# Hartke HD 75 HD 150

**HD Series Bass Guitar Combos** 





**Owner's Manual** 

## Important Safety Information



AVIS
RISQUE DE CHOC ÉLECTRONIQUE NE PAS OLIVRIR

WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) AS THERE ARE NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of non-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 an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.

#### **EMC Notice**

HD75, HD150 are Active Speakers for professional use, they can be used in following electromagnetic environment: residential, commercial and light industrial, urban outdoors. They are the apparatus Not intended for rack mounting.

- For HD75, the peak inrush current equals to 9.31A.
- For HD150, the peak inrush current equals to 1.44A.

#### **FCC Notice**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1)this device may not cause harmful interference, and (2)this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



If you want to dispose this product, do not mix it with general household waste. There is a separate collection system for used electronic products in accordance with legislation that requires proper treatment, recovery and recycling.

Private household in the 28 member states of the EU, in Switzerland and Norway may return their used electronic products free of charge to designated collection facilities or to a retailer (if you purchase a similar new one).

For Countries not mentioned above, please contact your local authorities for a correct method of disposal.

By doing so you will ensure that your disposed product undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health.

#### **Important Safety Information**

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid

injury from tip-over.

- Unplug the apparatus during lightening storms or when unused for long periods of time.
- 14. Refer all servicing to qualified personnel. Service is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15. This appliance shall not be exposed to dripping or splashing water and that no object filled with liquid such as vases shall be placed on the apparatus.
- Caution-to prevent electrical shock, match wide blade plug wide slot fully insert.
- 17. Please keep a good ventilation environment around the entire unit.
- To prevent injury, this apparatus must be securely attached to the stand in accordance with the installation instructions.
- 19. WARNING: The battery (battery or batteries or battery pack) shall not be exposed to excessive heat such as sunshine, fire or the like.
- 20. CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

#### Introduction

Thank you for purchasing the Hydrive HD75 or HD150 Bass Combo Amplifier from Hartke! We know you don't like reading owners manuals, but you've just purchased one of the finest bass combos around, and we want to tell you about it. So, before you plug in and start playing, we'd like to suggest you take just a few moments to scan these pages.

The HD75 is a compact combo featuring a 75-watt amp with a 12" Hydrive Series speaker and a 1" tweeter. The HD150 has a 150-watt amp with a 15" Hydrive Series speaker and a 1" tweeter. Hartke Hydrive transducers are a radical change, and improvement, in bass speaker technology. The unique hybrid cone speaker is constructed using an outside paper cone, producing deep and warm low frequencies, and an inside aluminum cone which produces mids that cut, yet are still sweet. The versatility of the Hydrive HD Combos makes them ideal for bassists playing jazz, funk, country, roots rock, metal or for whatever style you create.

In these pages, you'll find a description of the many features of your Hydrive bass amplifier combo, instructions for setting up and using the amp, plus full specifications. If you purchased the amplifier in the United States you will also find a warranty card enclosed—please don't forget to fill it out and mail it so that you can receive online technical support and so we can send you updated information about this and other Hartke and Samson products in the future. Also, be sure to check out our website (www.hartke.com) for complete information about our full product line.

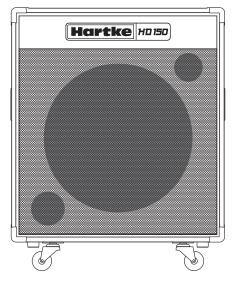
We recommend you keep the following records for reference, as well as a copy of your sales receipt.

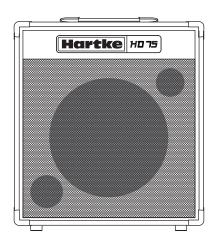
| Serial number:      |  |
|---------------------|--|
| Date of purchase: _ |  |
| Dealer name:        |  |

With proper care and maintenance, your Hydrive HD Combo will operate trouble-free for many years. Should the product ever require servicing, a Return Authorization (RA) number must be obtained before shipping your unit to Samson. Without this number, the unit will not be accepted. Please call Samson at 1-800-3SAMSON for an RA number prior to shipping your unit. Please retain the original packing materials and, if possible, return the unit in its original carton. If your HD75 or HD150 was purchased outside of the United States, contact your local distributor for warranty details and service information.



#### **Features**

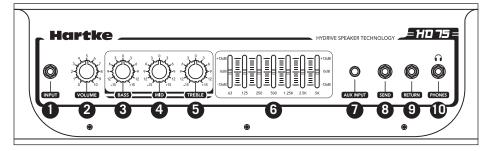




The Hartke HD Series offers all the state-of-the-art speaker technology as well as robust amplification in an extremely compact size and affordable price. Here are some of its main features:

- The HD75 delivers 75 Watts of power to its specially designed 12" Hydrive bass speaker and 1" tweeter
- The HD150 delivers 150 Watts to its specially designed 15-inch Hydrive bass speaker and 1" tweeter
- Input accommodates a broad range of input levels, so that you can use passive model basses or those with active circuitry.
- 7-band graphic EQ plus bass, mid, and treble controls to create a broad range of tonal colors.
- Dedicated 3.5 mm line input is included allowing you to hook up a portable CD or MP3 player to practice along with.
- Line-level effects loop send and return jacks to connect to professional outboard effects processors.
- The HD150 features an electronically balanced direct output for routing signal to mixing consoles in both live performance and recording environments.
- Headphone output automatically disconnects the speaker output allowing use as a high-quality practice amp.
- Built-in limiter protects the speaker and amplifier from overload.
- Rugged construction makes the HD Series eminently road-worthy.
- The HD150 includes four rolling casters to help transport the amplifier.

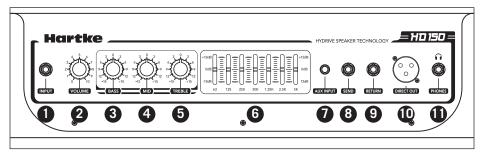
#### **HD75 Top Panel Controls**



- INPUT Connect your bass guitar here using a standard ¼" unbalanced instrument cable.
- VOLUME Control This is the overall volume control. For best signal-to-noise ratio, keep the output of your bass at or near maximum and adjust the VOLUME to the desired level.
- **3. BASS Control** This control is used to adjust the low frequency response. As it is turned clockwise the frequency area is boosted; as it is turned counterclockwise the frequency area is attenuated.
- **4. MID Control** This control is used to adjust the mid frequency response. As it is turned clockwise the frequency area is boosted; as it is turned counterclockwise the frequency area is attenuated.
- **TREBLE Control** This control is used to adjust the high frequency response. As it is turned clockwise the frequency area is boosted; as it is turned counterclockwise the frequency area is attenuated.
- **6. Graphic Equalizer -** These sliders allow you to "draw" the tonal response of the system by adding 12 dB of boost or attenuation to seven different frequency bands.
- AUX INPUT Use this 1/8" input to connect a line level device like a portable CD or MP3 player.
- 8. Effect SEND jack Use this ¼" unbalanced jack to send signal from the HD75 to outboard effects processors. In-line effects, such as stomp boxes, intended for low signal levels should be placed between the bass and the amplifier input and not connected with the Effect Send and Return jacks. You can also use the Effect Send jack to route signal to an external mixing console or amplifier with an input sensitivity of +4 dB.
- **9. Effect RETURN jack** Use this ¼" unbalanced jack to return low impedance signal to the HD75 from an outboard effects processor.
- **10. Headphones jack** Connect headphones to this standard ½" jack. When a plug is inserted into the headphone jack, the speaker output is disconnected, allowing you to use your HD75 as a practice amplifier.

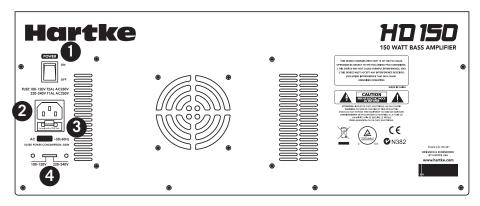


#### **HD150 Top Panel Controls**



- INPUT Connect your bass guitar here using a standard ¼" unbalanced instrument cable.
- VOLUME Control This is the overall volume control. For best signal-to-noise ratio, keep the output of your bass at or near maximum and adjust the VOLUME to the desired level.
- **3. BASS Control** This control is used to adjust the low frequency response. As it is turned clockwise the frequency area is boosted; as it is turned counterclockwise the frequency area is attenuated.
- **4. MID Control** This control is used to adjust the mid frequency response. As it is turned clockwise the frequency area is boosted; as it is turned counterclockwise the frequency area is attenuated.
- **TREBLE Control** This control is used to adjust the high frequency response. As it is turned clockwise the frequency area is boosted; as it is turned counterclockwise the frequency area is attenuated.
- **6. Graphic Equalizer -** These sliders allow you to "draw" the tonal response of the system by adding 12 dB of boost or attenuation to seven different frequency bands.
- **7. AUX INPUT -** Use this 1/8" input to connect a line level device like a portable CD or MP3 player.
- 8. Effect SEND jack Use this ¼" unbalanced jack to send signal from the HD150 to outboard effects processors. In-line effects, such as stomp boxes, intended for low signal levels should be placed between the bass and the amplifier input and not connected with the Effect Send and Return jacks. You can also use the Effect Send jack to route signal to an external mixing console or amplifier with an input sensitivity of +4 dB.
- **9. Effect RETURN jack** Use this ¼" unbalanced jack to return low impedance signal to the HD150 from an outboard effects processor.
- 10. DIRECT OUT (XLR connector) This standard, balanced male XLR connector provides a line-level output signal from the HD150 amplifier for connecting to mixing consoles or recording interface.
- 11. **Headphones jack** Connect headphones to this standard ¼" jack. When a plug is inserted into the headphone jack, the speaker output is disconnected, allowing you to use your HD75 as a practice amplifier.

#### **Rear Panel Controls**



- Power Switch Use this to power the amplifier on or off. When powered on, the switch illuminates red.
- AC Inlet Attach the grounded AC power cord here to connect your amplifier to mains power. This cord comes supplied with the appropriate plug for your geographic area.
  - CAUTION: Do not use an adapter to defeat the third grounding pin on this plug or severe electric shock may result!
- **3. Fuse Holder** The fuse holder comes from the factory with the appropriately rated fuse for your model. If you need to change this fuse for any reason, replace it with one that has the same exact rating.
- **4. Voltage Selection Switch -** This switch is used to select the amplifiers operating voltage
  - NOTE: Before using your speaker, be sure the voltage selection switch is set to the correct voltage for your country. Be sure to install the properly rated fuse when changing the operating voltage.

#### **Quick Start**

Setting up your Hartke HD Series Combo Bass Amplifier is a simple procedure which takes only a few minutes:

- Remove all packing materials and decide where the amplifier is to be physically placed.
- 2. Before you plug-in the power cable, be sure the Power switch is in the off position. Connect the supplied power cable to the AC inlet located on the rear panel. Then, plug-in the 3-pin AC plug into any grounded AC socket.
- **3.** Use a standard ¼" instrument cable to connect your bass to the Input jack on the front panel.
- **4.** On the top panel of the amplifier, turn the Volume the minimum (fully counterclockwise) position, set all EQ knobs to their twelve o'clock position and the 7-band graphic EQ sliders to the center position.
- **5.** Press the rear panel Power switch in order to turn on the amplifier.
- **6.** Set the output of your bass to maximum and then, while playing, slowly turn the Volume control up until the desired level is achieved.
- **7.** Adjust the equalization controls to taste.
- **8.** Test the headphone output by turning the Volume control to its minimum (fully counterclockwise) position and then connect a pair of headphones to the top-panel Phones jack. While playing your bass, slowly turn the Volume control up, you should hear sound from the headphones and none from the connected speaker.
- 9. The HD Series amplifier features an AUX INPUT that you can use with a portable CD or MP3 player to play with prerecorded tracks. You can plug any line level signal into the AUX INPUT including the signal from a keyboard or drum machine. Connect the line level device to the AUX INPUT using standard 1/8" cable. You will need to use the volume control on the input device to set the balance between the track and your bass. So, start with the volume control all the way down and slowly raise it until you reach a good balance with your bass.

## **Using Equalization**

The Hartke Systems HD Series Bass Amplifier gives you control over shaping the sound of your bass, using a process called equalization. To understand how this works, it's important to know that every naturally occurring sound consists of a broad range of pitches, or frequencies, combined together in a unique way. This blend is what gives every sound its distinctive tonal color. The HD Series EQ controls allow you to alter a sound by boosting or attenuating specific frequency areas - they operate much like the bass and treble controls on your hi-fi amp, but with much greater precision.

The HD75 and HD150 offer three bands of equalization. Each EQ knob, labeled Bass, Mid, and Treble, affects a different frequency area of the audio. We carefully selected these frequency areas because they have maximum impact on bass guitar signals. The Bass and Treble controls are shelving EQs, which provide boost when the control is moved clockwise from the center or cut when the control is moved counterclockwise from the center. The Mid EQ control is a passive, cut-only, circuit designed to provide a response that is flat to a mid-scoop.

The seven-band graphic equalizer provides seven sliders, each corresponding to a single narrow frequency band. This allows you to "draw" the desired tonal response of your system. When a slider is in its 0, center detent position, it has no effect to the audio signal. When it is moved above center (towards +12), the particular frequency area is being boosted; when it is moved below center (towards -15), the frequency area is being attenuated.

In many instances, the best way to deal with equalization is to think in terms of which frequency areas you need to attenuate, as opposed to which ones you need to boost. Be aware that boosting a frequency area also has the effect of boosting the overall signal; specifically, too much Low EQ boost can actually cause overload distortion or even harm the connected speaker.

The specific EQ you will apply to your bass signal is very much dependent upon your particular instrument and personal taste and playing style.

However, here are a few general suggestions:

For reggae or Motown sound, boost the Bass EQ slightly while attenuating the Treble EQ.

To remove boxiness and make your instrument sound more "hi-fi," attenuate the Mid EQ control.

For a twangy sound that cuts, try boosting the Treble and slighting rolling off the Bass EQ control.

As you experiment with the EQ controls of the HD Series, don't forget that your bass also provides significant EQ control in the form of its pickup and tonal settings—this can be particularly effective in instruments that have active circuitry.



## **Specifications**

**Rated Output Power** 

HD75 75 w (1 kHz, 16 ohm, 1% THD) HD150 150 w (1 kHz, 4 ohm, 1% THD)

Rated Input Level (@ 1 kHz)

HD75 44.6mv rms HD150 38.8mv rms

Total Harmonic Distortion (@ 1 dB below rated output, 1 kHz typical)

HD75 0.32% HD150 0.6%

Signal To Noise Ratio (1 Wrms @ 1 kHz)

HD75 1W/62dB HD150 1W/62dB

Signal Gain Speaker Output

HD75 35V HD150 24.5V

Signal Gain to Direct Out and Send Jack

HD75 Send Out: 545mV

HD150 Direct Out: 7.6V; Send Out: 900mV

Equalizer BASS, MID, TREBLE Center Frequency
Bass 50 Hz
Mid 700 Hz
Treble 10 kHz

Seven-Band Graphic EQ Frequencies 63Hz, 125Hz, 250Hz,

500Hz, 1.25kHz, 2.5kHz, 5kHz

**Fuse Rating** 

HD75 220V-240V:T1.5AL AC250V 100V-120V:T800mAL AC250V

HD150 220V-240V:T2AL AC250V

100V-120V:T1AL AC250V

Weight

HD75 48.2 lb

24.7 kg

HD150 57.8 lb

26.2 kg

Dimensions (HxWxD)

HD75 19.9" x 18.6" x 13.9"

506 mm x 472 mm x 353 mm

HD150 (without wheels) 23.6" x 21.5" x 13.89"

599 mm x 545 mm x 353 mm

At Hartke, we are continually improving our products, therefore specifications and images are subject to change without notice.

## Hartke

45 Gilpin Avenue Hauppauge, New York 11788-8816 Phone: 1-800-3-SAMSON (1-800-372-6766) Fax: 631-784-2201

ax: 631-784-2201 www.hartke.com