zorg-grove Documentation

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For full documentation visit zorg-grove.readthedocs.org.

CHAPTER 1

Contents:

LCD Driver

Documentation for the Grove RGB LCD I2C driver.

class `zorg_grove.lcd.`**`LCD`**(*options*, *connection*)

Bases: `zorg.driver.Driver`

`backlight_color`(*red*, *green*, *blue*)

Set RGB color for the back light.

`backlight_off`()

Turns off the back light. Does so by setting the color to black.

`backlight_on`()

Turns on the back light. Does so by setting the color to white

`blink_off`()

Turns off the cursor blinking character.

`blink_on`()

Turns on the cursor blinking character.

`clear`()

Clears display and returns cursor to the home position (address 0).

`cursor_off`()

Turns off the cursor.

`cursor_on`()

Turns on the cursor.

`display_off`()

Sets Off of all display (D), cursor Off (C) and blink of cursor position character (B).

`display_on`()

Sets On of all display (D), cursor On (C) and blink of cursor position character (B).

home()
Returns cursor to home position.

print_string(*characters*)
Prints characters on the LCD. Automatically wraps text to fit 16 character wide display.

set_cursor(*col*, *row*)
Sets cursor position.

start()

Microphone Driver

Documentation for the Grove Sound Sensor driver.

class zorg_grove.microphone.**Microphone**(*options*, *connection*)
Bases: zorg.driver.Driver

read_decibels()
Returns the value of the current sound level in decibels.

Rotary Angle Sensor

Documentation for the Grove Rotary Angle Sensor driver.

class zorg_grove.rotary_angle_sensor.**RotaryAngleSensor**(*options*, *connection*)
Bases: zorg.driver.Driver

This may also be known as a potentiometer.

read_angle()
Read and return the current angle of the sensor in degrees. The rotary angle sensor produces analog output between 0 and Vcc (D1).

Servo

Documentation for the Grove Servo driver.

class zorg_grove.servo.**Servo**(*options*, *connection*)
Bases: zorg.driver.Driver

get_angle()
Get the current angle of the servo motor.

set_angle(*angle*)
Set the angle of the servo motor.

Temperature Sensor

Documentation for the Grove Temperature Sensor driver.

class zorg_grove.temperature_sensor.**TemperatureSensor**(*options*, *connection*)
Bases: zorg.driver.Driver

read_celsius()

Read and return the celsius value of the temperature sensor. See data sheet: http://www.seeedstudio.com/wiki/images/a/a1/NCP18WF104F03RC.pdf

read_fahrenheit()

Read and return the fahrenheit value of the temperature sensor.

read_kelvin()

Read and return the kelvin value of the temperature sensor.

read_resistance()

Read and return the resistive value of the temperature sensor.

CHAPTER 2

Overview

This package includes python drivers for controling hardware devices. Typically, this package will not be used directly. The normal useage would be to include it as a device driver when configuring a robot using Zorg.

CHAPTER 3

Installation

Install this package using

```
pip install zorg-grove
```

CHAPTER 4

Usage

The driver should be included using the dot-notated format of the import string.

```
"zorg_grove.Servo"
```

CHAPTER 5

Indices and tables

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