FUTURE KIT

HIGH QUALITY ELECTRONIC KITS

FUTURE KIT

AMBULANCE SIREN

CODE 232

LEVEL1

Aumulance siren circuit gives an ambulance siren sound with high and low tone. It is suitable for studying, easy application. It can be connected with playing car or siren box.

Technical specifications:

- power supply: 9VDC.

- consumption: 45mA max.

- loudspeaker connection: 8 Ohm/0.25W

- dimensions: 2.14 x 1.19 inches

How to works:

TR1 and TR2 are connected as low frequency generator. which then will be sent to control high generator from TR3 and TR4. The sounds will loud periodically according to low frequency generator. Both frequencies are amplified by TR5 and transferred to speaker to a loudspeaker further.

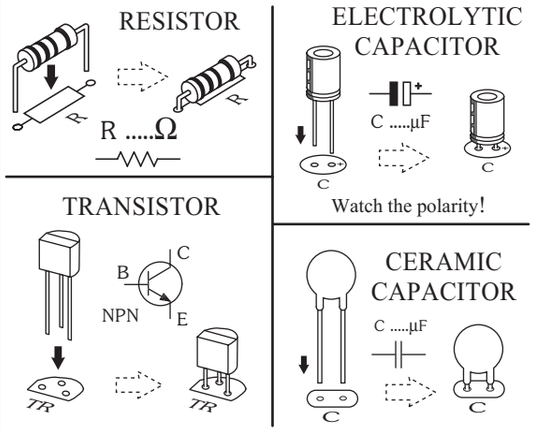
PCB assembly:

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 componants



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 ambulance siren circuit

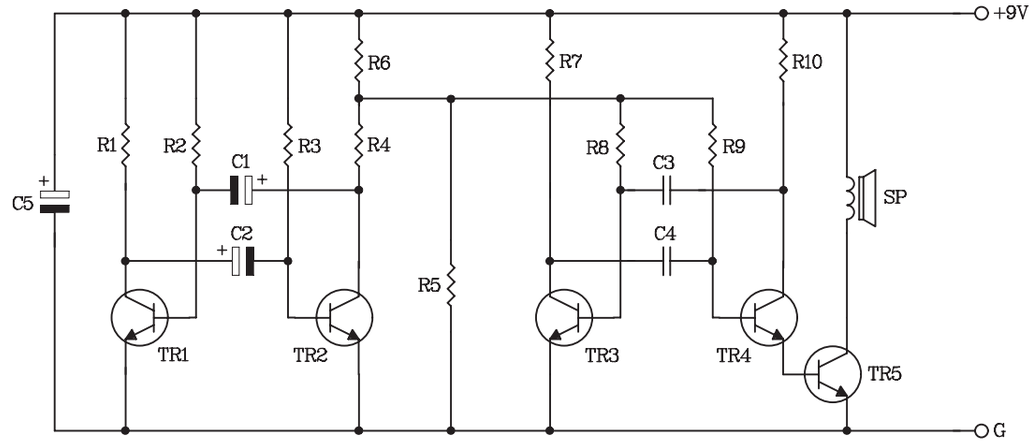
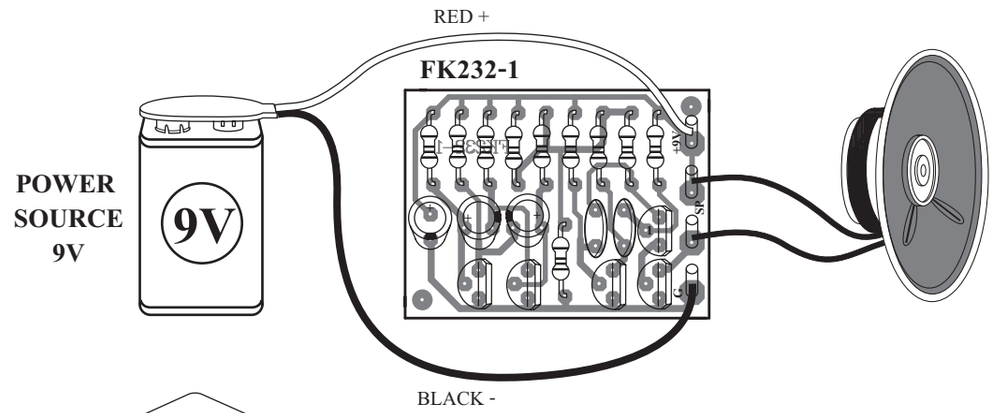
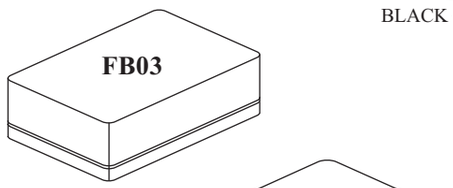
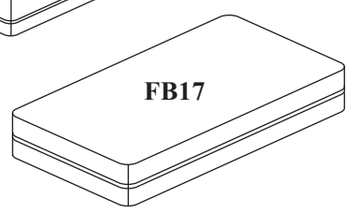


Figure 3. Connections







NOTE:

FUTURE BOX FB03 or FB17

are suitable for this kit.

NEW KIT SET NEW

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