



X1	LM2903 dual comparator or equivalent
TR1, TR2	BC639 or equivalent
D1, D2	Red LED
R1, R2	1k resistor
R3, R4	4k7 resistor
R5 - R8	100R resistor
VR1, VR2	50k trim pot
C1 - C3	0.1 μ F dipped ceramic capacitor
PT1, PT2	Phototransistor
M1, M2	3 V dc motor
B1	2 x AA battery pack
S1	SPST slide switch

Notes

1. The table surface should be smooth and flat. A production unit should have more ground clearance and wider, domed nylon 'skids' at each end. It should then be OK on carpet.
2. Best results are achieved in darkened room using a flashlight as a light source. Experiments using different lighting conditions and pot settings are encouraged.
3. When light levels are below the threshold set by the pots VR1 and VR2, both motors are off. When the light level on a sensor rises above the threshold, the opposite motor is turned on forwards. Hence the robot turns towards the light source.
4. Two AA size batteries are required.