



Instruction Manual



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All Carr Amplifiers are warranted to be free from defects in workmanship for the lifetime of the original owner, and free from defects in materials for three-years from the date of purchase by the original owner, provided that:

- The owner mails the signed warranty card to Carr Amplifiers within thirty-days of purchase.
- Problems are not the result of misuse, abuse, tampering, or spilled beverages, as these will void the warranty.
- The amplifier is shipped to Carr Amplifiers, with freight paid by the purchaser.

Note: The tubes & speaker(s) carry a ninety-day warranty, and are subject to the same terms and conditions as the above.

DETACH & MAIL



Carr Amplifiers Owner's Registration

MODEL: _____

SERIAL NUMBER: _____

PURCHASED FROM: _____

CITY & STATE: _____

PURCHASER'S NAME: _____

PURCHASER'S ADDRESS: _____

DATE OF PURCHASE: _____

TYPE OF MUSIC YOU USUALLY PLAY: _____

HOW YOU FIRST HEARD ABOUT CARR AMPLIFIERS: _____

YOUR ADDITIONAL COMMENTS ARE INVITED: _____

I have read and understand the terms and conditions of the warranty agreement as set forth in the owner's manual.

Signed: _____ Date: _____

The above must be signed and dated to validate the warranty.

Tone Controls

Clean Channel (El Moto Imperial, Slant 6V & Rambler)

- Volume
- Treble
- Middle—set to 10 o'clock for classic American '60's tone, or all-the-way up for vintage '50's tone.
- Bass
- Reverb—adjusts reverb volume.
- Tremolo (Imperial & Rambler)—adjust DEPTH & SPEED to control amount and rate of tremolo effect.

Distortion Channel (El Moto & Slant 6V)

- Volume—set higher for more distortion, set lower for a vintage tweed sound.
- Gain Switch (between "Volume" and "Master")—flip toggle switch up for low gain, flip down for gain boost (a brighter, punchier sound).
- Master—adjusts overall volume for distortion channel.
- Treble
- Middle—turning this up really pushes the overdrive.
- Bass

SLANT 6V

Impedance Selector & Power Selector

When adjusting the impedance and power settings, the amplifier should be set to **STANDBY**. Located on the back panel, the **IMPEDANCE** selector switch should be used to match the output impedance of the amplifier to the impedance of the internal speaker or external speaker cabinet. The impedance switch works in tandem with the **FULL POWER/HALF POWER** switch, and should be adjusted accordingly. Proper settings optimize the amplifier's performance and produce a fuller, richer tone.

- For **FULL POWER** setting, match **IMPEDANCE** selector to speaker load. For example, when using an 8 Ω speaker, set the impedance selector to 8.
- For **HALF POWER** settings (fixed bias or cathode bias, see below), set impedance selector to ½ speaker load. For example, when using a 16 Ω speaker, set impedance selector to 8.
- When using an external speaker cabinet, note the cabinet's impedance. If the external speaker cabinet's impedance is 8 Ω , set the impedance selector to 8 for the full-power setting, and to 4 for half-power settings.

Fixed Bias

- This half-power setting delivers a punchy attack, with more power than the cathode bias setting, for a tight, crisp sound.

Cathode Bias

- This setting takes advantage of the power tubes' inherent, natural compression, giving plentiful sustain and tasty harmonic distortion while giving the player both more "feel" and control over the amp's dynamics.

RAMBLER

Note: The tremolo effect is on all the time unless a foot switch is plugged into the TREMOLO pedal jack in middle of bottom panel.

Triode/Pentode Switch

Set amp to **STANDBY** before switching between **TRIODE & PENTODE** settings.

- **PENTODE**—Provides a bright, crisp tone with more presence, using the amp's full power.
- **TRIODE**—Gives a more buttery, mellow tone, delivering about ½ the power of the pentode setting; the amp treats the output tubes as triodes resulting in a decrease in power, but an increase in pleasant, even-order harmonics.

EL MOTO

Impedance Selector

When adjusting the impedance setting, the amplifier should be set to **STANDBY**. Located on the bottom panel, the **IMPEDANCE** selector switch should be used to match the output impedance of the amplifier to the impedance of the internal speaker or external speaker cabinet.

- For maximum power output, match **IMPEDANCE** selector to speaker load.

Drive Control

- Varies the phase inverter's gain characteristics to change the amp's tonal balance. Setting 1 gives a tight and focused sound; setting 2 gives more crunch and a more open sound; setting 3 gives a loose, full-spectrum sound with the most output tube distortion.

Master Volume

- The El Moto has a post phase inverter master volume that is active over both channels. Use in conjunction with either channel's volume control to set overall volume and tone.

IMPERIAL

Note: The tremolo effect is on all the time unless a footswitch is plugged into the footswitch jack in the middle of bottom panel. Set amp to standby before switching between TRIODE & PENTODE settings.

TRIODE/PENTODE Switch

- **PENTODE**—provides a bright, crisp tone with more presence, using the amps full power.



Welcome to Carr Amplifiers

“Combining the best of proven electron tube technology with state-of-the-art components for a timeless sound.”

By incorporating the best new components into the design of a tube amplifier, Carr Amplifiers blends the past and present to make the best sound possible. Each amplifier is completely hand-wired, and uses proven tube design features such as tube rectification, while offering innovative features such as fixed and/or cathode bias (the Slant 6V), and modern, durable components such as polypropylene filter capacitors.

Although each model provides a variety of features, sensible design makes operation effortless, and the amazing tonal range of Carr Amplifiers sets them apart as individuals on a stage full of sound-alike compromises.

— READ THIS BEFORE OPERATING! —

Operation Basics

- Make sure amp is plugged into speaker or speaker cabinet.
- Plug in control pedal (Slant 6V, El Moto, Imperial, & Rambler).
- Plug instrument into INPUT.
- Make sure that STANDBY switch is set to STANDBY. Turn power switch to one of the ON positions. This allows the tubes to warm up.
- After amp has warmed-up for one minute, flip the STANDBY switch. If there is noise from interference, flip the ON switch to the position that results in least noise.
- Adjust tone controls to desired setting and play.

Read the next section for more detailed operation instructions.

Start-up Procedure (All Models)

- Make sure that STANDBY switch is set to STANDBY. Turn power switch to one of the ON positions. This allows the tubes to warm up. After one minute, flip the standby switch to begin playing. Note: Set switch to STANDBY when taking a break from playing to save wear on tubes when not in use. By using your STANDBY switch you will significantly lengthen the life of your output tubes.
- The ON/OFF switch also acts as a polarity reversal switch. To eliminate any shocks or ground loops from other equipment such as a PA, microphones, or other amplified instruments, set the switch to the position that results in less noise.

Inputs

- Plug instrument in.

Speaker Outputs

- Use to connect speaker or speakers (such as an external cabinet) to the amp. Outputs are wired in parallel. To find correct impedance when using both speaker outputs, use the impedance and resistance in parallel formula: Total Resistance (R_{total}) = $(R1 \times R2)/(R1 + R2)$. For example, the formula for using an 8 Ω speaker cabinet in addition to an 8 Ω internal speaker would be: $R = (8 \times 8)/8 + 8$. So, the resistance would be 4 Ω .

- TRIODE—gives a more buttery, mellow tone, delivering about ½ the power of the pentode setting; the amp treats the output tubes as triodes resulting in a decrease in power, but an increase in pleasant, even order harmonics.

Boost

This feature allows you to increase the gain of the amp when more volume is necessary, such as during solos, lead passages, and chunky Texas-style rhythm playing.

- Activate the gain boost with the footswitch or toggle switch on the amp itself.

Note: The toggle switch on the amp is inactive if the footswitch is plugged in. Also, a separate button on the footswitch activates the tremolo.

- Adjust the amount of volume increase through the BOOST control on the amp.

Impedance Selector

Note: When adjusting the impedance setting, the amplifier should be set to STANDBY.

Located on the chassis inside the cabinets back panel, the IMPEDANCE selector switch should be used to match the output impedance of the internal speakers and/or external speaker cabinet. Looking at the back of the amp, the 8 Ω setting is inside left, with the two-position toggle switch towards the power cord, and the 4 Ω setting is to the right. The Imperial's speakers are wired in parallel to give a punchy, “American-style” sound.

- For the 2x12 Imperial combo amp, the switch should be set to 8 Ω . When using an 8 Ω external speaker cabinet in combination with the Imperial's internal speakers, set the switch to 4 Ω .
- For the 4x10 Imperial combo amp, the switch should be set to 4 Ω . If using an external speaker cabinet in combination with the Imperial's internal speakers, contact the factory for instructions. To use an external speaker cabinet instead of the Imperial's internal speakers, simply set the selector switch to the impedance of the external speaker cabinet (4 Ω or 8 Ω).

HAMMERHEAD

Impact

- This four-position selector lets you increase the brightness and punch of the amp as the setting is increased from 1 to 4. Setting 2 adds brightness, while setting 3 & 4 extend into the midrange as well, providing yet more punch to your sound.

Grip

Two elements are involved in this feature: a pre-amp gain boost to increase the presence of the sound, and a power-section cathode bias to increase the sharpness or edge.

- The pre-amp operates with greater & greater gain from settings 1 to 3, then setting 4 combines maximum pre-amp gain with the power section cathode bypass circuit for a sharper edge.