processed signal into the amp.
- **34. EFFECTS LOOP SEND:** When using an external signal processor, connect the INPUT of the effect to this jack using a shielded instrument cable to send the amp's post-EQ signal to the effect unit for processing.
- 35. FOOTSWITCH: Connect a dual footswitch to this jack for remote Mute and EQ On/Off control. On the footswitch's stereo/TRS 1/4" plug, the tip controls Mute and the ring controls EQ On/Off. The EQ footswitch overrides the front panel EQ Switch [15], and the Mute function is available from either the footswitch or front panel Mute Switch [14].

NOTE: A footswitch (model #AFP2) may be purchased at your local Ampeg Dealer, or ordered directly from the Ampeg website, at shop.ampeg.com.

Make sure that the amp's ventilation openings are not obscured in any way. This will allow the flow of air to cool the power amplifier's heatsinks.



Suggested Settings

Note that the Graphic EQ may be used in two ways:

- To fine-tune the sound make small adjustments at the desired frequencies while leaving the EQ on throughout the entire session. (This is great for adapting to varying room acoustics when playing multiple venues.)
- For a completely different sound

 make larger adjustments and
 only activate the EQ, optionally via footswitch, when a "second channel" sound is required (such as during bass solos).

ROCK



^{*}Adjust to taste..

JAZZ



**Set at "10" for cleanest sound, at "5" for moderate softness, or at "0" for a very soft feel.

COUNTRY



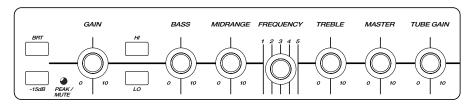
FUNK "POPPING"

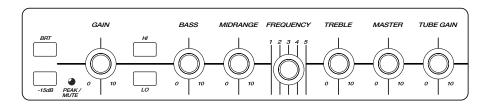


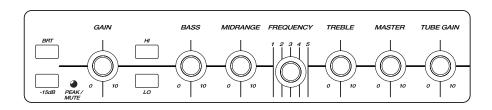


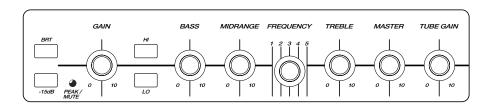
Personal Settings

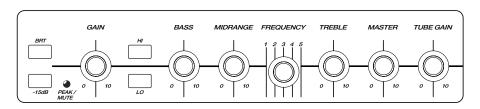
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Rack Mounting

When mounting the SVT-3PRO into a rack, the amp's four bottom feet should be removed to maintain the two rack-space height of the amplifier. Be sure to keep the feet and their attachment bolts for future use. If the feet are reinstalled, never use screws that will protrude farther into the amplifier than the original hardware.

The rack must be a high quality enclosure, capable of securely supporting the weight of the amplifier. Tighten the mounting screws securely through the amplifier's face plate and into the rack rails. Check the rack and mounting screws occasionally to ensure a continually safe and secure installation.

A 1/4–20 threaded insert is provided on the rear of the amplifier for connection to an additional support bracket. It is highly recommended that this additional support be used when rack mounting the amplifier. It must not protrude more than 1/2" into the amplifier.

Thermal Considerations

The SVT-3PRO amplifier is fan cooled with a single fan. Air is drawn through the side panel vent to cool down the amplifier's heatsinks, and then expelled through the rear panel vents.

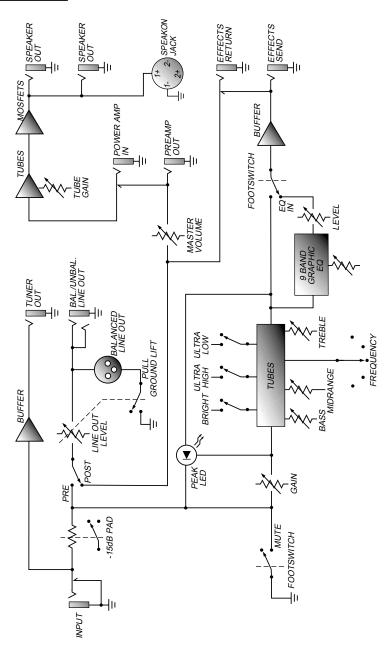
When installing in a rack, be sure to allow sufficient air space around the front, sides and rear of the amplifier for adequate cooling of the heatsinks. Leave at least one rack space above and below, and at least six inches behind and in front of the chassis to allow proper ventilation. The rear of the rack should be unobstructed and placed no closer than 10" from walls or other large obstructions.

When the amplifier is first turned on, the fan runs at a low speed. As the power output increases and the amp warms up, the fan gradually increases in speed to provide additional cooling. If the amplifier should overheat, a thermal switch turns off the power amplifier, allowing the heatsink to cool down. Once the amplifier has cooled to a safe operating temperature, the thermal switch resets and reactivates the amplifier. If this should occur, identify the cause of the problem and take corrective action. For example:

- Provide better ventilation
- · Install a fan in the rack to move more air
- Make sure the amplifier is not overloaded with too low of a speaker impedance load, or by a short circuit on the speaker line



Block Diagram





Technical Specifications

Output Power Rating	450 Watts RMS @ 4 Ω, 3% THD
	275 Watts RMS @ 8 Ω, 3% THD
Signal to Noise Ratio	80 dB (20 Hz-30 kHz), ref: 1% THD+N into a
	4 Ω load with –20 dB stimulus ("normal")
Maximum Gain	63 dB @ 1 kHz, tone controls centered
Tube Complement	Preamp Tubes: 12AX7 (3)
	Driver Tubes: 12AX7 (1), 12AU7 (1)
Tone Controls	Bass: +12 / -12 dB @ 50 Hz
	Midrange: +15 / -15 dB @ 220 Hz, 450 Hz,
	800 Hz, 1.6 kHz or 3 kHz
	Treble: +14 / -19 dB @ 5 kHz
Graphic EQ Level	+10 / –10 dB
Graphic EQ Range	33 Hz: +15 / –15 dB
	80 Hz: +8 / –8 dB
	150 Hz: +8 / -8 dB
	300 Hz: +8 / -8 dB
	600 Hz: +8 / -8 dB
	900 Hz: +8 / -8 dB
	2 kHz: +8 / -8 dB
	5 kHz: +9 / -9 dB
	8 kHz: +10 / –10 dB
Bright Switch	+6 dB @ 2 kHz
Ultra Hi Switch	+6 dB @ 5 kHz
Ultra Lo Switch	+2.5 dB @ 50 Hz, -12 dB @ 560 Hz,
	+1.5 dB @ 5 kHz
Footswitch Jack	Graphic EQ On/Off, Mute On/Off
	(Tip = Mute, Ring = EQ)
Power Requirements	~100–120VAC, 50–60 Hz, 390W [Domestic]
~200-240VAC, 50-60 Hz, 390V	V [Export]
Size (H x W x D)	4.0 in / 102 mm (with feet) x 19.0 in / 483 mm

(with ears) / 17.4 in / 442 mm (without ears)

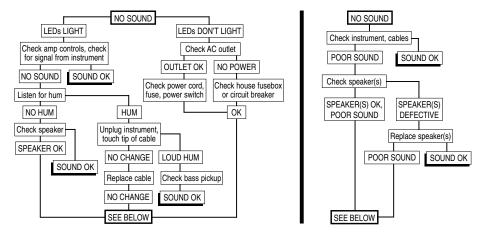
x 15.5 in / 394 mm

Weight

26.0 lb / 11.8 kg (approximately)

Troubleshooting

In the unlikely event that your SVT-3PRO should malfunction, take a few minutes to troubleshoot it before you call for service. You can save yourself time and money by doing it yourself, and often the cure for the problem is something quite simple.



If the problem isn't covered above, or if the steps lead you here, then contact your Ampeg dealer for service information. Also, you should refer the amp for servicing if it gets dropped, has liquid spilled into it, or sustains damage to its power cord.

The SVT-3PRO is covered with sheet metal and aluminum, not unlike robots, spaceships and other cool things. Clean with a dry, lint-free cloth. Never spray cleaning agents on the SVT-3PRO. Avoid abrasive cleansers which would damage the finish.

Ampeg continually develops new products and improves upon existing ones. For this reason, the specifications and information in this manual are subject to change without notice.



Warranty and Support

Visit WWW.AMPEG.COM to ...

- (1) ...identify **WARRANTY** coverage provided in your local market. Please keep your sales receipt in a safe place.
- (2) ...REGISTER your product.
- (3) ... CONTACT Technical Support, or call 818-575-3600.

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