



QUICKSTART

To get acquainted with your new ADINEKO, let's plug it in by itself, without your other pedals. Start off with a clean sound from your amp.

The ADINEKO can achieve the authentic oil can sounds, but is designed to model the mechanical concept well beyond what was possible in original units. Let's set up your ADINEKO for an authentic oil can sound!

TIMING to 9-10 o'clock

VISCOSITY to 9-10 o'clock

REVERB to the verge of self oscillation

BLEND to 12 o'clock

BALANCE to 12 o'clock

Now you're hearing all of the hallmarks of an original oil can unit. A relatively short echo time on two taps, a vibrato in concert with the delay time, and a reverb that sounds like low lying fog coalescing upon the verge of a self-oscillating resonant point. To get more of the vibrato sound of a Tel-Ray Deluxe Organ Tone, use the above settings but turn the **REVERB** down and the **BLEND** up to taste!

CONTROLS IN DETAIL:

BALANCE: Original units had a short and long echo playback head selectable by a pair of slider switches or a rotary switch that allowed the user to select one or the other, or both on at the same time. We expanded upon on this concept by putting the playback heads on a continuous mixer, allowing accents and new rhythmic possibilities by favoring one head volume over the other. Counter-clockwise is the short delay time head, clockwise long head, and noon is both heads at equal amplitude.



catalinbread
MECHANISMS OF MUSIC

BLEND: This control allows you mix between 100% wet and 100% dry signals. The original units featured tube preamp stages, the ADINEKO's preamp stages are tuned to provide very much the same experience as a healthy example of an original unit.

TIMING: A majority of original oil can units have a fixed rotation speed hence a fixed delay time and fixed vibrato time (there were models with a mechanical motor brake to slow it down), however the actual maximum delay time was very short from 80-120ms. The ADINEKO extends your modulated delay time up to one second.

VISCOSITY: To really appreciate this control it is helpful to understand how the original units functioned mechanically. Imagine a slowly rotating metallic disc inside of a paint can. This disc "holds" an electro-static charge from a static record brush "head" until it is later picked up by one or two of the playback heads. In order to prevent this charge from leaking into the air it is sealed in by using a mysterious oil. It was rumored for a long time that this oil was a carcinogen, but as it turns out the oil was most likely Union Carbide LB-65 oil. But I digress, the oil's main purpose is to seal the charge from the air. The problem with oil is viscosity reduces (making it less warbly) based on how warm the unit has gotten. If it gets too hot the oil no longer can effectively store the charge. So in summary, the VISCOSITY knob controls the modulation depth!

REVERB: This knob functions like the repeats on any echo unit, it feeds back the wet output back into the input of the delay line. On oil can delays and the ADINEKO the repeats quality smears into a soupy foggy due to the low fidelity of the record medium and the fact that the echoes are always modulating.



Designer's Notes

My fascination with oil can delay units began many years before I founded Catalinbread. I don't even really remember exactly where I first ran into them, but when I did I would buy 'em whenever I could. My first unit was a Fender Dimension IV "Sound Expander" that plugged into the reverb loop on Fender amps. This particular unit created a reverb drenched vibrato that was difficult to actually use! So I asked around the budding young DIY websites (any of you DIYers remember The Ampage?!) to see if anybody had any information about modifications that would give control over the reverb and vibrato levels. The answer was unanimous, "that's just the nature of the beast!" Along the way I discovered other tidbits of information where people claimed that the oil in the cans was a mysterious and carcinogenic oil that you can't find anywhere. Over the years I stumbled onto other units including an Acoustic Reverberator, Tel-Ray Organ Tone, Tel-Ray Variable Delay and Gibson GA-4RE that actually offered some control and an inspiring usable echo and vibrato.

Catalinbread started working on an oil can delay pedal (only later to be named ADINEKO) in the summer of 2012, about the same time we began working on the ECHOREC. We identified a number of very cool behaviors of the old units, though the differences could be dramatic from unit to unit and day to day (even hour to hour!). The positive behaviors were a cool, bright, but dark sounding echo with a vibrato modulation that lined up with the echo time and a repeat quality, that had a fog which can hover in a neat way. There were many not-so-good behaviors with these units such as a short delay time, as the unit warmed up the modulation and repeat quality changes dramatically, and for the most part a limited amount of actual control over delay time etc. So we put it on the back burner and occasionally thought about it for what turned out to be a number of years!

As we always strive to do when making something old, new again, we want to honor the old experience and expand upon it. Our ADINEKO is no exception: the murky warble of the old units, traditionally only achievable when the oil's thickness is incorrect, can be conjured by a twist of the VISCOSITY knob. The warm echo quality has an expanded range of delay time (TIMING knob), more so than any oil can unit could ever achieve. The dual playback head is continuously balanceable (BALANCE knob) to favor one head over the other for interesting syncopation feels.

The ADINEKO must be powered with center negative, regulated 9-18v DC external power supply.

You'll notice that each of the ADINEKO cases have been aged. It seemed fitting for this pedal, which has been inspired by the old oil can effects, to physically look weathered and a bit stained.

-Nicholas Harris