

## Miniature Music Tesla Coil Plasma Speaker Production

Tesla Coil is a resonant principle using the operation of the transformer (resonant transformer), by the American Serbian-born scientist Nikola Tesla invented in 1891, mainly used to produce ultra-high voltage but low current , High-frequency AC power. The Tesla coil consists of two sets (sometimes three sets) of resonant circuits. Tesla coil is difficult to define, Nicholas Tesla tried a large number of various coil configurations. Tesla uses these coils for innovative experiments such as electrical lighting, fluorescence spectroscopy, X-ray, high-frequency AC current phenomena, electrotherapy and wireless power transmission, and transmitting and receiving radio signals.

This Tesla on the basis of ordinary Tesla added music playback, you can play mobile phone / computer music, clear sound quality. Voltage input 15-24V DC, arc length 24V 5 - 10 mm meters ideal, small size, power and can be complete, you can work long hours, you can also empty the neon lights, energy saving lamps, flash tube , The ignition coil can be played wireless power transmission (next to put a coil, coil induction can produce current), rotating arc (high voltage coil discharge side of the copper wire length of 5 cm or more, the arc ion can launch copper wire movement circle) Wait.

Parameters:

Size: 38 \* 79 mm

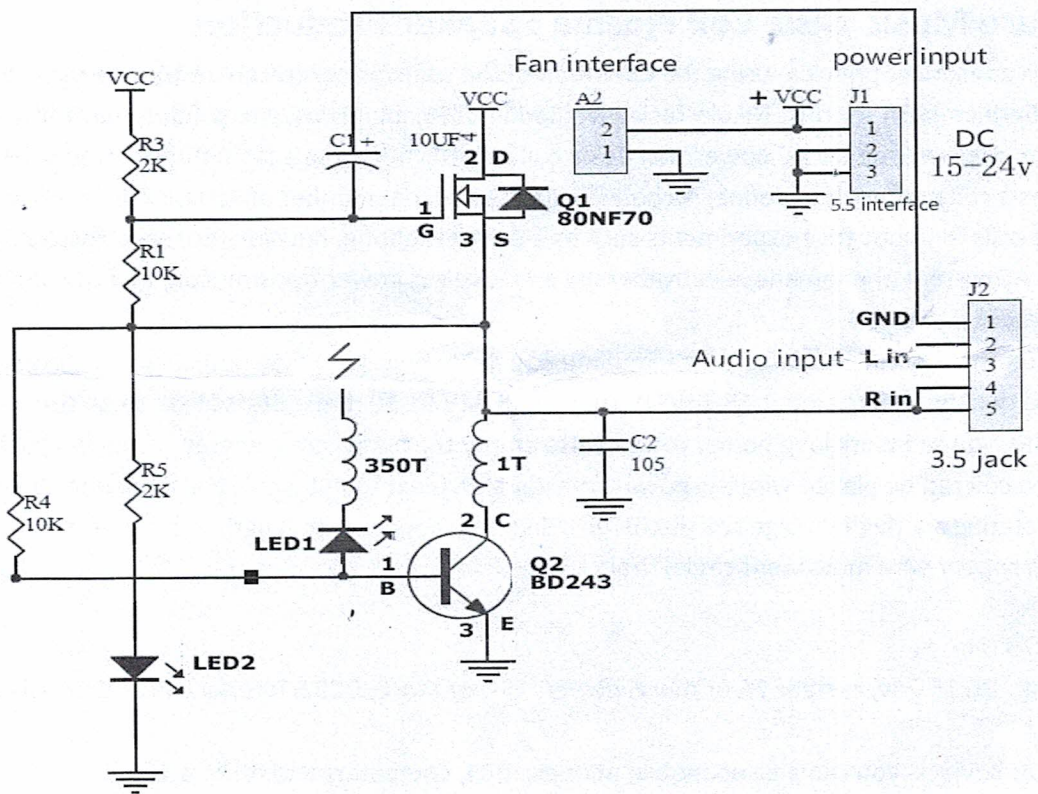
Power input: DC 15-24v, current 2A or more, power: 15w or more, DC5.5 interface (less than 15v 2A does not work)

Audio input: 3.5 jack, you can pick up mobile phones, mp3, computers and other audio.

### Component list:

Name	Quantity	Name	Quantity	Name	Quantity
R1, R4 1 / 4w resistance 2k (color ring: red, black and brown brown)	2	J1 DC5.5 power outlet	1	Aluminum radiator	2
R2, R5 1 / 4w resistance 10k (color ring: brown black and red brown)	2	12cm long 0.5 square wire	1	Double Tong M3 * 10	4
LED1 3mm red light-emitting diode (long legs + positive)	1	Q1 80nf70 FET	1	Pcb circuit board	1
LED2 3mm blue light-emitting diode (long legs + positive)	1	Q2 BD243C transistor tube	1	M3 * 6 mounting screws	6
C1 10uf / 16v electrolytic capacitor (long legs + positive)	1	Neon lamp (close to induction lighting)	1	Thermal Grease	1
C2 1uf (105) 50v film capacitor (non-polar direction)	1	Coil 0.12 / 370T regardless of the upper and lower	1	J2 3.5 audio socket	1

### Schematic



Frequently Asked Questions:

1. led lights do not shine: led lamp mounted anti-or secondary coil enameled wire does not scratch clean and then welding.
2. If the primary coil and secondary coil ignition: the primary coil loosen the secondary coil 1 mm or more, that is not too close to the primary secondary.
3. Arc is very small voice small: the sound itself is not very loud, if too small, please check the input voltage and power are adequate, less than 15v less than 2A does not work or the sound is too small, the higher the input voltage, , 24v when the loudest, you can also self-made horn for amplification, similar to the phonograph.

- Precautions:**
1. This product safety, power is not high, not because of electric shock injuries, but not recommended to touch the coil at the top of the arc, there will be burning sensation.
  2. Do not touch the heat sink after a long period of power; the temperature is very high, especially when using a huge fever 24v, reserved for fan interface, if necessary, add fan cooling.
  3. Tesla coil work in the body or other objects close to the coil, that is, half a meter away next to the coil cannot be other objects, because other objects as a conductor will let the coil form a good loop, absorbing coil energy, making Tesla coil Demonstration of the effect of deterioration or cannot demonstrate!
  4. Do not put mobile phones, mp3 and other electronic equipment close to the coil, otherwise the coil will produce high-frequency magnetic field interference, making mobile phones, mp3 and other equipment failure or damage!
- Tips: DIY kit (parts) to their own welding, installation and production requires a certain professional foundation and practical ability, Any problem, please contact us