- Warranty Information -

Please complete and return the enclosed warranty card within 10 days of purchase. We will repair the unit for free within one year of date of purchase. If you should need to return your unit for service within the warranty period, please include a brief description of the problem as well as you name, address, telephone number, copy of your receipt, and a check or money order for \$5.00 shipping and handling to:

Electro-Harmonix C/O New Sensor Corporation 32-33 47th Ave Long Island City, NY 11101 Att: Service Department

Please make checks/money orders payable to New Sensor Corporation.

To hear demos by rock stars on all EH pedals visit us on the web at **www.ehx.com**. Email us at info@ehx.com

electro-harmonix

TUBE ZIPPER

envelope filter + distortion

Congratulations on your purchase of the truly outrageous Tube Zipper. The Tube Zipper is two effects in one, a warm sounding Tube Envelope Follower and a rich tube Distortion unit. When these two effects are combined into the same circuit the outcome are entirely unique new wild effects. The Tube Zipper uses two premium 12AX7EH vacuum tubes.

Carefully reading these instructions will ensure that you will get the most out of your Tube Zipper. We urge you to sit down with your Tube Zipper and spend some time learning exactly how this pedal works. You won't regret it!

Your Tube Zipper comes with a unique 12V AC/1000mA adaptor. Use only the adaptor

supplied.	Using any other adaptor can cause harm to you and the Tube Zipper.

- CONTROLS -

ENV Switch (UP/DOWN) – Selects the direction of the filter sweep.

MODE Switch (TRON/TRILL) – In TRON MODE, the filter sweeps smoothly and follows the envelope of the input signal. In TRILL MODE, a modulation is added to the envelope so that as the filter sweeps, it sounds like the note is being trilled. **WARNING:** If the INPUT GAIN knob and SENSITIVITY knob are both turned up when switching from TRON to TRILL MODE it is possible that the unit will go into oscillation, this can be avoided by turning down the SENSITIVITY or INPUT GAIN knobs before flipping the MODE switch.

INPUT GAIN Knob – Boost the input signal before the filter. When the INPUT GAIN is turned up, it will yield tube distortion.

DRIVE Knob – Adjusts the amount of distortion after the filter. As you turn the DRIVE knob up, past 12 o'clock, the overall volume of the pedal will begin to decrease. Simply turn the MASTER VOLUME up to compensate.

SENSITIVITY Knob – Determines how sensitive the filter sweep is to your playing. Use this knob to adjust how far up or down the filter will sweep when you play.

FREQUENCY Knob – Sets the peak frequency of the filter when the envelope is not active. When the envelope is active, the FREQUENCY knob determines both the start and stop frequency of the filter sweep.

RESONANCE Knob – Determines the RESONANCE or Q of the filter. As you turn the RESONANCE clockwise the filter will become increasingly sharper. When the

RESONANCE knob is turned up all the way the TUBE ZIPPER may begin to self-oscillate. If you find the oscillation undesirable simply turn the RESONANCE knob down.

MASTER VOLUME Knob – Controls output volume.

POWER LED – Lights up when the TUBE ZIPPER is on.

STATUS LED – Lights up when the TUBE ZIPPER Effect is engaged. If the STATUS led is off, the unit is in TRUE BYPASS mode. The Footswitch engages/disengages the effect.

FREQUENCY LED – Gets brighter as the filter's peak frequency rises.

- OPERATION -

Some Things to Keep in Mind When Experimenting with the TUBE ZIPPER:

Due to the high gain of the filter circuit, when the **RESONANCE** knob is turned up high, the Tube Zipper may go into oscillation. This is the way the unit is designed and enables you to get over-the-top tones that make the Tube Zipper unique. If the oscillation is bothersome simply turn the **RESONANCE** knob down.

The controls are extremely interactive and sensitive – slight changes in a knob's position can sometimes produce a radically different effect.

Tips for Using the Envelope Follower in the TUBE ZIPPER:

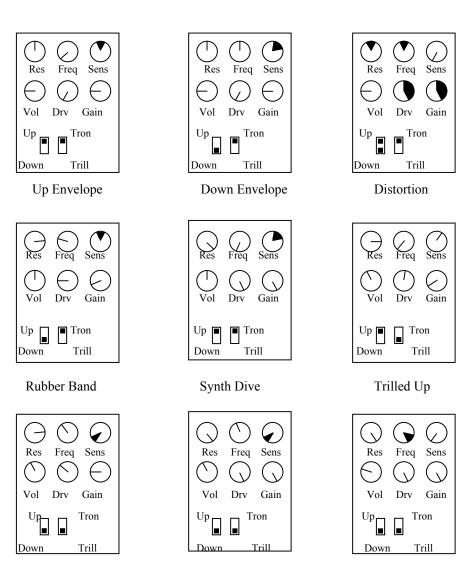
The ENV UP Position: When you play a note, the peak frequency of the filter will start at wherever the FREQUENCY knob is set and then very quickly jump UP to a higher frequency, depending on how loud the note is and the setting of the SENSITIVITY knob. The louder the note and the higher the SENSITIVITY knob, the higher the frequency will jump UP. The peak frequency of the filter will then sweep DOWN, following the envelope of the note. The filter sweep will stop at the frequency the FREQUENCY knob is set to. To obtain a large frequency sweep when using the TUBE ZIPPER in the ENV UP position, you will want to set the FREQUENCY knob to a low value, below 9 o'clock on the knob. Set the SENSITIVITY and the RESONANCE knobs above 12 o'clock.

The ENV DOWN Position: When you play a note, the peak frequency of the filter will start at wherever the FREQUENCY knob is set and then very quickly jump DOWN to a lower frequency, depending on how loud the note is and the setting of the SENSITIVITY knob. The louder the note and the higher the SENSITIVITY knob, the lower the frequency will jump DOWN. The peak frequency of the filter will then sweep UP, opposing the envelope of the note. The filter sweep will stop at the frequency the FREQUENCY knob is set to. To obtain a large frequency sweep when using the TUBE ZIPPER in the ENV DOWN position, you will want to set the FREQUENCY knob to a high value, above 12 o'clock on the knob. Set the SENSITIVITY and the RESONANCE knobs above 12 o'clock.

TRON/TRILL MODE:

- 1. When switching between the two modes, the SENSITIVITY knob might have to be adjusted to better suit the mode you are in.
- 2. In TRILL MODE, the SENSITIVITY knob as well as the INPUT GAIN knob will effect the reaction the envelope has to your playing. Both of these knobs should be tweaked to find the best TRILL sounds.
- 3. TRILL MODE usually works better with high RESONANCE.

Sample Settings



Self Modulation

Call and Answer

Down Trill