diy makeaway

Krachmacher bauen mit der Schweizerischen Gesellschaft für Mechatronische Kunst

Light-Seeker 14.90

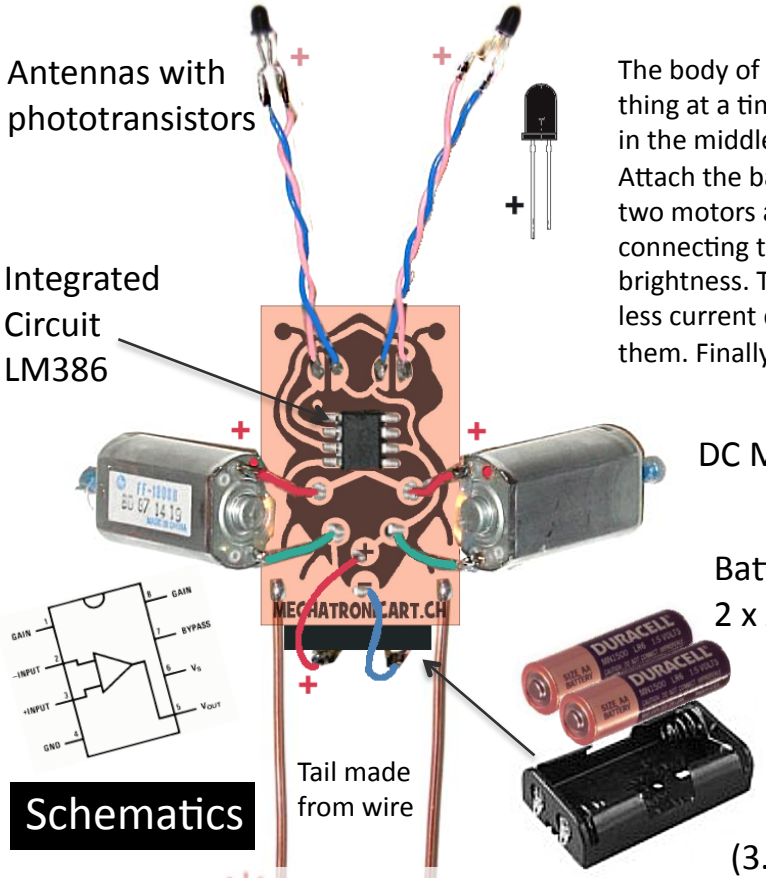
BEAM: Biology – Electronics – Aesthetics – Mechanics

You copy the behavior an the aesthetics of a natural organism. The smart robot is capable to find a light source or even track a path on the floor. The robot is built with two motors and only three electronic parts on a funny and intuitive circuit board.

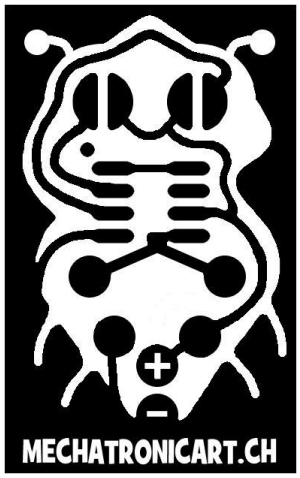


Assembly Plan

Ok, let's try this
Go for some soldering action...

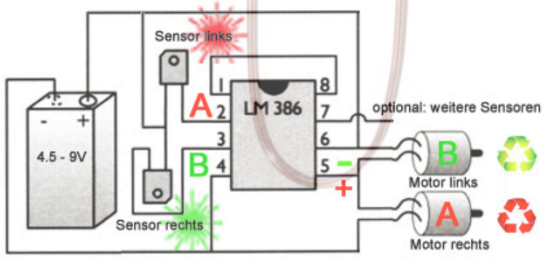


The body of our bug is the printed circuit board (PCB). Do one thing at a time. Starting with the integrated circuit (the brain) in the middle. The groove on the chip has to point to the front. Attach the battery pack to the board using some hot glue. The two motors are the legs. Watch the polarity (red dots) when connecting them. With the antennas the bug can see brightness. The phototransistors at their end let pass more or less current depending on the amount of light that falls on them. Finally connect the battery pack , red is +.



For better road grip put a piece of a hot glue stick or a piece of rubber tube on the axis of the motor.
Cross the antennas left and right and your bug becomes a shady creature averse to light.

Schematics



Quelle: Junkbots, Bugbots & Bots on Wheels, Osborne Verlag

SMAS Swiss Mechatronic Art Society
SSAM Société Suisse d'Art Méchatronique
SGMK Schweizerische Gesellschaft für Mechatronische Kunst
www.mechatronicart.ch