The Unofficial micro:bit Community Magazine

Issue 2 October 2018

Scratch for Comicro:bit

Learn all about the new micro:bit features in Scratch 3.0!

Scratch Interview

We interview 2 members of the Scratch team!

cube:bit Review

Turn your micro:bit into a shiny 3D cube with a new board

Global Challenge

Solve a problem in your community with the new micro:bit challenge!

Make your own Blocks!

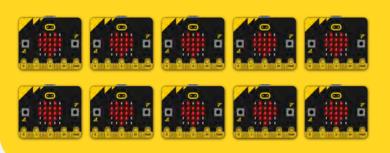
Make your own MakeCode blocks with our easy to use beginners guide.

Dexter Industries GiggleBot

Dexter GiggleBot

:review

Making & Programming robots just got easier!



Here at micro:mag we love micro:bit robots.

These come in all shapes,

sizes and prices but this new offering from Dexter industries makes it very accessible for kids. Let's take a look at what it has to offer.

Hardware

- 2 x DC Motors
- 9 x WS2812 Neopixels
- A pen Holder (Yes you can code GiggleBot to draw!) this is located between the wheels.
- 2 x line following sensors can be used to follow a thick black line on the floor
- 2 x light sensors one located on each side of the robot, you can code the light sensors to follow a torch.
- 2 x servo mounts



- 1 x AA battery holder for 3xAA
- 2 x connectors for I2C addons
- ATMega328PB microcontroller (the brains of the robot)
- DRV8837C 1A H Bridge motor controller (controls the motors and makes your robot move)
- A broken out micro:bit edge connector.

Build

10/10

GiggleBot is probably the easiest robot to build as it comes almost completely assembled all we needed to do was push the wheels on to the motors and insert some batteries. Then it was ready to insert our micro:bit and get coding!

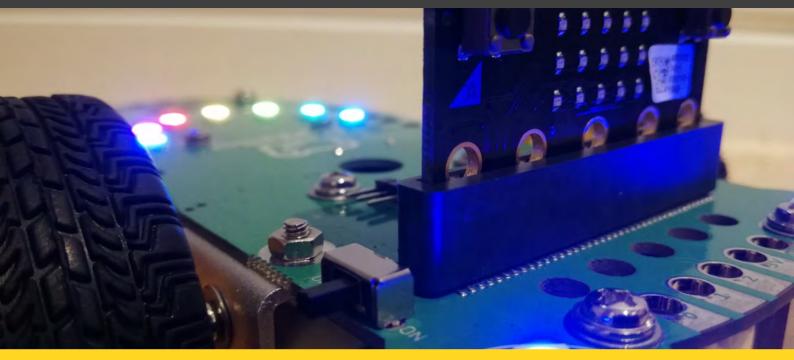
Programming

GiggleBot can be programmed using

MicroPython using the <u>Mu editor</u>, <u>EduBlocks</u> and <u>MakeCode</u>, this is because it is powered by a micro:bit.

When test driving GiggleBot we used the MakeCode editor. To get started you have to install the giggle extension to do this go to Advanced -> Extensions and in the search box

Dexter Industries GiggleBot



Not only is the Gigglebot an incredibly good robot to use, it also looks amazing with its plethora of lights and lime green PCB chassis.

type giggle and press Enter. Extensions alaak This is the limited backage ckage for the GiggleBot! This

With GiggleBot aimed at children, we are happy to report that it is very easy to program. Within a few minutes of looking at the code blocks, we were able to figure out how to make our robot move. We tried out our GiggleBot at a local code club, the kids really enjoyed using the robot and were instantly getting it to move, light up and sense.

Another thing we are really impressed with is the fact the robot is compatible with nearly all of the "major" micro:bit editors, allowing people of all abilities to use the GiggleBot making it the perfect robot for beginners and experts alike.

The MakeCode extension developed by Dexter is simple to use and has lots of blocks that let you control the robot with ease and For those who want to get a bit more advanced too, the EduBlocks and Python libraries are great for them, allowing you to use the GiggleBot with standard python features.



Conclusion

GiggleBot is priced at \$60 USD which is about £45 GBP which for what the robot offers, we think is a very fair price. Also, if you're in the US, Dexter offer free trials for schools in which you can loan some GiggleBots for 45 days. Overall this is an excellent beginners robot and is one of the easiest to use we've seen for the micro:bit.

Buy a GiggleBot: go.micromag.cc/buygiggle