### - 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.

### **United States & Canada**

**EHX CUSTOMER SERVICE ELECTRO-HARMONIX** c/o NEW SENSOR CORP. 55-01 2ND STREET LONG ISLAND CITY, NY 11101

Tel: 718-937-8300 Email: info@ehx.com

### **Europe**

JOHN WILLIAMS ELECTRO-HARMONIX UK 13 CWMDONKIN TERRACE SWANSEA SA2 ORQ UNITED KINGDOM Tel: +44 179 247 3258

Email: electroharmonixuk@virginmedia.com

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
- 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.

# electro-harmonix

## **Q-TRON**

### **Envelope Controlled Filter**

### -OPERATING INSTRUCTIONS-

Congratulations on your purchase of the **O-Tron** envelope controlled filter! You have purchased a very powerful tool for musical expression.

Please take a few minutes to familiarize yourself with the **Q-Tron's** controls and how they work.

Envelope controlled filters are a unique type of sound modifier where the intensity of the effect is controlled by the user's playing dynamics.

The volume (also know as the envelope) of an incoming audio signal is used to control a swept filter. As the volume increases or decreases so does the pitch of the filter.

### -CONTROLS-

**Drive Switch** (Up/Down) – Selects direction of filter sweep

Range Switch (HI/Lo) – Emphasizes vowel-like sound in low position and overtones in high position.

Gain Control (0-11) – Functions as both a volume control and a filter sensitivity control in boost mode. In Normal mode the Gain control acts as a filter sensitivity control and has no effect on the unit's output volume.

**Boost Switch** (Normal/Boost) – Normal mode disengages internal pre-amp, Boost mode activates it. Also determines function of Gain control (see above).

**Peak Control** (0-11) – Determines frequency peak of filter. This control will create a more dramatic effect when turned clockwise.

**Mode Switch** (LP, BP, HP, MIX) – Determines what frequency range the filter will sweep in. Emphasizes lows in Low Pass, midrange in Band Pass, treble in High Pass. Mix mode combines BP with dry instrument signal.

Bypass Switch (in/out) - Disengages effect.

Lastly, the **O-Tron's** effect can be controlled by the user's playing dynamics. A strong attack will yield a more dramatic effect, while softer playing will yield more subtle effects or none at all.

-OPERATION-

Your unit comes equipped with a 24-volt/100mA tip positive, external power adapter (European models come equipped with a 24v DC/30mA tip positive adapter). Use only the power adapter supplied. Using the wrong adapter can cause serious bodily injury. Using the wrong adapter may also damage your unit and will void the warranty.

Make sure all controls are set at minimum. Connect your instrument to the input jack and your amplifier to the effect out jack. The unit's power LED should be lit.

Set the Q-Tron's controls to the following:

Drive Switch: Up Range Switch: Low Mode Switch: BP

Peak Control: Maximum Boost Switch: Normal Gain Control: See Below

Vary the Gain control until the Overload Indicator LED lights on most of the notes you play. If no effect is noticeable, depress the Bypass switch to engage the effect. With this setting the user should be able to approximate the sound of a conventional wah wah pedal. Experiment with this setting to see how the **Q-Tron** reacts to playing dynamics.

Adjusting the Gain and Peak controls will vary the amount and intensity of the effect. For tonal variations adjust the Range, Mode, and Drive controls.

To attain an effect similar to an original Mutron III, set the O-Tron's controls to the following:

Drive Switch: Down Range Switch: Low Mode Switch: BP

Peak Control: Maximum Boost Switch: Boost Gain Control: See Below

Vary the Gain control until the Overload Indicator LED lights on only the loudest notes you play. Increasing the Gain will saturate the filter, yielding those famous, "chewy" Mutron-like sounds. Adjusting the Peak control will vary the intensity of the effect. For tonal variations, adjust the Range, Mode, and Drive controls.

### -OPTIONS FOR USE-

Due to the **Q-Tron's** extended frequency response, it can be used with a wide variety of electronic instruments. Here are some setting tips for use with different instrument types:

**Range Control**: Lo range is the best for rhythm guitar and bass. Hi range is best for lead guitar, brass, and wind use. Both ranges work well with keyboards.

**Mix Mode**: Works especially well with bass guitar (May require higher peak settings).

**Drive Switch**: Down Drive works well with bass guitar. Up Drive is best with guitar and keyboards.

The **Q-Tron** can also be used in conjunction with other effect pedals. Here are some interesting combinations:

**Q-Tron** and **Big Muff** distortion: Place the distortion <u>after</u> the **Q-Tron** in the signal chain. The use of distortion will dramatically increase the intensity of the **Q-Tron's** effect. You can also place the Distortion before the **Q-tron**, but his combination tends to flatten the dynamic response range of the effect.

**Q-Tron** into another **Q-Tron**: Try this with one unit in the Up Drive position and one in the Down Drive position.

**Q-Tron** and octave divider: Place the octave divider before the **Q-Tron** in the signal chain. Make sure to use an octave divider which maintains the natural envelope of the signal. This combination will yield sounds similar to an analog synthesizer.

As always, experiment to achieve your own unique sound. When used properly, the **Q-Tron** will provide a lifetime of playing pleasure!