



# iRobot®

## Root® Coding Robot

Coding is now an essential 21<sup>st</sup> century skill, just like math and reading. The iRobot® Root® Coding Robot makes learning to code feel like play, giving kids and adults the opportunity to practice coding in a simple and fun way. Using Root's companion app, users can choose between three different levels of coding that scale with the user's development.

### Root Grows with You

**level**  
**1**

**Graphic coding.**  
Graphical blocks teach essential logic skills of coding. Problem solve with Root by drawing, playing music, and making games.

**level**  
**2**

**Hybrid coding.**  
Gives you more control of the code with a more detailed interface. The hybrid drag and drop language builds computational fluency.

**level**  
**3**

**Full text coding.**  
Advancing to Level 3 allows you to solve problems and learn the syntax and structure of professional coding languages in Swift, Python and JavaScript coming soon!

*get anyone coding*



### Creativity Through Coding

#### A LITTLE ROBOT WITH A LOT OF POSSIBILITIES:



#### Explore your artistic side

- Draw unique artwork by lifting and dropping any marker or pen.
- From words and letters to amazing fractal creations, code Root to draw whatever you can imagine.
- Searching for inspiration? Start with some pre-made code and make incremental changes to see your artwork grow into something uniquely your own!
- Preview what Root will draw with the advanced Simulator module on the Root Coding App.



#### Compose music

- Transform Root into a musical instrument by coding compositions and robot melodies.
- Root scans colors to follow or react to what you draw. Create a color guitar that plays different notes for each color it sees!
- Adjust the tempo with speed. Root's speed is controllable, up to 10cm/s.
- With 32 color sensors, Root can identify and react to basic colors (red, blue, green, and black).



#### Create games

- Build games using your imagination. Race a friend by coding a Root racer.
- Turn your tablet or phone into a controller and use Root's color sensors to get boosts or slow down.
- Root works over a table or on the floor, but can also climb up, down, and around a magnetic whiteboard, so you won't limit your imagination to one surface.
- Root detects edges to avoid falls, and can sense objects with bump sensors, ensuring safety as you explore.

### Teach with Root®

Root is designed for classroom use as well. With standards-aligned curriculum included in Root Academy and printables available right in the Root Coding App, Root® makes a perfect addition to any K-12 school classroom.

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