FUTURE KIT

HIGH QUALITY ELECTRONIC KITS

TWO LAMP FLASHER CODE 171

LEVEL 1

This two lamp flasher circuit is a basic circuit that is suitable for those who interested in electronic. Easily application with low-price. This circuit has LAMP's splash alternately one by one.

Technical specifications:

- power supply : 3VDC.

- consumption : 300mA max.

- light indication : 2 small bulbs 3 volts

- PCB dimensions : 1.68 x 1.06 inches.

How to works:

Multi-vibrator (TR3 and TR4) is configured as frequency generator. TR3 and TR4 will alternately one by one. If TR3 works, causing TR2 works following, LAMP will light on and the rest of LAMP will light off. But if TR4 works, causing TR1 works following, LAMP will light on and the rest of LAMP will light off. Speed of LED blinking is depending on VR1, R2, R3, C1 and C2.
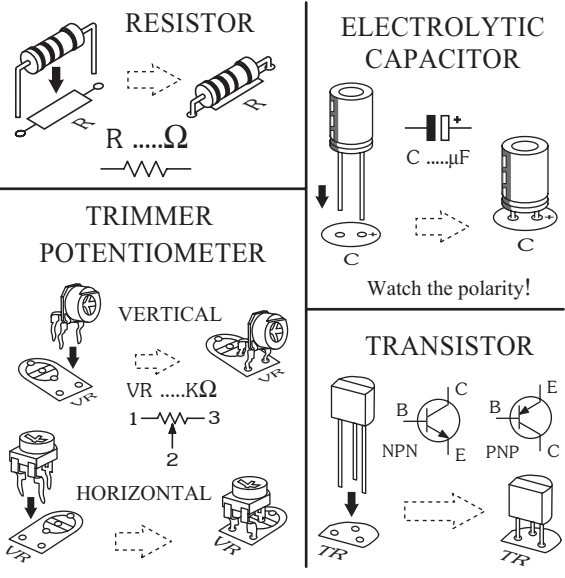
PCB assembly:

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. 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. The LED has a flat spot on the body which lines up with the line on the overlay. Now check that you really did mount them all the right way round!

Testing:

Connect the power supply 9 to 12V to circuit. With the positive pole is connected to "+" point and the negative pole is connected to "-" point. LAMP 3V will be flashing alternately one by one.

Figure 1. Installing the componants

RESISTOR

R .....Ω

TRIMMER POTENTIOMETER

VERTICAL

VR .....KΩ

1 —W— 3

2

HORIZONTAL

ELECTROLYTIC CAPACITOR

C .....µF

Watch the polarity!

TRANSISTOR

B — C

E

NPN

B — E

C

PNP

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.
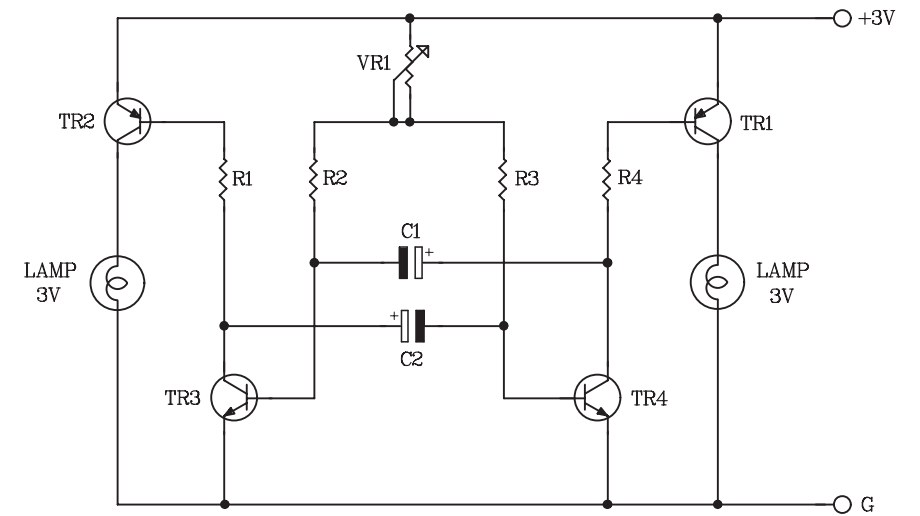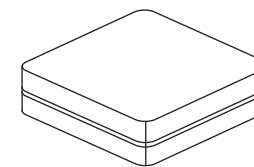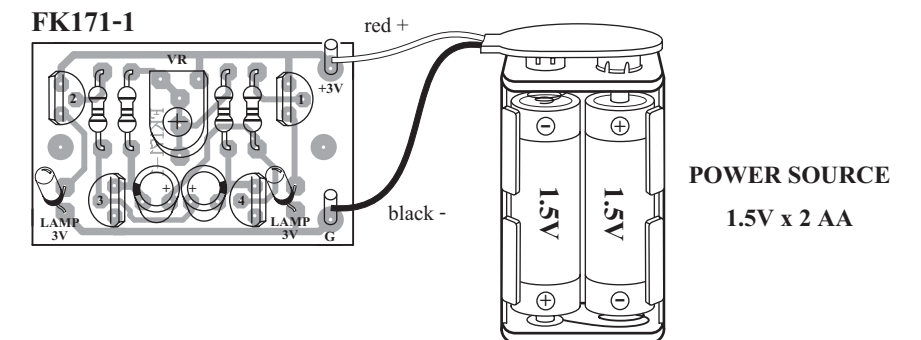

Figure 2. The two lamp flasher circuit

Figure 3. Connections

FK171-1

red +

black -

POWER SOURCE
1.5V x 2 AA

NOTE:

FUTURE BOX FB01 is suitable for this kit.

NEW KIT SET

CODE FK	DESCRIPTION	POWER
511	TWO FUNCTION INFRARED SENSOR	12VDC
674	POWER AMP. 2W MONO WITH SPEAKER	9-12VDC
675	POWER AMP. 2+2W STEREO WITH SPEAKER	9-12VDC