

Lego Mindstorms NXT is a programmable robotics kit released by [Lego](#) in late July 2006. It replaces the first-generation Lego Mindstorms kit, which was called the

[Robotics Invention System](#)

. It comes with the NXT-G programming software, but a variety of unofficial languages exist, such as NXC, NBC, leJOS NXJ, and RobotC.

The main component in the kit is a brick-shaped [computer](#) called the NXT Intelligent Brick. It can take input from up to four [sensors](#)

[sensors](#)

and control up to three

[motors](#)

, via

[RJ12](#)

cables, very similar to but incompatible with

[RJ11](#)

phone cords. The brick has a 100x64 pixel

[monochrome](#)

[LCD display](#)

and four buttons that can be used to navigate a user interface using hierarchical menus. It also has a

[speaker](#)

and can play sound files at sampling rates up to 8 kHz. Power is supplied by 6

[AA](#)

(1.5 V each)

[batteries](#)

in the consumer version of the kit and by a

[Li-Ion](#)

rechargeable battery and charger in the educational version



Some chat rooms with the firm name for the NXT Intelligent Brick are [Open NXTirc](#) [4] and [LEGO Mindstorms NXT IRC](#) [5]. The brick is the only device that can be programmed for a task.