

mBot Ultimate 2.0 Getting Started Tutorial

1. About mBot Ultimate 2.0

mBot Ultimate 2.0 is a flagship 10-in-1 robot kit developed based on the Makeblock platform with rich features and strong compatibility. Whether you are an enthusiast of Raspberry Pi or Arduino, mechanical or electronics engineer, teacher, or student, it helps you learn the knowledge and skills of mechanical structures, electronic modules and programming with ease.



2. Download Makeblock & mBlock Apps

a. Download Remote Control App - Makeblock

b. Download Programming App - mBlock 5 or mBlock 3 or Arduino C

(mBlock 5 and mBlock 3 supports block-based programming, Arduino C supports text-based programming, and the Makeblock app allows you to control the Ultimate 2.0 robot in different modes and forms)

c. Search for "Makeblock or mBlock" in App Store or Google Play to download it.



3. Play & Learn with mBot Ultimate 2.0

Learn more about how to play and learn with mBot Ultimate 2.0 and get the best support from **Makeblock Help Center**.

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- About mBot Ultimate 2.0
- Assembly Instruction for mBot Ultimate 2.0(Original Forms)
- Assembly Instruction for mBot Ultimate 2.0 (Additional Forms)
- Control Ultimate 2.0 with Makeblock App

 **Basic Cases**

- Case 1 - Distance Detection with Ultrasonic Sensor
- Case 2 - Black Color Detection
- Case 3 - Posture Detection
- Case 4 - Detection of Encoder Motor Shaft Angles
- Case 5 - Control of Encoder Motor Shaft Rotation
- Case 6 - Control of Robotic Clamp Claw

 **Advanced Cases**

- Case 7 - Robotic Clamp Claw Control with Ultrasonic Sensor
- Case 8 - Collision Avoidance Simulation with Ultrasonic Sensor
- Case 9 - Synchronous Wheel Control
- Case 10 - Line Detection with Line Follower Sensor
- Case 11 - Self-Balancing Robot Simulation

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