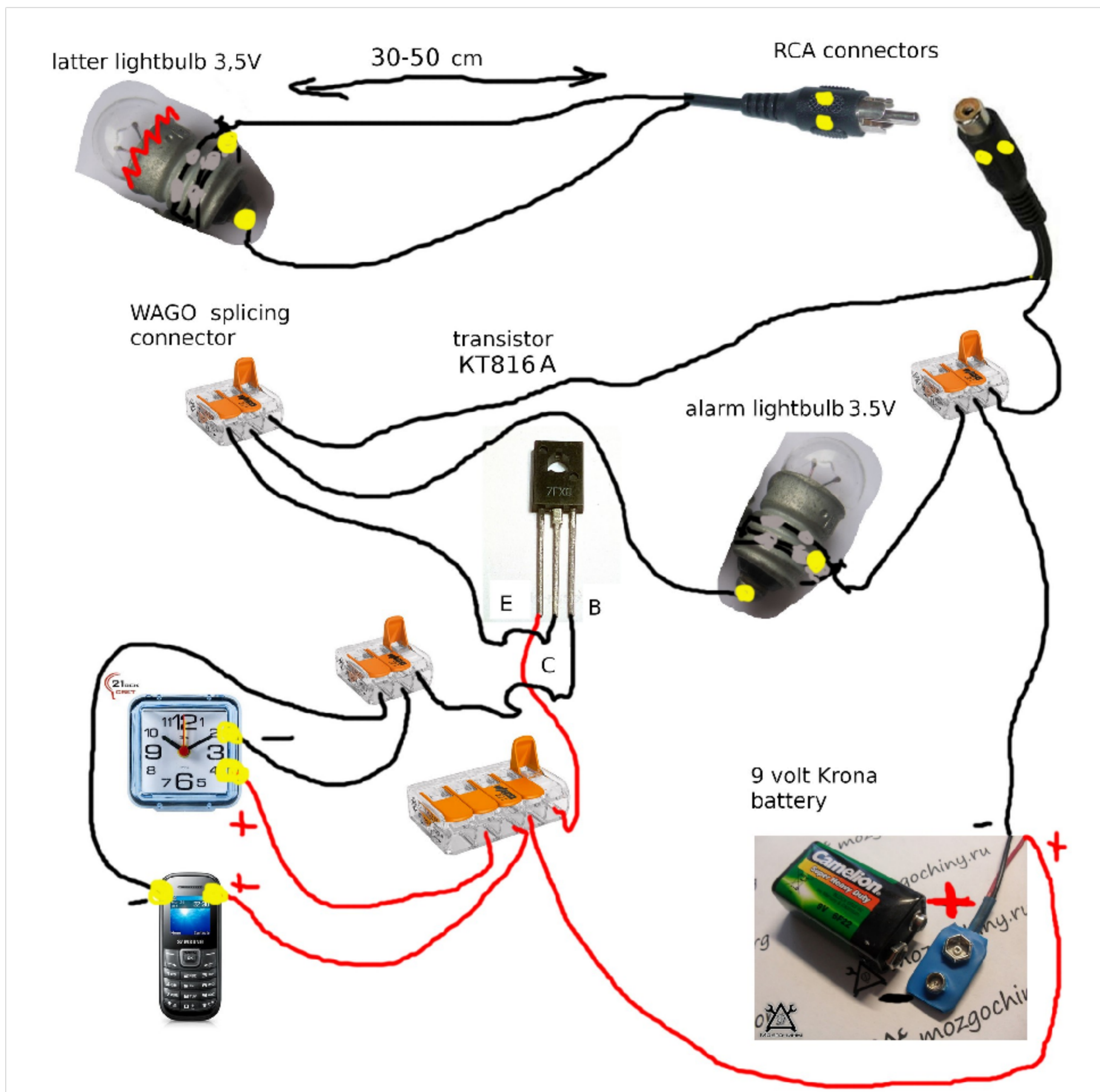


Remotely activated (or timer-equipped) device

In this article we describe how to assemble the device allowing a partisan, while activating their tool of vengeance - incendiary mixture or an explosive charge - to be at a distance or even in a completely safe location

Firstly - the scheme of the device and assembly.



The scheme basically speaks for itself. A mobile phone/alarm clock sends a signal that opens the transistor. As a result the current starts flowing through a «prime» circuit – from a 9 volt Krona battery to the ignition device. A 3.5 volt lightbulb serves as the latter.

How to make an igniter

For a lightbulb to serve as an ignition device we have to saw its glass off along the cap with a needle file (or a nail file). It's easiest to hold the lightbulb by its cap with pliers while doing so. After that, the glass part should be taken off carefully (as to not damage neither the glass nor the spiral), and stuffed with some highly flammable material – may it be Triacetone Triperoxide or even sulfur from the heads of matches.

Then, equally carefully, the glass should be put back on (more precisely, on the contrary – we lower the spiral into the glass part which is turned upside down so not to spill its contents), the spiral must be immersed into our flammable material without being damaged during this process. Additionally, we can put a small drop of instant glue on the spiral to secure it in position.

After that, the glass must be fixed to the cap with an electrical tape.

When the current is applied to it, the spiral heats up, ignites sulfur/TT, and as a result the glass comes off from the blast and the fire ignites whatever substance you've put your fuse it into, may it be an explosive charge detonator or a incendiary material.

Safety measures implemented in the scheme

The scheme provides two technical solutions, allowing a partisan some level of protection from self-detonation.

1) A break in the “prime” circuit. The lightbulb is connected to the main circuit with RCA connector. This makes it possible to pre-position the igniter in our explosive substance/Molotov cocktail (and thus to remove the risk of assembling this part of the device right on the spot), without running the risk of having the current supplied to the device during transportation.

2) A warning light within the main circuit. Aside from the “prime” lightbulb we have an additional one, an alarm bulb, connected to the main circuit at all times. In the event of the circuit closing this alarm bulb will light up, letting us know that something is wrong and that we absolutely cannot connect the igniter to the circuit at this point.

Therefore, during installation, all the batteries come first (Krona and a cell phone battery), then the device is set in place, and only then, at the very last moment, seeing that everything is ok, and the warning light is off, we connect RCA to the igniter.

In addition, our alarm lightbulb allows us to test the device after assembly, but before actually using it – to make sure that the whole thing has been set up correctly. Plus the last testing just before use (but prior to the setting up of the device and connecting RCA!!!)

We strongly recommend you a trial assembly, and to get rid of all the cellphones/sim cards, which were used in the scheme, right after testing, without using them for an actual deed. In this particular case we advise you to do try this at home – to identify problem points.

For an actual non-test assembly our recommendations are: to build everything sans testing, without putting a battery in the phone. After the assembly you should drive off somewhere to the woods with the device and a couple of cellphones (one used in the scheme and another one for transmitting the activation signal) (it goes without saying, that you should leave your own phone at home). And only then and there you can insert all batteries and try it out, using that very alarm lightbulb. After the test you should turn everything off, this time until the very act.

Also, keeping in mind that it's not advisable to put the battery inside those phones at your own home, you should take a powerbank with you to charge the batteries in the woods.

Assembling a remote activation device

For this you are going to need the following:
(links given below are just for reference)

Components:

- transistor KT816A (the last letter can be any.) <https://www.chipdip.ru/product/kt816a-integral>

- wires. It doesn't really matter which ones — as long as they are not single-lead (solid, rigid), but multi-lead (stranded, flexible). No thinner than 0,5 square mm (too difficult to solder), but no thicker than 1-1,5 (has no point, difficult to stuff them into splicing connectors).

<https://www.chipdip.ru/product/mgshv-0.5-yellow>

- 9 volt Krona battery. <https://www.chipdip.ru/product/varta-2022>

- 9-volt battery connector (makes it easier to assembly and increases its reliability, because wires soldered directly to a battery may simply fall off). <https://www.chipdip.ru/product0/9000193836>

- 3,5 volt lightbulb (or a christmas garland lightbulb). <https://www.chipdip.ru/product/varta-00714>

- a 3.5 volt lightbulb socket (eliminates the need for soldering directly to the lightbulb cap). It's easier if you have a christmas garland lightbulb – it already has wires connected to it. But they may not be long enough so you will need to increase their length, connecting an additional wire. Of course, it is better to do it using wago splicing connector instead of soldering.

- RCA connectors. You can put them together in different variations:

Male connector (<https://www.chipdip.ru/product/rp-405-yellow>) — Female

(<https://www.chipdip.ru/product/rp-406-yellow>) (you'll have to solder cable to them)

OR

you can buy a complete RCA male-female connector and cut it in the right place (closer to the female part, so it leaves a longer tail for your “main” lightbulb).

OR

you can buy a ready-made RCA cable male-MALE (<https://www.chipdip.ru/product0/8416993941>, you are going to need only one, you can cut the other one off), cut it and so on, put female-female adapter on one end <https://www.chipdip.ru/product0/8355763537> (similarly, cut off the other half)

- WAGO splicing connectors

(come in different variations)

for 2 (<https://www.chipdip.ru/product/wago-221-412>) (for increasing wire length)

for 3 <https://www.chipdip.ru/product/wago-221-413>

for 5 <https://www.chipdip.ru/product/wago-221-415> ways.

Splicing connectors are a good alternative to soldering and are easy to use – just strip the wire to the appropriate length, pop the lever open, push your wire in, and clamp the lever closed again.

- mobile phone. Cheapest burner button cellphone you can find. Be careful when buying used cellphones – they often have dying batteries. In your phone settings turn off ALL the sounds (turning on sound, sms, buttons sound etc.) leaving only the call sound, (to rule out the possibility of an unintentional activation at the most inopportune moment), in doing so you should choose a ringtone with the longest melody and not just short beeping. Also, it's great if your phone allows for a group call profile settings. In that case you can choose “silent” for all calls, and create a group “with sound” with a single phone number – the one which is going to be used for the activating call.

- alarm clock/timer with an electrical beeper (don't really need one if you have a cellphone (because you can set an alarm clock in your phone), but it's also an option. You can cross it off the list and leave only a burner phone). Cheapest alarm clocks are not very reliable anyway.

Tools:

- soldering iron with a thin soldering tip <https://www.chipdip.ru/product/goot-ks-30r>
- solder <https://www.chipdip.ru/product0/9000195067>
- multimeter <https://www.chipdip.ru/product0/8000847176>
- pliers
- box cutter (for wire stripping).
- electrical tape
- small watch screwdriver for disassembling phones/alarm clocks
- needle files — for cutting of the lightbulb cap

Assembling the device

The scheme is rather self-explanatory, but let's note a few important points:

- yellow points are the places where you'll have to solder.
- when soldering to the lightbulb cap, you can strip one of the wires some more and roll it around the cap, then twist it around itself, and then solder.
- it's better to get more lightbulbs, to practice sawing the cap without damaging the spiral. To make sure you didn't, you can measure resistance while the lightbulb is still intact and then again after cutting off the cap.
- especially crucial during your first assembly - after connecting each and every element, you should use multimeter to measure resistance between the extreme points (sans transistor, because electricity wouldn't flow through it). Resistance should be about 0 – i.e. we're checking the assembly/soldering quality, if current is passing through the circuit.
- you can spread out the transistor pins to make it easier to stuff them into splicing connector without soldering any additional wires.
- transistor is depicted correctly on the picture. i.e. you should place its black side (one with the round hole in it with 3 pins) towards you, and connect everything as is shown in the scheme.
- wires running from the phone/alarm clock are red and black in the scheme, as it's most likely going to be. If they are not, then you'll have to build the whole thing and test it. If it's not working - switch the connection points from cellphone/alarm clock (most likely the polarity is wrong).
- connecting wires to a phone/alarm clock. Phone/alarm clock must be disassembled so you can find its speaker. Then you have to solder off the wire from this speaker (not from the board!) and solder your wires to the cellphone wires (not directly to the board), because boards on some cheaper phones (let alone alarm clocks) oftentimes are made quite poorly and can simply fall off while you're soldering – and then the whole device goes to waste. Meanwhile soldering to wires allows you more attempts, but nevertheless make sure not to yank on the wires running from the board.
- Also, we recommend, while the phone is disassembled, to make a small hole in its side (just break off a part of the case), and pull the speaker wire through it. After that, fix the wire with electrical

tape (wrap it around the phone but in such a way that allows you to insert the battery) and assemble it back. And only then you can proceed with soldering. It's an additional safety measure protecting the wires from being yanked off completely, and it also may come handy when you need to insert the battery without damaging them.

- while soldering thin wires you can tape them to the table with small pieces of electrical tape. i.e. you tape the first wire to the table, press the second wire to it with one hand, and with the other hand you'll have to solder.

- Even more: if your phone has jack 3,5 output and if your phone can play the ringtone melody through it (in mode settings you'll have a mode "headset"), that'll be great, meaning you can avoid disassembling the phone and soldering thin wires, but just plug in headphones wire, cut it off, and connect it to the scheme.

- Do not spare electrical tape while assembling the device. It shouldn't be kept together on a wing and a prayer, but form a single entity. Every next wire you tape securely to the last one. After the assembly the only place free of an electrical tape should be the 9-volt battery connector (so you can change it (cold weather drains batteries, so you might consider keeping them somewhere warm till right before the action)), back side of the phone (for putting battery in it), phone screen and keyboard (for turning on and setting alarm clock, and for testing it). And an RCA for connecting the main lightbulb.

Wires running from the cellphone are going to be the weakest link here, as we wrote above, so you'll have to fix it securely to the phone case with electrical tape, leaving only bare minimum.

- The whole assembly should be carried out with gloved hands – so you don't leave your handprints or DNA. Make sure not to leave any hair or eyelashes, we advise you to wear something with long sleeves and also a hat or a shower cap. Who knows which part of the device will survive the blast (or gods forbid it it won't work at all) — don't give our enemies any evidence!