

## Description of principle

### **Power support**

The transmitter is fed by ipod or iphone power supply

### **Antenna:**

The transmitter utilize dipole antenna.

The power of this signal (Power manager) will be send to MCU. Audio signal will be process by audio input, then it be send to FM stereo modulate. MCU will output pulse to trigger the oscillator and the encoder to generate a carrier frequency and digital code signal when frequency and memory adjustment was pressed. Then the serially digital signal of encoder will mixed with the carrier at modulator stage by was of FSK mode (frequency Modulation) from the RF VCO, this process utilize PLL which compare 19KHZ frequency Modulation signal with signal which is from trigger the oscillator. Then this signal will pass through time frequency to change into the frequency that required. This signal then pass through LC frequency select network and will be sent to transmitter antenna for transmitting.

### **Ground:**

There is no external ground connection. The ground is only that of the printed circuit board.