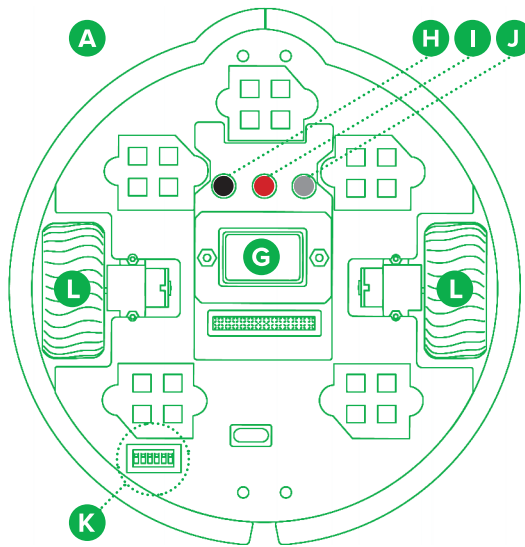
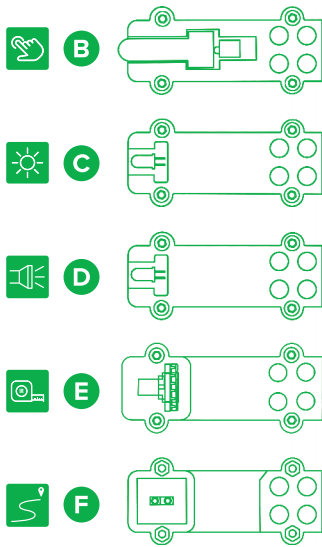


PARTS OF THE ROBOT



- A. Robot platform**
- B. Touch sensor** recognises touch
- C. Light sensor** recognises surrounding light
- D. LED sensor** produces light
- E. Distance sensor** recognises the distance from an object
- F. Line tracking sensor** recognises light and dark surface
- G. Battery**
- H. Reset button** restarts the processor
- I. ON/OFF button** switches on the battery current
- J. Start button** programmable button
- K. DIP switches**
Robbo platform contains switches for adjusting its functioning.
 - 1. & 2. Wheel calculators**
 - 3. Battery's undervoltage protection** (use with rechargeable battery)
 - 4. Prevention of joint use of USB lead and battery**
 - 5. Automatic timeout** (approx. 10 min)**NOTE!** For most purposes, all switches are recommended to be kept in the ON position.
- L. Wheels**

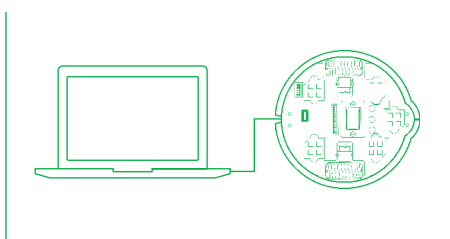
COMPATIBILITY

Download software for programming the robot (Windows, Mac, Linux): <http://files.robbo.world>

ESTABLISHING CONNECTION

- Attach one end of the USB cable to the robot and the other end to the computer (IMAGE 1).
- Open the Robbo Scratch software on your computer.
- The computer finds the robot automatically.
- Wait until the circle on the Control panel turns green as a sign of established connection. If the circle does not turn green, press the Update firmware button.

IMAGE 1



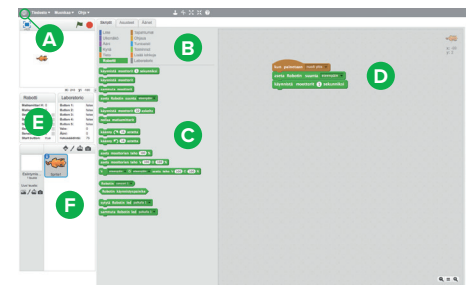
With Bluetooth:

- Attach the power source (battery / accumulator) to the robot.
- Switch the robot on by pressing the ON/OFF button.
- Activate Bluetooth on your computer and search for nearby devices.
- Choose ROB-R-X-X-X and form a pair (if necessary, use the code 1234).
- The green LED by the Bluetooth module blinks, when the module waits for connection. The LED burns steadily, when the connection has been established. The Bluetooth module is located below sensor point #3.

PROGRAM YOUR ROBOT

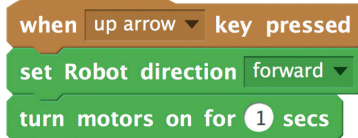
The robot is programmed using the Robbo Scratch program as follows:

- A. Globe icon:** change language here.
- B. Command menu:** here you find the command groups.
- C. Command group:** here you see the commands.
- D. Programming section:** drag the commands to this section one below the other.
- E. Sensor values** can be traced in this section.
- F. Scene:** In this section you can move figures (in the picture a cat).



MAKE THE ROBOT MOVE!

1. Experiment what the program written in the image makes the robot do.
2. You can write another program in the programming section.

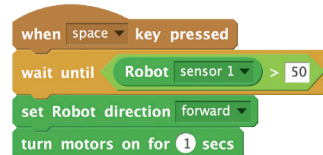


Tip! The robot processes the program from up to down. Choose the commands of the right colour from the command menu (B). In the end, press the arrow key. 1.

USE TOUCH SENSOR TO MAKE THE ROBOT MOVE

With the help of the information given by the sensors, your program can react to external events.

- Attach the touch sensor to sensor point #1 according to IMAGE 2 and connect the robot to the computer.
- When you press the touch sensor, you notice that the number in section (E) Sensor 1 changes (0 → 100).
 - Experiment what the program written in the image makes the robot do.



Tip! Drag the robot's (sensor 1) value inside the green condition.

IMAGE 2

