

the following information on build accuracy was not included in the original PDF of compiled AVEC information. I found this with Google and I don't recall where. Interesting insights.

Quote

E-mail from XXX

April 2008

I'm away on a course so this is a quick reply. With pulses although we talk of a phase shift we are talking of the time between the start of one pulse and the start of the next pulse as being the same between each successive pulse, in an ideal world. If you are using the same type of drive components and type of mosfets, have high tolerance resistors and capacitors, and keep wire lengths between components as short as possible but consistent between each driver circuit, mitigating impedance and capacitance effects of the wires, the delays to all three coils should be almost identical. So even if there is 50 nanosecond delay, if it's the same delay to each coil then it's not a problem. Even a difference of 10-30 nanoseconds between coils will not disappoint in terms of output energy and cold elec effects.

Let's take a typical poor-build. Each coil has different widths out by 1/8inch or more. The coils are wrapped until either the spool is empty or it just seems the right height. The length of wire between coils varies by 15-20% at least. These coils will require independent delays of hundreds of nanoseconds and increases in pulse width of hundreds of nanoseconds to get a \*consistent\* output. But even without adjustment they'll get output, however the amplitude of that output will come in waves and not be as high as it could be, and the amount of input energy used will be much higher due to the much longer pulse widths. They will be unlikely to get a consistent cold energy output, the lightbulbs in the SEP circuit, may ebb and glow slightly. It may or may not be overunity but possibly only by 10%. All exciting stuff but it's not a setup that is going anywhere. It is not really utilising any flow of cold electricity, just bursts here and there. i.e. because the pattern is not building up, it is occurring only in waves, and is relatively feasible, i.e. there is no 'resonance' in the ether.

In answer to your question if you build your coils carefully and locate them precisely and rigidly, I would not bother with the delay line components. At a later date for reference:

These are useful for pulse width:

<http://www.datadelay.com/datasheets/3d7608.pdf>

These are useful for delay lines as you use a screwdriver:

<http://www.datadelay.com/asp/variable.asp>

Switch mode power supply chips can be useful for driving 3 or 6 coils as 3 pairs. Such as:

<http://ww1.microchip.com/downloads/en/DeviceDoc/70178C.pdf>

>Hi XXX,

>

>I'm still working on the control circuit for the coil and had a couple  
>of questions to ask you. Exactly how accurate does the phase-shifting  
>for the rotating field need to be? The controller circuit that I am  
>building uses some shift registers to divide the clock input and produce  
>the three output phases 120 degrees shifted. Below is the circuit that I  
>have come up with so far. The way it is setup, you can use the pulse  
>width of the input clock to control the pulse width of all three output  
>channels simultaneously:

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>I found that the circuit could run up to at least 5 MHz without  
>glitching and allows us to use a single pulse width control component  
to  
>control the outputs for all three channels simultaneously. However, I  
am  
>concerned about the phase-shift/delay fine-tuning.  
>  
>You mentioned that the phase-shift has to be accurate for the rotating  
>field to be setup correctly. Coming out of the shift register, the  
>timing for each channel is accurate to within 0.5 ns. but by the time  
>the signal goes through the driver ICs and input lines to the coils,  
>there could be significant delays of 10s of nanoseconds. My questions  
is  
>how precise is precise enough for the effect to work without destroying  
>the effect? If we need to fine-tune the output delays, I found some  
>8-bit delay line ICs that can adjust the the delays to within 0.25 ns of  
>the output up to a max delay of 80 ns. But before I toss these onto the  
>circuit, I thought i would ask you to see if this is really necessary or  
>simply overkill. What methods did you use to design the timing circuitry  
>for your controller?