
Luma Documentation

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CHAPTER 1

Introduction

luma.core is a component library providing a Pillow-compatible drawing canvas, and other functionality to support drawing primitives and text-rendering capabilities for small displays on the Raspberry Pi and other single board computers:

- scrolling/panning capability,
- terminal-style printing,
- state management,
- color/greyscale (where supported),
- dithering to monochrome,
- sprite animation,
- flexible framebuffering (depending on device capabilities)

Device drivers extend **luma.core** to provide the correct initialization sequences for specific physical display devices/chipsets.

There are several drivers for different classes of device available:

- [luma.oled](#)
- [luma.lcd](#)
- [luma.led_matrix](#)

There are emulators that run in real-time (with `pygame`) and others that can take screenshots, or assemble animated GIFs, as per the examples below (source code for these is available in the [luma.examples](#) directory):

CHAPTER 2

Installation

TODO

TODO - descriptions and usage examples for each subcomponent

3.1 luma.core

TODO

3.2 luma.emulator

TODO

3.3 luma.examples

TODO

3.4 luma.lcd

TODO

3.5 luma.led_matrix

TODO

3.6 luma.oled

TODO

CHAPTER 4

API Documentation

4.1 `luma.core.ansi_color`

4.2 `luma.core.const`

4.3 `luma.core.device`

4.4 `luma.core.error`

4.5 `luma.core.framebuffer`

4.6 `luma.core.legacy`

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4.8 `luma.core.mixin`

4.9 `luma.core.render`

4.10 `luma.core.serial`

4.11 `luma.core.sprite_system`

4.12 `luma.core.threadpool`

4.13 `luma.core.virtual`

Pull requests (code changes / documentation / typos / feature requests / setup) are gladly accepted. If you are intending to introduce some large-scale changes, please get in touch first to make sure we're on the same page: try to include a docstring for any new method or class, and keep method bodies small, readable and PEP8-compliant. Add tests and strive to keep the code coverage levels high.

5.1 GitHub

The source code is available to clone at: <https://github.com/rm-hull/luma.docs>

5.2 Contributors

- Thijs Triemstra (@thijstriemstra)

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