**Name of the Experiment:** Study of the FM transmitter .

**Apparatus:**

1. Monophone Plug

2. 4 piece Wire

3. Coil (Solid copper)

5. Copper Clans Board

6. 0.1 micro ferrade Capacitor 104 (2pc)

7. 27 k Resistor

8. Electronic Capacitor

9. 10 k Resistor

10. 0.1 Capacitor (50 v)

11. 10 pf disk capacitor (2pc)

12. 470 resistor

13. NPN transistor

14. 9v Battery

15. LED red & green

16. Battery Plug

**Circuit Diagram:**

**Theory:**

FM transmitters can be complicated to build, but not this one , because this transmitter creates frequency quickly and it expand the wave form . This design was originally popularized by Japanese multimedia artist .the primary function of fm transmitter is only based on Battery, resistor and capacitor . This circuit contains a monoplug clip where we can set much and plug it into Phone of Music play and after plugging battery we will find a Frequency which is created by the Circuit and it catches by the fm . Attiner can help to catch the frequency very fast . so times this kind of fm transmitter frequency being blocked by the country but it works in a very cheap and easy process.

**Procedure:**

1. 1st wire the monophone plug , black wire to the outer shield contact and the other red one is to the center tip contact and then shoulder it .

2. Bend the copper wire into 12 cm coil . Cut the copper circuit board in 4 by 4 inch .

3. set 2 pad into board and attach copper coil with the 0.1 micro farrede capacitor including 27 kilo ohm resistor in another pad then electric capacitor with again another pad ,but its polarized then 10 kilo ohm resistor & 0.1 capacitor both in the Ground .

4. Set NPN transistor bend the leds collector to the coil , base to the resistors and emitter to the free pad . set 10 piko farrede disk capacitor on that free pad .

5. One side of 470 resistor is in the Free pad and another side is set on the ground .

6. Finally again set 10 piko farrede disk capacitor to the coil and ground .

7. Set both Mono phone phul and battery clip's black wire to the ground and red one of battery clip to the end of the coil and red one wire of monophone plug with the resistor .

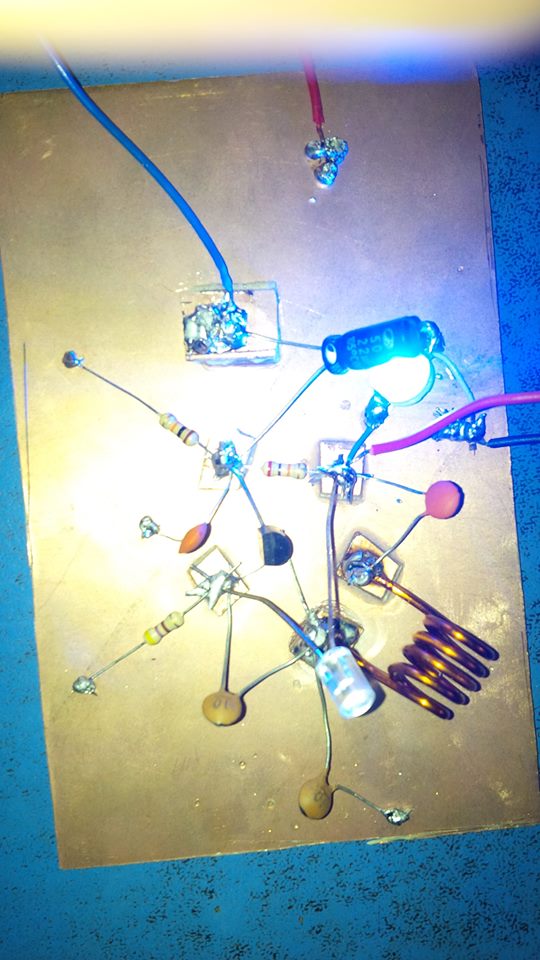
8. Just plug into the Battery and put monophono plug to the Handset and play music , fm will catch the frequency and will show to a specific Band .

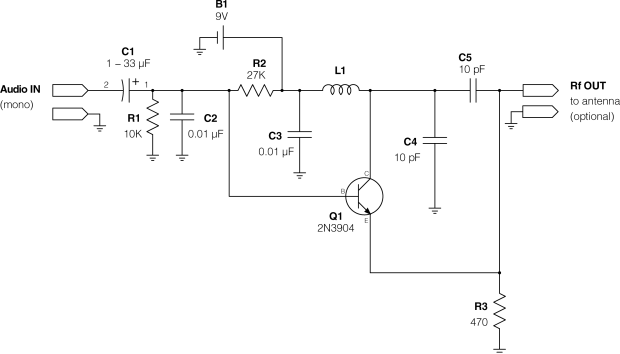
9. Set 2 LEDs to the Coil and at the starting point where the battery is situated.

10. Turn it off by removing the battery though it’s a illegal project to build but interesting .

**Conclusion:**

At first we have Practiced on Breadboard then we made 3 circuit and all become successful, we faced some problem in our Instruments so we become late for project but we ended up our project Successfully at last .

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