







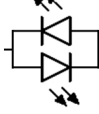

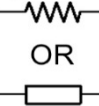





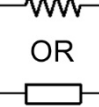

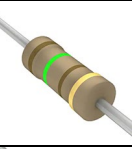
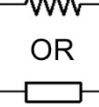


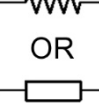



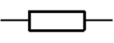


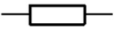


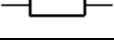
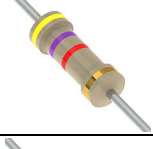

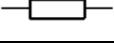
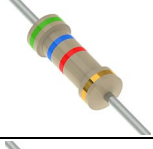

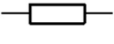
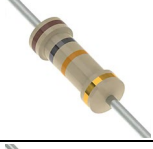

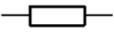
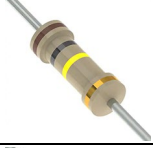

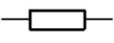











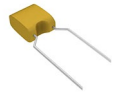


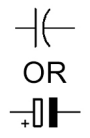


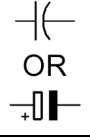


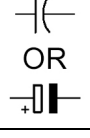


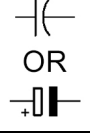




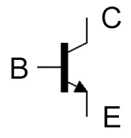

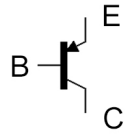

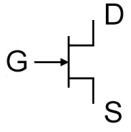

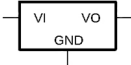
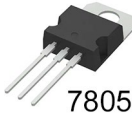
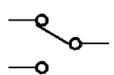
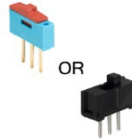
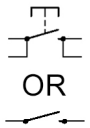

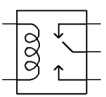



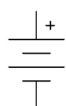










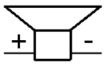





LEDs			
Symbol	Kit QTY	Image	Description
	5		5mm Red LED, Forward Voltage (Vf) = 2V, Current = 20mA
	5		5mm Green LED, Forward Voltage (Vf) = 2.1V, Current = 20mA
	5		5mm Yellow LED, Forward Voltage (Vf) = 2.1V, Current = 20mA
	5		5mm Clear Blue LED, Forward Voltage (Vf) = 3.2V, Current = 20mA
	5		5mm Bi-color Red/Green Two Lead LED Forward Voltage (Vf) = 2.1V Green, 1.95V Red, Current = 20mA
Resistors			
All resistor tolerances are $\pm 5\%$ (gold stripe)			
 OR 	10		51 Ω ¼W 5% Carbon Film Resistor Green, Brown, Black
 OR 	10		100 Ω ¼W 5% Carbon Film Resistor Brown, Black, Brown
 OR 	10		150 Ω ¼W 5% Carbon Film Resistor Brown, Green, Brown
 OR 	10		270 Ω ¼W 5% Carbon Film Resistor Red, Violet, Brown
 OR 	10		330 Ω ¼W 5% Carbon Film Resistor Orange, Orange, Brown

 OR 	10		360Ω ¼W 5% Carbon Film Resistor Orange, Blue, Brown
 OR 	10		1KΩ ¼W 5% Carbon Film Resistor Brown, Black, Red
 OR 	10		4.7KΩ ¼W 5% Carbon Film Resistor Yellow, Violet, Red
 OR 	10		5.6KΩ ¼W 5% Carbon Film Resistor Green, Blue, Red
 OR 	10		10KΩ ¼W 5% Carbon Film Resistor Brown, Black, Orange
 OR 	10		100KΩ ¼W 5% Carbon Film Resistor Brown, Black, Yellow
 OR 	10		220KΩ ¼W 5% Carbon Film Resistor Red, Red, Yellow
 OR 	1		CdS Photocell Dark Resistance. ≈ .5MΩ, Light Resistance = Between 16 – 33 KΩ)
 OR 	1	 103	10KΩ Trimmer Potentiometer (Style may vary)
 OR 	1	 104	100kΩ Trimmer Potentiometer (Style may vary)

Capacitors			
	2	 103	0.01 µF Ceramic Capacitor 50V
	2	 334	0.33 µF Ceramic Capacitor 50V (code 334) (color may vary)
 OR 	2		0.47 µF 50V Radial Electrolytic Capacitor
 OR 	2		10 µF 35V Radial Electrolytic Capacitor
 OR 	2		22 µF 35V Radial Electrolytic Capacitor (color may vary)
 OR 	2		470µF 35V Radial electrolytic Capacitor
Diodes and Transistors			
	2	 1N4007	1N4007 1A 100V Rectifier Diode
 C B E	2	 PN2222	PN2222 Bi-Polar Junction Transistor (BJT) NPN 40volts 1A
 E B C	2	 2N3906	2N3906 Transistor PNP 40V .2A
 D G S	2	 J113	J113 N-CH Junction-gate-Field Effect Transistor (J-FET) (replacement for MPF102)

Voltage Regulators			
	1	 7805	7805 5V Linear Voltage Regulator 1.5A
Switches and Relays			
	1	 OR	Red and Blue Slide Switch 1P2T (SPDT), 300mA (DC), 24V Black Slide Switch 1P2T (SPDT), 200mA (DC), 30V Note: Your kit will come with one of these two switches (based on availability)
 OR	2		Tact Switch 12*12mm Through Hole SPST-NO
	1		9V Relay (PN PE014012)
Lamps			
	1		Neon lamp 65VAC 90VDC
Batteries and Battery Connectors			
	1		9V Alkaline Battery (Brand may vary)
	2		9V Battery Connector with plug for breadboard jumpers
	1		Two pack AA alkaline batteries (Brand may vary)
	1		Two AA battery holder with plug for 9V Battery Connector

Prototyping Supplies			
	1		400 Point Solderless plug-in breadboard
	1		Alligator Clip test leads (Pack of 10)
	1		Jumper Kit Various colors 22AWG 70PCS (Replaced the 65 Pc. Jumper Wire Assortment as of 1-4-22)
Speakers and Buzzers			
	1		9VDC Mechanical Buzzer with Wire Lead
	1		Round 8 Ohm Speaker 2 Watt, 1" Diameter
Motors			
	1		Hobby Motor (6600 RPM @ 12V)