

electro-harmonix

PITCH FORK®+

POLYPHONIC PITCH-SHIFTER/HARMONY PEDAL

Congratulations on your purchase of the Electro-Harmonix **PITCH FORK®+**, a fully featured polyphonic pitch-shifter/harmony pedal. The **PITCH FORK®+** has two independent pitch shifting engines each capable of transposing over a +/- 3 octave range and detuning +/- 99 cents. Both shift voices have their own volume control and a third for a dedicated DRY level control. There are two output jacks MAIN and AUX. The AUX output offers multiple routing options. In addition to a standard bypass footswitch, there is a second footswitch, USER, which can be assigned to a host of tasks. An input for an expression pedal or control voltage can be assigned to many of the pedal's parameters. There is an external foot-controller input for hands-free control and a large easy to read display. The PITCH FORK®+ has 100 slots for storing and recalling presets. Ten factory presets are pre-loaded to help you get familiar with some of the pedal's incredible capabilities.

WARNING: Your PITCH FORK®+ comes equipped with an Electro-Harmonix 9.6VDC / 200mA power supply. The PITCH FORK®+ requires **120mA** at 9VDC with a center negative plug. Using the wrong adaptor or a plug with the wrong polarity may damage your PITCH FORK®+ and void the warranty.

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QUICK START GUIDE

Plugging in the PITCH FORK®+

1. Connect the EHX9.6DC Power Adapter into the 9V jack at the top of the pedal. Plug the AC Adapter into an AC outlet.
2. Connect your guitar or other instrument to the INPUT jack using a standard 1/4" instrument cable. Connect the MAIN OUTPUT jack to your amp with another standard 1/4" instrument cable.
3. If using AUX, also connect the AUX OUTPUT jack to an additional amp using another standard 1/4" instrument cable.
4. If using an expression pedal, such as the Electro-Harmonix Expression, connect to the EXP jack with a TRS Cable.
5. If using an external three-button foot controller, such as the Electro-Harmonix Triple Foot Controller, connect to the EXT jack with a TRS cable.

Loading a Factory Preset

1. Press the PRESET mode button.
2. Turn the VALUE knob to scroll through factory presets *1-10*.
3. Press VALUE to load the selected blinking preset.

Creating a User Preset

1. Press the PRESET mode button.
2. Turn the VALUE knob counterclockwise to scroll down to *LIVE*:
 - LIVE is a template that can be used for creating a preset.
 - LIVE settings can be saved to a preset slot to recall after a power cycle.
3. Press VALUE to load LIVE.
4. Press the SHIFT 1 button then turn VALUE to adjust the semitone setting for SHIFT 1.
5. Press the SHIFT 2 button then turn VALUE to adjust the semitone setting for SHIFT 2.
6. Adjust DRY, SHIFT 1, and SHIFT 2 volume knobs to create the desired mix.
7. Press the PRESET button and turn the VALUE encoder to select an empty preset slot. An empty preset slot will not have a dot in the lower right corner like the factory presets. Slots 11-100, by default, are blank from the factory.
8. Press and hold VALUE for two seconds to initiate the saving process. The saving process is complete when the PRESET LED stops blinking.

CONNECTIONS

INPUT Jack – Audio input with an impedance of 2.2M Ω .

MAIN OUTPUT Jack – Main audio output with an impedance of 470 Ω .

AUX OUTPUT Jack – Auxiliary audio output with an impedance of 470 Ω .

EXP Jack – Expression pedal or control voltage (CV) input. The PITCH FORK[®]+ allows for an expression pedal to be assigned to a number of different parameters. See **EXP Mode** section for more details.

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 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, EHX Dual Expression, M-Audio[®] EX-P, Moog[®] EP-2 & EP-3, Roland[®] EV-5 or Boss[®] FV-500L.

EXT JACK – TRS input for connecting a generic external foot-controller such as the EHX Triple Foot Controller or Digitech[®] FS3X. A foot-controller has three footswitches: MODE (Tip), UP (Ring) and DOWN (Tip+Ring). These can be used for changing modes, entering/exiting sub-menus, loading presets, and scrolling parameter values. Saving presets cannot be done using an external foot-controller. See the **EXT** section for more details.

9V Power Jack – Power input for the EHX 9.6DC 200mA power adapter. The PITCH FORK[®]+ uses a 2.1mm center-negative barrel plug and requires a current rating of at least 120mA at 9VDC.

CONTROLS & DISPLAY

DRY Knob – Controls the volume level of the DRY signal.

SHIFT 1 Knob – Controls the effect volume level of SHIFT 1.

SHIFT 2 Knob – Controls the effect volume level of SHIFT 2.

VALUE Knob – VALUE is a rotary encoder that can rotate continuously in either direction, and be pushed like a button. VALUE will adjust the selected mode parameter, enter sub-menus, or save presets to memory. A press of VALUE enters sub-menus when applicable. Holding VALUE when in PRESET mode saves a preset.

4-Character Display – The 4-character display shows the current parameter value or menu setting for the selected mode. The display shows which option is selected within a mode menu or sub-menu.

When there is a dot in the lower right corner of the display, for example "*FREQ.*", this signifies there is a sub-menu that can be entered. Enter a sub-menu by pressing VALUE or a double-tap of the MODE (Tip) FSW on an external foot-controller.

BYPASS Footswitch and LED – The BYPASS 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 glissando effect is on, when the footswitch is released, the PITCH FORK[®]+ enters bypass. The status LED lights when in effect mode or when glissando is active.

USER Footswitch and LED – The USER footswitch's function is programmable when the USER mode button is selected. The USER footswitch works independently from the BYPASS footswitch and has its own status LED. When the LED is lit, an effect or feature is enabled. When the USER footswitch LED is off, then the effect or feature is disabled or not in use.

OVERVIEW OF MODES

The PITCH FORK®+ has eight control modes that are accessed by pressing one of the eight illuminated buttons. The mode buttons can be used to exit, go back to previous sub-menus, or back to the main mode menu. Selecting a different mode button resets the previously selected mode to its main menu and brings you to the newly pressed mode.

AUX – AUX mode selects which channel is sent to the AUX output jack. The AUX menu can also select if and how the BYPASS footswitch will affect the AUX output.

SHIFT 1 & SHIFT 2 – The SHIFT modes select the amount that each shift engine will transpose the input signal. Each SHIFT mode can be set to semitones or octaves covering a total range of +/- 3 octaves. Detuning is also possible in either SHIFT mode.

EXP – EXP mode sets how the expression pedal or control voltage signal is routed within each of the three sub-menus: **FREQ**, **GLIS**, and **VOL**. These sub-menus will allow control over pitch, glissando (glide) rate, and volume for both SHIFT voices and DRY.

USER – USER mode programs the function of the USER footswitch. The user programmable footswitch can be assigned to control different parameters or augment features.

X-MOD – X-MOD mode accesses the cross-modulation amount and SHIFT2+DETUNE2 settings. Cross modulation can be used to create ring modulation and FM type of effects, while SHIFT2+DETUNE2 adds the detune amount from SHIFT 2 to its selected SHIFT value.

PRESET – PRESET mode manages loading and saving presets.

LATCH – The LATCH mode controls how the BYPASS footswitch operates. As on the original Pitch Fork®, the BYPASS footswitch can be set to either latching or momentary mode.

MODE BUTTON FUNCTIONS

Each Mode button allows for control over its corresponding parameters. When a Mode button is pressed, it will illuminate, and display its current selection. You can then use the VALUE knob to scroll values, enter a sub-menu, or save and load presets.

AUX Mode – In AUX mode, the VALUE knob is used to select the channels that are sent to the AUX output. The selected channels will not be sent to the MAIN output with the exception of “ALL.”

- **IN** – sends the unaffected input signal directly to the AUX output
- **DRY** – DRY knob channel sent to the AUX output
- **D+S2** – Both DRY and SHIFT 2 channels are sent to AUX output
- **D//S2** – SHIFT 2 to AUX and SHIFT 1 to MAIN and DRY sent to both outputs
- **SHF2** – SHIFT 2 channel is sent to AUX output
- **ALL** – DRY, SHIFT 1 and SHIFT 2 channels are sent to both the AUX and MAIN outputs
- **BYPS.** – Press VALUE encoder to enter bypass footswitch sub-menu

The **BYPS** sub-menu in the **AUX** mode selects if and how the BYPASS footswitch affects the AUX output.

- **BYP.** – Selects if the BYPASS Footswitch applies to AUX
 - **ON** – AUX output is toggled between the AUX mode selection and bypass TYPE via the BYPASS Footswitch.
 - **OFF** – BYPASS FSW has no effect on AUX output. AUX output remains active unless controlled by USER footswitch.
- **TYPE.** – Bypass type for AUX Output when **BYP** is set to ON
 - **NORM** – Sends the unaffected INPUT signal directly to AUX output when AUX is bypassed
 - **MUTE** – Mutes AUX Output when AUX is bypassed

SHIFT 1 & 2 Modes – Both SHIFT mode channels are identical. In either mode, VALUE selects the amount the input signal is transposed. The VALUE knob scrolls through the available SHIFT mode values, which covers a total range of +/- three octaves.

SHIFT MODE VALUES

| | | | | | | | | | |
|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|------------------------|--------------------------|--------------------------|--------------------------|
| D. | m2 | M2 | m3 | M3 | P4 | b5 | P5 | m6 | M6 |
| Detune sub-menu | minor 2 nd | Major 2 nd | minor 3 rd | Major 3 rd | Perfect 4 th | Flat 5 th | Perfect 5 th | minor 6 th | Major 6 th |
| m7 | M7 | 1OCT | m9 | M9 | m10 | M10 | P11 | b12 | P12 |
| minor 7 th | Major 7 th | 1 st Octave | minor 9 th | Major 9 th | minor 10 th | Major 10 th | Perfect 11 th | Flat 12 th | Perfect 12 th |
| m13 | M13 | m14 | M14 | 2OCT | m17 | M17 | P18 | P19 | 3OCT |
| minor 13 th | Major 13 th | Minor 14 th | Major 14 th | 2 nd Octave | minor 17 th | Major 17 th | Perfect 18 th | Perfect 19 th | 3 rd Octave |

Note: For negative SHIFT values the signal is transposed down from root, -10C is an octave below and a detune value of -38c, for example, is 38 cents below the root.

Selecting **detune (D.)** in a SHIFT mode detunes the input signal by an amount of +/- 99 cents. The detune sub-menu adjusts the amount in one-cent increments, ranging from 1 to 99.

To set the detune value:

1. Select desired SHIFT mode.
2. Use VALUE to scroll to detune (D.).
3. Press VALUE to enter the detune sub-menu.
4. Turn VALUE to adjust detune in increments of one cent in either plus or minus amounts.
5. Once the desired detune value is found, exit the detune sub-menu by pressing any mode button.

Detune can be added to any SHIFT 2 interval by enabling the S2D2 sub-menu within X-MOD. The detune setting in SHIFT 2's D. menu at the time that S2D2 is enabled will be added to SHIFT 2's interval setting. For example, if SHIFT 2 is set to 1OCT and SHIFT 2's detune is set to +16c, when S2D2 is ON, SHIFT 2 transposes by a total amount of 1OCT+16c. This is useful for creating lush detuning sounds between SHIFT channels 1 and 2 when they are set to the same SHIFT mode value.

EXP Mode – The EXP mode menu assigns the expression pedal/control voltage (CV) signal within each of the three available sub-menus. Use the VALUE knob to scroll between the **FREQ**, **GLIS**, and **VOL** sub-menus. Press VALUE to enter the selected sub-menu.

- **FREQ.** – Expression/CV controls the Frequency of the selected SHIFT channel creating whammy bar pitch bend effects.
 - **OFF** – Expression/CV frequency control disabled
 - **SHF1** – SHIFT 1 frequency control only
 - **SHF2** – SHIFT 2 frequency control only
 - **BOTH** – Both SHIFT 1 and 2 frequency control
 - **1XS2** – Cross-shift and crossfade SHIFT 1 with SHIFT 2. Creates a simultaneous frequency bend and volume crossfade from SHIFT 1 to SHIFT 2. NOTE: *Heel position (0V) is SHIFT 1's value and volume setting and the toe position (+5V) is SHIFT 2's value and volume setting*

- **GLIS.** – Expression/CV controls the rise and/or fall time of pitch glissando in momentary mode.
 - **OFF** – Expression/CV glissando control disabled
 - **RISE** – Glissando rise-time control only
 - **FALL** – Glissando fall-time control only
 - **BOTH** – Rise and fall-time control

- **VOL.** – Expression/CV controls the amplitude of the selected channel or an array of combinations that can blend, crossfade, or invert each channel.
 - **OFF** – Expression/CV volume control disabled
 - **SHF1** – SHIFT 1 volume control only
 - **SHF2** – SHIFT 2 volume control only
 - **BOTH** – SHIFT 1&2 volume control
 - **DRY** – DRY volume control only
 - **D+S1** – DRY and SHIFT 1 volume control
 - **D+S2** – DRY and SHIFT 2 volume control
 - **ALL** – DRY, SHIFT 1 and SHIFT 2 volume control enabled
 - **BLND** – Blends from DRY to both SHIFT channels
 - Note: *Heel position (0V) is DRY and toe (+5V) is both SHIFT 1 and SHIFT*
 - **1XF2** – Crossfade from SHIFT 1 to SHIFT 2
 - **1X2D** – Crossfade from SHIFT 1 to SHIFT 2 with **DRY**
 - **D1X2** – Crossfade from SHIFT 1 with **DRY** to SHIFT 2

USER Mode – The user programmable footswitch can be assigned to control different parameters or augment certain features.

For **BLND**, **1XF2**, **1X2D**, **D1X2** and **1XS2**, holding down the footswitch will behave like a pseudo expression pedal. The crossfade rate for these modes is set within the **RISE** and **FALL** sub-menus under **MOME** in **LATCH** mode. When using one of these five USER modes, the BYPASS footswitch changes to LATCH mode, even if MOME is currently selected.

When the USER footswitch is assigned to control frequency or volume, that function is disabled for use with the EXP jack. Also, USER 1XS2 takes precedence over EXP's FREQ 1XS2.

- **AUXO.** – Toggles the AUX Output. Press VALUE to enter the Aux output control sub-menu. When selected, **AUXO** takes precedence over **BYPS** settings within AUX.
 - **BYP** – Will toggle between the input signal and the AUX output setting
 - **MUTE** – Will mute the AUX output when USER is toggled OFF
- **SHF1** – Will toggle SHIFT 1 channel's ON/OFF
- **SHF2** – Will toggle SHIFT 2 channel's ON/OFF
- **JUMP.** – Turn VALUE to choose a preset slot ranging from **1-100**. When the **USER** footswitch is pressed, preset will jump to and load the selected slot if a valid preset is selected. Any number of presets can be chained together. These preset chains can then be closed to create a loop of presets that are cycled through with each press of the USER footswitch. See page 10 on how to setup a preset chain with JUMP.
- **HOLD** – If momentary (MOME.) is selected in LATCH mode, a glissando (glide) occurs at a programmed rate when BYPASS is pressed. When USER is set to HOLD and the USER footswitch is pressed, during a glissando sweep, the glissando pitch is held at the point when the USER footswitch was pressed. Releasing the USER footswitch continues the glissando cycle.
- **BLND** – Blends from DRY to both SHIFT channels
- **1XF2** – Crossfade from SHIFT 1 to SHIFT 2
- **1X2D** – Crossfade from SHIFT 1 to SHIFT 2 with **DRY** control
- **D1X2** – Crossfade from SHIFT 1 with **DRY** control to SHIFT 2
- **1XS2** – Cross-shift and crossfade SHIFT1 to SHIFT 2
- **TOGL.** – Choose between Momentary or Latch action for the USER footswitch in BLND, 1XF2, 1X2D, D1X2, and 1XS2 User modes.

With the USER mode button is set to **JUMP**, any number of presets can be chained together. To set up a JUMP preset chain:

1. Press the PRESET button and use the VALUE knob to select the preset that will start the preset chain.
2. Press the USER mode button and use VALUE to select **JUMP**.
3. Press VALUE to enter the **JUMP** sub-menu.
4. Turn VALUE to select the preset that the USER footswitch will jump to and load.
5. Press PRESET, then press and hold VALUE for 2 seconds to save the preset. **Important:** Skipping this step will cause the JUMP selection to revert to its previous value when the preset was loaded. You must save before pressing the USER footswitch in the following step.
6. Press the USER footswitch to jump to the next preset in the chain
7. Repeat Steps 2-6 to add more presets to the chain.
8. To close a jump preset chain loop, set the JUMP value for the preset at the end of the chain to JUMP back to first preset in the chain set in Step 1. *NOTE: Skip this step if you do not wish to loop the chain.*

X-MOD Mode – Press VALUE to enter cross modulation (X-MOD) and SHIFT2+DETUNE2 (S2D2) sub-menus. Cross Modulation can be used to create ring mod and frequency modulation effects. **S2D2** adds SHIFT 2's detune value to its current SHIFT interval.

- **1->2.** – Press, then turn VALUE to adjust the amount that SHIFT 1 will modulate SHIFT 2.
 - The total range is **0-100** and can lead to subtle and/or intense modulation timbres. When set to 0, modulation is disabled.
- **1<-2.** – Press, then turn VALUE to adjust the amount that SHIFT 2 will modulate SHIFT 1.
 - The total range is **0-100** same as **1->2**, and 0 is OFF.
- **S2D2.** – Press, then turn VALUE to toggle ON/OFF adding SHIFT 2's detune setting to all SHIFT 2 semitone and octave intervals. For example, if SHIFT 2 is set to 1OCT and SHIFT 2's detune menu is set to +16c, when S2D2 is ON, SHIFT 2 transposes by a total amount of 1OCT+16c. This is useful for creating lush detuning sounds between SHIFT channels 1 and 2 when they are set to the same SHIFT mode value. To adjust the amount of detune applied, follow instructions for setting detune (*D.*) on page 7.

PRESET MODE – In PRESET mode, the VALUE knob selects which presets to load, and save. Turn VALUE to select a desired preset then press VALUE to load the selected preset.

The PITCH FORK®+ comes loaded with 10 unique factory presets (see page 12) and 90 empty slots. The factory presets will guide you through the pedal’s potential by showcasing some of its features. Any of these factory presets can be overwritten at any time. See page 12 for instructions on how to restore the factory presets.

Load a preset: While in PRESET mode, turn VALUE to scroll through the preset slots. The preset slot number blinks to indicate the selected slot is not currently loaded. Occupied preset slots will have a dot in the lower right corner. The preset number stops flashing when VALUE is pressed to load a valid preset, otherwise it will continue to blink if empty.

Save a preset: Select the desired slot within the PRESET menu by turning VALUE. The preset slot number blinks when the selected slot is not currently loaded. Empty slots will have no dot in the lower right corner. Press and hold VALUE for two seconds, the PRESET button will first blink then remain lit when the saving process is complete.

Altered presets: The PRESET button blinks when one or more parameter values are altered from the stored state except when LIVE is loaded. The blinking continues until the controls are adjusted back to the original stored value, a preset is loaded, or the altered preset is saved.

LIVE is a preset template to aid with new preset creation. LIVE is found before slot 1. Any changes made to LIVE while the pedal is powered, are held in that slot even if other presets are loaded or saved. The LIVE settings can be stored at any time to a preset slot (see **Save a preset**).

Important: Upon power up, LIVE reverts to its default settings. If you want to keep any changes made to LIVE, they must be saved to a preset slot before powering off the pedal. LIVE’s volume settings for DRY, SHIFT 1, and SHIFT 2 are the actual positions of the knobs.

FACTORY DEFAULT LIVE SETTINGS

| AUX | SHIFT 1 | SHIFT 2 | EXP | USER | X-MOD | LATCH |
|-----|---------|---------|-------------------|------|-------|-------|
| ALL | -1OCT | +1OCT | FREQ. set to BOTH | SHF1 | OFF | LATC |

RESTORING FACTORY PRESETS: PRESET SLOTS 1-10

1. Power up the PITCH FORK®+ with the PRESET mode button held DOWN.
2. The display will read, "FACTORY PRESETS RESTORED" before normal startup.
3. The presets for slots 1-10 are now restored to the original factory settings.

FACTORY PRESETS 1-10

| PRESET | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------|--------------|--------------|--------------|--------------|--------------|-------------|--------------|-------------|-------------|-------------|
| AUX | ALL | ALL | ALL | ALL | ALL | ALL | ALL | ALL | ALL | ALL |
| SHIFT1 | P5 | -P5 | -23c | -10C | -5c | P4 | -10C | -10C | -10C | -10C |
| SHIFT2 | P5 | P12 | +12c | 2OCT | -10C | P11 | 1OCT | P19 | P5 | 1OCT |
| EXP | FREQ BOTH | FREQ BOTH | FREQ SHF1 | FREQ SHF1 | FREQ BOTH | VOL D1X2 | FREQ BOTH | VOL BOTH | VOL BOTH | VOL BOTH |
| USER | SHF2 | SHF2 | SHF2 | SHF1 | SHF2 | SHF2 | JUMP 8 | JUMP 7 | SHF1 | SHF1 |
| X-MOD | 0 | 0 | 0 | 64 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| | ON | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| LATCH | LATC | LATC | LATC | LATC | LATC | LATC | LATC | LATC | 79 | 0 |
| | | | | | | | | | 0 | 78 |
| | | | | | | | | | OFF | OFF |
| | | | | | | | | | BOTH | BOTH |

LATCH MODE – Latch mode selects how the BYPASS footswitch operates. It can be set to either latching or momentary with glissando (glide) effect control.

- **LATC** – Latching mode toggles the effect ON/OFF with each press of the BYPASS footswitch.
- **MOME.** – Momentary mode engages the glissando effect when the BYPASS footswitch is pressed. The speed of glissando's rise and fall times and the SHIFT channels affected are set in the following sub-menus. Press VALUE to enter momentary mode's main menu:
 - **RISE.** – Press, then turn VALUE to adjust how quickly the glissando rate goes from unison to the SHIFT setting when the BYPASS footswitch is pressed and held. When set to **0**, the rise-time is 4ms. At the maximum setting of **100**, the rise-time is 8 seconds.
 - **FALL.** – Press VALUE then turn to adjust how quickly the glissando rate goes from the SHIFT settings back down to unison upon release of BYPASS. The minimum rate is 4ms and maximum is 8 seconds. The BYPASS LED will remain lit until the glissando fall rate returns back to unison/BYPASSED.
 - **LINK.** – Press VALUE and turn to toggle LINK ON/OFF. When set to ON the **RISE** setting is used for both **RISE** and **FALL**.
 - **DEST.** – Press VALUE to enter the glissando destination sub-menu. Destination is the SHIFT channel that is affected by the glissando effect control:
 - **SHF1** – SHIFT 1 only
 - **SHF2** – SHIFT 2 only
 - **BOTH** – SHIFT 1 & 2 have glissando control

EXT FOOTSWITCH FUNCTIONS

The **EXT** input jack on the PITCH FORK®+ provides expanded control with an external foot controller, such as the EHX Triple Foot Controller or Digitech® FS3X. Using a TRS cable, connect the foot controller to the EXT input. Now use the external foot controller to change modes, enter/exit sub-menus, load presets, and scroll through parameter values.

The foot controller has three footswitches, Mode (Tip), Up (Ring) and Down (Tip+Ring). The footswitches function as follows:

MODE (Tip) – This footswitch can be used to cycle through the eight Mode buttons, enter/exit a sub-menu and load presets.

- Cycle through modes: A single press when a mode main-menu is displayed selects the next mode button.
- Enter sub-menu: Quickly double press the mode footswitch.
- Exit sub-menu: Single press to go back one menu level.

UP (Ring)/DOWN (Tip+Ring) – These two footswitches can be used for scrolling through parameter values and menus:

- Increment: A single press and release on the Up footswitch increments the current parameter value by one.
- Decrement: A single press and release on the Down footswitch decrements the current parameter value by one.
- Quick Scroll Increment: Press and hold the Up footswitch to scroll upwards through values at a faster rate for certain modes and sub-menus listed below.
- Quick Scroll Decrement: Press and hold the Down footswitch to scroll downwards through values at a faster rate for certain modes and sub-menus listed below.

Quick scrolling works within the following modes/menus: SHIFT 1&2, DETUNE 1&2, JUMP, 1->2, 1<-2, PRESET, RISE and FALL. While quick scrolling in PRESET mode, once the desired preset is reached, tap either UP or DOWN to load the selected PRESET if it is valid. A valid/non-empty preset slot will have a dot in the lower right corner.

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.



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



The WEEE or "trashcan" logo indicates that this product is made up of electronic components that should not be trashed alongside household waste but instead should be recycled by a proper electrical waste facility.

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

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