

# KBSW180107 SLAMWARE SDK API Reference(ios)

iosSLAMWARE SDKAPI

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

RPFirmwareUpdateProgress	
RPHealthError	
RPHealthInfo	
RPLaserPoint	
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RPLine	
RPLocation	
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<RPMoveActionProtocol>	MoveAction
RPPath	
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RPSize	
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<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**

**-waitUntilDone**

**-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:**

NSStringipintport

**-connect:**

DiscoveryModeMDNSRPAbstractDevice

**-pair:withWifiInfo:withListenter:**

WiFiDiscoveryModeBLERPAbstractDevice

**id< RPDiscoveryDelegate > delegate**

Delegate

RPDeviceManager(Connect)

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

IPIPNSStringint

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

DiscoveryModeMDNSRPAbstractDevice

<RPDiscoveryDelegate>

**-onStartDiscovery:**

RPAbstractDiscovercanBeFoundWith:

**-onStopDiscovery:**

RPAbstractDiscovercanBeFoundWith:

**-onDiscoveryStatusChanged:withStatus:withError:**

RPAbstractDiscoverDiscoverStatusNSStringerror

**-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



## RPMap

**-initWithOrigin: andDimension:andResolution:andTimestamp:andData:**

RPPointForiginRPSizedimensionRPPointFresolutionlongtimestampNSDatadata

**-initWithOrigin:andDimension:andResolution:andData:**

RPPointForiginRPSizedimensionRPPointFresolutionNSDatadata

**-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

# RRectangle

rectangle

**-init**

**-initWithOrigin:andSize:**

RPointoriginRPSizesize

**-left**

**-top**

**-right**

**-bottom**

**-empty**

Size

**-unionOf:**

rectangleRRectangledest

**-intersectionOf:**

RecatngleRRectangledest

**-area**

intarea

**RPoint\* origin**

**RSize\* size**

size

# RRectangleF

rectangle

**-init**

**- initWithOrigin:andSize:**

RPointFRPointFsize

**-left**

**-top**

**-right**

**-bottom**

**-empty**

Size

**-unionOf:**

rectangleRPRectangleFdest

**-intersectionOf:**

RecatngleRPRectangleFdest

**-area**

**RPointF\* origin**

**RSizeF\* size**

size

**RRotation**

**-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**

SlamwareRPMap

**-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**

SLAMWARESLAMWARENSString

**-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

**RMapType**

**RMapTypeBitmap8Bit**

Bitmap

**RMapKind**

**RMapKindExploreMap = 0**

**RMapKindSweepMap = 10**

**RActionStatus**

**RActionStatusWaitingForStart**

**RActionStatusRunning**

**RActionStatusFinished**

**RActionStatusPaused**

**RActionStatusStopped**

**RActionStatusError**

**RDiscoveryMode**

**RDiscoveryModeBle**

Ble

**RDiscoveryModeMdns**

Mdns

**RPRestartMode**

**RPRestartModeSoft**

SDK

**RPRestartModeHard**

**RPMoveDirection**

**RPMoveDirectionForward**

**RPMoveDirectionBackward**

**RPMoveDirectionTurnRight**

**RPMoveDirectionTurnLeft**

**RPBleError**

**RPBleErrorBluetooth**

**RPBleErrorDisconnected**

**RPBleErrorInvalidDevice**

**RPBleErrorInvalidSsid**

SSID

**RPBleErrorInvalidPassword**

**RPBleErrorConfigurationFailed**

**RPBleErrorWifiConnectionFailed**

WiFi

**RPBleErrorUnknown**