

electro-harmonix

Pitch Fork

POLYPHONIC PITCH-SHIFTER/HARMONY PEDAL

Congratulations on your purchase of the Electro-Harmonix **Pitch Fork**, a compact, battery powered, polyphonic pitch-shifter/harmony pedal. The **Pitch Fork** transposes the pitch of your instrument over a range of up to +/- 3 octaves. Three different available pitch-shifting modes allow the pitch to be transposed up, down or both simultaneously in Dual mode. The pitch shift amount can be set to a fixed interval or continuously varied by an expression pedal or control voltage. The Pitch Fork's footswitch features two different modes of operation: Latch and Momentary. Momentary allows rapid toggling between effect and bypass for quick blasts of pitch bending. The BLEND knob is a wet/dry control allowing you to create the perfect mix of your dry and transposed signals.

WARNING: Your PITCH FORK comes equipped with an Electro-Harmonix 9.6DC-200BI power supply (same as used by Boss® & Ibanez®: 9.6 Volts DC 200mA). The PITCH FORK requires 30mA at 9VDC with a center negative plug or runs off a 9Volt battery. Using the wrong adaptor or a plug with the wrong polarity may damage your PITCH FORK and void the warranty.

GETTING STARTED

Connect the output plug of the supplied power adaptor to the 9V power jack. Plug your instrument into the INPUT jack; connect your amp to the OUTPUT jack. Set the toggle switch to UP arrow and press the LATCH button so it is down. Turn BLEND fully clockwise and set SHIFT to 1, as in 1 octave up. Press the footswitch until the LED lights up. You will hear all your notes shifted up 1 octave. Connect an optional expression pedal to continuously vary the pitch from unity up to 1 octave.

Press the LATCH button so it is up. The footswitch now has a momentary action: when pressed the effect activates and pitch is shifted; when released, the effect is bypassed. Connect an expression pedal to control glissando rate of the momentary footswitch. If the EXP jack is vacant, pitch will change at the default glissando rate of 60ms (this is user adjustable).

BLEND KNOB

The BLEND knob mixes between the untreated, analog dry signal and the effected signal. At BLEND's full clockwise position, the output is 100% wet.

SHIFT KNOB

The SHIFT knob selects the maximum interval of chromatic transposition. The chart below shows how the pitch will be shifted relative to the original pitch.

D	m2	M2	M3	P4	P5	M6	m7	1	2	3
Detune	Minor 2nd	Major 2nd	Major 3rd	Perfect 4th	Perfect 5th	Major 6th	Minor 7th	1 Oct	2 Oct	3 Oct

MODE TOGGLE SWITCH

The MODE toggle switch selects whether the pitch is shifted up, down or both simultaneously relative to the root. Dual mode outputs two pitch-shifted signals. One of the shifted signals follows the SHIFT knob as if in UP mode. The other shifted signal creates a musically useful harmony according to the SHIFT knob setting.

DUAL mode SHIFT knob Settings:

D	m2	M2	M3	P4	P5	M6	m7	1	2	3
Detune	Deep	M2	M3	P4	P5	M6	m7	1 Oct	2 Oct	3 Oct
	Detune	up	up	up	up	up	up	up	up	up
		+	+	+	+	+	+	+	+	+
		M6	P5	P5	1 Oct	P5	M6	1 Oct	1 Oct	1 Oct
		up	up	down	down	down	up	down	down	down

LATCH BUTTON

The LATCH button selects Latch or Momentary mode. This affects how the footswitch and EXP jack input behave. When the LATCH button is down, Latch mode is enabled. The footswitch toggles between effect and bypass each time you press and release the footswitch; the EXP input continuously varies pitch. When the LATCH button is in the up position, Momentary mode is selected. The effect is only on while the footswitch is held down, otherwise the Pitch Fork is bypassed; the EXP input varies the glissando rate of the momentary footswitch.

BYPASS FOOTSWITCH & STATUS LED

The footswitch toggles between effect on and buffered bypass. In Latch mode, each press and release of the footswitch toggles between effect and bypass modes. In Momentary mode, when the footswitch is held down, the effect is on, when the footswitch is released, the Pitch Fork enters bypass. The status LED lights when in Effect mode.

EXP JACK

EXpression input jack accepts a TRS expression pedal connector or a Tip-Sleeve 0-5V control voltage input. The expression pedal should ideally use a 10k potentiometer with linear rather than audio taper. It must have the wiper connected to TIP and toe-down connected to RING. Pedals made by some manufacturers do not conform to this convention, and would need a special cable to swap RING and TIP. Some suggested Expression Pedals: EHx Expression Pedal, M-Audio® EX-P, Moog® EP-2 & EP-3, Roland® EV-5 or Boss® FV-500L.

- **LATCH MODE** - the Expression/CV input controls pitch shift amount, ranging from unity, or no pitch shift, in the heel position to the interval set by the SHIFT knob for the toe position. Pitch varies continuously from heel to toe in all settings.
- **MOMENTARY MODE** - the Expression/CV input controls glissando rate for the Pitch Fork's footswitch. When the bypass footswitch is pressed, the Pitch Fork jumps from bypass to the pitch shift interval set by the SHIFT knob. The amount of time it takes to reach the SHIFT knob's interval setting is the glissando rate. When the footswitch is released, pitch will return to unity by the same rate. When your expression pedal is heel-down the rate is 4ms, in toe-down the rate is 2sec. When no device is plugged into the EXP input the default glissando rate is 60ms.

SAVING NEW GLISSANDO RATE SETTING FOR PITCH FORK FOOTSWITCH

- 1) Set LATCH mode button to the Momentary or up position.
- 2) Connect expression pedal or CV device to EXP jack.
- 3) Press and release Pitch Fork's footswitch while adjusting expression pedal or CV device until you hear desired glissando rate. Leave external device in current setting.
- 4) Press and hold down the Pitch Fork's footswitch.
- 5) Press LATCH button so it changes to Latch mode. LED flashes to confirm.
- 6) Release the footswitch.
- 7) The new glissando rate is now saved. Remove plug inserted into EXP jack, change back to Momentary mode and use footswitch to confirm new rate.

RESTORING FACTORY DEFAULT FOR GLISSANDO RATE

- 1) Make sure nothing is plugged into EXP jack.
- 2) Set LATCH button to Latch mode, the down position.
- 3) Press footswitch so that Pitch Fork is in Bypass.
- 4) Press and hold down the Pitch Fork's footswitch.
- 5) Press LATCH button so it changes to Momentary mode. LED flashes to confirm.
- 6) Release the footswitch.

OUTPUT JACK

Outputs the wet/dry mix set by the BLEND knob.

CHANGING BETWEEN LATCH AND MOMENTARY WHEN EXPRESSION PEDAL IS CONNECTED

When in Latch mode and you switch to Momentary mode the expression pedal position is ignored. The stored glissando rate will take precedence until the expression pedal is moved from current position.

LED ON STARTUP

The LED will blink 4 times then hold on the 5th if in latch mode or toggle off if in momentary. This happens when AC power is applied or you plug into the input jack with a fresh battery installed. If battery power is too low, the LED blinks dimly, every other second.

CHANGING THE BATTERY

To change the 9-volt battery, you must remove the 4 screws on the bottom of the Pitch Fork. 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. To extend battery life, disconnect the INPUT jack when the Pitch Fork is not in use.

NOTES AND SPECIFICATIONS

- PITCH FORK has high quality buffered bypass.
- Input impedance is 2.2M Ω .
- Output impedance is 680 Ω
- Current draw of the PITCH FORK is 30mA.

- 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

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.