



GERMANIUM⁴ BIG MUFF PI

Dual Vintage Distortion and Overdrive

Congratulations on your purchase of the GERMANIUM⁴ BIG MUFF PI. The GERMANIUM⁴ BIG MUFF PI is a new and versatile overdrive/distortion that captures the essence of the warm sound unique to the germanium transistors from the '60s. The GERMANIUM⁴ BIG MUFF PI is two independent circuits, one a distortion and one an overdrive, each with completely independent controls. The two circuits can be used separately or together. Each circuit has its own independent ON/OFF bypass footswitch.

-CONTROLS-

DISTORTION SIDE: The DISTORTION side can be used independently or with the OVERDRIVE side. When both sides are ON, the DISTORTION side precedes the OVERDRIVE side in the signal chain. The DISTORTION utilizes two germanium transistors and is capable of going from clean - to a gritty overdrive - to a full on distortion and beyond.

GAIN CONTROL – This knob adjusts the amount of preamp gain for the DISTORTION side of the pedal. As you turn the GAIN knob clockwise the distortion and volume will increase dramatically.

BIAS CONTROL – This knob adjusts the character of the distortion by changing the bias of the signal before it is distorted by the Germanium transistors. Turning the BIAS knob counter-clockwise will result in a more mellow and compressed tone. Turning the BIAS knob clockwise will result in an edgy and more aggressive tone.

VOLTS CONTROL – This knob adjusts the amount of voltage supplied to the DISTORTION side only. When the VOLTS knob is turned fully clockwise, the circuit is receiving the full voltage. Turning the VOLTS knob counter-clockwise will simulate a dying battery. As the voltage is lowered, the signal will become more compressed, and start to clip, creating a wide

range of sonic textures to work with. NOTE: As the VOLTS knob is turned, the sound may momentarily dip in volume as the signal adjusts to the new voltage setting.

VOLUME CONTROL – This knob controls the output level of the DISTORTION side of the pedal. Fully counter-clockwise will produce no sound. As the VOLUME knob is turned clockwise, the output level will increase to its maximum volume at the full clockwise setting.

OVERDRIVE SIDE: The OVERDRIVE side can be used independently or with the DISTORTION side. When both sides are ON, the OVERDRIVE side follows the DISTORTION side in the signal chain. The overdrive utilizes two germanium transistors and can go from a nice fattening boost to a warm overdrive. The overdrive reacts differently to different input levels. Using hotter pickups, or having the DISTORTION side on will add a variety of tonal options.

GAIN CONTROL – This knob adjust the amount of gain in the two germanium transistor preamp gain stage for the OVERDRIVE side. The gain will increase as the GAIN knob is turned clockwise. Overall, there is less gain available on this side than the DISTORTION side. The overall character of the gain will change depending on how the BIAS control is set.

BIAS CONTROL – This knob adjusts the character of the distortion by changing the bias of the signal in the preamp section of the overdrive circuit. When the BIAS knob is at noon, the sound will be the clearest and most dynamic. When the BIAS knob is fully counter-clockwise, the sound will be more compressed. When the BIAS knob is fully clockwise, the sound will start to clip and can add a great vintage grit to the overdrive.

TONE CONTROL – This knob is a single knob tone control. As the TONE knob is turned clockwise, the tone of the OVERDRIVE side will change from a low end emphasis to a high end emphasis.

VOLUME CONTROL – This knob controls the output level of the OVERDRIVE side of the pedal. Fully counter-clockwise will produce no sound. As the VOLUME knob is turned clockwise, the output level will increase to its maximum volume at the full clockwise setting.

STATUS LED and FOOTSWITCH (DISTORTION) – When this LED is lit; the GERMANIUM⁴ BIG MUFF PI DISTORTION effect is active. When the LED is off, the DISTORTION side is in True Bypass Mode. The footswitch engages/disengages this effect. The footswitch controls the true bypass ON/OFF for the DISTORTION side.

STATUS LED and FOOTSWITCH (OVERDRIVE) – When this LED is lit; the GERMANIUM⁴ BIG MUFF PI OVERDRIVE effect is active. When the LED is off, the OVERDRIVE side is in True Bypass Mode. The footswitch engages/disengages this effect. The footswitch controls the true bypass ON/OFF for the OVERDRIVE side.

INPUT Jack – Connect your instrument to the input jack. The input impedance of the GERMANIUM⁴ BIG MUFF PI is 200K ohms.

OUTPUT Jack – Connect this jack to your amplifier.

9V POWER JACK – The GERMANIUM⁴ BIG MUFF PI can run off of a 9V battery or you can connect a 9VDC battery eliminator capable of delivering at least 100mA to the 9V power jack. The optional 9V power supply from Electro-Harmonix is 9.6DC-200BI (same as used by Boss™ & Ibanez™) 9.6 Volts DC 200mA. The power supply must have a barrel connector with center negative. The battery may be left in or taken out when using a power supply. The current draw for the GERMANIUM⁴ BIG MUFF PI is 12mA.

- 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, and RA#; and a copy of your receipt clearly showing the purchase date.

United States & Canada

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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.

To hear demos on all EHX pedals visit us on the web at www.ehx.com
Email us at info@ehx.com

FCC 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.