

User's Manual

Butter Yellow Auto Quack (BJF design)

Thank you for your purchase of the Butter Yellow Auto Quack (BYAQ) by One Control.

- **Overview:**

It's an envelope controlled filter. This type of filter is controlled by the dynamics of playing. BYAQ is a resonant filter, the center frequency of which moves upward with as you strike a note harder. The filter takes the initial transient of a plucked note and then follows the decay of the note so that filter center frequency moves up at the peak and then falls by the ratio of the decay

- **History of effect**

Since envelope filters are controlled by strength of input signal, historically famous users of envelope filters have connected the control input directly to guitar or bass pick up and others used compressors or volume control on instrument to equalize the value of notes through out the fretboard. Envelope filters are also common in analog synths.

Historically most envelope filters were designed for keyboards to cover the complete range of the keyboard. BYAQ is adapted to the range of electric guitar and electric bass and has therefore a more narrow range. The heart is a resonant filter similar to a wah however BYAQ has a Mellow/Bright switch that sets the range of the filter.

There are a number of problems with use of envelope filters on guitar and bass which the BYAQ attempts to solve: partly filter range is often too wide and therefore BYAQ has a range switch; filters often rest at very low frequency and the BYAQ is made to rest at about transparent level: this allows having BYAQ on for a see through effect until a transient triggers filter to move. The starting frequency can be set with Bias control so that even small movements i.e. mini-wahs can be created on each plucked note.

- **The sounds:**

BYAQ can be used to make wah sounds controlled by the musician and it triggers swiftly enough for fast rhythm sequences as well as making low strings mellow and high strings bright and BYAQ can be used to make small or larger sweeps of filter to create a movement on chords.

- **Bjorn's comments:**

Sensitivity is set for medium pickups and a tip is to use Pale Blue Compressor set with Blend to allow transients to equal sensitivity throughout fretboard and also to equal sensitivity between pick ups on instrument. and also to compensate between different instruments.

When using envelope controlled effects in general and without the aid of compressor with transients it is often helpful to set sensitivity at highest required and to ride the volume control on instrument to equalize.

Though Envelope filters are often used on clean sounds BYAQ can also be used ahead of distortion to make a hand controlled wah.

- **Controls:**

BIAS: Sets starting point of filter and can be used to sweep through the filter's entire range.

SENSITIVITY: Sets the level where transients trigger filter to move.

DECAY: Sets the rate it takes from transient moving filter to return.

MELLOW/ BRIGHT switch: Sets filter range from low and narrow to high and wide.

Footswitch: Engage or bypass the pedal (Truebypass)

- **Specifications:**

Input impedance: 500 K

Output impedance: 1K

Power Supply: Negative Center DC 9V or 6F22 Battery

Current Consumption: 6.4 mA

Size: 39(W)x100(D)x31(H)mm / 2.41(W)x4.41(D)x1.26(H)Inch

Weight: 160g / 5.64oz.

True-Bypass Switching

High Quality Aluminum Enclosure