

Radio Control

The BBC micro:bit and the Scratch programming language provide an excellent way of having fun while learning to code. The aim of this activity is to use radio communication to make a cat do tricks! If you command a real cat to jump, you have no hope. Yet with a quick movement of your BBC micro:bit you can make Scratch the virtual cat do tricks, like standing on its head.



About 30 minutes



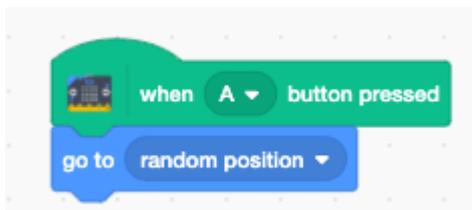
Kit List

- BBC micro:bit v2
- Computer with Scratch 3 loaded



Instructions

1. Connect the BBC micro:bit to the computer and go to the website <https://scratch.mit.edu/microbit>
2. Follow the instructions to install the Scratch link and hex file
3. Add the extension 'microbit' on the MakeCode page. Extensions are in the bottom left corner
4. Check everything is working by displaying 'hello' on the micro:bit as suggested on the web page
5. You can choose what to use, such as pressing button A, or making the micro:bit move up



6. Click on 'My Blocks' and make a block such as 'stand on head'. Define what that block is by writing the code to turn Scratch 180 degrees.



Next Steps

Try different commands, such as tilting the micro:bit and make Scratch tilt as well.

You can make different sounds depending on what command you send.

Investigate: How is your signal getting to the computer? What is Bluetooth? How far away does your micro:bit still work?