

DOORBELL SOUND
CODE 240

LEVEL 1

This circuit is a small sound generator. It is suitable for studying, easy application. Idea for home or room.

Technical specifications:

- power supply: 6-12VDC.
- consumption: 105mA max.
- dimensions: 1.02 x 1.06 inches

How to works:

TR1 and TR2 is configured as a sound oscillator with the frequency is depending on resistor and capacitor. This frequency can be adjusted the value from resistor R2 and capacitor C2. After than this frequency drives loudspeaker.

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!

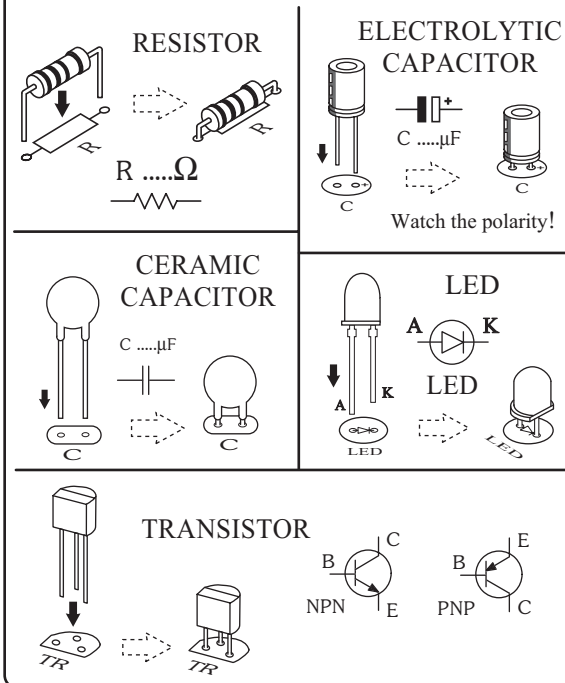
Testing:

This kit has an operating voltage range of 9 VDC. Apply power supply. You will hear the sound from a loudspeaker and LED is lighted on.

Application:

When you want install the circuit to your home, you have to use the push switch at positive point. If push the push switch, you will hear the sound from loudspeaker. This circuit can be used DC adaptor 9V or FK801 power supply 6-9-12V 300mA. for supply the circuit.

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 doorbell sound circuit

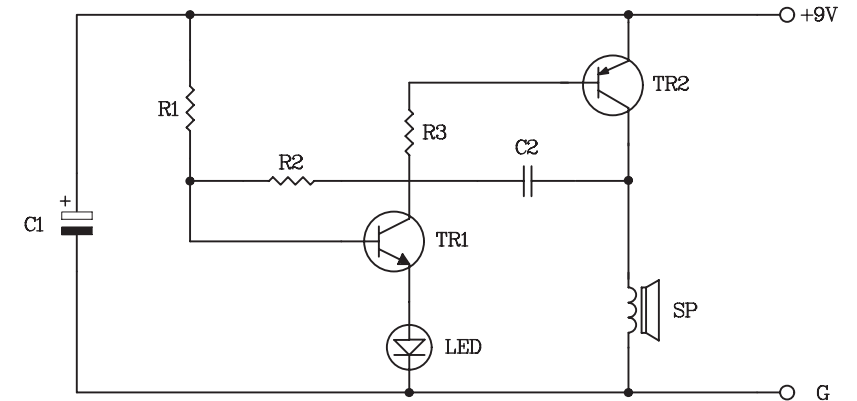
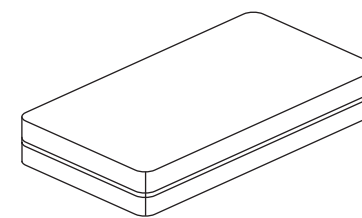
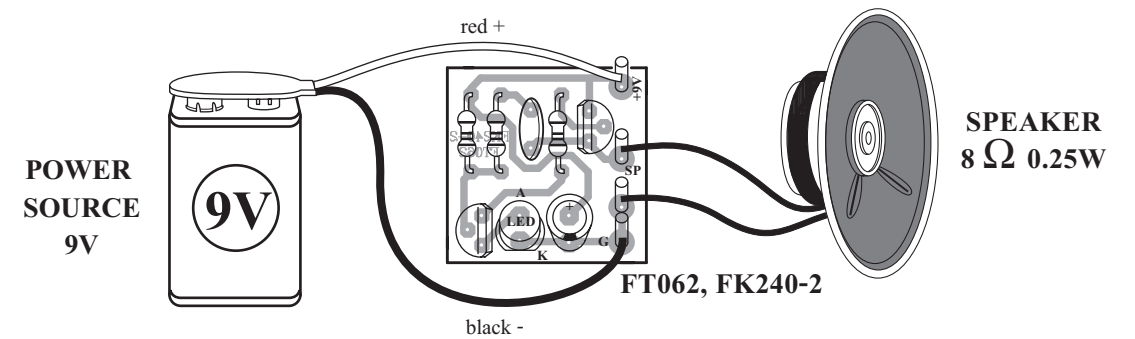


Figure 3. Connections



NOTE:

FUTURE BOX FB17 is suitable for this kit.

NEW KIT SET

CODE FK	DESCRIPTION	POWER
168	NO SMOKING FLASHER 46 LED	9-12VDC.
169	DANCING ROBOT FLASHER 33 LED	9-12VDC.
170	DANGER FLASHER 42 LED	9-12VDC.
171	TWO LAMP FLASHER	3VDC.
172	THREE STEP FLASHER 19 LED	9-12VDC.
173	HALLOWEEN PUMPKIN FLASHER 23 LED	9-12VDC.
174	ANIMATED LED SIGNBOARD (5x7 DOT MATRIX)	3-5VDC.
816	VARIABLE REGULATOR 0-50V. 3A.	50VDC.
817	TRANSFORMERLESS POWER SUPPLY 6-9-12V 50mA	220-240VAC.