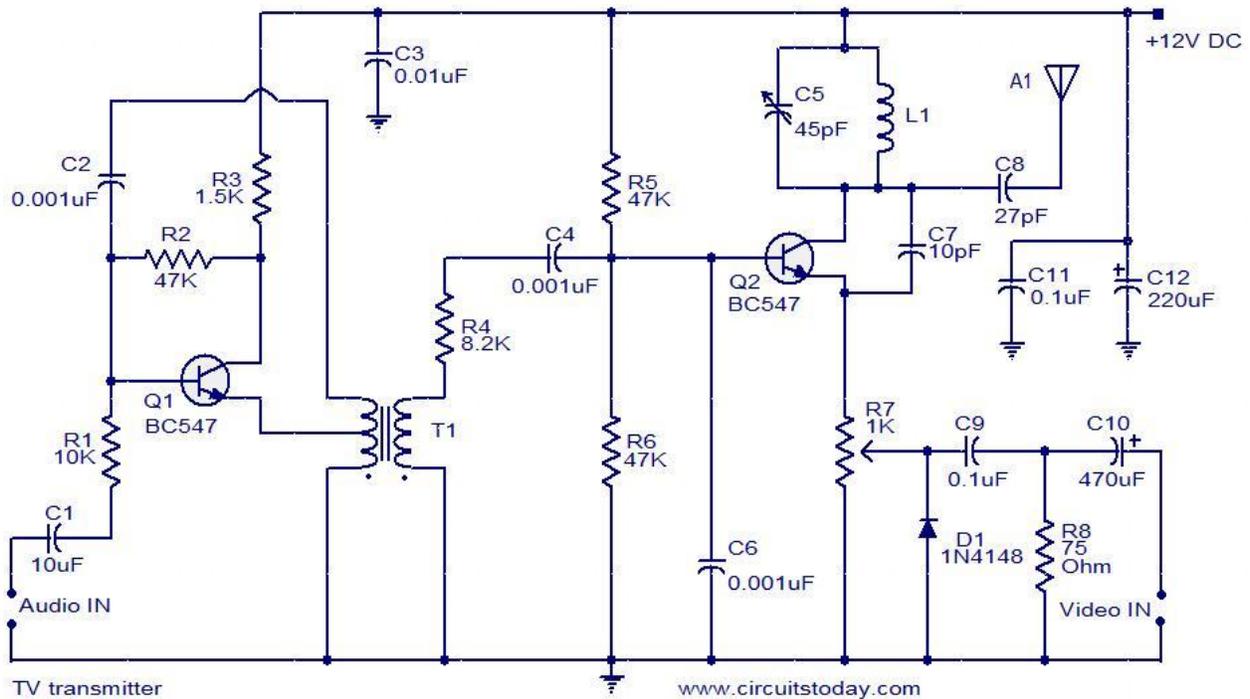


TV TRANSMITTER CIRCUIT

Description.

The TV transmitter circuit given here uses UK standard 1 FM modulation for sound and PAL for video modulation. The audio signal to be modulated is pre-amplified using the transistor Q1 and associated components. The transistor Q2 has two jobs: production of carrier frequency and modulation. The pre-amplified audio signal is fed to the base of transistor Q2 for modulation. Capacitor C5 and inductor L1 forms the tank circuit which is responsible for producing the carrier frequency. The video signal is fed to the emitter of transistor Q2 via POT R7 for modulation. The modulated composite signal (audio+video) is transmitted by the antenna A1. This TV transmitter circuit can be operated from 12V DC. Either a 12V DC power supply or a battery can be used for the purpose, using a battery will surely reduce noise and improve the performance. If you are going with a DC power supply, then it must be well regulated and free of noise.

Circuit diagram with Parts list.



Notes.

- Assemble the circuit on a good quality PCB.
- Inductor L1 can be made by making 4 turns of 24SWG enameled copper wire on a 6mm dia: plastic former.
- T1 can be a radio frequency transformer with built in capacitor. (Can be found on old transistor radio boards).
- Antenna A1 can be a 1M long copper wire. (Experiment with the length to get optimum performance).
- This transmitter is working in VHF band somewhat between 50 – 210MHz.
- This transmitter is compatible only with PAL B and PAL G systems.
- Slight adjustments are required on the value of C8 for getting optimum performance.

Source: <http://www.circuitstoday.com/tv-transmitter-circuit>