

FM WIRELESS MIC 1 STATE
CODE 702 **LEVEL 1**

The set FM wireless microphone is a wireless mic circuit which is printed in coil circuit resonance circuit, so it makes the composition easy.

Technical specifications:

- power supply : 9VDC.
- consumption : 10mA. max.
- transmitting frequency: approx. 88 MHz (adj.)
- PCB dimensions : 1.64 x 1.10 inches.

How to works:

Condenser MIC will receive the signal sent in. There is a signal expanding phase in the MIC. The expanded sound from MIC will be sent through C2 to the base of TR1 and TR1 will create the frequency of radio wave and it is the mixer of sound signal and radio frequency created. The created frequency depends on trimmer and wire coil created from the print. The collector of TR1 will be connected to the antenna for broadcasting.

PCB assembly:

Shown in Figure 3 is the assembled PCB. Starting with the lowest height components first, taking care not to short any tracks or touch the edge connector with solder. Some tracks run under components, and care should be taken not to short out these tracks. If the pins will not enter the holes with ease, use a small drill to slightly enlarge the opening. All components with axial leads should be carefully bent to fit the position on the PCB and then soldered into place. Make sure that the electrolytic capacitors are inserted the correct way around. Some components are particularly sensitive to heat (ie: Transistors, IC's, diodes etc.) extra care must be taken to only apply the iron for as little time as possible, using a pair of pliers to grip the leads will help conduct heat away. Trim components leads with wire

cutters to prevent excess lengths causing a short circuit. Now check that you really did mount them all the right way round!

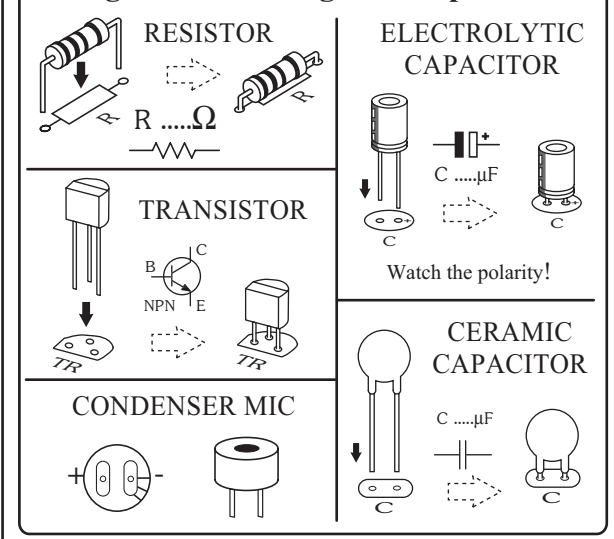
Testing:

Connect the power supply 9 volts to "+3V" and "G" point. Connect ANT to the coil by soldering at ANT by removing the solution before soldering, if not soldering will not work. Tune FM station to 88MHz and use a plastic screw driver to adjust the trimmer test through the MIC, there will be sound coming from the speaker. If no sound coming out from the speaker, turn the radio wave to 100MHz, in order to try again.

Application:

After the test works, connect the switch according to the chart (figure), by altering connect the positive pole to "+B" instead of +9V, the switch will work more efficiently. If a box is needed we can use FB08 box.

Figure 1. Installing the components



Troubleshooting:

The most problem like the fault soldering. Check all the soldering joint suspicious. If you discover the short track or the short soldering joint, re-solder at that point and check other the soldering joint. Check the position of all component on the PCB. See that there are no components missing or inserted in the wrong places. Make sure that all the polarised components have been soldered the right way round.

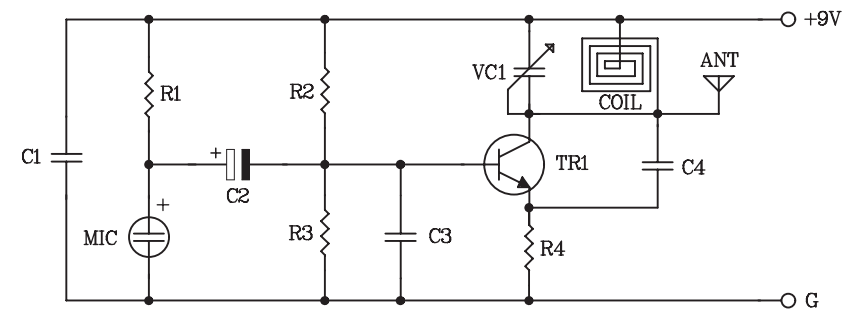
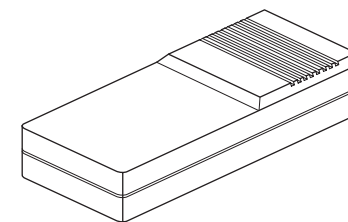
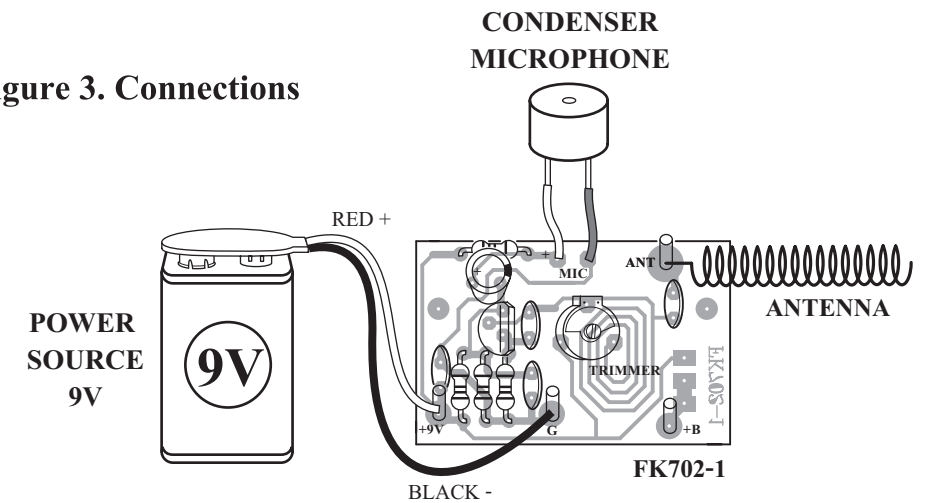


Figure 2. The FM wireless MIC 1 state circuit

Figure 3. Connections



NOTE:
FUTURE BOX FB08 is suitable for this kit.

NEW KIT SET

CODE FK	DESCRIPTION	POWER
167	FIREFLY LIGHT (NIGHT ACTIVATE)	3VDC
275	THREE TRAIN SOUNDS (IC DIGITAL)	3VDC
276	OWL VOICE (IC DIGITAL)	3VDC
326	DUAL STATION INTERCOM&DOOR BELL (WITH 2 SPEAKER)	6-12VDC
436	UHF REMOTE CONTROL 1 CH.	TX. 9VDC RX. 12VDC
673	MINI POWER AMP 1+1W. STEREO	3-12VDC