



Pollyanna Octave Owner's Manual

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Introduction

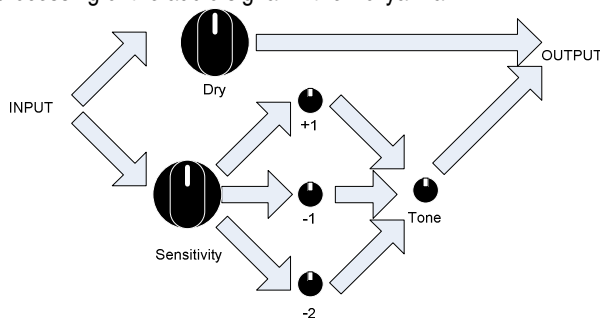
Hi there! Congratulations on purchasing the MI Audio Pollyanna, my new Poly-octave, analogue 'synth' pedal. I've been a very good and polite boy thus far with my other pedals, all of which have been very pragmatic middle of the road affairs (quite good, if I may say so myself!). With the Pollyanna, I've decided to do something a bit wacky, but a hell of a lot of fun!

The idea for the Pollyanna has been with me for some time now, but took shape within the space of a few hours, believe it or not! The basic idea was to combine the most common types of dirty and nasty analogue octave effects in one unit. If you're after a smooth polished polyphonic digitised octave, look elsewhere! This is all about the funk baby!

Features

Signal Flow

Below is a signal flow diagram which best represents the processing of the audio signal in the Pollyanna.



From the input, the signal is split into two paths. The first path goes to the Dry control. The second passes through the sensitivity control to the three individual octave levels. The output of these three octaves are then mixed and the overall tone adjusted with the tone control. Finally, this processed signal is then mixed with the dry signal to produce the final output.

Sensitivity Control

The sensitivity control is an input gain control to the three octave circuits. It works in two ways.

For the octave up (+1), it acts as a level control, and then as the sensitivity control is turned up higher, as a kind of fuzz control. If you're going to drive the Pollyanna with an

overdrive, distortion, or fuzz pedal, then there shouldn't be a need to set this control too high.

For the one octave down (-1) and two octaves down (-2), this control will adjust the sustain of the synth circuit. The higher sensitivity control, the longer the sustain. For very low settings of the sensitivity control, you may find that the lower octaves do not track at all. This is normal.

+1 (Octave Up)

The vintage octave effect works by rectifying the audio signal to roughly 'double' the frequency. The octave up effect in the Pollyanna works exactly the same way, although we've employed a precision full wave rectifier circuit, so that you don't get signal drop-out for even the softest signal. Having said that, the rectification process does some strange things to your signal 'dynamics', but this is precisely where all the fun's at! For low settings of sensitivity, the octave up effect is 'clean' but warped in a cool kind of way. As the sensitivity goes up, the octave up becomes more like an octave/fuzz effect.

One thing to note about the octave up effect is that just like in a vintage octave effect, the octave effect is strongest using the neck pickup, and playing around the 12th fret. For the geeky among us, the reason for this is due to the position of the vibration anti-nodes above the pickup. I've added an extra bit of filtering to make the octave up effect stronger than normal, but it's still a good idea to keep this in mind when trying to get the strongest octave effect possible.

I also find that to get an even stronger octave effect (depending on the guitar and the pickup), the tone control needs to be rolled back a bit, but this is not imperative.

Playing lower down the neck produces a very cool 'metallic' sound. Try some power chords,... a lot of fun!

-1 and -2 Synth Octave Down

The octave down circuits in the Pollyanna are brutally beautiful. They turn an otherwise articulate and dynamic instrument into,... well,... something resembling a Commodore 64! This is square wave heaven circa 1982.

Like the +1 octave, the Sensitivity control has an affect on the -1 and -2 octaves. However, unlike the +1 octave, where the sensitivity control functions like a gain control, here it functions more like a sustain control. The higher the sensitivity control, the longer the sustain. But keep in mind also that the higher the sensitivity, the more 'noise' is generated on note attack. So keep this in mind.

Tone

The tone control balances the low and high frequency content of the octave signals only. This leaves your original dry signal as is. There's no hard and fast rule to adjusting this control.



Dry

This is a high quality buffered version of your original signal. At 50%, it's roughly the same amplitude as the input signal. This allows you to mix in some of the original signal. You can then use this to add a hint of your original tone. Alternatively, by letting the original tone dominate, you can add just a hint of octave madness.

Using the Pollyanna

Such a unique device should really be experimented with. In general, there's no hard and fast rule to using the Pollyanna. However, here are a few things I've found which are quite cool. As mentioned previously, neck position pickup is the best, and maybe even roll the tone back a bit.

1. Vintage Octave/Fuzz. Set all controls to 0, except for sensitivity to 50% or higher, and the +1 octave.
2. Super Octave up. As above, but plug the output of the Pollyanna into an OD pedal or gain channel of the amp. This will make the octave even stronger. You may need to reduce the sensitivity to avoid getting too much noise.
3. Another variation: Drive the Pollyanna with an OD pedal. Keep the sensitivity low, since you don't need to rely on the sensitivity to drive the octave. You can then mix in some dry signal if you like, so that your tone is mainly OD with a hint of octave, or just full on octave.
4. Weird metallic sound. Keep the sensitivity low, and use a clean guitar signal. Try chords if you dare!
5. mix -1 and -2 to taste. For an all out synth sound, don't use any +1 octave. Use a low sensitivity setting for a gated synth sound, or a higher setting for more sustain.
6. Try some pinch harmonics using the bridge pickup to completely freak out the tracking on the -1 and -2 octaves.
7. Booster: Keep all octaves set to 0 and use the dry signal as a high quality buffered booster. Heck,... add a bit of octave in there for a bit of fun!

A Note on Usage

I think one thing to keep in mind about using a pedal such as the Pollyanna is that you can't just play like 'normal' and turn the pedal on. This is a pedal which you need to work with and meet half way to get the best results.

Other Features

- High quality, heavy duty diecast metal casing.
- Heavy duty footswitch with true bypass.

- 9 volt battery operated or DC port (which accepts a standard barrel jack with a *Negative centre pin.*) Note that the Pollyanna has been designed to run comfortably up to 25V.

To Change the Battery

To access the battery, unscrew the 4 rubber feet with a screwdriver and remove the bottom plate.

Registration

To register your pedal, you can email your name, contact details, purchase date, and retailer details along with the pedal serial number to:

register@miaudio.com

Alternatively, you can send the above information to the postal address on the front of this manual. **PLEASE REGISTER YOUR PEDAL.** In the long run, it will be difficult to have your pedal serviced if you need to if the pedal is not registered.

Warranty

This pedal carries a 5 year warranty that covers all repairs due to manufacturer error. It does not cover any damage due to user mishandling, shipping, acts of God, and abuse. The owner should contact MI Audio directly for all repairs, and any work done by anyone other than MI Audio voids the warranty. All shipping costs are the responsibility of the owner, and are to be paid in advance of any work performed on the pedal. The owner may be asked to provide a copy of the sales receipt for verification.

Disclaimer

The owner or user assumes responsibility for death, injury and/or damages relating to the operation of this device. MI audio assumes no responsibility for death, injury or damages relating from the operation of this device. All specifications are subject to change without notice.