
Brightlybrightly Library Documentation

Release 1.0

Debra Ansell

Mar 31, 2020

Contents

1	Dependencies	3
2	Usage Example	5
3	Contributing	7
4	Table of Contents	9
4.1	Simple test	9
5	Indices and tables	11

Brightly is a library based Adafruit's [CircuitPython](#) Python implementation with functions to generate simple LED patterns and animations. It is designed to work with the [Brightly Code Generator](#) to create an easy to use drag-and-drop coding interface for Neopixels on CircuitPython capable boards.

CHAPTER 1

Dependencies

This library depends on:

- [Adafruit CircuitPython](#)
- [Adafruit CircuitPython NeoPixel](#)

The current `brightly.mpy` library is compatible with CircuitPython 4

Please ensure all dependencies are available on the CircuitPython filesystem. This is easily achieved by downloading the [Adafruit library and driver bundle](#)

CHAPTER 2

Usage Example

See [examples/main.py](#)

CHAPTER 3

Contributing

Contributions are welcome! Please read the [Code of Conduct](#) before contributing to help this project stay welcoming.

4.1 Simple test

Ensure your device works with this simple test.

Listing 1: examples/main.py

```

1  #Auto generated CircuitPython Code
2  import board
3  import neopixel
4  import time
5  import brightly
6  numpix = 14
7
8  strip = neopixel.NeoPixel(board.D1, numpix, brightness=0.15, auto_write=False)
9  brightly = brightly.Brightly(strip, numpix)
10
11 while True:
12     brightly.wipe(0.05, 1, (255, 0, 0))
13     brightly.wipe(0.05, -1, (0, 0, 255))
14     brightly.twinkle(8, [(255, 0, 0), (0, 255, 0), (0, 0, 255)], 5)
15     brightly.scroll_morse("hi there", (255, 0, 0))
16     brightly.smooth_change_to((0, 255, 0))
17     brightly.smooth_change_to([(255, 0, 0), (201, 54, 0), (147, 108, 0), (90, 165, 0), (36, 219, 0),
→ (0, 237, 18), (0, 183, 72), (0, 126, 129), (0, 75, 180), (0, 18, 237), (33, 0, 222), (90, 0, 165), (144,
→ 0, 111), (198, 0, 57)])
18     for i in range(16):
19         brightly.smooth_rotate_pix(1)
20     for i in range(16):
21         brightly.set_pixels([(255, 0, 0), (0, 0, 0), (255, 0, 0), (0, 0, 0), (255, 0, 0), (0, 0,
→ 0), (255, 0, 0), (0, 0, 0), (255, 0, 0), (0, 0, 0), (255, 0, 0), (0, 0, 0), (255, 0, 0), (0, 0,
→ 0)])
22         time.sleep(0.4)
23         brightly.smooth_change_to([(0, 0, 0), (255, 0, 0), (0, 0, 0), (255, 0, 0), (0, 0, 0),
→ (255, 0, 0), (0, 0, 0), (255, 0, 0), (0, 0, 0), (255, 0, 0), (0, 0, 0), (255, 0, 0), (0, 0, 0),
→ (255, 0, 0)])

```

(continues on next page)

(continued from previous page)

--	--

CHAPTER 5

Indices and tables

- `genindex`
- `modindex`
- `search`