Long range AM transmitter.

Description.

Here is the circuit diagram of an easy to build long range AM transmitter circuit based on three transistors. With correct tuning and a matching antenna, the transmitter can deliver signals up to a distance of 2 kilometers.

The audio signal to be transmitted is given to the base of the transistor Q1 via the audio driver transformer T1.The modulated signal is developed at the collector of transistor Q1.The frequency of the transmitted signal can be tuned adjusting the gang condenser C7.The required amplification of the modulated signal is done by the two transistors Q2 and Q3.The two transistor amplifier stages are connected in parallel for obtaining maximum power. The signal to be transmitted is coupled to the antenna via the capacitor C4.

Circuit diagram with Parts list.



Notes.

- The inductor L1 can be made by making 56 turns of 365 WG enameled copper wire on a 1 cm former.
- The transformer T1 can be a general purpose audio driver transformer seen in transistor radios.
- Inductor L2 can be a 10 mH general purpose radio frequency choke.
- Use a 1 meter insulated copper wire as antenna.
- The circuit can be powered from a 9V PP3 battery.
- Adjust the value of C7 for maximum range.
- Also, you can experiment with the length of antenna for maximum range.
- The resonator F1 used here is a two terminal type without a ground pin. If you are using a three terminal one, the ground pin must be connected to the circuit's ground.
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- Read more: <u>http://www.circuitstoday.com/long-range-am-transmitter#ixzz0mPVmSk5u</u> Under Creative Commons License: <u>Attribution</u>