Adafruit RTTTL Library Documentation

Release 1.0

Scott Shawcroft

Feb 10, 2021

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This plays RTTTL melodies.

CHAPTER 1

Dependencies

This driver depends on:

- Adafruit CircuitPython
- Adafruit CircuitPython Waveform

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

CHAPTER 2

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-rtttl
```

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

```
sudo pip3 install adafruit-circuitpython-rtttl
```

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-rtttl
```

CHAPTER 3

Usage Example

This plays Frosty the Snowman:

```
import board
import adafruit_rtttl

adafruit_rtttl.play(board.A0, "Snowman:d=8,o=5,b=200:2g,4e.,f,4g,2c6,b,c6,4d6,4c6,4b,
↪a,2g.,b,c6,4d6,4c6,4b,a,a,g,4c6,4e.,g,a,4g,4f,4e,4d,2c.,4c,4a,4a,4c6,4c6,4b,4a,4g,
↪4e,4f,4a,4g,4f,2e.,4e,4d,4d,4g,4g,4b,4b,4d6,d6,b,4d6,4c6,4b,4a,4g,4p,2g")
```

CHAPTER 4

CPX Usage Example

This plays Frosty the Snowman on a Circuit Playground Express (we must enable onboard speaker):

```
import board
from digitalio import DigitalInOut, Direction
import adafruit_rtttl
spkrenable = DigitalInOut(board.SPEAKER_ENABLE)
spkrenable.direction = Direction.OUTPUT
spkrenable.value = True

adafruit_rtttl.play(board.A0, "Snowman:d=8,o=5,b=200:2g,4e.,f,4g,2c6,b,c6,4d6,4c6,4b,
↪a,2g.,b,c6,4d6,4c6,4b,a,a,g,4c6,4e.,g,a,4g,4f,4e,4d,2c.,4c,4a,4a,4c6,4c6,4b,4a,4g,
↪4e,4f,4a,4g,4f,2e.,4e,4d,4d,4g,4g,4b,4b,4d6,d6,b,4d6,4c6,4b,4a,4g,4p,2g")
```

CHAPTER 5

Contributing

Contributions are welcome! Please read our Code of Conduct before contributing to help this project stay welcoming.

CHAPTER 6

Documentation

For information on building library documentation, please check out this guide.

CHAPTER 7

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7.1 Simple test

Ensure your device works with this simple test.

Listing 1: examples/rtttl_simpletest.py

```
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#
# Copyright (c) 2017 Scott Shawcroft for Adafruit Industries
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# THE SOFTWARE.

# This is tested on the CircuitPlayground Express

```

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```
import digitalio
import board
import adafruit_rtttl

enable = digitalio.DigitalInOut(board.SPEAKER_ENABLE)
enable.switch_to_output(value=True)

adafruit_rtttl.play(
    board.SPEAKER,
    "itchy:d=8,o=6,b=160:c,a5,4p,c,a,4p,c,a5,c,a5,"
    + "c,a,4p,p,c,d,e,p,e,f,g,4p,d,c,4d,f,4a#,4a,2c7",
)
adafruit_rtttl.play(
    board.SPEAKER,
    "Phantom:d=4,o=5,b=140:c,f,c,d#.,8c#,2c#,a#4,"
    + "d#,8a#4,2c,c,f,c,d#.,8c#,2c#,a#4,d#.,8a#4,2c,p,c,f,g#,c.6,8a#,2a#,a#,d#.6,8a#,"
    + "2c6,p,c6,2f.6,8d#6,8c#6,8c6,8a#,8g#,8g,8f,2e,c#,c#.,8c,2c",
)
```

7.2 adafruit_rtttl

Play notes to a digialio pin using ring tone text transfer language (rtttl).

- Author(s): Scott Shawcroft

adafruit_rtttl.**play**(*pin*, *rtttl*, *octave=None*, *duration=None*, *tempo=None*)

Play notes to a digialio pin using ring tone text transfer language (rtttl). :param ~digitalio.DigitalInOut pin: the speaker pin :param rtttl: string containing rtttl :param int octave: represents octave number (default 6 starts at middle c) :param int duration: length of notes (default 4 quarter note) :param int tempo: how fast (default 63 beats per minute)

CHAPTER 8

Indices and tables

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