

electro-harmonix

15WATT HOWITZER **Guitar Preamp & Power Amp**

Congratulations on your purchase of the **15WATT HOWITZER** guitar amplifier! The 15Watt Howitzer produces an ample 15 watts but is small enough to throw in a bag and carry anywhere. At 15 watts, the Howitzer's sweet sound and extreme portability will make it an integral part of any rig. The 15Watt Howitzer was designed for guitar but can handle other instruments as well. It includes a preamp section with GAIN, BASS, MID, and TREBLE controls to dial in your perfect sound. The BRIGHT switch adds a bit more sparkling highs to your output. An FX Loop, on the SEND/RETURN jacks, allows for effects to be placed between the 15Watt Howitzer's preamp section and VOL knob. Please read this manual to get the most out of your 15Watt Howitzer.

WARNING: THE 15Watt Howitzer IS A POWER AMP, NOT AN EFFECTS PEDAL. Do not connect the OUTPUT 8-16 Ω jack of the 15Watt Howitzer to the input of another amplifier, effects pedal, mixer, computer, computer interface or other similar device. Connect the output of the 15Watt Howitzer to an 8 -16 Ω speaker cabinet ONLY.

CONTROLS

VOL Knob – Controls the volume or loudness of the amplifier. As you turn the VOL knob clockwise, the 15Watt Howitzer's output gets louder. This knob acts as a master volume control and interacts with the GAIN knob to set the output level.

GAIN Knob – This knob controls the amount of gain and overdrive that is generated by the preamp. As you turn GAIN clockwise, the overall signal will get louder and start to distort. When the knob is turned fully clockwise, the sound will be a warm overdriven tone. **WARNING:** as you turn the GAIN knob up, the output level might increase significantly, compensate by turning down VOL.

BASS Knob – Controls the loudness of low frequencies in the preamp section of the amplifier. As you turn BASS up, the low-end increases.

MID Knob – Controls the mid frequency loudness in the preamp section of the amplifier. As you turn MID up, the middle frequency band increases in level.

TREBLE Knob – This knob controls the loudness of high frequencies in the preamp section of the amplifier. As you turn TREBLE up, the high-end increases.

BRIGHT/NORM Switch – When engaged, the BRIGHT switch adds a subtle top boost or presence to your signal. When in the NORM position, the top boost is defeated.

CONNECTIONS

INPUT Jack – Plug the output of your guitar, effects pedal or any other instrument into the INPUT jack using a standard ¼" instrument cable. The input impedance presented at the INPUT jack is 1 MΩ.

SEND/LINE OUT Jack – The SEND/LINE OUT jack outputs the Howitzer's preamp section. Connect SEND/LINE OUT to the beginning of your FX loop or use it as a direct output.

The SEND/LINE OUT jack is post preamp but before the VOL knob. If used as a line output—with nothing plugged into the RETURN jack—sound will still be produced from the speaker connected to the OUTPUT 8-16 Ω jack. The output impedance of the SEND/LINE OUT jack is 470Ω.

RETURN Jack – The RETURN jack connects directly to the power amp section of the Howitzer. Plug your FX loop output into the RETURN jack.

The RETURN jack can also be used as a direct input into the power amp. Plug directly into the RETURN jack to bypass the Howitzer's preamp section. When using the RETURN jack as a direct power amp input, the preamp section will not effect the tone. The VOL knob still controls the overall loudness of the amp and the BRIGHT/NORM switch provides a slight high-end boost to the Return signal. The input impedance presented at the RETURN jack is 1 MΩ.

OUTPUT 8–16Ω Jack – Connect the 15Watt Howitzer's OUTPUT jack directly to a speaker cabinet with impedance of 8Ω – 16Ω only.

24VDC/1.0A POWER Jack – See the following page for information on powering your 15Watt Howitzer.

NOTES & SPECIFICATIONS

- Audio input impedance at INPUT and RETURN jack: 1MΩ
- Audio output impedance at SEND/LINE OUT jack: 470Ω
- Output power at OUTPUT 8-16Ω jack: 15W at 8Ω
- Current draw: 1A at 24.0VDC

POWER

WARNING: NEVER CONNECT THE **OUTPUT 8–16Ω** JACK OF THE 15WATT HOWITZER TO THE INPUT OF ANOTHER AMPLIFIER, AN EFFECTS PEDAL, MIXER, COMPUTER, COMPUTER INTERFACE OR OTHER SIMILAR DEVICE.

We recommend using a speaker cable between the 15Watt Howitzer OUTPUT and speaker cabinet as you would with any power amplifier, though you can use an instrument cable if necessary. The impedance of the speaker cabinet must be rated between 8Ω and 16Ω (Ω = ohms). 8Ω is the ideal load for the Howitzer. Additionally, the speaker cabinet must have a power rating equal to or greater than the Howitzer's output power capability. We recommend a speaker cabinet with at least a 15W rating.

WARNING: Make sure the 15Watt Howitzer's output is connected to a speaker cabinet before applying power.

24VDC/1.0A POWER Jack – Connect the output plug from the 15Watt Howitzer's supplied power supply to the power jack at the top of the unit. We highly recommend using the power supply that the Howitzer was supplied with. The polarity of the power jack is center-positive.

WARNINGS – PLEASE READ

THE 15WATT HOWITZER IS A POWER AMP, NOT AN EFFECTS PEDAL: Connect the OUTPUT 8–16Ω jack of the Howitzer to a speaker cabinet only. DO NOT CONNECT THE OUTPUT OF THE HOWITZER TO THE INPUT OF ANOTHER AMPLIFIER, EFFECTS PEDAL, MIXER, COMPUTER, COMPUTER INTERFACE or similar device.

SPEAKER CABINET: Only plug the OUTPUT 8–16Ω jack of the 15Watt Howitzer into a speaker cabinet rated for an impedance in the range of 8Ω to 16Ω (8 to 16 ohms); the speaker cabinet power rating should be 15W or greater.

OUTPUT FIRST THEN POWER: Connect the output of the 15Watt Howitzer to a proper speaker cabinet before applying power to the Howitzer. If you connect the Howitzer to a speaker cabinet while it is powered up, the Howitzer may automatically mute its output to prevent a short circuit on the output jack. In this situation, simply remove power from the Howitzer, wait a few seconds and then re-apply power to the Howitzer, it should then work normally.

WARRANTY INFORMATION

Please register online at <http://www.ehx.com/product-registration> or complete and return the enclosed warranty card within 10 days of purchase. Electro-Harmonix will repair or replace, at its discretion, a product that fails to operate due to defects in materials or workmanship for a period of one year from date of purchase. This applies only to original purchasers who have bought their product from an authorized Electro-Harmonix retailer. Repaired or replaced units will then be warranted for the unexpired portion of the original warranty term.

If you should need to return your unit for service within the warranty period, please contact the appropriate office listed below. Customers outside the regions listed below, please contact EHX Customer Service for information on warranty repairs at info@ehx.com or +1-718-937-8300. USA and Canadian customers: please obtain a **Return Authorization Number (RA#)** from EHX Customer Service before returning your product. Include—with your returned unit—a written description of the problem as well as your name, address, telephone number, e-mail address, RA#, and a copy of your receipt clearly showing the purchase date.

United States & Canada

EHX CUSTOMER SERVICE
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To hear demos on all EHX pedals visit us on the web at www.ehx.com

This warranty gives a purchaser specific legal rights. A purchaser may have even greater rights depending upon the laws of the jurisdiction within which the product was purchased.

COMPLIANCE

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.

Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC rules.



The CE logo indicates that this product has been tested and shown to conform with all applicable European Conformity directives.