

KBSW180107 SLAMWARE SDK API Reference(ios)

iosSLAMWARE SDKAPI

- -
 - [RLEWrapper](#)
 - [RPAbstractDevice](#)
 - [RPAbstractDiscover](#)
 - [<RPActionProtocol>](#)
 - [<RPBleConfigureListener>](#)
 - [RPBleDevice](#)
 - [RPBleWifiInfo](#)
 - [RPDeviceManager](#)
 - [RPDeviceManager\(Connect\)](#)
 - [<RPDiscoveryDelegate>](#)
 - [RPFirmwareUpdateInfo](#)
 - [RPFirmwareUpdateProgress](#)
 - [RPHealthError](#)
 - [RPHealthInfo](#)
 - [RPLaserPoint](#)
 - [RPLaserScan](#)
 - [RPLine](#)
 - [RPLocation](#)
 - [RPMap](#)
 - [<RPMoveActionProtocol>](#)
 - [RPPath](#)
 - [RPPoint](#)
 - [RPPointF](#)
 - [RPPose](#)
 - [RPRectangle](#)
 - [RPRectangleF](#)
 - [RPRotation](#)
 - [RPScheduleTask](#)
 - [RPSize](#)
 - [RPSizeF](#)
 - [RPSlamwarePlatformProtocol](#)
 - [<RPSweepMoveActionProtocol>](#)
 - [RPSlamwareEnums](#)
-

RLEWrapper	
RPAbstractDevice	
RPAbstractDiscover	
<RPActionProtocol>	Action
<RPBleConfigureListener>	Bluetooth configure listener
RPBleDevice	
RPBleWifiInfo	WiFi
RPDeviceManager	
RPDeviceManager(Connect)	
<RPDiscoveryDelegate>	Discovery delegate
RPFirmwareUpdateInfo	

RPFirmwareUpdateProgress	
RPHealthError	
RPHealthInfo	
RPLaserPoint	
RPLaserScan	
RPLine	
RPLocation	
RPMap	
<RPMoveActionProtocol>	MoveAction
RPPath	
RPPoint	
RPPointF	
RPPose	
RPRectangle	
RPRectangleF	
RPRotation	
RPScheduleTask	
RPSize	
RPSizeF	
<RPSlamwarePlatformProtocol>	SLAMWARE
<RPSweepMoveActionProtocol>	
RPSlamwareEnums	

RLEWrapper

+ encode

+ decode

RPAbstractDevice

-canBeFoundWith:

DiscoveryModeDiscoveryModeDiscoveryMode

```
int manufacturerId
IDint

int modelId
IDint

NSString *manufacturerName
NSString

NSString *modelName
NSString

NSString *hardwareVersion
NSString

NSString *softwareVersion
NSString

NSString *serialNumber
NSString

NSUUID *deviceId
IDNSUUID

NSString *deviceName
NSString
```

RPAbstractDiscover

Abstract discover

-getStatus:

-start:

-stop:

-getMode

DiscoverDiscoveryMode

<RPActionProtocol>

RPAction

-status

-progress

double

-cancel

-waitForDone

-actionName

NSString

<RPBleConfigureListener>

RPBleConfigureListener

-onConfigureSuccess

- onConfigureFailure:(RPBleError)error

RPBleDevice

RPAbstractDevice

-canBeFoundWith:

DiscoveryModeDiscoveryMode

CBPeripheral *peripheral

CBPeripheral

RPBleWifiInfo

WiFiWiFi

NSString *ssid

WiFiSSID

NSString *pwd

WiFi

RPDeviceManager

RPAbstractDiscover

-initWithDelegate:

RPDiscoveryDelegate

-connect:withPort:

NSString*
int port

-connect:

DiscoveryModeMDNSRPAbstractDevice

-pair:withWifiInfo:withListener:

WiFiDiscoveryModeBLERPAbstractDevice

id< RPDiscoveryDelegate > delegate

Delegate

RPDeviceManager(Connect)

(nonnull id< RPSlamwarePlatformProtocol >) + connect:withPort:

IP*
NSString*
int port

(nonnull id< RPSlamwarePlatformProtocol >) + connect:

DiscoveryModeMDNSRPAbstractDevice

<RPDiscoveryDelegate>

-onStartDiscovery:

RPAbstractDiscovercanBeFoundWith:

-onStopDiscovery:

RPAbstractDiscovercanBeFoundWith:

-onDiscoveryStatusChanged:withStatus:withError:

RPAbstractDiscoverDiscoverStatusNSError

-onDeviceFound:withDevice:

RPAbstractDiscoverRPAbstractDevice

RPFirmwareUpdateInfo

-init

NSString

current

NSString

latest

NSString

releaseDate

NSString

brief

NSString

RPFirmwareUpdateProgress

- init

currentStep

unsigned int

totalSteps

unsigned int

currentStepProgress

unsigned int

currentStepName

NSString

RPHealthError

errorId

idint

errorLevel

BaseErrorLevel

errorComponent

BaseErrorComponent

componentErrorCode

int

errorCode

int

errorMessage

NSString

RPHealthInfo

hasWarning

hasError

hasFatal

errors

NSArray<RPHealthError*>

RPLaserPoint

-init

-initWithDistance:andAngle:

floatDistancefloatAngle

-initWithDistance:andAngle:andValid:

floatDistancefloatAnglebooleanValid

float distance

distance

float angle

angle

BOOL valid

RPLaserScan

-initWithLaserPoints:

NSArrayRPLaserPoint

-initWithLaserPoints:andPose:

NSArray<RPLaserPoint>RPPose

NSArray<RPLaserPoint*>* laserPoints

RPPose* pose

RPLine

-initWithStartPoint:andEndPoint:

RPPointF startPoint RPPointF endPoint

-initWithStartPoint:andEndPoint:andLineId:

RPPointF startPoint RPPointF endPoint int lineId

RPPointF* startPoint

RPPointF* endPoint

int lineId

line id

RPLocation

-init

-initWithX:andY:andZ:

xyz

float x

x

float y

y

float z

z

RPMMap

-initWithOrigin: andDimension:andResolution:andTimestamp:andData:

RPPointForiginRPSizedimensionRPPointFresolutionlongtimestampNSDatabyte

-initWithOrigin:andDimension:andResolution:andData:

RPPointForiginRPSizedimensionRPPointFresolutionNSDatabyte

-getMapArea

RPPointF* origin

RPSIZE* dimension

RPPointF* resolution

long timestamp

NSData* data

<RPMoveActionProtocol>

-remainingPath

-remainingMilestones

RPPath

- init

- initWithPoints:

pointsNSArray<RPLocation>

```
NSArray<RPLocation*>* points
```

RPPoint

```
-init
```

```
-initWithX:andY:
```

```
xy
```

```
int x
```

```
x
```

```
int y
```

```
y
```

RPPointF

```
-init
```

```
-initWithX:andY:
```

```
xy
```

```
float x
```

```
x
```

```
float y
```

```
y
```

RPPose

```
- init
```

```
-initWithLocation:
```

```
location
```

-initWithRotation:

rotation

-initWithLocation:andRotation:

locationrotation

-initWithX:andY:andZ:andYaw:andPitch:andRoll:

xyzyawpitchroll

-x

x

-setX:

X

-y

y

-setY:

Y

-z

z

-setZ:

Z

-yaw

yaw

-setYaw:

yaw

-pitch

pitch

-setPitch:

pitch

-roll

roll

-setRoll:

roll

RPLocation* location

location

RPRotation* rotation

rotation

RPRectangle

rectangle

-init

-initWithOrigin:andSize:

RPPointoriginRPSizesize

-left

-top

-right

-bottom

-empty

Size

-unionOf:

rectangleRPRectangledest

-intersectionOf:

RecatngleRPRectangledest

-area

intarea

RPPoint* origin

RPSIZE* size

size

RPRectangleF

rectangle

-init

- initWithOrigin:andSize:

RPPointFRPPointFsize

-left

-top

-right

-bottom

-empty

Size

-unionOf:

rectangleRPRectangleFdest

-intersectionOf:

RecatngleRPRectangleFdest

-area

RPPointF* origin

RPSIZEF* size

size

RPRotation

-init

-initWithYaw:

yaw

-initWithYaw:andPitch:andRoll:

yawpitch roll

float yaw

yaw

float pitch

pitch

float roll

roll

RPScheduleTask

int id

IDint

int hour

int

int minute

int

int year

int

int month

int

int day

int

int maxDuration

int

BOOL enabled

int weekRepeat

01248163264127.

NSString task

NSString

RPSize

size

-init

-initWithWidth:andHeight:

intint

int width

int height

RPSizeF

size

-init

-initWithWidth:andHeight:

floatfloat

float width

float height

RPSlamwarePlatformProtocol

-disconnect

- deviceId

ididNSUUID

- manufacturerId

idinteger

- manufacturerName

NSString

- modelId

idinteger

- modelName

NSString

- hardwareVersion

NSString

- softwareVersion

NSString

-availableMaps

SlamwareRPMMap

-getMapWithMapType:inArea:ofMapKind:

type	
rect	
kind	

-setMapWithMap:ofMapType:andMapKind:

SLAMWAREsetPose

Map	
Type	
Kind	

-getKnownAreaOfMapType:andMapKind:

Type	
Kind	

-clearMap

-location

-pose

-setPose:

pose	

-mapLocalization

-setMapLocalization:

V	SLAMWARE

-mapUpdate

SLAMWARESLAMWARE

-setMapUpdate:

V	SLAMWARE

-localizationQuality

-moveToLocations:andAppendingToCurrentTask:andSetAsMilestones:

Locs	
Appending	SLAMWARE
isMilestone	SLAMWAREtruefalse

- moveToLocation:andAppendingToCurrentTask:andSetAsMilestones:

Loc	
Appending	SLAMWARE
isMilestone	SLAMWAREtruefalse

- moveBy:

MoveAction.cancel()moveBy

direction	RPMoveDirection

-rotateToOrientation:

orientation	

-rotateBy:

offset	

-currentAction

-searchPathToLocation:

Location	

-batteryPercentage

0~100int

-batteryIsCharging

boolean

-dcIsConnected

boolean

-slamwareVersion

SLAMWARE SLAMWARENSString

-sdkVersion

SLAMWARE SDKSLAMWARE SDKNSString

-laserScan

-walls

-addWall:

Slamware

wall	

-addWalls:

Slamware

walls	

-clearWallById:

wallId	id

-clearWalls

SLAMWARE

-startSweep

-sweepSpot:

-goHome

-restartModuleWithMode:

SLAMWARE

mode	SLAMWRE

-setSystemParameterNamed:withValue:

name	
value	

-valueOfSystemParameterNamed:

name	

- getFirmwareUpdateInfo

- **startFirmwareUpdate**

- **getFirmwareUpdateProgress**

- **getScheduledTasks**

- **addScheduledTask:**

YESNO

task	

- **getScheduledTaskWithId:**

id	id

- **updateScheduledTask:**

task	

- **deleteScheduledTaskWithId:**

YESNO

id	id

- **getRobotHealth**

RPHealthInfo

- **clearRobotHealth**

errorCode	RPHealthErrorerrorCode

<RPSweepMoveActionProtocol>

-getAvailableSweepMaps

-getSweepMap:withArea:

-getSweepMapArea:

RPSlamwareEnums

RPMapType

RPMapTypeBitmap8Bit

Bitmap

RPMapKind

RPMapKindExploreMap = 0

RPMapKindSweepMap = 10

RPACTIONStatus

RPACTIONStatusWaitingForStart

RPACTIONStatusRunning

RPACTIONStatusFinished

RPACTIONStatusPaused

RPACTIONStatusStopped

RPACTIONStatusError

RPDiscoveryMode

RPDiscoveryModeBle

Ble

RPDiscoveryModeMdns

Mdns

RPRestartMode

RPRestartModeSoft

SDK

RPRestartModeHard

RPMoveDirection

RPMoveDirectionForward

RPMoveDirectionBackward

RPMoveDirectionTurnRight

RPMoveDirectionTurnLeft

RPBleError

RPBleErrorBluetooth

RPBleErrorDisconnected

RPBleErrorInvalidDevice

RPBleErrorInvalidSsid

SSID

RPBleErrorInvalidPassword

RPBleErrorConfigurationFailed

RPBleErrorWifiConnectionFailed

WiFi

RPBleErrorUnknown