

## XBotMicro for your Arduino card – Diduibot

Xbot is a cost-effective robot base. 4 control signals for the fast low power motors. 2 signals from the whiskers Built-in charger for the batteries.

Add you Arduino board. No need for a motor shield. Add 8 wires and program. Avoid obstacles, understand PWM and PFM. Add sensor and communication shields

It's amazing to follow a light. Try photovore and photophobe behaviours with the **Suivi** module. The challenge is to have several robots following each other.

How far are obstacles? Ultrasonic is perfect in a large room, works from 5cm to 5 meters.

Follow a wall not touching it? This is a job for infrared distance sensors.

Add a display to get sensor values, or real time info while the robot is moving.

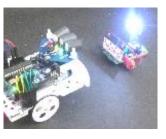
Control with you tablet? Learn how to handle BT signals





No need for a microcontroller. Play with electronic components for simple behaviours: track the light, avoid obstacles

Use preferably a Diduino, the breadboard shield is included and you can learn and play with components, play music while the robot moves.



Follow a line on the ground with the **Piste** module. Understand control algorithms, sensor calibration, recovery procedures.

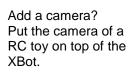
PSD sensors are better to navigate on a table and under-stand how to play all kind of tricks. Measures distances between 15 and 80 cm, 5 degree angular resolution.

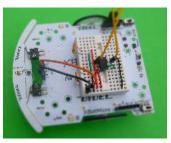
Combine sensor to get more information. Ultrasonic for searching the target, IR for short distances, whiskers when detection problems.





Add one or two small servos to pick objects or move sensors, even a miniature camera.



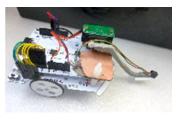














## Swiss design, swiss quality, didactic documentation