

Pimoroni & Cyntech Pibrella

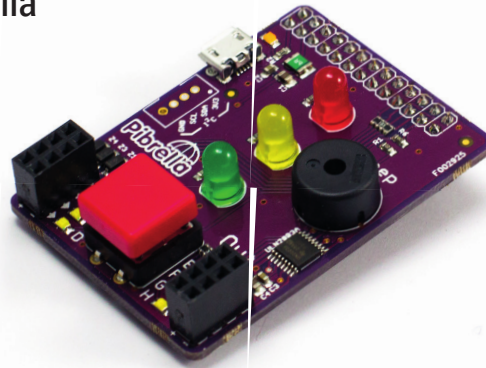
No, it has nothing to do with Rihanna, but Les Pounder lets us stand under his Pibrella... ella

Pimoroni, the Sheffield-based company of makers and tinkerers, has become the place to go to for Raspberry Pi-related kit. Fresh from the success of its popular PiGlow add-on board comes the new kid on the block: the Pibrella, which is a partnership with Cyntech Components, the company behind the Raspberry Pi logo-shaped hub.

The Pibrella is a simple add-on board that is placed on to the GPIO pins of the Raspberry Pi, and provides the user with extra methods of input and output. At first glance you can easily see two forms of output in the shape of a red, a yellow and a green LED, as well as one buzzer. There's also a big red button that looks as though it's come from the leftovers of a nuclear decommissioning programme.

If you look a little closer you'll see two banks of female connections on either side of the button. The left bank provides four extra methods of input, whereas the right bank provides four methods of output. These extra IO ports provide you with an easy way to extend the functionality of the Pibrella via the use of sensors and motors.

Pibrella can be used with two programming languages – Python and Scratch – using Simon Walters' ScratchGPIO (<http://cymplecy.wordpress.com>). Pibrella comes with its own Python library courtesy of Pimoroni's GitHub repo (<https://github.com/pimoroni/pibrella>). The library is a sheer delight




You can use the Pibrella's extra IO methods to create simple projects such as traffic lights or a reaction timer.

to use, and it really helps newcomers quickly hack together a project with minimal fuss.

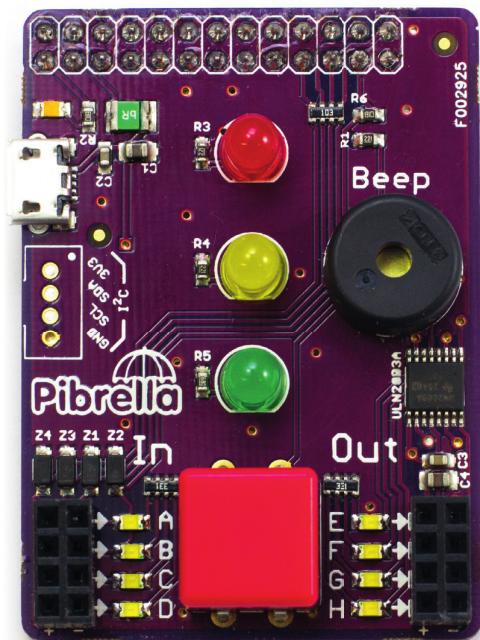
Python library

The board itself is simple to use. By importing the library into your Python code, you can easily turn lights on and off by colour using a simple line of code, so to turn the red light on and off you can use `pibrella.light.red.on()` and `pibrella.light.red.off()`. The library also provides ingenious ways to make LEDs blink and use pulse width modulation (PWM) to create a fading effect. The use of the extra IO ports is also handled via the library, and when a port is in use the corresponding LED is lit up to indicate as such, enabling you to quickly diagnose any faults.

It's possible to connect motors, servos and solenoids to the Pibrella, but they require a little more power than a standard Raspberry Pi can provide – have no fear though, as the team have considered this issue and incorporated a separate micro USB port to provide the additional power.

The Pibrella is the answer to a lot of our problems. It provides an easy-to-use device that enables anyone to create fun projects in Python and Scratch. The expansion possibilities are tremendous, and we can see this board becoming very popular indeed – particularly in education, as it will easily slot into the UK's secondary school curriculum. 

“Pibrella can be used via two programming languages – Python and Scratch.”



There's easily £10 worth of weekend hardware hacking packed into this little Raspberry Pi add-on.

DATA

Web
<http://pibrella.com>
Developer
Pimoroni vs Cyntech
Price
£10

LINUX VOICE VERDICT

The right features for all levels of users coupled with the right price makes this a must-have piece of kit.

★★★★★