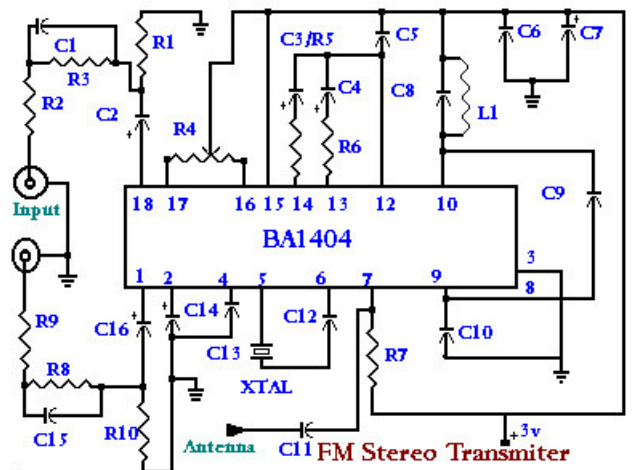


February 98 Project : FM Stereo Transmitter

You'll find that this is a very easy project to build. It will transmit good quality sound in the FM band (88 - 108 mhz). One important item is that the IC chip operates on 3 volts DC. The chip will get destroyed if it is operated on any voltage higher than 3.5 volts. The antenna can be a standard telescopic antenna or a 2 foot length of wire. The input is in the millivolt range and you may need to add additional pots for the inputs. I was able to use this circuit for a walkman and a portable CD player in my car. I used the headphone jack on both and varied the signal with the volume control.

To adjust the circuit tune your FM radio to a quite spot then adjust the trimmer capacitor C8 until you hear the signal that you are transmitting. When you have a strong signal adjust the resistor R4 until the stereo signal indicator lights. If the input is too high of a signal you may over drive the IC chip. Use two 15 turn pots on the input signals to bring the level down. You can balance the signal by using headphones. The inductor L1 is 3 turns of .5 mm wire on a 5 mm ferrite core.



R1=1K	R7=330	C3=10	C9=10pf	C15=.001
R2=22K	R8=68K	C4=220pf	C10=10pf	C16=4.7
R3=68K	R9=22K	C5=.001	C11=10pf	XTAL=38KHZ
R4=50K POT	R10=1K	C6=.1	C12=10pf	L1=3 TURNS OF .5
R5=5.6K	C1=.001	C7=10	C13=.001	mm wire. .5
R6=150K	C2=4.7	C8=47pf	C14=10	core