

VERSION 2.0

Sentrax Device Manager User Guide



Simplifies and enhances the configuration & management of BLE beacon tags, available on both Android and iOS.



Contents

1.	Prer	equisites2		
2.	2. SDM Overview2			
2	2.1.	Home Screen3		
2	.2.	Scan Screen4		
2	.3.	Beacon Information Display5		
2	2.4.	List Sorting Options for Beacon Information6		
2	2.5.	iBeacon Field Filters7		
2	.6.	Connect with Beacon		
2	2.7.	Beacon Configuration Screen9		
2	.8.	Beacon Configuration Parameters10		
2	.9.	Bulk Configuration Screen11		
2	2.10.	Bulk Scan Screen		
2	2.11.	Connect with SBeacon13		
2	2.12.	File Storage Location for Saved Beacon Configuration14		
2	2.13.	File Storage Location for Saved Beacon Configuration15		
2	2.14.	Bulk Programming Screen16		
2	.15.	Start New Session17		
2	.16.	CSV File Selection		
2	2.17.	Programming initiation and Summary Display19		
2	.18.	Beacon Configuration List and Programming Status20		
2	.19.	Resuming Sessions		

sentrax

1. Prerequisites

- Make sure that the phone's location and Bluetooth is on
- Make sure android version is greater than 4 and iOS version is greater and equal to 11
- Make sure Devices (AoA beacons) are in connectable state.
- Make sure AoA beacons are only supported in Android version 5 to 9

2. SDM Overview

Sentrax Device Manager (SDM) Overview:

Sentrax Device Manager (SDM) is a powerful application designed to simplify and enhance the management of your PINIX beacons. Whether you're using Android or iOS, SDM provides a user-friendly experience that streamlines various aspects of beacon management:

SDM 2.0 saves you valuable time and effort. Its adaptive programming sessions cater to your workflow, ensuring a seamless experience. Plus, the ability to export Beacon Configuration Reports empowers strategic decision-making. Embrace the future of control and insightful management with SDM 2.0.



2.1. Home Screen

Pressing the 'Scan' button will navigate you to the beacon scanning screen, while selecting the 'Configure' button will lead you to the beacon configuration screen



Figure 1: Home Screen

sentrax

2.2. Scan Screen

To initiate scanning, simply press the 'Scan' button



Figure 2: Scan Screen



2.3. Beacon Information Display

The list of beacons is displayed with detailed information including their MAC address, Major and Minor identifiers, UUID (Universally Unique Identifier), TYPE, the timestamp of their last appearance ('Last Seen'), signal strength, and battery level



Figure 3: Beacon List



2.4. List Sorting Options for Beacon Information

Users have the capability to sort the list based on the following criteria: minor in ascending order, major in descending order, RSSI (received signal strength indicator) in ascending order, and RSSI in descending order.



Figure 4: Sortable Beacon List Criteria



2.5. iBeacon Field Filters

Filtering iBeacon Fields:

3:43 💽 🗘 🗘 ·	হি .াl 74% ট	3:43 📼 众 众	र्क्ति .ıll 74% 🖬
< sentrax	FILTER	< sentrox	STOP
RSSI	-120	T RSI	TE RSSI -
iBeacon		MAC: AB:CD:EF:FE:DC:BA MAJOR: 1200 MINOR: 10 UUID: 120A64C6-7EF9-4B37-8D52-41B7121D1C85 TYPE: Sentrax iBeacon LAST SEEN: Just now	-36 dBm
Major 0 to	0	MAC: F3:7D:52:BF:56:D5 MAJOR: 2000 MINOR: 3001 UUID: 56EF1F00-D8A8-4D5C-8B37-1E20375F2AE7 TVPE: Sentrax IReacon LAST SEEN: Just now	-39 dBm 3.5 V
Minor 0 to	0		

Figure 5: Filtering beacon



2.6. Connect with Beacon

At the point of interacting with the beacon, the user is prompted to input a password, which, for demonstration purposes, is set to '5285



Figure 6: Connect with beacon



2.7. Beacon Configuration Screen

After successfully entering the correct password, the user is directed to the Configuration Screen

3:39 🔄 🗘 🗘 -	🗟 .ຟ 74% ຊື
Configuration	•
MAC : F3:7D:52:BF:56:D5 Firmware : 0	
iBeacon Settings	
UUID	
Major Minor)
Calibrated RSSI iBeacon Interval ((sec)
sBeacon Settings	
sBeacon Interval (Sec)	
Eddystone TLM Settings	
LED Connecting	SLEEP
CANCEL	PLY

Figure 7: Beacon Configuration



2.8. Beacon Configuration Parameters

After establishing a successful connection, the status changes to 'Connected.' At this point, the user gains access to the current configuration settings applied to the Beacon. Users have the ability to perform the following actions:

- Test LED
- Activate Sleep Mode for the Beacon
- Apply New Configuration Changes to the Beacon

3:41 📼 🗘 🗘 🕐	र्ज्ञ .॥ 74% व			
< Configuration				
MAC : F3:7D:52:BF:56:D5 Firmware : 0				
iBeacon Settings				
UUID				
56EF1F00-D8A8-4D5C-8B37-1E20375F2AE7				
Major Minor				
2000 3001				
Calibrated RSSI iBeacon Interval (se	c)			
-60 0.3				
sBeacon Settings	•			
sBeacon Interval (Sec) 5				
Eddystone TLM Settings				
LED Connected	SLEEP			
CANCEL APPL	(

Figure 8: Post-Connection Actions: Testing, Sleep Mode, and Configuration Changes

sentrax

2.9. Bulk Configuration Screen

On the Bulk Configuration Screen, users have the following capabilities:

- Scan beacons to save their configuration in a CSV file.
- Program beacons to apply configurations from a CSV file.



Figure 9: List of Floors page



2.10. Bulk Scan Screen

To initiate the scanning process for beacons, the user can simply tap the 'Scan' button.

4:01 💽 🗘 l	Ĵ.	तिः .il	l 74% 🖻
< ser	ntrax		:
Y No Filter Selected		STO)P
S.No.	МАС	Major	Min
1	AB:CD:EF:FE:DC:BA	1200	10
2	F3:7D:52:BF:56:D5	2000	300
3	CB:7E:C5:7D:DD:F4	2000	200
4	AC:23:3F:2C:D4:B8	0	0
	Save		

Figure 10: Beacon Scanning Initiation



2.11. Connect with SBeacon

When the user taps on the 'More' buttons, a checkbox option becomes visible. Here's how it functions:

- If the checkbox is selected and the beacon is connectable, all configurations will be read from the beacons after establishing a connection.
- If the checkbox is unselected or the beacon is non-connectable, iBeacon configurations will be read from the beacons without the need to establish a connection.

4:01 4:01 4:01 4:01 4:01 4:01 4:01 4:01 Connect with SBeacon ▼ No Filter Selected SCAN			
S.No.	МАС	Major	Min
1	AB:CD:EF:FE:DC:BA	1200	10
2	F3:7D:52:BF:56:D5	2000	300
3	CB:7E:C5:7D:DD:F4	2000	200
4	AC:23:3F:2C:D4:B8	0	0
	Save		

Figure 11: Configuring Beacon Read Behavior with Checkbox Selection



2.12. File Storage Location for Saved Beacon Configuration

When the user taps the 'Save' button, all configurations of each beacon will be stored in a CSV file. This file is saved at the following location:

'Android/data/com.sentrax.device_manager/files/downloads/'



Figure 12: File Storage

2.13. File Storage Location for Saved Beacon Configuration

After Successful saving, a pop-up message will be displayed

4:02 🖻 🗘 🗘 · 🗇 🕤 🕯 🕯 🕄 🛱			74% 🖻
< ser	ntrox		:
Y No Filter Selected		SCAN	
S.No.	МАС	Major	Min
1	AB:CD:EF:FE:DC:BA	1200	10
2	F3:7D:52:BF:56:D5	2000	300
3	CB:7E:C5:7D:DD:F4	2000	200
4	AC:23:3F:2C:D4:B8	0	0
	File is exported		

Figure 12.1: File Export

Save



2.14. Bulk Programming Screen

This screen allows users to either commence a new session or resume a previous session.



Figure 13: Bulk Programming Screen



2.15. Start New Session

On the New Session screen, users can select a CSV file from file system.



Figure 14: Start New Session

sentrax

2.16. CSV File Selection

Choose the file that was saved from the scanning screen.



Figure 15: Select File



2.17. Programming initiation and Summary Display

After successfully loading the CSV file, a Summary will be displayed. If the 'Stop after each program' option is checked, programming will pause after programming each beacon. Upon tapping the 'Start' button, the app will transition to the Program Screen



Figure 16: Summary Display



2.18. Beacon Configuration List and Programming Status.

All beacon configurations loaded from the CSV file will be listed. The 'Status' column indicates the current programming status of each beacon:

'L' for LEFT (to be programmed)
'P' for PROGRAMMED
'E' for ERROR during programming
'N' for NOT FOUND during programming

Users have the option to both start and stop programming beacons as needed.

If the user stops during the programming process, the current session is saved locally and can be resumed from the Resume Session Screen.

"Export" button exports the beacons' configurations report to supported apps like WhatsApp & Gmail.



Figure 17: List of beacons with status



2.19. Resuming Sessions

In this section, users have the option to resume previously saved beacon programming sessions, picking up where they left off. If all beacons are successfully programmed during the session, the saved session will be automatically removed.

2:57 🚇 💿 🗟 🕄 🕄	3:03 🖾 🕥	ி.ய 91% 🖬
Configure - Program	Configure - Progra	im START
Resume Session Summary	Bulk Programming	
	S No. MAC	Status
	1 DB:72:8C:76:30:50	P P
	2 E5:44:EB:35:59:1B	L
File Name : Beacons Data-2023-08-03	3 D9:2D:1F:64:9E:FB	L L
14.57.07.976039.csv	4 CB:7E:C5:7D:DD:F-	4 L
Beacons: 4		· · · · · · · · · · · · · · · · · · ·
Programed : 1		
Left: 3 Beacons : 4		
Error: 0	Programed : 1 Left : 3 Error : 0 Not Found : 0	
Not Found : 0		
Stop after each program		
RESUME	Ехро	rt

Figure 18: Resume Session



Disclaimer:

This guide is intended for informational purposes only. If in doubt at any stage of the installation or operation of the locator/gateway always consult Sentrax's authorized dealer, distributor, or get in touch directly with Sentrax GmbH.

Given that Sentrax will continuously improve and develop the product, changes may be made to the information in this manual at any time without any obligation to notify any person of any such revisions or changes. Sentrax will make all possible efforts to secure the accuracy and integrity of this manual.

Note: Reproduction, transfer, distribution or storage of part or all the contents of this document in any form without the prior permission of Sentrax GmbH is prohibited.

