

Welcome

Thank you for taking the time to evaluate Wonder Workshop's personal robots!

Dash & Dot are capable robots that can sense their environment and can be programmed wirelessly using a touch device. Dash & Dot are designed to be fun at your home and in a child's play room. The combination of sensors on these robots, the child friendly programming tools on touch devices, and the design of the robots makes it fun and easy for kids (and grown ups!) to do several activities with robots that would have seemed impossible until now.

Dash & Dot are designed to be a development platform. Although Wonder Workshop provides a number of apps to program the robots visually, older children can use our API to create their own apps and developers can launch their own apps to Google Play store and Apple App store.



Features



<u>Dash</u>

Dash has two drive wheels and a balance caster that enables it to drive forwards, backwards, spin, and move almost anyway you like.

Dash's head can move relative to the body, both pan and tilt, and the 12 LEDs in the eye can be programmed independently to create patterns and animations.

You can customize Dash's personality by changing the color of the side headlights, the eye animation and greetings. Dash's ability to play different sounds, including recordings of your own voice, add even more fun to play.

Dash's IR sensors allow it to sense how far away an object is in front or behind it -perfect for navigating around the home (or a maze!). The gyroscope and accelerometer help Dash orient itself and make better turns.

Encoders in the base motor help Dash plan its motion better and adjust for different surfaces, such as carpet and hardwood.

Position sensors in the head motors enable Dash to accurately move its head, which improves the ability to perform tasks accurately, such as playing the xylophone.

Dash has three microphones, that allow it to detect sound and direction it's coming from.



<u>Dot</u>

Dot's eye can be programmed to different patterns, just like Dash's. In addition, Dot's eye can be programmed to take a color.

Dot has an accelerometer that helps detect when Dot is moved, shaken, tilted, rotated, dropped, and so on. These gestures can be used to program any other robot (or even used in conjunction with other devices). Dot can be used as a remote control to guide Dash along.

Dot has a microphone, and can respond to sound.

Just like Dash, Dot has various lights and a speaker that can be used as parts of its personality.

Pre-recorded sounds, or user recorded sounds, can be saved on Dot and played back.



Apps

Wonder Workshop provides several apps out of the box.





<u>Go</u>

Go is where each child will start with the robots. Here, you can see the background story of Dash & Dot leaving Robot Island to come find their new human friends. This is where you will become familiar with the controls of Dash & Dot, like changing the color of their lights, giving them different personality types, and driving Dash around with the remote control.

This is our intro to robots app, and it's fun for all ages. This is also where you set up your robot and make sure they are fully to do date, learn how to connect, and give the robots a name! <u>Path</u>

Path is designed to introduce coding to prereaders via visual path drawing and iconbased events. This begins at an introductory tutorial level and will allow users to progress to new maps if they complete learning challenges, like adding a noise to Dash's path or making it spin out like a racecar.





<u>Blockly</u>



<u>Xylo</u>

The Blockly app is based on the visual coding environment developed by Google. This app is a visual coding tool ideal for kids 8 and older. Here, kids can program Dash with increasing complexity and have Dash and Dot interact with each other.

The Blockly app gives you free rein on what the robots can do, and what the robots sense around them. You can use events, conditions, loops and all the usual controls of the robots. Start with example code and learn by editing and tweaking it. The Xylo app is designed to help kids program Dash to play the xylophone. It requires the optional xylophone accessory.The interface blends in music and coding, and brings out the specific concepts of loops for children to explore patterns in music.



Evaluation

Unbox your robot and connect to it using an iPad 3 or newer, any iPad Air, or any iPad Mini. You can turn the robots on by pressing the power button on the side of the robot. If the robot needs to be charged, simply connect the included micro USB cord to the robot and use any USB wall adapter or computer to charge.

Our apps can be found in the Apple App Store by searching for makewonder.

Try Go:

Go app is a free play app that lets you control all aspects of the robots and discover their capabilities. You will also find Dash & Dot's story here.

Set up the robots by pressing the plus button in the top right corner. Press and hold to connect to the selected robot. When you connect to the robots for the first time, you will be able to give the robot a name and personalize the robot.

Personalize your robot	×
Robot Name Dash Greeting	



Try controlling the robots through the different tabs in the left and right sections. The left section gives you the body motion and eye pattern controls. The right section gives you the head motion, sounds, and body lights.



Try some of the recommended activities with Dash & Dot.

If you leave Dash alone for too long, it may start to yawn and idle to conserve battery. If left alone longer, the robot will turn itself on. Simply turn the robot back on using the power button to continue play.



<u>Try Path:</u>

Path enables you to use path-drawing as the programming interface. Try the free-play mode by drawing a path for Dash to follow. To help you plan your navigation, each square in the grid is designed to be the size of the robot.

Add actions for Dash to perform on the path.

Try the tutorial.

Try some of the three themes. Each theme presents a set of challenges, and solving those challenges unlocks new actions you can use in the free play mode. The three themes are Race track, Farm and City.





Try the accessories:









The pusher bar makes Dash into a cleaning machine! Try laying out some bottle caps for Dash to clean up.

The bunny tail and ears attach to Dash or Dot for a fun new look

The tow hook allows Dash to bring Dot along for the ride!

The smartphone mount will allow Dash to carry a smartphone to turn it into a spy or an explorer reporting back to its programmer

<u>Try Xylo:</u>

Choose the notes you want Dash to play and it will follow along.

Note: In order to attach the xylophone accessory properly, make sure that the mallet is attached so that it hits the xylophone when Dash looks down.

Try playing some of the pre-recorded songs, and tweaking them. Add motion to the music to make the robot dance while it plays the songs.





<u>Try Blockly:</u>

Use Blockly to have Dash sound the alarm when moved. How about having this sequence repeat 5 times?

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Set up a maze built from different things around your house and program Dash to make it all the way through the maze using the sensors.

Use Dot to control Dash. For example, if Dot moves one way, Dash can move too! Try some of the other example code.

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If programming is your thing, contact developers@makewonder.com for information on how to get access to the Wonder Workshop SDK. To view our help center, visit help.makewonder.com or email support@makewonder.com for more info!

Coming Soon

The ideas and apps section of Go!









Contact Information

Thank you so much for taking the time to play with our robots! If you have any further questions, please feel free to reach out to:

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