



FUTURE KIT
HIGH QUALITY ELECTRONIC KITS

MINI SIREN
CODE 228

LEVEL 1

The mini siren circuit is easy application and low cost. It is suitable for installing in playing car, alarm-systems, door bells etc.

Technical specifications:

- power supply: 9VDC.
- consumption: 36mA max.
- loudspeaker connection: 8 Ohm/0.25W
- dimensions: 1.79 x 1.36 inches

How to works:

TR1 and TR2 are connected as low frequency generator which then will be sent to control high generated from TR3 and TR4. This controlled high frequency will be transferred through TR5 for further amplifying to speaker. Siren sound is set by C3 and R4.

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.

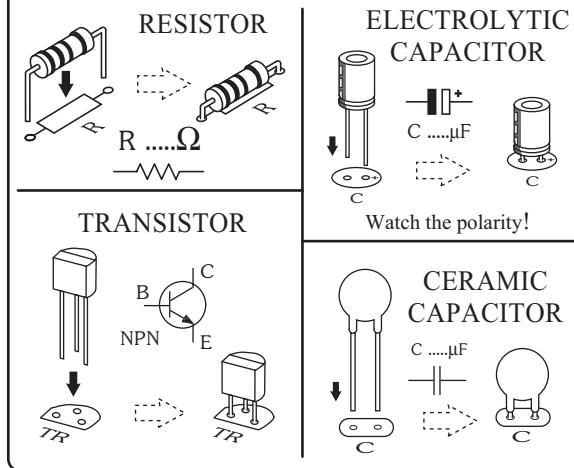
Now check that you really did mount them all the right way round!

Testing:

This kit has an operating voltage range of 9 VDC.

Apply power supply. You will hear the ambulance sound from a loudspeaker.

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 mini siren circuit

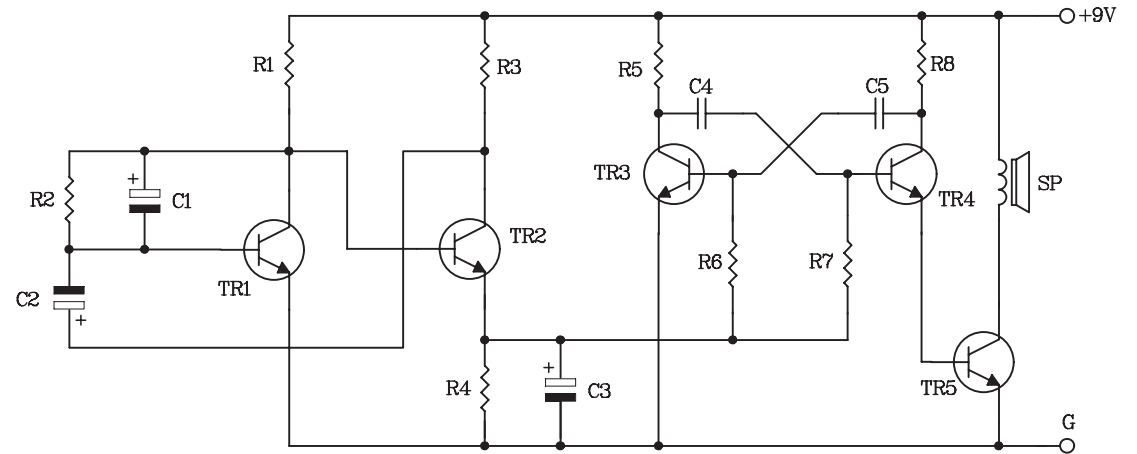
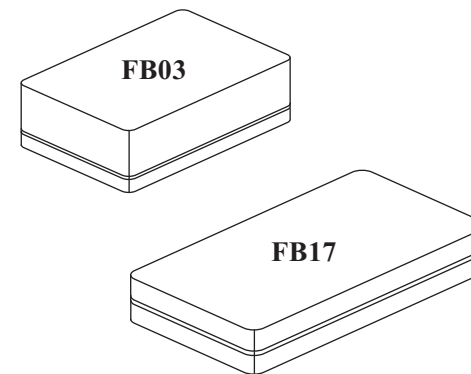
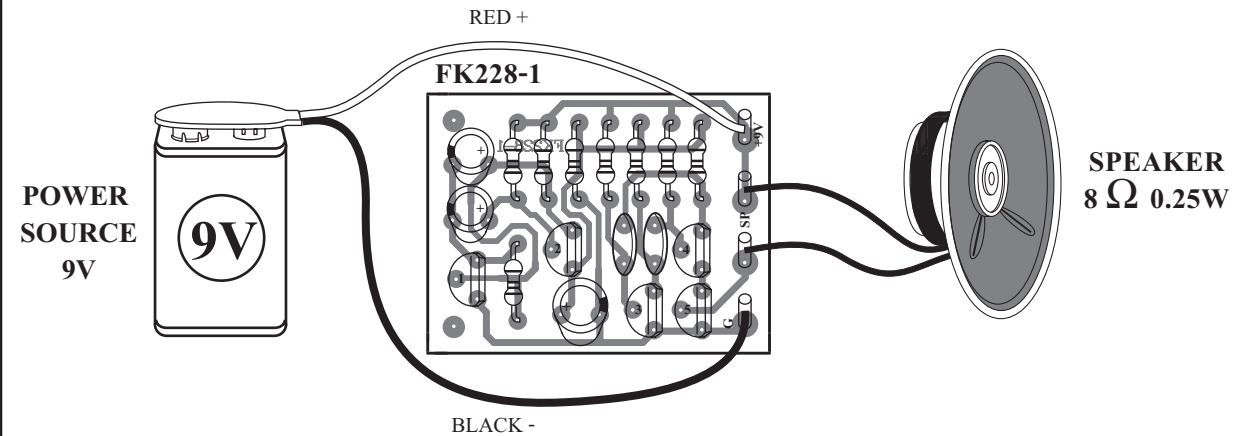


Figure 3. Connections



NOTE:
FUTURE BOX FB03 or FB17
are suitable for this kit.

NEW KIT SET

CODE FK	DESCRIPTION	POWER
156	MINI TRAFFIC LIGHT 3 LED	9-12VDC
157	TWO WAY CHASING LIGHT TWO COLOUR 10 LED	9-12VDC
158	STROBOSCOPE 220V	220VAC
159	SHAKING DICE	9-12VDC
160	RANDOM NUMBER GAME 1 DIGIT	9-12VDC
273	MUSIC DOOR (WITH MAGNATIC SWITCH)	3VDC
274	MINI ORGAN 13 TONE (WITH MAGNATIC SWITCH)	9VDC
325	RINGING SIGNAL LIGHT 5 LED	NONE
672	MINI MEGAPHONE (WITH SPEAKER)	4.5-12VDC