

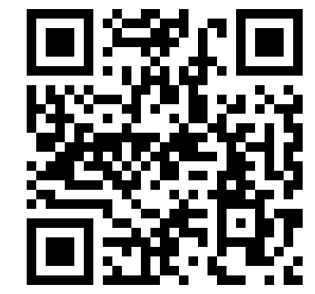
# Botley the Robot

Scan the QR codes below for "How to Videos"



Getting Started with Botley

How to code Loop Commands with Botley



How to code Botley to detect objects

# What is a Botley Robot?



- Botley is a **screen-free** coding toy for **children aged 5+ with adults help**
- There are **two programming modes: Line Following**- has sensors that can detect lines and will follow them in line mode; and **Coding**- use the included remote control to give Botley a series of commands to execute one after the other



# Get to Know Botley

## Using the Remote Programmer



You can program Botley using the Remote Programmer. See the image below to learn about the different buttons you can press to enter commands.

### FORWARD

Botley moves forward 1 step (approximately 8", depending on the surface).

### TURN LEFT

Botley will rotate to the left 90 degrees.

### REVERSE

Botley moves backward 1 step.

### OBJECT DETECTION

Press to enable object detection.

### LOOP

Press to repeat a step or sequence of steps.

### TRANSMIT

Press to send your code from the Remote Programmer to Botley.

### TURN RIGHT

Botley will rotate to the right 90 degrees.

### CLEAR

Press to clear all previously programmed steps.

### SOUND

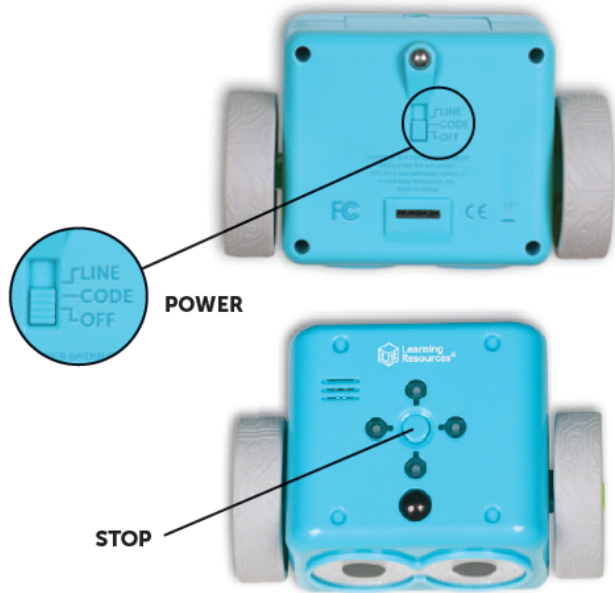
Press to toggle between 3 sound settings: **High**, **Low**, and **Off**.





# Getting Started

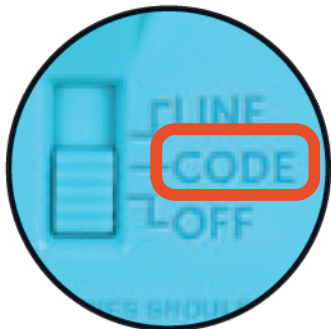
## 1 Turning Botley ON



To turn Botley on slide the switch to either **CODE** or **LINE FOLLOWING** modes. **CODE mode** will allow Botley to read barcodes; **LINE FOLLOWING mode** will allow Botley to use his special sensor to follow a black line.

**STOP** Botley from moving at any time by **pressing the center button on top of him.**

## 2 Using CODE mode



In **CODE mode**, each arrow button you press represents a step in your code. When you transmit your code to Botley, he will **execute all the steps in order.** The **lights on the top of Botley** will **light up** at the **beginning of each step.** Botley will **stop and make a sound** when he **completes the code.**



### 3 Code a simple program



1. Slide the **POWER** switch on the bottom of Botley to **CODE**.
2. Place Botley on the floor (he works best on hard surfaces).
3. Press the **FORWARD** arrow on the Remote Programmer.
4. Point the Remote Programmer at Botley and press the **TRANSMIT** button.
5. Botley will light up, make a sound to indicate the program has been transmitted, and move forward one step.

**Note:** *If you hear a negative sound after pressing the transmit button:*

- **Press TRANSMIT again. (Do not re-enter your program—it will remain in the Remote Programmer memory until you clear it.)**
- **Check that the POWER button on the bottom of Botley is in the CODE position.**
- **Check the lighting of your surroundings. Bright light can affect the way the Remote Programmer works.**
- **Point the Remote Programmer directly at Botley.**
- **Bring the Remote Programmer closer to Botley.**

## 4 Try a longer program



1. Press **CLEAR** to delete the old program.
2. Enter the following sequence: **FORWARD, FORWARD, RIGHT, RIGHT, FORWARD.**
3. Press **TRANSMIT** and Botley will execute the program.

### Tips:

- **STOP** Botley at any time by pressing the center button on top of him.
- You can transmit a program from up to 10' away depending on the lighting (Botley works best in ordinary room lighting).
- You can add steps onto a program. Once Botley completes a program, you can add more steps by entering them into the Remote Programmer. When you press **TRANSMIT**, Botley will restart the program from the beginning, adding on the additional steps at the end.
- Botley can perform sequences of up to 80 steps! If you enter a programmed sequence that exceeds 80 steps, you'll hear a sound indicating the step limit has been reached.

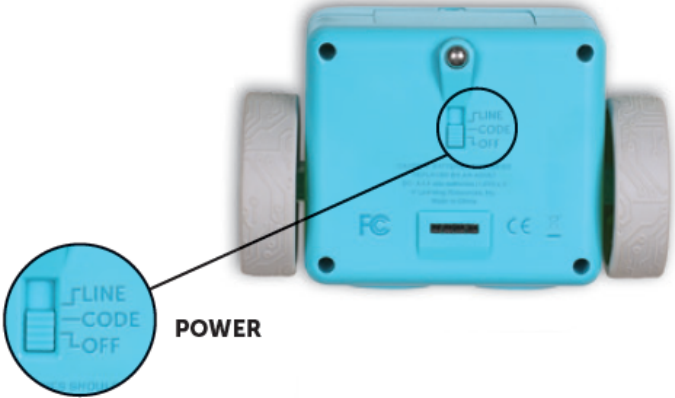
## 5 Using the Coding Cards



Use the coding cards to keep track of each step in your code. Each card features a direction or “step” to program into Botley. These cards are color-coordinated to match the buttons on the Remote Programmer.

We recommend lining up the coding cards horizontally in sequence to mirror each step in your program and to help follow and remember the sequence.

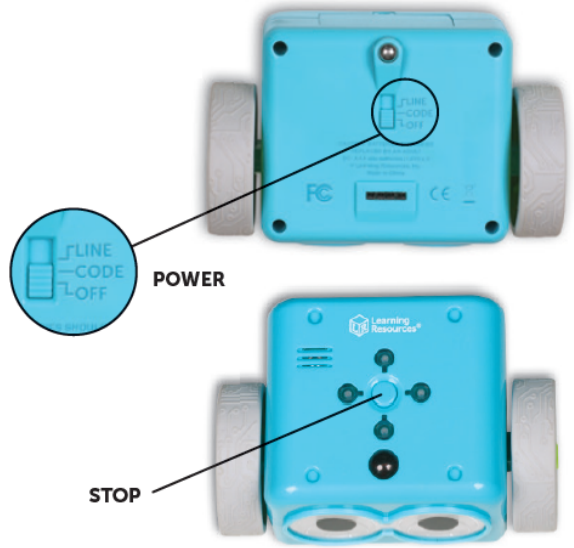
## 6 Turning Botley OFF



To turn Botley **OFF**, slide the switch to **OFF**.

# Getting Started

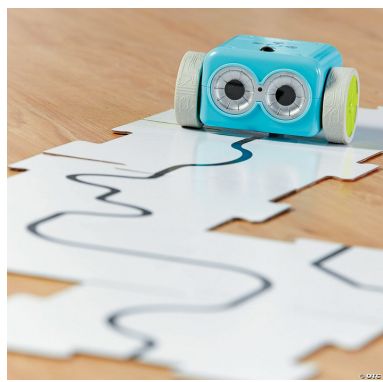
## 1 Turning Botley ON



To turn Botley on slide the switch to either **CODE** or **LINE FOLLOWING** modes. **CODE mode** will allow Botley to read barcodes; **LINE FOLLOWING mode** will allow Botley to use his special sensor to follow a black line.

**STOP** Botley from moving at any time by **pressing the center button on top of him.**

## 2 Using LINE FOLLOWING mode

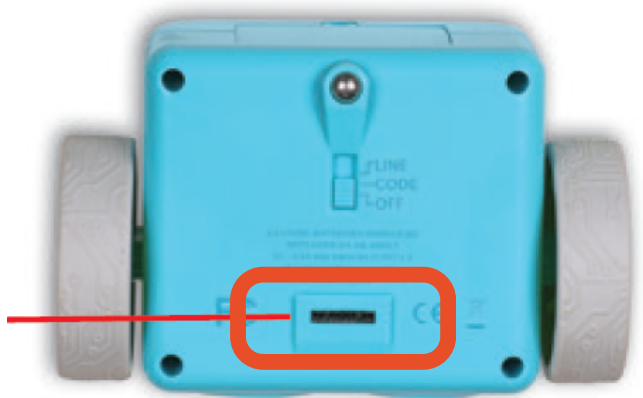


In **LINE mode**, Botley's special sensor allows him to follow a black line.

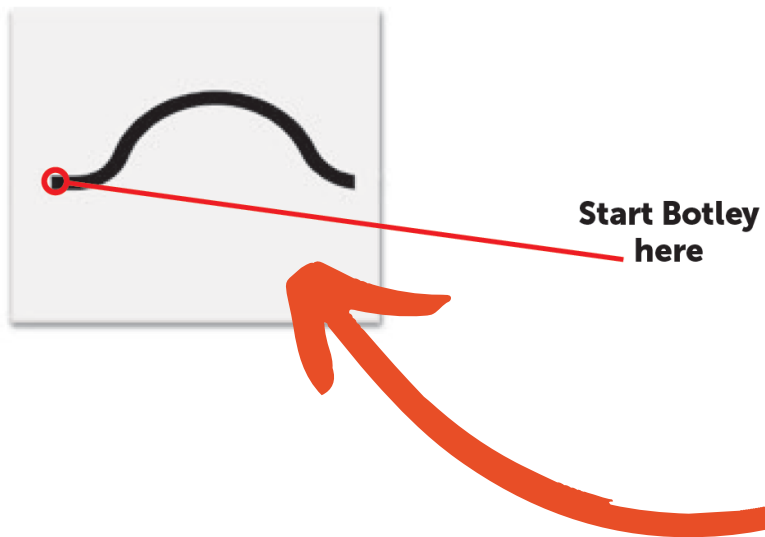
Put the **double-sided tiles** together like a puzzle so that the **black line side is facing up**. Make sure the **black line on each of the tile pieces are connected** in order for Botley to be able to properly travel down the path (see image for reference).



### 3 Explore Botley's LINE FOLLOWING Mode



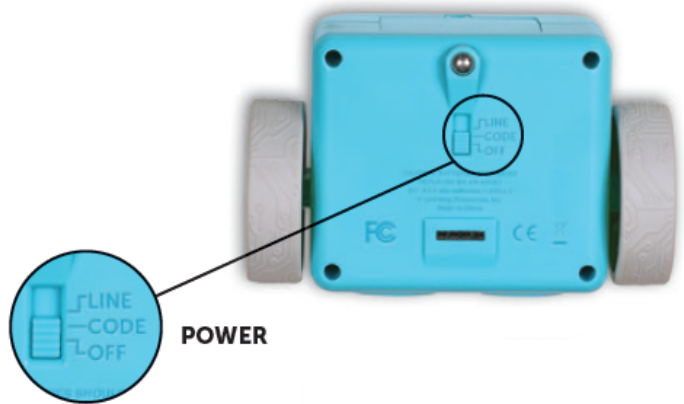
1. Slide the **POWER** switch on the bottom of Botley to **LINE**.
2. Place Botley on the black line. The **sensor** on the bottom of Botley needs to be **directly over the black line**.
3. Press the **center button on top of Botley** to start line following. If he just keeps spinning around, nudge him closer to the line—he'll say "**Ah-ha**" when he finds the line.
4. Press the center button again to **STOP** Botley- or just pick him up!



You can also draw your own path for Botley to follow.

- Use a **white piece of paper** and a **thick black marker**.  
*Hand-drawn lines must be between **4mm and 10mm wide and solid black against white**. Note that any dark pattern or color change will affect his movements, so **be sure there are no other color or surface changes near the black line**.*
- You can start with **drawing something like this** (see image beside for reference).

# 4 Turning Botley OFF



To turn Botley **OFF**, slide the switch to **OFF**.