



# ATLAS User Guide

Prepared May 11, 2023



# 1. ATLAS User Manual

Welcome to ATLAS!

ATLAS is used to manage your gear and deployment coordinates.

Ashored values your privacy, but also recognizes the importance of ensuring gear is not placed on top of each other. To accommodate this, ATLAS will only display your gear to others if they are within 2000-meter radius of your drop point.

For assistance or feedback please reach out to [customer@ashored.ca](mailto:customer@ashored.ca)



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## 1.1. Section Overview

### [Account Registration](#)

Provides steps for sign up process.

### [Device Setup](#)

Tutorial for adding or removing gear from your account.

### [Device Management](#)

Explanations for device interactions.

### [Map and Gear Deployments](#)

Overview for how to deploy and recover gear.

### [Gear Events](#)

Records of past and present gear deployments.

### [Settings](#)

Additional feature selection and custom gear creation for your traps.



## 2. Account Registration

ATLAS requires you to register an email. This will be used to back up your account should your tablet need to be replaced or if you have multiple tablets in use.

All gear tied to this account will only be accessible through this account. This will prevent other customers from releasing your gear.

A screenshot of a mobile application's "Sign In" screen. The screen is light blue and features a central "Sign In" title. Below the title, there are two links: "No account?" on the left and "Make account" on the right. The main form consists of three rounded rectangular input fields: "Email", "Password" (with an eye icon for toggling visibility), and a "Sign In" button. Below the button is a link for "Forgot your password?". The top of the screen shows a status bar with the time "2:23 Thu., May 11", system icons, and a battery level of "100%".



## 2.1. Creating an Account




Tap the “Make account” button to start the account creation process.

A screenshot of a mobile application's "Sign Up" screen. The screen has a light blue background. At the top, the status bar shows the time "2:24 Thu., May 11" and various icons. The title "Sign Up" is centered at the top. Below the title, there is a link "Sign In" on the right. The main form consists of five rounded rectangular input fields: "Email", "Password", "Confirm Password", "Name", and "+1 Phone Number". The "Password" and "Confirm Password" fields have an eye icon on the right side, indicating a toggle for visibility. The "Phone Number" field has a dropdown arrow next to the "+1" prefix.



It is important that the email you register with is accessible. A confirmation code will be sent to the email provided.

Note: Your password must be at least 8 characters long. We recommend a mix of capital letters and numbers.



2:28 Thu., May 11    •

   100% 

 A confirmation code has been sent to e\*\*\*@a\*\*\*. 

## Enter your confirmation code

Email

example@ashored.ca

Verification Code

0/6

[Lost your code?](#)

[Send Code](#)

[Confirm](#)


[Back to Sign In](#)




Click the "Send Code" and no-reply@ashored.ca will send a confirmation code to the email registered.

Your verification code 🔍

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 no-reply@ashored.ca ↩️ ⏪ ⏩ ⋮  
To: example@ashored.ca Thu 2023-05-11 2:46 PM

Your verification code is 133827



↩️ Reply ⏩ Forward

Note: It might be in your spam inbox.



Now you can sign in as shown below:

## Sign In

No account?

[Make account](#)

Email

example@ashored.ca

Password

.....



Sign In

[Forgot your password?](#)






## 2.2. Signing Out

If you need to sign out so you can switch accounts, go to Settings and click Sign Out.

### Settings

#### Account


 +11234567


 example@ashored.ca

 66 Example St. Example Ville, A1B A1B

 Sign out

#### Custom Gear

 Add custom trap

 View added custom traps



Map



Device



Events



Mesh

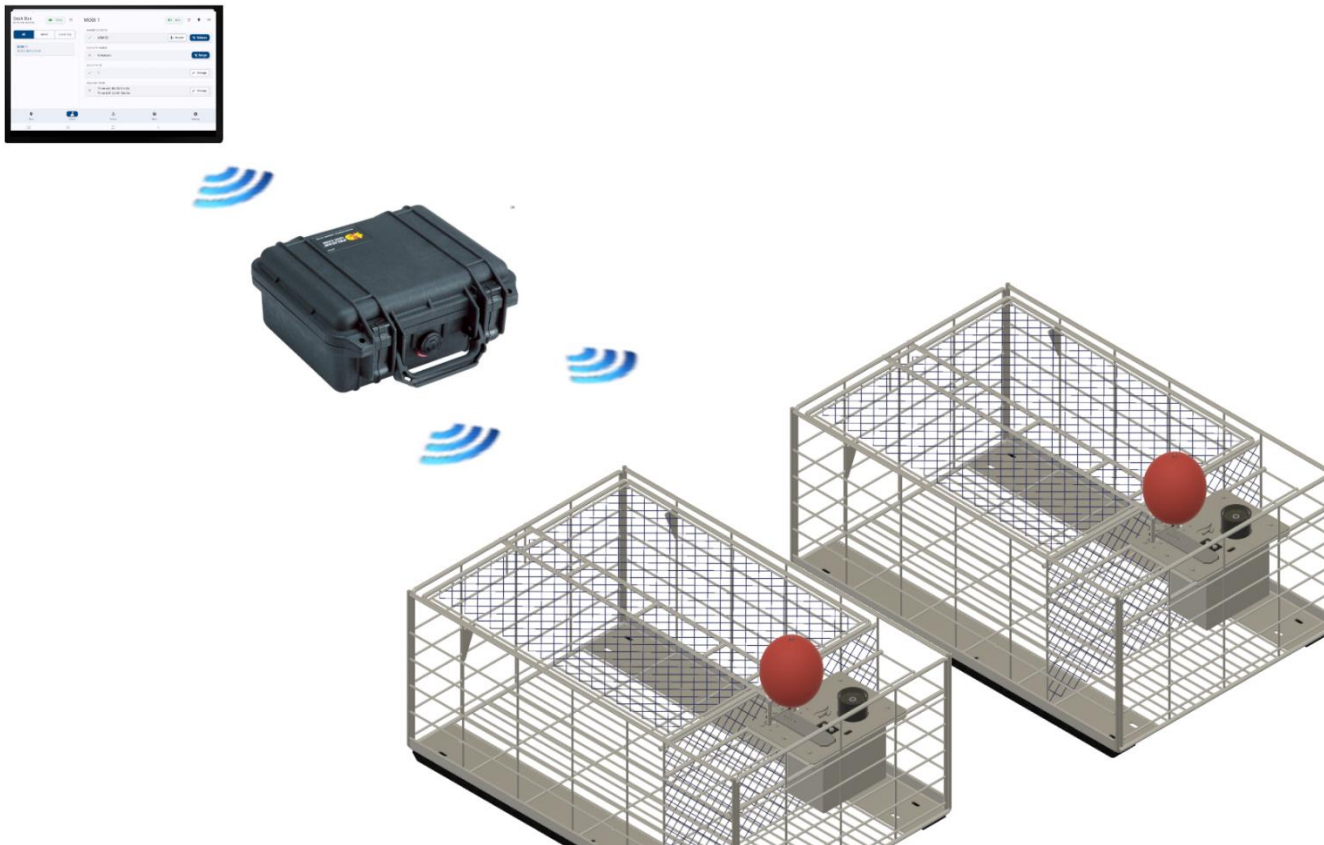


Settings

### 3. Device Setup

The MOBIs require the Deck Box to communicate with the tablet. Currently each Deck Box can support up to 28 MOBIs at a time. (Ashored will be introducing a Bluetooth Relay device for expanding past that, if only acoustics are needed, the Deck Box can support up to 250 MOBIs).

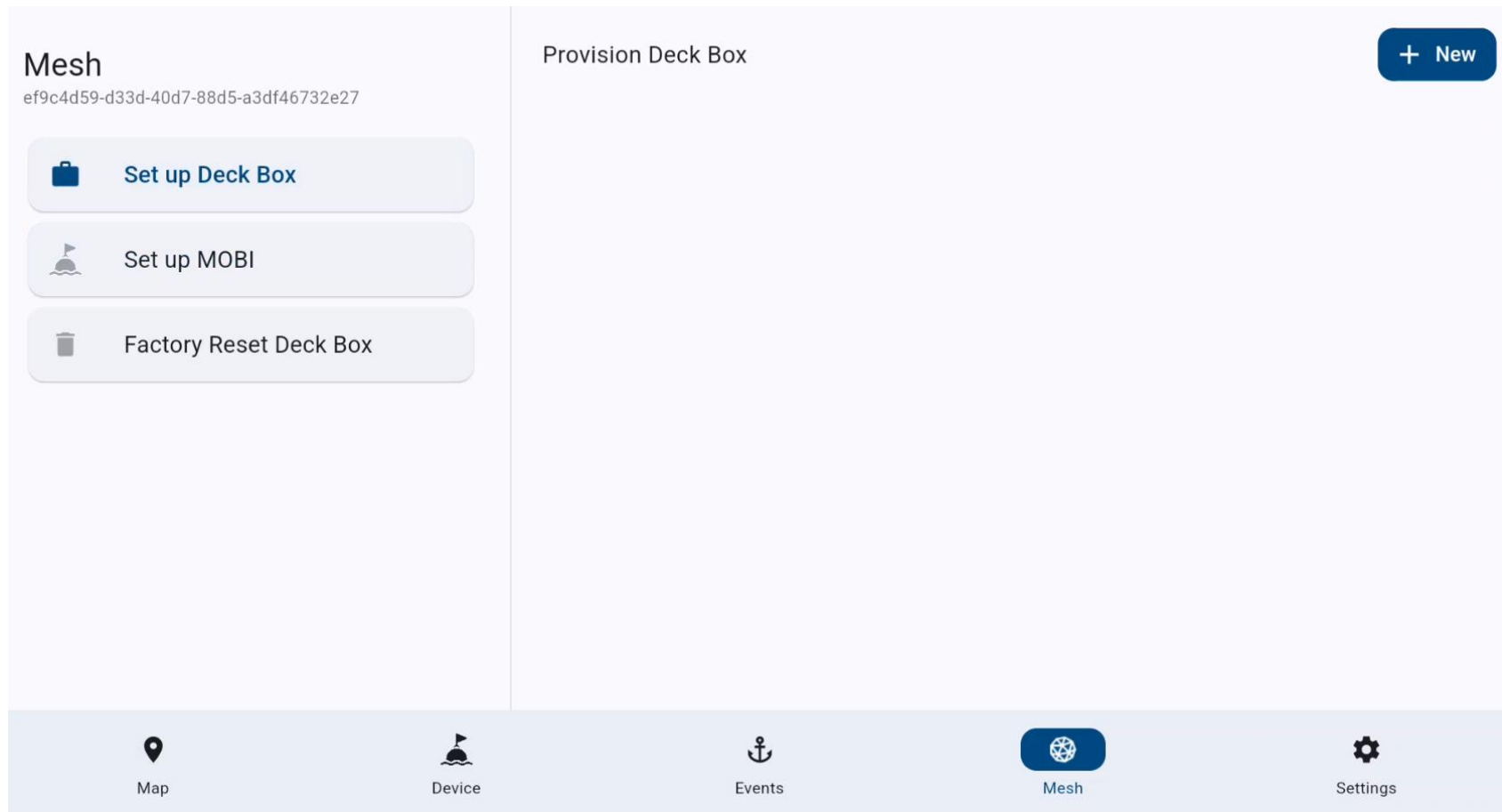
The mesh is used to communicate with the MOBIs from the Deck Box. This allows active communication for all connected devices. Provisioning is the method of giving unique passwords to each device.





### 3.1. Deck Box Binding

The Mesh menu allows you to add new gear or reprovision gear should they become factory reset. Binding will register devices with your account.





+ New


To begin, click the “New” button in the top right corner. This will begin searching for unprovisioned Deck Boxes.

Once added, it will appear in the provisioning menu. Click “Provision” to start the process. If your device is not showing up, see section 3.3.



Searching for unprovision DECKBOX

Note: DECKBOX that are already set up before will not show here

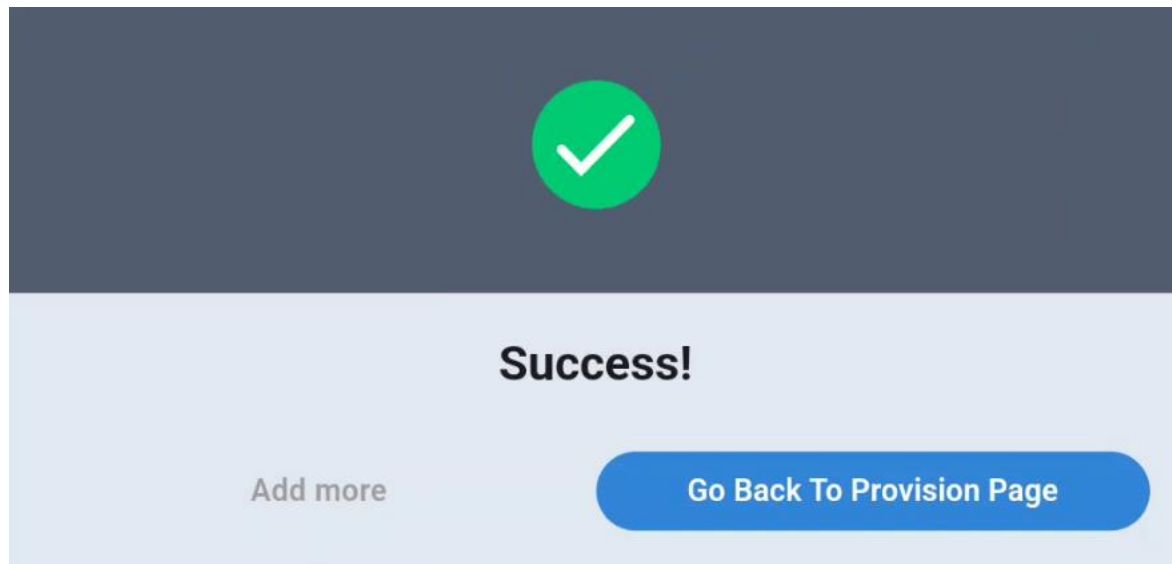
 D1:27:D9:18:02:3E

Exit

Add



Click on the MAC address of the Deck Box (This will match the ID plate on the Deck Box).





Click the “Go Back to Provision Page” button to continue the process.

Tap on the “Provision” button to start the process.

The screenshot shows the Ashored Mesh Provision Deck Box interface. On the left, under the heading "Mesh" (ID: ef9c4d59-d33d-40d7-88d5-a3df46732e27), there are three buttons: "Set up Deck Box" (with a briefcase icon), "Set up MOBI" (with a flag icon), and "Factory Reset Deck Box" (with a trash can icon). The main area is titled "Provision Deck Box" and features a "+ New" button in the top right. A single "Deck Box" is listed with a "MAC address" of "D1:27:D9:18:02:3E". Below the MAC address are two buttons: "Remove" and "Provision". At the bottom, a navigation bar contains five icons: "Map", "Device", "Events", "Mesh" (which is highlighted), and "Settings".



## ← Provisioning



- 18 **Updating mesh data**  
Updating mesh data on the device. ✓ Success
- 17 **Setting boat ID**  
Setting boat ID on the device. ✓ Success
- 15 **Connecting UART**  
Connecting UART to the device. ✓ Success
- 14 **Binding publication**  
Binding publication to the device. ✓ Success
- 13 **Binding subscription**  
Binding subscription to the device. ✓ Success
- 12 **Binding model app**  
Binding model app to the device. ✓ Success

Provision complete!

Once completed (Step 18) the Deck Box is fully provisioned.



## 3.2. MOBI Binding

In the “Set up MOBI” menu, click the “New” button in the middle of the screen. If your device is not showing up, see section 3.4.

The screenshot displays the Ashored mobile application interface. On the left, a sidebar menu is titled "Mesh" with the ID "ef9c4d59-d33d-40d7-88d5-a3df46732e27". It contains three buttons: "Set up Deck Box" (with a briefcase icon), "Set up MOBI" (with a flag icon), and "Factory Reset Deck Box" (with a trash can icon). The main content area is titled "Select a Deck Box to provision a MOBI" and features a "Deck Box" card with the MAC address "D1:27:D9:18:02:3E". Below this is a "Provision" section. Two blue "+ New" buttons are positioned on the right side of the main area. At the bottom, a navigation bar includes icons for "Map", "Device", "Events", "Mesh" (which is highlighted), and "Settings".






Searching for unprovision MOBI

Note: MOBI that are already set up before will not show here

 F1:9E:C6:D5:F5:5B

 CC:BC:38:F2:16:CC

 E3:99:F3:55:AD:4E

 C0:6D:01:56:E5:95

Exit

Add

Select the MAC Address of the device being registered. The MAC address can be found on the bottom side of the MOBI. Click the Add button to bind to your account before provisioning.

Note: If you can't figure out which device has what MAC address placing the tablet close to the MOBI should show full signal strength bars.



## Mesh

ef9c4d59-d33d-40d7-88d5-a3df46732e27



Set up Deck Box



Set up MOBI



Factory Reset Deck Box

Select a Deck Box to provision a MOBI

+ New

### Deck Box

MAC address **D1:27:D9:18:02:3E**

Provision

+ New

### MOBI

Network ID **1**

MAC address **CC:BC:38:F2:16:CC**

Remove

Provision



Map



Device



Events



Mesh




Settings

To begin provisioning the MOBI tap on the Deck Box that is already provisioned.




## Mesh

ef9c4d59-d33d-40d7-88d5-a3df46732e27

 Set up Deck Box

 Set up MOBI

 Factory Reset Deck Box

Select a Deck Box to provision a MOBI

+ New

### Deck Box

MAC address **D1:27:D9:18:02:3E**

Provision

+ New

### MOBI

Network ID **1**

MAC address **CC:BC:38:F2:16:CC**

Remove

Provision



Map



Device



Events



Mesh




Settings

Now tap “Provision” to start the process.

Note: The network ID is what the MOBI will display as. In this case, Network ID 1 will mean MOBI 1.

← Provisioning !

18 Updating mesh data ✓ Success



### Provisioning Complete

You can now use your device

OK

14 Binding publication to the device. ✓ Success

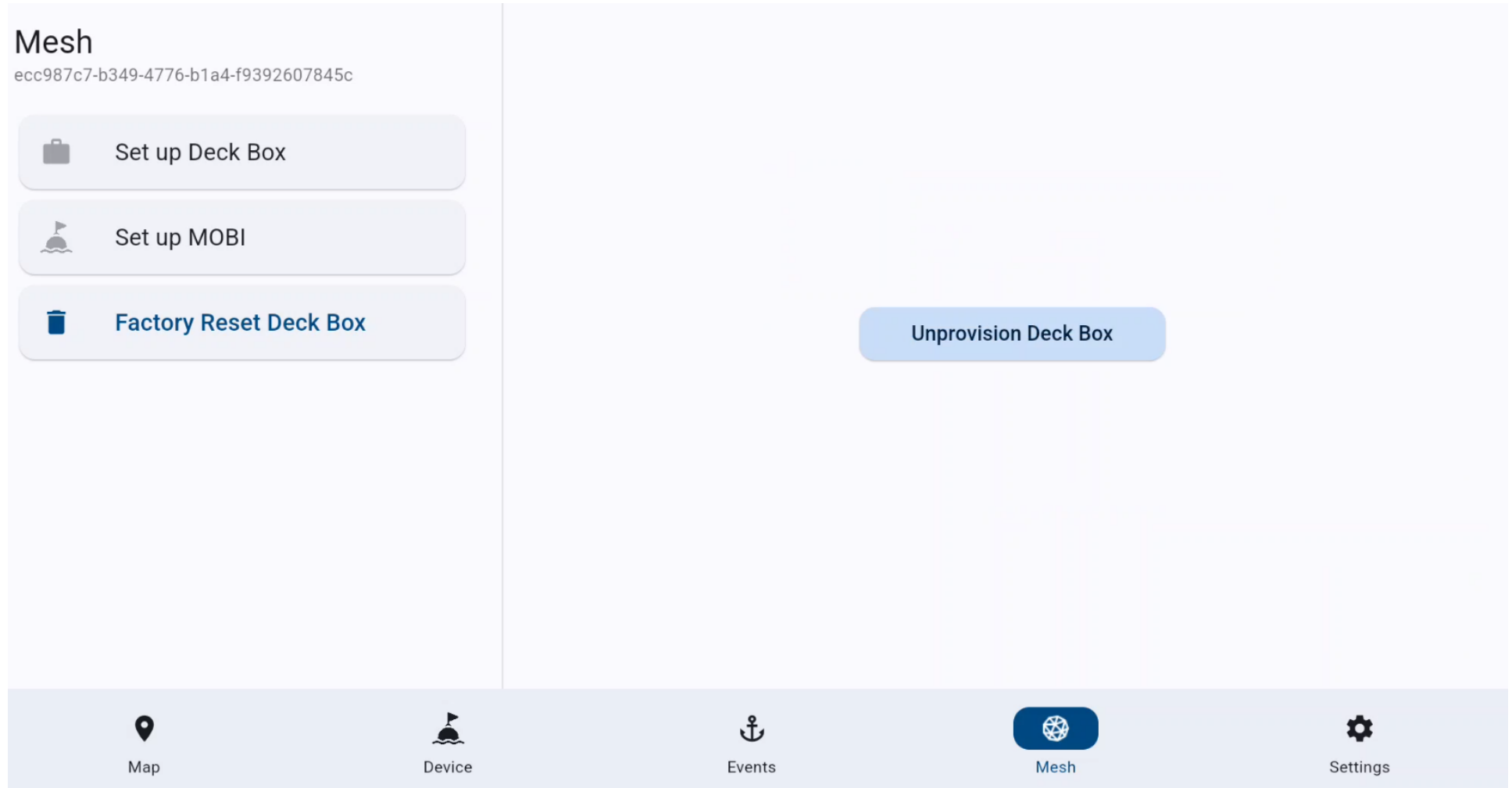
13 Binding subscription  
Binding subscription to the device. ✓ Success

Provision complete!



### 3.3. Factory Resetting the Deck Box

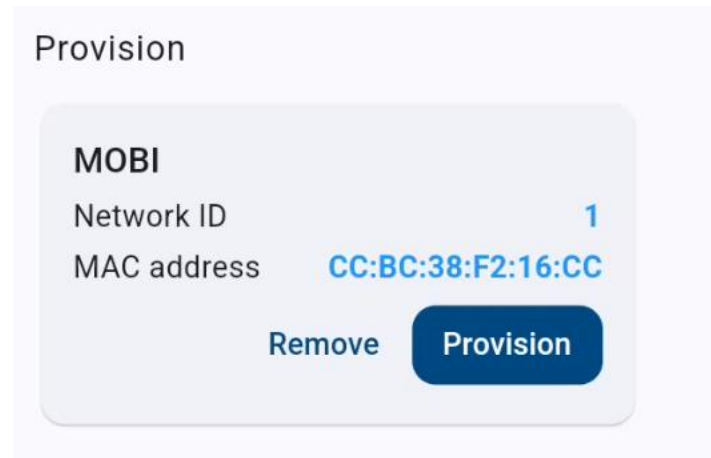
You can remove a Deck Box by tapping the “Factory Reset Deck Box”. This will mean that your Deck Box will no longer be able to communicate with the MOBIs.





### 3.4. Factory Resetting the MOBIs

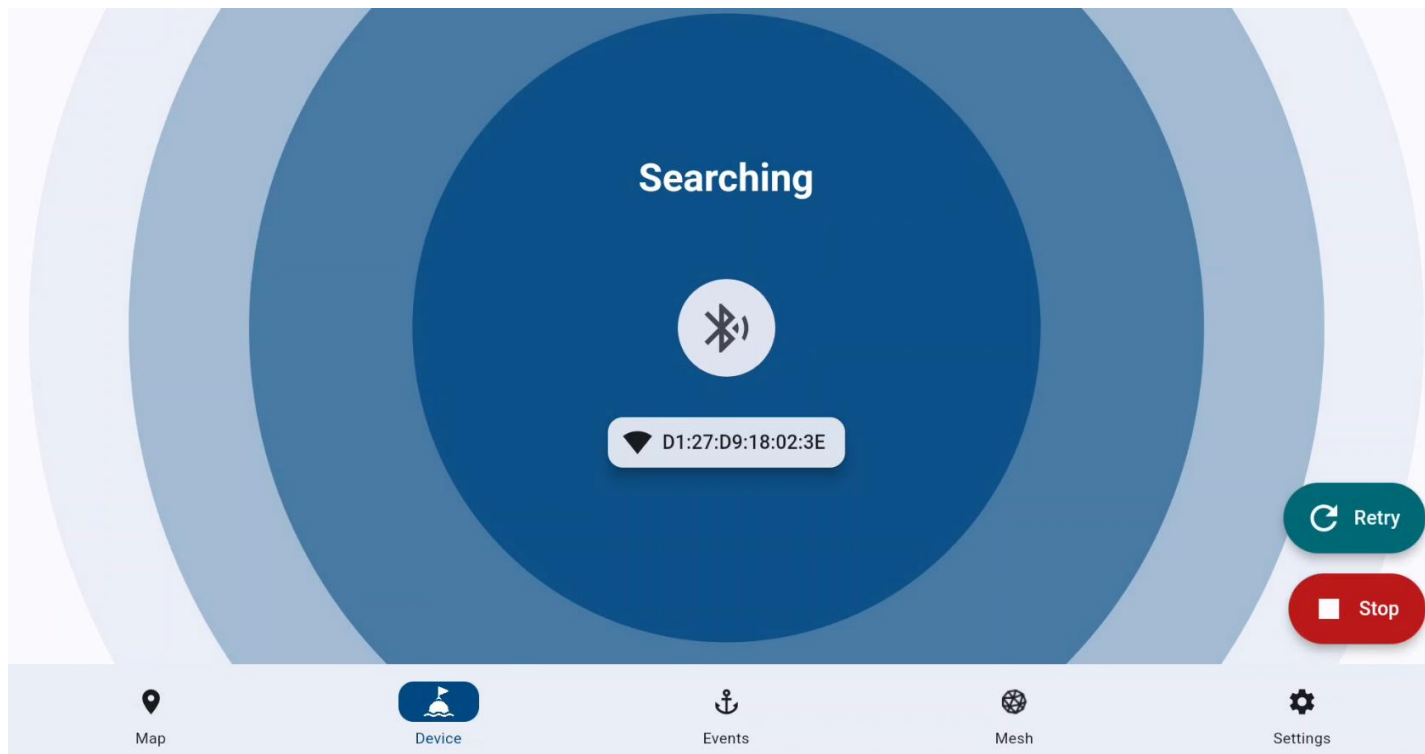
To unbind a MOBI, swipe a magnet on and off the top sensor 7 times (The unit must be disarmed). The LED will turn pink. Allow 30 seconds from the first swipe to activate. The MOBI will reset and now will be unbonded. You can unregister it from your account by tapping the “Remove” button below.



## 4. Device Management

### 4.1. Connecting

The Device page can be used to manage the Deck Box and MOBIs. The Start button will trigger the tablet to search for the Deck Box. You can identify your Deck Box by the MAC address attached to the lid of the device. Tap the MAC Address that matches and the tablet will begin connecting.





## 4.2. Deck Box Menu

This screen allows you to view the Deck Box's battery life and interact with the MOBIs.

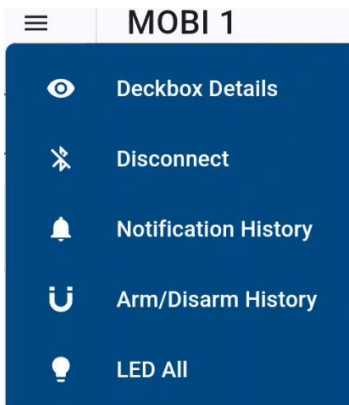


A green battery icon with a full charge level, labeled "100%".

The top left portion displays the connected Deck Box's battery.



The option will display further details about the Deck Box. Additionally, the firmware on the Deck Box can receive firmware updates through this menu.



Deck Box Details: Displays the firmware version of the Deck Box.

Disconnect: This will disconnect from the Deck Box

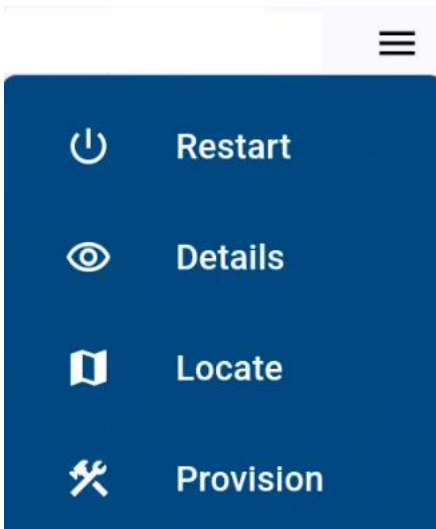
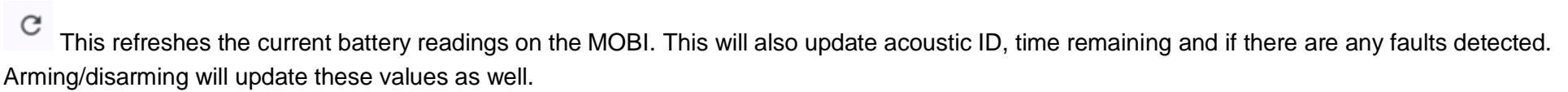
Notification History: Recent notifications can be viewed here.

Arm/Disarm History: If trying to identify a MOBI, arm it and this will display the event.

LED All: This will make the LEDs of all MOBIs start to blink. This is useful for identifying unprovisioned MOBIs.

### 4.3. MOBI Management

The MOBI menu on the right side of the page will display it's current state here.

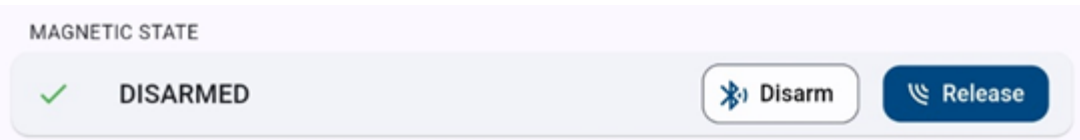


Restart: This will cause the MOBI to restart to the initial state.

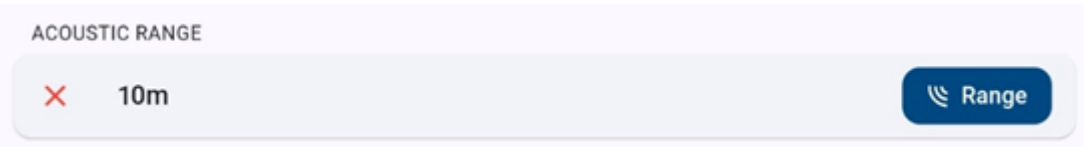
Details: This can be used to view current firmware revisions.



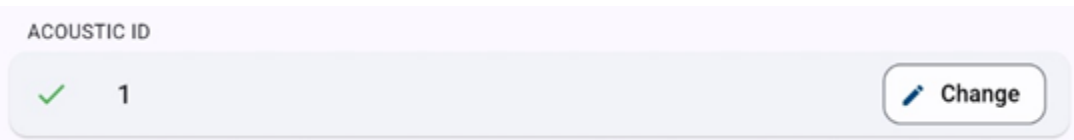
Locate: This will jump you to the map page at its current location (if deployed).



This shows if the magnet is currently attached. In the above case, the magnet is removed. The Disarm button will trigger a release over Bluetooth. The Release button will trigger an acoustic release for the selected MOBI. \*WARNING\* Be sure to read safety concerns while handling hydrophones.



The range function will trigger a status update that will range the MOBI based off the MOBI's acoustic response time.



The Acoustic ID can either be unique or the same as another MOBI in case you have a trawl and want both MOBIs to surface.



## 4.4. Release Timer

The release timer can be used to set a timed release. When the timer expires, the MOBI disarms. The “Auto set timer?” checkbox will set the release timer to automatically re-use the previous timer value used for rapid deployments.

RELEASE TIMER

✓ Time set: 0d 0h 0m 0s  
Time left: 0d 0h 0m 0s

Change

Select Release Timer

Days Hours Minutes Seconds

|   |   |   |    |
|---|---|---|----|
| 0 | 1 | 0 | 0  |
| 1 | 2 | 1 | 5  |
| 2 | 3 | 2 | 10 |
| 3 | 4 | 3 | 15 |
| 4 | 5 | 4 | 20 |

May 11, 2023 5:16 PM

Auto set timer?

Cancel Confirm

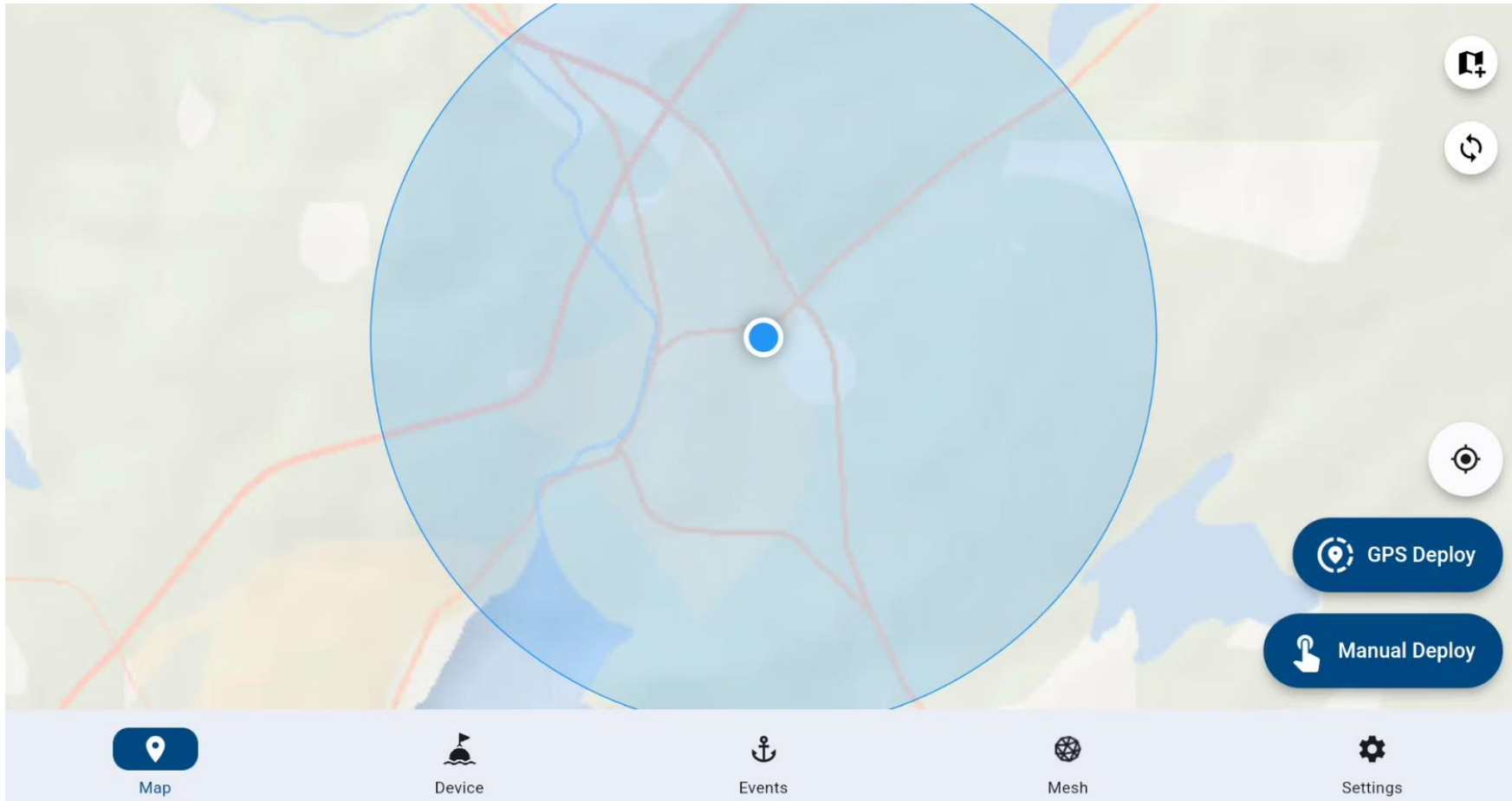
RELEASE TIMER

✓ Time set: 0d 1h 0m 0s  
Time left: 0d 0h 59m 50s

Change

## 5. Map and Gear Deployments

Deployments can be made on this screen. There are two methods of deploying gear: GPS Deploy and Manual Deploy.



The blue circle in the center of the screen indicates your current position. The shaded blue circle is the active deployment zone. Attempting to deploy outside of this zone will not be entered.



To zoom in and out, move your fingers together pinching inwards. To zoom out, pinch outwards. The GPS Deploy button will auto enter the deploy coordinates with your active location. Manual Deploy allows you to draw the line by marking points on the map manually.



The cross hair in the bottom right corner of the map will snap the map to your current location.



This will deploy with your current location.



This will deploy with a location selected from the map.

## 5.1. Deploying Gear

### 5.1.1. [MOBI Gear Deployment](#)

The MOBI window will deploy depending on the selected MOBI you have registered to your account. You can see the status of the MOBI before deploying to ensure that the device is operational.

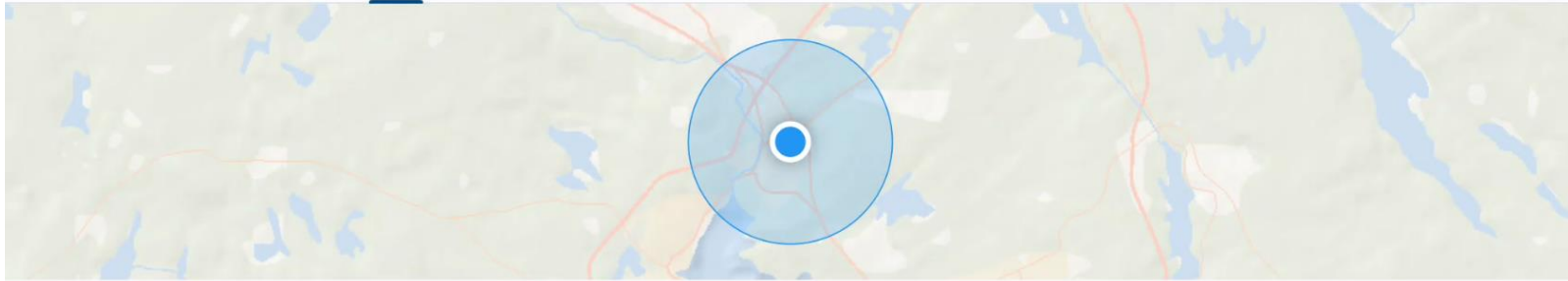


← New Gear Event

Deploy

MOBI

Custom Trap



STATUS CHECK

**MOBI 1**

CC:BC:38:F2:16:CC

46%

✓ **Magnetic State**  
ARMED

✓ **Acoustic ID**  
1

🕒 **Timer**  
Time set: 0d 1h 0m 0s



Map



Device



Events

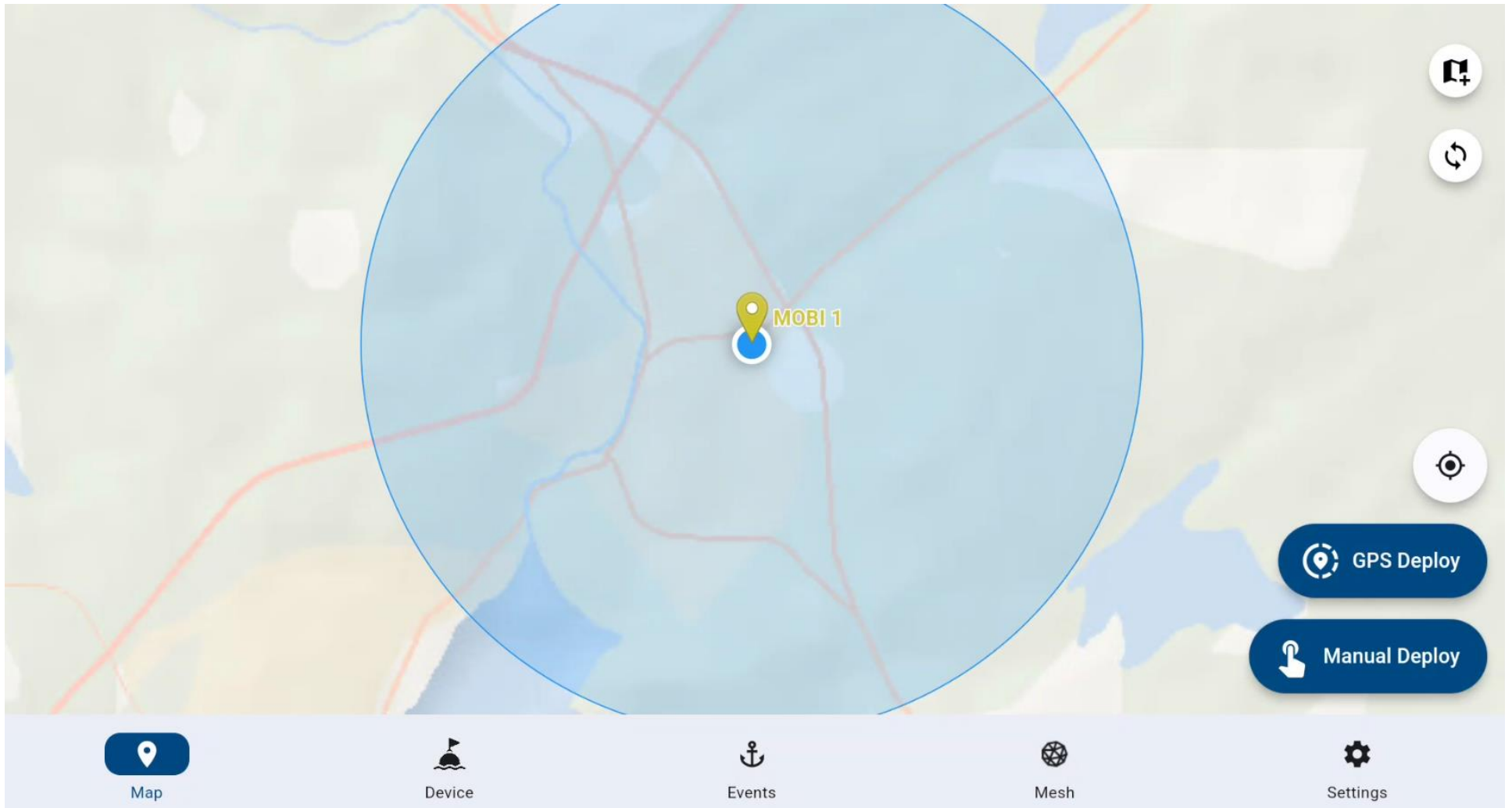


Mesh



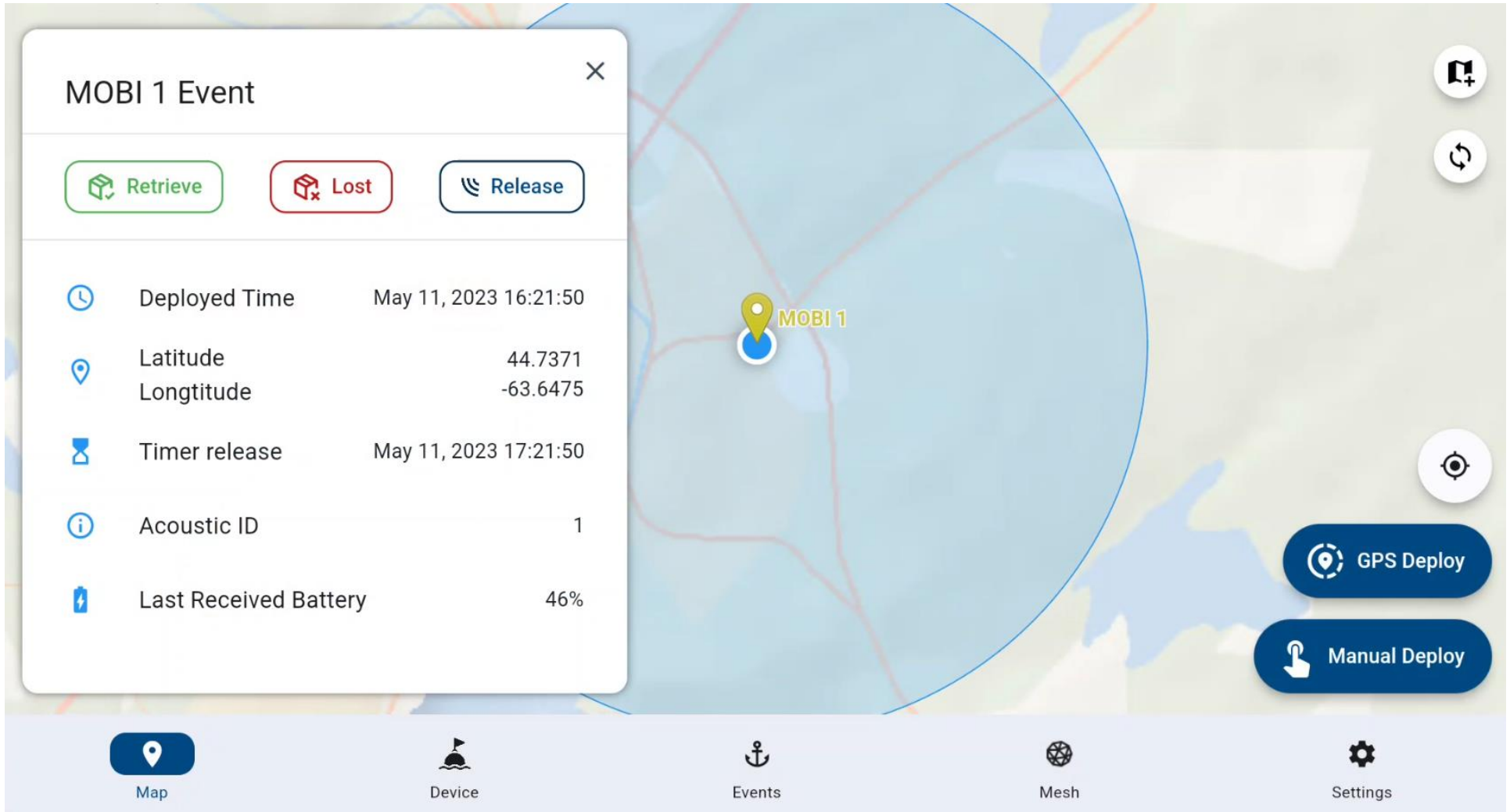
Settings

When ready to create the marker, tap “Deploy” in the top right corner.



To retrieve the MOBI, tap on the marker to open the device deployment window.





The screenshot displays the Ashored mobile application interface. A map shows a device location marked with a yellow pin labeled "MOBI 1". A popup window titled "MOBI 1 Event" is open, providing details about the device's status and deployment. The popup includes three action buttons: "Retrieve" (green), "Lost" (red), and "Release" (blue). Below these are several data points:

| Icon | Property              | Value                 |
|------|-----------------------|-----------------------|
| 🕒    | Deployed Time         | May 11, 2023 16:21:50 |
| 📍    | Latitude              | 44.7371               |
| 📍    | Longitude             | -63.6475              |
| 🕒    | Timer release         | May 11, 2023 17:21:50 |
| 📄    | Acoustic ID           | 1                     |
| 🔋    | Last Received Battery | 46%                   |

At the bottom of the popup, there are two large blue buttons: "GPS Deploy" and "Manual Deploy". The main application interface includes a bottom navigation bar with icons for "Map", "Device", "Events", "Mesh", and "Settings".

 **Release**

Release will send the release command.



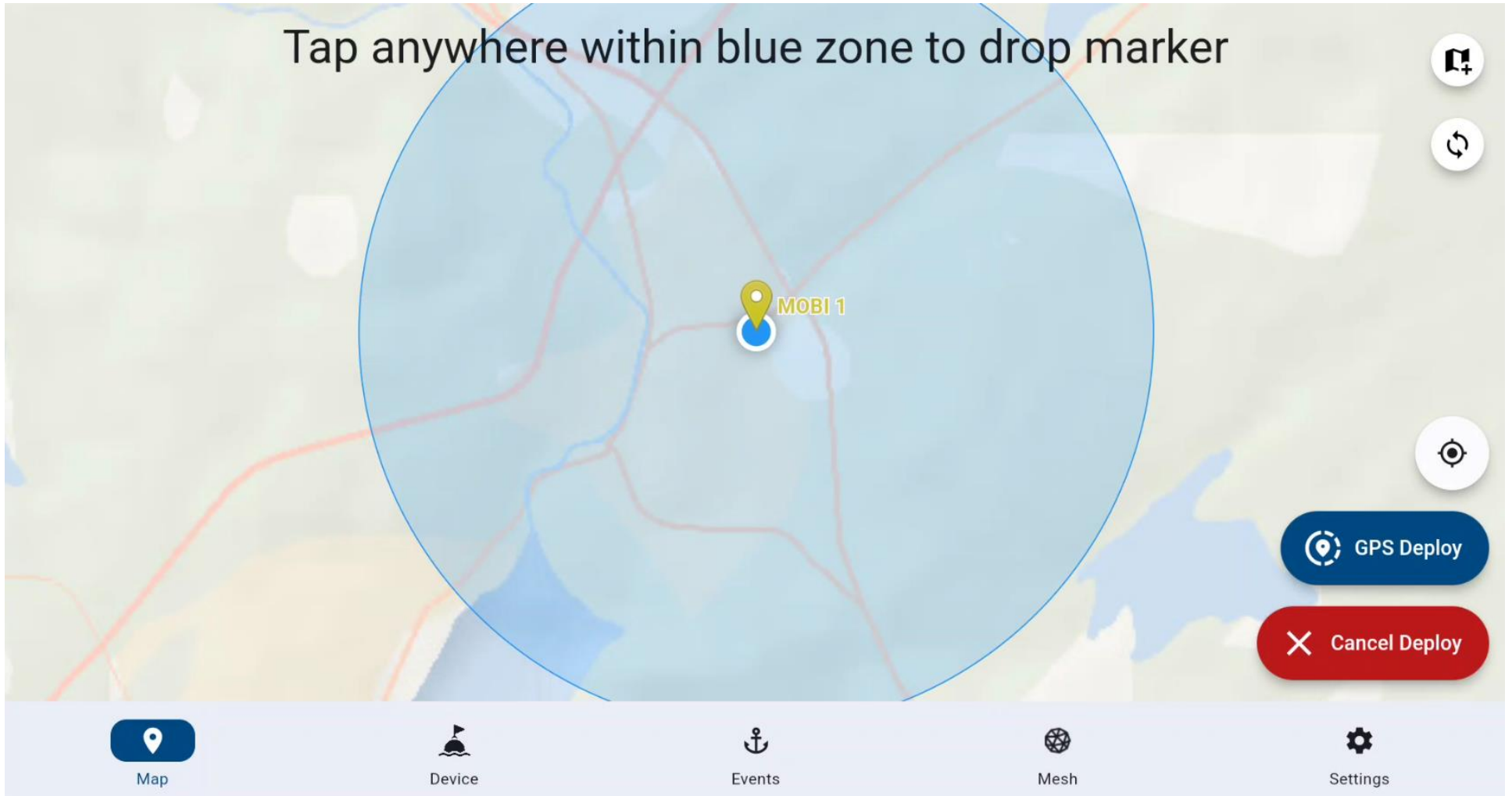
Retrieve will clear the marker.



Lost will mark the gear as lost and unresponsive. This will be used to report to enforcement agencies.

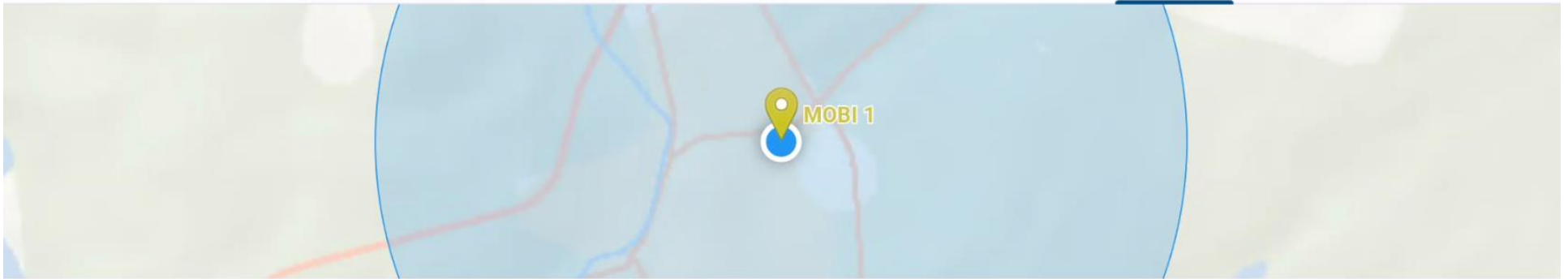
### 5.1.2. Custom Trap Deployment

To create a custom trap marker, you must add it in the settings page (See section: Settings > Adding Custom Traps). The Custom Trap window will prompt you to tap the location within the shaded blue circle.



MOBI

Custom trap



SELECT CUSTOM GEAR

✓ Trap 1

BIND TO EXISTING EVENT TO MAKE A TRAWL (LEAVE EMPTY IF SINGLE EVENT)

MOBI 1



Map



Device



Events



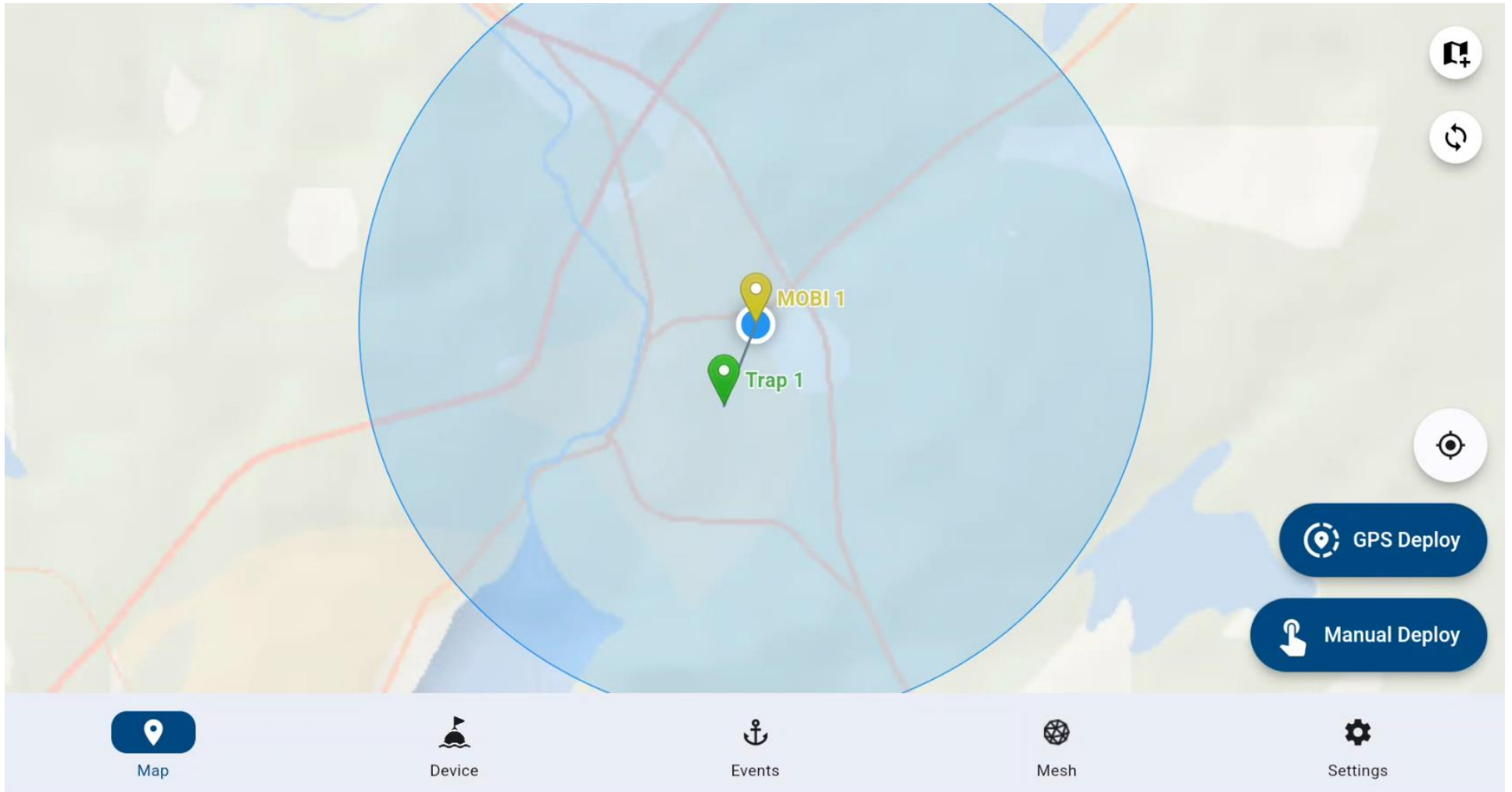
Mesh



Settings



If you are deploying a single trap, leave the drop-down box unselected. If you are binding to an already deployed device, select it in the drop-down box. This will draw a line between the points indicating a trawl.








The custom gear has its own recovery window which can be opened by tapping on the marker.


## Manual Deployment ×

---

 Retrieve  Lost

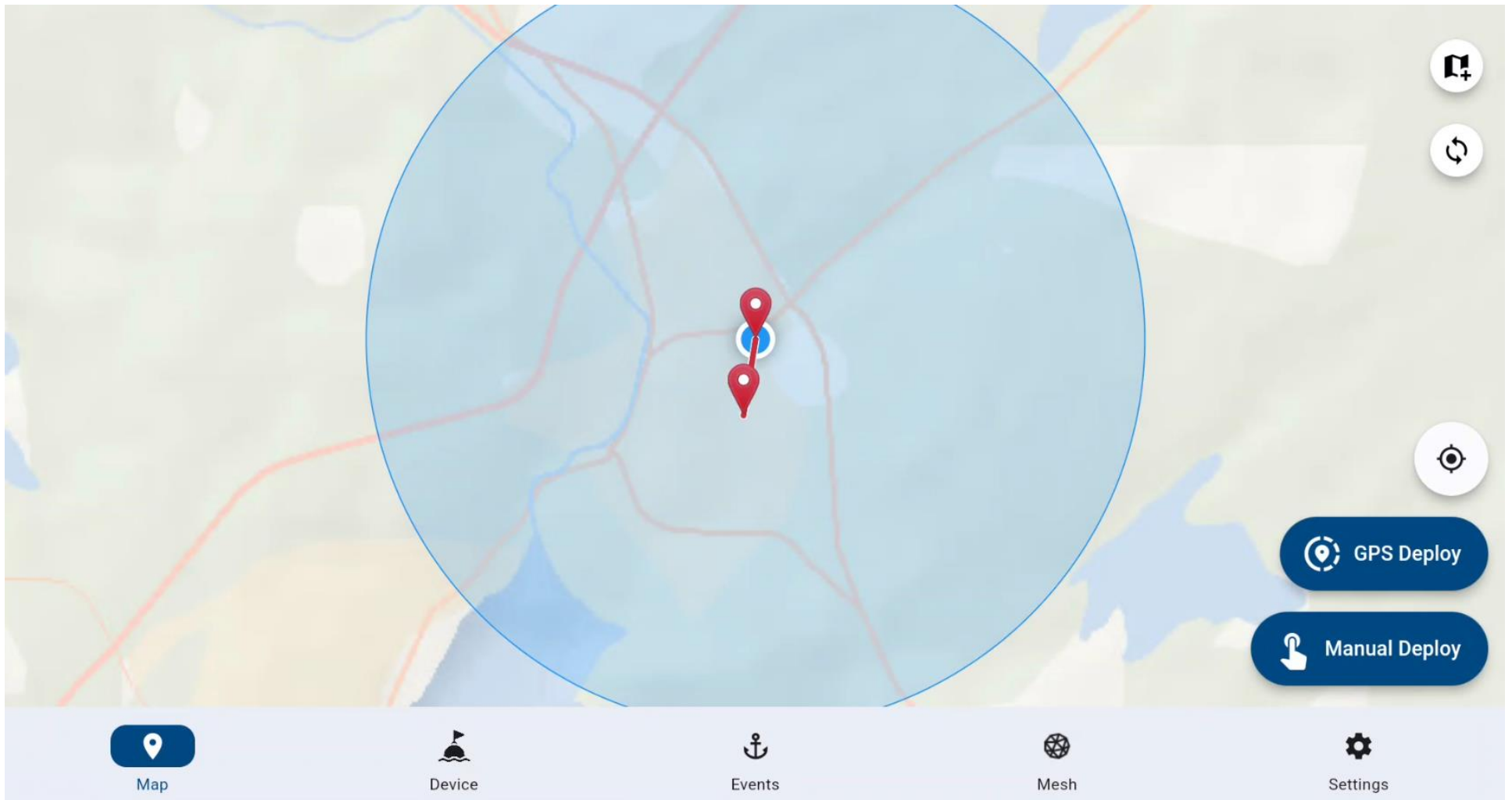
---

 Deployed Time      2023-05-11 16:31:19.994

 Latitude: 44.7334436783532  
Longitude: -63.64958881210097

## 5.2. Viewing Nearby Gear

Other users in the area will see your gear displayed as red icons. This is only visible if you are within the 2000-meter range.



## 6. Gear Events

A record of deployments can be viewed in the Events tab.

### Gear Events

[Export](#)






| Gear   | ↑↓ | Status    | ↑↓ | Deployed Time           | ↑↓ | Recovered Time          | ↑↓ | Deployed At          | ↑↓ | Recovered At         | ↑↓ |
|--------|----|-----------|----|-------------------------|----|-------------------------|----|----------------------|----|----------------------|----|
| Trap 1 |    | Active    |    | 11 May 2023<br>16:38:20 |    |                         |    | 44.7336,<br>-63.6483 |    |                      |    |
| Trap 1 |    | Recovered |    | 11 May 2023<br>16:31:19 |    | 11 May 2023<br>16:33:00 |    | 44.7334,<br>-63.6496 |    | 44.7372,<br>-63.6476 |    |
| Trap 1 |    | Recovered |    | 11 May 2023<br>16:30:39 |    | 11 May 2023<br>16:31:04 |    | 44.7306,<br>-63.6584 |    | 44.7371,<br>-63.6476 |    |
| MOBI 1 |    | Active    |    | 11 May 2023<br>16:21:50 |    |                         |    | 44.7371,<br>-63.6475 |    |                      |    |



Map



Device



Events



Mesh



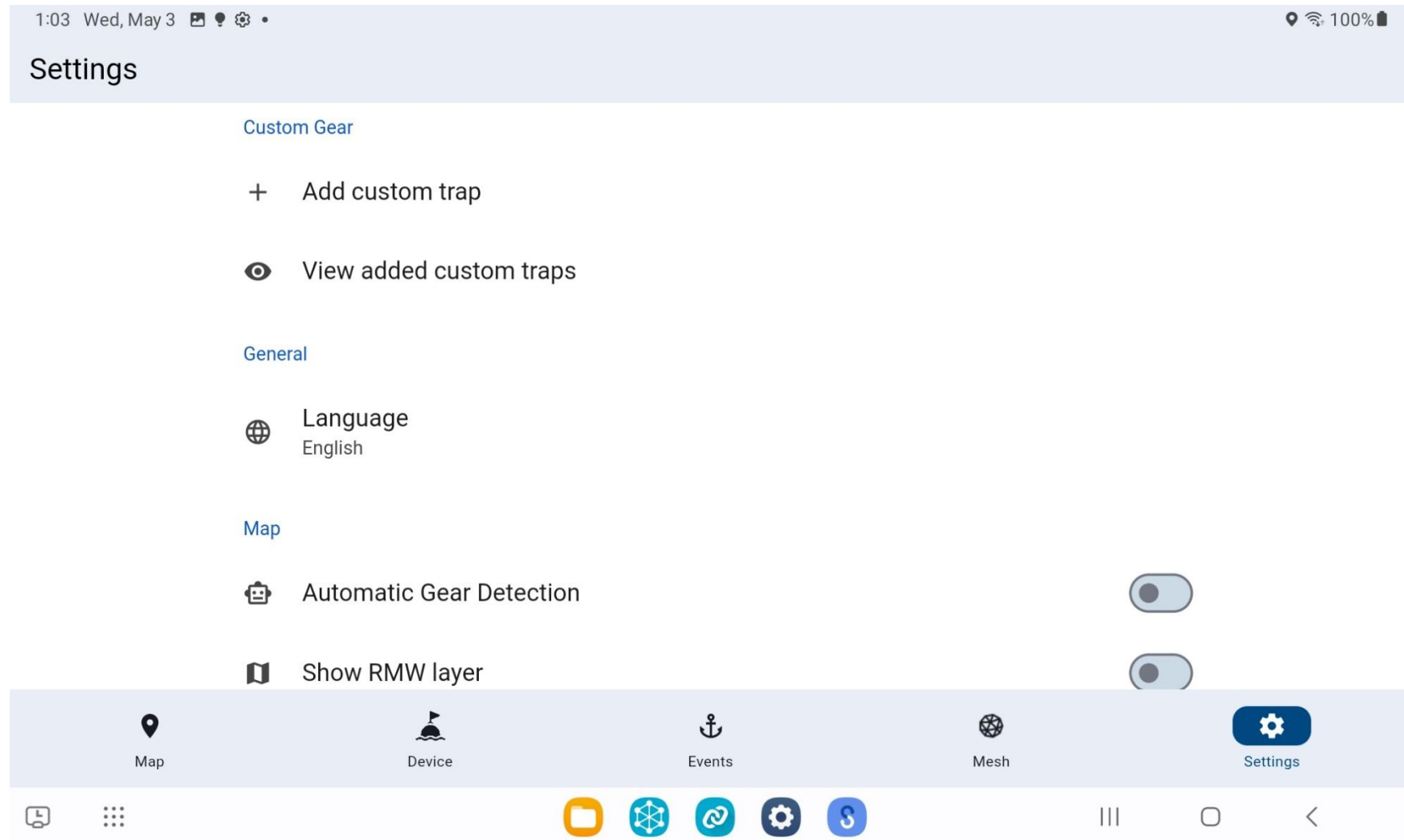
Settings





## 7. Settings

The Settings page can be used to add custom traps for manual deployments and enable additional features.





## 7.1. Adding Custom Traps

If deploying traditional traps, they can be managed here.

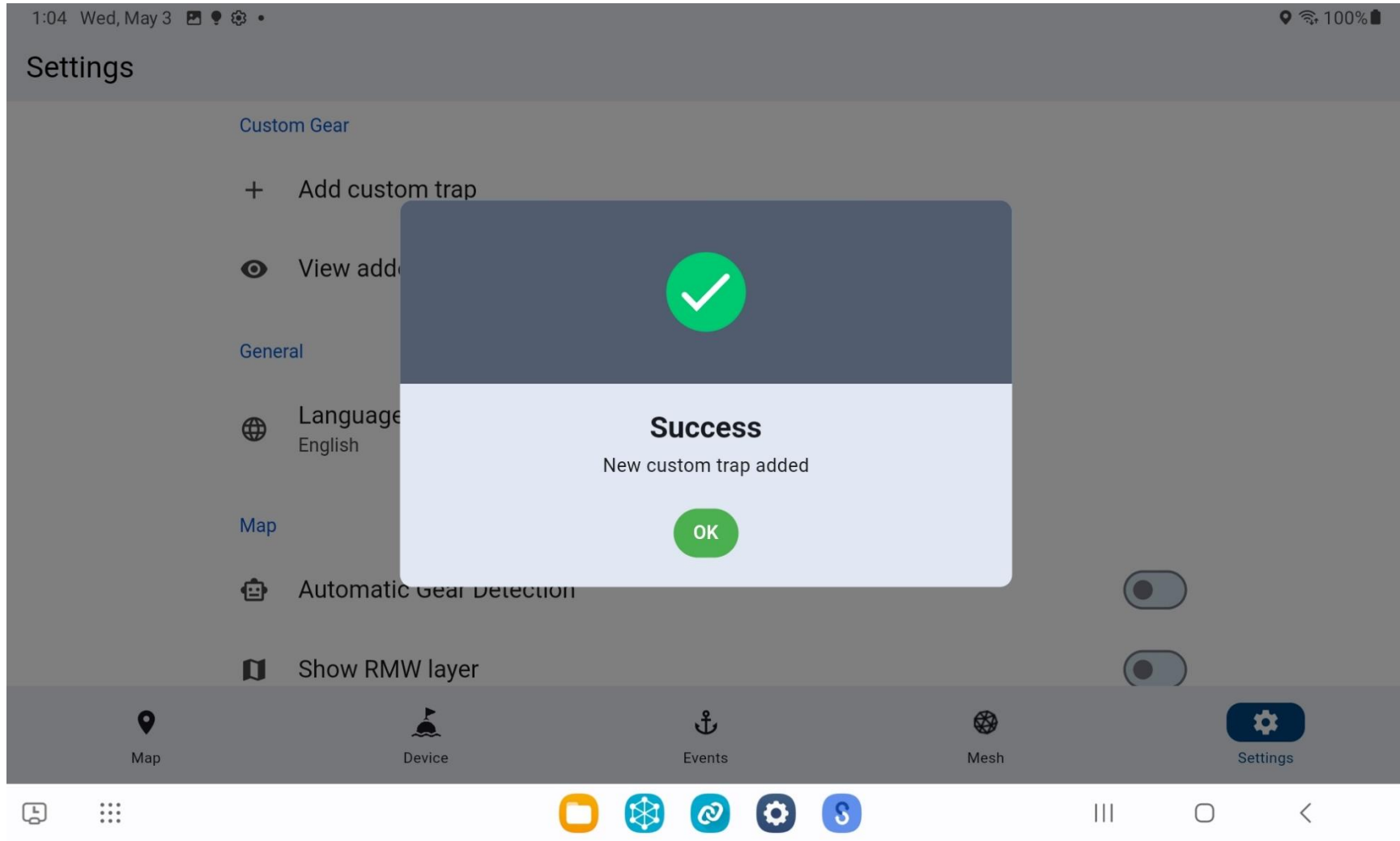
### Custom Gear

- + Add custom trap
- 👁 View added custom traps



Adding custom traps will prompt you to enter a custom name for the trap and an optional description.

A screenshot of the Ashored mobile application's settings screen. The background is a dark grey menu with options like 'Account', 'Custom Gear', and 'View added custom traps'. A white dialog box titled 'Add new gear' is centered on the screen. It contains two text input fields: the first contains 'Trap 1' and the second contains 'Wooden trap'. At the bottom right of the dialog are two buttons: 'Exit' in red text and 'Add' in a blue button.



### 7.1.1. [Custom Trap View](#)

Custom Traps that have been added can be viewed here.

← Custom Traps Export

Search Date range Clear filter


| Name   | ↑↓ | Description | ↑↓ | Last Update             | ↑↓ |
|--------|----|-------------|----|-------------------------|----|
| Trap 1 |    | Wooden trap |    | 11 May 2023<br>16:27:24 |    |

Map Device Events Mesh Settings



## 7.2. Additional Settings

### General

 Language  
English

### Map

-  Automatic Gear Detection
-  Enable RMW layer
-  Enable Earth Ranger layer

**Automatic Gear Detection Toggle:** The Deck Box can monitor the connected state of the MOBIs. If they go overboard, this will automatically mark the deployment coordinates. This feature is currently still in beta mode.

**Show RMW layer:** The RMW is the Ropeless Manufacture Workgroup.

**Show Earth Ranger layer:** Earth Ranger is another shared location service that allows users to synchronize with Earth Ranger users shared drop points.

All participating companies of either RMW or Earth Ranger will have their gear positions synced with this service and allow other users to view your dropped positions as well. We will only other users gear within a 2-kilometre radius of your current position.