

## General Operation

ToadWorks Envelope is a dynamically controlled effect loop. Depending on the configuration, attack-controlled features can be added to non-dynamic effects. The dynamic nature of this device can be applied to virtually any effect; modern, vintage, rack gear, etc.

ToadWorks Envelope can be used in many ways, but there are five basic modes of operation:

**True Bypass** - This mode does exactly what it suggests - signal sent into the IN jack is mechanically routed around the active Envelope circuit.

**Dynamic Forward** - In Dynamic Forward mode, signal coming into the IN jack is split into multiple signals. One signal is unaffected (Clean Pass), while another is routed to the SEND jack. Signal coming into the RETURN jack is then mixed with the Clean Pass signal and sent to the OUT jack. In this mode, the Clean Pass to loop signal ratio is dynamically controlled by the original signal amplitude; the harder the attack, the more looped effect is heard.

**Dynamic Backward** - Dynamic Backward mode works identically to the Dynamic Forward, but the dynamic behavior is reversed. In Dynamic Backward mode, the base signal is primarily from the effect loop - the harder you play, the more Clean Pass signal is heard.

**Trigger** - In this mode, the dynamic nature of the effect is applied to any signal coming into the RETURN jack. Trigger mode allows control of any external audio source using the signal amplitude coming into the IN jack. (note: To completely eliminate the Clean Pass signal from the output, all 1/4" plugs must be removed from the SEND jack)

**True Loop** - This mode offers a true buffered effect loop at unity gain. True Loop mode disables the dynamic aspect of the circuit, as well as completely eliminating the clean pass signal from the output.

### 1 Sensitivity

The SENS. knob adjusts the sensitivity of the attack-based circuit. Turn the knob clockwise to increase the sensitivity, counter-clockwise to decrease the sensitivity. This control is also a push-pull switch - pull the knob out to activate True Loop mode, push it in to activate Dynamic modes. (note: activating True Loop mode will override all other settings)

### 2 Release

The RELEASE knob adjusts the release time of the attack-based circuit. Turn the knob clockwise to increase the release time, counter-clockwise to decrease the release time. This control is also a push-pull switch - pull the knob out to activate Dynamic Backward mode, push it in to activate Dynamic Forward mode.

### 3 Send

The SEND jack is the output for signal that has been split off from the original signal. Signal coming from the SEND jack can be used to control an external envelope follower, sent straight to a recording console, sent to another effect/amp chain, or routed through an external effect device and sent back into the RETURN jack.

### 4 Return

The RETURN jack is an input for external audio sources. In Dynamic Forward/Backward modes, signal coming into the RETURN jack will be mixed with the Clean Pass signal. In Trigger mode, signal coming into the RETURN jack will be sent directly to the OUT jack (in this mode, the level of the signal sent to the OUT jack will vary according to the signal amplitude coming into the IN jack). In True Loop mode, signal coming into the RETURN jack will be sent directly to the OUT jack with no dynamics applied (and no Clean Pass signal present).

### 5 In

The input jack is clearly labeled on the right side of the pedal. It is designed for use with 1/4" phone plugs only.

### 6 Out

The output jack is clearly labeled on the left side of the pedal. It is designed for use with 1/4" phone plugs only.

### 7 Switch

The switch is located directly on top of the pedal, and is used to turn the effect on and off (Note: Envelope is wired for "True Bypass." This means that when the switch is in the "off" position, the original signal is routed around the effect circuit, resulting in no signal loss or coloration).

### 8 9V Battery Clip

Envelope uses a standard 9V alkaline battery. We recommend Duracell part # MX1604.

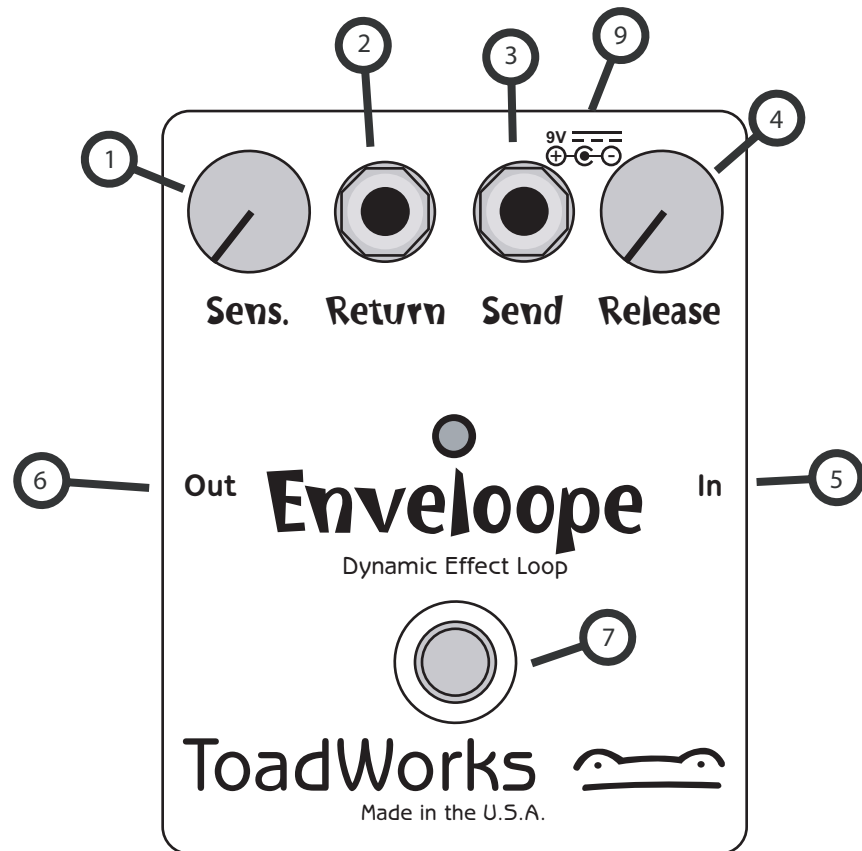
### 9 Power Supply Jack

Envelope is equipped with a 2.1mm barrel jack for use with a tip-negative 9 Volt DC power adapter (Note: Many 9V power adapters are grossly out of spec, and the actual voltage can range anywhere from 7.5 Volts to 16 Volts. Voltages of 11V and above will affect the operation of the pedal and can damage the components. To avoid damage and/or incorrect operation, use only the highest quality power adapters).

## DO NOT UNDER ANY CIRCUMSTANCES USE AN 18V OR AC ADAPTER!

Forget about "increasing headroom" - if the pedal was intended to be used with 18V, we would say so. Any voltage higher than 11 VDC will DESTROY the op-amps, and we won't fix it for free.

Envelope is an extremely complex and sensitive circuit, and requires an optimal power supply at all times. In order to make Envelope work using only 9V, certain concessions had to be made, and as a result, the battery clips inside this unit are for convenience only - ToadWorks does NOT recommend using Envelope with anything other than a standard 9V Boss adapter.



## Warranty

We guarantee that your pedal will be free of defects in workmanship for a period of two (2) years from the date of purchase. However, each pedal is hand made, and as a result certain imperfections are unavoidable; color & finish will ALWAYS be slightly imperfect. Just think of it as "unique." We also guarantee the continued operation of all components for a period of two (2) years from the date of purchase. Within this two year period ToadWorks will repair or replace at our discretion any pedal that ceases to function properly as a result of faulty workmanship or materials.

This warranty can be voided by any of the following:

- Removal or replacement of any component
- Prolonged exposure to elements
- Abuse above and beyond normal wear and tear
- Application of incorrect power supply

No pedal shall be repaired or replaced that shows signs of abuse and/or modification. All requests for warranty service must be accompanied by documented proof of purchase. This warranty is non-transferable. As of January 1, 2006, units purchased from US domestic dealers and shipped to Europe, Asia and Australia are not eligible for warranty services.

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## REAR VIEW

