FUTURE KIT

HIGH QUALITY ELECTRONIC KITS

FUTURE KIT

INFRARED REMOTE CHECKER
CODE 933 LEVEL 1

This circuit is chacking the infrared remote control. It has LED for indicator checking. Idea as checking the infrared remote control etc.

Technical specifications:

- power supply : 3-5VDC.
- consumption : 500μA max. @ 3VDC.
- PCB dimensions : 1.61 x 0.89 inches.

How to works:

When the infrared light into photodiode sensor, internal resistance of photodiode is low resistance causing TR2 is working follow the infrared light after then at the cathode of photodiode will has the voltage. This voltage is fed to the base of TR1 through C1 which TR1 will be working when the base of TR1 is equal to zero volt only. When TR1 is working, at the collector of TR1 has the voltage causing LED1 is light-on.

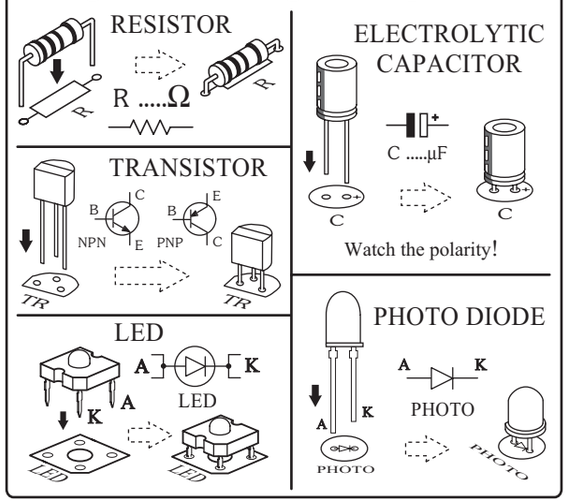
PCB assembly:

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:

The board should be given a final inspection before power is applied. Supply the battery 3 to 5V. to the circuit. With the position pole is connected to "+" point and the negative pole is connected to "-" point. After then transmit the infrared light into photodiode. At LED will be blinking but if stop transmit the infrared light at LED is stoping blink.

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.

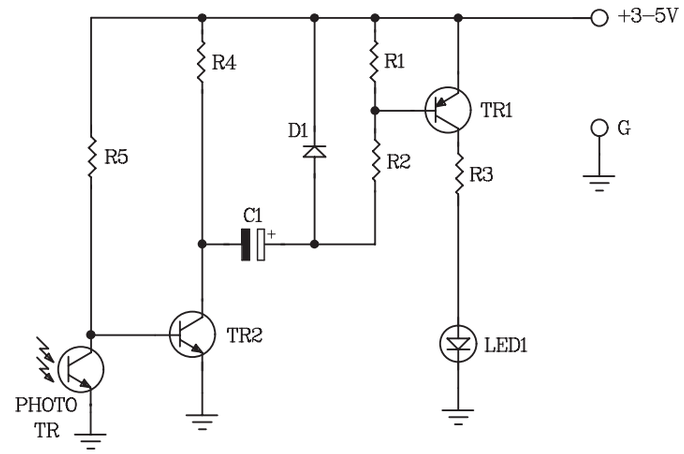
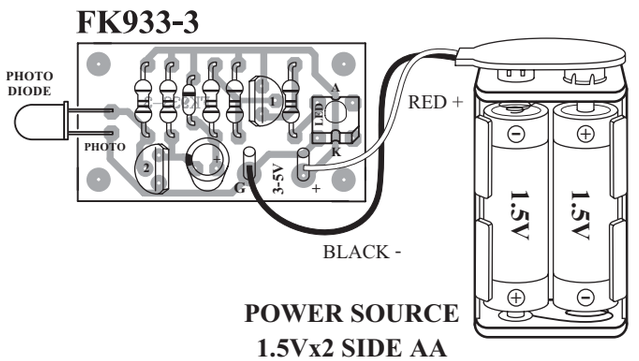
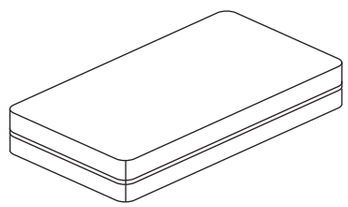


Figure 2. The infrared remote checker circuit

Figure 3. Connections



POWER SOURCE
1.5Vx2 SIDE AA



NOTE:

FUTURE BOX FB17 is suitable for this kit.

NEW KIT SET NEW

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	5x7 ANIMATED LED SIGNBOARD	3-5VDC.
816	VARIABLE REGULATOR 0-50V. 3A.	50VDC.
817	TRANSFORMERLESS POWER SUPPLY 6-9-12V 50mA	220-240VAC.