

# Harmy Goo Control Analysis / Lab Practices

## What is Harmy Goo?

In essence, the Harmy Goo pedal is your experimenter's lab that allows you to extract and manipulate the harmonic content of any input signal. This is a 100% totally analog process, fine-tuned for any dynamic range and any playing style.

Any instrument can be used, the signal path is unbalanced for use with guitar, bass, keyboard, etc. The input section has high headroom making it ideal for in front of an amplifier or in the effects loop of an amplifier.

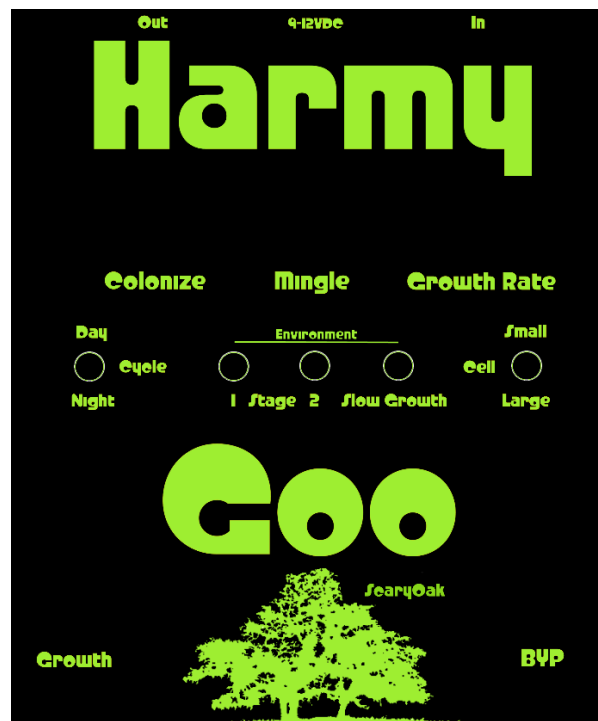
This pedal is designed to follow your picking dynamics. How hard or soft you hit the strings has a direct and profound impact on the sound of the process, it *is* the basis of all Goo cell generation. Active pickups are fully certified and fall within data input parameters for correct functioning of the process of cell extraction/manipulation.

This Goo process covers a very wide frequency bandwidth from laid back and mellow to up front and aggressive, all by adjusting the environment that the Goo is grown/generated in.

The bypass mode is unbuffered, true bypass.

Required power is positive (+) Barrel 9-12V power, 200mA. Using 12V increases the headroom when using high level signals *slightly*. Never apply more than 12V, it will damage the unit. For most uses, there will be no audible difference when using 9V, as the front end is capable of accepting high levels signals (+10dBu) without using 12V.

To quickly generate and spread some Goo, take a quick glance at the following lab notes to familiarize yourself with the controls, plug in a signal source and grow some Goo.



## Controls:

### Growth Rate

The **Growth Rate** control is used to set the desired gain (Goo Cell Generation) in the lab and the controls' range is determined by the **Stage 1**, **Stage 2**, and **Slow Growth** switches. Clockwise rotation SLOWS growth rate- to increase gain (growth rate), turn counterclockwise. For normal use, this control is pretty much always set fully counterclockwise. When using line level signals, increasing this control clockwise will get you to the same place sonically without overdriving the first stage too much (although that in itself sounds good) Intentionally clipping the front end with the output of whatever is connected to the input is thoroughly encouraged. The front end can handle very hot signals (no speaker inputs, please) and is designed to behave in a musical way with all signal levels.

**Stage 1** and **Stage 2** controls are band contoured filters that you can switch in to make changes to the extracted harmonic content generated by the **Growth Rate** Control and the **Environment** switches. These also effect the overall cell generation and can be utilized with distorted input signals from fuzz pedals, heavy gain amp channels, ect. These three controls are highly effective to balance cell generation and to maintain suitable Goo output for all types of input configurations/instrument types.

**Slow Growth** limits the range of cell generation in the first processing section of the lab and is useful when changing instrument types between guitar and bass/ baritone. Enable **Slow Growth** while using bass/baritone instruments if you want to limit the large cell generation. This mode is certified for all instrument types and is not required for any particular input device.

### Mingle

The **Mingle** control lets you mix the output of the goo discharge port and the input signal outflow ducts (harmonic seed allocation array). Clockwise opens the goo discharge port, conversely, fully counterclockwise will allow the least amount of goo through and still maintain a healthy ecosystem.

### Colonize

The **Colonize** Control allows the user to adjust the overall Goo discharge rate in any input setting configuration. This is a very wide amount of control, for typical guitar/bass levels and a very good starting point, this should be set at about 9:00 o'clock. When enabling the **Environment** switches the **Colonize** control is where you want to make up the level/discharge rate.

This control is great for pushing the front end of an amp. There is plenty of energy here-use wisely.

Pushing the return of an effects loop in an amp is also certified for use, although care should be taken to not exceed the input flow rate for the amplifier. Always start low and increase to optimum levels/discharge rate.

## Cell Size

The **Cell** control is the cell generation aperture setting for the signal being applied. Low frequency signal (bass/baritone) can be enhanced by using the “**Large**” cell setting.

**Small** cell size is certified for all signal types.

This is a convenience setting, any **Cell** size setting can be used by any instrument, but if you play bass and want some more definition at higher cell generation settings, this may be your ticket there. As with every control and switch: Use them, there is no right or wrong, just different amounts of Goo with different cell structures.

## Cycle

The **Cycle** control mimics a diurnal shift for direct stimulation of the cells from the goo discharge port/HSAOD.

**Day** cycle enhances the large cell generation which occurs during the day. Larger cells are bigger, rounder and have a more pronounced low/mid spectrum. There is no discernible phase shift between the two cell generation sections.

**Night** cycle is characterized by a more focused upper mid spectrum and tends to follow a slightly different phase path out of the harmonic seed allocation array output ducts (HSAOD). This causes direct stimulation of the planum temporale and many believe it enhances the ability to increase musical vocabulary. Our experiments confirm a correlation between both styles of stimuli and have concluded that the HSAOD performs better than initially forecasted due to this multi-phase cell discharge manipulation.

Both **Night/Day** cycles are heavily influenced by the Mingle Control. *Heavily* influenced.

## Environment:

The Environment section lets you setup two different worlds (gain structures) to grow your Goo, selectable by the **Growth** footswitch. **Stage 1/ Stage 2** are enabled/disabled with the footswitch, think of them as the adjustments for the ‘low gain’ operation. These switches should be considered as preset switches for the low gain operation or when using a fuzz/gain pedal before the Harmacy Goo or using with a distorted amp channel. They are active while NOT in the “**Growth**” mode. (LED OFF), so changing the switches while the **Growth** LED is on, you will not much difference.

**Stage 1** On=Up Provides a softer, rounder goo, great for going into a dirty amp.

**Stage 2** On=Up Another step in the same direction as Stage 1, with a slight lean to the midrange. Great for lower gain lead definition, etc.

Both **Stage 1/Stage 2** On=Up This is the lowest Goo generation setting and is very handy for adding just a subtle amount of goo you your sound. Start here for bass for ‘just a touch’ of Goo.

**Slow Growth** The **Slow Growth** enable switch is for matching instrument levels to the unit. Enable this mode when you have hotter signals, like humbuckers on a baritone guitar to clean up the low end if it becomes muddy or loses too much definition. This is not a hard and fast rule, as lots of low frequency content with heavy chords is a wonderful sound, especially when you let big fat chords sustain, the tail (trail of Goo) is dynamic to your playing. (Bass chords are certified for use)

*The **Environment** section is highly effective when the Harmacy Goo pedal is used in the effects loop of an amplifier.*

**Bypass Footswitch** Typical bypass, true by design and copper from in to out, isolated from everything.

**Growth Footswitch** The Growth Footswitch lets you change between two levels of Goo generation. Maximum cell production is achieved with the “**Slow Growth**” switch in the Environment section set to off and the Growth LED is lit.