

ELECFREAKS Introduces TPBot Edu Car Kit: Making Advanced Robotics Accessible for Teenagers

ELECFREAKS launches TPBot Edu Car Kit: a smart Micro:bit robot with precise control and rich sensors to inspire teens' programming and robotics skills.

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/EINPresswire.com/ -- As STEM/STEAM education continues to evolve, how to enable teenagers to master programming and robotics technology more easily and intuitively has become a key focus for educators and parents.

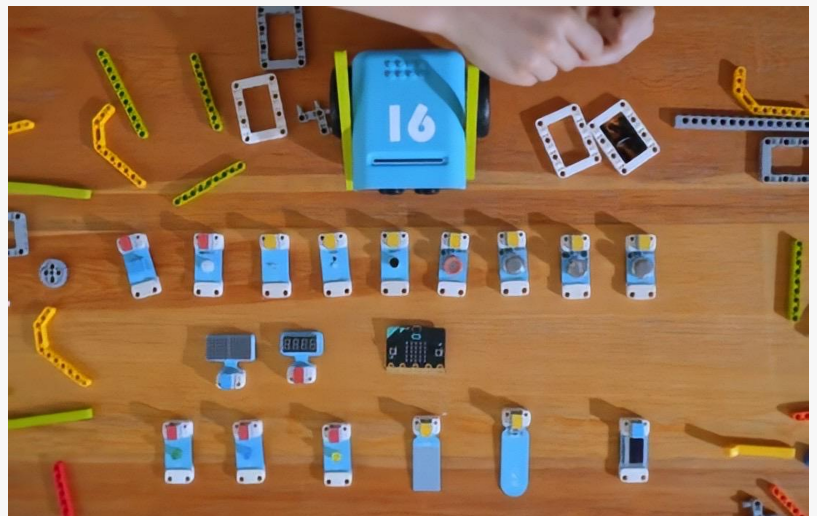
[ELECFREAKS](#), a leading enterprise focused on STEM education hardware research and development, has launched the brand-new micro:bit smart educational robot – [TPBot Edu Car Kit](#). Based on the globally popular micro:bit programming platform, and enhanced through feedback from existing TPBot users, the TPBot Edu Car represents an educational upgrade. This product integrates rich sensors and precise drive technology to create an easy-to-operate, feature-rich, and highly expandable smart car, aiming to open a new chapter of fun programming and robotics learning for primary and secondary school students.

Product Core Features and Technical Highlights

Entertainment Mode: Specifically created for younger learners, even without a micro:bit, kids can immediately enjoy pre-programmed functions, making it an engaging and accessible introduction to robotics.



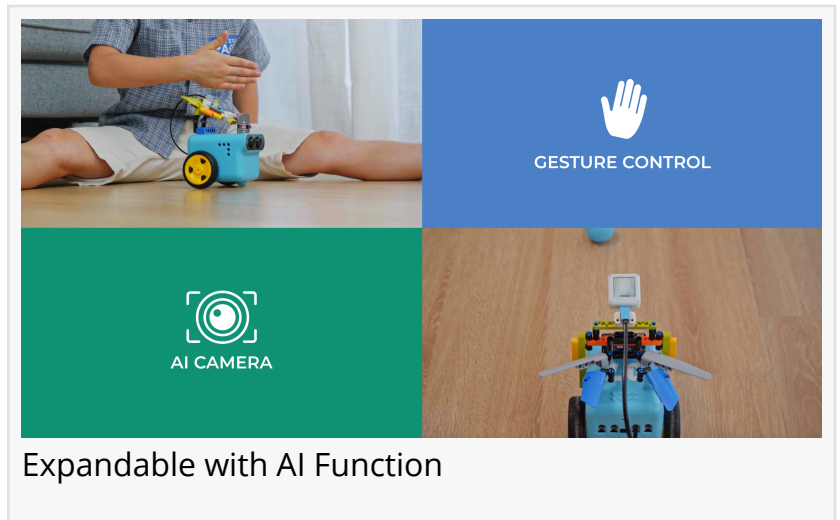
TPbot Edu Car Kit Overall Appearance



Sufficient Expansion Accessories

Precise Control with Encoder Motors:
Equipped with encoder motors, it enables precise speed control, allowing children to finely manipulate the car and experience the joy of precise control brought by programming.

Built-in High-Performance Gyroscope:
Features a six-axis gyroscope to ensure accurate and stable steering, aiding in complex path planning and motion control.



Rechargeable Lithium Battery: With its recyclable design, the lithium battery offers an eco-friendly power solution. It also boasts extended battery life, minimizing environmental impact and cutting down on long-term expenses.

IDEA Bronze Award Certified: With its unique design and appealing aesthetic, the TPBot Edu secured the IDEA Bronze Award, drawing noticeable interest from educators.

Educational Value and User Experience

The TPBot Edu Car Kit is not only a programming learning tool but also a bridge connecting theory and practice. Its rich sensors and programmable modules provide real-time feedback to students, encouraging them to solve problems through design, debugging, and improvement, thereby cultivating logical thinking, collaboration skills, and innovative awareness. Students can utilize TPBot Edu to master line-following challenges, obstacle avoidance courses, and even remote-controlled navigation, making it perfect for classroom demonstrations and robotics competitions alike. MakeCode's visual interface lowers the programming threshold, allowing children to master complex skills while playing, and Python support provides greater room for interested students to explore.

Target user groups

The TPBot Edu Car is designed to engage a wide range of users, including K-12 students learning fundamental programming, robot control, and electronics, and educators and schools, who can use it as an ideal tool for STEM courses and robotics clubs. It also facilitates parents and home learners in collaborative tech exploration and family fun, while providing makers and robotics enthusiasts with flexible expansion and programming support for advanced design and development.

Supporting Resources

ELECFREAKS provides complete online [Wiki](#) tutorials, assembly videos, example programs, and teaching guides to ensure teachers and students can easily get started and continue exploring.

In addition, the ELECFREAKS community is active, regularly updating teaching content, and users can also obtain professional technical support and a platform for creative sharing.

About ELECFREAKS

ELECFREAKS is dedicated to advancing STEAM education, with a core focus on the design, research, and development of educational micro:bit-based hardware products. With over fourteen years of industry experience and a global perspective, it helps teachers and students overcome learning bottlenecks, stimulates teenagers' interest in science and technology and creative potential, and helps cultivate future scientific and technological innovation talents.

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