



AC25

OPERATION MANUAL

Thank you for purchasing an Andrews Amplifier. The AC25 is designed to deliver classic British “Class A” tones while providing greater versatility and improved reliability.

As with all Andrews amps, these models are built to the highest standards of craftsmanship and are finely tuned for the ultimate tone. This manual will help you to get the most from your new amp. Please feel free to contact us with any questions at andrewsamps.com

FEATURES;

- **HAND-WIRED CONSTRUCTION** – Also sometimes called “point-to-point” wiring, the Spectraverb amps utilize a very high-quality turret board made of super-tough G10 composite. This glass-epoxy laminate is specified for its extremely high strength and dimensional stability over temperature. The extra-thick board material will never warp or melt, and there are no copper traces to peel away from the board over time. All wiring and soldering is done by hand and quality-checked to ensure many years of trouble free operation.
- **AMERICAN-MADE TRANSFORMERS** – We utilize only the best transformers to meet our specifications. They are chosen for superior tone and are rated to withstand extreme heat for high reliability. Output impedance is available at 4, 8 or 16 ohms. The custom wound power transformer is designed for optimal voltage to allow the EL84 output tubes to operate within their design parameters which extends tube life and reduces tube failures.
- **CUSTOM DESIGNED CHASSIS** – Our durable light-weight welded aluminum chassis is designed specifically for our amp models so that every part can be mounted in the optimal location for lowest noise and highest stability.
- **CUSTOM DESIGNED CABINET** – Our cabinets are specially designed for maximum durability and superior tone. The cabinet components are precision cut and are hand assembled with care. Finger joints are used at the edges for maximum strength. Tube ventilation is improved compared to vintage designs.
- **CUSTOMIZABLE GAIN** - The AC25 contains a “trim pot” to alter the range of the gain of the amp. For those who prefer a cleaner tone or for those who prefer more overdrive, in internal adjustment is provided. It comes from our shop preset to a medium setting. Please refer this adjustment to qualified technician.

Warnings and Precautions

During operation, vacuum tubes can reach temperatures over 400 degrees F. Do not touch hot tubes. Insure plenty of ventilation behind the amp. Keep the amp away from children as well as curtains and other flammable objects.

Do not expose your amplifier to rain. Never set any cups, glasses, bottles or cans of liquid on your amplifier.

Do not use any solvents to clean your amplifier.

Never operate your amplifier without a proper speaker load or damage may occur. See the section about the rear panel features for more information.

Make sure the amplifier is always properly grounded. Never remove or defeat the ground pin from your power cord. Always unplug the amplifier before changing tubes or fuses.

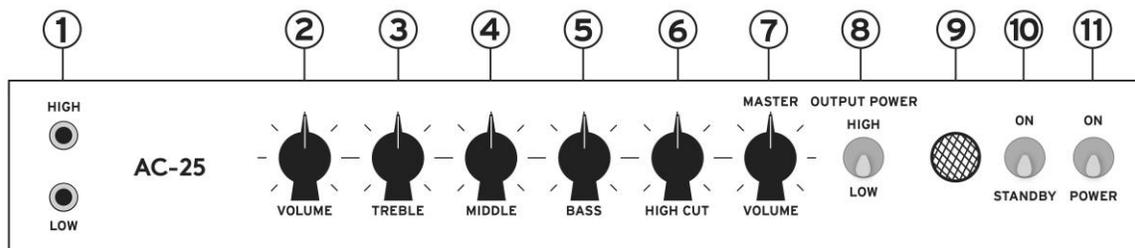
Use only correctly rated fuses. See the rear panel description of this manual for proper fuse ratings.

This amplifier can create high sound pressure levels. Please use proper hearing protection and/or maintain an adequate distance from the amplifier to avoid hearing damage.

Tube amps contain lethal voltages (even when unplugged). There are no fuses or other user serviceable parts inside. Please refer servicing to qualified service personnel.

Never insert any tool or other object into ventilation holes, tube sockets or other openings unless instructed to do so in this manual. Otherwise, you may come in contact with dangerous high voltages inside the chassis.

Front Panel



- 1. INPUT JACKS** – For maximum versatility, we have provided two input jacks (labeled High and Low). The HI jack provides a bit more drive and sensitivity. The LO jack provides a slight (6dB) attenuation and is useful when a cleaner and slightly darker tone is desired, especially with high output pickups.
- 2. VOLUME CONTROL** – Use this control to adjust the volume and gain of the amp. Try using the other input jack to widen the range of the Volume control
- 3. TREBLE CONTROL** - This control varies the amount of treble. At high settings, it also decreases the amount of bass.
- 4. MIDRANGE CONTROL** – The Midrange control adjusts the midrange level.
- 5. BASS CONTROL** – This control varies the amount of bass. In general, it is suggested to increase the bass setting as the master volume is turned down to compensate for the way the human ear hears bass at different volume levels.
- 6. HIGH CUT CONTROL** – This acts as an additional treble control and is placed in the power amp circuit rather than the preamp. Turning the control counterclockwise will filter highs from the power amp. Try various combinations of treble and high cut settings to achieve the desired tone at various volume and gain settings and various guitars.
- 7. MASTER VOLUME CONTROL** – This controls the overall output volume of the amp. Use this in conjunction with the Volume Control to dial in the desired amount of crunch at the overall volume to fit your situation. For even more flexibility, switch the output power to allow your favorite Master Volume setting at the correct sound level for your situation. For the cleanest tone, it's recommended to keep the Master Volume setting high and the power on High while dialing down the Volume Control.

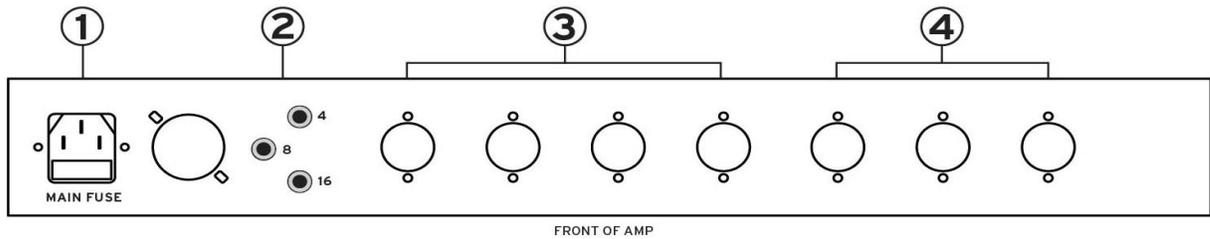
- 8. OUTPUT POWER SWITCH** – The high-power setting selects all four EL84 output tubes and produces about 25 watts. Switching to low power turns off two of the output tubes and produces 10 or 14 watts. *Turning off two tubes actually changes the output impedance of the amp. To compensate, it is recommended to move the speaker plug from the 8 ohm jack to the 4 ohm jack. Doing so will allow the amp run most efficiently in the low power setting and will produce about 14 watts. If the low power mode is selected without changing the speaker plug position, the amp will produce around 10 watts. Also, the output tubes may run a little hotter and could have a reduced lifespan. Using the amp in the 10 watt mode is generally safe for the amp but we recommend against long term use at that setting for the sake of the tubes.*

- 9. PILOT LIGHT** – This light indicates when the main power is turned on. For bulb replacement, simply unscrew the red lens, grab the bulb with your fingers, push in while turning counterclockwise and release. Replace with a standard #47 or #755 bulb or LED equivalent. The lens thread fits many standard lamp lenses and “jewels” allowing you to customize the color if you desire.

- 10. STANDBY SWITCH** – This switch turns on the high voltage for the tubes amp in the standby mode. It is a good idea to place the amp in standby when taking a break to extend the life of the tubes and to allow the amp to cool.

- 11. POWER SWITCH** – This switch turns on the main power to the amplifier. Always turn off the POWER switch when not using the amp for a couple of hours or more.

Rear Panel



1. POWER CONNECTOR & FUSE – Always use correctly rated 3 amp slow blow fuse or severe damage to the amp may occur. Always unplug the amp before replacing any fuses. The main AC fuse is located in the AC cord jack. Use a small screwdriver to remove the fuse holder.

2. SPEAKER JACKS – Three speaker jacks are provided. One each for 4, 8 and 16 ohms. The built-in speaker is rated at 8 ohms so it should normally be plugged into the 8 ohm jack but can be plugged into the 4 ohm jack when operating the amp in the low power mode. See instructions for Front Panel. The wiring of these three jacks can be customized for other combinations. For example, the 16 ohm jack can be converted to an additional 4 ohm jack so the amp can be used with it's built-in speaker and an additional 8 ohm speaker cabinet at the same time. *NEVER OPERATE THE AMPLIFIER WITHOUT A SPEAKER CONNECTED OR DAMAGE MAY OCCUR AND THE WARRANTY WILL BE VOID.*

In the chart below, keep in mind that the built-in speaker is 8 ohms and is considered to be one cabinet.

Connection	For One Cabinet	For Two cabinets
4 ohm jack	One 4 ohm cabinet	Two 8 ohm cabinets
8 ohm jack	One 8 ohm cabinet	Two 16 ohm cabinets
16 ohm jack	One 16 ohm cabinet	

3. OUTPUT TUBES – Matched set of EL84 tubes

4. PREAMP TUBES – 12AX7/ECC83 tubes

TUBE REPLACEMENT

Precautions:

Always unplug the amplifier and allow the tubes to cool completely before touching them.

The AC25 is designed with cathode biasing. This means bias adjustments are not necessary when replacing tubes. When purchasing EL84 output tubes, be sure to purchase matched quads and replace all four together. Also, for maximum tube life, request a set with “lower plate current”.

When to replace tubes:

Preamp tubes such as 12AX7 will generally last for many thousands of hours but occasionally problems can develop before they “wear out”. If you hear crackling, popping, humming, ringing, or other strange noises, try replacing your preamp tubes one at a time. This may resolve the problem. Preamp tubes can be replaced individually at any time without any adjustment.

Output tubes usually have a shorter life. They will often start to sound bad long before they fail. If you notice that your amp is gradually losing volume, headroom or “punch”, or if you notice that low notes are sounding a little “flabby”, it might be time for a new matched set of high-quality output tubes. This could happen after a several months or it might take several years depending on how much the amp is played.

Similar symptoms can be caused by a worn-out speaker so be sure to try the amp on another cabinet to be sure.

Sometimes an output tube will fail before it “wears out”. A tube failure will usually result in blown fuse. If you find a blown fuse in your amp, the most likely cause is a bad output tube. If your amp is blowing fuses, try a new matched set of output tubes.

Always use the correct fuse rating.

LIMITED WARRANTY – Valid in USA and Canada only

Andrews Amp Lab Inc. warrants this product to be free of defects in materials and workmanship for a period of five (5) years from the original date of purchase **to the original purchaser**. For subsequent owners, the length of warranty shall be for a period of 1 year *from the original date of purchase*. During the warranty period, in the unlikely event that a defect occurs, Andrews Amp Lab will at its discretion, repair or replace the product at no charge to you for parts or labor. You must provide a copy of the original purchase receipt in order to receive warranty service.

What is covered:

- All components other than vacuum tubes and footswitches are covered for the periods listed above.
- Vacuum tubes and footswitches are covered for a period of 90 days from the original date of purchase.

What is not covered:

- Any damage due to abuse, accident, improper AC power, lightening, AC power surge, flood, moisture, rain, solvents and other liquids, fire, smoke, improper connections, improper bias adjustment, improper service, defective tubes not installed Andrews Amp Lab or it's authorized agent or normal wear and tear
- Any amp with altered, defaced or removed serial numbers
- Any product that has been altered or modified in any way not authorized in writing by Andrews Amp Lab Inc.
- Andrews Amp Lab Inc. shall not be liable for any consequential and/or incidental damages.

How to obtain warranty service: Contact Andrews Amp Lab to arrange for service by calling 770-671-0485 or e-mailing amps@andrewsamplab.com or check the web at andrewsamplab.com or andrewsamps.com for the latest contact information. After confirming warranty status, send or bring your amp to the location specified. If shipping, you are responsible for the cost of getting the amp to us and we will pay the return shipping costs.