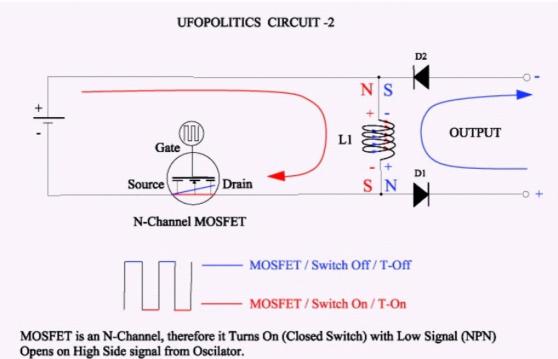
# a noobs guide to Ufopolitics

## art of, Indirect Current(IC), Cold Current (CC), radiant, Cold Electriciy(CE)?

Essential circuit diagram download > https://dl.dropbox.com/u/72933791/JohnStone%20public/Frequency%20Generaator/PWM%20FET% 20driver%20V2.pdf

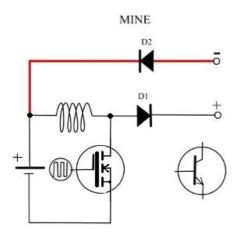
I have tried this output on typical DC brush motors, they go beyond estimated top speed...rated to go that fast at a consumption of @ 36 Volts, However using this just simple arrangement of Coil-Diodes it uses 4.0 Volts, going over speed limits, but the must impressive thing is...as they accelerate they become much colder.

If this is truly cold current you should be able to run it through a resistive load and the resistor should cool down.



Blue will be "Pure" and clean, just C EMF Output, Diodes block our signal out .

### INDUCTANCE BOOST CONVERTER



### Suggested loads after diodes on 'cold' side

Running the system without a load at Radiant Output will give you completely false readings at output, besides, Radiant will definitively Retro-Feedback into your circuit through Input (before diodes) and could blow your Mosfet's and other components. So, there must be at least a Load Resistor at Output at all times...but remember that Radiant goes through resistance without any effort, so the resistor must be set according to RE tolerance...meaning, a very low resistor of lower Kilo ohms, would do absolutely nothing, Nada. (exactly what load resistor is best?)



-Self ballasted fluorescent with fitting - 125 W/120V - you will just need @ 2000 Hz in output...spending @800Hz input.

Have a group of CFL's or at least one connected to output.

You have to slowly start increasing frequency, till you start seeing the CFL's flashing and going brighter

as you turn frequency higher, until you get to the Max Point of steady brightness, from there you start going up...but watch the meters or will blow CFL's.

Outputs power to five 120V/23 Watts CFL's

Use first a 120 V Neon or a 23 Watts or lower CFL as Monitoring lamp.

I never had a problem with CFL's except blowing their 33 uF Cap...rated at 200V...but replaced with same value 400V...lights great.

I do not use below 23 Watts with my set-up. (36V Input)

-Regular type Brushed DC Motor. (what rating?)

A Brushed typical short-circuit DC Motor will Run very smooth and no sparks at all on Commutators, but mainly READ TEMPERATURE on Motor while ON at full blast.

High torque motor rated 28V 2.8A 0.85 FT. LBS

-Dynamo-electric machines.

-Simple conversion COLD to HOT is just via big capacitor. Only requirement here is frequency! El.Caps don't like low frequency with big ripple current. So you have to use HF caps as pre-filter and then el.caps to store energy.

Best way is to charge cap bank to maximal allowed level (Uds and cap max voltage dependent) and then use BUCK convertor to regulate output voltage. I am working on it now. One DSP controller regulating COLD side via duty cycle value to do not 'overshoot' max levels together with BUCK regulation of DC output voltage. Last step is full bridge true sine wave converter to make 230VAC. But this is not important at the moment.

-A Generator contains (basically and briefly) three circuits:

1- The Stator Field: Stator meaning, it always maintains a steady static, magnetic field polarity. They could be Rotary, where the electrical feeding is done through continuous slip rings contacts. Or Stators could be "non movable", more likely structurally set in the outside of the embodiment.

2-The Generating Fields: They are located opposite facing the Stator Fields, wherever they would be, In or Out.

3-The Exciter Fields: They are in charge to keep feeding "linear" current to Stators via the slip rings, rectified by a couple of diodes, in order to always get DC on them. And most of times they are double opposite coils not to "interrupt" the sequence in either position of the magnetic poles. They are located in between the Generating Fields, facing the Stator Fields.

First thing wrong In Symmetric generators: The generating fields are connected in a multi-filar heavy gauge wire (14-16) depending on output spec's, BUT always interconnected between them in an array that could be parallel or series. This connections derive in a negative performance, because the fields that are not being induced in that "momentum" that stator is NOT passing by, receive current from the ones being induced, therefore they magnetize against rotation, create drag and magnetic friction, besides reducing output because their electrical consumption. Here is the main reason why, the more we add "Loads" the more this generators oppose to our "Prime Mover"...

If we look at all Nikola Tesla Generators and in general all his Electro-Dynamic Machines. He ALWAYS states to use Independently connected coils sets in Pairs or Groups of Pairs (why in pairs?...well to satisfy the positioning of the Static Fields at the 180 degrees timing). He uses dual or more -according to set-up- output slip rings for each group of generating fields. Further on, this way to interconnect the Generating Fields allows to "exchange" coil components with a Motor Assembly in a timely sequenced fashion that He also, nicely displays in every angle of rotation to fulfill the whole 360 degrees...

Now, We will NEVER be able to make this happen, to accomplish this extremely important "exchange of components" in ANY Symmetrical Arrangement, simple as that, Ladies and Gentlemen!!

Second thing I see wrong with Symmetry in Generator arrangement is to "Linearly Feed" the Stator Fields at all times, when they could be easily Pulsed, therefore, obtaining the Natural Response from our Nature to energize the Generating Coils while we give a "brake" an Idle to our Stator Feeding process. This Opposite Nature response, instead of creating drag, it could assist rotation, if, set up in a convenient and preconceived fashion.

Now, the arrangement of a typical Alternator in any given vehicle is even worst, related to the way the Stator displays its magnetic field at the whole 360 degrees based on the Spider design, and "On" at ALL Times...but I guess it does not matter...if we are using a heavy muscle big HP Gas Engine...Right?

Well, this fact adds enormous drag on our engines, creating our "Idling RPM's" at very high rates...but it doesn't matter either...we just add more Gas to it and problem solved...

This post should have gone into Symmetrical versus Asymmetrical Systems...but this is in order to add to the Generator from Harbor Freight above

## Diodes

The Diodes should be the lowest resistance than the IN4000 family (rated @600 Ohms)...

NTE576 is cross referenced to the UF505 which is a more "international" number ...rated at 400 Volts and @4000hms [NTE576] (NTE577=1000v)

Alternate? HFA16PB. They're ultrafast rated at 600V/15A continuous?

### R1560P2 diodes

Diode must be "Fast Switchers" and rated to pretty High Voltage...400V and Up.

If you have the 1N4003-4004 up to 4007 they will work fine...not as fast as 576...but safe.

1N4148 after your diodes, as a second filter to do the Final Clean up from Hot

Put two diodes in series in each line...one of them to be a 1N4148 (Germanium diode) after the big voltage rectifiers(NTE576), or will blow them up. Once you connect the 1N4148 small diodes you will not read nothing at output, but will obtain better filtering.

## **Primary Coil**

Enameled magnetic wire.

Plastic new Roll of Coil from Factory 16 Gauge, ten pounds just adding diodes at ends.

If you could wind it "BiFilar" like Tesla's Patent, that would create a stronger Electromagnetic Field. <u>http://en.wikipedia.org/wiki/Bifilar\_coil</u>

Bifilar coil should reduce the Ohms a lot...try to keep it in the lows 1-2 Ohms on primary

The perfect measurement would be a bit over like 1.4 to 1.5 Ohms

# I am having much better results with a Bifilar Coil, but NOT series but Parallel connected between wires.

A Quadfilar of 19 awg is an awesome Coil set-up!

I use masking tape between layers, or any kind of higher temperature flex paper. to damp/reduce vibration noise, ...connected outside Coil, meaning leaving terminals extended outside the coil, this I made it like that for testing purposes...Then you could connected "Bifilar"..BUT all have to project same Magnetic Orientation that is VERY IMPORTANT!!, Otherwise they will cancel and will never work!!...I also check induction levels playing with just two in series and one primary out etc...

All Layers winded in same direction, to have same N and same South in COMMON.

This is just a single Coil , that if you like could go the 360 Turns continuous (without breaking them in layers) I did it because it helps when testing other parameters (like the way this electricity induces into the next layers before Hot Electricity does, etc) and doing some math also between Current, Voltage and Hertz, Load On-Off, etc, etc.

Now winding the Coil I started CW on top of cylinder core...and that is meant to be the positive, therefore, that upper part next to (+) will give you a North Pole...

All other layers I did the same exact way.(CW)..I put a white sleeve to mark which one was first layer...and 2, & 3...

I have done it is Bifilar, just because is double stranded wire, two AWG 18 or 20, no big deal there...but starting end to starting end attached and final end to final end, saying it is a parallel connection. This creates a double stronger magnetic field that makes the Lady come in faster and stronger, the only problem is resistance, like you've said...making it this way sets the Coil at very low R levels...mines are between 1 to 2 Ohms...that is the reason I have proposed to start lowering the Hot On times after we get Her in solid...

There is a center part that has been ignored by physics on any given Coil...an structure of opposed magnetic polarity that actually attaches 'internally' to the externally disposed one we all are familiar with...in every magnet or electromagnet in the world.

Outer Diameter of Core =2.0 Inches. Height of coil= 2.0 Inches. 200 Turns 18 awg wire (double strands), connected in parallel start with start, end with end. After finishing winding the outer wire diameter gets very close to three inches.

### The way I wound it:

1-I make my own spool ends or caps with fiberglass sheets, in a fiberglass tube that I also mold/make...now, this one was made over acrylic clear tubing just for video purposes...but I like fiberglass better since it can stand better the heat. (I use Polyester Resin with Methyl Ethyl Kethol (MEK) Hardener. The end caps prevents from wire to slip out of control and could result in a loose winding that will make too much noise and vibrations...

2-I start on top turning Clockwise and tight going down, at bottom start coming up, and so on...200 turns.

3-Now the Orientation, I really do not want to confuse you, but my start wire is my positive...and end is negative...still North is on Top, next to Positive (You've said is not possible, I will re-check this coil again..to make sure, maybe my compass is "shifted"...lol)...but like I told you before, this concepts of magnetic poles are relative for the purpose you are going to be testing, magnetic polarity does not matter, and you could test it with a compass or a defined polarity magnet.

4- Just define the positive above, at the starting wire, so install diodes according to that set-up.

It is MOSTLY about the Magnetic Field strength and not much about the electrical parameters (like resistance, voltage, etc...what we are all looking to "Enhance" here.

However, there must be compensation at the MOSFET's level, when we have very low resistance values, because of Higher number of strands in the Parallel Multifilar Coil...in order to run a "Stable and Relaxed" system.

(what coil type produces biggest magnetic field for given input?)

(naturally resonant coils for hot/cold both primary and secondary?)

## Secondary coil not required

HOT will NOT thrive in an inner secondary Coil...**IF**...We do not provide the 'adequate' steel frame structure to transfer flux from Primary to inner secondary core...

HOT will get there...but very weak...Milli-volts...while Radiant/Cold will be in K Volts.

Remember Radiant medium is the Ether or Aether..Hot is not good developing Induction at Air Cores/Gaps...

When you connect Output Carbon Fiber Secondary to a load (CFL) Make sure You ALSO connect another SEPARATE OUTPUT From Primary Copper Coil TO ANOTHER LOAD THROUGH DIODES!!...This is very Important, or your Copper Coil will get super hot and could blow MOSFET's with High Positive Spikes

going as reverse feedback through your drain !!

Make sure of this!!

Now I hope you are winding BOTH COILS (CF and Copper) AT SAME DIRECTION !!

Tape style of 2" carbon (which has its own covering) can be rolled over the core like a traditional wind and then the copper primary can be rolled on next which brings them even closer togeather. This works the same as long as the diodes are in place.

Carbon fiber heating wire, it's used in things like heating under ceramic tiles (10000 meter rolls). Instant heat, coated with insulation.

I have done some testing to try to determine what coil arrangement to use with the CF.

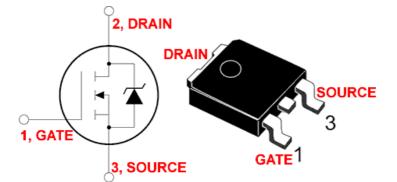
The most volts that I have been able to get is around 140v, but i think this may be just half of the output as I can only measure it by placing two diodes to direct it one direction. Also, all my measurements are in parallel to an NE-2 and spark gap bulb that are lit. I guess this may take away from the output too and give lower measurements.

So far the best uses a mere 12' of 2" CF tape (50k unidirectional fibers). The copper magnet wire coil over it is still in question, but so far 4 strands in parallel of 380' of 19AWG work and are around 1 ohm.

If "she" is strongest immediately at the edge of the magnet wire coil, might it be a good idea to wind the magnet wire and the CF in a modified bi-filar fashion so that the CF is right with the magnet wire all the way through?

BTW, if you're going to hold both Output leads of put your hands in water with them, keep the Frequency high. Low Frequency means that whatever Duty Cycle you have going is going to be on longer time-wise and deliver a "more profound" sensation to your body. In other words, if you're using a 20% Duty Cycle, 20% of 10Hz is .02 seconds long while 20% of 10Hz is only .002 seconds (a 10th of the time). The higher Frequency feels less hammering.

## **Mosfets and Drivers**



http://www.rmcybernetics.com/projects/DIY\_Devices/homemade\_pulse\_controller.htm

Always use an extra diode right next to each MOSFET's of the Parallel Bank.

Positive as "Source", as Provider, as Feeder...and Negative as a Drain, an Absorption, a Sink

N-channel Mosfet. A fet in a TO3 package might be a better choice than the TO220 or TO224.

NTE2397 (cross reference to UF505) looks to be a replacement for IRF740. http://www.datasheetcatalog.com/

They should be at least 15 Amps.

MOSFET's will get Hot normally...make sure You have pretty heavy heat-sinks on all of them.

You can check with this simple circuit at what duty cycle adjustment you get 80% of maximum peak voltge. Do not go above for constant operation - thanks from your FETs!

So keep them gently and learn how to make them happy.

#### Get radiant with low side FET FIRST!!!

MOSFET's you could add a diode of lesser value than Intrinsic Diode on MOSFET right next to each one...Source To Drain connected.

2SK2837 is repetitive avalanche rated by Toshiba

IRFN450

IRFP460, N-Channel 500V, 0.27 Ohm, 20A and 80A pulsed

TK20D60U and TK20E60U for example... They are TO220 package. For better current handling you can use TO247 package, just search farnell or digikey....

I will operate the FETs with dedicated drivers only. Cinan recommended FOD3180.

At least a power source of 24V / 4.5 Amps, and reducing voltage with a Voltage regulator (like LM317) to supply 555 timer source to 13-14 Volts...but using the Full 24 V to drive MOSFET'S Source-Drain lines output. (if we can run off pc power supplies this would be easier?)

Yes, the 47K resistor from gate to ground is your "call back" reset of MOSFET's...the Biasing factor, otherwise they will not turn fully off...and you may play with this values according to your set-up...increasing, but never decreasing this value.

The System could also be improved with Opto-Isolators from Gate to low voltage signals, Isolating them from Drain-Source flow, allowing higher voltage peaks to excite coil...but like Mosfet's Drivers...let's leave it for further analysis...

The only way to be able to run this circuit completely safe is through Opto-Isolators between 555 leg 3 and Gate, I mentioned that before in previews posts. Then you could rise the voltage up to 400 Volts as MOSFET'S allows.

Need to put a Diode (same you are using) between Drain and Negative like this [Drain]---l<---[Negative].

If you remove (open) the circuit to Radiant Output while is On...You will get all RE Spikes into your

circuit...and get Mosfet's on fire.

Yes, MOSFET's are the first to go on this circuit...and most of times it is just one that shorts out Drain-Negative Source, making the whole circuit be in short, so you should make an easy way to take the heatsink bolts out and check them independent one from the other, BUT FIRST, you should check if there is continuity between Drain-Source, before taking them apart, and making sure you switch the meter's probes according to be in "Forward Bias" with the Intrinsic Diode on the Mosfet's...

I would recommend to add an individual 555 to every FET placed near to the gate pin.

In the pmw circuit with multiple fets you stated that unit D should be duplicated for each fet. My question is--- if I am using unit E also, should this duplication be with both D and E or just E next to the fets. This is a good control from 8Hz up to anywhere you want to go.

I will redraw my schematic conforming the hints below in order to clarify the matter. But read these hints before.

1. There is all about switching FETs fast. First it is good in order to keep them cool.

Second I learned that it is important in OU matters to switch fast. It is the suddenness of switching action that stirrs the vacuum.

I will explain the effects below and tell you then what to obey first.

2. A FET owns a gate capacitance of about 1 nF. The faster it can be charged / discharged the faster the FET will switch (and stay cool). We talk here not of ms but of  $\mu$ s or much less. So do not apply your "DC-feeling" and "DC-expertise" in order to evaluate the facts.

3. Professional FET drivers will source and sink about 1...5 Amps for minute slices of time. I do not urge you to drive so hard but keep in mind that we do not have CMOS like weak signals here. Of course we get a FET switched on with weak signals but the intermediate time can be disastrous.

3. What determines the speed of charge / discharge for the gate capacitance?

a) Length of wire from driver to gate or gates = inductance ( $1m \Rightarrow 0.05\mu$ H) Apart from differnt delays if differnt length the inductance can initate HF oscillations and thus repetetive ON/OFF/ON/OF switching actions. The result might be burned FETS and lag of OU activities.

b)Drive capability of the driver itself and the capability to get current out of its power lines. It is essential to have capacitors ( $10\mu$ F + 100nF) minimum attachted DIRECTLY to the driver VCC/GND.

c) Resistance of the wire GATE/GND - between FET and driver. The charges need to travel as fast as possible from teh pwer capacitor of the driver to the FET. Don't calculate - help the charges to be be fast!

4. Now most of you are not blessed with plenty of high end measurement utilities and you will build your setups mostly blind regarding HF matters. So consider some milestons detected in the foggy environment and follow them.

You may drive your FET with a LM358 . You may decide to use LM324 in order to get a quad drive.

Remember the switch off action is more essential and you will get a drive of 4x16mA minimum.

You might decide to use a NE555 as driver device only (200mA)

Keep wires SHORT between driver output and FET gate including GND. It is no prblem if you have some distance between generator and driver(s)

Keep GND line thick between FETS and your driver(s) and generator.

It is best to double the LM358 in parallel.

If you use multiple FETs in parallel please take in account that you slow the switching time with the same factor.

Multiple FETs might do worse than a single one because they have now desastrous switching property starving on drive current at their gate.

In summary:

Start with one generator being a unit for itself - and- one separated driving unit built out of driver (including caps for power) and one FET being all placed close together. This will be a reliable setup.

Try multiple FETs on that driver and be careful not to burn FETs being possibly poor driven. Keep the wires from driver to gate (including GND) all the same lenth. This might be no reliable setup.

Duplicate the driver unit (driver, caps, FET) several times and drive them by your singel generator. This will be a reliable setup being scalable with known properties.

Check the maximum driving capability of your signal generator output by calculation.

Improve drive capability by using a NE555 (200mA source/sink) Additional improvement by connecting "discharge" pin to output (= double sink capability).

1. Do not confuse regular operation of a tested circuit with the first switch on of a prototype. Prototyping is some kind of blind flight!

And do not underestimate apparent simplicity. If you overdrive it without certain expertise you convert it to sadness! I claim: The lower count of components the higher experise required! Given the same functionality of course. With this in mind I posted my PWM circuit - more components, better debuging - less expertise required .

2. A good idea would be to devise first tests of your circuit with resitive load only. Second step with coil and smaller resistance in series.

3. You might decide to prepare in order to measure the peak voltage later on at your coil. Given you do not own an oscilloscope.

Connect across FET or coil

Regard polarity

Discharge before every measurement

Wait until your meter reads stable

Please understand that this is for initial and basic testing only. It is just for educating yourself. I do not know what happens to your meter if SHE enters the circuit.

Anyway you can check with this simple circuit at what duty cycle adjustment you get 80% of maximum peak voltge. Do not go above for constant operation - thanks from your FETs!

4. If using coils first time in your circuit you should understand that if you use a good and strong driver the FET will switch switch very fast indeed. That might be one of the problems.

Imagine: A fork lifter driving with a ton of load across the yard. If there are some bumps across the trace it will shake and suffer on additional load and oscillations. The magentic field shows some kind of inertia as well like mass and the example above is similar to a FET being driven by a weak driver.

Now throw a piece of timber of about 4 inch diameter across the trace and see what happens. While the fork lifter continues its way the assembly experiences a shock of 200g = 200tons not gramm! This is not an estimation but was measured scientifically. This is like your FET being driven fast.

Like decelleration of mass emits force the decelleration of current emits voltage.

This condition is not necessarly wrong for your circuit but it eats up some distance to damage and additional other types of stress might lead to dmage.

5. Tesla in his time had mechanical switchis available only and different from electronic parts you can hear, smell, see switches being at limits. FETs suffer silently downstairs in the darkness and you detect it only if they vomit onto your stairs. So keep them gently and learn how to make them happy. If they are happy - you are happy!

6. It would be wise (if driving coils) to add some kind of overvoltage protection across source / drain as long you do not know the kind of stress produced. Some neons in series would be fine because you can see without using any meter what's going on (ca. 90V per neon). Get one neon first and check at what pulse width it gives light. Then get two in series and repeat the procedure. So you can calibrate every individual coil for parameters: source voltage / pulsewidth / switch off voltage.

Remeber: Prototyping is blind flight!

The neons act like a kind suspension to the load of our fork lifter!

7. Did you operate the coil without HER diodes? Beware of that if you operate the coil under full load and have no neons attached.

8. Do not confuse a simple push pull circuit with what we do here!

A typical standard push pull circuit connects the drain of the bottom FET to the source of the upper FET. This middle point will switch high or low. The dedicated FET driver will switch the bottem FET off first

and after some minute delay the upper one will get drive voltage. @thugugly- see the datasheet of your driver!

The following notions refor to a circuit with N-FET only. I never used P-FETs.

What we do here is completely different. We separate the FETs and put some wild and oscillating beast of coil inbetween. There is no reference point for the gate of the upper FET. (BTW: P-FETs still have their reference to the battery voltage! @UFO: You got it right! And you did'nt encourage to use N-FET only ) I never used high side N-FETS in such a setup up to now but I can imagine FETs suffering extremely.

At weak driving it might be OK but the shorter the switching time the wilder the beast - especialy if HER diodes missing! I do not know what your driver does exactly internally but there are certain limits as well. Different scenarios are possible - all of them spreading death and devastation.

I do not claim that your circuit can't work but at prototype state it is extremely dangerous. Can anybody post if he built this direct drive circuit successfully with heavy loaded coil?

9. I did not dare up to now to drive an upper FET directly. It is much more cheaper (less losses) to get an opto driver (i.e. FOD3180 the price is for four parts)

Additionally we need a small DC/DC PSU / regulator for driving the high side driver. I choose the **RE1215** It separates securely 1000V.

I will use the same circuit for low side and high side FET in order to protect my generartor.

Here a keyhole view to my circuit under construction. For me it will be the lowest cost of ownership and I assume for you as well.

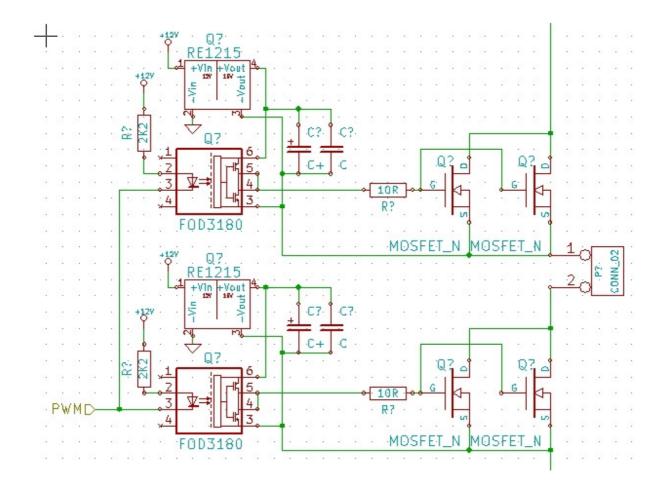
But please do not understand this as instructable - it is not finished and not proven. It is for envisioning the matter and educating myself and I disclose it just for teasing your mind in advance.

And please try to understand before you build. I do my best to help.

Below diagram is non-functional early concept opto design only.

Please correct the schematic with the opto drivers. It was not disclosed as proved circuit! GND lines missing between drivers and FETs - source. The link to dropbox directs you to the corrected schematic - still not proved. Please insert a corresponding note!

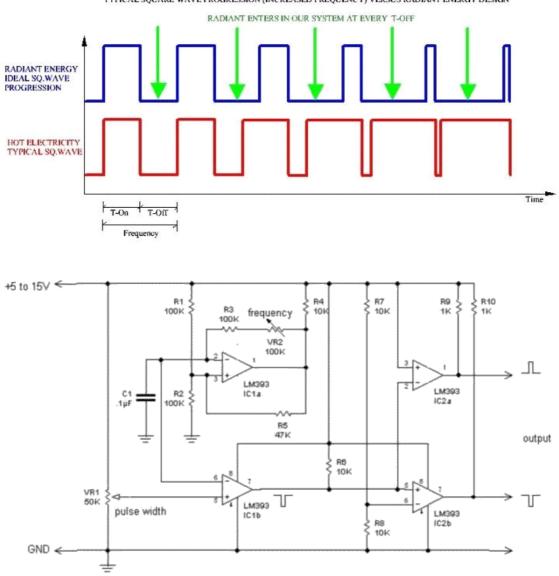
Schematic below is still preliminary and still under construction = not proved



(diagram of Opto-Isolators driver?)

Square wave DC oscillator system

http://www.rmcybernetics.com/projects/DIY\_Devices/homemade\_signal\_generator2.htm



TYPICAL SQUARE WAVE PROGRESSION (INCREASED FREQUENCY) VERSUS RADIANT ENERGY DESIGN

Simplist

form - 555 IC timer...in its Astable configuration

Ok the main specifications on Wave is to be ASTABLE ...

The second and to me the Main ONE, Is that it starts from ZERO, ONE, TWO...SO ON HERTZ PULSES: <u>http://www.electronics-tutorials.ws/waveforms/555\_oscillator.html</u>

A great way to isolate Gate Low Signals from "Drive Train Heavy Network" is by using an Opto Isolator

Low resistance on Coil will put heavy stress in your oscillator...so make sure you protect them with diodes to avoid heavy negative spikes

http://www3.telus.net/chemelec/Projects/PWM/PWM.htm

I see in the Data Sheet of the LM393M that there is a 'Output B (Leg#7, not connected here)'...Is that the

Anti-phase square wave in synchronicity with the square wave shown in diagram by output 1 of IC LM393M, since I see that Invert Input A (leg #2) and Non Invert Input A (Leg#3) are connected to 555 Timer?

Anyways, I see that it also has TWO Inputs for B Output , Inverted and none inverted...so, using another 555 as Inverted signal ONLY, could be also used, just in case...and run it through this output B...Yeah, I figured it out already, so do not 'warm' up your Pentium if you do not know the answer on this subject...

The reason am asking is because I want to run it through Dual Anti-Phase Channels, like I have now with two 555 IC, where one is the master (originating signal) and the second does the "Mirror Anti-phase" P-Channel MOSFET's gate signal...It could also be done even much better and more compact, with a 556 Dual Timer IC.

Now, **It is NOT a "Push-Pull" arrangement!!**...It is a simultaneous, exactly, same time High-Low Pulse, where one goes to N-Channels, and other to P-Channels accordingly.

Dual Anti-phase Channels works much better than just N-Channel original oscillator. I mean really better...the reason? It benefits the traffic flow of Cold electricity better, like putting Two Light Signals instead of just one...and the positive from Hot will not be there "full-time".

the starting level to adjust the frequency should be at least from the 100Hz going up slowly...not 400Hz

I can start rolling up my oscillators at 9-18Hz up...and I installed a Vernier Dialer to Pot in order to delay turns ratio and isolate turns from touching directly Pot.

One more thing, the Pot must be grounded or it will increase (jump) to higher freq with your hand..

. I guess I will turn the frequency pot to the most resistance and the duty cycle pot to the middle of it's range. Is this correct or is there a better start setting?

I would install a meter at Drain-Positive to read voltage output and also a Scope or Hertz meter on same output terminals...**BUT without connecting it to the Coil yet!** And turn it on and read...If you have Full Power at Voltage between Drain-Positive then you MUST turn it opposite to zero.

The same with Frequency (Hertz)...they both should be at ZERO before starting, and then dialing frequency FIRST Up...very slowly.

YES Duty should be at 50% to start . But play first with Frequency...till you get it...I have got it without varying duty cycle. just Freq.

-The most "controlable" setup would have to be a STAMP or PIC or I've purchased an ARDUINO.

These microprocessors make it simple to control both dutycycle and pulsewidth.

They are also inexpensive - mine A\$39.00

Simply connect output pins to transistor switch or mosfet controllers.

-The only way to be able to run this circuit completely safe is through Opto-Isolators between 555 leg 3 and Gate, I mentioned that before in previews posts. Then you could rise the voltage up to 400 Volts as MOSFET'S allows.

36V>12V regulator In your Im317 circuit the diodes must be 1N4002

**Batteries** - 3x 12v lipos in series? - Lithium Polymers Pack of 3 X 11. 6 aprox= Fully charged to 36V - 2100 MiliAmps Each X3 =6.3A

**Meters** Xtech digital meters that measure Hertz...and also two Radio Shack's Amperage Clamp meters.

Hook up a Hz and Volt meter to output and Input?

### Note

Since you've mentioned Hydraulics and mechanical concepts, I will use same them also to explain how this works...

In a gas engine there is a Crankshaft that is sequenced to take in Piston Up while another one is down...synchronized in a fashion that they are 'stable'...a Push-Pull approach, where actually one Piston coming down (vacuum-exhaust stage), assist the other going up (Build Pressure-Explode) and is transmitted by the crankshaft in a harmonic way.

This system is very similar...The pulsating signals are 'amplified' by the MOSFET's...into the Coil energizing it, let's say at "pressure time", a current is produced in the Coil at T-On of MOSFET (Closed Drain-Gates), that produces a magnetic field in the Coil. Then when signal collapses vertically to zero, it generates a "Magnetic Vacuum" in the existing area where it was previously, creating an opposite magnetic field of greater intensity, that is the Radiant Field attraction, transformed through the coil and passed through the diodes into the system (my output after diodes). Therefore, diodes are valves or gates (just like you've said) to free that cold electricity through the output. if they were not there...cold electricity will crash with the "Hot" flow in every cycle, like we have been doing so far...those are the spikes, transients, parasitic currents, back emf etc,etc...

Therefore you do have a great approach by trying to keep at least a bit of energy enough to keep polarized radiant field, but when Hot impulse enters into the coil, then it will wipe it out...taking over and canceling it. The advantages I see, is that the radiant field could be induced into a secondary coil, isolated from the "Pumping Effect Fields"...and greatly, this Radiant Induction is much faster than hot current, it reaches full levels when hot is still at mill volts, I have also tested that already...

Radiant Energy Field had been entering all our equipments ever since the first coil was excited by a current...like "Ghosts in the machine"...but we keep fighting against her...flywheel diodes do exactly that...Snubbers, Chokes, etc...

I had run brushed motors with cold electricity, they perform better than on Hot side, faster and freezing...and almost none to very light sparks on commutators...using minimal amounts of expense from our Hot side.

Whenever You are going to do the first testing, make sure of:

1\_Set "Gauges" everywhere you could, Digital Meters, Oscilloscopes, etc.

Mainly you need:

A Voltmeter on Input (between Coil and Diodes, where you hook Input. This measure is one of the most importants...If you see nothing happening and "spending over 2.0 V...something is WRONG!! . So STOP, and go over everything again.

A Volt meter on Batteries Terminals...This measure will allow you to "see" if the Load is kicking back to your Oscillator, if it increases too High, STOP...Recheck your load, that is why I recommend CFL (Fluorescent Bulbs), they are your pilot light.

A Voltmeter on Output (After Diodes) If the light doesn't even attempt to light up...and you get huge voltage here...STOP!!...RECHECK!!

Ammeters on Input Versus Output.

And finally a Hertz meter on Input and Output (Here I want you to record on video if you could the behavior of this two gauges...

At normal set up, they should start at equal values...approximately (I use a TWIN set of same brand meters (EXTECH), this is because there are less chances of % of errors, same manufacturers use same components and designs...so they should be performing pretty good.

There are some meters, that when reading this type of electricity, they start jumping at High-Low...very fast...NOT GOOD!!...It happened at my Motors-Generators...And they were not cheap either, so the \$ does not always means they are great, you will never get a good reading with them, therefore is a waste of time.

There are some Chinese Meters that are cheap, but very precise because they have built inside a Compensation Analyzer, and other designs as Logic Controllers, etc...so they do a very fast math and reads out a very good average value.

When doing the POT turns for the first time, GO SLOW!!...VERY SLOW, here watch your Hertz gauges, this should start giving some minor signals at very, very low values of Frequency...a very small pulse...ONCE You have found this point, MARK IT, then go super-slower...to get a faster pulse. (Here at this very first puling is where you could hook a Neon 120V like in my latest video...and here Radiance will come to you at ZERO VOLTS from Input Voltage...Here you have to establish another mark at the highest peak you get the neon to Pulse this light ONLY!!...Once you start getting the Normal illumination, you HAVE PASSED this stage, then STOP, and take Neon Off. and keep going on the CFL...(DO NOT PUT CFL AND NEONS AT SAME TIME FIRST USE NEON, even though the CFL will also do this reading, however the real picture of Radiance you will only get it with Neon, they are beautiful colors and is worthy) put a switch for both On-Off, so you do not get distracted where you were at.

Do not try a Halogen or Tungsten filament Incandescent lamp...it will turn it on , but you will get MASSIVE negative feedback ("C EMF")..and your Coil will overheat, Later on We will even light a Metal

Halide Sodium HID Bulb...but NOT NOW.

I have to keep moving ahead, there are tons of things coming on, some are related some aren't... I am "reviving , and enhancing to newest technology improvements, a few Nikola Tesla patents, Motors-Generators and Coils...And some new type of Oscillation..

Well, there is a bit of info needed in your Scooter spec's...So I could direct you to the right paths...If it is a BLDC (Brush-less DC) Motor, there is not much I could do for you...but if it is a Brushed Motor I could help you. Then I would need the Voltage-Amps supply and the type of Controller it has (Brand-Model, Voltage-Amps and C.L (Current Limiting) ratings.

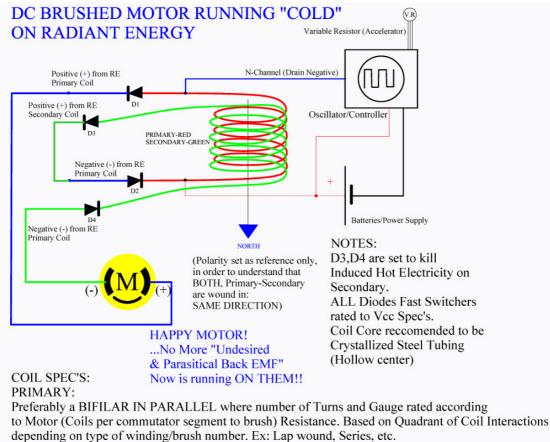
I had designed and built an specific Motor for a Bosch-Badsey Scooter...used to be 24 V 33 A System, dual gel batteries...and I got to run it with 36V 6.3 A...out of a 3Pack R/C Electric Helicopter LiPo batteries...for much longer time than the heavy lead acid-gel batteries...actually you could stick this batteries in your pocket.

I used exactly the same controller I have in this post...The typical controllers are built with a Heavy 'Fire Wall' against Back EMF...that would not apply here...it will overheat something in my type of system...batteries or motor...not good.

Now, to run it with Radiant Energy if you have a brushed motor is relatively simple, all you need is a Primary-Secondary Coil of same wiring as your motor gauge...rated for your supply system (V-A). I would say that depending at the configuration of how many brushes, [if it has four or two] then you could figure out the turn ratio per contact of brushes-commutator to rotor coils, in order to build your coil accurately. Then, run the motor out of the Secondary-Primary (After Diodes) both in series of your new coil...You will get super power, the motor will run very cold to freezing levels..

and enough power to run a built in "smart new style charger". NOT the type that have a One Ton of Steel, Transformer on it, but the light and modern switching chargers.

Actually all you have done, is to run the motor with what Physics call Back EMF, yes, "PURE Back EMF"...We took -this time- the "Parasitical" Hot Electricity out of our System



SECONDARY: To be Wound as a LAYER on TOP of Primary, Separated by High Temp. Tape-Paper. Same Gauge and exceed # of Turns by percentage desired.

## Q'nA

so we've been using 'yang' electrical force for over 100 years but now 'yin' electrical force is becoming apparent and usable. What if we don't go from one side of the force to the other but rather use both together.