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**volux**

***Release 0.9.1***

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# Volux Basics

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# CHAPTER 1

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## Installation

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### 1.1 Installing with Pip

```
$ pip install volux
```

Congratulations, you've just installed Volux!

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**Note:** If you would rather build the module yourself, see “Installing from source”

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Next, let's try running the ‘bar’ demo.



# CHAPTER 2

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## Running Demos

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### 2.1 Bar Demo

Once volux is finished installing, you can run the bar demo like so:

```
$ volux demo bar
```

You should now see a transparent bar at the bottom of your screen.

#### 2.1.1 Bar Demo Explained

In different modes, performing identical actions on the bar produce different results.

Below, you'll see a table of representing the result of performing certain actions on the bar in a given mode.

Bar Color	Action	Result
Any	Right-click Double right-click	Change bar mode Exit demo
Green	Scroll up Scroll down Middle-click	Increase volume Decrease volume Mute
Red	Scroll up Scroll down Middle-click	Increase volume Decrease volume Unmute
Blue	Scroll up Scroll down Middle-click	Increase bulb brightness Decrease bulb brightness Toggle bulb power



# CHAPTER 3

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## Examples

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### 3.1 Classes

#### 3.1.1 VoluxLight

**Warning:** This section is a work-in-progress

##### Adding New Lights

```
from voluxlight import VoluxLight
vlight = VoluxLight(<label>)

<operator instance>.add_module(vlight)
```

<label> must be a string. This is the name you've set via your mobile for a LIFX bulb on your network.

In the bar demo, we have a bulb with the label 'Demo Bulb', so we set <label> to match it accordingly.



# CHAPTER 4

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Python

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## 4.1 Classes

### 4.1.1 VoluxOperator

#### Instantiating a New Operator

```
import volux
vlx = volux.VoluxOperator()
```

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**Note:** `vlx` will serve as the name of the operator instance in the following examples

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#### Adding Modules to an Operator

```
from voluxdemomodule import VoluxDemoModule
demo_module = VoluxDemoModule()
vlx.add_module()
```



# CHAPTER 5

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## Installing from source

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**Warning:** If any of the code below looks unfamiliar or scary to you, building from source is not a good idea. It is highly recommended to install volux from pip or at least via the latest wheel release on pypi.

```
$ git clone https://github.com/DrTexx/Volux.git
$ cd Volux
$ python3 -m venv venv
$ source venv/bin/activate
$ pip install -r volux/demos/demo_toolbar_requirements.txt
$ pip install wheel setuptools --upgrade
$ python3 setup.py bdist_wheel
$ cd dist
$ pip install volux-*.whl
```



# CHAPTER 6

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## Writing your own modules

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**Warning:** This section is a work-in-progress

### 6.1 Example Module

```
from volux import VoluxModule

class DecoyVoluxModule(VoluxModule):
    def __init__(self, *args, **kwargs):
        super().__init__(
            module_name="Decoy Module",
            module_attr="decoy",
            module_get=self.get,
            module_set=self.set,
        )
        self.val = 0

    def get(self):
        return self.val

    def set(self, new_val):
        self.val = new_val
```

`module_name` is the human-readable name for your volux module.

`module_attr` is the attribute which will be added to the `VoluxOperator` object.

`module_get` is the class method for getting the modules generic data

`module_set` is the class method for setting the modules generic data



# CHAPTER 7

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volux

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## 7.1 volux package

### 7.1.1 Subpackages

`volux.demos` package

Submodules

`volux.demos.vol_lux_bar` module

## Module contents

### 7.1.2 Submodules

#### 7.1.3 volux.core module

#### 7.1.4 volux.demo module

#### 7.1.5 volux.module module

#### 7.1.6 volux.operator module

#### 7.1.7 Module contents

## 7.2 voluxbar package

### 7.2.1 Module contents

## 7.3 voluxcliprint package

### 7.3.1 Module contents

## 7.4 voluxdisplay package

### 7.4.1 Module contents

## 7.5 voluxlight package

### 7.5.1 Module contents

## 7.6 voluxvolume package

### 7.6.1 Module contents

# CHAPTER 8

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## Indices and tables

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