

A bright orange and black remote-operated vehicle (ROV) is shown underwater, illuminated by a blue light source. The ROV has a rounded, somewhat spherical body with various sensors and cameras attached. It is positioned in the center-left of the frame, facing towards the right. The background is a dark blue underwater environment with some faint structures and bubbles.

**Quick Start Guide
Seasam ROV**

 notilo plus

Content

I - STARTING UP THE DRONE

- Prepare your equipment
- Connecting the battery
- Connecting the WiFi Reel to the drone
- Starting up the equipment
- Connecting to the WiFi Reel
 - Delivery after September 2021
 - Delivery before September 2021
- Connection of the controller
- Choice of configuration
- Checking the connections
- Seasam Control
- Set up and calibration

II - USING SEASAM

- Launching the drone
- Piloting tools
- Taking a picture or recording a sequence
- Recording annotations (Flags)
- Cleaning and storage

Content

III - RETRIEVING DIVES AND DATA FROM THE DRONE

- Retrieving dives and downloading data
- Basic configuration
- Drone Configuration
- Retrieving dives recorded in follow the diver
- Retrieving dives from the drone to the application
- Retrieve dives and download data

IV - SAVING DATA TO THE TABLET

- Retrieve your dives from the Seasam Control application to the tablet

V - IMPORT DATA TO NOTILO CLOUD

- Import your dives and data from Seasam Control App to Notilo Cloud
- Upload your dives from Seasam Control App to Notilo Cloud

I - STARTING UP THE DRONE

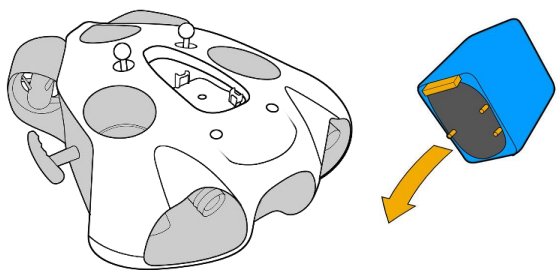


I - STARTING UP THE DRONE

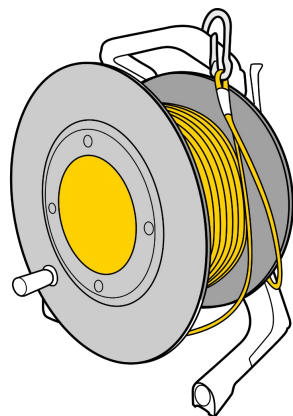
Prepare your equipment

The day before the operation, charge all devices.

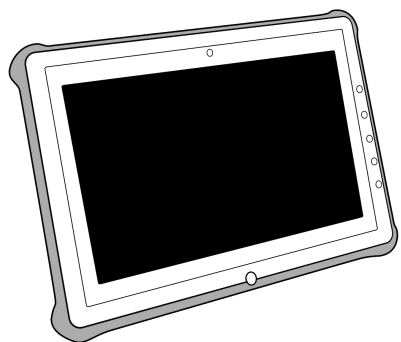
ROV Mode



Battery for SEASAM Drone



WiFi Reel



Control Unit



Controller



The Navigator can replace the WiFi Reel in ROV mode, please check the Cartography documentation to see how to connect it with the drone.

	Charging Time	Usage Time	Waterproof
M Batteries	2,5 hours	1-2 hours	NO
L Batteries	5 h (2,5 h*)	2-3 hours	NO
XL Batteries	10 h (3,5 h*)	3-6 hours	NO
WiFi Reel	6 hours	8 hours	Rain resistant
Control unit	3 hours	15 hours	Rain resistant
Controller	2 hours	14 hours	NO

*Require a specific charger

I - STARTING UP THE DRONE

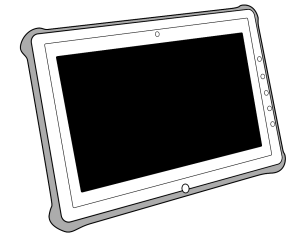
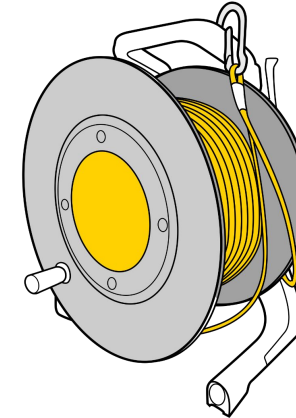
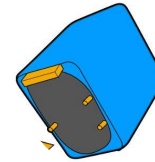
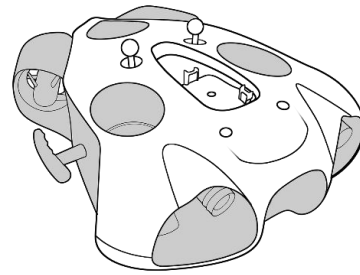
Prepare your equipment

The day of the operation, verify the check list to avoid forget anything

ROV Mode

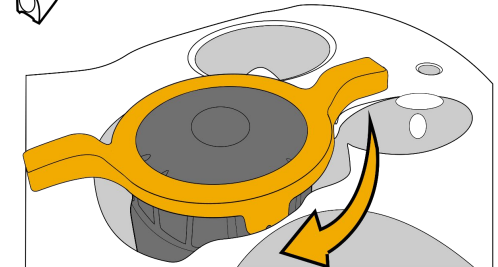
Main equipment

- Seasam Drone
- Battery for the drone
- Opening tool for battery compartment
- WiFi Reel
- Controller
- Control unit
- Underwater remote control or Magnet to start the drone



Additional

- Grease for the O-ring
- Towel to dry the drone
- Allen key for the float/weight for the drone (according to your battery)

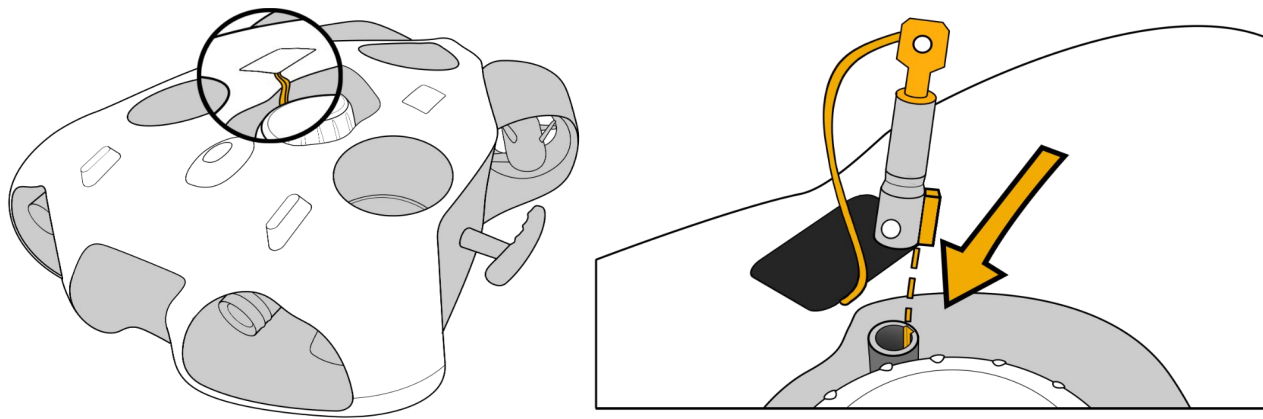


I - STARTING UP THE DRONE

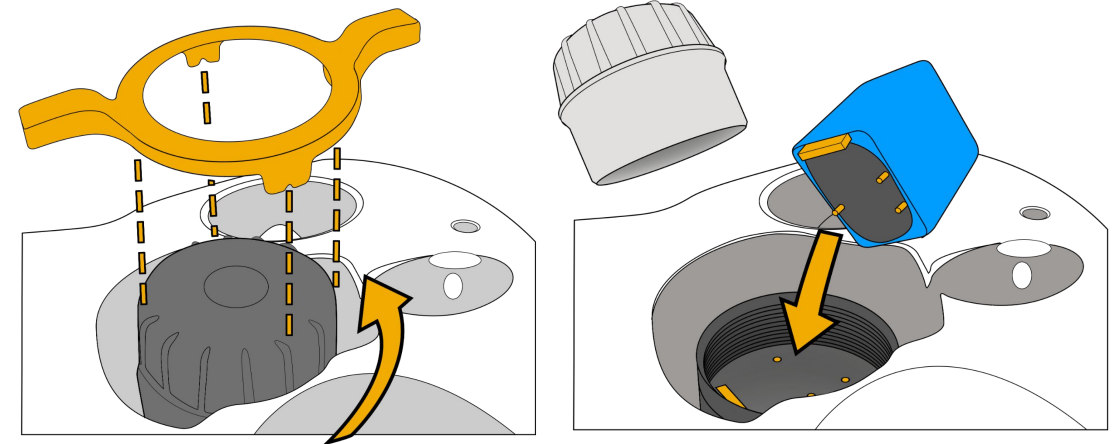
Connecting the battery

Ensure that the emergency stop on the underside of the drone is properly inserted.

Make sure that the safety guide is aligned in the right direction



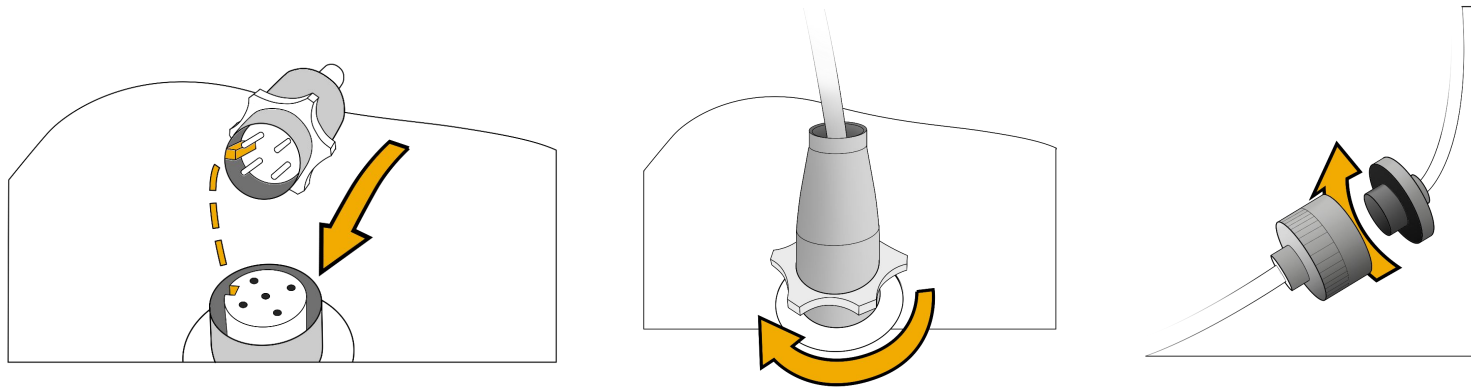
Make sure the battery compartment is properly closed.
Use the dedicated tool.



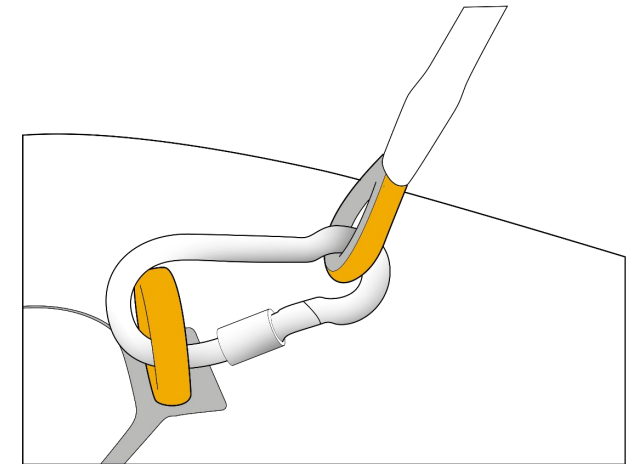
I - STARTING UP THE DRONE

Connecting the WiFi reel to the drone

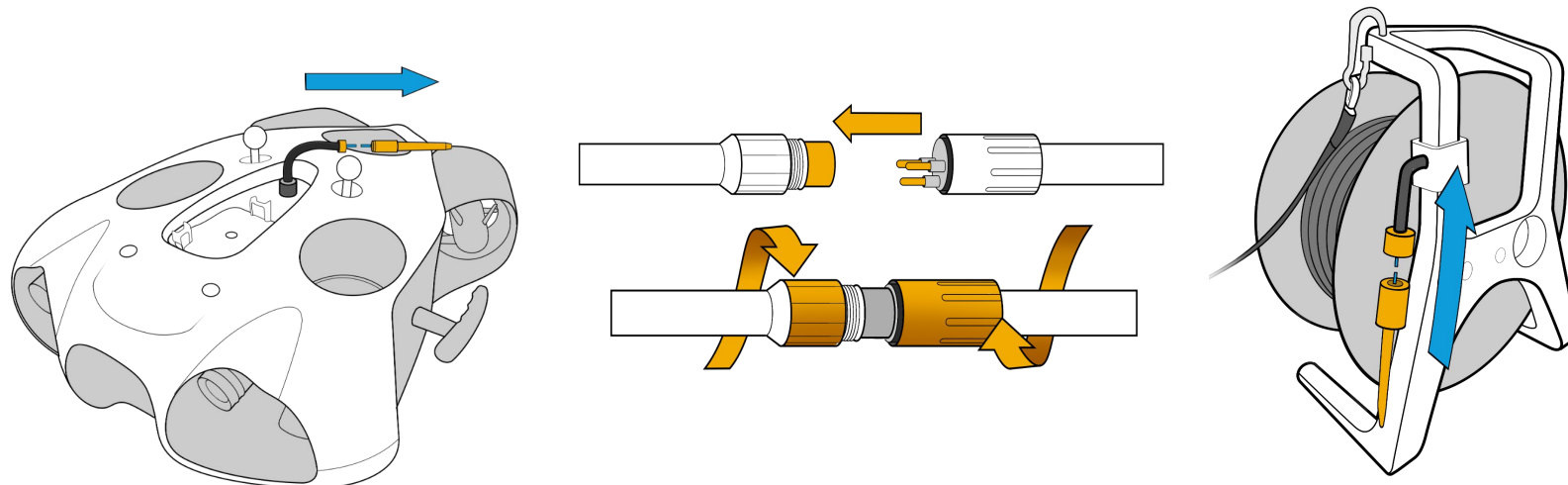
Standard Connector



Attach and lock the carabiner on the drone to secure the Drone

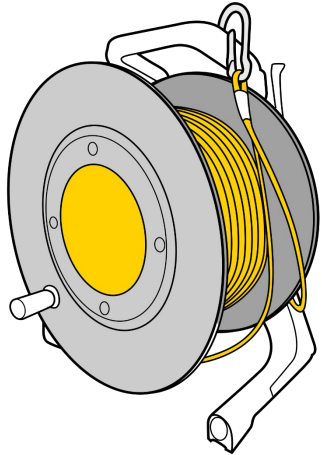


Subconn Connector

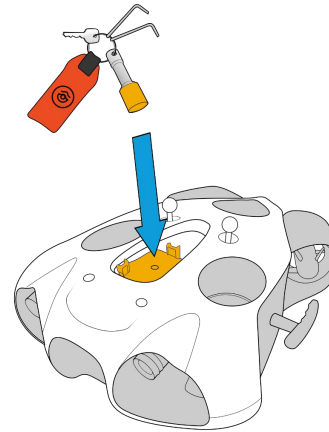


I - STARTING UP THE DRONE

Starting up the equipment



Press the "On" button once. After several seconds the LED flashes quickly blue



Place the magnet on the "Power" icon on top of the drone. The drone will turn on and test all its components. It will make sounds and activate its lights.

Make sure that nothing is in the way and that the motors are not jammed.

When this process is complete, the green front LED will be solid.



Turn on the controller.

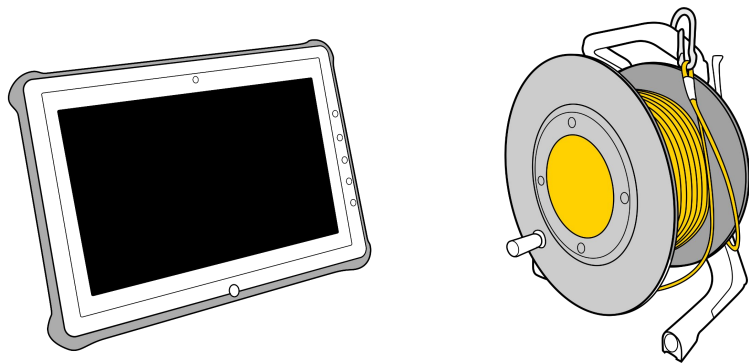
I - STARTING UP THE DRONE

Connecting to the WiFi Reel

Delivery after September 2021

The wifi network is: "Seasam-WiFiReel-XXXX".
The password is **@Notilo+**

Continue directly to page 12



I - STARTING UP THE DRONE

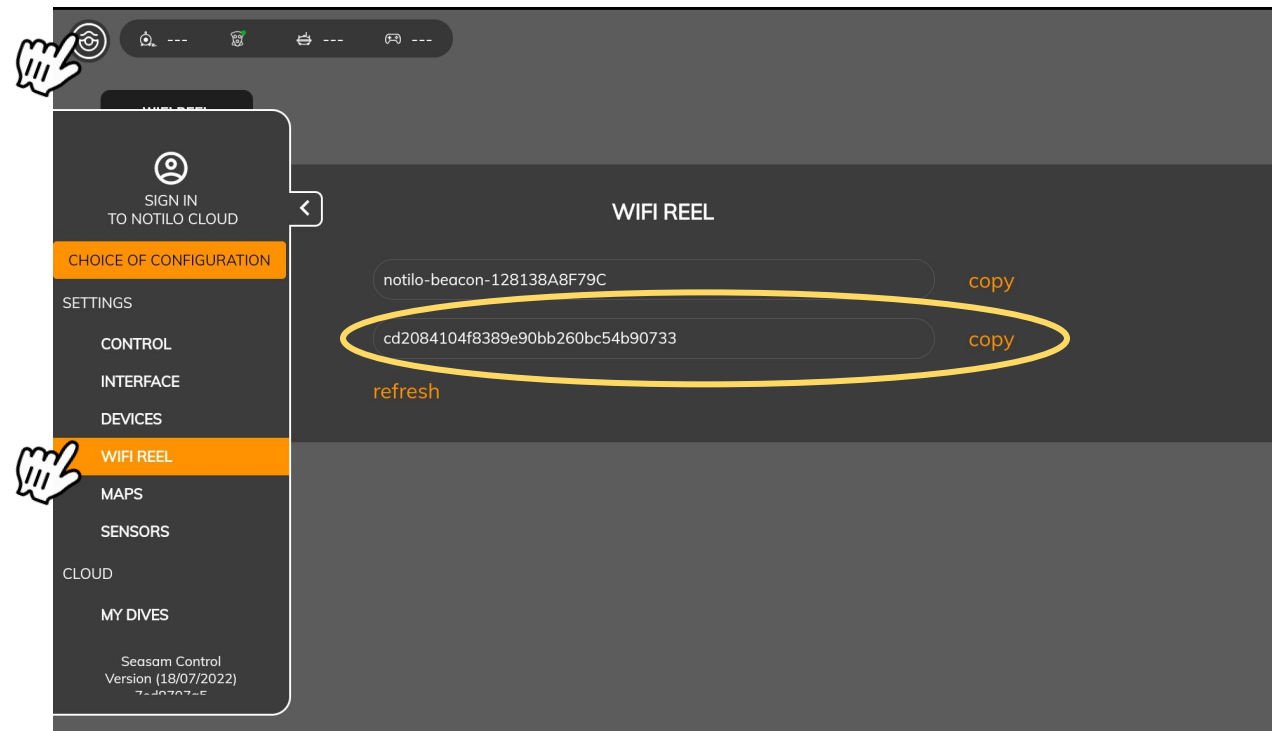
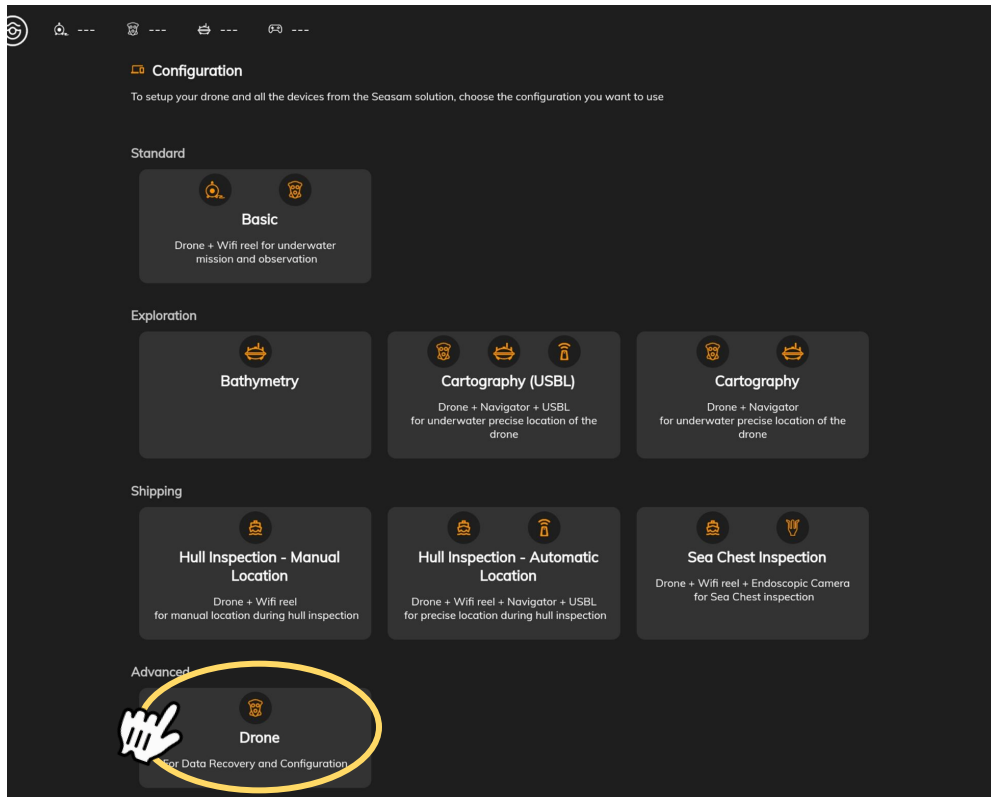
Connecting to the WiFi Reel

Delivery before September 2021

The wifi network is: "notilo-beacon-XXXX"

- Connect the tablet to the WiFi network of the drone "Seasam-XXXX".
- In the configuration part choose "Drone".

- Go to the application settings
- Select "WiFi Reel".
- The network name and password are displayed
- **Copy the password**
- **Connect the tablet to the notilo-beacon-XXX WiFi network**



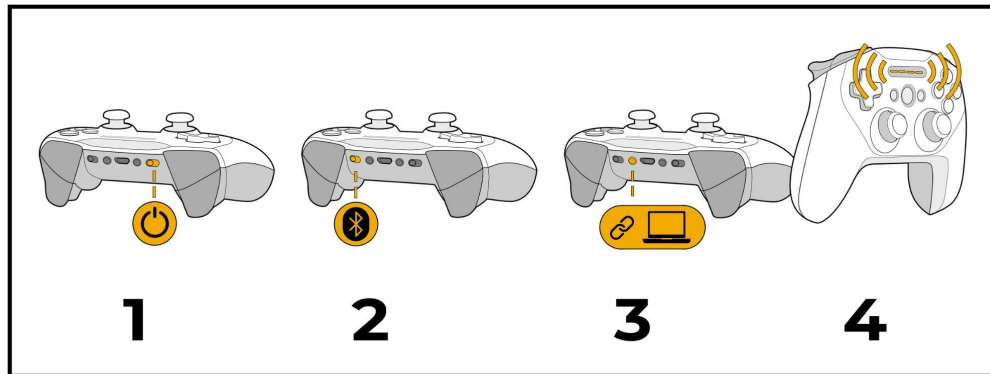
I - STARTING UP THE DRONE

Connection of the controller

Connect the tablet to the controller via Bluetooth

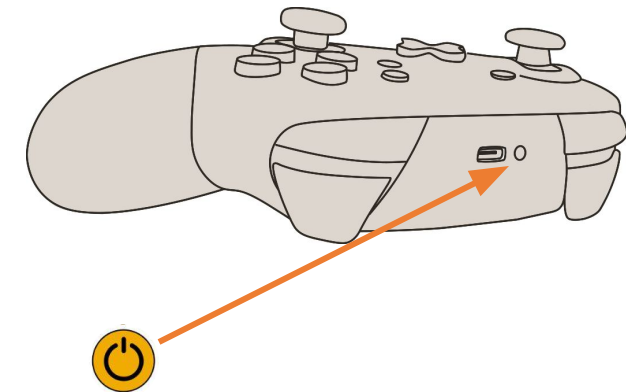
Steelseries controller

Device name: SteelSeries Stratus Duo



Switch Controller

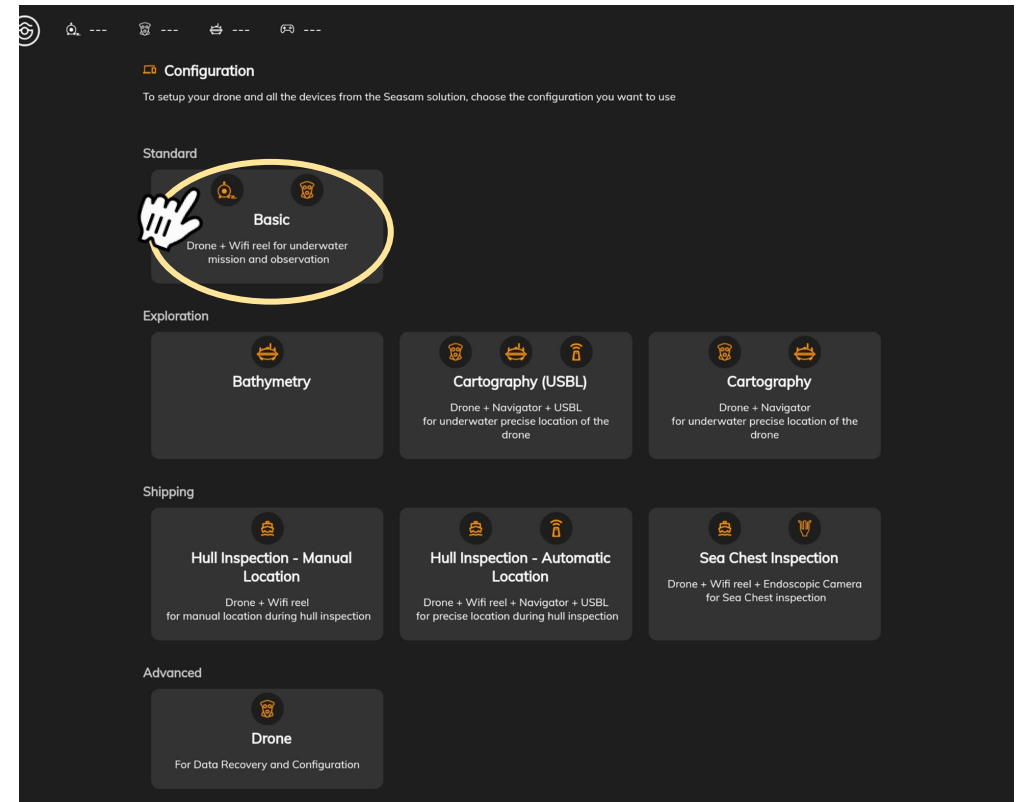
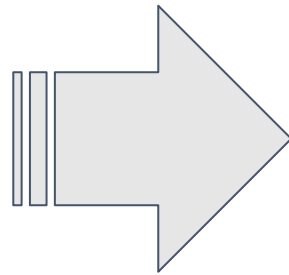
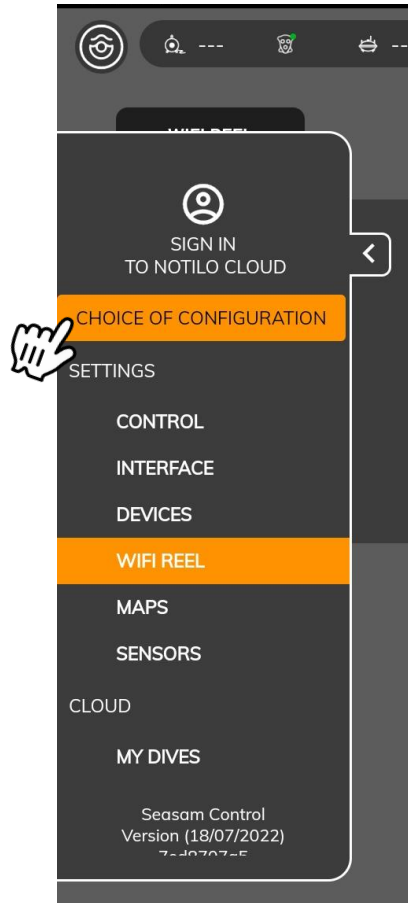
Device name: Pro Controller



I - STARTING UP THE DRONE

Choice of configuration

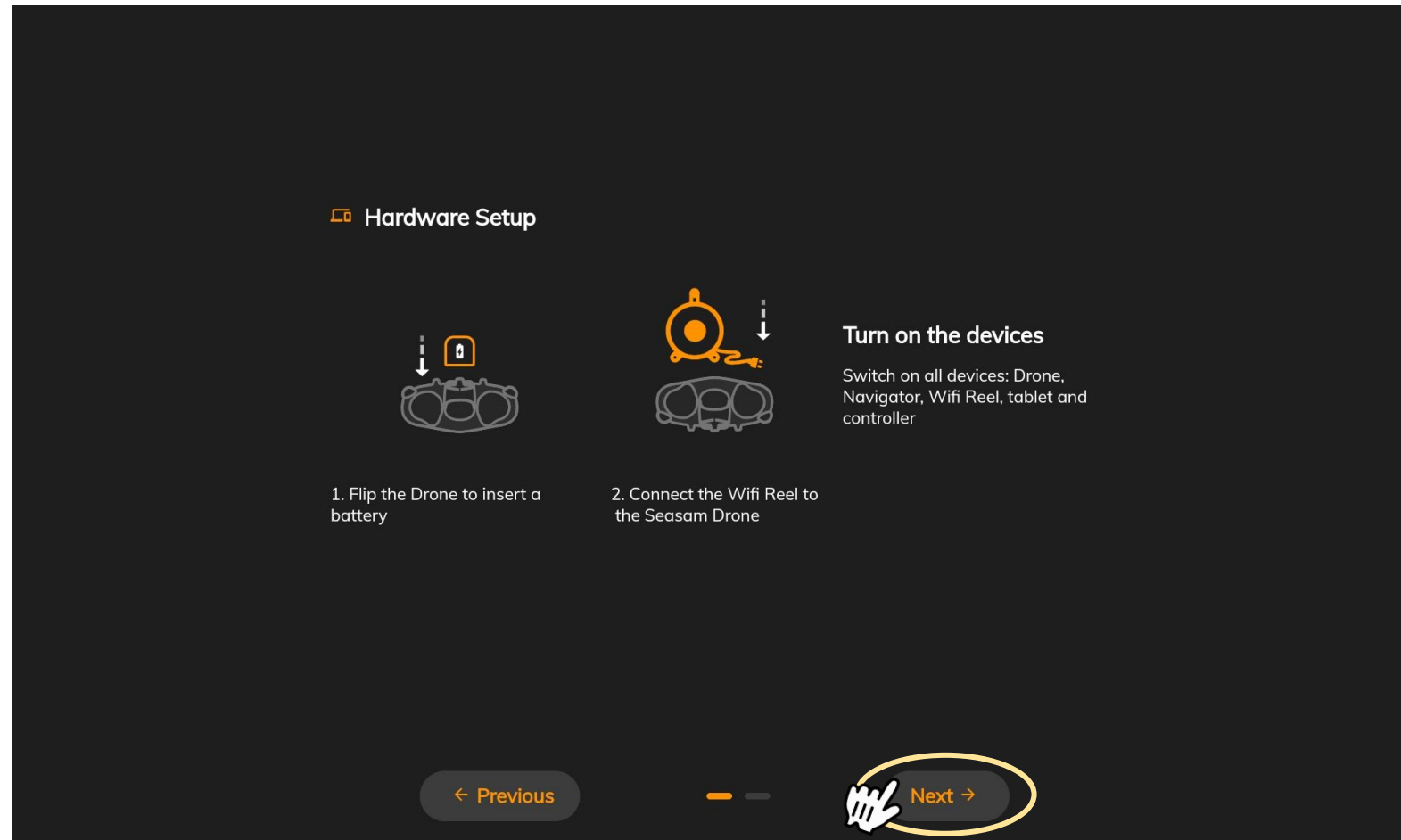
Start Seasam Control or select "Configuration Choice" if you have already opened the application.
In the configuration menu, select "Basic Configuration".



I - STARTING UP THE DRONE

Checking the connections

Check that the indicated steps have been completed and select "Next".



I - STARTING UP THE DRONE

Checking the connections

This screen checks that all the equipment is connected correctly.
Once both connections are checked, click on "Continue" to access the control screen.

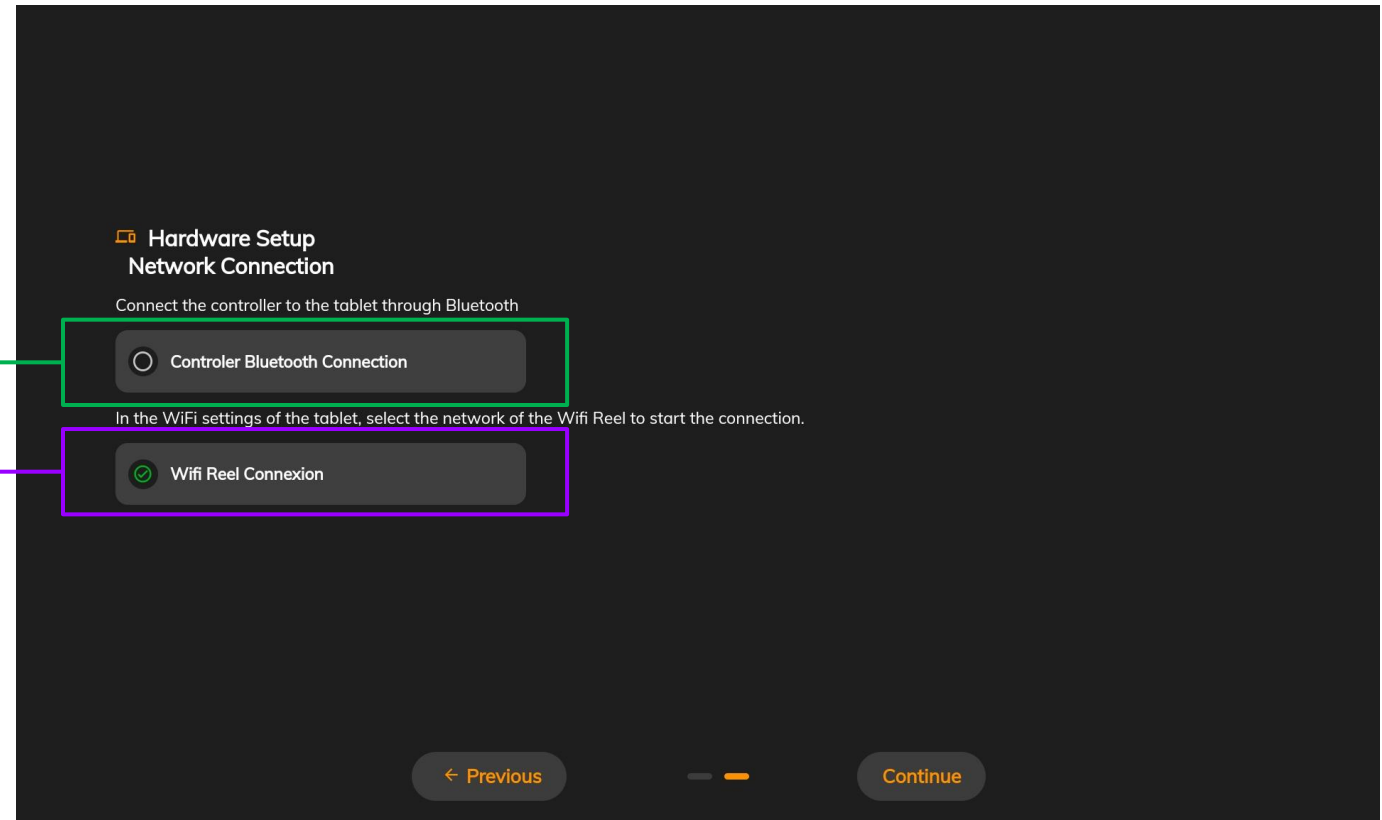
Move a joystick on the controller to have the connection checked.

The system checks that the drone AND the WiFi Reel are **switched on and physically connected together.**

If the green tick takes a long time to appear :

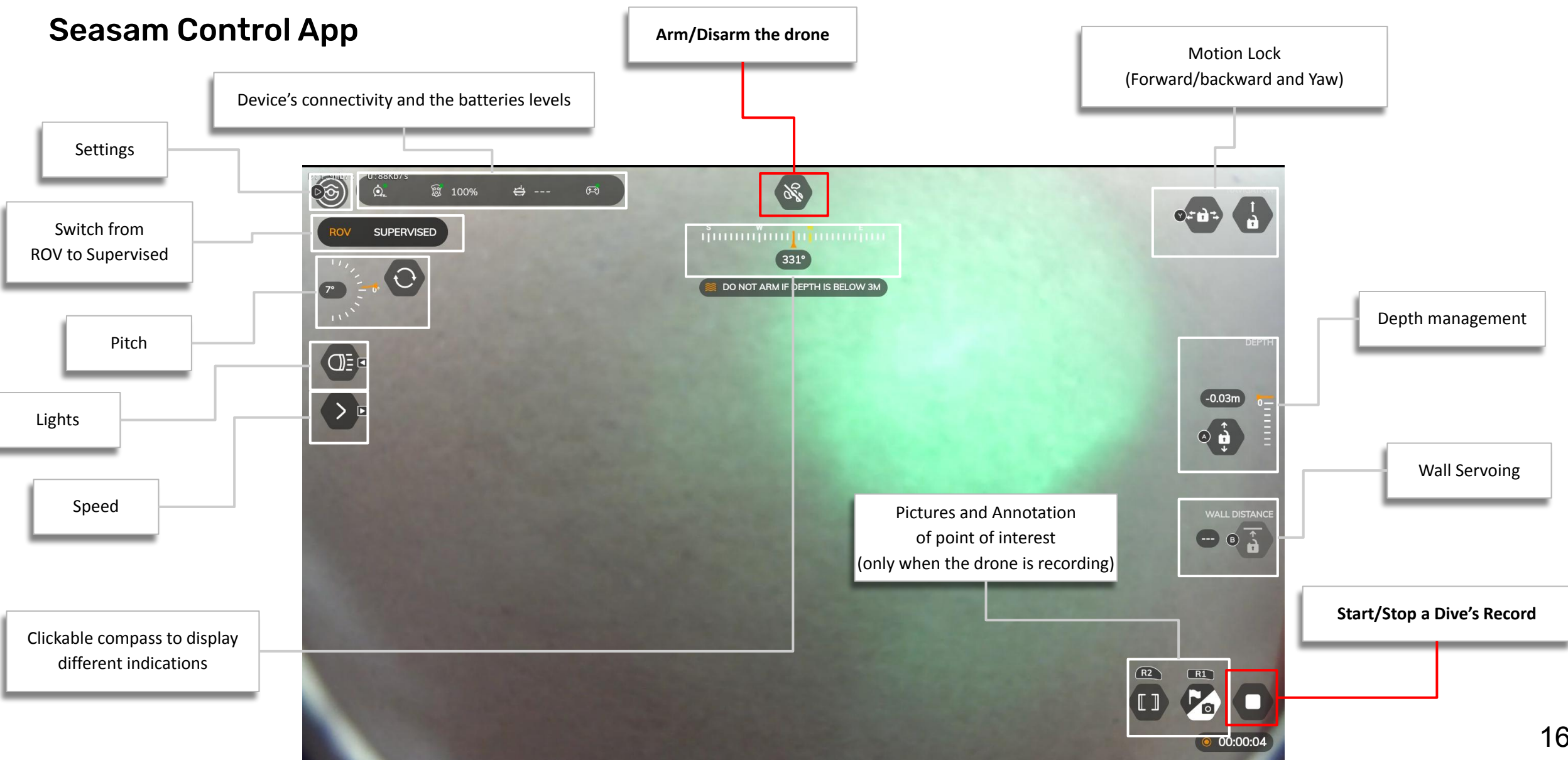
- Wait a few seconds
- Check the physical connections
- Make sure the drone is turned on
- Make sure the tablet is connected to the WiFi reel network
- Go back to the previous page and press "Next" again

If the problem persists contact support@notiloplus.com



I - STARTING UP THE DRONE

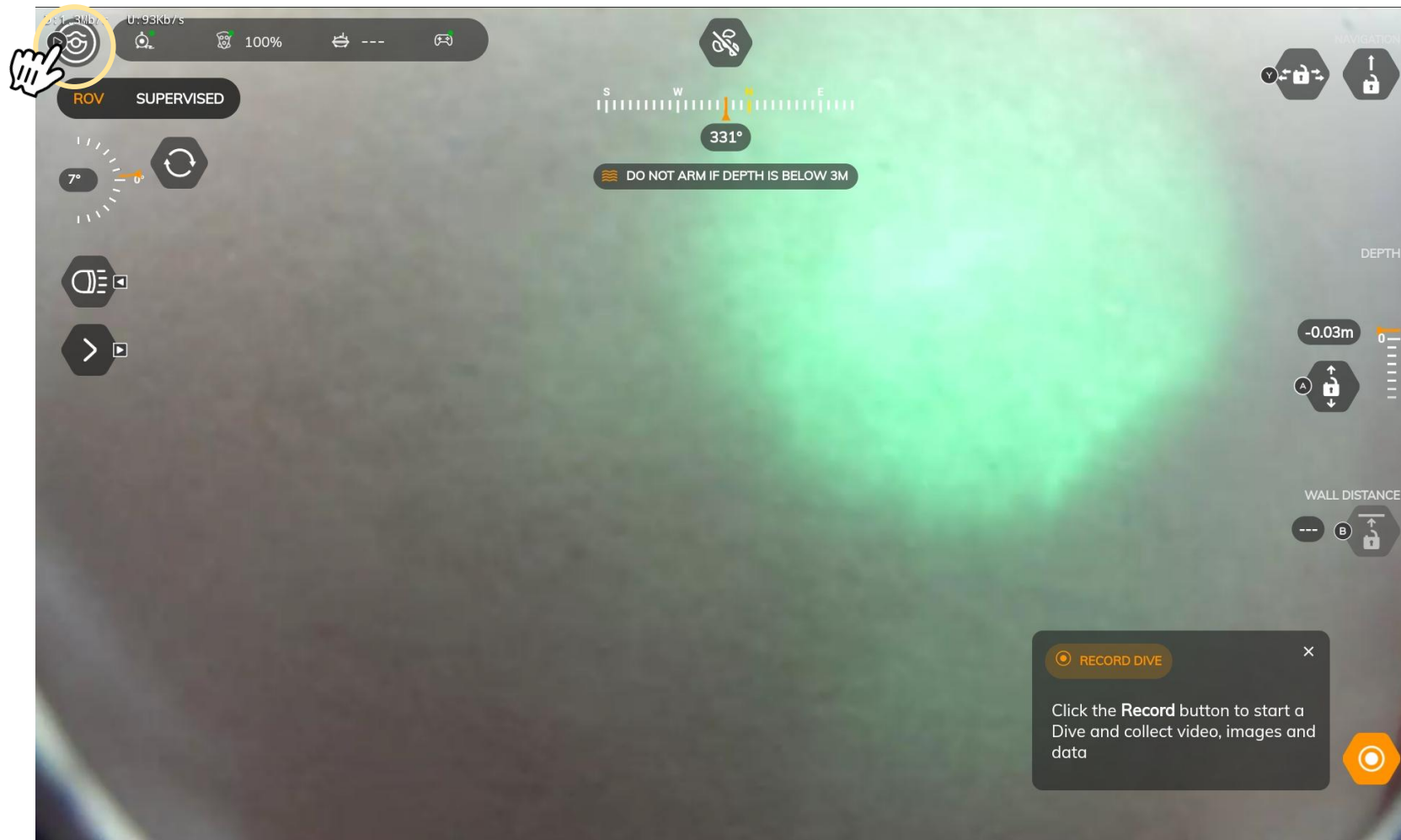
Seasam Control App



I - STARTING UP THE DRONE

Set up and Calibration

Go in the Settings menu by clicking on the Notilo Plus button



I - STARTING UP THE DRONE

Set up and Calibration

Control Settings

In the "Control" tab, if necessary, modify the speed settings.

4 speed modes are available:

- **Slow** : for fine movement
- **Medium** : for standard inspection with low current
- **Fast** : for standard inspection with high current
- **Turbo**: for ultra fast current.
Be careful: This mode increases drastically the battery consumption.

Click on "Save" to save the customized setting

The screenshot displays the drone's control interface. At the top, there are icons for home, battery (91%), return, and a settings icon. The main interface is divided into two tabs: "Control" (selected) and "Controller". Under the "Control" tab, there are four speed modes: "Slow", "Medium" (selected), "Fast", and "Turbo". A hand icon points to the "Medium" mode. Below the modes, there are five sliders for different speed parameters: "Rov Moving speed", "Rov Lateral speed", "Rov Vertical speed", "Rov Yaw speed", and "Rov Pitch increment". Each slider has a range from 20% to 100% (or 5° to 20° for pitch) and a numerical input field. A hand icon points to the "40 %" input field for "Rov Yaw speed". At the bottom, there are two more sliders: "Following Speed (%)" set to 130% and "Following distance between the drone and the diver" set to 2.50m. At the very bottom, there are "Reset to default" and "Save" buttons.

I - STARTING UP THE DRONE

Set up and Calibration

Controller Settings

In the "Controller" tab.

Calibrate the controller before for each inspection.

Click on the button "Calibrate" and follow the indications.

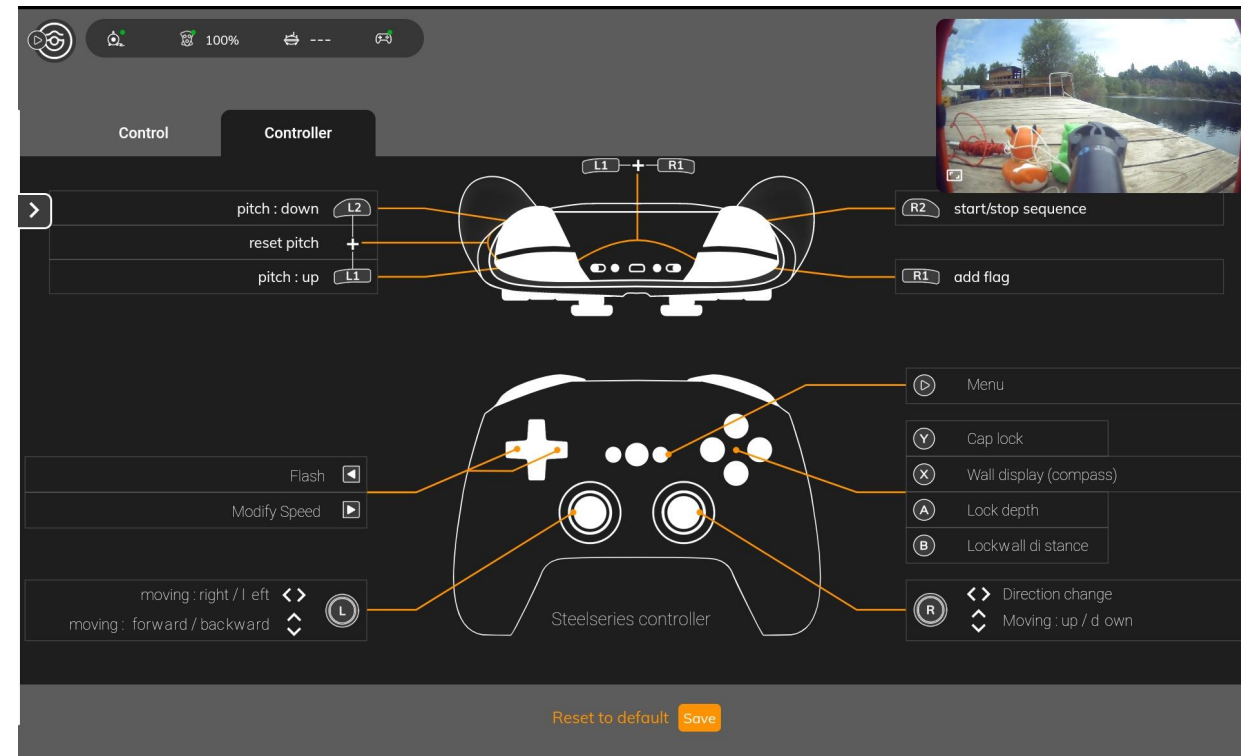
Be careful: Maintain each joystick in position for 1 second.

Otherwise, the calibration will not be correct.

Check this [video](#).



On the bottom of the screen, you can find a reminder of the different shortcuts controls from the controller.



II - USING SEASAM

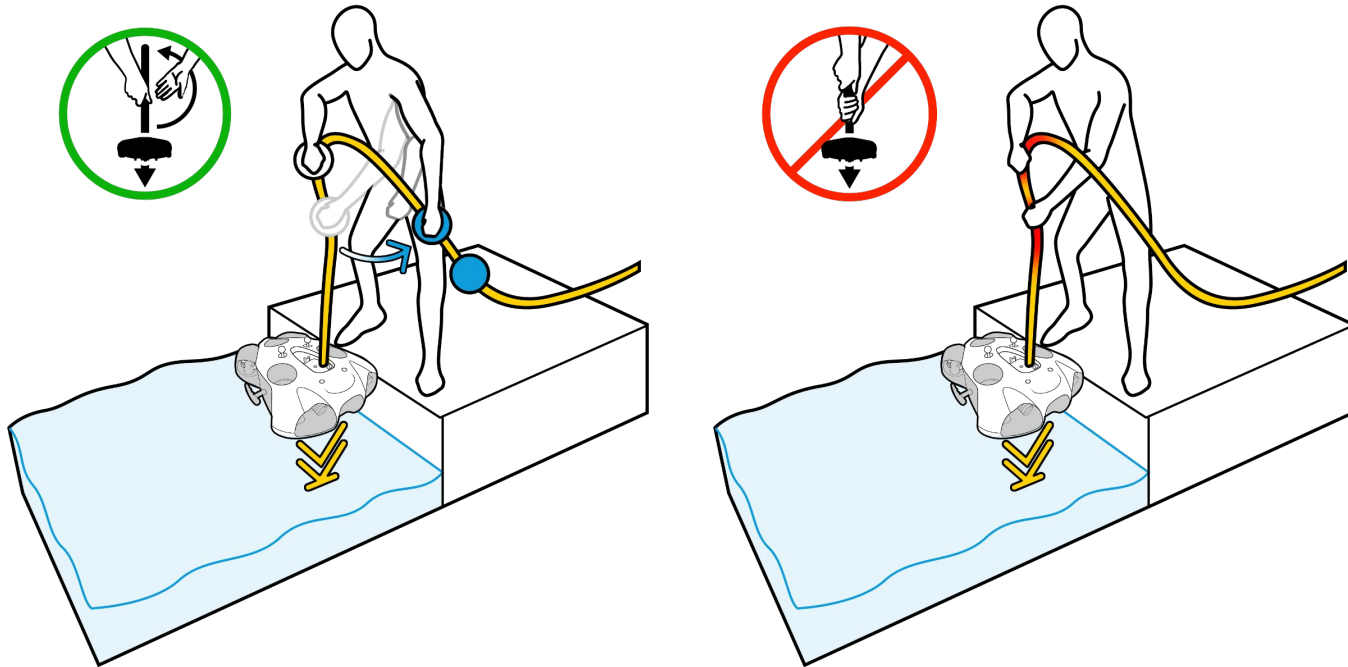


II – USING SEASAM

Drone launching

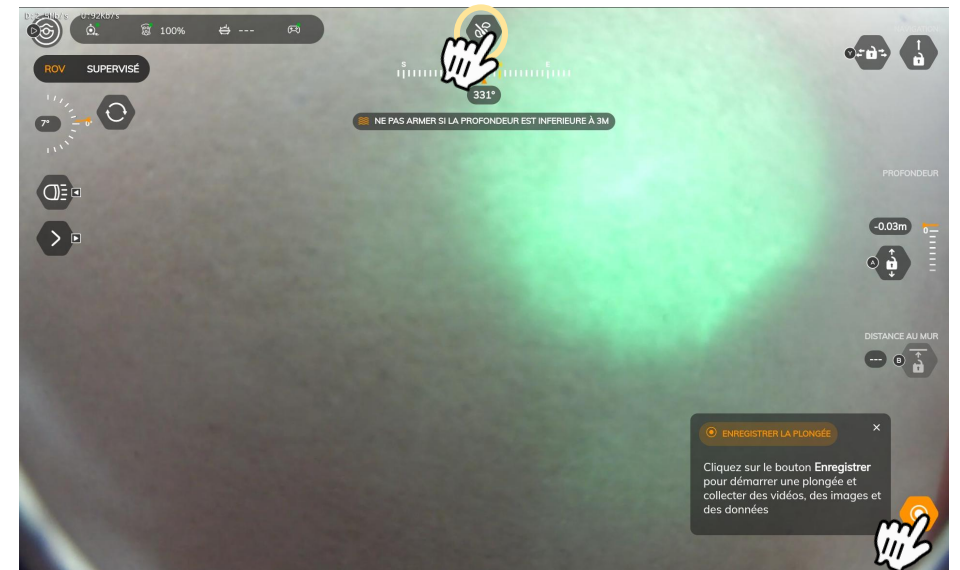
Launch the drone in the water. Hold the drone by the cable and gradually lower it one hand at a time.

Do not let the cable slip in your hands.



Arm the drone by clicking on the "Arm" button at the top of the screen and activate the dive recording

- Please do not arm the drone if any debris is floating on the surface. This could damage the motors.
- When arming, the drone will automatically dive to 50cm.
- Make sure to have at least 2m depth when arming to avoid the drone hitting the seafloor.



Seasam Control App View

II – USING SEASAM

- **Wall Servoing**

Lock the drone at a requested distance and depth according to a wall, a surface, a hull, etc

→ *This feature works as of 2 meters depth (6.56ft)*

1. Position the drone in front of a wall until the indication “WALL DISTANCE” appears
2. Select the lock icon, the drone will lock its depth and distance to the wall
3. You can now move the drone laterally to the right and left to inspect the surface
4. Use the “+” and “-” icon to increase or decrease the distance between the drone and the wall
5. Click on the lock to unlock the Wall Servoing

- **Lock Depth**

Lock or send the drone at a desired depth

1. Select the lock icon, the drone will lock its depth
2. Use the “+” and “-” icon to increase or decrease the depth
3. Click on the lock icon to unlock the depth

- **Manage the speed**

Adjust the speed of the drone to slow, medium, fast or turbo accordingly to the operation performed

1. In the Settings and “Control” tab set the 3 different speeds
2. During the dive, click on the speed icon to change the speed

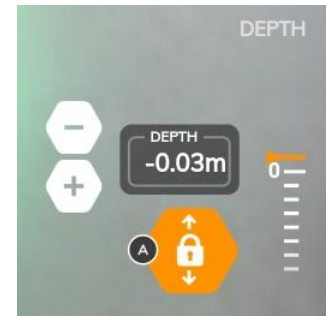
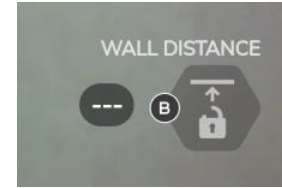
Other features

You will have 2 other tools near the compass

- **Block the Yaw (1)**

1. Then use the right joystick to move the drone laterally
2. Push only once on the right or the left to start the move

- **Block the forward and backward (2)**

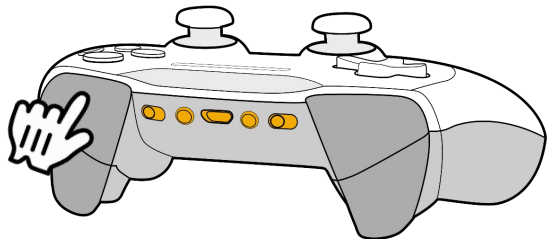
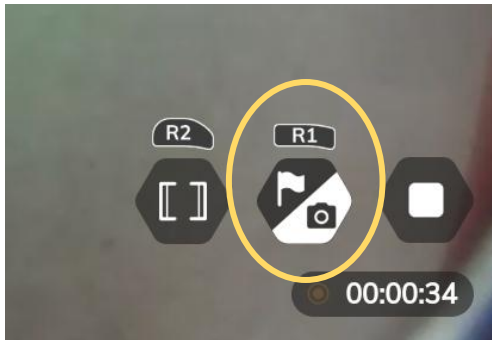


II – USING SEASAM

Take a picture or record a sequence

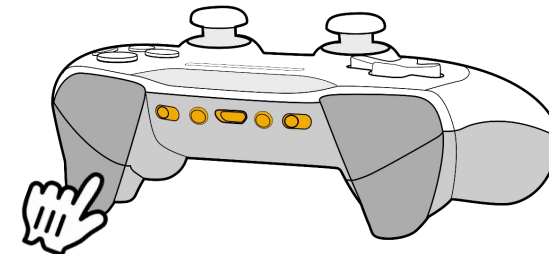
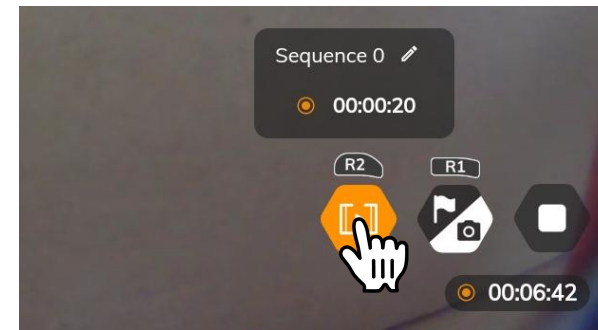
During exploration, **take pictures**

1. Start a dive recording
2. The photo taking widget is then available
3. To take a picture, click the R1 button on the controller



During exploration, **record a sequence**

1. Start a dive recording
2. The sequence recording widget is then available
3. To record a sequence, click on the widget or on the R2 key on the controller
4. Rename the sequence during exploration or later on Notilo Cloud

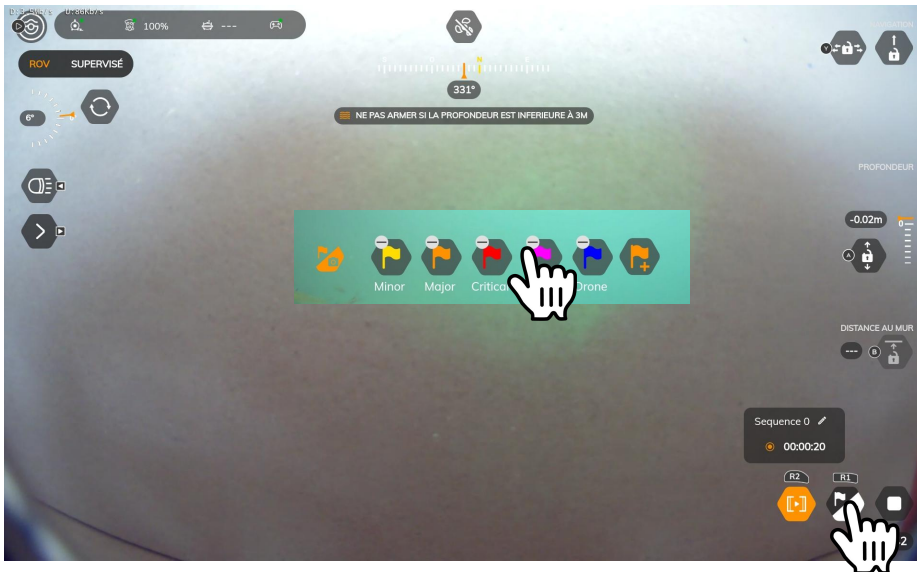


II – USING SEASAM

Recording Flags

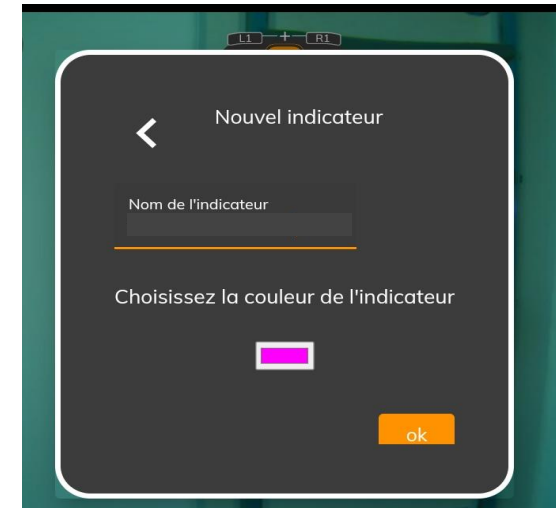
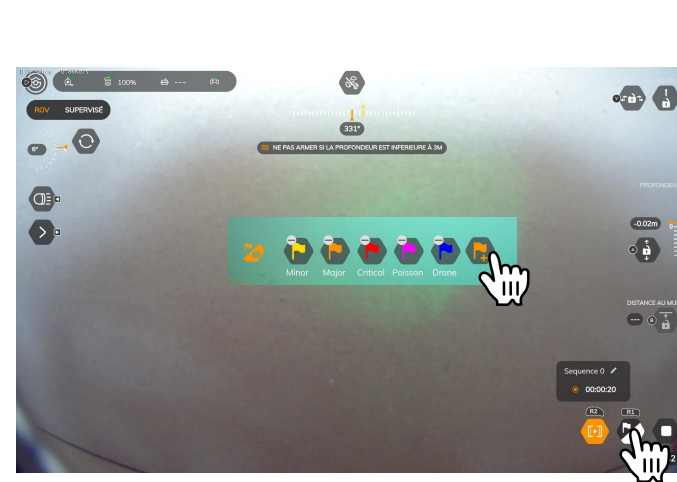
During exploration, **record flags**

1. Start a dive recording
2. The photo taking widget is then available
3. Select the widget to access the list of available flags
4. Select the desired flag
5. When the flag is selected, use the R1 controller shortcut to record a flag and take a picture at the same time
6. You can then find the photos taken with an annotation on Notilo Cloud



Create a **flag**

1. Start a dive recording
2. The photo taking widget is then available
3. Select the widget to access the list of available flags
4. Select the "+" flag
5. Give it a name, choose a colour
6. When the flag is selected, use the R1 controller shortcut to record an flag and take a picture at the same time



II – USING SEASAM

Cleaning and Storage

After using the drone it is important to have good practices to ensure the maintenance and longevity of the equipment.

Switching off the equipment

- Drone: only with the magnet or underwater remote control turned off. Place them on the drone for several seconds and wait for the drone lights to flash. Immediately remove the magnet or underwater remote control, the drone will shut down after several seconds.
Do not remove the emergency stop or the batteries to turn off the drone as this may damage it.
- WiFi Reel: Hold the "On" button until the red LED flashes.
- Underwater remote control: Press all 3 buttons simultaneously

Maintenance

- After each dive in salt water, it is necessary to rinse the drone thoroughly with clear water, insisting on the motors to clean all the salt deposits or impurities that can, in the long term, lead to the corrosion of the motors and alter the proper functioning of the drone.

The ideal process is to immerse the drone in a tub of clean water and turn the motor propellers manually. Make sure the drone is turned off and disarmed before performing this cleaning.

- After each dive, do not transport the batteries with the drone wet.

Storage

- After rinsing let the drone dry for a few hours and store it in a dry place.
Do not store the drone wet in a hard case, as this may cause mould.
- Do not store the batteries in the drone, store them in a dry place away from moisture. There is no need to discharge them before storing them.

If you have any further questions, please visit <https://support.seasam.notiloplus.com/>



III - RETRIEVING DIVES AND DATA FROM THE DRONE



III – RETRIEVE DIVES AND DATA

Retrieving dives and downloading data

Once you have finished your operation, you can retrieve the recorded dives and data. There are two ways to do this:

- Retrieve via the basic configuration on **page 28**

You are still at the operation location and all equipment (drone, reel/navigator-land base, tablet) is turned on and connected together.

- Recover via drone configuration **page 29**

You are no longer in the field, the equipment (drone, reel/navigator-landing base, tablet) is no longer turned on and connected together

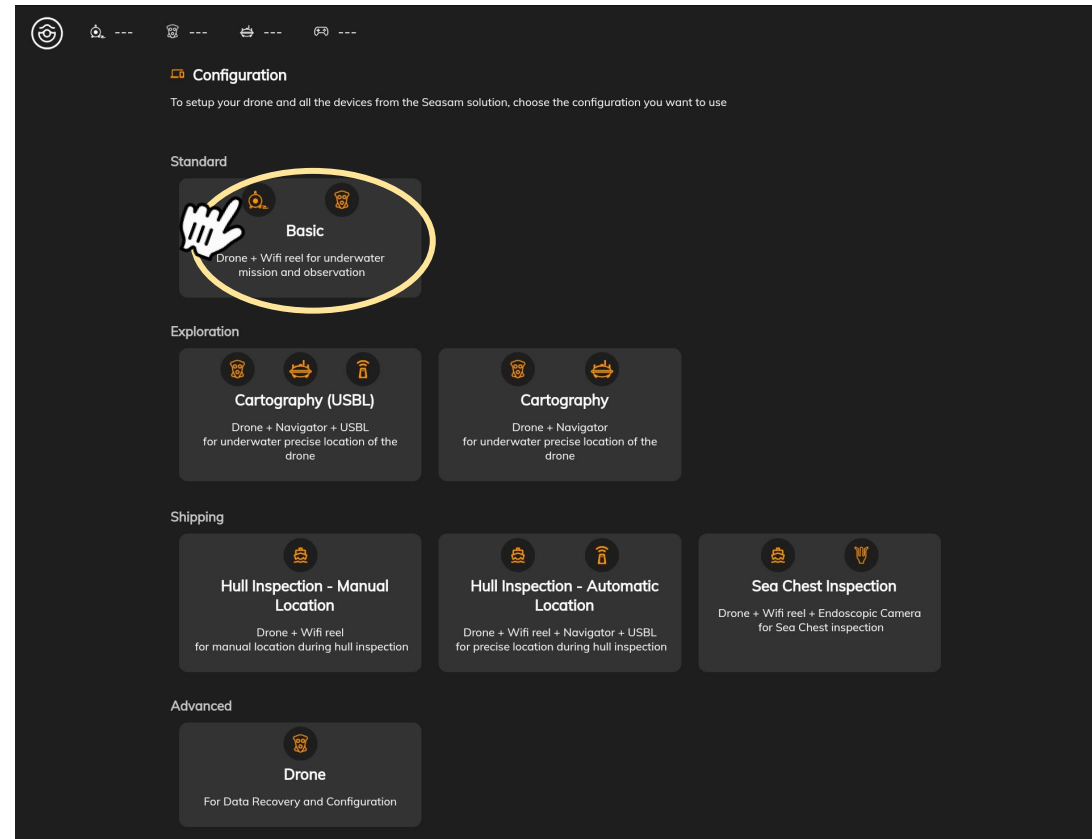
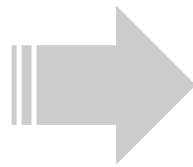
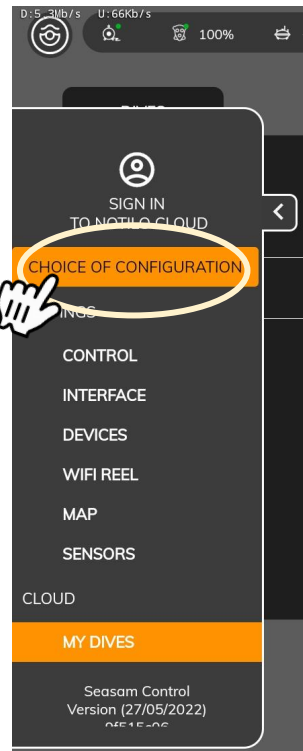
In case you have used the drone in simple diver tracking with the underwater remote, go directly to **page 30**

III - RETRIEVE DIVES AND DATA

Basic Configuration

Recover the dives just after your exploration.

1. In the WiFi settings of the control unit, check that you are still connected to the WiFi signal of the WiFi Reel "Seasam-WiFiReel-XXXX" or the signal of the "Ground Station".
2. In the "Choice of Configuration " check that you are in "Basic Configuration".



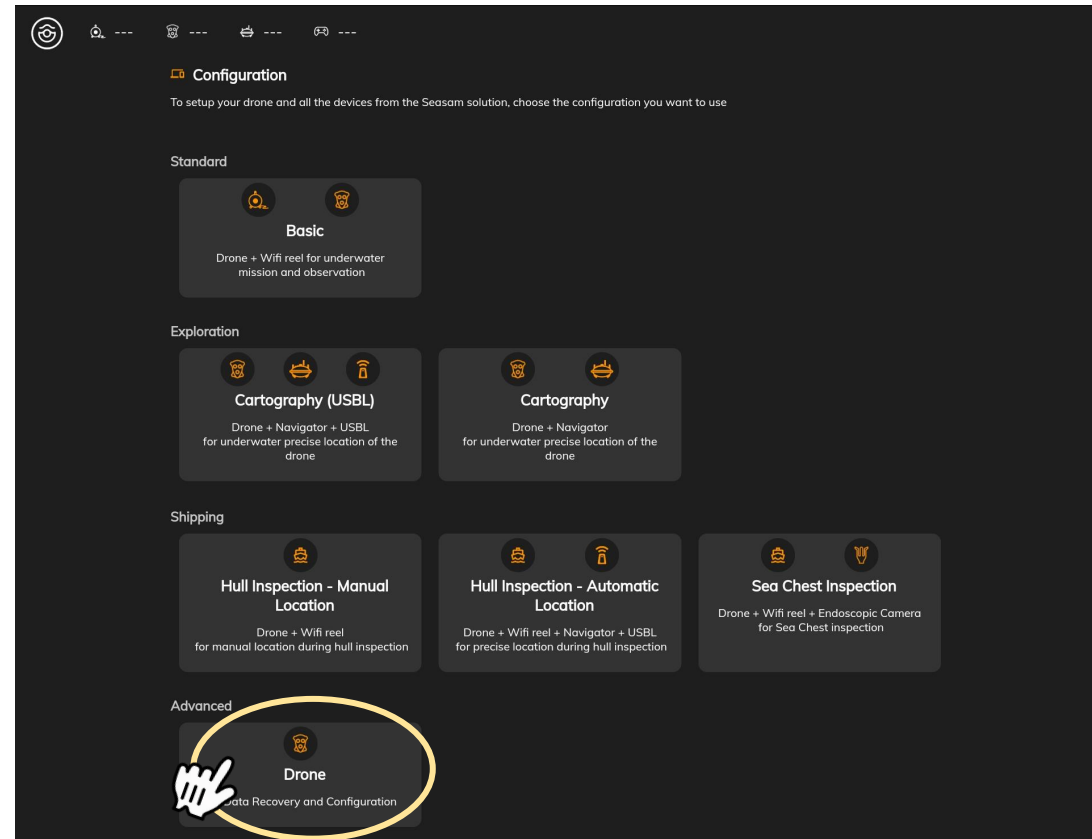
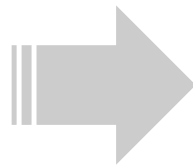
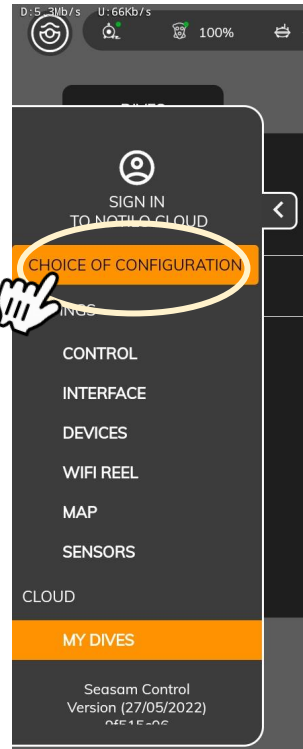
III - RETRIEVE DIVES AND DATA

Drone configuration

Retrieve dives at any time

1. Turn on the drone only
2. In the WiFi settings of the control unit, connect to the WiFi signal of the drone
3. "Seasam-Drone-XXXX" In the "Configuration choices" select "Drone".

Go to page 32

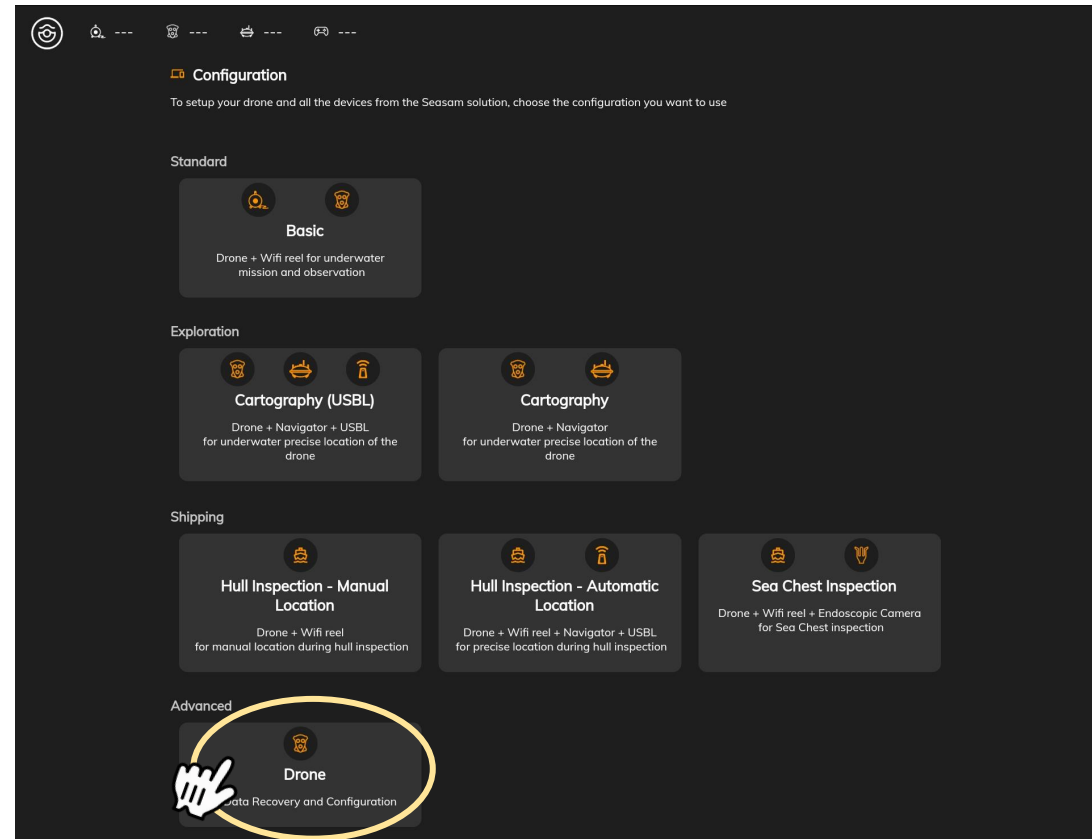
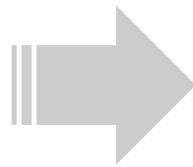
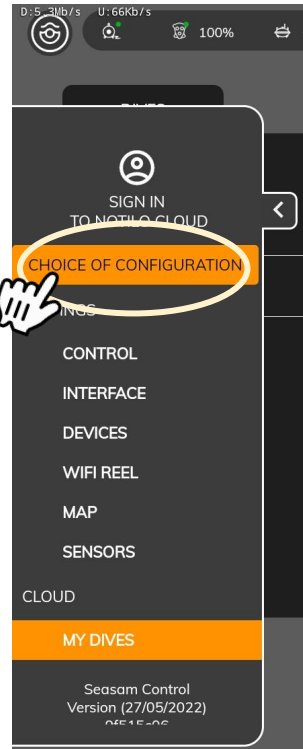


III - RETRIEVE DIVES AND DATA

Retrieve dives recorded in follow the diver

When the drone has been used in simple follow the diver, the dives do not appear on the application, they must be retrieved from the drone. To do this:

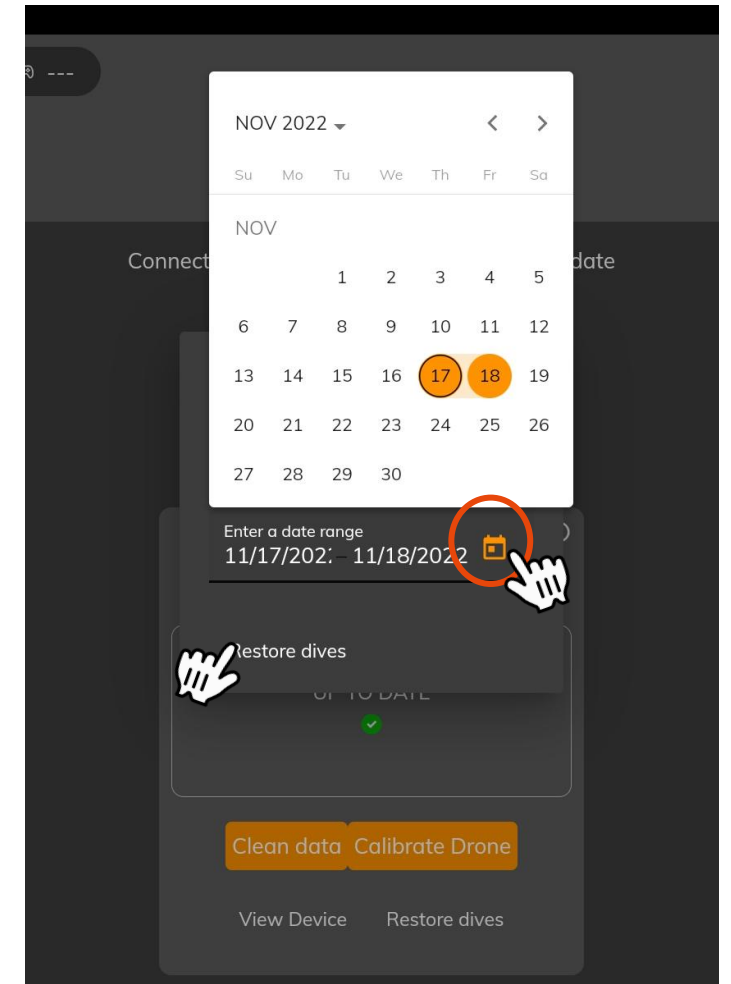
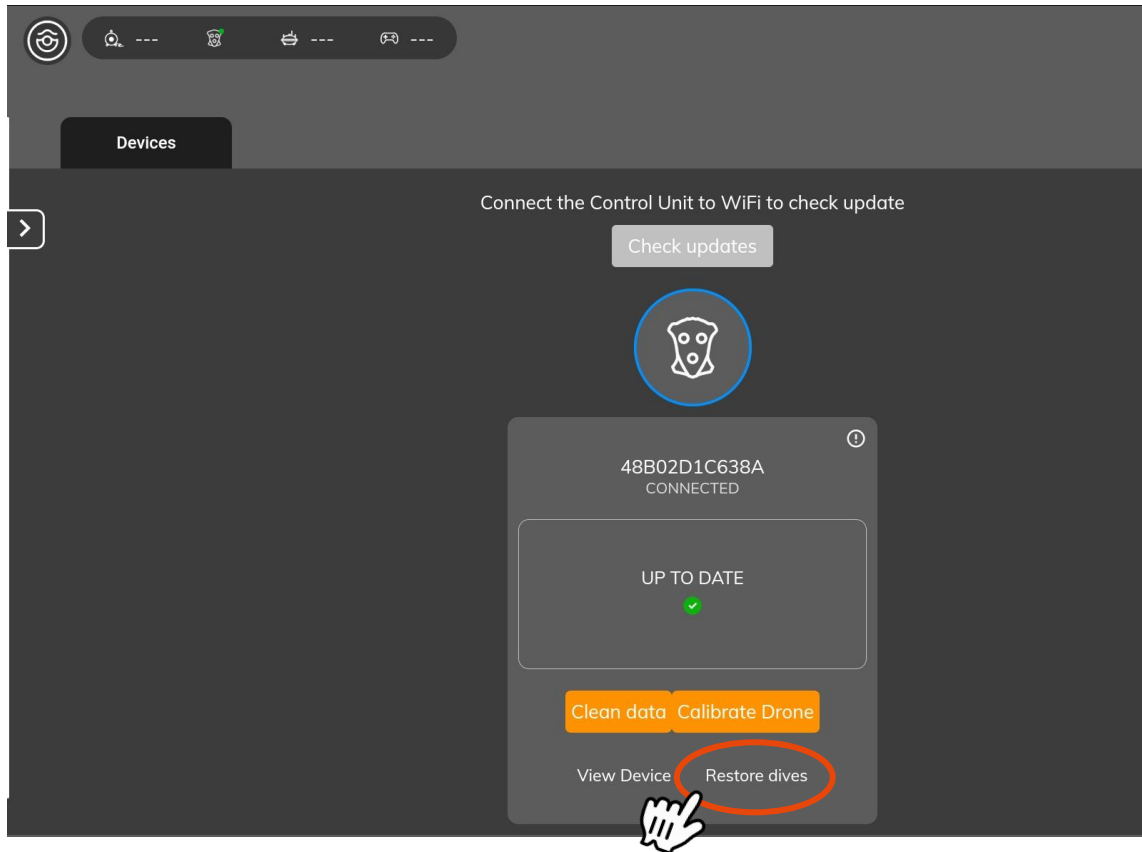
1. Turn on the drone
2. In the WiFi settings of the control unit, connect to the WiFi signal of the drone "Seasam-Drone-XXXX".
3. In the "Configuration choices" choose "Drone".



III – RETRIEVE DIVES AND DATA

Retrieve dives recorded in follow the diver

4. In the settings, select "Devices" then "Restore Dives".
5. Select the dates on which the dives were recorded
6. Select "Restore Dives".



III – RETRIEVE DIVES AND DATA

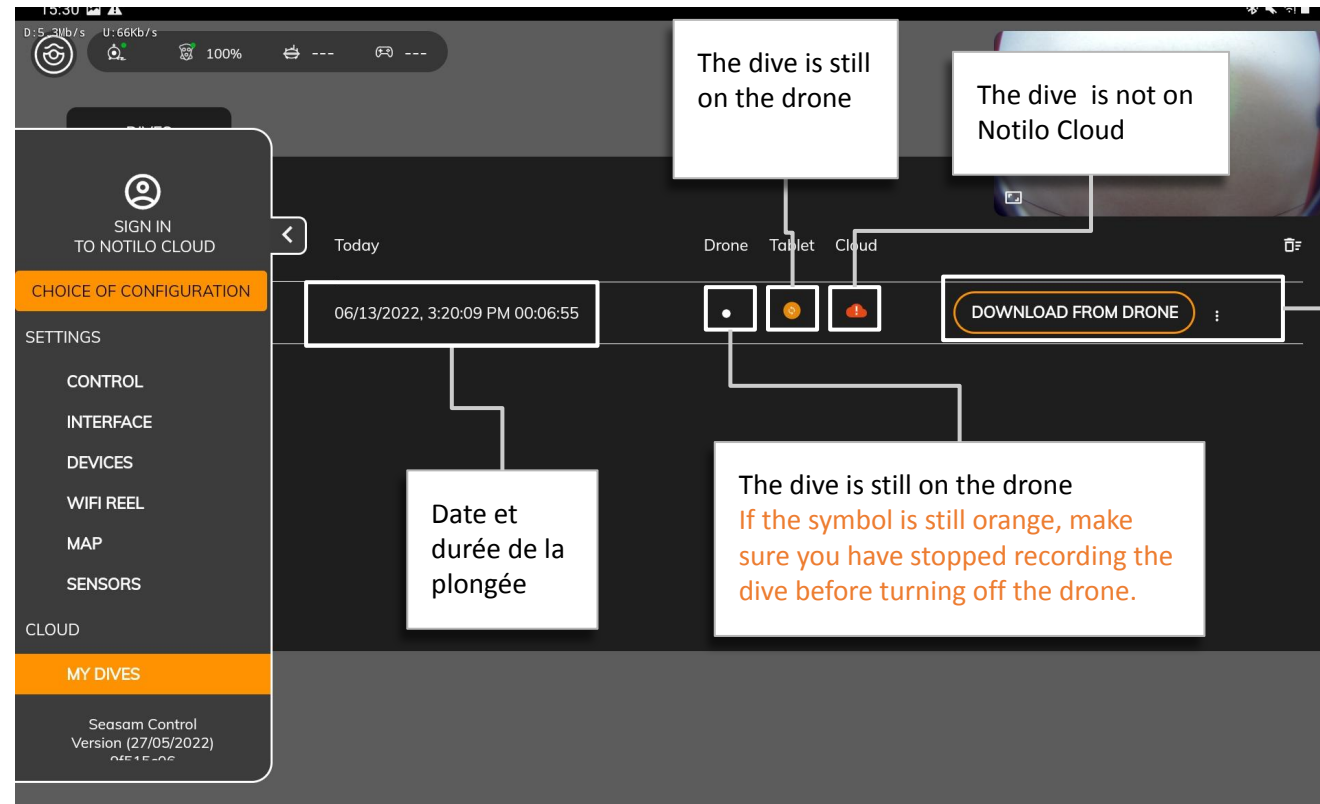
Retrieving dives from the drone to the application

1. Select "My dives". The videos recorded during the operation are displayed in a list
2. **Rename your dives** and click on "Download from drone". **See page 33**
3. When finished, a green tick appears in the "tablet" column: the dives are saved on the app

You can now :

- Send the dives to Notilo Cloud **See page 37**
- Download videos, flags, GPS data directly to the tablet **See page 35**

Rename the dive to make it easier to find on Notilo Cloud



Click here to download the dive from the drone to the application

II – USING SEASAM

Recover the Dives and Download Data

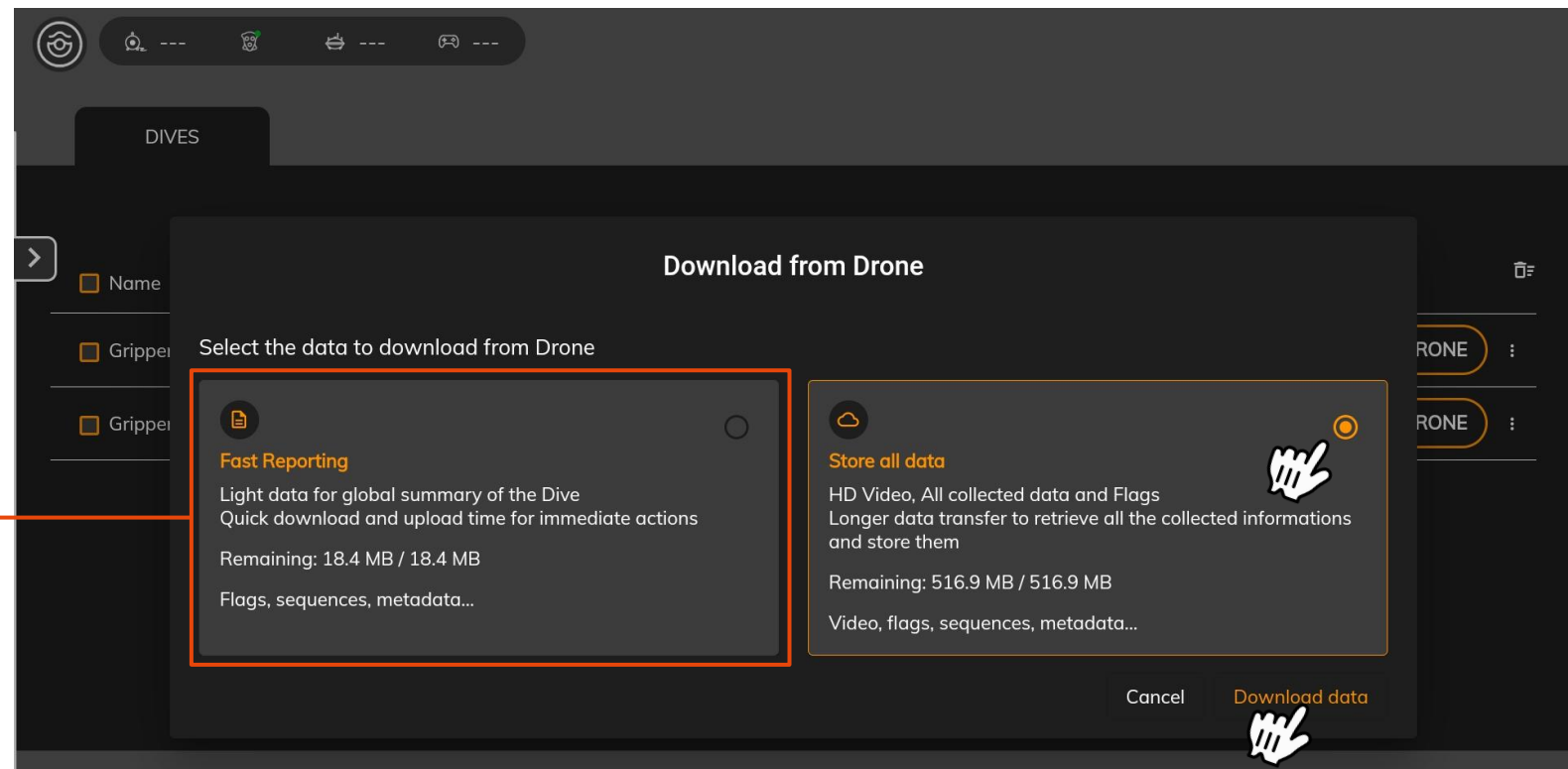
Be careful:

When downloading the data from the drone the App will ask you if you want a “Fast reporting or “Store all data”

Make sure you select “Store all data” then “Download data”

Fast reporting is for Shipping inspection **when you need a quick report.**

You will recover **only the Flags and Sequences** and not the entire video recorded



IV- SAVING DATA TO THE TABLET



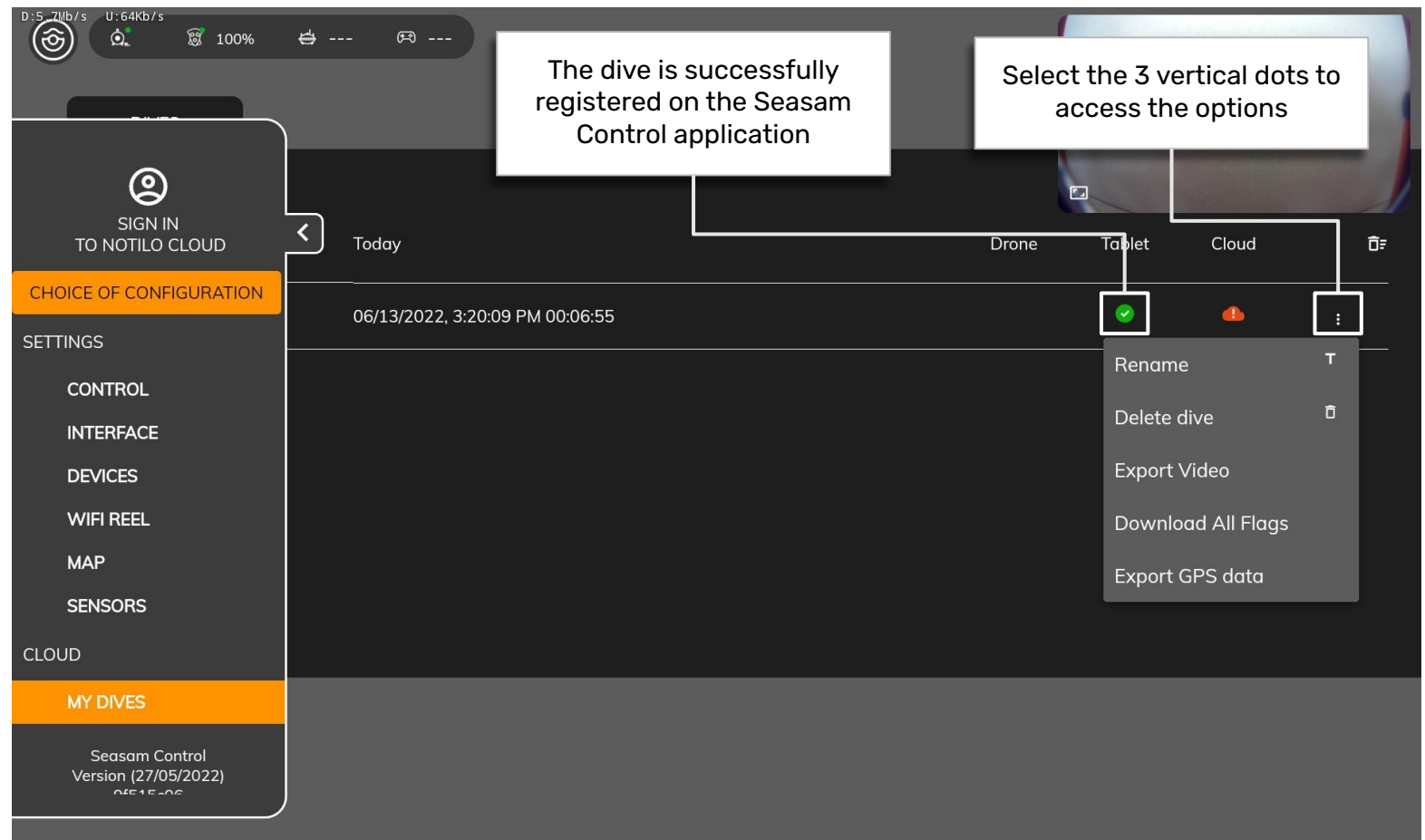
IV- SAVING DATA TO THE TABLET

Retrieve your dives from the Seasam Control App to the Tablet

Once the dive is retrieved from the drone and available on the seasam control app (green tick in the "tablet" column) you can download the video, gps data or other information directly into the tablet's storage space.

To retrieve data from the tablet's storage:

1. Go to "Internal Storage"
2. Documents > Exported Dives
3. The folders with the data are available and sorted by export date.



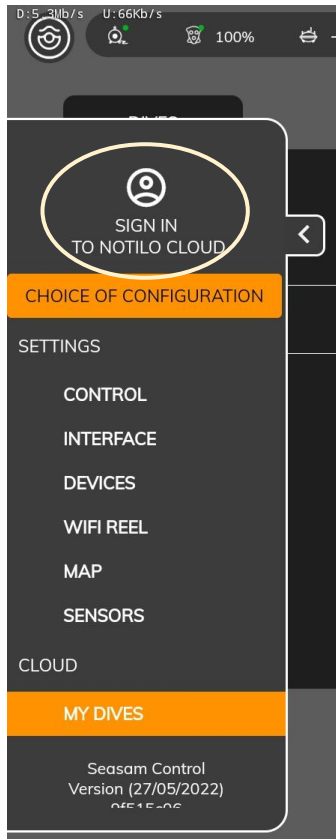
V - IMPORT
DATA TO
NOTILO CLOUD



III- UPLOADING TO NOTILO CLOUD

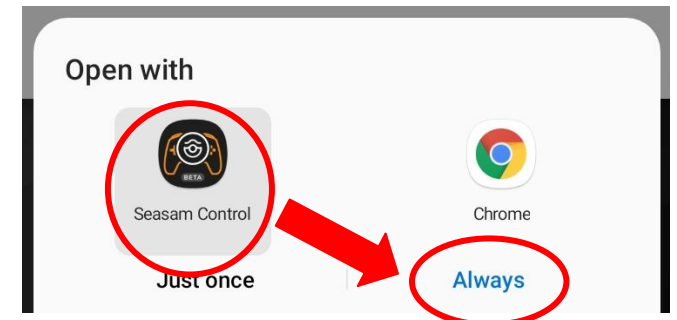
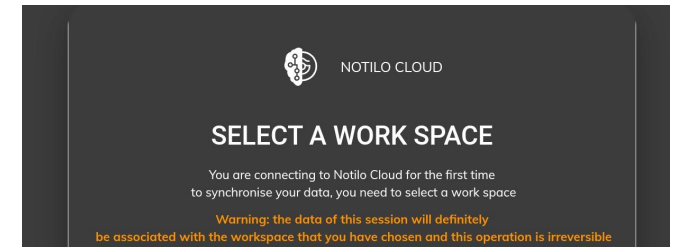
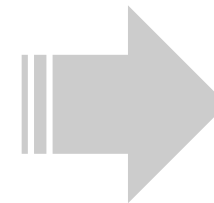
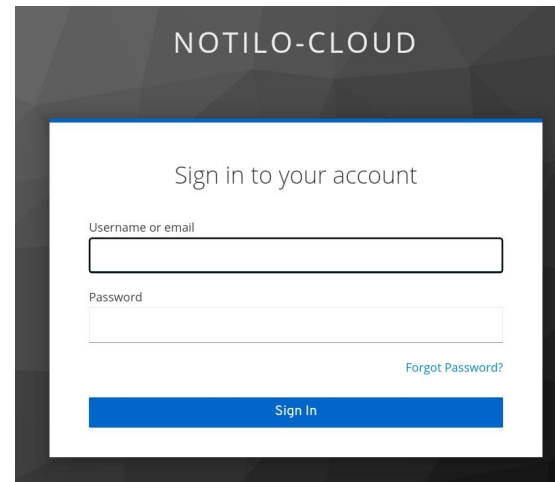
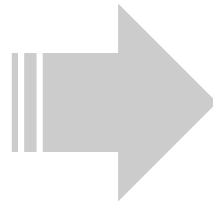
Upload your dives from Seasam Control App to Notilo Cloud

1. Connect the tablet to internet
2. In the left tab select "Sign in to Notilo Cloud"
3. Enter your personal login (email + password) to connect



The first time you connect

- **Select "Open with Seasam Control" - "Always"**
- Select the Workspace



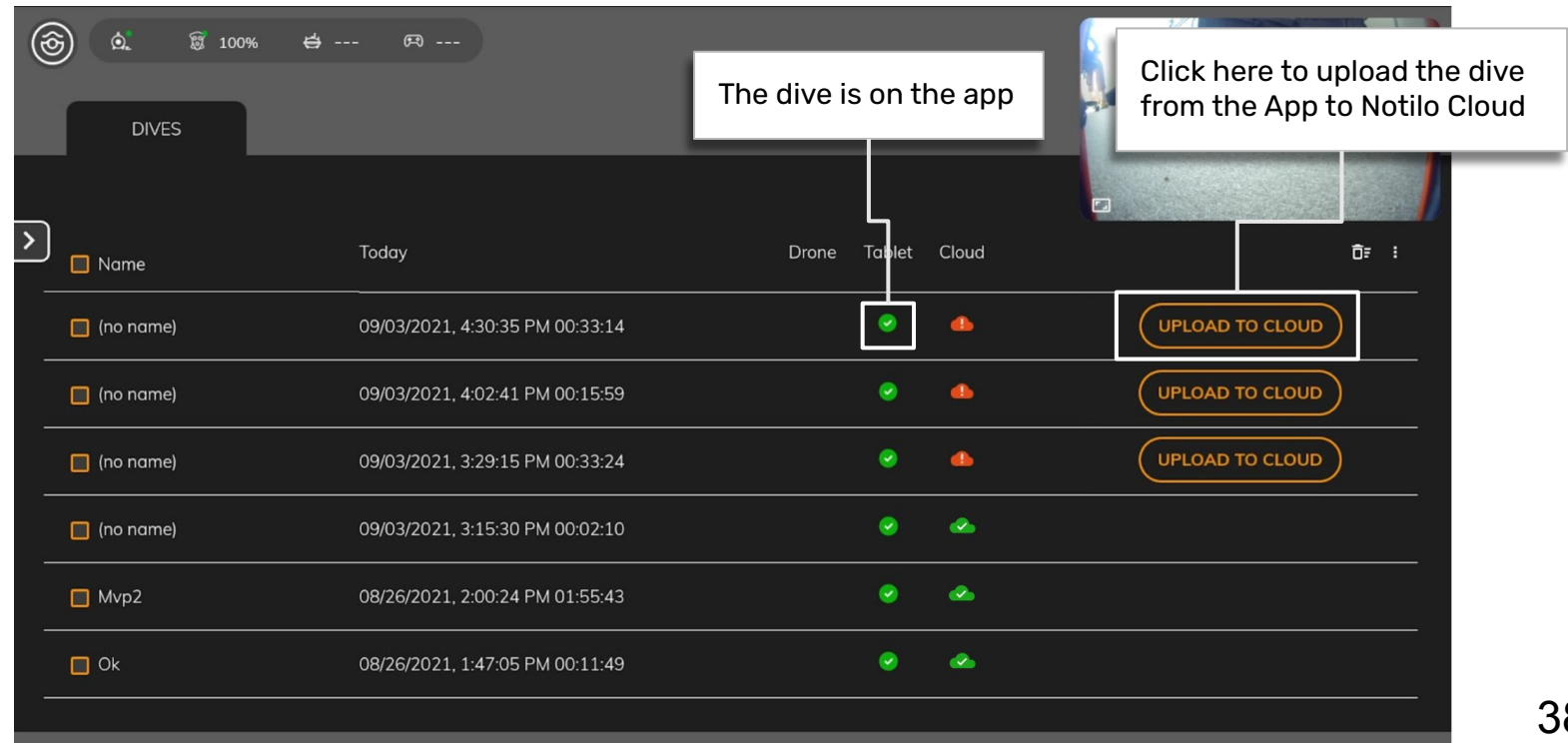
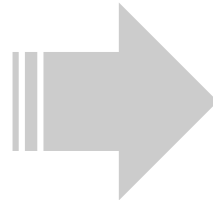
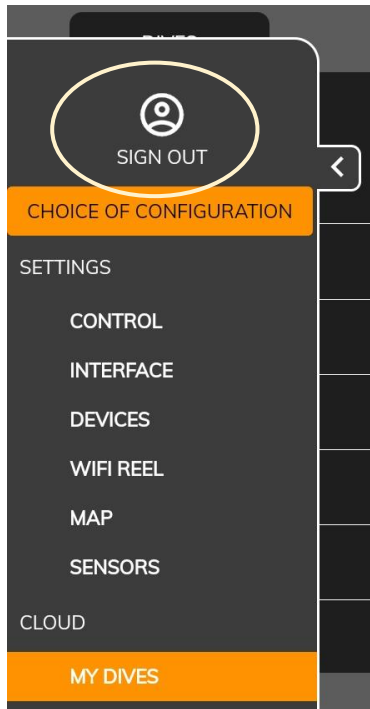
III- UPLOADING TO NOTILO CLOUD

Upload your dives from Seasm Control App to Notilo Cloud

Once connected, you can "Upload to the Cloud" the dives by clicking on the corresponding button. A new loading bar will appear. When your dive is loaded, the small cloud icon will turn green.

Once in the cloud, **the next time the tablet is connected to the drone, the dive will be automatically deleted from the drone's memory.**

You must manually delete the dives on the app.



III- UPLOADING TO NOTILO CLOUD

Upload your dives from Seasam Control App to Notilo Cloud

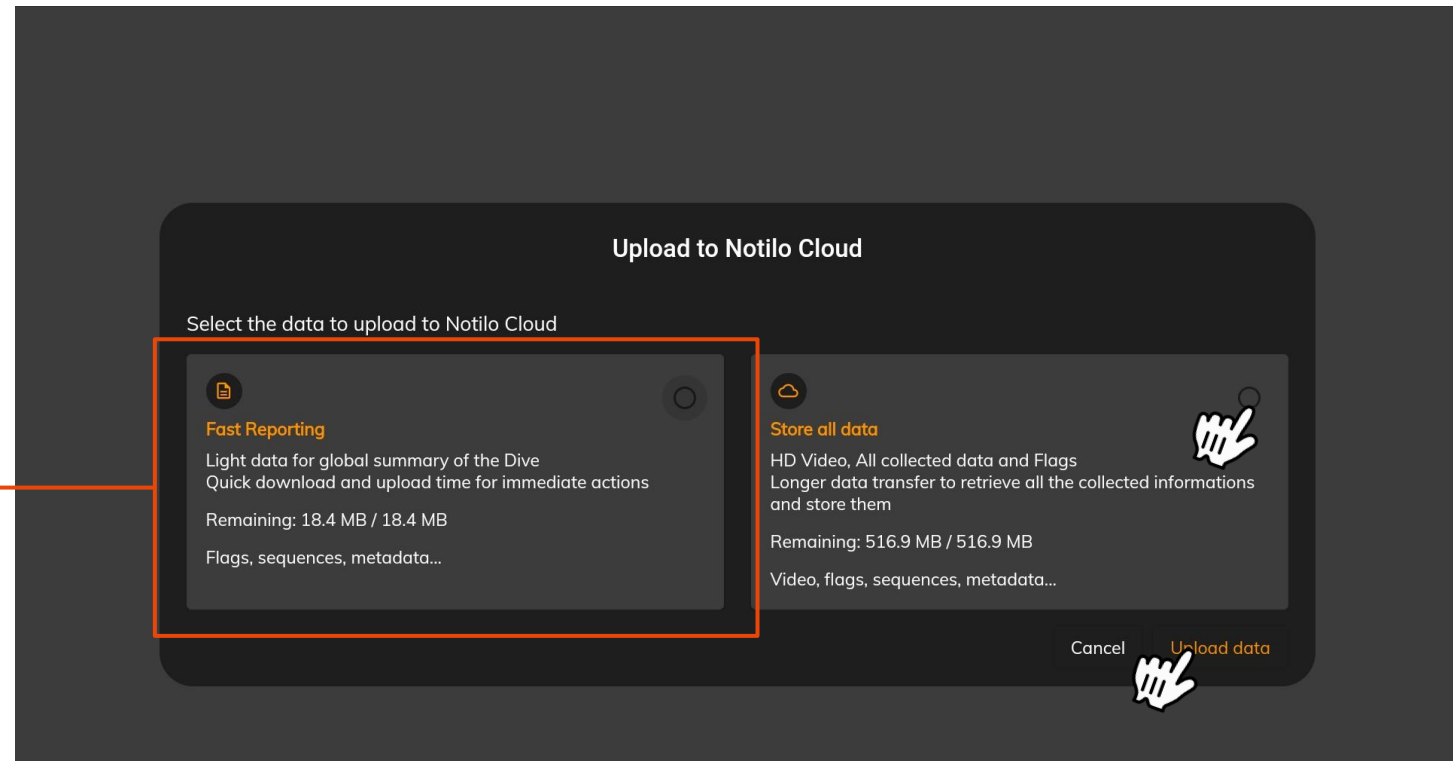
Be careful:

When uploading the data to Notilo Cloud the App will ask you if you want a "Fast reporting or "Store all data"

Make sure you select "Store all data" then "Download data"

Fast reporting is for Shipping inspection **when you need a quick report.**

You will recover **only the Flags and Sequences** and not the entire video recorded



SEASAM

by  notilo plus

More information : <https://support.seasam.notiloplus.com/>

Contact us : support@notiloplus.com