ActivityBot 360° Robot Kit

Product ID: **32600**

Ready for robotics? The smart little ActivityBot 360° Robot can get you started and take you a long way. It is easy to program visually with BlocklyProp, or in C with simplified libraries. Feedback 360° High Speed Servos with built-in encoders make for fast, consistent maneuvers. A variety of sensors and components come in the kit. Its Propeller Activity Board WX features built-in support for audio and wireless upgrades.

Free web tutorials guide you step by step — just follow the checkmarks. First, build your ActivityBot. Then, learn about programming its multicore Propeller chip brain. Start building circuits on a breadboard, then make DIY sensor systems so your robot can navigate on its own. Tutorial options include BlocklyProp graphical programming or C language with simplified libraries. Choose your preference, or go from one to the other for a strong foundation and progression.

The ActivityBot 360° Robot is ready for tinkering. Add off-the-shelf components, additional sensors, and upgrade kits. The Propeller Activity Board WX sports a mini audio jack and a socket for an optional RF module (not included).

The ActivityBot 360° Robot builds transferrable skills in middle school, high school or college robotics, technology, engineering, and programming courses. Recommended for ages 14 and up.

Features

- Free BlocklyProp online graphical programming for Chromebook, Windows, and Mac
- Free C language programming with SimpleIDE software for Windows and Mac
- Propeller Activity Board WX (#32912) makes it quick to integrate sensors, motors, and more
- Feedback 360° High-speed servo motors with built-in encoders make fast, consistent maneuvers
- Plug common electronic parts right into the breadboard or 3-pin headers. No soldering or special connectors needed!
- Parts included for DIY navigation sensors that use touch, visible light, infrared light and ultrasonics
- Built-in SD card slot and included microSD card are ready for data-logging and file storage

Application Ideas

- A great hobby kit for exploring robotics, electronics and programming
- An affordable STEM education platform to provide a high robot/student ratio

Note: The ActivityBot 360° Robot requires five 1.5 V AA alkaline batteries, or 5 1.2 V NiMH rechargeable batteries, not included. The ActivityBot 360° replaces the original ActivityBot Robot Kit (#32500).

Specifications:

- Power requirements: 7.5 VDC; as five 1.5 V AA batteries (not included)
- Communication: USB 2.0 for programming and serial port debugging
- Dimensions: 4 x 4.5 x 5.7 inches (10 x 14.4 x 11.5 cm) assembled, without sensors
- Operating temperature range: 5 to 158 °F (-15 to +70 °C)

Kit Contents:

- (1) - Propeller Activity Board WX (#32912)
- (2) - Parallax Feedback 360° High Speed Servos (#900-00360)
- (1) - PING))) Ultrasonic Distance Sensor (#28015)
- (1) - Small Robot Chassis (#700-00022)
- (2) - Small Robot Wheel and Tire (#28114)
- (1) - 1" Tail Wheel Ball (#700-00009)
- (1) - 5 AA Battery Holder (#753-00007)
- (1) - Parallax Screwdriver (#700-00064)
- (1) - Parallax Combination Wrench (#700-10025)
- (1) - USB A to Mini-B Cable (#805-00006)
- (1) - 2 GB microSD card (#32319)
- (1) - Electronics pack with passive components plus light, touch, and infrared sensors
- (1) - Hardware pack with all the screws, nuts, and standoffs needed

Where's the Book?
We chose web tutorials for the ActivityBot 360° Robot so we could:

- Bring you fresh updates, new activities, and bonus projects faster
- Add more sensors, instead of more paper, to your kit
- Choose a box that fits the assembled robot, instead of a book
- Save on weight to lower your shipping costs and use less fuel

To work off-line, go to the first page of the web tutorial and click "Printer-friendly version" to save or print the entire tutorial from a single file.

32600: ActivityBot 360° Robot Kit - kit contents unassembled