CARR AMPLIFIERS



OWNER'S MANUAL

Revised 03 Dec 2008

Hammerhead Mk II Instructions

Thank you for purchasing a Carr Hammerhead Mk II amplifier. The Hammerhead Mk II employs a pure and simple circuit keeping tone and gain modifiers (Impact and Grip) out of the direct signal path. The Tone control can be switched in or out of the signal path for added flexibility. Tones from clean with grit to very heavy output tube overdrive are easily dialed in using our unique controls. The Hammerhead Mk II has roots in 50s and 60s eclectic American and British amplifiers combined with superior construction and modern cutting edge components. Give yourself time to experiment with the 5 controls. You will find the Hammerhead Mk II covers a surprising amount of sonic ground.

<u>Volume</u> – Controls the drive of the amplifier. Settings below 11 o'clock will yield different shades of clean tones while higher settings will bring the amp to overdrive (for the average output pickup).

Impact – Using a parallel circuit the 4 position Impact allows you to select from

- 1) flat response
- 2) high treble emphasis like a 'blackface' style amp
- 3) high treble and upper midrange emphasis like a metal face early 70s British amp
- 4) high treble and full midrange emphasis like a late 60s British style amp

The Impact control is interactive with the Volume control and will have maximum effect when the Volume is at 3 o'clock and below.

<u>Master</u> – Controls how much of the preamp signal gets to the power tubes. Typically a setting of 10 o'clock or higher yields the best tone. You will get more output tube overdrive and bass response at higher Master settings.

We recommend starting with the Master set very high and then bringing up the Volume to set overall loudness (see Recommended Settings). From this point, you can roll down the Master and/or roll up the Volume to find the perfect combination of volume, drive, and tone.

<u>Grip</u> – This 4 position switch increases preamp gain and drive from position 1 to 3. Position 4 maintains the gain level of position 3 while adding more focused response to the leading edge of notes.

<u>Tone</u> —When you turn the Tone control clockwise you will feel a click as it activates. The Tone control starts in the bass position. Turning the control further clockwise will allow more high frequencies through. The Tone control works by rolling off the high end and is similar to a variable cut switch. You will find that having the Tone set at 12 o'clock gives the closest approximation of a 'blackface' type of sound. For maximum gain, switch the Tone control to the OFF position.

<u>Standby</u> – Set amp to standby (switch baton *down*) before turning on the power switch (see *On-Off-On* below). After 1 minute of warm up, switch the Standby baton *up*. The amp is ready to be played. Using the Standby switch every time the amp is turned on will prolong tube life.

 $\underline{\mathbf{On} - \mathbf{Off} - \mathbf{On}}$ – Selects between two ON positions (one is wired in opposite phase of the other) and the OFF position. If you receive a shock from another piece of equipment such as a microphone or another amp, or hear line noise static, switch to the opposing ON position.

Bottom Panel

<u>Fuse</u> – In the unlikely event that a tube fails, the amp is protected by a 1.5 Amp slow blow fuse for 120v and 100v (North America and Japan) models, or a 0.75 Amp slow blow fuse for 220v and 230v-240v (SE Asia and Europe) models. Please consult us or a qualified tech for further instruction or assistance in the event of a fuse blowing. The fuse is located on the bottom of the chassis by the power cord.

<u>Speaker output jack</u> – The Hammerhead Mk II is designed for 8-ohm loads. Maximum power and tone will be realized when running an 8-ohm speaker or cabinet. The speaker output jack is located between the power and the preamp tubes on the bottom of the chassis (see *Chassis Diagram*). To run an external cabinet, turn the Hammerhead OFF, unplug the Hammerhead's internal speaker, and plug in the external cabinet's speaker cord.

The Hammerhead will work with a 16 or 4 ohm cabinet with the following caveat - you will loose a little power from the impedance mismatch, and the power tubes will have to work a bit harder and thus age faster. You can also use a Y speaker cord to run an external cabinet along with the internal speaker without damage to the amp. Damage will result from operating the Hammerhead without a speaker load.

Biasing your Hammerhead Mk II

The Hammerhead Mk II is a cathode bias (self bias) amp and as such does not require a bias adjustment when changing tubes. Please use well-matched pairs of output tubes for maximum performance. The Hammerhead can only use matched pairs of EL-34, KT77, KT88, or 6550 power tubes.

Carr Amplifiers selects and tests the finest current production tubes specifically for each amplifier model. Caution should be used when buying replacement tubes from any dealer who does not have a return policy as all tubes can have problems (NOS tubes are susceptible to microphonics and failure too).

Recommended Settings

Humbucker

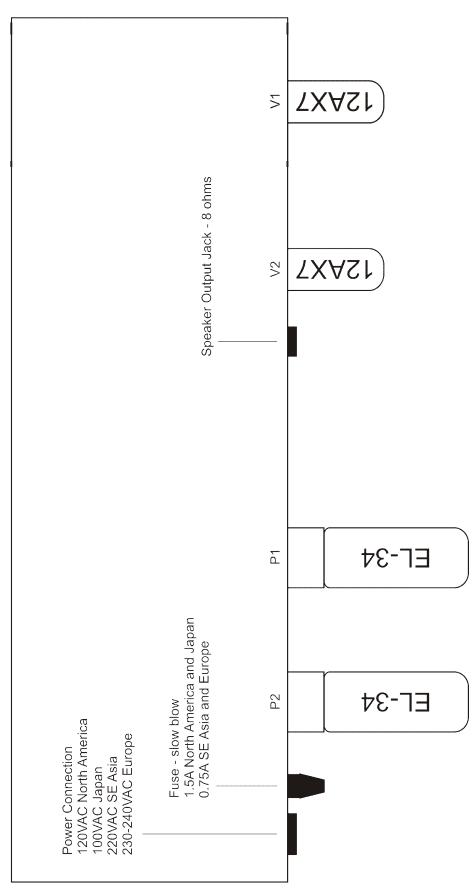
Pickup	Sound	Volume	Impact	Master	Grip	Tone
Bridge	Dark TX Tone					Off
Bridge	Rock		*			Off
Bridge	Australia		*		4	Off
Bridge	Jangle Crunch	*	4	•	*	•
Both	Groove	-	•	•	*	
Neck	Blues	•	*		•	Off

Single Coil

Pickup	Sound	Volume	Impact	Master	Grip	Tone
Bridge	Bark				•	Off
Bridge	Driven Clean				4	Off
Bridge	Rock	•				Off
Bridge	Rockin' Apartment		*	*	*	•
Neck	Blues	-	•		*	•
Neck	Tough Jazz	•	•			*

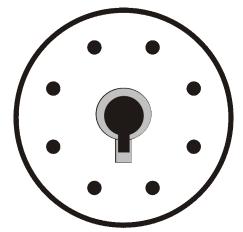


CARR AMPLIFIERS CHASSIS DIAGRAM



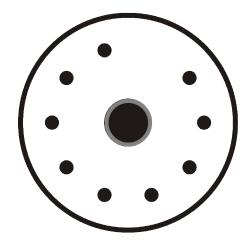
IMPORTANT REMINDERS

- Please keep the original packing materials in case your amp needs to be shipped for service. Ask your dealer if they did not provide them.
- When inserting power tubes, the power tube key <u>must</u> line up with the tube socket keyway.



Do not insert power tubes with missing or damaged keys or pins.

 When inserting preamp tubes, the tube pins <u>must</u> line up with the tube socket holes.



Do not insert preamp tubes with missing or damaged pins.

- To reduce the risk of electric shock, keep the unit away from excess moisture.
- No user serviceable parts inside.
- Potentially lethal voltage present.

CARR AMPLIFIERS WARRANTY

All Carr amplifiers are warranted to be free from defects in workmanship (solder joints, hardware assembly etc.) for the lifetime of the original owner, and free from defects in materials (including cabinet) for three years from the date of purchase by the original owner, provided that:

- The owner mails the signed warranty registration card (next page) and a copy of the original sales receipt to Carr Amplifiers within thirty days of purchase.
- Problems are not the result of misuse, abuse, tampering, circuit modification, improper tube installation (incorrect orientation of tubes can damage the amp), or spilled beverages, as these will void the warranty.
- The amplifier is shipped to Carr Amplifiers in the original packing materials with freight paid by the purchaser. We pay the return shipping after the warranty work is complete.

Tubes, speaker(s), and reverb tanks carry a ninety-day warranty, and are subject to the same terms and conditions as above.

Please call us at 919-545-0747 if you have a warranty claim. Be prepared to provide the model and serial number of your amp. We will issue a Return Merchandise Authorization number (RMA#) before the amplifier is shipped for service.

For customers outside of North America, warranty and repair service is provided through the dealer where the amp was purchased.

Shipping address:

Carr Amplifiers 23 Rectory St., Suite E Pittsboro, NC 27312

Mailing address:

Carr Amplifiers 433 W. Salisbury St. Pittsboro, NC 27312

Tel: 919-545-0747 **Fax:** 919-545-0739

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