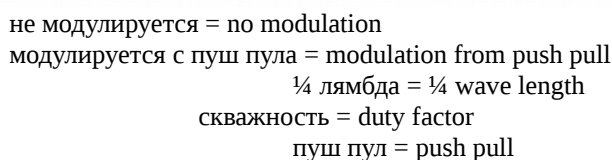


Original discussion is here <http://realstrannik.com/forum/razdel-avtorskikh-tem/1091-moj-skromnyj-generator?limitstart=0>

If someone does not understand how to put it all together, I propose a structural diagram (see below).



One of the main questions of many seekers: "from where, in where is the energy gain?".

Well, here, in this installation works an electro-magnetic field plus an increase from Environment. I just want to warn you right away, THERE IS NO KILOWATTS HERE.

The G1 oscillator should approximately operate at a frequency of about 1 MHz.

In general, the frequency of operation of this generator depends on the winding data of the high voltage coils (resonators of the Tesla transformer and the receiving resonator). I have these resonators wound on a former with 50mm diameter, a wire diameter 0.35 mm the length of winding of each of the coils (each resonator) is 30 cm. The distance between the resonators is 10 cm. It is not necessary to stick to these parameters of the windings of the resonators, it is possible to change the diameter and the wires and windings, but this change their operating frequency and accordingly the operating frequency other generators, which, accordingly, may lead to difficulties in manufacturing and tuning of control generators.

Note that these coils are wound in different directions, i.e. they have different winding directions, they work in anti-phase. We go further. On the left resonator we wind the "inductor" (* primary winding). Diameter of winding 100mm, Number of turns 3. The current transformer connected to earth is wound either in the air (air core) or on high-frequency ferrite. The windings data of this transformer presented in the schematic diagram.

As a grounding you can use in principle any "ground", at least a massive metallic plate, and as a ground wire it is better to take the wire with possibly a larger surface area. The pickup coil is wound on the second (receiving) resonator in the same direction, as the resonator itself, by a wire in PVC insulation on a frame with a diameter 70mm. On top of the pickup winding, the winding of the push-pull inductor(* primary winding) is wound in two layers. The winding direction is the same as that of the pickup one.

As the core for the transformer of the push-pull, ferrite is used. Any form, even a ring K45, though E-shaped from the power supply, even a pot core. Winding method is regular. I think there should not be any more questions on it. After winding all the coils, let's proceed to setup.

We connect the inductor (* primary) and the left resonator according to the scheme of the kacher (* Tesla-coil like setup). As a result of this connection, we will be able to recognize a quarter wave resonance without complications. Kacher itself tunes to a quarter wave, but by adjusting its inductor (* primary winding) it is necessary to achieve a glow of the neon lamp (used as a tuning indicator) on the kacher's high voltage (right) end of the resonator. After determine the frequency of the wave resonance, you will need to configure G2 for this frequency.

Next, proceed to configure G1, disabling the kacher and not connecting G2. By adjusting the frequency of the generator G1, we obtain glow of the neon lamp in middle of the resonator.

Approximately the frequency should be in the area indicated on the block diagram (if all coils are naturally wound according to the data specified on the block diagram).

After setting up these generators, we will calculate by the formula:

$$F_{\text{push-pull}} = (G2 - G1 * 2) / 10$$

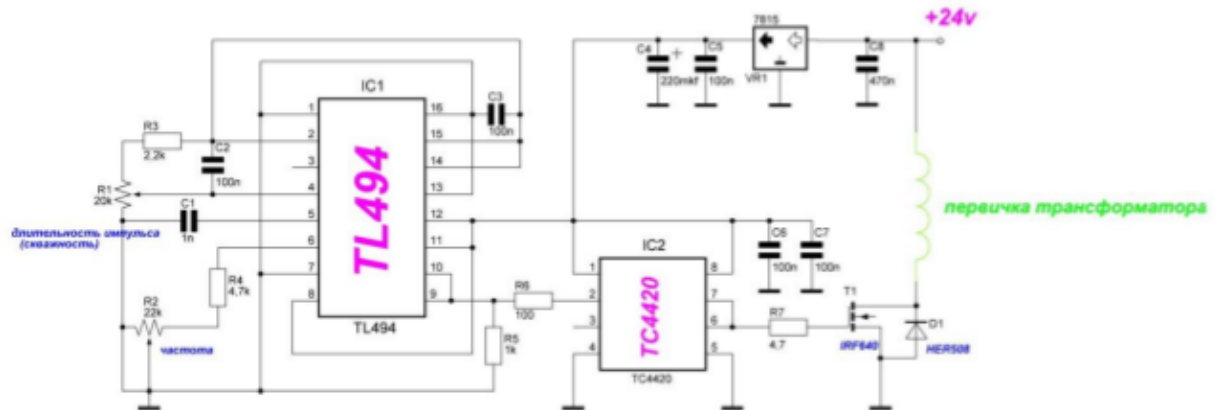
Well, respectively, we get: $(1000 - 400 * 2) / 10 = 20\text{kHz}$ - this will be the working Frequency of push-pull.

And a bit of circuitry. The generator G2 is controlled (modulated, interrupted) by the push-pull generator. The generator G1 has a continuous generation. Capacitor C1 is selected naturally by resonance at the push-in inductor calculated frequency. Below are the variants of the circuits of the modules of the device.

*) translator's comment

автор: Igorek

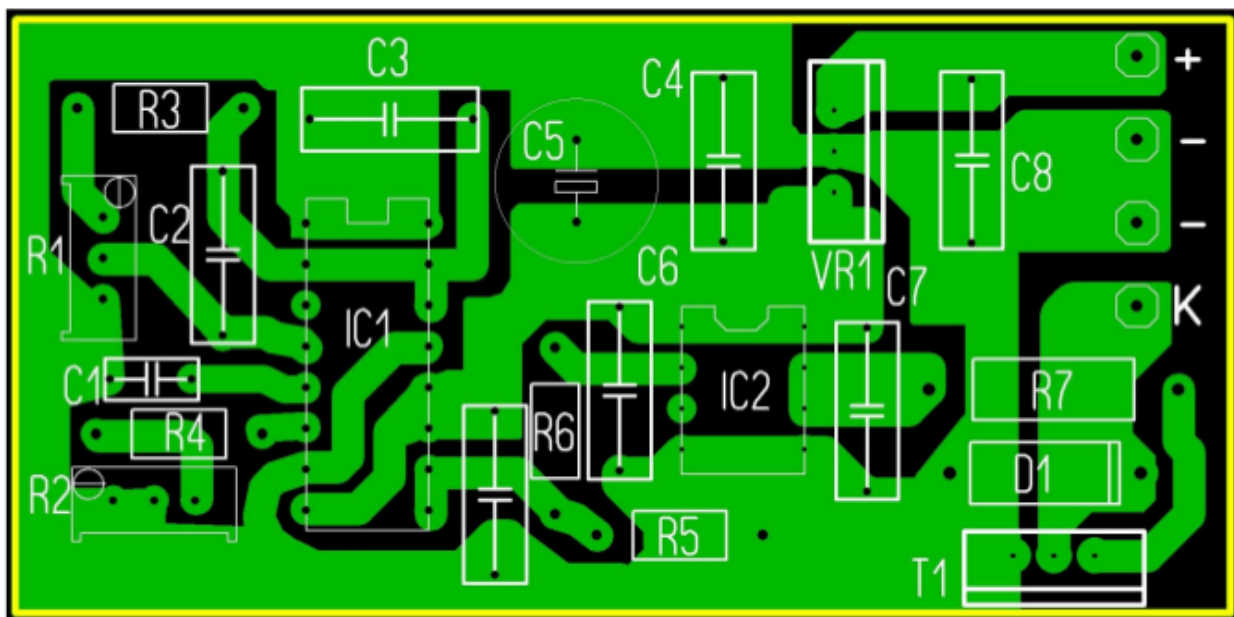
генератор G1



Generator G1 Author: Igorek
pulse duration (duty cycle)
frequency

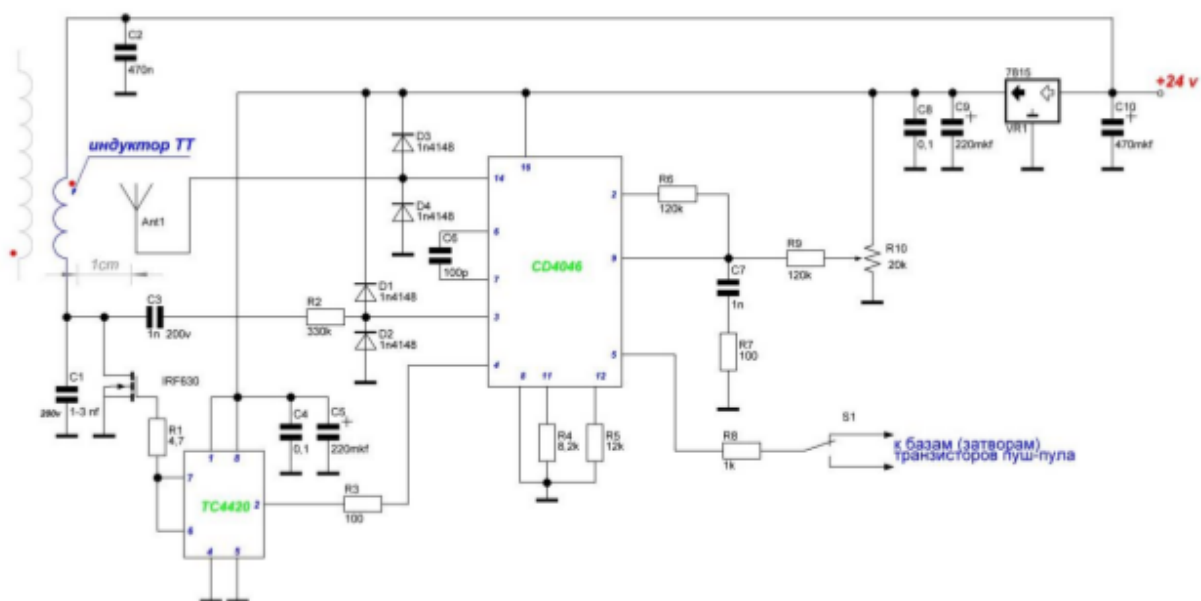
primary winding

and below possible version of PCB layout



генератор G2

автор: Igorek



Ant - кусок провода длиной 10см на расстоянии приблизительно 1см от индуктора ТТ

generator G2 Author: Igorek

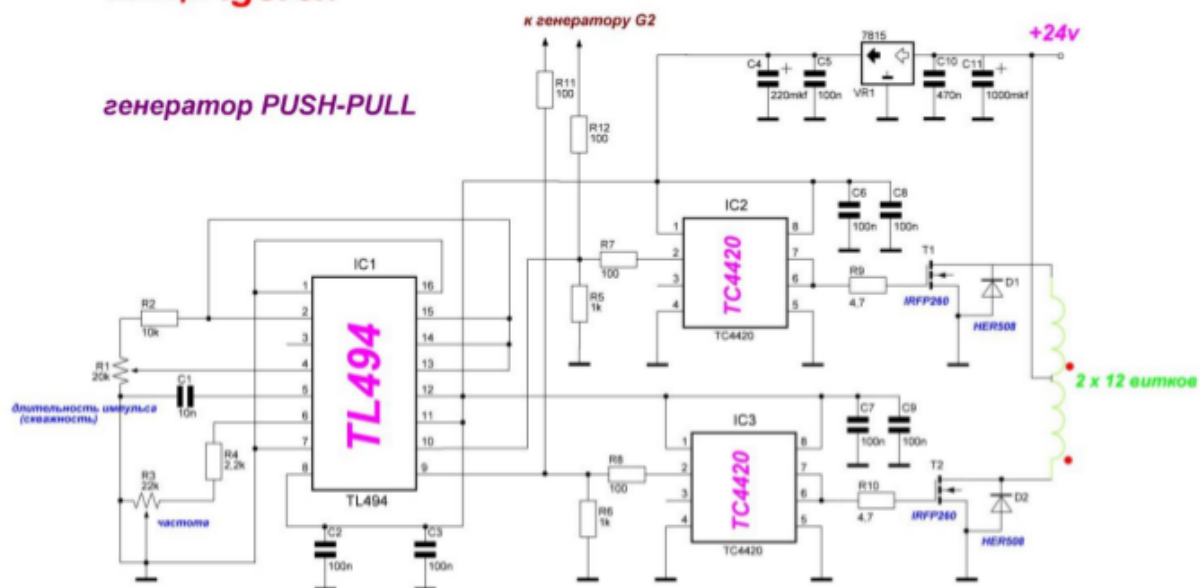
primary winding of Tesla coil (kacher)

Ant – a piece of wire, length 10cm placed about 1cm apart from Tesla coil primary

to push pull's transistors gates

автор: Igorek

генератор PUSH-PULL



generator PushPull Author: Igorek

pulse duration (duty cycle)

frequency

to G2

2x12 turns

Well, hopefully I did not forget anything...

Sincerely, Igorek (development) and Alex (design) !!!

*) This document was posted on 1 April 2017