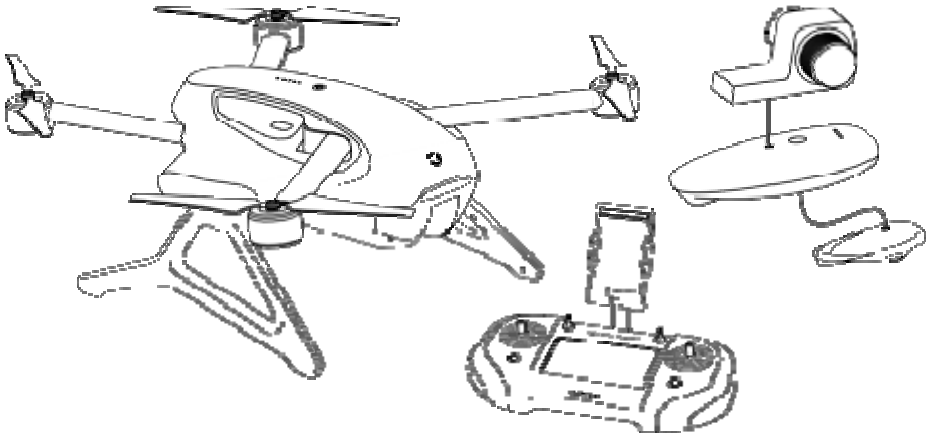
RIPPTON

Installation and User Instructions

MOBULA

FISHING DRONE



These are the original English instructions

January 2019

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General Notice: Some product names used in this manual are used for identification purposes onlyand may be trademarks of their respective companies.

MOBULA

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1 Preface

1.1 Description of theUser

This document is intended for the user of the Rippton MOBULA. The Rippton MOBULA should only be used by people with experience of flying drones. Users without any drone-piloting experience should practice more than 20 hours in a wide and empty space, before using the MOBULA for sea fishing.

1.2 Conventions Used in ThisManual

The following style conventions are used in this document:

Bold

Names of product elements, commands, options, programs, processes, services, andutilities.

Names of interface elements (such as windows, dialog boxes, buttons, fields, and menus) Interface elements the user selects, clicks, presses, or types

Italic

Publication titles referenced in the text

Emphasis (for example a new term)

Variables

`Courier`

System output, such as an error message or script

URLs, complete paths, filenames, prompts, and syntax

1.3 Explanation of SafetyWarnings

Danger indicates a hazard with a high level of risk which, if not avoided, will result in serious injury.

Warning indicates a hazard with a medium level of risk which, if not avoided, could result in serious injury.

Caution indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.

Notice indicates information considered important, but not hazard-related.

1.4 RetainingInstructions

Read and understand this manual and its safety instructions before using this product. Failure to do so can result in serious injury.

Follow all instructions. This will avoid fire, explosion, electric shock or other hazards that may result in damage to property and/or severe or severe injuries.

The product should only be used by people who have fully read and understood the contents of this user manual.

Ensurethateachpersonwhousestheproducthasreadthesewarningsandinstructions and follows them.

Keep all safety information and instructions for future reference and pass them on to subsequent users of the product.

The manufacturer is not liable for cases of material damage or personal injury caused by incorrect handling or non-compliance with the safety instructions. In such cases, the warranty will be voided.

1.5 Obtaining Documentation andInformation

1.5.1 Internet

The latest version of the documentation, as well as video tutorials, is available at the following address: www.rippton.com.

1.5.2 Orderingdocumentation

Documentation, user instructions and technical information can be ordered by calling

Rippton at +86 574 87139648 or sending an email to support@rippton.com.

1.5.3 Otherlanguages

This is the English language version of the user manual. Manuals in other languages areavailable upon request.

1.5.4 Documentationfeedback

IfyouarereadingRipptonproductdocumentationontheinternet,anycommentscanbe submittedonthesupportwebsite.Commentscanalsobesenttosupport@rippton.com.

We appreciate your comments.

1.5.5 Support andservice

For service related questions,contact:

Rippton/Ningbo Pelican Drone Co., Ltd.

+86 574 87139648

support@rippton.com

2 Description of theProduct

2.1 Intended Use and Reasonably ForeseeableMisuse

The Rippton MOBULA is intended to be used as a drone for professional sea fishing purposes, such as:

- Finding the location of fish with the built-incamera
- Finding the location of fish with the optional fishfinder
- Flying and releasing the fish line and berley to/at a desiredlocation

Theproductshouldbeusedinopenareasonthebeachandabovetheseaonlyandshould always stay within the sight of its user. The product is intended to carry a maximum weight of 3 kg.

The Rippton MOBULA is NOT intended for:

- Indoor use.
- Use in or close to residential areas or areas frequented by people.
- Use in No-FlyZones.
- Useasatoy.TheMOBULAmustnotbeusedbychildrenunder14years of age. The product is *not* a toy.
- Use in or near rough water and extreme weather conditions, such as strong winds (max. 35 km/h), rain, snow orfog.
- Use close to large metalstructures.
- Areas with high levels of electromagnetism, including base stations and radio transmission towers.
- Use above the maximum allowed flight altitude of 120 meters and maximum allowed flight range of 1.5km.

The Rippton MOBULA should be used with the following software, original accessories and components only:

- Rippton MOBULA battery (includingcharger)

- Ripptoncontroller(includingchargingcable)
- Rippton fish finder (including chargingcable)
- Rippton propellers
- Rippton winder
- Rippton landing gears
- RipptonApp

All other uses of the product not described in this manual are regarded as unintended use.

2.2 Process Overview

The MOBULA is a drone for professional fishing purposes. It consists of an aircraft (with built-in camera to spot fish and Berley/Fish Line Release Modules), a controller with LCD screen, tablet/smart-phone add-on and an optional fish finder. Amongst the most important features are the auto-return function and the berley/fish line release function. The MOBULA comes with the RipptonApp.

TheMOBULAiscontrolledbythe remotecontroller.ThecontrollerhasanintegratedLCDscreen that displays the recording of the aircraft's camera and some other flight information. When using the GPS function with the App and the fish finder scanning mode, the locations where fish have been spotted can be saved.

Flight data is automatically recorded on to the internal storage of the aircraft. This includes flight telemetry and aircraft status information. The optional fish finder can be connected to the drone to find fish more accurately.

The aircraft has one Fish Line Release Module and two BerleyRelease Modules which can easily perform accurate fish line and berleyrelease. Your berley can be attached to the two BerleyRelease Modules. Your fish line can be attached to the Fish Line Release Module. Once the berley or fish line is at the desired location, it

can bedropped using the controller or theApp.

2.3 TechnicalData

Parameter	Unit
Aircraft	
Device name	Rippton
Designation	Fishing Drone
Type	MOBULA
Dimensions:	630 x 608 x 225 mm (Propeller closed)
Protection class motor	Water Resistance
Max. speed	10 m/s (36 km/h)
Max. flight time	Up to 15 min
Payload	3kg
Max. wind resistance	8 m/s (28.8 km/h)
Range	0-1.5 km
Weight	5.6 kg
Radio technology	Wi-Fi graphic transmission Controller Spread Spectrum Wireless
Frequency band	5.8 Ghz Wi-Fi graphic transmission 2.4 Ghz Controller Spread Spectrum Wireless
Operating temperature range	-10°C to +60°C
Max. relative humidity	Max 50% at +60°C
Fish finder (optional)	
Depth	0.6 m to 100 m
Degree of accuracy	0.1 m
Angle of measurement	30° or 60°
Detection frequency	200 kHz/83 kHz

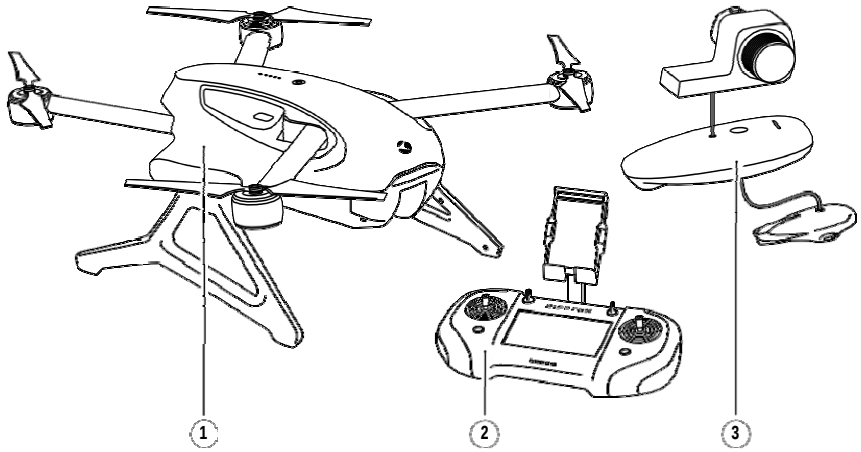
Winder	
Release&retreat speed	20 cm/s

Capacity factor	7 W
Controller	
LCD screen	5.5 inchs
Battery	
Type	6S/25C/10,000 mAh
Operating time	Max 15 mins continuous use

2.4 ProductCompliance

This product complies with all relevant European Directives. The Declaration ofConformity can be found in the appendix.

2.5 Product Elements



1. Aircraft (see 2.5.1)

2. Controller (see 2.5.2)
3. Fish Finder (optional; see2.5.3)

2.5.1 Aircraft

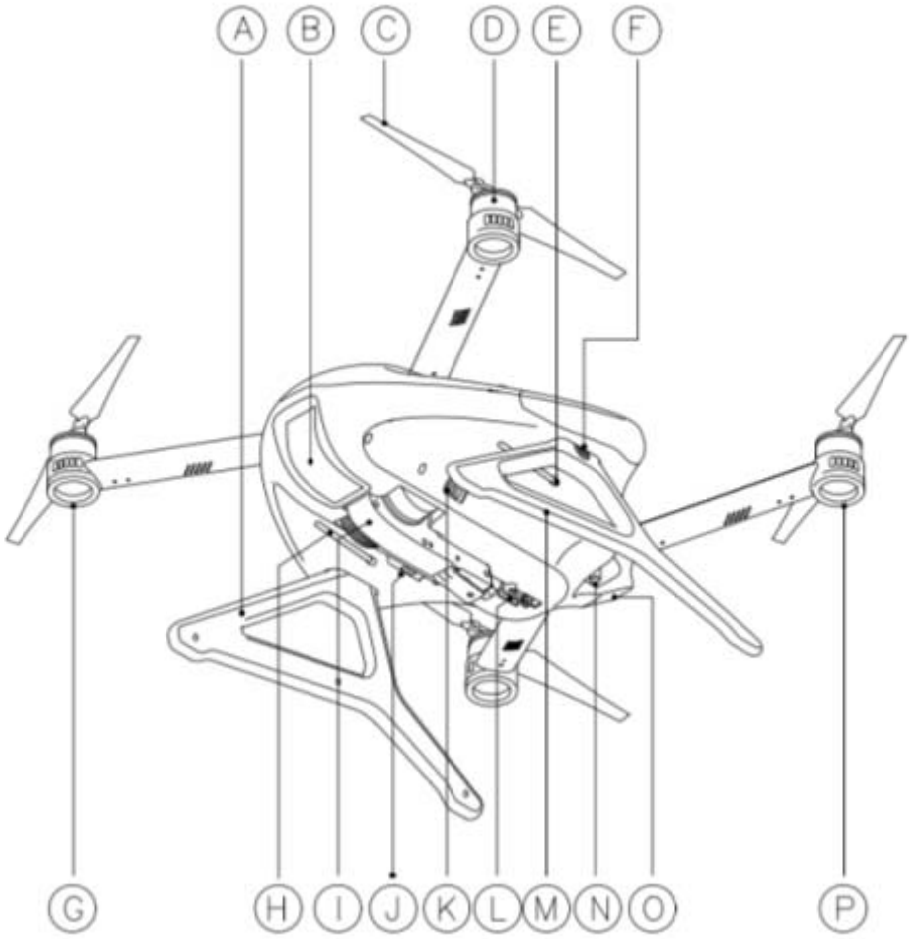


Figure 1

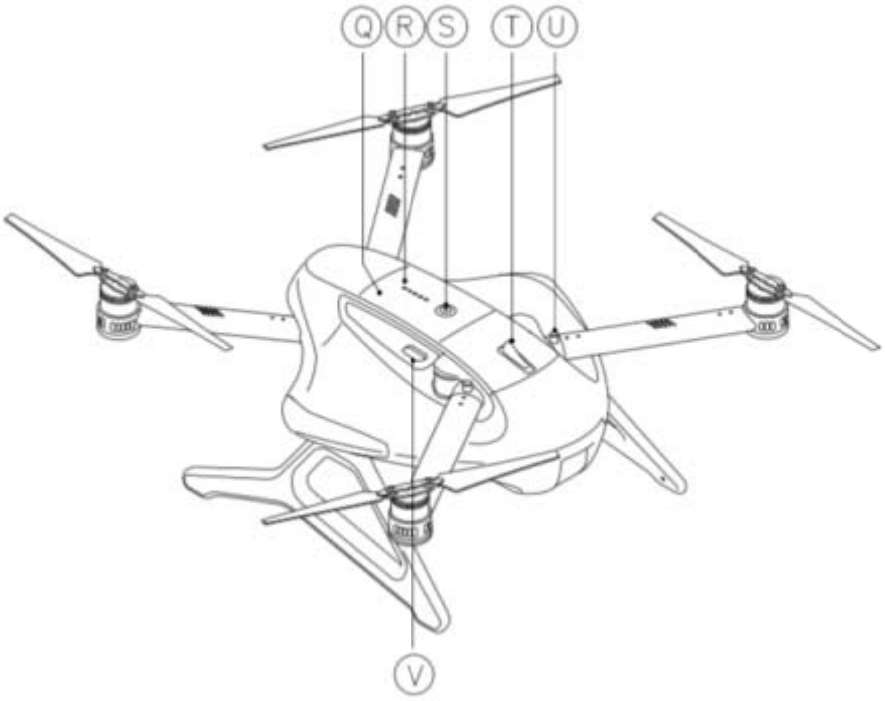


Figure 2

A.	Landing Gear	L.	Fish Line Release Module
B.	Camera	M.	Landing Gear
C.	Propellers	N.	Rear Arm Unlock Buttom
D.	Motor	O.	Tail Aircraft Status Indicator
E.	Folding Antenna	P.	Rear LED Indicator
F.	Landing Gear Unlock Button	Q.	Aircraft Battery
G.	Rear LED Indicator	R.	Battery Level Indicator
H.	Folding Antenna	S.	Battery Power Button
I.	Winder (Optional)	T.	Top Aircraft Status Indicator

J. Burley Release Module 2
K. Winder Unlock Button
U. Front Arm Unlock Buttom
V. Battery Unlock Buttom

2.5.2 Controller

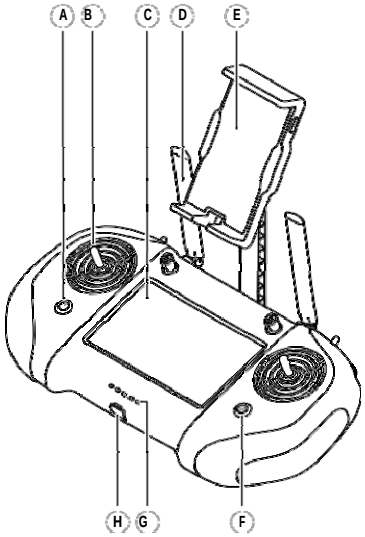


Figure3

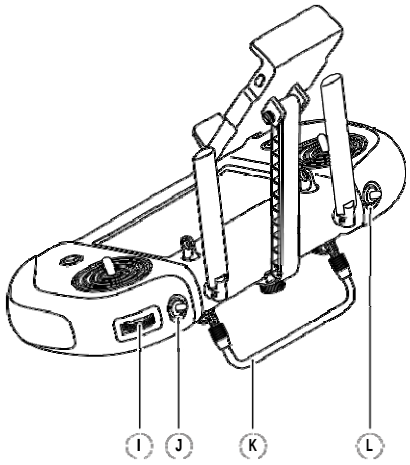
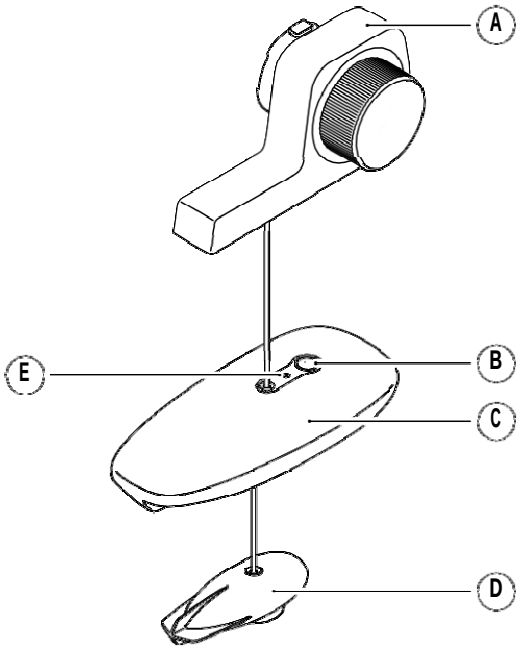


Figure4

No	Item	Function
A	Controller Power Button	Turns controller on/off
B	Control Stick	The right control stick controls the droneto fly forward, backward, left and right(correspondingly push the stick up,down, left andright) The left control stick controls the drone to rise vertically, go vertically downward, left rotate and right rotate (correspondingly push the stick up, down, left andright)
C	LCD Screen	Displays the recording of the aircraft'scamera
D	Antenna	Makes connection with the aircraft
E	Mobile Device Clamp	Used to attach a smartphone or tablet
F	Return-to-Home (RTH) Button	Aircraft will automatically return byshort press and long press RTH Button
G	Controller Battery Level Indicator	Indicates the battery level
H	Power Port	Port to connect the charging cable
I	Camera Setting Dial	Controls the camera's pointing angle
J	Fish Line Release Stick	Casts the fish line
K	Handle	Used to carry/hold the controller
L	Flight Mode Switch	Switches between Altitude Hold ModeorPosition Hold Mode

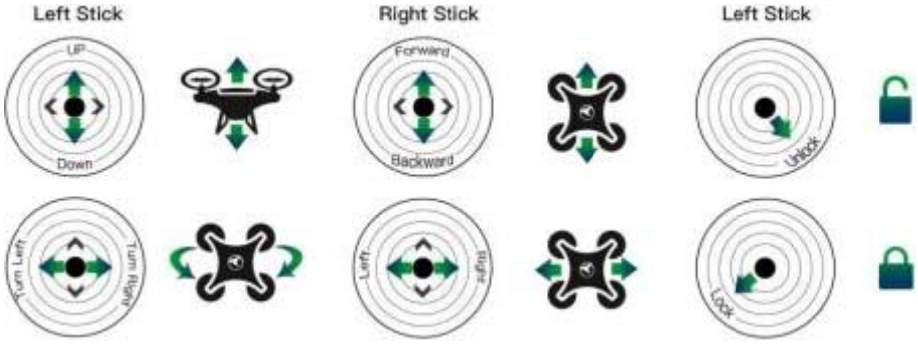
2.5.3 Fish finder (optional)



A. Winder
B. Fish Finder PowerButton
C. Floater
D. FishFinder
E. Battery Charging Indicator

2.6 Understanding the UserInterface

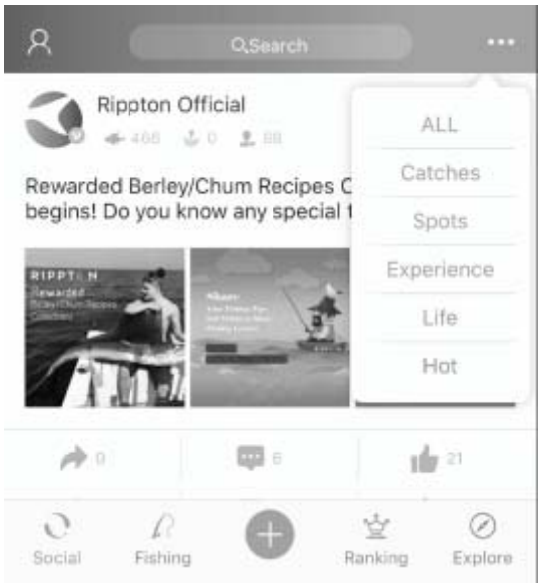
2.6.1 Controlling theaircraft



- Movingtheleftcontrol stickupanddownchangestheaircraft'sclime rate.Pushthecontrol stickup to ascend and down to descend.
- When both control sticks are centered, the MOBULA will hover inplace.
- The further the control stick is pushed away from the center position, the faster the MOBULA will change its clime rate. Always push the control stick gently to prevent sudden and unexpected elevationchanges.
- Moving the left control stick to the left or right controls the rotation of theaircraft.
- Push the control stick left to rotate the aircraft counter-clockwise, push the control stick right to rotate the aircraft clockwise. If the control stick is centered, the MOBULA will maintain its current orientation.
- Thefurtherthecontrolstickispushedawayfromthecenterposition,thefastertheMOBULA will rotate.
- Movingtherightcontrol stickupanddownchangestheaircraft'sforwardandbackwardpitch.
- Pushtherightcontrolstickuptoflyforwardanddowntoflybackward.MOBULAwillhover in place if the right stick is centered.
- Pushtherightcontrolsticklefttoflyleftandrighttoflyright.MOBULAwillhoveriftherig ht stick is centered.

- Push the left controlstick to the lower right to unlock thedrone.
- Push the left controlstick to the lower left to lock thedrone.

2.6.2 User interfaceApp



Item	Function
All	All posts (overview of catches, fishing spots, fishing experience and life)
Catches	Shows the fish that have been caught
Spots	Reserves, shares and views fishing spots (spots detected by fish finder)
Experience	Writes and shares your fishingexperience
Life	Writes and shares daily news

Social	Shares your catches, fishing spots, experience and life with your social network
Fishing	Overview of fishing spots you detected, reserved and others' fishing spots. Entry to the flight control interface
Explore	Contains information you might need for fishing (location information, fish species details, fishing activities, berley, fishing line & fishing techniques, experience recommended by administrator) and to see other users around you
Ranking	Contains world record of fish caught by users (ranked by length, classified by fish species), and most highly rated fishing spots (ranked byrating)
Posts (path: social>profile>posts)	Post record (catches, fishing spots, fishing experience life and social) that you have posted before.
+	Post new fishing experience, catches, spots, etc.

Mission Selection

Select Fish Finder scan or Fish Line/Berley(Burley) cast mission.

Fish Finder

To release or collect Fish Finder.

Switch

To lock/unlock the Fish Line /Berley Release Module(s).

Fish Finder

Cast the fish finder to scan the selected water region.

Cast Fish Line

Cast the Fish Line to the selected water region.

Cast Berley/Burley

Cast the Berley/Burley to the selected water region.

Release Fish Finder

To release Fish Finder.

Collect Fish Finder

To collect Fish Finder.

Home Point

The position where the MOUBLA takes off.

Fish Line Release Switch

Lock/Unlock the Fish Line Release Module.

Berley/Burley Release Switch

Lock/Unlock the Berley/Burley Release Modules.

RTH (Return To Home)

Bring MOBULA back to the Home Point.

Automatic Landing

MOBULA will land vertically and stop its motors.

Automatic Take Off

MOBULA will take off from Home Point.

Automatic Landing

MOBULA will hover over the current position.

Drone Battery Level

Indicate the current battery level of MOBULA.

Satellite Number

Indicate the number of satellite providing the positioning signal.

2.7 Explanation of Auditory and VisualSignals

2.7.1 Aircraft

LED	Signal	Meaning
2 x Front LED Indicator	Green flashing	Aircraft is on the ground and ready for take off
	Constant green light	Aircraft unlocked orflying
2 x Rear LED Indicator	Red flashing	Aircraft is on the ground and ready for take off
	Constant red light	Aircraft unlocked flying
2 x Aircraft Status Indicator (tail and top)	Fast yellow flashing	Aircraft crashed
	Slow yellow flashing	Low battery level. Aircraftwill automatically return
	Red flash only once	Error occurs.
	Blue flashing	No GPS signal
	Slow green flashing	Weak GPS signal
	Green flashing	Normal GPS signal
	Fast green flashing	Strong GPS signal
	Constanly green	Aircraft unlocked
Battery Level Indicator	Green LEDs	1 LED = 20%full 2 LEDs = 40%full 3 LEDs = 60%full 4 LEDs = 80%full 5 LEDs = 100% full
Battery Power Button	Constant green light	Aircraft in ON position

2.7.2 Controller

LED	Signal	Meaning
Power Button	Flash under press, then lights off.With short beeping.	Controller in ON position
Return-to-Home Button	Green light flashing with constantly beeping.	Aircraft in Return-to-Home (RTH) mode. Aircraft will automatically return.

2.7.3 Fish finder

LED	Signal	Meaning
Power Button	Constant green light	Fish finder in ON position

3 Preparation andInstallation

3.1 How to Handle, Transport and Store theMOBULA

NOTICE

- Handle,lift,carryandtransporttheproductwithgreatcaretopreventitfrom being damaged.

3.2 Storing the MOBULA During Intervals of NormalUse

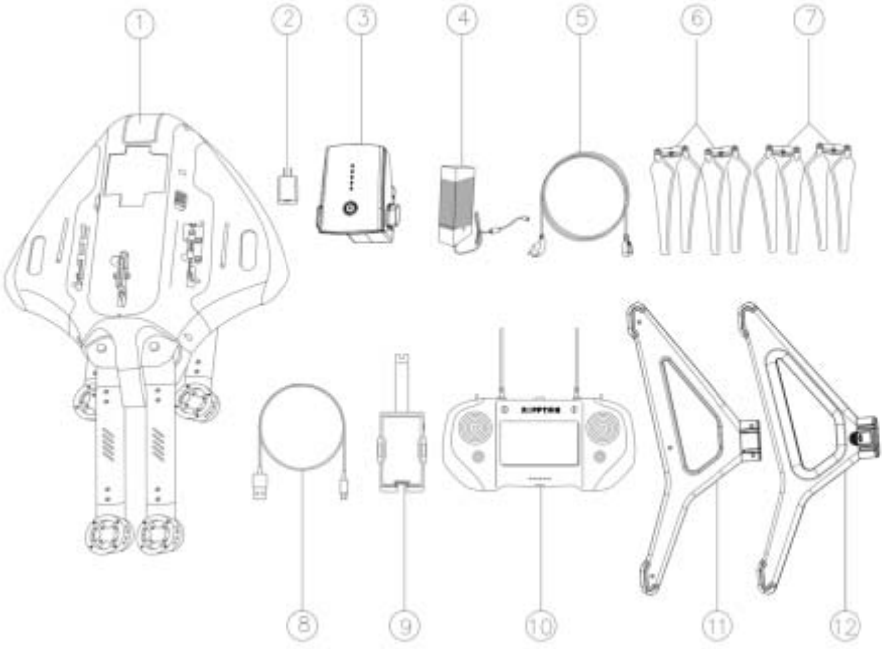
To store the MOBULA during intervals of normal use:

1. Make sure that everything works properly before storing theproduct.
2. Make sure that the propellers areassembled.
3. Disconnect the landinggears.
4. Take out the battery.
5. Put the product in its originalpackaging.
6. Store the product within a temperature range of +5°C to +40°C and with a relative humidity of max. 50% at+40°C.

3.3 How to Install theMOBULA

3.3.1 Unpacking the MOBULA and checking thecontents

Make sure the packaging contains the following items:



1. 1 x Aircraft
2. 1 x USB Travel Adapter (USB adapter may vary according to your country's standard)
3. 1 x Aircraft Battery
4. 1 x Charging Adapter
5. 1 x Power Cord
6. 1 x set Clockwise Propellers
7. 1 x set Counter-Clockwise Propellers
8. 1 x Controller Charger Cable USB <-> Type-C-USB
9. 1 x Mobile Device Clamp
10. 1 x Controller
11. 1 x Landing Gear Right
12. 1 x Landing Gear Left

Optional accessories

- 1 x FishFinder
- 1 x Fish Finder ChargingCable
- 1 x USB TravelAdapter
- 1 x Fish Finder Bag

z

3.3.2 Conditions forassembling

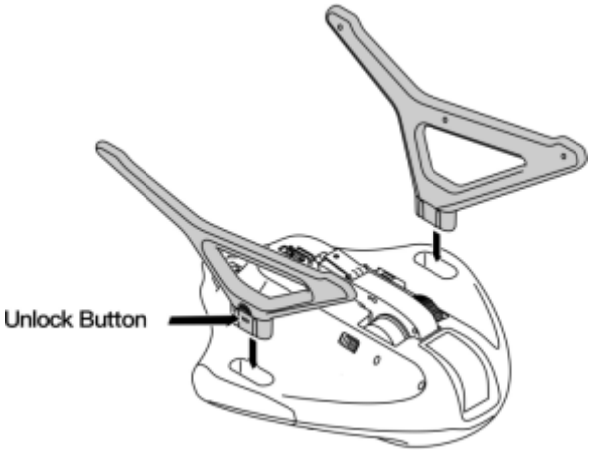
Before you assemble the MOBULA:

1. Makesureyouhavedownloadedandinstalled the **RipptonApp** fromtheGoogle Play Store, Samsung Galaxy Apps or App Store. Get Ripptonmembership.
2. Make sure that the **battery** of the **aircraft** and **controller** are fullycharged.
3. Make sure that the **battery** of the optional **fish finder** is fullycharged.

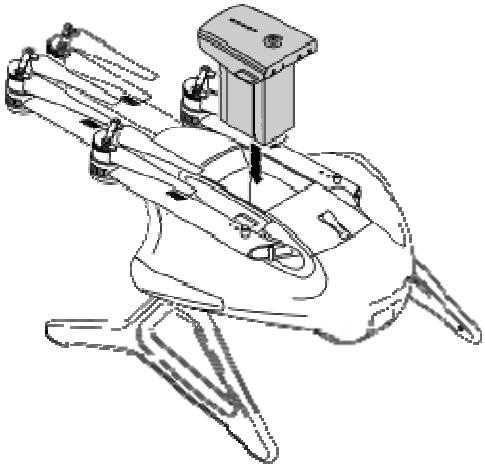
3.3.3 Installation/Preparation of theMOBULA

To install the MOBULA:

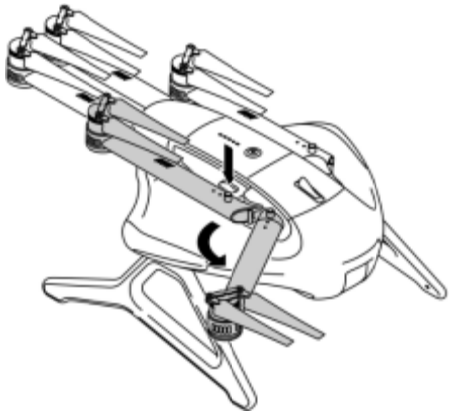
1. Attach the **landing gears** to the aircraft when the drone is still in its packaging. This prevents the aircraft from being damaged. ***NOTICE*** The two landing gear parts are different. Make sure the landing gear's **unlock button** was face outside.



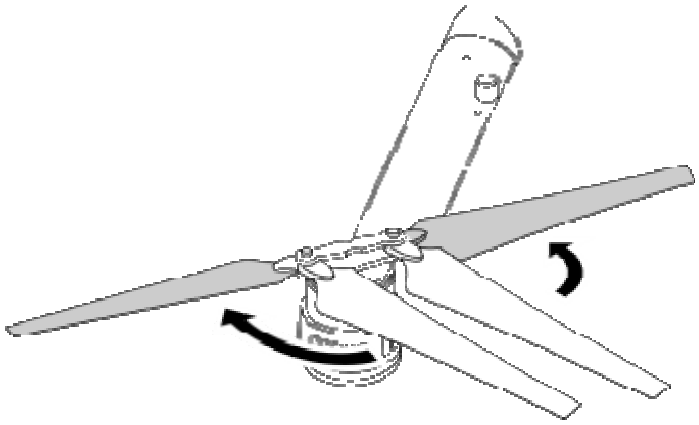
2. Optional: connect the **fish finder** (see *How to Connect the FishFinder*).
3. Turn the **MOBULA** so it stands with the **landing gears** on theground.
4. Press the battery unlock button and insert the **aircraft battery**.



5. Pressone of the **front arm unlock buttons**. Unfold the arm in position andreleasethe button.Move forward and backward few times to ensure it's locked properly. Repeat this for the other arms.



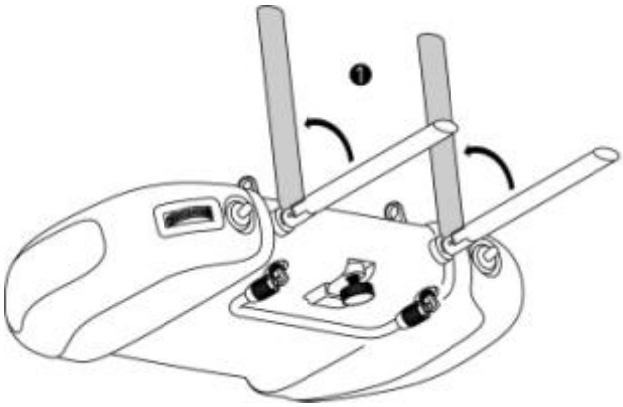
6. Unfold the four **propellers**.



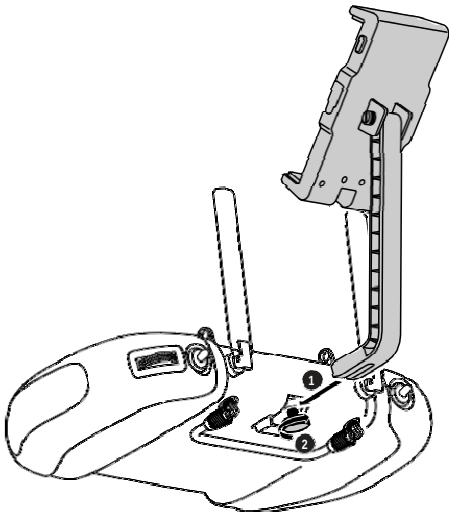
3.3.4 Preparation of thecontroller

To prepare the controller:

1. Put the **antennas** into the vertical position.



2. Attach the **mobile deviceclamp**.

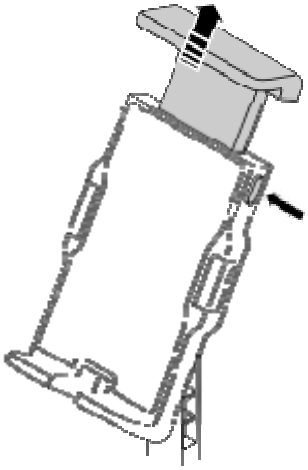


3. Unfold the **handle**. Fasten the twonuts.

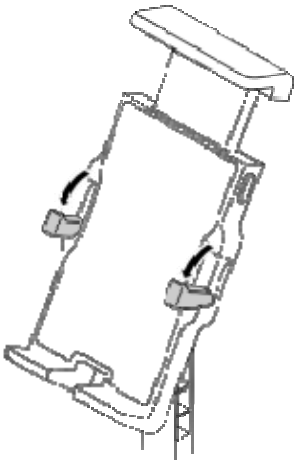
4. Putyourmobiledeviceonthe**mobiledeviceclamp**.***NOTICE***Makesureyouonly use a device with a 5G Wi-Fi connection.

- To put your **mobile phone** on the **mobile device clamp**:

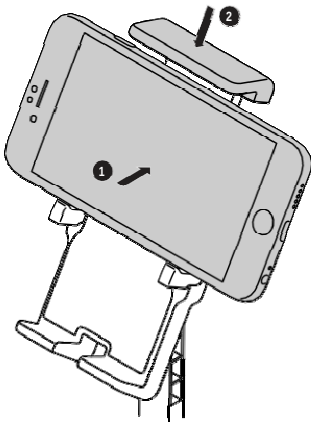
  I. Press the **unlock button** on the **mobile device clamp**. The upper part of the **mobile device clamp** foldsout.



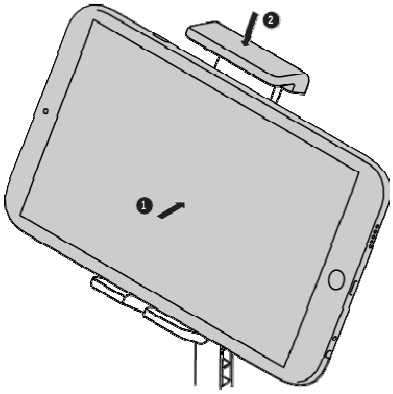
  II. Unfold the two **mobile phoneholders**.



  III. Putyourmobilephoneonthe**mobiledeviceclamp**.Movetheupperpart ofthe**mobiledeviceclamp**downwardtoattachthemobilephone.



- To put your **tablet** on the **mobile device clamp**:
  I. Press the **unlock button** on the **mobile device clamp**. The upper part of the **mobile device clamp** foldsout.
  II. Putyour**tablet**onthe**mobiledeviceclamp**.Movetheupperpartofthe**mobile device clamp** downward to attach the **tablet**.



4 Operation/Use

4.1 Check Before Using theMOBULA

4.1.1 Minimum spaceneeded

- Ensurethattherearenopeopleorobjectswithinarangeof20meterswhenyoustart flying. In order to avoid possible injury or damage.
- Only use the product in open areas on the beach and above thesea.

4.1.2 Connecting the aircraft with your mobiledevice

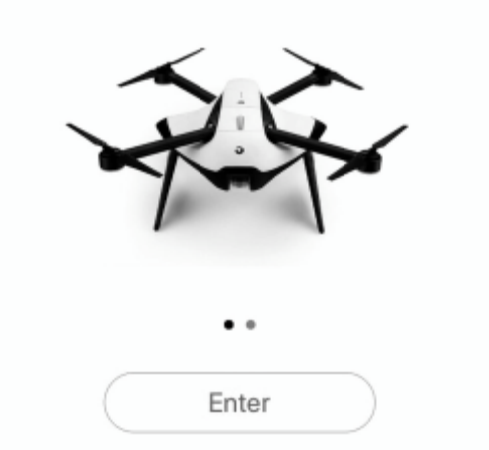
To connect the aircraft with your mobile device:

1. Open the controller, and search for the **MOBULA's WiFi** signal in the **settings** of your mobile device. Make a connection. The format of MOBULA's **WiFi** name is IN-XXXXXXX), and the original password is 12345678 which you can change later.

2. Enter the App's main page. Click**Fishing**.

3. Tap the **droneicon**.

4. Select **Enter** to complete theconnection.



4.1.3 Calibrating thecompass

NOTICE

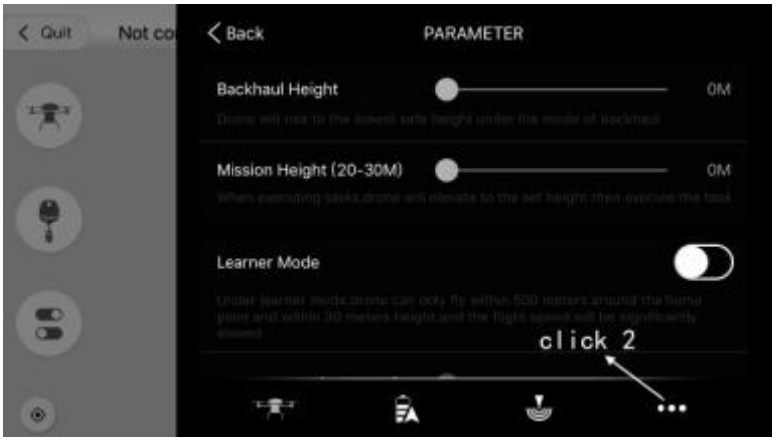
The compass needs to be calibrated in the following situations:

- When you use the MOBULA for the firsttime.
- Whenyouflyatanew place.
- When the aircraft has not been used for more than onemonth.

- DONOTcalibratethecompassinthepresenceofastrongmagneticinterference,such as magnetite, parking structures, and steel reinforcements underground.
- DONOTcarryferromagneticmaterialswithyouduringcalibration,suchasmobile phones.

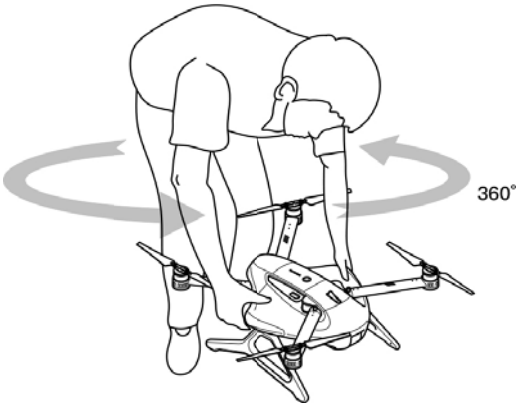
To calibrate the aircraft:

1. Choose an open area to carry out the calibrationprocedures.
2. Openthe**RipptonApp**.Tapthe**AircraftStatusBar**intheapp.Select**Calibrate**. Follow the on-screen instructions

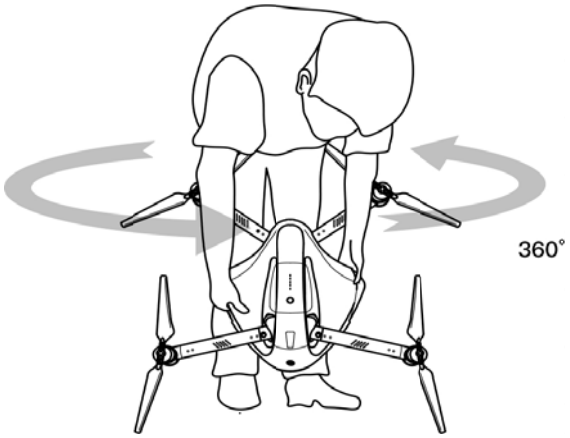



Quit
Not co
Back
COMMON SETTINGS
Compass
click 3
CALIBRATE
IMU
CALIBRATE
Parameter Unit
KM/H
Flight Log
Operation Log

3. When the **top status indicator light** starts flashing or constantly green, please hold the drone horizontally and rotate anticlockwise or clockwise till the light changes from Blue–Yellow flashing toYellow-Green flashing.



4. Please hold the **aircraft** vertically (with nose downwards) and wait till light changes from flashes Red-Green to Blue-Yellow. Then start rotate till status indicator light flashing Blue.



5. Place the drone on the ground, wait till indicator flashes blue to flashes green.

Drone Top Indicator Status of Horizontal Calibration:

Calibration Process	Aircraft Turned on	GPS Signal Received	Horizontal Calibration Ready	Horizontal Calibration Completed
Color	Green or Blue or Red	Green	Blue –Yellow	Yellow - Green
Flashing	Flashing	Flashing or Constantly light	Flashing	Flashing

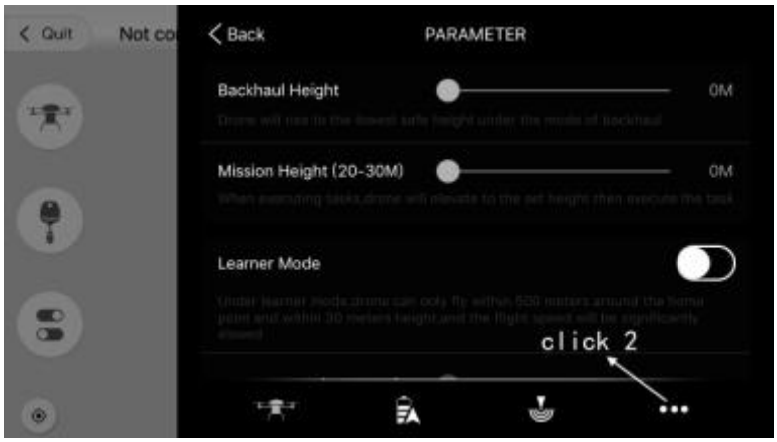
Drone Top Indicator Status of Vertical Calibration:

Calibration Process	Vertically Calibration Ready	Vertical Calibration Completed	Whole Process Completed
Color	Blue - Yellow	Blue	Green
Flashing	Flashing	Flashing	Flashing

5.1.4 Calibrating the IMU

6. Open the **Ripptop App**. Tap the **Aircraft Status Bar** in the app. Select **Calibrate**. Follow the on-screen instructions.


Quit
Not connected...
Set
click 1
D H H.S V.S


Quit
Back
PARAMETER
Backhaul Height
0M
Mission Height (20-30M)
0M
Learner Mode
click 2


Quit
Back
COMMON SETTINGS
Compass
CALIBRATE
IMU
click 3
CALIBRATE
Parameter Unit
KM/H
Flight Log
Operation Log

7. The aircraft's top indicator will flash Red-Blue, when the IMU calibration is completed indicatorwill turn Green.
8. After the calibration, restart the aircraft and the controller.

5.1.5 Checking the product beforeflying

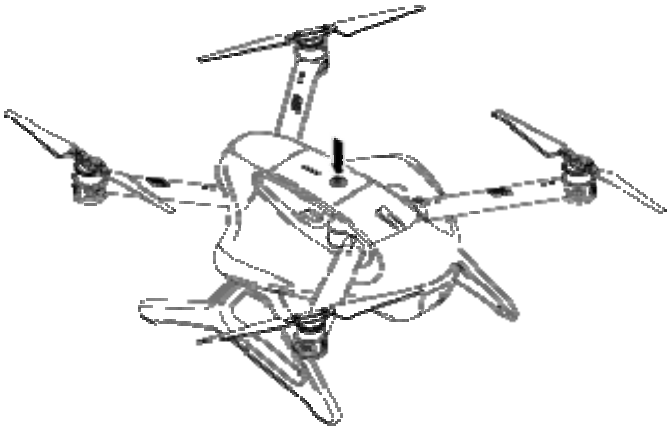
Preflight checklist:

1. Make sure that the **controller**, **aircraft battery**, and mobile device are fully charged.See***HowtoChecktheBatteryLevel***and***HowtoMaintaintheMOBULA***for charging instructions.
2. Make sure the flight arms are unfolded in position and landing gears are mounted correctly and firmly. See ***Conditions for assembling.***
3. Make sure that the **Propellers** are mounted correctly and firmly. See ***How to Replace thePropellers***.
4. Makesurethatthe**MobileDeviceClamp**ismountedcorrectlyandfirmly.See***Preparation of the controller*.**
5. Make sure that the **Fish Line and BerleyRelease Modules** operatecorrectly.
6. Make sure that the **Rippton App** operatescorrectly.

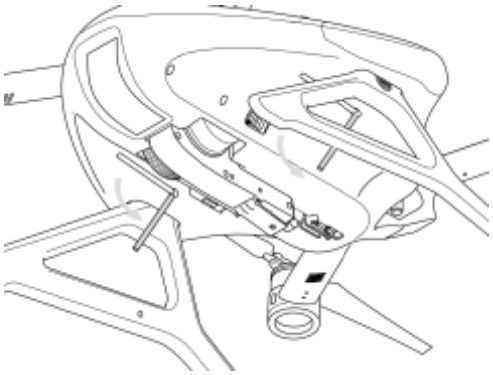
4.2 How to Start and Stop theMOBULA

To start the MOBULA:

1. Short press and long press the **battery powerbutton** till aircraft's LED indicator, status indicator is on and aircraft beeping.



2. Unfold aircraft's antenna. ***Notice*** Fold up the antenna after use.



3. Keep a distance of 20m from person, animal and car or any obstacle.
4. Choose one of the followingoptions:
   - To start the MOBULA through the controller:

I. Short press and long press the **controller power button** to turn on the **controller**. The **controller** will beep when turned on. The aircraft is well connected with the controller when there is graphic on the **LCD screen** and the first indicator on the **controller** turns green and lights constantly.

II. Push the **left control stick** to the lower right corner to unlock the aircraft after it's unlocked, then push the left control stick down and hold till the drone's status indicator lightup, propellers rotating. MOBULA is ready to take off.

III. Push the **left control stick** upwards to take off the aircraft. Control both **control sticks** during flight. Make sure that the motors start and operate correctly.

- To start the MOBULA through the Rippton App:

I. Open the **Rippton App**.

II. Make sure that your mobile device is connected to MOBULA WiFi. See ***Connecting the aircraft with your mobile device***.

III. Make sure that the graph on the **LCD screen** is displayed normally.

IV. Tap the **Fishing icon**. Tap the **Drone icon** in the upper right corner. Select **Enter**. The aircraft connects with the **Rippton App**. Afterlogging into the **Rippton App**, tap on the App screen to choose the aircraft's flight destination.

To stop the motor:

- Under manual operation, push the **left control stick** to the lower left corner till all indicators flashes and propellers stops.
- Under App control, the motors will stop automatically when the aircraftlands.

4.3 How to Use the MOBULA to Spot Fish with the Built-in Camera

4.3.1 Flying the MOBULA to a location and controlling thecamera

1. Start the **aircraft**. See *How to Start and Stop the MOBULA*. The MOBULA

will automatically save the point from which the aircraft takes off as the HomePoint.

2. Control the aircraft through the **controller**:
   - Select the **flight modeswitch**:
     I. **Position Hold Mode**: to maintain the exact previous geographic coordinates with GPS signal and the exact altitude. Select this mode when there is a GPS signal (indicated by green flashing of the **aircraft statusindicator**).
     II. **Altitude Hold Mode** (ATTI): to maintain the exact previous altitude and manual control of the aircraft's direction when there is no GPS signal.
     SelectthismodewhenthereisnoGPSsignal(indicatedbyblueflashing of the **aircraft status indicator** or by the amount of available satellites in the App).
   - Use the **control sticks** to fly the aircraft:
     I. The **right control stick** causes the aircraft to fly forward, backward,left and right (correspondingly push the control stick up, down, left andright).
     II. The **left control stick** causes the aircraft to ascend, descend, rotate counter-clockwise and clockwise (correspondingly push the stick up, down, left andright).
     NOTICE The degree of control stick inclination decides the speed of the aircraft. For more information, see the section *Controlling the aircraft*.

3. Camera recordings are shown on the **LCD screen**. Control the**camera's**angle (0°and 90°) with the **camera setting dial** on the **controller**.

4. The aircraft will automatically record and save all detected fishingspots.

4.3.2 Returning and landing of theMOBULA

NOTICE

- Whenthebatterylevelislow,the**topandtailaircraftstatusindicator**willflash yellow slowly and the **aircraft** will automatically return. This will be shown

onthe app.

To return the MOBULA:

1. Choose one of the followingoptions:
   - To return the MOBULA manually (in case of weak or no GPS signal):
     I. Put the **flight mode switch** in the **Altitude Hold Mode**position.
     II. Use the **control sticks** to return the**aircraft**.
     III. Land the **aircraft** carefully on the ground.
   - To return the **aircraft** with the **Return-to-Home function** (in case of strong GPSsignal):
     I. Put the **flight mode switch** in the **Position Hold Mode**position.
     II. Short press and long press the **Return-to-Home button** on the **controller**. The RTH button will flash green and controller will beep. The **aircraft** will then return to the last recorded Home Point andland automatically. The Home Point is the location from which the **aircraft** takes off.
     III. To cancel Return-to-Home, short press and long press Return-to-Home Button again, and drone will activate Position Hold Mode.
     IV. The aircraft will go to the preset altitude in the App and fly directly tothe home point and land. ***NOTICE*** The aircraft **cannot avoid** obstructions during the **Return-to-Home function**. In case of any obstacles, put the **flight mode switch** in the **Position Hold Mode** position and control the aircraft manually.

4.4 How to Use the MOBULA to Attach and Drop Berley/Fish Line

TheMOBULAcontainsthreereleasemodules.Withthesemodulesitispossibletodrop your berley or fish line further than you could do without aircraft. The two **BerleyRelease Modules** are located at the bottom on both sides of the aircraft. The **Fish Line Release Module** is located in themiddle.

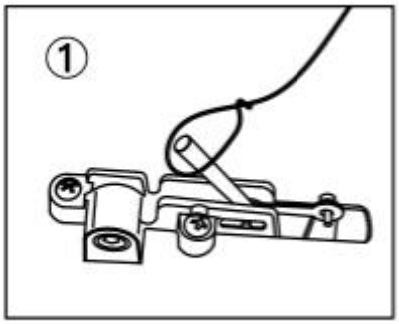
4.4.1 Attach and drop the fishline

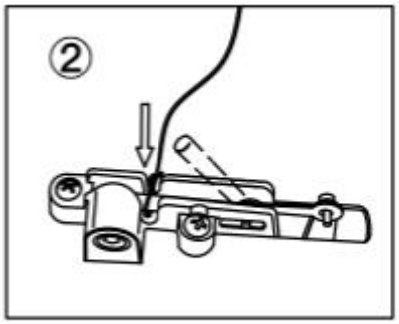
The max payload of the aircraft is 3kg. When the payload is exceeded, the safe releasesystemwillautomaticallyreleasetheattachment(s).Forthisreason,itisadvised that the total weight of berley/fish line should be less than 3kg.

To attach and drop the fish line:

1. To open the drop stick of the **Fish Line Release Module**, unfold aircraft's arms, spread its propellers to a line parallel to the ground, and place the it upwards on the ground, do one of the following:
   - Push the **Fish Line Release Stick**forwards to unlock the **Fish Line Release Module**.
   - Make sure that the **aircraft** is in the **ON** position.

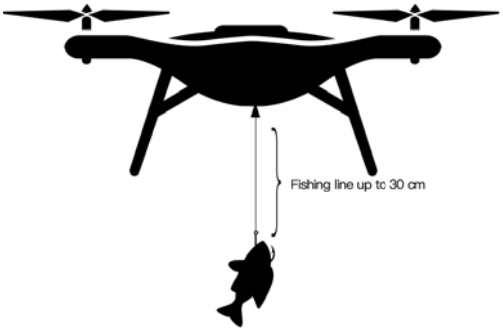
     Tap  then  inthe**RipptonApp**tounlock the **Fish Line Release Module.**
2. Attach the fish line.





3. To lock the **Fish Line Release Module,** do one of the following
   - Pull the **Fish Line Release Stick** towards you.
   - Tap  then  in the **Rippton App** to lock the **Fish Line Release Module.**

NOTICE The distance between the fish line's bait and the MOBULA shouldbe no more than 30 cm.



4. Fly the **aircraft** to the desired location by doing one of thefollowing:
   - Select the fishing spot using the **Rippton App**.
   - Use the controller to manually fly the **aircraft** to the fishing spot.
5. Do one of the following:
   - When a fishing spot has been selected (instead of manually flying the

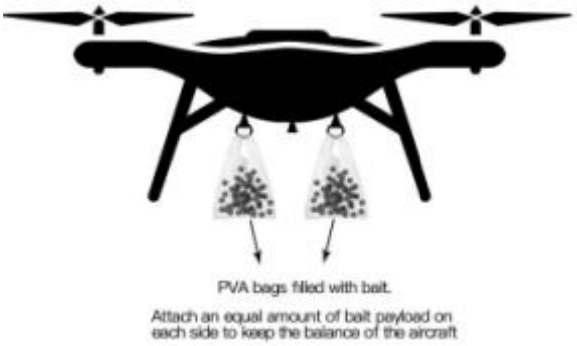
aircraft to the fishing spot):

I. When your mobile device indicates that the casting place has been reached, select **Confirm to cast**. The fish line will be dropped automatically.

- To open the drop stick manuallydoes one of the following:
  I. Press the **Fish LineRelease Stick** on the**Controller**.
  II. Tap   e**RipptonApp**to release the fish line**.**

4.4.2 Attaching and droppingberley

Each **BerleyRelease Module**'s payload is approx. 1.5 kg. Make sure you attach an equal amount of berley payload on each side to keep the balance of the aircraft. The total payload should be less than 3 kg.

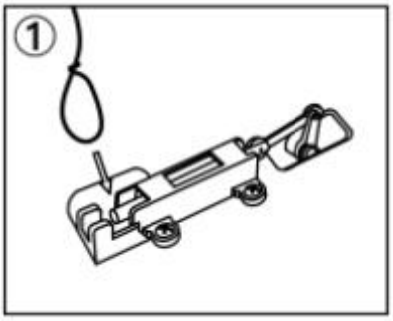


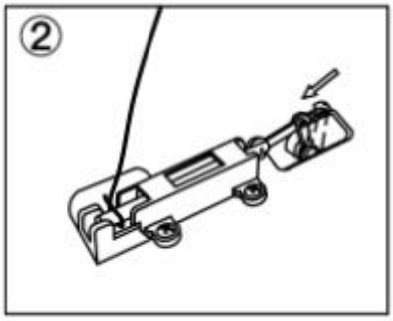
To attach and drop the berley:

1. To open the drop stick of the **BerleyRelease Module**, unfold aircraft's arms, spread its propellers to a line parallel to the ground, and place the it upwards on the ground, then

   Tap  then  e **Rippton App** to open the **dropstick**.

2. Attach the berley.





NoticeBetween berley and drop stick, connect with a ball bearing swivel to avoid anything stuck into the release module or aircraft.

3. Tap again to close the **dropstick**.
4. Fly the **aircraft** to the desired location by doing one of thefollowing:
   - Select the fishing spot in the **Rippton App**.
   - Use the controller to manually fly the **aircraft** to the fishing spot.
5. Do one of the following:
   - When a fishing spot has been selected (instead of manually flying the aircraft to the fishingspot):
     I. When your mobile device indicates that the casting location has been reached,select**Confirmtocast**.Theberleywillbedroppedautomatically.
   - To open the drop stick Open the **Rippton App**. Tap to drop theberley.

4.5 What to Do in Emergency and ExceptionalSituations

4.5.1 What to do in case of acrash

In case of a crash or the aircraft accidentally landing in the water, the **aircraft status indicators** will

showafastyellowflashing.TheGPSfunctionandthealarmlight(visibleupto1km)will be activated and all other functions will be turned off. The last position of the aircraft will be shown in the **RipptonApp**.

To pick up the aircraft after a crash:

1. Openthe**RipptonApp**.Ifthedronehascrashed,theAppwillshowthelastposition of the aircraft on the screen.

2. Pick up the **aircraft** where the drone hascrashed.

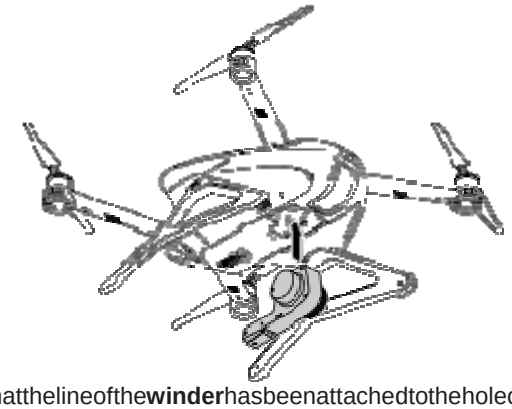
4.6 How to Use the FishFinder

With the fish finder you can detect fish more accurately. The fish finder uses 5.8G WiFi communication technology, with which the data can be displayed in real time on the mobile device within a distance of 1.5km.

4.6.1 Installing the fish finder

To install the fish finder:

1. Attach the **winder** to the bottom of the **aircraft**.



2. Makesurethatthelineofthe**winder**hasbeenattachedtotheholeofthe**floater**of the**fish finder**.

4.6.2 Using the fish finder to detectfish

1. Make sure that the **fish finder**, **controller** and **aircraft** are all fullycharged.
2. Press and hold the fish finder **power button** for one second to turn on the device.
3. Turn on the aircraft.
4. Turn on the controller.

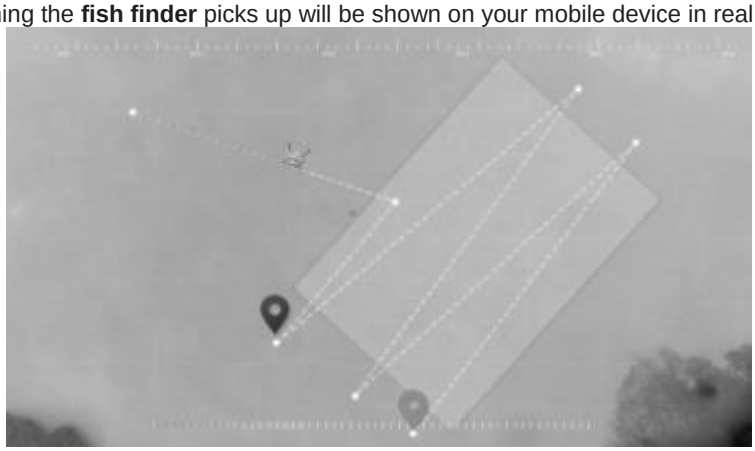
4.6.3 Using the fish detectingmodes

There are three fish detecting modes for use with the fish finders. Open the **Rippton App** and choose one of the following fish detecting modes:

- **Fast fish detection:** you select the start and end point in the App. The maximal fishing spots can be 12 in one line. The longest possible distance between two points is 10 meters.
- **Fixed point detection:** users can preset some points and the drone candetect them one by one (maximum of 5 points).
- **Regional spots detection:** select a region in the App and the aircraft automatically flies to it where you can release the fish finder. The aircraft

will guide the fish finder through the entire region. The 10 x 20 meter square scanning zone centered on the chosen spot will be automatically formed, so the App can automatically design the fish detectingroute.

Everything the **fish finder** picks up will be shown on your mobile device in real time.

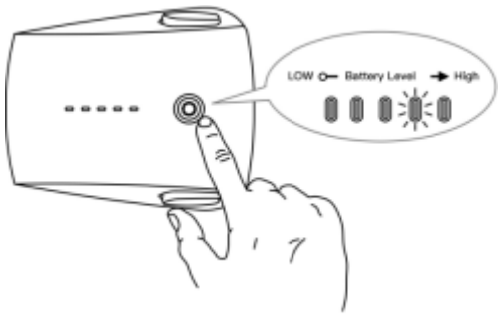


4.7 How to Check the Battery Level of theMOBULA

To check the battery level of the aircraft:

1. Do one of the following:
   - To check the battery level via the **Rippton App**:
     I. In the **Rippton App**, tap the **Fishing icon**. Tap the **Drone icon** in the upper right corner. Select **Enter**. See the battery icon in the upper right corner for the batterylevel.

     I. Turn on the aircraft battery.
     II. The **battery level indicator** will light up and show the battery level.See *Explanation of Auditory and Visual Signals*. To charge the battery, see *Charging the aircraftbattery*.

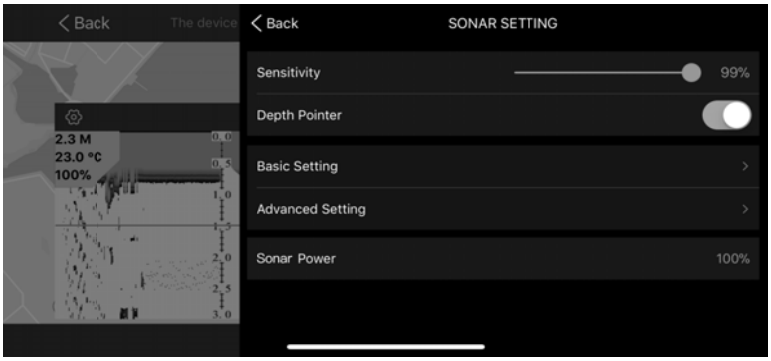


To check the battery level of the controller:

1. Turn on the**controller**.
2. The four (except the first indicator) **controller battery level indicator** will light up and show the batterylevel.

To check the battery level of the fish finder via the Rippton App:

1. Turnonthe**fishfinder**.The**fishfinderbatterychargingindicator**willlightup.
2. In the **Rippton App**, go to **SonarSettings**.



5 Maintenance

5.1 How to take care of theMOBULA

5.1.1 Cleaning, disinfecting andrinsing

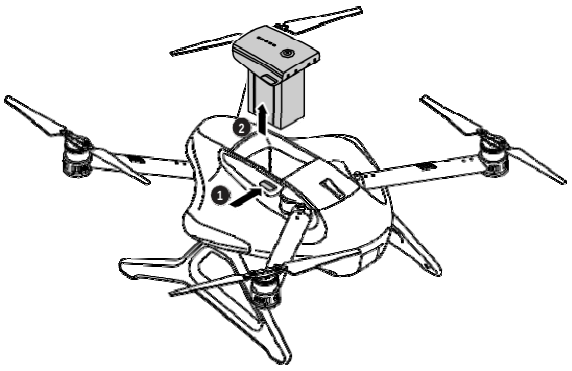
To clean the MOBULA:

- The Controller cannot be washed with water, but it can be cleaned with a wet cloth.
- Take out the battery and rinsetheaircraftwithlukewarmwateraftereachuse and wipe aircraft till it's completely dry.Donotrinsethecontrollerwith water, but wipe it with a soft, clean, damp cloth.
- Cleanthehousingoftheaircraft,thecontrollerandtheoptionalfishfinderaftereach use, using commercial cleaning agents and disinfectants as required.
- Donotusealcohol(suchasspirits),chemicalcleaningagentsorsolventsasthey can damage plastic parts.
- Do not apply cleaning agents directly onto the devices directly. Always putthemonto a soft cloth that can be used to clean the devices.
- Do not clean any electrical or mechanicalparts.

5.1.2 Replacing the aircraftbattery

To replace the aircraft battery:

1. Press the **battery unlock buttons**. Remove the**battery**.



2. Loadthenewly charged**battery**(see*Chargingtheaircraftbattery*)orreplaceitwithafullycharged one.

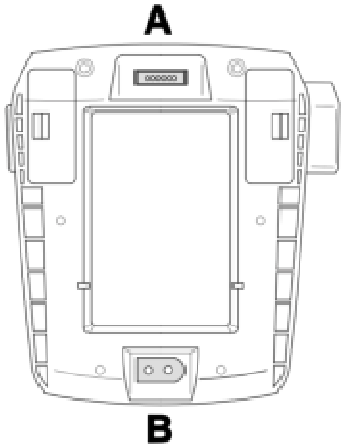
5.1.3 Charging the aircraftbattery

NOTICE

- Only charge the battery with the provided batterycharger.
- Connect all cables first before charging.

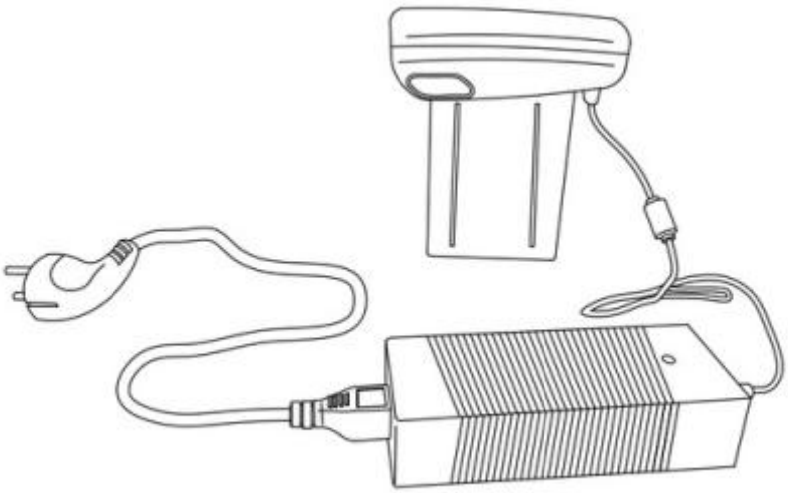
To charge the aircraft battery:

1. Connect the**charging adapter** with**power cord**.
2. Connect the **power cord** to an earthed wallsocket.



Battery Bottom View

3. Connect the **charging adapter** to the **aircraftbattery**.



NOTICE

- Make sure you only charge the battery when the temperature is between 5°Cand40°C.Thechargerwillstopchargingifthetemperatureisnotwithin this range.

4. The battery charging time is approx three hours. When the **aircraft battery** is fullycharged:
   - Disconnect all cables from the **aircraft battery**.
   - Disconnect all cables from the **battery charging adapter**. Disconnect the **power cord** from the earthed wallsocket.

5.1.4 Charging thecontroller

To charge the controller:

1. Connectthe**controllerchargercableUSB<->Type-C-USB**tothe**powerport**of the **controller**.
2. Connect the other end of the **controller charger cable USB <->Type-C-USB** to the **USB traveladapter**.
3. Connect the **USB travel adapter** to an earthed wallsocket.
4. Remove the **USB travel adapter** from the earthed wall socket whenthebatteryisfullycharged.Thebatteryisfullychargedwhenthe**controllerbatterylevel indicators** are all on. The controller charging time is approx. two to threehours.

   NOTICEMakesuretochargethebatterywhenthetemperatureisbetween5°Cand 40°C.Thechargerwillstopchargingifthetemperatureisnotwithinthisrange.

   - Do not attach the **controller charger cable USB <->Type-C-USB** to the laptop/desktop to charge the controller.
5. Removethe**controllerchargercableUSB<->Type-C-USB**andthe**USBtravel**adapter**.**

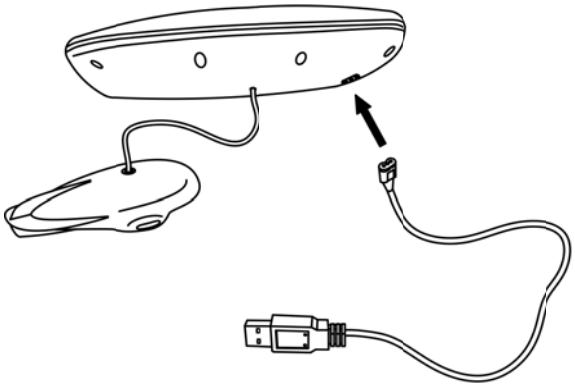
   NOTICE When you charge the controller while it's off, the LCD screen will light up for seconds before dark again.

5.1.5 Charging optional fishfinder

To charge the fish finder:

1. Connect the **fish finder charging cable** to the **power port** of the **fish finder**. Connect the other end of the **fish finder charging cable** to the **USB travel adapter**.

2. Connect the **USB travel adapter** to an earthed wallsocket.



3. Remove the **USB travel adapter** from the wall socket when the battery is fully charged. The battery is fully charged when the **fish finder battery level indicator** has turned from red to green.
   NOTICEMake sure to charge the battery when the temperature is between 5°C and 40°C. The charger will stop charging if the temperature is not within this range.
4. Remove the **fish finder charging cable** and the **USB traveladapter**.

5.2 How to Inspect theProduct

5.2.1 Weekly inspectiontasks

Task	Frequency
Check the functioning of the motors	Before each use and monthly
Check if the propellers are well fastened	Before each use and monthly

6 Troubleshooting andRepair

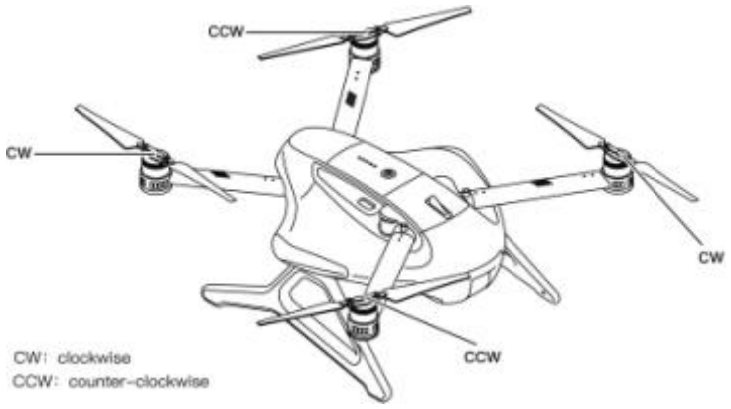
6.1 How to Identify and SolveProblems

Error	Cause	Solution
Product does not start	Empty battery	Charge the batteries
Motors are not functioning	Empty battery	Charge the batteries
Propeller malfunction	Broken propeller	Replace the propeller (see *How to Replace the Propellers*)

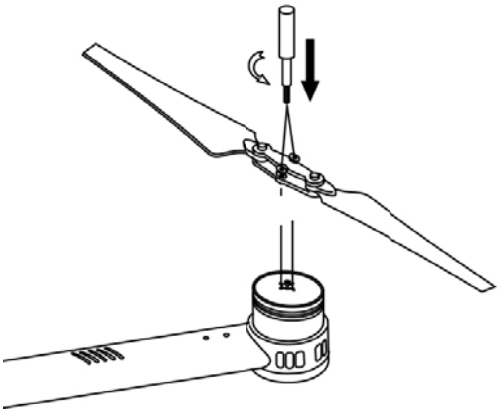
6.2 How to Replace thePropellers

To replace the propeller:

1. Use a screwdriver to loosen the screws that attach thepropeller.
2. Replacethe**propeller**.***NOTICE***TheCWpropellersaretaggedwithCWsignals. The CCW propellers are tagged with CCW signals. The below illustration indicates the CCWpropellers.



3. Tighten the **propellers** with the twoscrews.

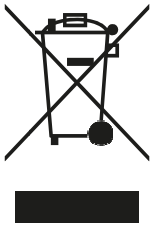


Caution

- Apply removable thread-locking fluid on the screw, before tighten the screw.
- Do not reuse the screws once it’s been untighten.

7 Disposal

7.1 Disposal of ElectronicComponents



The symbol on the product, the accessories or packaging indicates that this device must not be treated as unsorted municipal waste but must be collected separately. Dispose of the device via a collection point for the recycling of waste electrical and electronic equipment waste if you live within the EU and in other European countries that operate separate collection systems for waste electrical and electronic equipment waste. Bydisposingofthedeviceinthepropermanner,youhelptoavoidpossible hazardstothe environment and public health that could otherwise be caused by improper treatment ofwasteequipment.Therecyclingofmaterialscontributestotheconserv ationofnatural resources. Therefore do not dispose of your old electrical and electronic equipment together with the unsorted municipalwaste.

7.2 Disposal of Packaging Waste

The packaging is made of environmentally friendly materials, which may be disposed of through your local recycling facilities. By disposing of the packaging and packaging waste in the proper manner, you help to avoid possible hazards that could harm the environment and public health. The symbol on the packaging indicates that the packaging is made ofPAP.

7.3 Disposal ofBatteries

The product contains a battery. Batteries must not be disposed of with the usual domestic waste. They may contain toxic heavy metals and are subject to

hazardous waste regulations. For this reason, dispose of used rechargeable batteries at a local collection point.

Appendix I – Supplied Accessories, Consumables and Spare Parts

Supplied accessories

Name	Article Number
Fish finder	RIP-MOB-FF-001
Fish finder bag	RIP-MOB-FF-002
Fish finder charging cable	RIP-MOB-FF-003
Fish finder charging cable adapter	RIP-MOB-FF-004

Spare/replacement parts

Name	Article Number
Propeller	RIP-MOB-001
Landing gear	RIP-MOB-002
Controller	RIP-MOB-003
Controller charging cable USB <-> Micro-USB	RIP-MOB-004
Aircraft battery	RIP-MOB-BA-001
Aircraft battery charger	RIP-MOB-BA-002
Aircraft battery charging cable	RIP-MOB-BA-003
Mobile device clamp	RIP-MOB-BA-005

Declaration of Conformity for Machinery

EC declaration of conformity (DoC) of the machinery
DeclarationaccordingtoDirective2006/42/EC,asamended(hereaftercalledMachinery Directive). This language version of the declaration is verified by the manufacturer (original declaration).

We (manufacturer):

Businessname: .....
Address: .....
Country: .....

declare under our sole responsibility for the following machinery:

Genericdenomination: .....
Function: .....
Model: .....
Type: .....
Serialnumber: .....
Commercialname: .....

that all the relevant provisions of the Machinery Directive are fulfilled;

that the machinery also complies with the provisions of the following European Directives:

- **DIRECTIVE 2014/30/EU relating to electromagneticcompatibility**
- **RoHS**
- **RED**

that the machinery is in conformity with the following standards and/or other normative documents:

- (example) EN ISO 12100:2010 Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO12100:2010)

- (example) EN 349:1993+A1:2008 Safety of machinery - Minimum gaps toavoid crushing of parts of the human body

and that the following Notified Body performed the intervention as described below and issued the EU-type examination certificate:

NotifiedBodyname: .....
Address: .....
Country: .....
Identificationnumber: .....
Descriptionofintervention: .....
Number EU-type examinationcertificate: .....
Date EU-type examinationcertificate: .....
Duration and conditions of validity of the examinationcertificate: .....

that the machinery is designed and constructed in accordance with the system of full quality assurance approved by:

NotifyBodyname: .....
Address .....
Country: .....
Identificationnumber: .....

thatthefollowingnaturalorlegalpersonestablishedintheCommunityismandated in writing to perform all or part of the obligations and formalities connected with the MachineryDirective:

Businessname: .....
Address: .....

Country: .....
Name: .....
Position: .....

and that the following natural or legal person established in the Community is authorized to compile the technical file:

Businessname: .....
Address: .....
Country: .....
Name: .....
Position: .....

Place and date of issue (of this DoC):

.....

Signed by or for the manufacturer:

.....

Name:.....
Title:.....

8 FCC Compliance

FCC Compliance

This equipment has been tested and found to comply with the limits fora Class B digital device, pursuant to Part 15 of the FCC Rules. These limits aredesigned to provide reasonable protection against harmful interference in aresidential installation. This equipment generates, uses and can radiate radiofrequency energy and, if not installed and used in accordance with theinstructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particularinstallation. If this equipment does cause harmful interference to radio ortelevision reception, which can be determined by turning the equipment off andon, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to whichthe receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

The device must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC Warning Message

This device complies with Part 15 of the FCC Rules. Operation is subject to thefollowing two conditions: (1) this device may not cause harmful interference, and(2) this device must accept any interference received, including interference thatmay cause undesired operation.

FCC RF Radiation Exposure Statement Caution

To maintain compliance with the FCC's RF exposure guidelines, place the product at the least 20cm from nearby persons.

Room 2407, Century Square Division C, NO. 14 Hualou Street, Haishu District, Ningbo City, Zhejiang Province, China

Email: support@rippton.com
Tel: +8657487139648
Zip Code:315000

Warning：

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help.
NOTE: This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter

RF Exposure Statement

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance of 20Cm the radiator your body. This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter