

**CAR TURNING LIGHT ALARM**

CODE 248

LEVEL 1

This is a sound generator circuit that can be applied for any automobile in order to giving alarm instead of splashing light only.

Technical specifications:

- power supply: 6 to 12VDC.
- dimensions: 1.79 x 1.27 inches

How to works:

This circuit composes of few components. Diode D1 and D2 are connected with left and right turning light. "G" point is connected with ground of car body. If we give L turning signal. L turning light will display. Current will transfer through diode D2 to sound generator to created sound. Sound generator is working at the same time that turning light displays with alarm sound. Now if we give R turning light signal, diode D2 is working while diode D1 will block current away from turning light. Instead, if we give R turning light signal, current will transfer through diode D1 but diode D2 will block current as per mentioned above. Either we give L or R turning light signals, there will be alarm sound, which is a dynamic buzzer by having TR1 and TR2 connected as frequency generator. This frequency is depending on R3, R4, C1, C2 value. TR3 is amplified this frequency before send to dynamic buzzer. VR1 is adjusted the frequency

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!

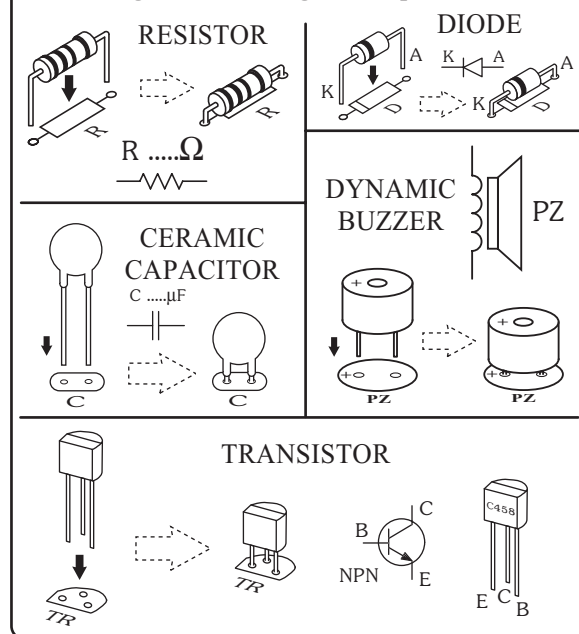
Testing:

Apply power supply 6 to 12 volts to the circuit. Connecting position pole with "L" point and negative pole with "G" point. There should be PZ sound after complete the installation. Moving positive pole to connect with "R" point, there should be the same sound as before. VR1 is adjusted the frequency.

Application:

Connecting "G" point with body car, "L" point with left turning light, "R" point with right turning light. When you turning on the right or left turning light, you will hear the sound from PZ simultaneously on every flashing of turning light.

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.

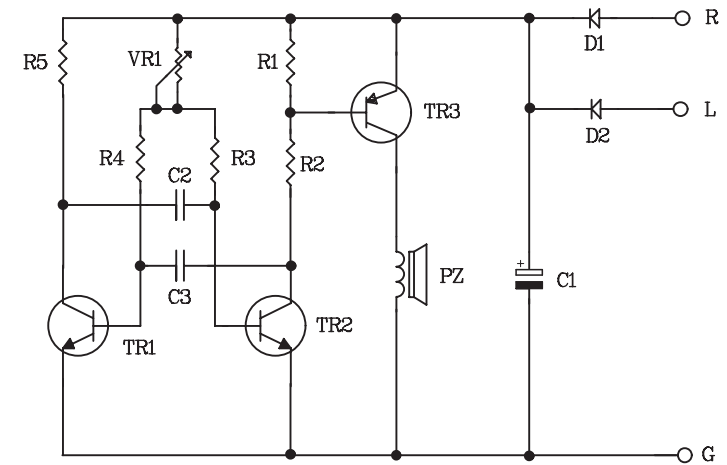


Figure 2. The car turning light alarm circuit

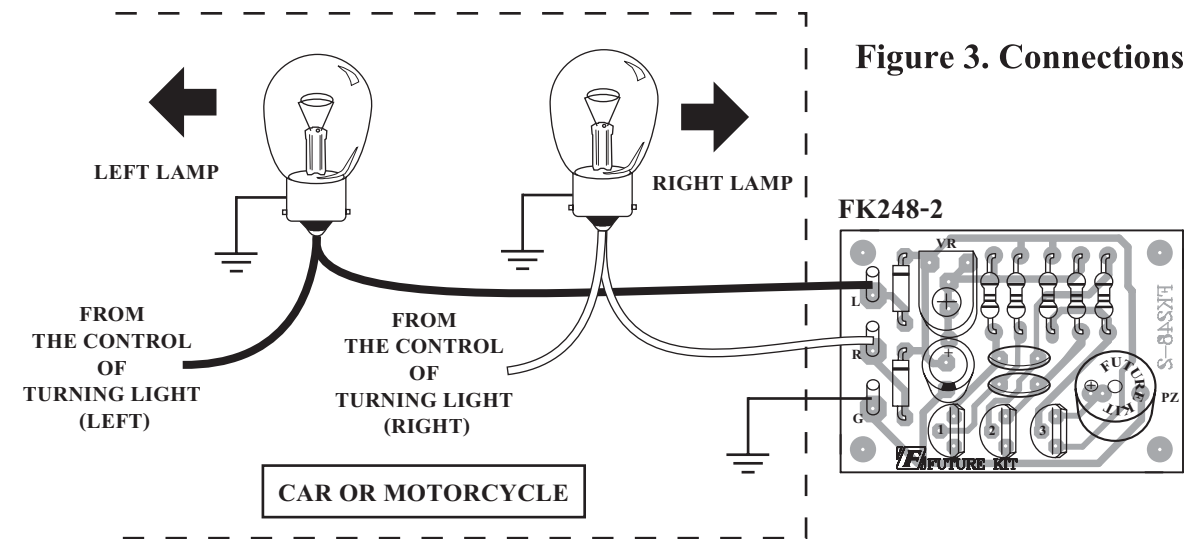
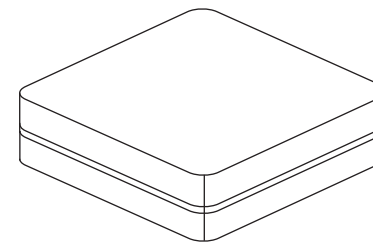


Figure 3. Connections



NOTE:

FUTURE BOX FB01 is 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