

# electro-harmonix

## EDDY

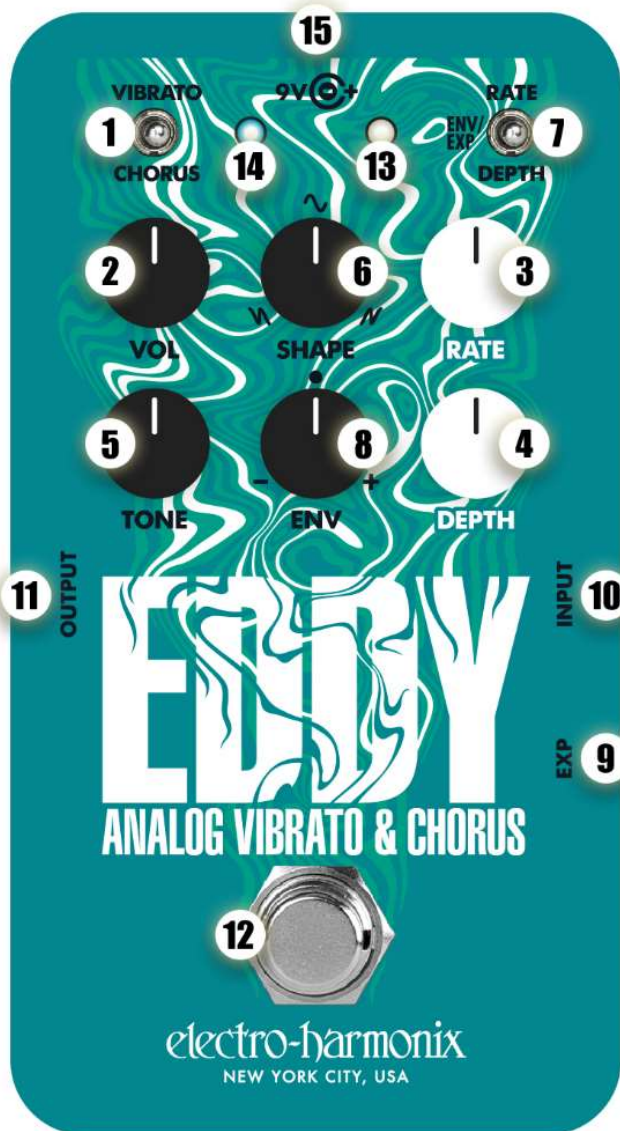
### Analog Vibrato & Chorus

Congratulations on your purchase of the Electro-Harmonix Eddy! The Eddy uses an all analog signal path for classic, bucket-brigade based vibrato and chorus tones. Vibrato is a modulated pitch effect, while chorus mixes in your dry signal to create a lush doubling effect. The Eddy features a variety of unique options to make these effects more expressive, such as envelope and expression pedal control over the rate and depth of the modulation. Further options such as LFO shape warping and a tone control expand the possibilities of the Eddy, making it a versatile yet classic modulation pedal.

#### - EDDY QUICK SETUP-

Plug the 9VDC adapter into the jack on the top of the Eddy. The unit must be powered to pass signal, even in bypass. Connect an instrument cable from your instrument into the **INPUT** jack. Connect an instrument cable between the **OUTPUT** jack and a suitable amplifier. Click the footswitch to engage the Eddy. The right, white LED lights to indicate that the unit is active. Start with all knobs at the center (12 o'clock) position. The top-left **VIBRATO/CHORUS** switch determines which effect you are using. Use the **RATE** knob to speed up or slow down the effect. Use the **DEPTH** knob to increase or decrease the intensity of the effect. These are the most basic controls for the Eddy, other controls and options are explained starting on the next page of this manual.

**WARNING:** Your Eddy comes equipped with an Electro-Harmonix 9.6DC-200 power supply. The Eddy requires 40mA at 9VDC with a center negative plug. Use of the wrong adapter or a plug with the wrong polarity may damage the device and void the warranty. Do not exceed 10.5VDC on the power plug. Power supplies rated for less than 40mA will cause the Eddy to act unreliably.



**1-VIBRATO/CHORUS switch:** this switch determines which effect you are currently using.

**2-VOL knob:** this knob sets the output volume of the effect.

**3-RATE knob:** this knob sets the speed of the modulation. The rate can be further controlled with your playing envelope and/or an expression pedal, which is explained later in this manual (see numbers 8 and 9).

**4-DEPTH knob:** this knob sets the amount of modulation. The higher this knob is, the more dramatic the effect is. The depth can be further controlled with your playing envelope and/or an expression pedal, which is explained later in this manual (see numbers 8 and 9).

**5-TONE knob:** this knob affects the tonality of the effect. Turn this clockwise for more treble (a brighter sound), turn this knob counter-clockwise for more bass (a darker sound).

**6-SHAPE knob:** this knob affects the LFO (low-frequency-oscillator) shape of the modulation. With the knob at center, you have a symmetric sine wave, the most standard sounding effect. As you turn the knob one direction or the other, the LFO shape is warped to be less symmetric the further you turn the knob.

**7-ENV/EXP switch:** this switch determines whether the envelope and/or expression pedal is affecting the rate or depth of the effect.

**8-ENV knob:** this knob effects how your playing envelope, or dynamics (how loud/soft you are playing) affects the modulation. With the knob at center, your envelope has no effect. As you turn the knob above center, harder playing will result in a faster rate or higher depth (depending on the state of the ENV/EXP switch). The further the knob is turned up, the more dramatic this effect will be. As you turn the knob below center, the opposite happens: harder playing results in a slower rate or lesser depth.

When using the envelope to affect RATE or DEPTH, it is important to know that the RATE and DEPTH knobs set the “base level” of that control, as in where it is at when you aren’t playing or are playing softly. Then, playing harder results in an increase or decrease (depending on which side of the ENV knob you are on) from that level.

The envelope cannot drive the rate or depth much past the maximum/minimum range of the RATE and DEPTH knobs. So for example, if you have the RATE knob relatively high, the ENV/EXP switch set to RATE, and the ENV knob relatively high, you won’t hear a strong envelope effect because the RATE is already close to its maximum before taking into account

the envelope. However, if you have the RATE knob set to minimum and the ENV knob set to maximum, you will hear a very dramatic effect.

**9-EXP jack:** plug an external expression pedal into this jack using a TRS (tip-ring-sleeve) cable. The Eddy, like all Electro-Harmonix effects, sends out its reference voltage on the ring and expects the control voltage on the tip. Which parameter the expression pedal controls depends on the state of the ENV/EXP switch. The current position of the RATE/DEPTH knob will serve as the maximum level, the level you will get when the expression pedal is at toe.

**10-INPUT jack:** plug a standard TS instrument cable from your guitar (or the output of another effects pedal) into this jack. The input impedance of the Eddy is  $1M\Omega$ .

**11-OUTPUT jack:** plug a standard TS instrument cable from this jack to the input of a suitable amplifier or a different effects pedal. The output impedance of the Eddy is  $470\Omega$ .

**12-Footswitch:** press this footswitch to switch between effect and buffered-bypass modes. You can also use this footswitch to enable a momentary effect. If, when in bypass, you press and hold the footswitch for over a half second or so, upon pressing it the effect will engage, and upon removing your foot the effect will switch back to bypass. You can disable this momentary option by opening the back of the pedal and switching the internal "mom. enable" switch on the bottom left to "OFF."

**13-White status LED:** this LED lights when the pedal is in effect mode, and is off when the pedal is in buffered-bypass mode.

**14-Blue strobing LED:** this LED strobos based on the current rate and shape of the modulation. As the rate is changed, by either the RATE knob, your envelope, or the expression pedal, you will see the speed of this LED's strobing change. This LED also helps visualize changes in the LFO shape controlled by the SHAPE knob. The current depth of the modulation is not reflected in this LED.

**15-Power jack:** plug the included power supply into this jack. The Eddy requires a voltage around 9VDC, on a center-negative plug. The Eddy draws around 40mA of current. Use of the wrong adapter or a plug with the wrong polarity or voltage may damage your Eddy and void the warranty. The Eddy does not accept a 9V battery.

## - 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](mailto: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.

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To hear demos of all EHX pedals visit us on the web at [www.ehx.com](http://www.ehx.com)

Email us at [info@ehx.com](mailto: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.*



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