

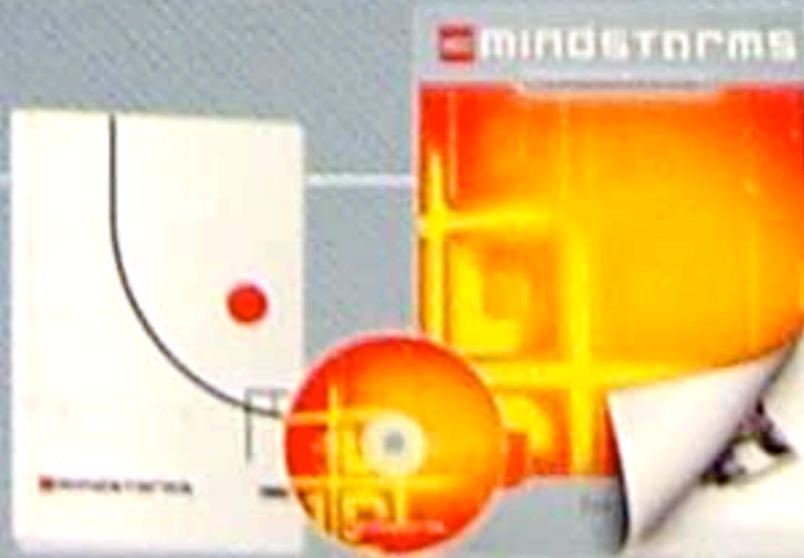
anton@linevich.com

http://viewdle.com



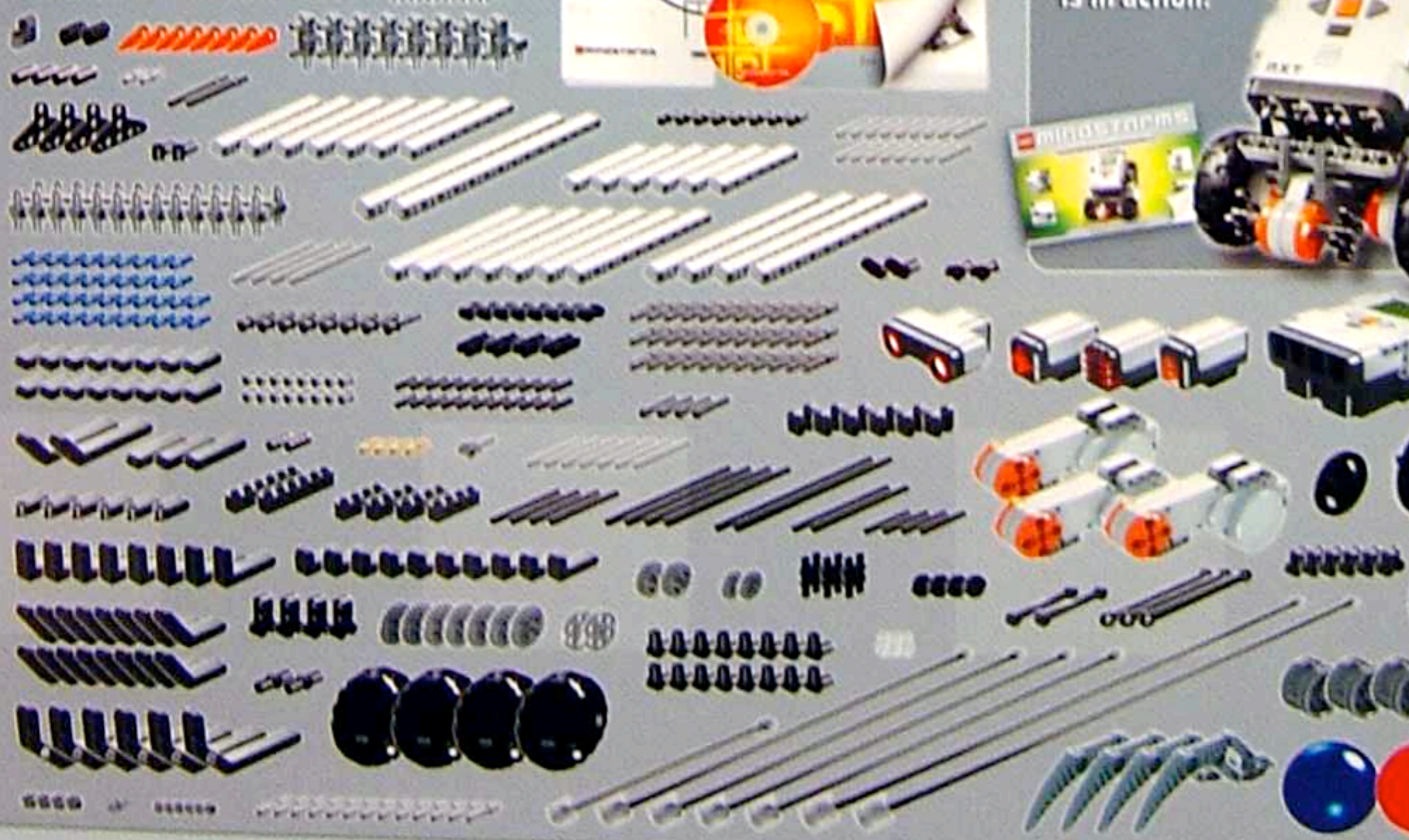
# The Robotics Toolset:

LEGO MINDSTORMS  
TECHNICAL  
PARTS



## QUICKSTART GUIDE

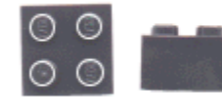
In just 30 minutes  
your First robot  
is in action!



# Beams



1 x 16 Beam



2 x 2 Beam



1 x 12 Beam



2 x 4 Beam



1 x 10 Beam



2 x 4 Beam



1 x 8 Beam



2 x 6 Beam



1 x 6 Beam



2 x 6 Beam



1 x 4 Beam



2 x 8 Beam



1 x 2 Beam



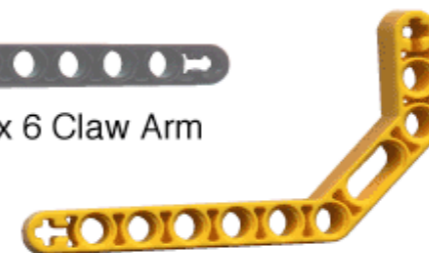
4 x 6 Claw Arm



1 x 2 Beam-to-Axle



2 x 2 Corner Beam



3 x 4 x 7 Claw Arm

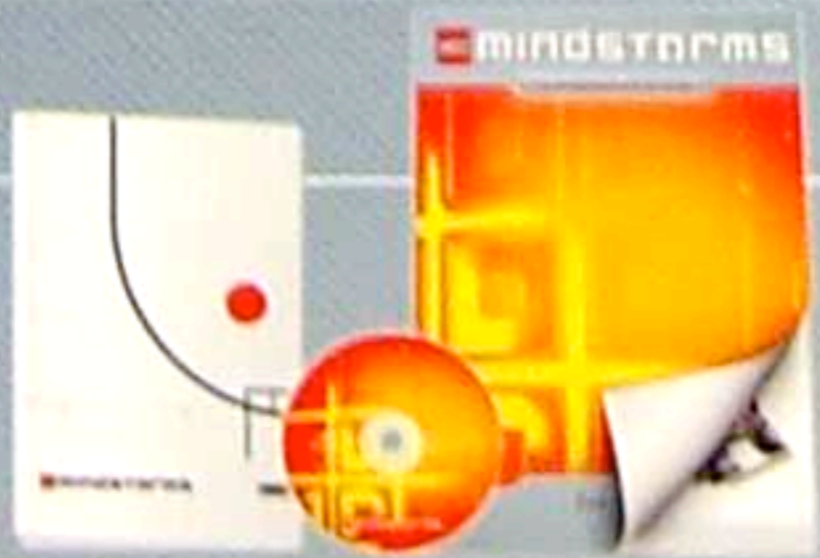
# Axel and connectors



# Gears

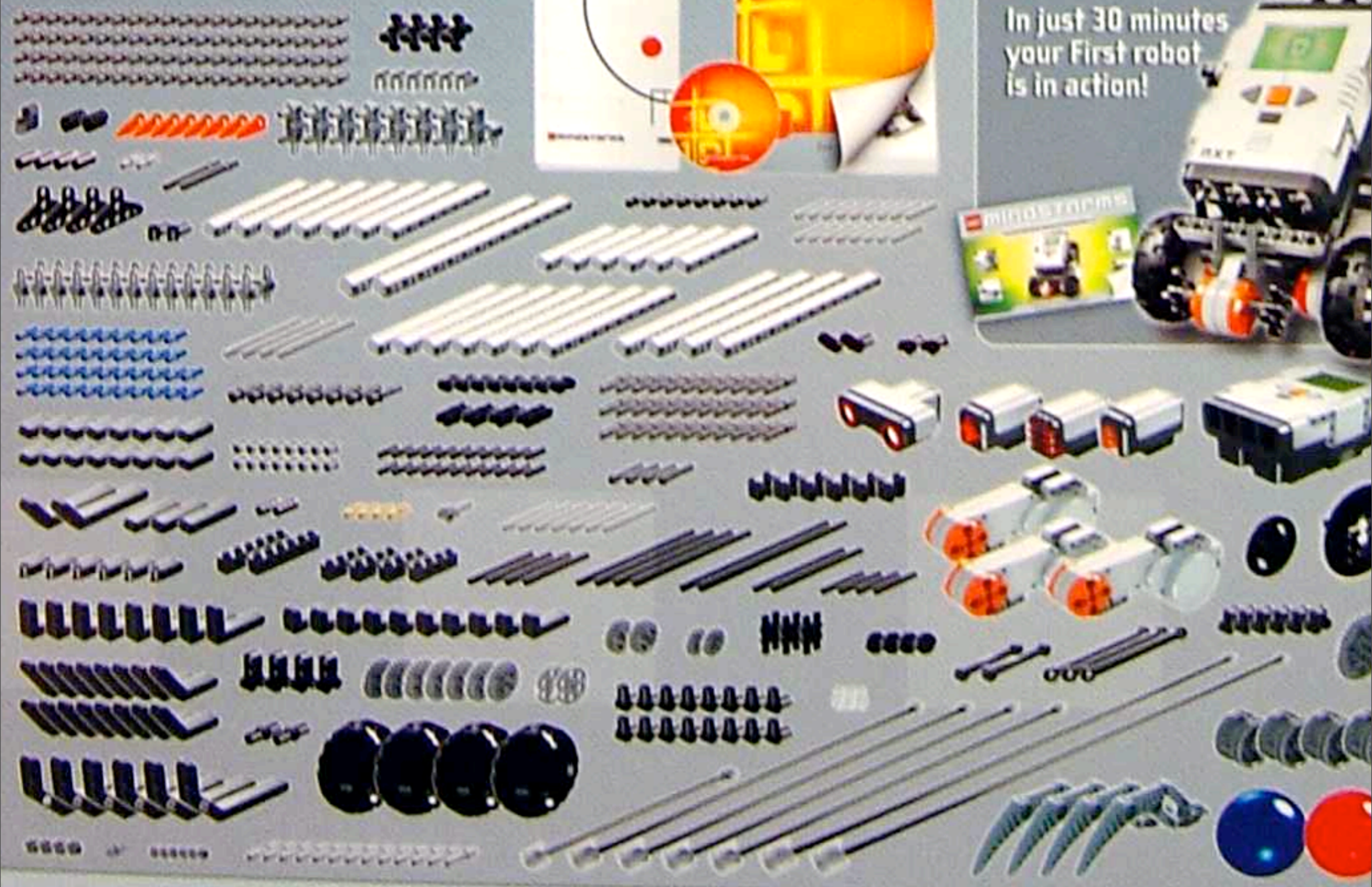


# The Robotics Toolset:



## ▶ QUICKSTART GUIDE

In just 30 minutes  
your First robot  
is in action!



# Electronics





# NXT Brick

- 32-bit ARM7 processor @48MHz
- 256kB of Flash memory
- 64kB of RAM
- 100x64 pixel LCD display
- USB & Bluetooth connectivity
- Open Source firmware



# Touch Sensor



# Sound Sensor



# Light Sensor

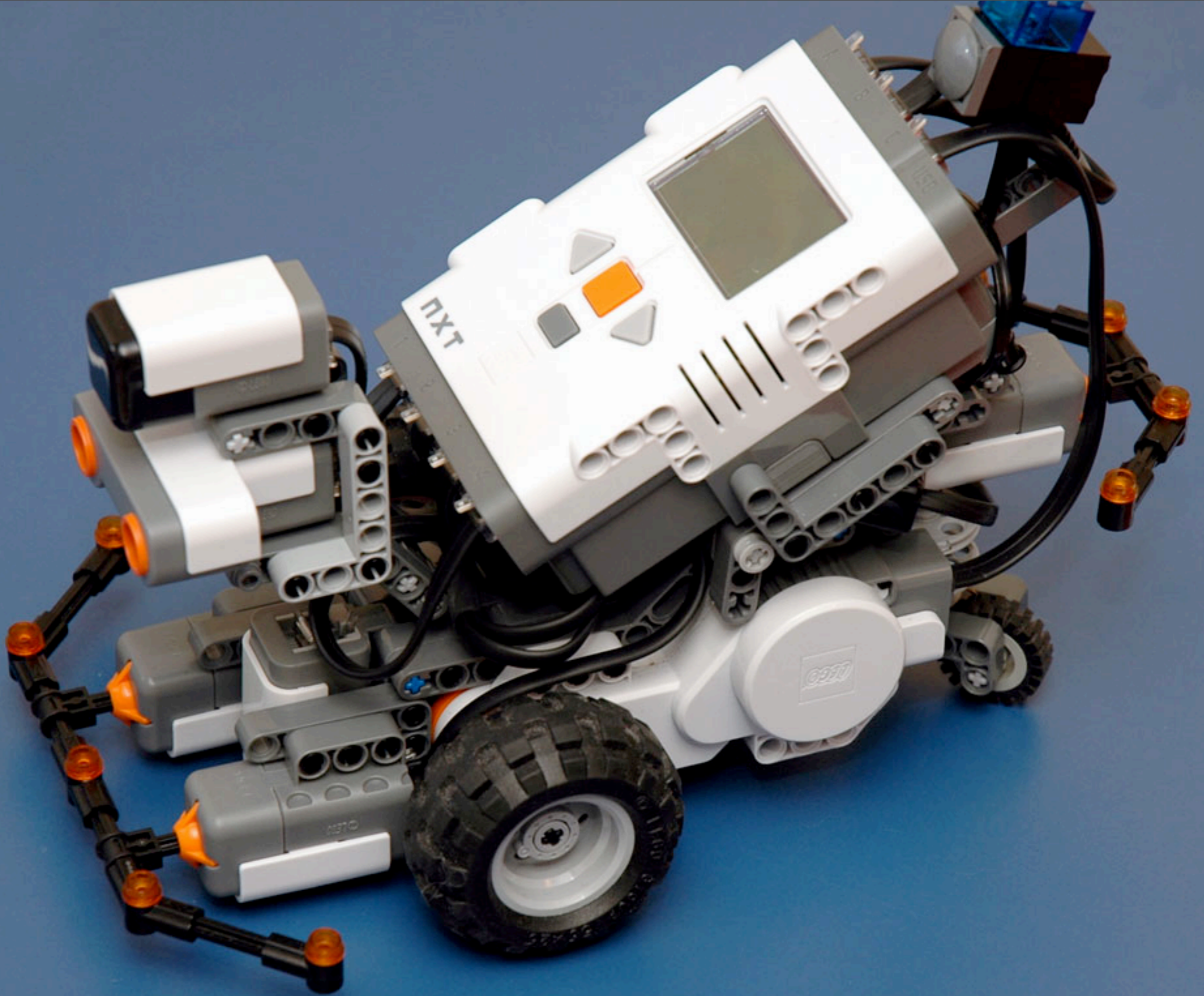


# Touch Sensor



# Servo Motor





Complete

**LEGO MINDSTORMS**

**Getting Started**  
Start here with a quick introduction to the basics

**Software Overview**  
A quick overview of the LEGO MINDSTORMS NXT Software

Navigation arrows: back, home, forward

**Start New Program**

Untitled-1 Simple Text **Go >>**

---

**Open Recent Program**

**Go >>**

**Robo Center**

- + Vehicles** \* Quickstart
- + Machines**
- + Animals**
- + Humanoids**

**Need help?**

Move the cursor over an object to read about its function. For additional help, click the "More help" link.

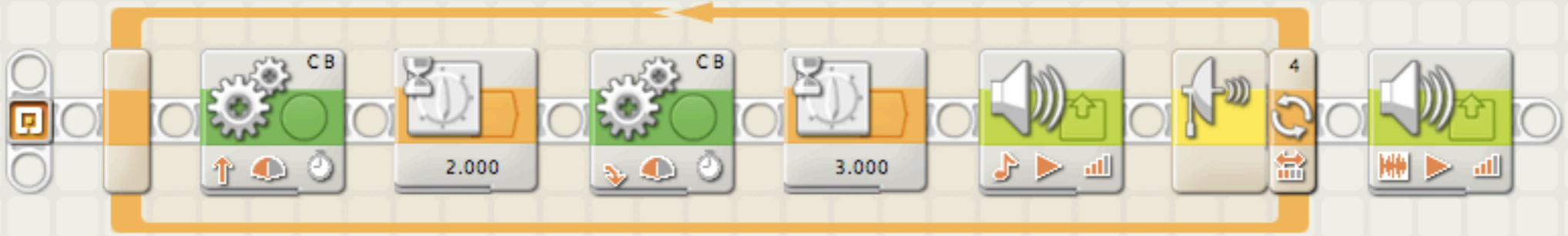
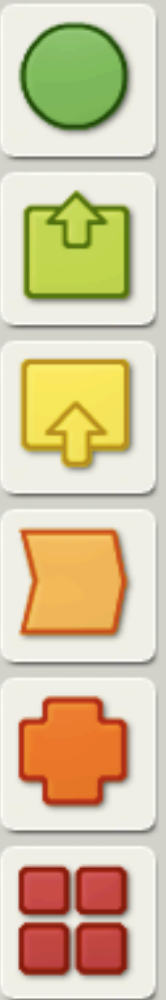
[More help >](#)

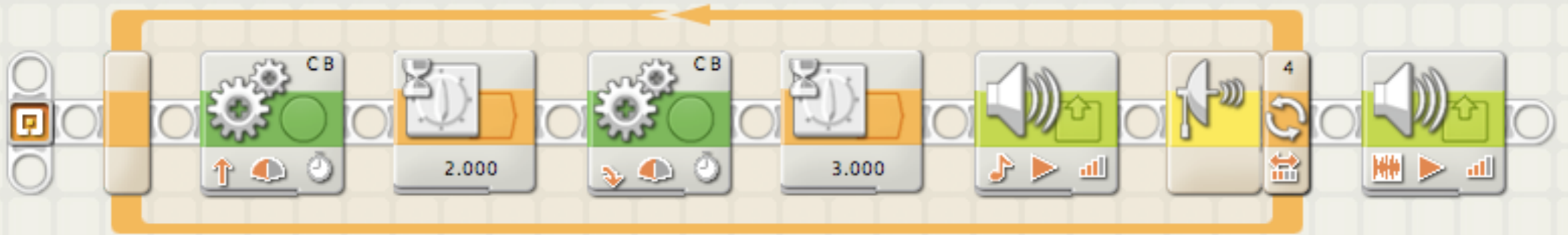




Complete

testBot





# Open Source

leJOS

iCommand

TclRCX

ruby-nxt

Lego#

NXT++

Lego::NXT

URBI

NXT-G

NXT Python

Lego.NET

LabVIEW

ROBOTC

Robolab

NXT Director

# NXT Python

```
#!/usr/bin/env python
```

```
import nxt.locator
```

```
sock = nxt.locator.find_one_brick()
```

```
if sock:
```

```
    brick = sock.connect()
```

```
    name, host, signal_strength, user_flash = brick.get_device_info()
```

```
    print 'NXT brick name: %s' % name
```

```
    print 'Host address: %s' % host
```

```
    print 'Bluetooth signal strength: %s' % signal_strength
```

```
    print 'Free user flash: %s' % user_flash
```

```
    sock.close()
```

