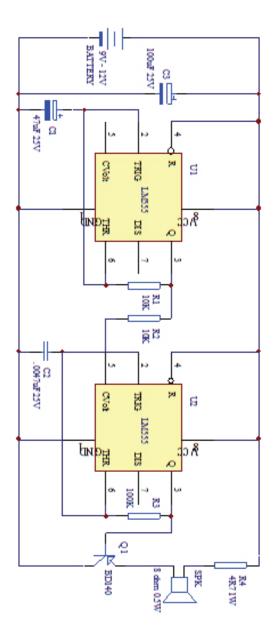
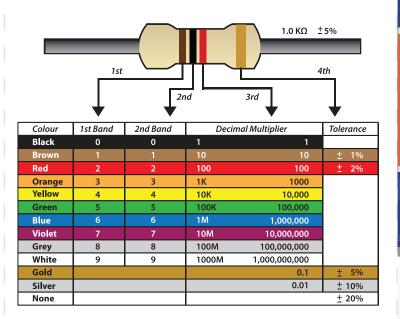


### **Schematic Diagram**



### RESISTOR COLOUR CODE GUIDE



## More Kits In The Range

**KI0205** Ding Dong Door Chime Kit

KI0236 Wailing Siren Kit

KI0208 Light Alarm Kit

**KI0211** Moisture Sensor Kit

**KI0213** Electronic Dice Kit

KI0231 9V DC Siren Kit







(KI0231)

# 9V DC Siren Kit

## Tekky Kit





### **CIRCUIT DESCRIPTION**



CONSTRUCTION



## **Component List**

Designator	Part Description	Part No.
R1	10K 0.25W Resistor (Brown, Black, Orange)	RS1605
R2	10K 0.25W Resistor (Brown, Black, Orange)	RS1605
R3	100K 0.25W Resistor (Brown, Black, Yellow)	RS1725
R4	4R7 1W Resistor (Yellow, Purple, Gold)	RS3205
C1	47uF 25V Electro Capacitor	CC1439
C2	.0047uF 25V polycap	CC2045
C3	100uF 25V Electro Capacitor	CC1445
U1	555 Timer IC	X-LM555N
U2	555 Timer IC	X-LM555N
Q1		BD140
BATT	9V Battery Snap	BA9000
WIRE	10cm Speaker Wire	BC327
SPK	Speaker	SP1207

R1 R2 R3 R4 Check
Check C1
Check C2 Check C3 Check C1
Check C4 Check C1
Check C4 Check C1
Check C4 Check C1
C1
CHeck C1

This kit contains two oscillators.

The first oscillator switches, while the second one generates the siren sound.

U2, one of the oscillators, creates the sound.

This sound is then sent to the base of Q1. Q1 acts like a booster, making the sound strong enough to drive the speaker.

The frequency at which U2 oscillates (produces the sound) depends on the values of R3 and C2.

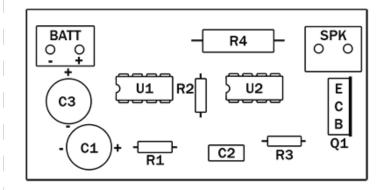
If you adjust these values, you can change the pitch of the sound.

U1 is the other oscillator.

Whenever U1 activates, it makes the voltage at pin 3 go high. This high voltage is connected to pin 5 of U2. Because of this connection, U2 changes its sound whenever U1 activates.

This results in the siren making a hee-haw sound.

### **PCB Component Overlay**

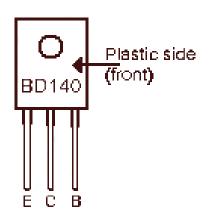


Using the component overlay, the component list and the circuit diagram, load and solder the components into the printed circuit board (PCB).

When finished, closely inspect your solder joints and your component placements are all okay. Now check your battery with a multimeter to ensure it is okay.

Fit the battery and the Siren should work.

#### **Transistor BD140 Identification**



The BD140 transistor supplied may not have E, C, B marked. Please see diagram for pinout.