

Ion Ray Gun

1 The Circuit

I found the following schematic from online sources. It's about generating and launching ions. I did not built this circuit. But I'll present some ideas on how to focus ions so that they will travel a longer distance.

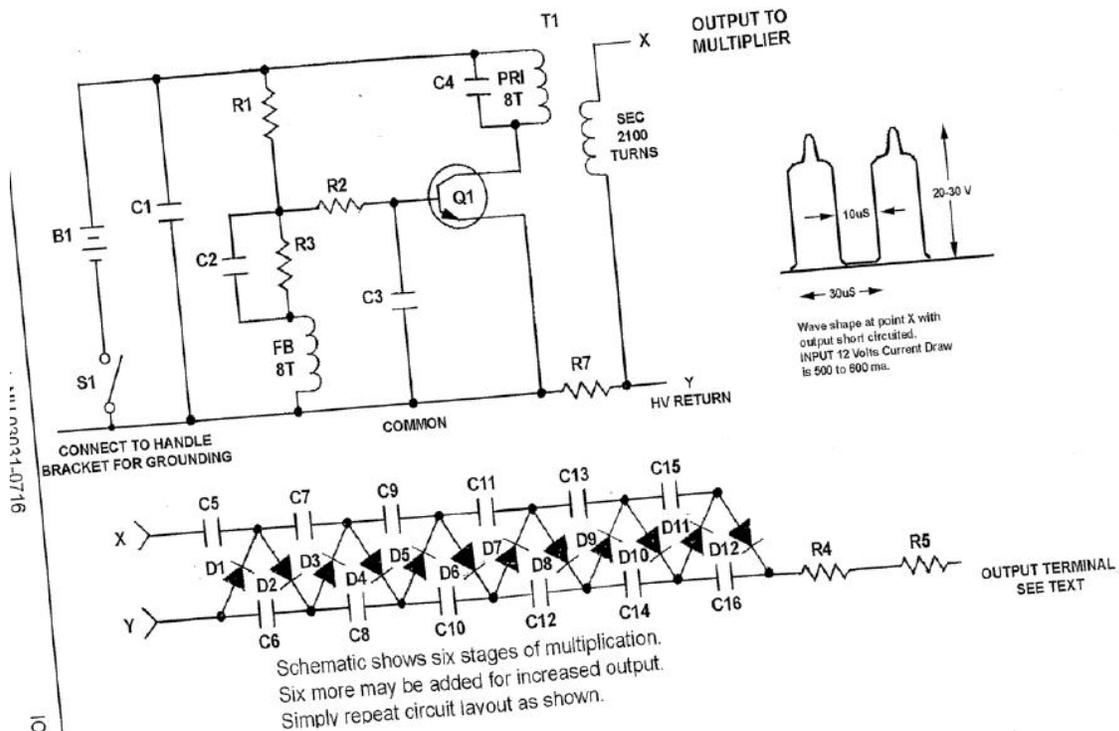


Fig. 1. Basic ion ray gun circuit.

Parts List

R1	2.2K
R2	27Ω
R3	220Ω
R4-R5	100MΩ
C1	0.47µF/50V

Configuration shown in Fig. 3 can be used to bunch electrons using a magnetic field. Later, if the magnetic field is cut rapidly, bunched electrons are released and due to the focusing effect of the negatively charged reflector (NCR), they can be launched on to a target. A pulsed magnetic field would do the job if it's generated by a pulsed capacitor discharge. So, if a HV capacitor is discharged on to a solenoid through an SCR, some amount of electrons and negative ions are captured and bunched by the magnetic field inside the solenoid. As the pulse dies out, they are released and focused by NCR.

For questions or comments:

4beowulf7@gmail.com