

AMPEG MODELS ST 42L ST 25L AND ST 22L COLOSSUS, OLYMPIAN, AND GLADIATOR SOLID-STATE PORTAFLEX AMPLIFIERS.

Colossus - 4 twelve inch Altec Lansing speakers Olympian - 2 fifteen inch Altec Lansing speakers Gladiator - 2 twelve inch Altec Lansing speakers

Output power: 100 watts R.M.S.

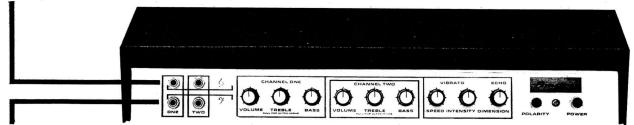
230 watts peak music power

You have purchased a fine Ampeg instrument and with proper care it will give you years and years of dependable service. Be sure to follow the instructions below.

1. Release the cabinet clamps and withdraw the shock-mounted amplifier.

- 2. Remove the double footswitch control from its spring-loaded receptacle inside of the cabinet, and put aside. More about this later.
- 3. Invert and reclamp the lid. The control panel may face in either direction.
- 4. Connect the speaker cable to the receptacle on the side of the cabinet, making certain the pins line up properly. Do not force this connection, let the keyway be your guide.
- 5. With all amplifier controls at zero, and with the power switch off, plug the line cord into any 105-125 volt, 50-60 cycle AC power source. Do not use any other line voltage or severe damage will be done.
- 6. Plug your instrument cable into the appropriate input on the panel. All Ampeg Portaflex amplifiers (except model SB-12) are two channel amplifiers, each channel having its own set of volume and tone controls. While more than one instrument can be played through an amplifier at the same time, let us consider its use with a single instrument for the present.

The upper jacks, marked with a treble clef, will work nicely with treble instruments such as guitar or any instrument with a magnetic pickup. For more deptch, use the lower jacks. The lower jacks, marked with a bass clef, are recommended for bass instruments with either crystal or magnetic instruments. Any stereo equipped instrument may use upper or lower jacks of channels one and two.



Although the "ST" series is designed primarily for electric guitar, other instruments may be used with exceptional results. Accordionists and organists, for example, enjoy its strong bass response, especially on the left hand, where a mellow, deep sound is desired. Guitarists also appreciate not only the great depth, but also the treble dimension made possible by the ultra high switches. More about the ultra high control later.

- 7. To turn on the amplifier, flip the toggle switch marked "Power" upward. The pilot bulb will light and the control panel will glow.
- 8. The polarity switch will eliminate the 60 cycle hum that is present in all AC power lines. Simply plug your cable into any input on either channel (do not connect the instrument). Slowly turn up the volume for that channel, when a hum is audible, flip the polarity switch to the position of least hum.

IMPORTANT: Reduce the volume setting to zero before plugging the free end of the cable into your musical instrument.

9. Turn the volume and tone controls of your musical instrument, all the way up. Always keep them at, or very near maximum while making preliminary adjustments.

Begin raising your volume control while at the same time testing on the lowest string (the open E). Pick the open E-string, using what you believe will be your strongest plectrum attack, (for the accordion, test the volume level using your strongest bellows attack) and gradually bring the volume to its ultimate level just before distortion occurs. Always keep your controls below this overload point. If you hear a slapping sound you are inviting a blown speaker. Cut back on the volume immediately. Once these settings have been determined you may then feel free to turn down the controls of the instrument itself to achieve your normal working level. Should it be desirable to raise your volume for solo performance, you'll still be operating in the safe range. This procedure cannot be overemphasized. It will prevent you from inadvertently raising your instrument controls beyond the overload point of the speaker.

BASS AND TREBLE CONTROLS

10. Separate bass and treble controls enable you to obtain the most critical balance of tone. The treble control, when turned to the extreme right, provides full "normal" treble. The bass control, when turned to the extreme right, provides the ultimate in bass response.

ULTRA HIGH SWITCHES

11. For still stronger treble, the "ST" series is provided with "ultra-high" switches built into the treble controls on both channels. To bring into play, simply pull outward on the control knobs. The ultra-high switches may be pulled at any degree of treble setting on either channel.

IMPORTANT: Bear in mind that an increase in treble or bass settings will also increase your volume. Thus, if you are operating at full output (before distortion) a higher setting of any controls may carry you beyond the overload point. If you feel you need more treble or bass, lower the volume control at the amplifier correspondingly, thus keeping volume and tone controls in balance.

- 12. ECHO is available on either or both channels by gently pulling out the volume controls. The amount of echo dimension is regulated with the echo dimension control.
- 13. Either VIBRATO or TREMOLO are provided on channel one only, and are selected by means of the knob marked INTENSITY. In normal position the VIBRATO is on; pulling the intensity knob turns on the TREMOLO.
- 14. The SPEED and INTENSITY of either VIBRATO or TREMOLO is regulated with the knobs so marked.
- 15. Double Footswitch

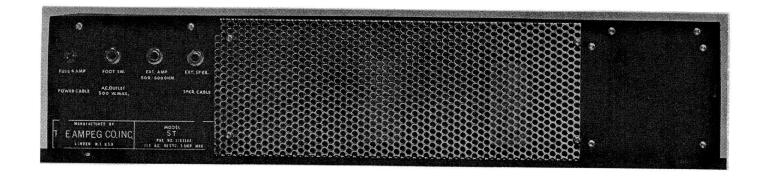
The special effects may be operated manually at the control panel, or by presetting them for the sounds desired, you may turn them on or off as needed with the double foot switch.

You may also turn the echo effect on or off with the footswitch. As mentioned previously, the volume controls on both panels are the "pull for echo" knobs and must be preset at the control panel to be used with the footswitch.

However, the vibrato, tremolo and echo may also be operated separately without the double footswitch at the control panel.

Plug the double footswitch into the input so marked on the rear of the chassis. Place the footswitch on the floor in your performance area. Depress the switch buttons accordingly for the effects desired.

Experimentation with the double footswitch will enable you to achieve many musical effects while performing without having to stop and readjust the controls at the amplifier.



16. Extension amplifier operation: Another method of increasing power and sound distribution is to plug one end of the cable into the rear jack marked "ext amp," then plug the other end into the input (on the front panel) of any auxiliary amplifier. Before playing, adjust the volume on the auxiliary amplifier to zero, adjust the ST to desired level, then advance volume on the auxiliary amplifier to obtain the desired level.

Another method possible with 2 ST series amplifiers is to use a regular guitar cable -- inserting it into the "Ext Amp" jack on each chassis. Then -- any instrument connected to either amplifier will play through both amplifiers at equal level. Adjustment of controls on the first amplifier only is required. The controls on the second amplifier may be set to zero.

- 17. Recording: Another feature of your "ST" series amplifier is its advantage in recording. The "ext. amp" jack has an output impedance of 500/600 ohms which is standard in most professional recording studios. The engineer can feed your pure signal directly into his console, eliminating balance problems common when a microphone is set up in front of the speaker enclosure. Just tell the the engineer that the output voltage from your "ext. amp" jack is 1 volt R.M.S. max. at 500/600 ohms.
- 18. It is advisable to use your voice microphone on one channel (plug into the bass input) and your instrument on the other. A little experimenting will quickly determine the adjustments necessary. If you are using only one channel, leave the controls of the unused channel on zero.
- 19. Most Ampeg PORTAFLEX models are equipped with detachable shock-mounted dollies. Important: Remove dolly while amplifier is in use. Because the dolly will absorb vibrations, it will also absorb sound waves. There is a definite gain of power if the amplifier has a solid footing. You may get enough power with the amplifier on the dolly, but the speaker is working harder than it should.

CARE AND MAINTENANCE

A dampened, soapy sponge will quickly clean the tough, durable vinyl covering of your PORTAFLEX. The grill cloth may be tightened, if necessary, by a heat lamp or hot plate (or electric iron) held several inches from the surface, and kept in motion, applying just enough heat to shrink. The grill cloth should also be brushed occasionally with a soft bristle brush, especially if the unit is used in a dusty location.

TROUBLESHOOTING

A common trouble in instrument amplification is caused by faulty external connections. Standard phone jack cables receive considerable abuse during performances, and loss of power (or gain) or an uneven tone quality can often be traced to a damaged cable. It is wise to carry a spare cable.

Included with the instruction literature is a complete list of <u>Certified AMPEG Service Centers</u>. Should you encounter any difficulty with your equipment, please contact the Ampeg service center in your area for a complete continuity check. A complete wiring diagram is included.

A final reminder, do not forget to check the position of the polarity switch to obtain minimum hum.

Feel free to contact us on any questions you may have, and include the serial number of your equipment in any correspondence.

