

# Important Safeguards and Precautions:

All Ampeg products are designed for continuous safe operation, as long as common sense is used and steps are taken to help avoid certain problems. Abiding by the following rules can help prevent damage to your amplifier, yourself, and others.

- The amplifier is equipped with a three-pronged AC power cord. To reduce the risk of electrical shock, **NEVER** remove or otherwise attempt to defeat the ground pin of the power cord.
- Connect the amplifier **ONLY** to a properly grounded AC outlet of the proper voltage for your amp.
- Avoid sudden temperature extremes, rain and moisture. Also, avoid sudden and intense impact. (If the unit has been subjected to any of the preceding abuses, have it looked at by an authorized service center.)
- NEVER set the amplifier on a support that might give out under its weight.
- Always keep the total speaker impedance at or above the rated load.
- Unplug the amplifier before cleaning it. **NEVER** spray liquid cleaners onto the amplifier. Wipe it with a slightly dampened, lint-free cloth to remove dirt and film.
- Do not use the amplifier if it has sustained damage to the chassis, controls, or power cord. Refer the unit to an authorized service center for inspection.
- Amplifiers capable of producing high volume levels are also capable of inflicting permanent hearing loss or damage, if the exposure to such levels is prolonged. Such damage is progressive and irreversible! Consider using quality hearing protection devices.



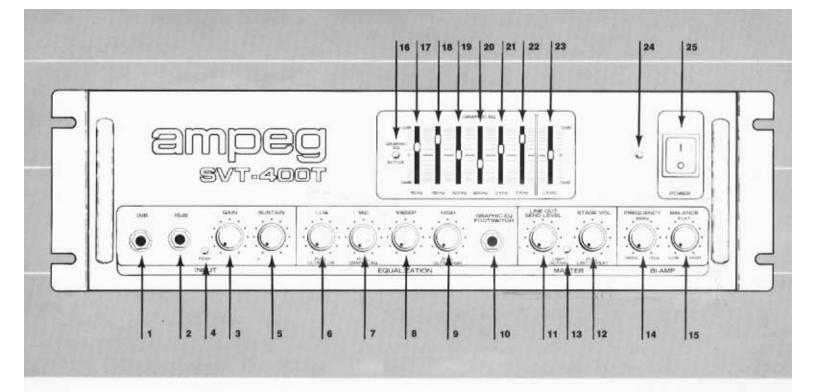
• OUR AMPLIFIERS ARE CAPABLE OF PRODUCING HIGH SOUND PRESSURE LEVELS. CONTINUED EXPOSURE TO HIGH SOUND PRESSURE LEVELS CAN CAUSE PERMA-NENT HEARING IMPAIRMENT OR LOSS. USER CAUTION IS ADVISED AND EAR PROTECTION IS RECOMMENDED IF UNIT IS OPERATED AT HIGH VOLUME.

EXPLANATION OF GRAPHICAL SYMBOLS: EXPLICACION DE SIMBOLOS GRAFICOS: EXPLICATION DES SYMBÔLES GRAPHIQUES





"IT IS NECESSARY FOR THE USER TO REFER TO THE INSTRUCTION MANUAL" "ES NECESARIO QUE EL USUARIO SE REFIERA AL MANUAL DE INSTRUCCIONES." "REFERREZ-VOUS AU MANUAL D'UTILISATION"



## Front Panel Features and Functions

Input Jacks (1 & 2) Your SVT-400T is equipped with two preamp input jacks. The "0db" input (1) accepts low to line level inputs. The "-15db" input (2) is padded to accept hotter inputs such as active type basses.

Gain (3) The gain control (3) is used to compensate for various input signal levels and playing styles by varying the amount of gain for the preamp. A peak indicator LED (4) is provided which is lit at signal levels of 6 db below preamp clipping. For the most efficient clean output, the gain control should be set such that the peak indicator (4) flashes occasionally.

#### Sustain (5) The sustain control provides a

compression/limiting effect. With the sustain control set at "0", no effect will be noticed. As the sustain control is turned towards "10" limiting will begin to occur. The limiting keeps the signal from going above a given level set by the sustain control. The overall volume level will decrease as the sustain control is turned clockwise. If more volume is desired at higher settings of the control simply turn up the stage volume control. This

limiting effect allows the player to obtain a smooth even sound level with more sustain. If even more sustain is desired, the gain control may be increased.

**Tone Controls (6-9)** The SVT-400T incorporates sophisticated active tone control circuitry in a configuration designed for maximum tonal variation possibilities.

Four rotary tone controls allow you to boost or cut frequencies in the range of 50Hz to 5kHz. The range of these controls can be further expanded by the "pull" switches incorporated into several of the tone controls: Ultra-High (9) and Ultra-Low (6) boost frequencies above and below the range of the tone controls. These functions may be activated by a gentle pull out on the knob, and cancelled by a gentle push in. The center point "action" frequency of the MID control (7) may be shifted between 350Hz and 1.2kHz by the use of the Mid Shift control (8). Note that the Mid shift will not be audible unless the control is set to a boost or cut position (away from the 12 o'clock position).

## Line Out Send Level (11)

This control adjusts the output level of the Balanced and Unbalanced Line Output jacks (28 & 29) on the rear panel of the SVT-400T.

Stage Volume (12) The Stage Volume control (12) is used to set the overall listening level of the SVT-400T. The SVT-400T contains power amp limiter. circuits which are designed to limit maximum output power to just below the "clipping" point (full undistorted power). This limiter circuit can be turned off by gently pulling the Stage Volume control (12). A limit indicator LED (13) is provided which is lit whenver the limiter is actually limiting the signal.

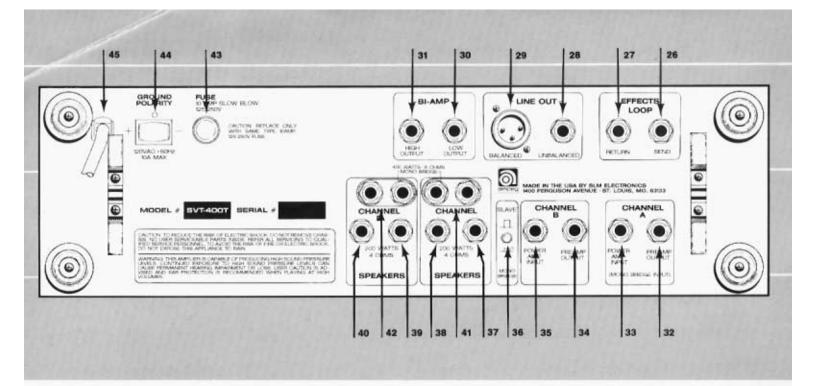
#### Bi-Amp Controls (14 & 15) The SVT-400T contains a bi-amp crossover circuit which splits the preamp output signal into high and low frequency outputs (30 & 31) on

the rear of the unit. The Frequency control (14) determines the crossover frequency (splitting point) of the bi-amp outputs. The Bi-amp Balance control (15) varies the relative levels of the bi-amp outputs. This allows matching the outputs to power amplifiers with different sensitivities or for adjusting the overall tonal balance. The level of the bi-amp outputs is adjusted by the stage volume control (12) in conjunction with the Bi-amp Balance control (15).

## Graphic Equalizer Controls (17-23) The

SVT-400T contains a switchable six band Graphic Equalizer which may be used to further tailor the overall tone. The graphic equalizer may be switched into the circuit by a gentle pull on the Mid Control (7) and switched out by a gentle push of the control. This function may also be performed by a remote foot switch by plugging a foot switch into the 1/4" footswitch iack (10) on the front panel. When a footswitch is being used, the "pull EQ on" functon of the Mid Control (7) is defeated. The EQ indicator light (16) will be lit whenever the EQ is switched into the circuit. The Level control (23) sets the overall level of the EQ circuit. The use of these controls allows you the possibility of remotely switching between two different tone settings and/or volume levels as well as the ability to fine tune the tone of the amplifier.

Power Switch (25) The SVT-400T is turned on by depressing the "1" marked on the Power Switch. The power indicator LED (24) should be lit when the amp is on.



## Rear Panel Features and Operation

Effects Loop (26 & 27) Effects Send (26) and Effects Return (27) jacks are provided on the rear panel of the SVT-400T. These unbalanced jacks are designed to be used as a "pre-EQ" line level external effects loop. The Effects Send jack (26) can be connected to the line level input of an external effect device, and the Effect Return jack (27) can be connected to the line level output of an external effect device. This "post-gain" configuration is helpful in obtaining optimum input signal levels to external devices and in reducing unwanted noise associated with external effects devices. The effects send jack may also be used as a "direct" unbalanced send for recording, etc.

#### Balanced Line Out (29) and Unbalanced Line Out (28) The Balanced Line

Output provides a low impedance balanced output and the Unbalanced Line Output provides a high impedance output for connecting the SVT-400T to an additional power amplifier, mixer, tape deck, etc. The output level of these jacks is set by the Line Out Send Level control (11) on the front panel. The line out level is independent of the stage volume level.

**Bi-Amp Outputs (30 & 31)** The Low Frequency Output jack (30) is the low frequency output of the bi-amp crossover and the High Frequency Output jack (31) is the high frequency output of the bi-amp crossover.

#### Preamp Output Jacks (32 & 34) The preamp output signal is available at these

jacks. Plugging in here will not interrupt the signal to the power amps, allowing these outputs to drive additional power amps, etc.

## **Power Amp Input Jacks**

(33 & 35) The Power Amp Input jacks (33 & 35) are direct inputs to the power amps. Plugging in here will interrupt the normal connection of the preamp to the power amp. The Power Amp inputs may also be used with the preamp outputs as effects loops. In Mono-Bridge mode the channel A power amp input (33) will drive both power amps and the channel B power amp input (35) will be automatically disconnected.

## Speaker Jacks (37-42) The SVT-400T contains two

separate power amps. The

power amps may be used independently (slave), each amp supplying power to its own set of speakers, or in Mono-Bridge mode, both power amps working together to supply double the power to one set of speakers. The mode of operation may be selected by pressing or releasing the

Slave/Mono-Bridge"switch (36) on the rear panel. Each channel is provided with two ¼" speaker jacks (37-40) and one set of binding posts (41 & 42).

In "Slave" mode, (both power amps working independently) any load equal to at least 4 ohms may be connected to each channel. If more than one jack is used in any one channel, the total load considering both jacks must be at least 4 ohms. This means that you may connect one 4 ohm cabinet, or up to two 8 ohm cabinets, or up to four 16 ohm cabinets, etc., per channel.

In "Mono-Bridge" mode, any load equal to at least 8 ohms may be connected by "bridging" the speakers across the two power amps. This is done by connecting a speaker lead to each Red binding post, and depressing the Mono-Bridge switch (36). The binding posts provide a convenient way of connecting speakers to the SVT-400T. Each set of binding posts consists of a red and black terminal which accepts bare wire, banana plugs, spade lugs, and certain test probes.

External Fuse Holder (43) This fuse holder contains a fuse which acts as a "safety valve" for the SVT-400T. If at any time the unit should fail to operate, check this fuse. If the problems persist after fuse replacement, consult an authorized Ampeg service center.

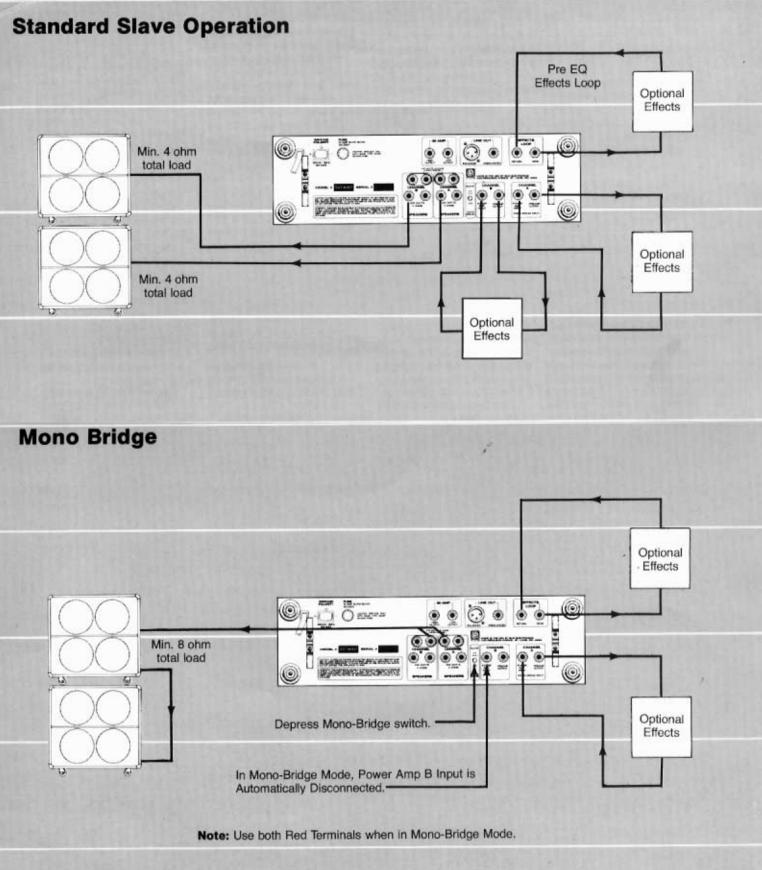
#### **Polarity Switch (44)**

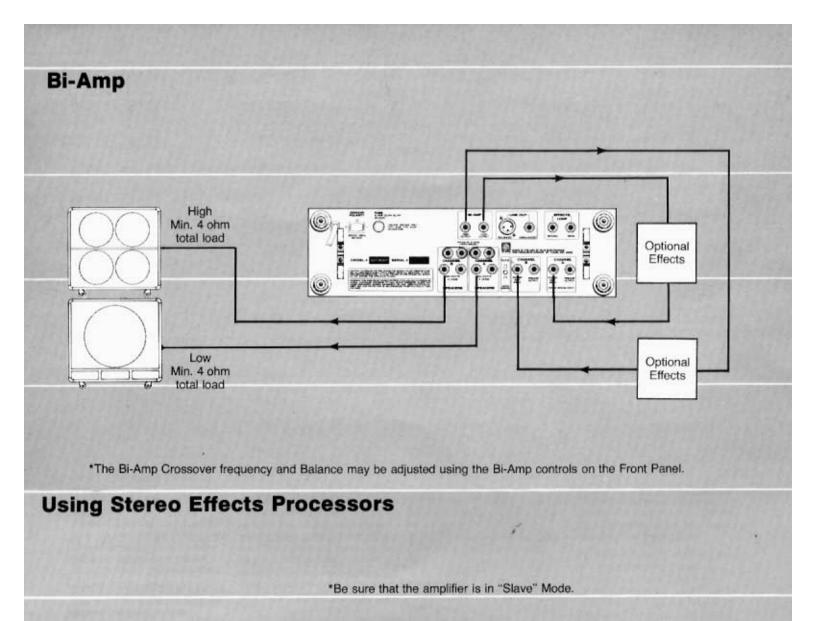
(Present on Domestic U.S.A. model only) If humming or buzzing occurs, try different positions of this switch. If it makes no difference to the buzzing, leave the switch in its center position, and check guitar cords, etc.

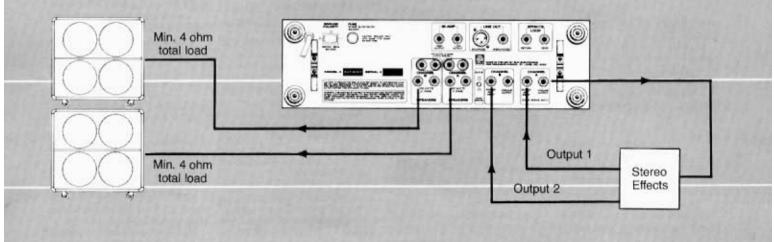
## Power Cord (45) Your

SVT-400T is shipped connected for standard 120 volt 60 Hz power. Be sure it is plugged into a properly wired grounded (three pin) power outlet before use. CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK, NEVER BREAK OFF OR OTHERWISE DEFEAT THE GROUND PIN ON THE POWER CORD.

# THE FOLLOWING PATCHING DIAGRAMS ILLUSTRATE JUST A FEW OF THE MANY REAR PANEL PATCHING CONFIGURATIONS OF THE SVT-400T.







## **TECHNICAL SPECIFICATIONS**

OUTPUT POWER RATING	200 Watts RMS @ 5% THD Per Channel @ 4 ohm load-120 VAC
	400 Watts RMS @ 5% THD @ 8 ohm Mono Bridge Load-120 VAC
TONE CONTROL RESPONSE	Ultra Low Switch
EQ RESPONSE	62 Hz .24db Range   150 Hz .22db Range   325 Hz .20db Range   700 Hz .20db Range   1.7 kHz .22db Range   5 kHz .34db Range
INPUT IMPEDANCE	0db 220k ohms 15db 57k ohms
MAXIMUM INPUT SIGNAL LEVEL ACCEPTED	22 volts, peak-to-peak
TOTAL SYSTEM GAIN	61db w/tones flat, Ultra-Low and Ultra-High off
SIGNAL TO NOISE RATIO	75db w/tones flat, Ultra-Low and Ultra-High off
POWER REQUIREMENTS	Domestic—10A 120vac 60Hz Export—5A 240vac 50Hz
SIZE AND WEIGHT	17"W x 13"D x 5¼"H 30 lbs.

CAUTION: To reduce the risk of electric shock, do not remove chassis. No user serviceable parts inside. Refer all servicing to qualified service personnel. To avoid the risk of fire or electric shock, do not expose this appliance to rain.

WARNING: This equipment is capable of producing sound pressure levels greater than 110 dB SPL. Continued exposure to such high sound pressure levels can cause permanent hearing impairment or loss. User caution is advised, and ear protection is recommended.

Specifications subject to change without notice.

We would like to take this opportunity to thank you for selecting an Ampeg product, and to tell you of our commitment to the design and manufacture of only the finest musical instrument amplification equipment; built for you, the musician.

You have purchased one of the most innovative sound amplification devices available today. Your Ampeg amplifier gives you more performance features than ever before; features that you, the musician, have asked for.

Your Ampeg amplifier is an American product, manufactured at our factory in St. Louis, Missouri. Only the finest available components and materials are used in the manufacture of each amplifier.

All Ampeg amplifiers are subject to seven or more inspection and testing steps to assure you of a high quality product. The final test for each amp is conducted by a trained musician with the instrument the amp was designed for. Any unit that does not meet the standards of his discriminating ear will not be passed. Since all Ampeg products are designed, developed, and manufactured through the cooperative efforts of engineers and professional musicians, the end result is a product that responds to the musician's audio requirements, and a product that will serve your needs for years to come.

### SLM ELECTRONICS LIMITED WARRANTY

SLM Electronics warrants this product to be free of defects in material and workmanship for a period of two (2) years from the original date of purchase to the original purchaser and is not transferable. Speakers, tubes, and meters carry a six (6) month warranty. This warranty is subject to the conditions, exclusions, and limitations hereinafter set forth: Excluded from this warranty are defects caused by wear and tear, misuse, neglect, alterations and modifications, or act of nature. Such determinations will be made by SLM Electronics. Warranty is also void if:

- a. The original retail purchase is not made from an Authorized Ampeg dealer;
- b. The serial number affixed to the product is altered, defaced or removed.

All parts costs will be borne by SLM Electronics within the warranty period. Labor costs will be covered within the warranty period according to rate schedules established by SLM Electronics. Warranty service may be done by SLM Electronics or an SLM Authorized Field Service Center. Transportation charges involved in warranty service are the sole responsibility of the purchaser.

SLM Electronics warrants speakers to be free from defects in material and workmanship for a period of ninety (90) days from original date of purchase. Speaker warranty will be subject to inspection of speaker by SLM Electronics or SLM Authorized Field Service Center. Obvious overpowering will result in a warranty denial. Realizing speakers can be overloaded causing failure, SLM Electronics will replace the spaker with a speaker of same or equal type at a price one-half the then current suggested retail price of the new speaker for life, regardless of reason.

Warranty repairs may be handled by your authorized dealer, authorized SLM Service Center, or SLM Electronics. All units being returned to SLM Electronics must be accompanied by a detailed description as to needed repairs, a copy of the original sales receipt, and an SLM Electronics return authorization. SLM Electronics reserves the right to repair or replace this piece of equipment at their option.

SLM Electronics is not liable for any incidental or consequential damages resulting from any defect or failure of this instrument other than the repair of the SLM Electronics product subject to the terms of this warranty. This limited warranty gives you specific legal rights, and you may have other rights which vary from state to state. This warranty is expressly in lieu of all other agreements and warranties, expressed or implied, except as may be otherwise required by law.

