



STEEL LEATHER

Bass Expander

Congratulations on your purchase of the Steel Leather! The Steel Leather is a result of Electro-Harmonix's commitment to present a useful and dynamic effect that is specifically designed for the bass. It presents you with a powerful attack control that gives your bass a cutting edge both on stage and in the studio. Reading these instructions carefully will ensure that you will get the most out of the Steel Leather.

- THEORY OF OPERATION -

The Steel Leather is an effect pedal designed to enhance your picking and plucking on the bass guitar. The enhanced notes will allow the bass to cut through more easily and give your notes a sharp attack. Using the two knobs you can adjust the Steel Leather's effect from subtle to a total emphasis of the attack portion of your playing. You have separate control over both the response and the volume of the effect.

The Steel Leather is an expander that operates over a narrow frequency range. The frequency range was chosen specifically to expand the attack portion of a bass guitar's notes. An expander is a device that makes loud signals louder and quiet signals quieter. An expander is the opposite of a compressor, making your playing more dynamic. The louder your notes the more the Steel Leather will expand or emphasize your attack. On quiet notes, it may not emphasize the attack at all. What this means is that the musician can use the Steel Leather to sharpen the attack on their notes just by simply playing louder. Of course you can also set up the Steel Leather so that it emphasizes every note you play, no matter how quiet the note.

As you start to use the Steel Leather, invest some time to experiment with the controls and how they interact. You will discover very interesting possibilities including many different attack emphasis points that apply to various music styles. Once you understand the possibilities you will find out that small changes can make a huge difference.

- CONTROLS -

Effect Level Knob – controls the volume of the Steel Leather effect. When turned down to 0, completely counter clockwise, no effect will be heard just the original dry signal. As you turn the Effect Level knob up, or clockwise, the volume of the effect will increase, while the level of the dry signal remains constant. The farther you turn the Effect Level knob up, the more effect you will hear, making your attack more dramatic. The Effect Level knob is completely independent of the Response knob though the two work hand in hand to create the overall effect.

Response Knob – controls the response or sensitivity of the effect to your picking. When the Response knob is set to a low setting, below 12 o'clock, only the loudest notes you play will be emphasized. Turn the Response knob above 12 o'clock and soon every note you play, no matter how lightly you play them, will be emphasized. Use the Response knob to set how the Steel Leather responds to your dynamics and picking. As you turn the Response knob up, or clockwise, you will notice your quiet notes begin to trigger the Steel Leather effect. As you turn the Response knob down, or counter-clockwise, you will need to play louder to emphasize your notes. For example, you can set up the Steel Leather to only respond to your loudest notes so that it can be used to emphasize a certain passage in a song.

You may also find that the Steel Leather responds differently when you switch from plucking the notes with your fingers to plucking the notes with a pick. Usually a finger plucked note will have a softer attack as compared to a picked note, so in general the Response knob needs to be turned up higher when playing with your fingers.

Status LED and Footswitch- When the LED is lit; the Steel Leather is in effect mode. When the LED is off, the Steel Leather is in True Bypass mode and power is completely disengaged. So when the Steel Leather is in Bypass, it is off and does not draw power from the battery. The Footswitch toggles between effect mode and off/bypass mode. Removing the input plug will also turn the Steel Leather off.

INPUT Jack – This ¼" jack is the audio input to the Steel Leather. The input impedance presented at this jack is 1MΩ. A ¼" plug must be connected to the INPUT to turn the Steel Leather on.

AMP Jack – This ¼" jack is the audio output from the Steel Leather. When the Steel Leather is in Bypass mode, the OUTPUT jack is connected directly to the INPUT jack.

9V Power Jack – The Steel Leather 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 battery eliminator must have a barrel connector with center negative. The battery may be left in or taken out when using an eliminator.

- POWER -

IMPORTANT PLEASE READ: The Steel Leather will not work with the same power adaptor that is daisy chained to other pedals in its signal chain. Please run the Steel Leather off of its own power adapter or a battery. The battery will last a long time.

Power from the internal 9-volt battery is activated by plugging into the INPUT jack and engaging the effect with the Footswitch. To disconnect power either press the Footswitch so the LED is off and/or remove the input cable. Whether you use a battery or an external AC Adapter, the Steel Leather powers up only when a plug is inserted into the INPUT jack and the LED is on.

To change the 9-volt battery, you must remove the 4 screws on the bottom of the Steel Leather. Once the screws are removed, you can take off the bottom plate and change the battery. Please do not touch the circuit board while the bottom plate is off or you risk damaging a component.

- 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.

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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 -

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. If the device is not installed and used in accordance with the instructions, it may cause harmful interference to radio communications and void the user's authority to guarantee 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.*

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