

Arc Generator DIY Kit

1. Introduction

It produces a stable high-frequency arc, the temperature is very high, you can easily ignite combustible material, it was called a plasma lighter.

2. Parameter

NO.	Parameter	Value
1	Power Supply	3.7V-4.2V
2	Work current	2A(Max)
3	Output voltage	15KV(Max)
4	Arc distance	1.5mm(Max)
5	PCB Size	4.2*3.2*0.16cm
6	PCB Material	FR4

3. Function

1>. Produce a spark

4. Application

1>. Science experiment.

2>. Electronic equipment.

3>. Negative ion generator.

4>. Small scientific production.

5. Component listing

NO.	Component Name	PCB Marker	Parameter	QTY
1	Transformer	T1	15KV	1
2	Diode	D1	UF4007	1
3	Transistor	NPN	N20	1
4	Resistor	R1	120ohm	1
5	Screw		M3*6mm	1
6	Switch	SW		1
7	Male Pin		2P	1
8	Tie			1
9	PCB		4.2*3.2*0.16cm	1

NOTE: User can complete the installation by PCB silk screen and components list.

6. Attention:

1>. After you finish the transformers, you need keep the product under epoxy resin or insulation wax encapsulation if you want to keep it for a long time.

Because the product will be due to lack of air insulation strength of the coil breakdown caused by damage in the air work.

2>.The kit is used for 3.7V input voltage (That is one 18650 charge power). If you want to increase input voltage, you need to increase the resistor(the default resistor is 200 ohm).

3>. If you don't increase the resistor, the triode is easily to be damaged. But you CAN NOT increase voltage over 12V.

7. Note:

This DIY product is to produce high pressure, just like electric mosquito swatter, if you touch it with your hand directly, you will have electric shock feeling, this DIY kit also has the same working principle.

8. Wiring diagram





