
AdafruitDymoScale Library Documentation

Release 1.0

ladyada

Jan 14, 2020

Contents

1	Dependencies	3
1.1	Installing from PyPI	3
2	Usage Example	5
3	Contributing	7
4	Documentation	9
5	Table of Contents	11
5.1	Simple test	11
5.2	adafruit_dymoscale	12
5.2.1	Implementation Notes	12
6	Indices and tables	13
	Python Module Index	15
	Index	17

CircuitPython interface for [DYMO](#) postage scales.

NOTE: This library will not work on embedded linux, only on microcontrollers.

This driver depends on:

- [Adafruit CircuitPython](#)

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

1.1 Installing from PyPI

On supported GNU/Linux systems like the Raspberry Pi, you can install the driver locally [from PyPI](#). To install for current user:

```
pip3 install adafruit-circuitpython-dymoscale
```

To install system-wide (this may be required in some cases):

```
sudo pip3 install adafruit-circuitpython-dymoscale
```

To install in a virtual environment in your current project:

```
mkdir project-name && cd project-name
python3 -m venv .env
source .env/bin/activate
pip3 install adafruit-circuitpython-dymoscale
```


CHAPTER 2

Usage Example

Initialize the scale by passing it a data pin and a pin to toggle the units button:

```
# initialize the dymo scale
units_pin = digitalio.DigitalInOut(board.D3)
units_pin.switch_to_output()
dymo = adafruit_dymoscale.DYMOscale(board.D4, units_pin)
```

Get the item's weight from the scale:

```
reading = dymo.weight
print(reading.weight)
```

Get the item's units from the scale:

```
print(reading.units)
```

To toggle between units (simulate a button press):

```
dymo.toggle_unit_button(switch_unit=True)
```

To toggle the unit button, but preserve the unit displayed:

```
dymo.toggle_unit_button()
```


CHAPTER 3

Contributing

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

CHAPTER 4

Documentation

For information on building library documentation, please check out [this guide](#).

5.1 Simple test

Ensure your device works with this simple test.

Listing 1: examples/dymoscale_simpletest.py

```
1 import time
2 import board
3 import digitalio
4 import adafruit_dymoscale
5
6 # initialize the dymo scale
7 units_pin = digitalio.DigitalInOut(board.D3)
8 units_pin.switch_to_output()
9 dymo = adafruit_dymoscale.DYMOScale(board.D4, units_pin)
10
11 # take a reading of the current time
12 time_stamp = time.monotonic()
13
14 while True:
15     reading = dymo.weight
16     text = "{} g".format(reading.weight)
17     print(text)
18     # to avoid sleep mode, toggle the units pin every 2 mins.
19     if (time.monotonic() - time_stamp) > 120:
20         print('toggling units button...')
21         dymo.toggle_unit_button()
22         # reset the time
23         time_stamp = time.monotonic()
```

5.2 adafruit_dymoscale

CircuitPython interface for DYMO scales.

- Author(s): ladyada

5.2.1 Implementation Notes

Software and Dependencies:

- Adafruit CircuitPython firmware for the supported boards: <https://github.com/adafruit/circuitpython/releases>

class `adafruit_dymoscale.DYMOscale` (*data_pin, units_pin, timeout=1.0*)

Interface to a DYMO postal scale.

get_scale_data ()

Reads a pulse of SPI data and analyzes the resulting data.

toggle_unit_button (*switch_units=False*)

Toggles the unit button on the dymo. :param bool switch_units: Simulates pressing the units button.

weight

Weight in grams

class `adafruit_dymoscale.ScaleReading`

Dymo Scale Data

CHAPTER 6

Indices and tables

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

a

`adafruit_dymoscale`, 11

A

`adafruit_dymoscale` (*module*), 11

D

`DYMOscale` (*class in adafruit_dymoscale*), 12

G

`get_scale_data()` (*adafruit_dymoscale.DYMOscale*
method), 12

S

`ScaleReading` (*class in adafruit_dymoscale*), 12

T

`toggle_unit_button()`
(*adafruit_dymoscale.DYMOscale* *method*),
12

W

`weight` (*adafruit_dymoscale.DYMOscale* *attribute*), 12