

# HLH SERIES HD 100



AMPLIFIER HEAD

Your 3RD POWER Amplifier is a professional musical instrument amplifier. The information contained herein is current at the time of publication. However, specifications are subject to change without prior notice.

#### **PRECAUTIONS & WARNINGS**

- READ THESE INSTRUCTIONS.
- KEEP THESE INSTRUCTIONS.
- HEED ALL WARNINGS.
- FOLLOW ALL INSTRUCTIONS.
- YOUR AMPLIFIER IS LOUD!
   EXPOSURE TO HIGH SOUND VOLUMES MAY CAUSE PERMANENT HEARING DAMAGE!
   Practice "safe listening."
- No user serviceable parts inside. Refer service to qualified personnel. Always unplug AC power before removing chassis.
- IF YOU INTEND ON OPERATING THIS EQUIPMENT OUTSIDE OF THE USA: Always insure that unit is wired for proper voltage. Make certain all connections and grounding conforms with local standards. Make certain that you have obtained authorization to operate prior to connecting to power supply.
- WARNING: Vacuum tube amplifiers generate heat. To insure proper ventilation always make certain there is at least four inches (100mm) of space behind the rear of the amplifier cabinet.
- Keep away from curtains or any flammable objects.
- WARNING: Do not block any ventilation openings on the rear or top of the amplifier. Do
  not impede ventilation by placing objects on top of the amplifier which extend past the
  rear edge of its cabinet.
- WARNING: Do not expose the amplifier to rain, moisture, dripping or splashing water. Do not place objects filled with liquids on or nearby the amplifier.
- WARNING: Always make certain proper load is connected before operating the amplifier. Failure to do so could pose a shock hazard and may result in damage to the amplifier.
- Do not expose amplifier to direct sunlight or extremely high temperatures.
- Always insure that amplifier is properly grounded. Always unplug AC power cord before changing fuse or any tubes. When replacing fuse, use only same type and rating.
- Avoid direct contact with heated tubes. Keep amplifier away from children.
- Be sure to connect to an AC power supply that meets the power supply specifications listed on the rear of the unit. Remove the power plug from the AC mains socket if the unit is to be stored for an extended period of time. If there is any danger of lightning occurring nearby, remove the power plug from the wall socket in advance.
- To avoid damaging your speakers and other music equipment, turn off the power of all related equipment before making the connections.
- Do not use excessive force in handling control buttons, switches and controls. Do not
  use solvents such as benzene or paint thinner to clean the unit. Wipe off the exterior with
  soft cloth.

CAUTION: To reduce the risk of electric shock, do not remove any cover. No user-serviceable parts inside. Refer servicing to qualified service personnel only.

The lightning flash with arrowhead symbol within the equilateral triangle is intended to alert the use to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying this amplifier.

CAUTION

To prevent electric shock, do not use this polarized plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

#### **MOVING FORWARD... IN 3D**



Thank you for choosing 3RD POWER as an integral component of your musical journey.

Music is a thrilling blend of tone, attitude and technique. When the right combination occurs, magic happens and it's experienced by everyone.

I've had the extraordinary

privilege of performing music for 30 years on stage and in the studio. As the principal visionary of the company, every product we design reflects my energy, attitude and life experiences.

Each amplifier we create is designed to help you tell your musical story - IN 3D!!!

Rock on!
- James Scott





#### **Special Features:**

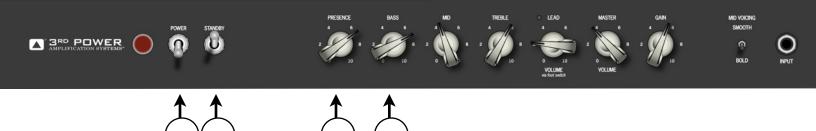
- Hand-built and hand-wired in the USA
- Single Channel All-Tube design
- 100 watt, EL34 Power Amp section
- Mid Voicing Switch, Preamp Gain, Master Volume, Solo Volume, Treble, Middle, Bass, and Presence controls
- Variable Line Output on back panel
- Series Insert/Effects Loop for external effects units
- Foot-switchable Lead Clean Boost (power amp boost)

# **Dimensions & Weights:**

Subject to change anytime. Please measure your amp carefully if a Custom Case is being made. These measurements do not include handle and rubber feet.

Dimensions (WxHxD): 29 x 10.75 x 8.375 in. Weight: 41 lb.

#### **Front Panel:**



# Preparing to Operate your HD100

Make certain that all connections are made prior to operating your HD100 including power cable, speaker cable and cabinet, instrument cable and instrument. Make certain that all tubes are installed.

# Power Switch (1)

The POWER switch, when placed in the UP position, provides AC wall power to the amplifier.

# Standby Switch (2)

The STANDBY switch, when placed in the UP position, puts the amplifier in 'standby mode' allowing the tubes to warm up. When this switch is place in the DOWN position, the tube circuitry is fully functional.

#### Presence Control (3)

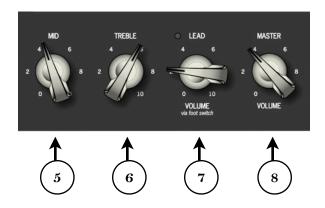
The PRESENCE control allows you to adjust the character or 'forwardness' of your sound. Low settings create 'darker' tones, whereas higher settings create a 'brilliant' or crisp sound.

#### **Bass Control (4)**

The BASS control allows you to adjust the depth of your lower frequencies. The BASS circuitry has been optimized to provide deep, rich low frequencies while retaining outstanding agility and note definition.

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#### **Front Panel:**



## Mid Control (5)

The MID control allows you to adjust the character of the middle frequency range. The MID circuitry has been optimized to deliver a wide range of mid frequency character so your tone cuts through the mix without sounding harsh.

#### Treble Control (6)

The TREBLE control allows you to adjust the character of the higher frequency range. The TREBLE circuitry has been optimized to deliver excellent high frequency character while retaining a smooth temperament.

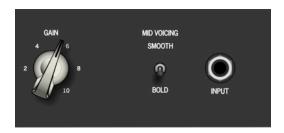
## Lead Volume Control (7)

The LEAD VOLUME control allows you to increase the overall output level without changing your tone or distortion character. When made operational via foot-switch (separately available) this control is additive to the MASTER VOLUME control and allows you to 'step out' for solos without missing a note.

#### **Master Volume Control (8)**

The MASTER VOLUME control allows you to set the loudness of your amplifier. The MASTER circuitry has been optimized to deliver incredibly linear response from your amplifier. Even at low setting, your tone is rich, wide and full of punch. Raising this control simply increases the volume without changing the tonal character of your sound.

#### **Front Panel:**









# Preamp Control (9)

The PREAMP control allows you to adjust the temperament and overall character of the distortion sound. The PREAMP circuitry has been optimized to provide superior versatility allowing you to achieve the superior classic rock, americana and modern metal sounds, as well as the highly coveted 'brown' sound.

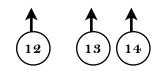
## Mid Voicing Switch (10)

The MID VOICING switch allows you to set the tonal center and character of the middle frequency range. In the SMOOTH position, the tone controls deliver the exact EQ points of a classic British tube amplifier from the late '60's. In the BOLD position, the tone controls deliver an articulated middle frequency response with tighter lows providing a finished/mastered or 'fader up' sound quality that is ideal for modern guitarists and soloists wether on stage or in the studio.

## Input Jack (11)

The INPUT jack is where you connect the output of your guitar signal path.





# AC Input (12)

The AC INPUT socket (TYPE IEC Grounded) is a required connection for operating your HD100 at 117V (standard USA household electrical power).

# Mains Fuse (13)

The MAINS FUSE requires a 4 AMP fast-acting fuse. This fuse protects your amplifier from voltage peaks from your power outlet.

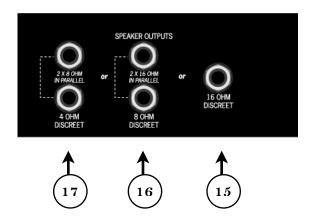
## H.T. Fuse (14)

The H.T. FUSE requires a 1 AMP slow-blow fuse. The H.T. FUSE usually blows if your power amp tubes are bad to protect the circuit from being damaged.

#### **SAFETY NOTES:**

- 1) Always plug your amp into a properly grounded 3 prong AC outlet.
- 2) Never plug your amp into an ungrounded outlet.
- 3) Never remove or break off the 3rd prong safety ground pin from the power cord.
- 4) Never use a damaged or ungrounded power cord.
- 5) Always use the proper value and type fuse according to the rearpanel markings.

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## 16-OHM Discreet Speaker Output (15)

The 16-OHM DISCREET SPEAKER OUTPUT is provided for connecting your amplifier to standard 16 OHM speaker cabinets.

# (2) 8-OHM Discreet Speaker Output (16)

The two (2) 8-OHM DISCREET SPEAKER OUTPUTs are provided for connecting your amplifier to single 8-OHM speaker cabinet or for connecting two (2) 16-OHM speaker cabinets in parallel.

# (2) 4-OHM Discreet Speaker Output (17)

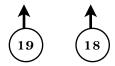
The two (2) 4-OHM DISCREET SPEAKER OUTPUTs are provided for connecting your amplifier to single 4-OHM speaker cabinet or for connecting two (2) 8-OHM speaker cabinets in parallel.

Never operate your amplifier without a connected speaker cabinet. This will damage your tubes or transformers - or both.

Always operate your amplifier with the proper impedance output that matches your cabinets(s).

In all cases, always use a good quality heavy gauge speaker cable (not a shielded instrument cable) to connect your HD100 to the speaker cabinet(s).



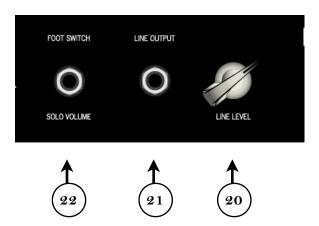


# Preamp Out (19)/ Poweramp In (18) Jacks

The PREAMP OUT and POWERAMP IN jacks are available to insert professional line-level effects devices. This type of effects loop is best described as a 'hard insert' or 'break' type of loop. PREAMP OUT connects to the input of your effects device. POWERAMP IN connects to the output of your effects device.

When connected to a professional line-level effects device, the amplifier breaks the connection between the preamp and poweramp. Signal levels and mix of the DRY/WET signals are controlled by the effects device. Take care to optimize your gain structure in order to retain a high-quality, low-noise signal. When not connected, there is no break internal to the amplifier allowing the amplifier to operate as designed.

This type of insert effects-loop is the best type for retaining the purity of the amplifier performance as there are no buffers or level matching circuitry to color your sound. The trade off is acknowledged to be less versatile in certain circumstances. However, the purity of the sound quality is the overriding requirement.

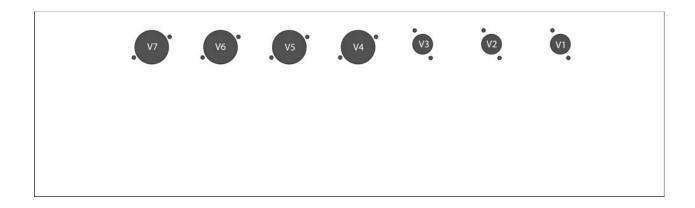


# Line Output (20) and Line Level Control (21)

The LINE OUTPUT jack and LINE LEVEL control work together to provide a line-level signal for feeding other amplifiers or effects devices. The signal present at this jack originates directly from the output transformer.

## Foot Switch for Solo Volume (22)

The SOLO VOLUME footswitch jack activates the front-panel SOLO VOLUME control. This provides you with the ability to 'step out' when performing live making sure that every note you play is heard in the mix. The circuitry is designed to operate with a latching-type of footswitch.



## **Tube Layout and Requirements:**

V1, V2 - JJ 12AX7-S V3 - Sovtek 12AX7-LPS V4 through V7 - JJ E34L output tubes

## Bias Adjustment

Your HD100 comes from the factory biased for JJ E34L tubes. Bias adjustments are not intended to be user-serviceable. Attempting to adjust the bias yourself will expose you to very dangerous high-voltage electricity that can kill you. Special test equipment and knowledge of amp circuits and tubes are required to perform this function. DO NOT ATTEMPT TO DO THIS YOURSELF.

#### **Tube Replacement**

Make sure you turn your amp off when you switch tubes and be careful, the tubes might be very hot!! Do not touch tube sockets with fingers! Even after turning your amp off and unplugging it from the power outlet there could be enough voltage stored in the capacitors to give you a lethal electrical shock.

#### **WARNING:**

- 1) Do not remove the back panel.
- 2) Do not attempt to check or replace tubes yourself. Refer to an authorized service center.
- 3) Never touch the tubes while the amplifier is turned on or has recently been turned ON. You can severely burn your fingers and hands.

#### LIMITED PRODUCT WARRANTY

Thank you for choosing 3RD POWER Amplification. 3RD POWER takes great pride in producing high-quality tube amplifiers and speaker cabinets. Each product is thoroughly tested prior to shipment.

The HD100 is warranted to the original purchaser to be free from defects in material and workmanship for the first 33-1/3 years to the original purchaser. An original sales receipt will establish coverage under this warranty. This warranty does not cover service or parts to repair damage caused by accident, neglect, abuse, normal wear, disaster, misuse, over-powering, negligence, inadequate packing or shipping procedures and service, repair or modifications to the product which have not been authorized by 3RD POWER. If this product is defective in materials or workmanship as warranted above, your sole remedy shall be repair or replacement as provided below.

**Tubes:** 3RD POWER warrants the original purchaser that the tubes used in the HD100 will be free from defects in material and workmanship for a period of 90 days from the original purchase date. A dated sales receipt will establish coverage under this warranty. This warranty is in lieu of all other expressed warranties. If tubes fail within the initial 90 day period your sole remedy shall be the replacement of tubes as provided below.

Return Procedures: In the unlikely event that a defect should occur, follow the procedure outlined below. Defective products must be shipped, together with proof of purchase, freight pre-paid and insured directly to 3RD POWER. A Return Authorization Number must be obtained prior to shipping the product. Contact 3RD POWER to obtain this RA number. Products must be shipped in their original packaging or equivalent. IN any case, the risk of loss or damage in transit is borne by the purchaser. The RA number must appear in large print directly below the shipping address. Always include a brief description of the defect, along with your correct return address and telephone number.

When calling to inquire about a returned product, always refer to the RA number. If 3RD POWER determines that the unit was defective in materials or workmanship at any time during the warranty period, 3RD POWER has the option of repairing or replacing the product at no additional charge, except as set forth below. All replaced parts become property of 3RD POWER. Products replaced or repaired under this warranty will be returned via ground shipping within the United States, freight prepaid. 3RD POWER is not responsible for costs associated with expedited shipping, either to 3RD POWER or returned of the product to the customer.

Incidental or Consequential Damage: In no event will 3RD POWER be liable for any incidental or consequential damages arising out of the use or inability to use any 3RD POWER product, even if a 3RD POWER dealer has been advised of the possibility of such damages or any other claim by any other party. Some states do not allow the exclusion or limitation of consequential damages, so the above limitation and exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which may vary from state to state.

For your protection: Please complete and mail the Purchase Information Card within (10) ten days of the date of purchase so that we may contact you directly in the event a safety notification issued in the accordance with the 1972 Consumer Product Safety Act.

Customer Support: Our dedicated staff is ready to assist you should you have any questions with regard to your product. Please call: (615) 945-3393 (9:00 AM to 5:00 PM Monday through Friday, Central Standard Time).



#### **3RD POWER Amplification LLC**

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Web Site

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