

# Kit B – Electromagnetic Cannon Manual

(English Translation)

## 一、本套件的特点 Features of the kit.

1. Very reliable circuit. Suitable for beginners.
2. Contains a plastic case to seal off the dangerous 100V high voltage.

## 二、安装方法 Building the Kit

1. Solder the 3 external components with wire. Do not over heat.
2. To solder the circuit board. Notice the polarity of components, especially the transformer. Do not get the L1~L3 connection wrong.
3. When circuit board is done, mount it inside the plastic case.
4. Insert the batteries. Close the lid.

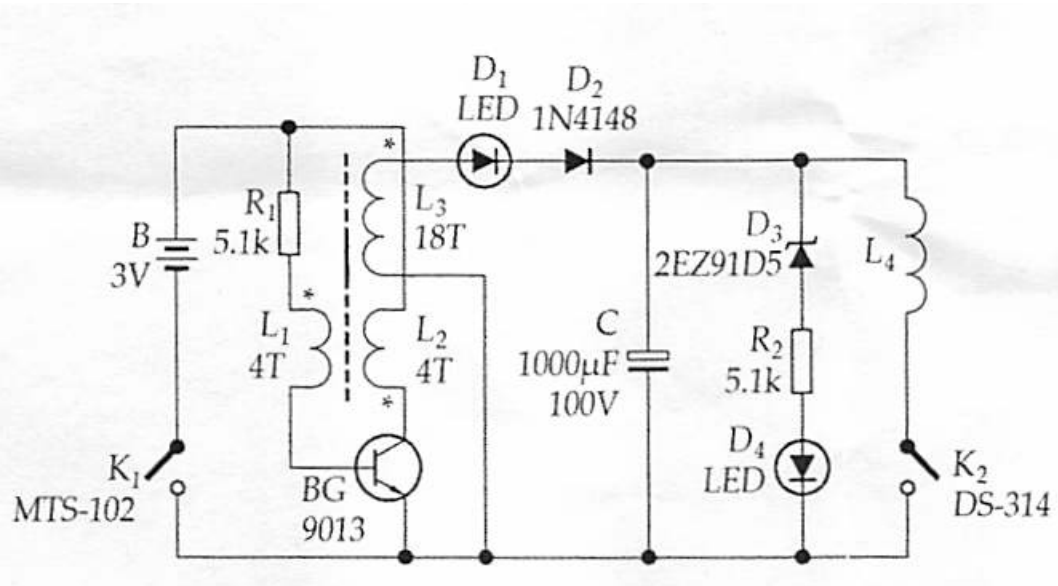
## 三、使用方法 Operation

1. Switch on K1. Green light will turn on. Capacitor will start to charge up. Wait for 2~3 min. When the capacitor is fully charged, the red light will turn on.
2. Insert the bullet into the cannon tube to the lowest edge of the tube. Press K2. Cannon will shoot the bullet out.

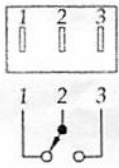
## 四、注意事项 Notice

1. Internal circuit voltage is 90~100V. Very dangerous. Do not touch the circuit.
2. Before cannon testing, you should test the charging circuit by connect a voltmeter across the capacitor, to see if it charges up to around 100V. Be careful. The testing probe should only touch the two capacitor terminals and nothing else.
3. After testing. You should discharge the capacitor by switching on K2. Do not leave the capacitor remain fully charged during testing. It is like a ticking time bomb.
4. The current consumption is quite big at 50mA. Be prepare to change battery often.
5. The nominal shooting distance is around 1~3 meter. At a 45° shooting angle.

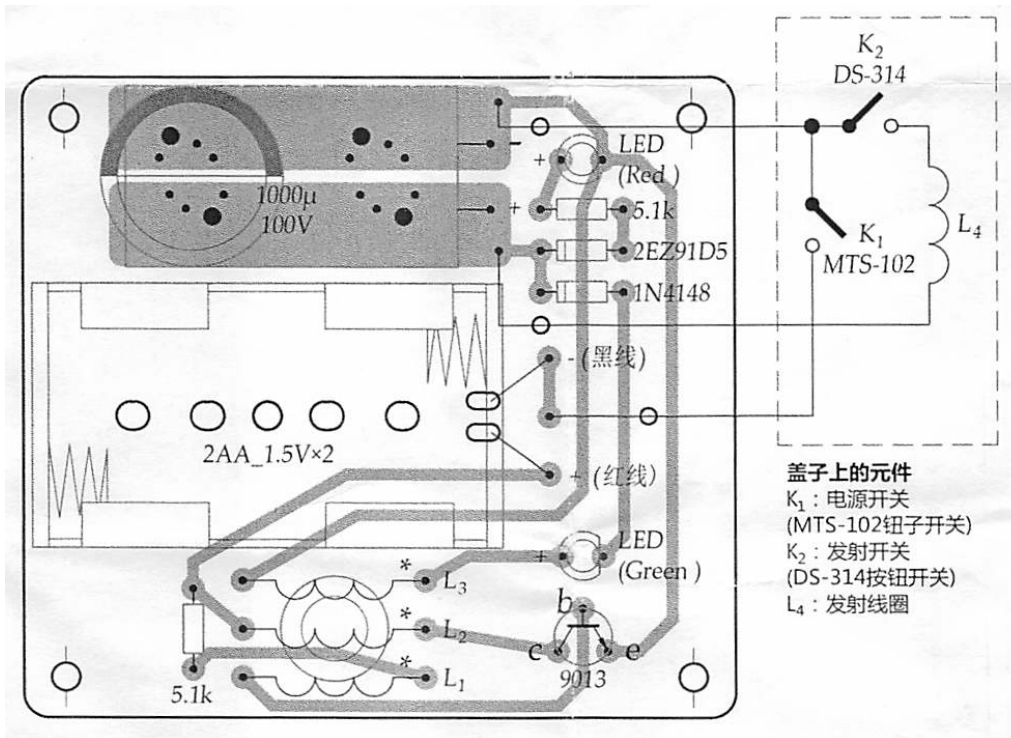
## 五、相关资源 Other Information



Circuit (version 1.3)



For the switch. You can use connection 1-2 or 2-3.



Three external components: K1: charging switch; K2 fire button, L4 electromagnetic cannon