

electro-harmonix

EHX TORTION **JFET Overdrive/Preamp**

Congratulations on your purchase of the EHX TORTION, the most advanced and dynamic overdrive pedal on the market today. The EHX TORTION uses analog JFET technology to reproduce the overdrive and distortion character of a tube amplifier, all in a compact, durable die-cast chassis. Three-band EQ and a Pre-Gain switch hone your sound, and a footswitchable BOOST mode adds a second channel of modern high-gain tones.

WARNING: Your EHX TORTION comes equipped with an Electro-Harmonix 9.6DC-200BI power supply (same as used by Boss® & Ibanez®: 9.6 Volts DC 200mA). The EHX TORTION requires 27mA at 9VDC with a center negative plug. Using the wrong adapter may damage your unit and void the warranty. The EHX TORTION also accepts 9V batteries, we recommend alkaline.

- MODES OF OPERATION: NORMAL VS. BOOST -

The EHX TORTION operates in two modes: NORMAL and BOOST. The NORMAL mode uses three JFET stages for low to medium gain sounds. The volume and gain controls for NORMAL mode are located in the top row of knobs. The boost mode is activated with the BOOST footswitch, and adds a fourth gain stage for modern high-gain tones. The BOOST volume and gain knobs are on the bottom row of the controls. The volume and gain controls for each mode are completely independent, allowing the two modes to function like two separate channels on a tube amplifier.

- CONTROLS -

GAIN Knob – The NORMAL GAIN knob is on the top row. This knob controls the amount of input gain when the pedal is in NORMAL mode. This knob is disabled when in BOOST mode.

PRE-GAIN Switch – This switch controls the level and tone of the initial input signal to the EHX TORTION. This switch has four settings. The two leftmost settings select a lower input level, for vintage plexi tones. The two rightmost settings are higher gain for a modern, hot-rodded sound. Each pre-gain setting has two tone selections: Full or Tight, indicated by **F** and **T**. The Full setting has

more bass for a bigger sound. The Tight setting focuses the bass frequencies for a more modern tone.

BASS Knob – Controls the level of the bass frequency range.

MID Knob – Controls the level of the middle frequency range.

TREBLE Knob – Controls the level of the treble frequency range.

VOL Knob – The NORMAL VOL knob is on the top row. This knob controls the output level of the EHX TORTION when in NORMAL mode. This knob is disabled when in BOOST mode.

BOOST GAIN Knob – The BOOST GAIN knob is on the bottom row. This knob controls the amount of input gain when the pedal is in BOOST mode. This knob is completely independent from the NORMAL GAIN knob, and is disabled when in Normal mode.

BOOST VOL Knob – The BOOST VOL knob is on the bottom row. This knob controls the output level of the EHX TORTION when in BOOST mode. This knob is completely independent from the NORMAL VOL knob, and is disabled when in Normal mode.

BYPASS Footswitch and red LED – This footswitch selects whether the EHX TORTION is engaged or in buffered bypass mode. When the effect is engaged, the red LED will be lit.

BOOST Footswitch and blue LED – This footswitch toggles Boost mode on and off. When in Boost mode, the blue LED will be lit.

INPUT Jack – This ¼" jack is the audio input for the EHX TORTION. The input impedance is 1MΩ.

OUTPUT Jack – This ¼" jack is the audio output from the EHX TORTION. The output impedance depends on the VOLUME setting, ranging from 250Ω to 25kΩ.

BOOST SW Jack – Allows an external momentary footswitch to control toggling Boost mode on and off. The external switch should be normally open. Upon engaging the switch, it should create a short circuit between the Tip and Sleeve of the plug inserted into the BOOST SW jack on the EHX TORTION. Releasing the switch should open the circuit between the Tip and Sleeve. The BOOST SW jack is connected in parallel with the BOOST Footswitch so they can both work at the same time. A suggested momentary footswitch that has been tested with the EHX TORTION is the Boss FS-5U Momentary Foot Switch.

DI OUTPUT Jack – This is a low impedance output capable of driving 600Ω to plug directly into a mixing console or recording equipment. The DI output uses an all-analog amp/cabinet simulator to create the sound of a real 4x12 cabinet. This output's signal is line-level, and is controlled by the active Volume knob. When the EHX TORTION is in bypass mode, the DI output and cabinet simulator are still active, and send your bypass signal through the simulator. This can be used to warm up the sound of other pedals or processors for recording.

9V Power Jack – Although the EHX TORTION accepts 9V Batteries, it is supplied from the factory with an Electro-Harmonix 9.6DC-200BI power supply. Plug the output of the supplied AC Adapter into the 9V power jack located at the top of the EHX TORTION. The EHX TORTION draws 27mA at 9VDC with a center negative plug. The EHX TORTION accepts Boss® and Ibanez® style AC Adapters.

- CHANGING THE BATTERY -

To change the 9-volt battery, you must remove the 4 screws on the bottom of the EHX TORTION. 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. Avoid touching the trimmers on the circuit board. These have been set at the factory for proper operation. Changing these trimmers can result in a non-functional unit.

- 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. If you should need to return your unit for service within the warranty period, please email us at **info@ehx.com** or call us at **(718) 937-8300** to obtain a Return Authorization (RA) number.

To hear demos on all EHX pedals visit us on the web at **www.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.