



**FREE eBook**

# LEARNING core-bluetooth

Free unaffiliated eBook created from  
**Stack Overflow contributors.**

#core-

bluetooth

# Table of Contents

About.....	1
<b>Chapter 1: Getting started with core-bluetooth.....</b>	<b>2</b>
Remarks.....	2
Examples.....	2
Installation or Setup.....	2
<b>Chapter 2: Scan &amp; connect with BLE peripherals (Bluetooth Smart).....</b>	<b>3</b>
Introduction.....	3
Examples.....	3
Scan all available peripherals.....	3
Scan available peripherals only with interested services.....	3
<b>Chapter 3: Setup bluetooth central manager.....</b>	<b>4</b>
Introduction.....	4
Examples.....	4
Declare and instantiate CBCentralManager.....	4
Declare and instantiate CBCentralManager with options.....	4
<b>Credits.....</b>	<b>5</b>

---

# About

You can share this PDF with anyone you feel could benefit from it, downloaded the latest version from: [core-bluetooth](#)

It is an unofficial and free core-bluetooth ebook created for educational purposes. All the content is extracted from [Stack Overflow Documentation](#), which is written by many hardworking individuals at Stack Overflow. It is neither affiliated with Stack Overflow nor official core-bluetooth.

The content is released under Creative Commons BY-SA, and the list of contributors to each chapter are provided in the credits section at the end of this book. Images may be copyright of their respective owners unless otherwise specified. All trademarks and registered trademarks are the property of their respective company owners.

Use the content presented in this book at your own risk; it is not guaranteed to be correct nor accurate, please send your feedback and corrections to [info@zzzprojects.com](mailto:info@zzzprojects.com)

---

# Chapter 1: Getting started with core-bluetooth

## Remarks

This section provides an overview of what core-bluetooth is, and why a developer might want to use it.

It should also mention any large subjects within core-bluetooth, and link out to the related topics. Since the Documentation for core-bluetooth is new, you may need to create initial versions of those related topics.

## Examples

### Installation or Setup

Detailed instructions on getting core-bluetooth set up or installed.

Read [Getting started with core-bluetooth online](https://riptutorial.com/core-bluetooth/topic/5544/getting-started-with-core-bluetooth): <https://riptutorial.com/core-bluetooth/topic/5544/getting-started-with-core-bluetooth>

---

# Chapter 2: Scan & connect with BLE peripherals (Bluetooth Smart)

## Introduction

This section describes how central (iOS app) can scan available BLE peripherals and connect with one we are interested in.

## Examples

### Scan all available peripherals

#### Swift:

```
centralManager.scanForPeripherals(withServices: nil, options: nil)
```

#### Objective C:

```
[centralManager scanForPeripheralsWithServices:nil options:nil];
```

### Scan available peripherals only with interested services

#### Swift:

```
let services = [CBUUID(string: SERVICE1_UUID), CBUUID(string: SERVICE2_UUID)]
centralManager.scanForPeripherals(withServices: services, options: nil)
```

#### Objective C:

```
NSArray *services = @[CBUUID UUIDWithString:SERVICE1_UUID], [CBUUID
UUIDWithString:SERVICE2_UUID]];
[centralManager scanForPeripheralsWithServices:services options:nil];
```

Read Scan & connect with BLE peripherals (Bluetooth Smart) online: <https://riptutorial.com/core-bluetooth/topic/9759/scan---connect-with-ble-peripherals--bluetooth-smart->

---

# Chapter 3: Setup bluetooth central manager

## Introduction

CBCentralManager acts as a manager class central side app generally iOS app. which is responsible for bridging communication between peripherals and central.

## Examples

### Declare and instantiate CBCentralManager

Swift:

```
var centralManager:CBCentralManager!  
  
centralManager = CBCentralManager(delegate: self, queue: nil)
```

Objective C:

```
@property (nonatomic, strong) CBCentralManager *centralManager;  
  
centralManager = [[CBCentralManager alloc] initWithDelegate:self queue:nil];
```

### Declare and instantiate CBCentralManager with options

Swift:

```
var centralManager:CBCentralManager!  
  
centralManager = CBCentralManager(delegate: self, queue: nil, options:  
[CBCentralManagerOptionRestoreIdentifierKey : "com.companyname.appname.central"])
```

Objective C:

```
@property (nonatomic, strong) CBCentralManager *centralManager;  
  
self.centralManager = [[CBCentralManager alloc] initWithDelegate:self queue:nil  
options:@{CBCentralManagerOptionRestoreIdentifierKey : @"com.companyname.appname.central"}];
```

Read Setup bluetooth central manager online: <https://riptutorial.com/core-bluetooth/topic/9760/setup-bluetooth-central-manager>

---

# Credits

S. No	Chapters	Contributors
1	Getting started with core-bluetooth	<a href="#">Community</a>
2	Scan & connect with BLE peripherals (Bluetooth Smart)	<a href="#">BaSha</a>
3	Setup bluetooth central manager	<a href="#">BaSha</a>