

# Ghost Fax: A Phase Computer (at a glance)



This is a phaser that goes bonkers. It also does some normal stuff. Let's look at the controls.

**Volume** - That's just the volume control. Volume is always volume.

**Action** - This knob has a few different functions, depending on the Gfax's mode. In general, action controls the motion of the phaser, in a variety of ways. More on that as we get into the mode settings.

**Mix** - This knob allows for a full wet/dry mix. Mix is always mix.

**Feedback** - Controls the feedback, or resonance of the phaser. Low settings can all but cancel out any effect, high settings can introduce self oscillation.

**Poles** - Allows you to add or subtract poles from the phaser. The Gfax has as few as two, or as many as 32 poles. In general, more poles make for a "wider" sound.

**Toggles** - These outside toggles control which mode the Gfax is in. The arrows on the face of the enclosure dictate the directions of the toggles required to enter each mode. The names are color coded, and the left LED will change color to further illustrate the mode setting.

**Xpd** - Expression Pedal Destination. When the toggle leans right, the expression pedal will control the "poles" pot. When the toggle leans left the expression pedal will control the "action" pot.

**Bypass** - Good old bypass. Turns the effect on and off.

**Pause** - Pauses any motion of the phaser in standard and envelope modes.

**Power** - Ghost Fax takes the industry standard 9v center negative plug. It requires about 100ma of power. We use OneSpot daisy chains or a OneSpot Pro brick style power supply.

**Expression** - For best results, use an expression pedal with a 10k control pot. This is the most common value.

## Four Freakin' Modes (plus a secret menu)

### Standard Star toggles pointing >>

(Aqua LED) This is how you get those old fashioned phaser sounds. An LFO controls a rhythmic modulation of the phase. The speed is controlled via the **Action** knob.

**Secret menu** - To activate the secret menu, press both footswitches at the same time. The mode LED will flash to tell you you've arrived. Now some knobs have new functions!

**Feedback** skews the shape of the LFO, allowing for wonky wave shapes that throw listeners off balance..

**Poles** sets the maximum (screechy-est) frequency the phaser can reach.

**Be sure to exit the secret menu** by pressing both foot switches again to save your secret menu settings.

### Manual Star toggles pointing ><

(yellow/orange LED) Imagine if your phaser stopped whooshing around and you could just pick your spot with a knob! This is exactly how manual mode works.

Pick your phase spot with the **Action** knob. No secret menu functions for this mode, but you can make it sound like a robot throwing up forever.

### Envelope Up Star toggles pointing <<

(red LED) Ghost Fax will generate a control signal based on the input amplitude, and crank the phase up in response. As the input signal fades out, the phase will slide back down. The **Action** knob controls the depth of this motion. Also functions as a laser-drum machine.

**Secret Menu** - **Action** now controls the length of the envelope attack phase. Counter clockwise rotation decreases the attack time, allowing for hyperspeed envelope re-triggering. Clockwise rotation allows for longer, gentler envelopes.

**Poles** sets the maximum (screechy-est) frequency in the secret mode.

### Envelope Down Star toggles pointing <>

(deep blue LED) The same concept and controls, and secret menu as **envelope up** except the phase is pushed down by the envelope attack, and rises back up as input volume fades out. Try the envelope settings on drums and keys, you'll be glad you did.



### Secret Menu!

Pressing both foot switches at the same time will open the secret menu in **Standard**, **Envelope up**, and **Envelope down** modes.

The mode indicator (left) LED will flash, and some knobs will allow for additional controls.

**Be sure to exit the secret menu** by pressing both footswitches again, or your settings will not be saved, and your tears will nourish a thousand demon babies.

