

## WhalesBot Rocky

# WhalesBot Rocky Smart Robot Car Instruction Manual

Model: Rocky

## 1. PRODUCT OVERVIEW

The WhalesBot Rocky Smart Robot Car is an educational kit designed to introduce users to robotics, coding, and engineering principles. It supports multiple operating modes including remote control, automatic functions, and various programming languages. This manual provides essential information for assembly, operation, and maintenance.

## 2. SAFETY INFORMATION

**WARNING: CHOKING HAZARD - Small parts. Not suitable for children under 3 years.**

Always supervise children during assembly and operation. Keep small components away from young children to prevent choking. Ensure all connections are secure before operating the robot.

## 3. WHAT'S IN THE BOX

The WhalesBot Rocky kit includes the following components:

- 1x Controller
- 1x Ultrasonic Sensor
- 1x 5-in-1 Grayscale Sensor
- 1x Chassis
- 1x Remote Control
- 1x Ultrasonic Sensor Cable
- 1x Grayscale Sensor Cable
- 2x Motor Cables
- 2x M2 Flange Screws
- 3x M3 Combination Screws
- 6x M6 Short Screws
- 6x M6 Long Screws
- 2x Gears

- 1x Universal Wheel
- 2x Tires
- 1x Building Guide
- 1x Quick Start Guide
- 1x C battery (included)



Image: All components of the WhalesBot Rocky kit, including sensors, chassis, remote, cables, screws, gears, wheels, and documentation.

#### 4. ASSEMBLY INSTRUCTIONS

The WhalesBot Rocky features a modular structure for easy assembly. Follow the included Building Guide booklet for detailed, step-by-step instructions. The WhalesBot APP also offers interactive 3D model building guides.

1. Unpack all components and verify against the 'What's in the Box' list.
2. Attach the motors and universal wheel to the chassis using the provided screws.
3. Mount the ultrasonic sensor and 5-in-1 grayscale sensor to the front of the chassis.
4. Connect the sensors and motors to the main controller board using the appropriate cables.
5. Secure the controller board to the chassis.
6. Install the tires onto the gears and attach them to the motor shafts.

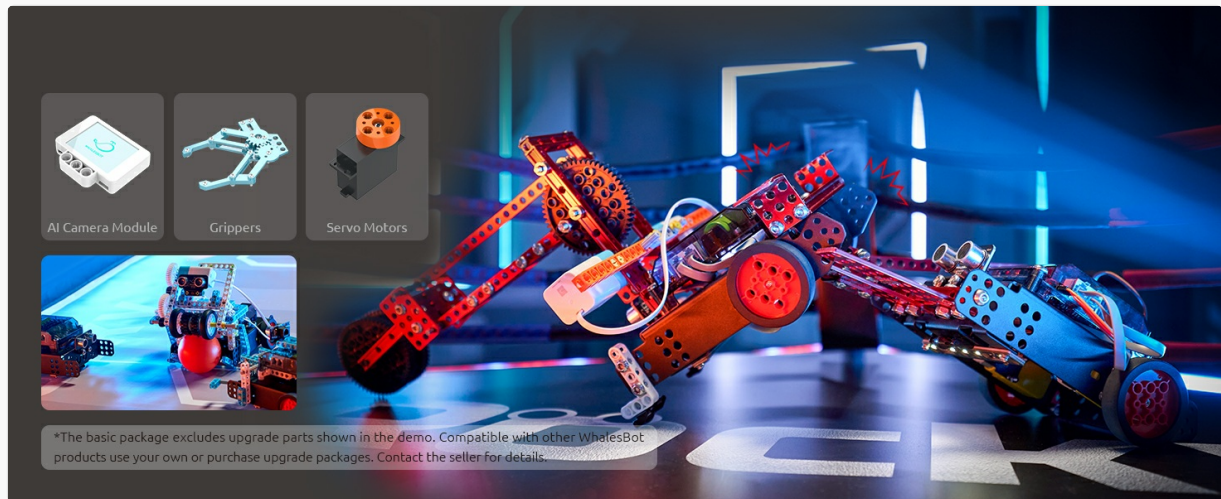


Image: Hands demonstrating the assembly process of the robot car, showing the chassis and electronic components.

Video: A young boy assembling the WhalesBot Rocky robot car, connecting various parts and wires.

## 5. POWERING ON AND INITIAL SETUP

After assembly, ensure the C battery is correctly installed in the controller. Press the power button on the controller to turn on the robot. Download the WhalesBot APP on your mobile device or PC for further interaction and programming.



Image: The WhalesBot Rocky robot shown alongside its remote control and a smartphone displaying the control application.

## 6. OPERATING MODES

Rocky supports various interactive modes:

### 6.1. Remote Control Mode



Use the included remote control to manually steer and operate Rocky. The remote allows for basic movements and can switch between different pre-programmed functions.



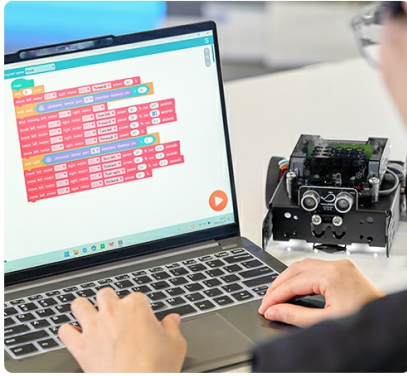
## Smart Remote Controller

### Instant Switch to Various Modes

Image: A detailed view of the WhalesBot Rocky remote control, highlighting its buttons for various functions like line following and obstacle avoidance.

#### 6.2. Line Following Mode

Utilizing its 5-in-1 grayscale sensor, Rocky can detect and follow lines on a designated track. Place Rocky on the provided track and activate this mode via the remote or programmed instructions.



Learn to code using Modular Programming, Scratch, Python, and C Languages for beginner to pro

Access entry-level courses on the WhalesBot App

Supports Android, ios, Windows and macOS



Image: The WhalesBot Rocky robot actively following a black line on a white track, demonstrating its line-following capability.

Video: The WhalesBot Rocky robot demonstrating its line-following capabilities on a designated track.

### 6.3. Obstacle Avoidance Mode

The ultrasonic sensor allows Rocky to detect objects in its path and navigate around them. This mode can be activated for autonomous movement.

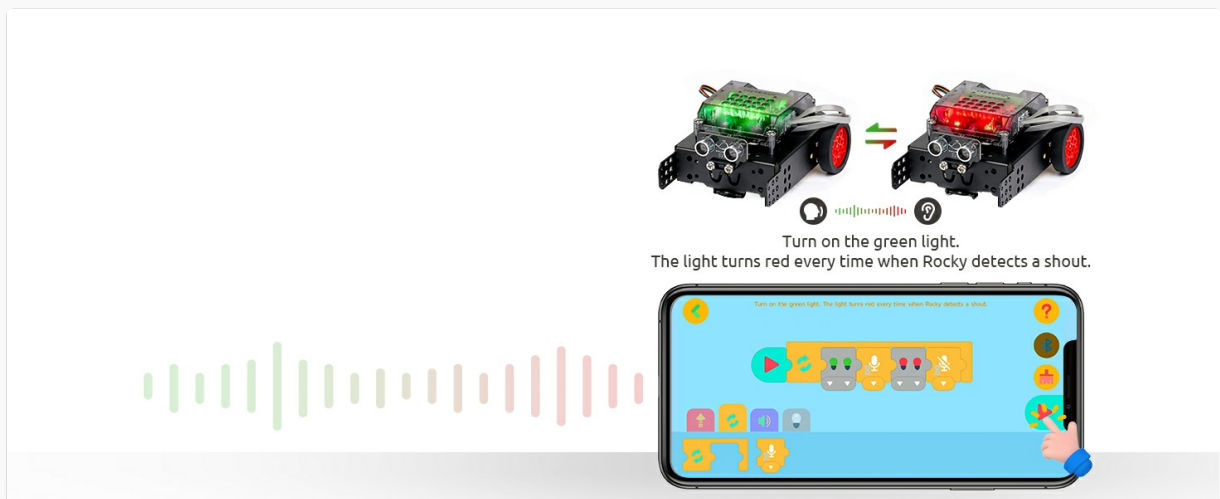


Image: The WhalesBot Rocky robot shown in motion, detecting and avoiding an orange cone obstacle using its ultrasonic sensor.

### 6.4. Light & Sound Detection

Rocky is equipped with sensors to detect ambient light and sound, allowing for interactive responses based on environmental stimuli. This can be programmed for various creative tasks.



Discover More Tasks in Coding Quest!  
Unlock 20 hands-on challenges to master coding logic-step by step.

## What You'll Explore:



### BASIC CODING

Learn block-based programming with drag-and-drop ease



### MOTION CONTROL

Command movement like a pro



### LIGHT & SOUND

Create dazzling visuals and catchy sound effects



### SMART SENSORS

Harness ultrasonic, grayscale, and light sensors for interactive projects

Image: The WhalesBot Rocky robot demonstrating light and sound detection, with its lights changing color in response to a sound input.

## 7. CODING AND PROGRAMMING

Rocky supports multiple programming methods, catering to various skill levels:

- **Modular Programming:** Entry-level block-based coding for beginners.
- **Scratch:** Visual programming language for easy drag-and-drop coding.
- **Python:** Text-based programming for more advanced users.
- **C:** Advanced programming for experienced coders.

The WhalesBot APP provides step-by-step coding courses and 20 hands-on challenges in 'Coding Quest' to help users master logic and programming concepts.

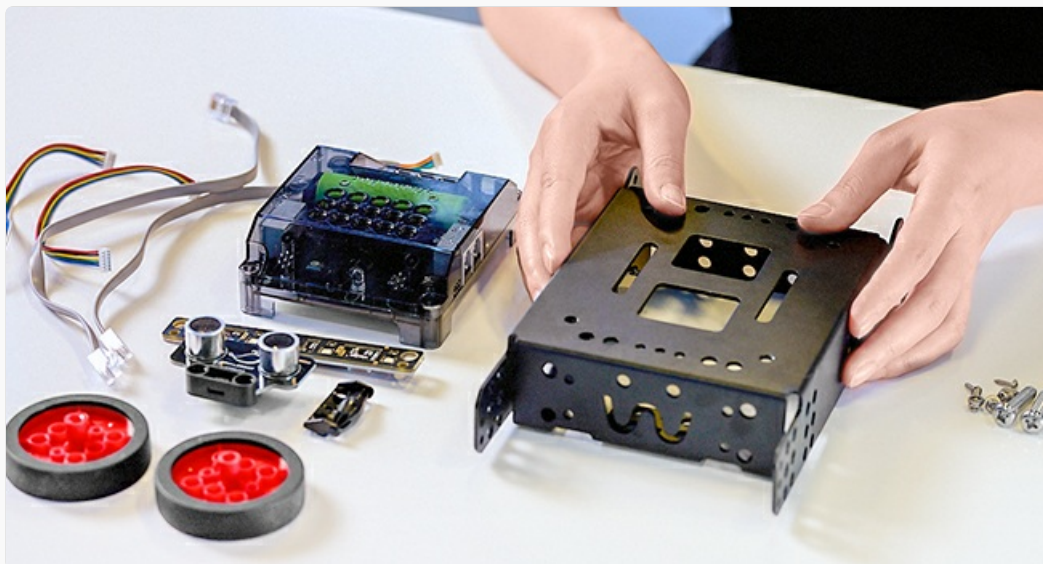


Image: A laptop and a smartphone showing different coding environments, including block-based and text-based programming, for the WhalesBot Rocky.

## 8. COMPONENTS AND SENSORS

Rocky is equipped with advanced components for enhanced performance and learning:

- **Closed-Loop Motors:** Provide higher precision and control for movement.
- **5-in-1 Grayscale Sensor:** Offers enhanced line detection capabilities.



- **Ultrasonic Sensor:** Used for accurate obstacle detection.
- **Integrated Controller:** The central processing unit for the robot.



Image: An exploded diagram illustrating the key internal components of the WhalesBot Rocky, including the controller, sensors, and motors.

## 9. SPECIFICATIONS

- **Product Dimensions:** 11.81 x 9.25 x 3.54 inches
- **Item Weight:** 2.43 pounds
- **Recommended Age:** 8 years and up
- **Batteries:** 1 C battery required (included)
- **Programming Languages:** Modular, Scratch, Python, C
- **Supported Platforms:** Android, iOS, Windows, macOS

## 10. TROUBLESHOOTING

If you encounter issues with your WhalesBot Rocky, consider the following:







- **Power Issues:** Ensure the C battery is fully charged and correctly inserted.
- **Connection Problems:** Verify Bluetooth connection between the robot and your device. Restart the app and robot if necessary.
- **Movement Irregularities:** Check all motor and sensor cable connections. Ensure wheels are properly attached and free from obstructions.
- **Sensor Malfunctions:** Clean sensor lenses if they appear dirty. Ensure sensors are correctly positioned according to the building guide.
- **Programming Errors:** Review your code for logical mistakes. Utilize the step-by-step tutorials in the WhalesBot APP for guidance.

For further assistance, refer to the detailed User Manual or contact WhalesBot customer support.

## 11. WARRANTY AND SUPPORT

WhalesBot is committed to providing quality educational robotics products. For any questions, technical support, or warranty inquiries, please refer to the contact information provided in your product packaging or visit the official WhalesBot website.

## Related Documents - Rocky

	<p><a href="#">WhalesBot E7 Pro User Manual - Coding Robot Guide</a></p> <p>Comprehensive user manual for the WhalesBot E7 Pro coding robot, detailing its controller, sensors, actuators, programming software (mobile and PC), sample projects, and safety guidelines for STEM education.</p>
	<p><a href="#">WhalesBot Controller Pro User Guide: Build and Program Your Robot</a></p> <p>Comprehensive user guide for the WhalesBot Controller Pro, detailing setup, components, sensors, actuators, logical programming, remote control, and sample projects for the WhalesBot A7 robot kit. Learn to assemble and control your robot with step-by-step instructions and explanations.</p>
	<p><a href="#">WhalesBot D3 Pro STEM Robotic Kit: Assembly and Programming Guide</a></p> <p>Explore the world of robotics with the WhalesBot D3 Pro STEM kit. This guide provides detailed instructions for building four unique robots – the Exploding Drummer, Mill Robot, Dynamic Bicycle, and Weightlifter – along with programming activities using the WeCode Pad.</p>
	<p><a href="#">WhalesBot B3 Pro User Manual: 24-in-1 STEM Robotic Kit for Kids</a></p> <p>Comprehensive user manual for the WhalesBot B3 Pro, a 24-in-1 STEM robotic kit. This guide covers controller and coding pen details, pairing, indicator lights, coding cards, sample project assembly and programming, charging methods, safety precautions, and technical specifications.</p>
	<p><a href="#">WhalesBot A3 Robot Kit: Parts List and Quick Start Guide</a></p> <p>Get started with your WhalesBot A3 educational robot kit. This guide provides a detailed parts list of all electronic and structural components, along with clear instructions and examples for basic coding and assembly.</p>
	<p><a href="#">WhalesBot Educational Robotics Projects: Movements, Cars, Carrier, and Warrior Guide</a></p> <p>Explore and build interactive educational robots with WhalesBot's project guide. Features include Little Car, Advanced Car, Carrier, and Warrior, with step-by-step building instructions and programming challenges to teach STEM concepts.</p>