



With sensors aimed at the sun adjust VR1 to the point where LED 2 will just turn OFF.

At end of day adjust VR2 to the point LED 1 will just turn ON. Start with the trim pot set at GND. Turning it towards +9V increases the circuit's sensitivity to light.

Name	Quantity
.01 $\mu$ F Capacitor	6
100 $\mu$ F Electrolytic Capacitor	1
1000 $\mu$ F Capacitor	1
100K Resistor (1/4W)	7
10K Potentiometer	1
10K Resistor (1/4W)	4
15K Resistor (1/4W)	1
1K Resistor (1/4W)	3
1M Potentiometer	1
1M Resistor (1/4W)	4
1N4004 Diode	3
220K Resistor (1/4W)	1
2N3904 NPN Transistor	4
4.7K Resistor (1/4W)	2
7809 (9V, 1A) Voltage Regulator	1
DPDT Relay (12V)	2
LED (Red)	2
LM339 Operational Amplifier	1
Motor (12V DC)	1
PHOTORESISTIVE CELL	2
SPST Switch	3