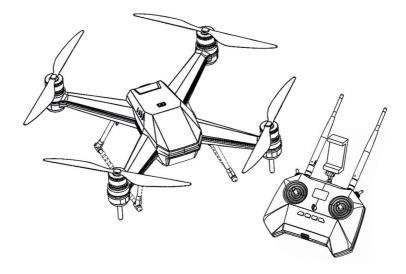


# SMART FISHING DRONE

# User Manual for SharkX

V14:20220609





### **Download the Rippton App**

Search for "Rippton" on the Google Play Store, Samsung Galaxy Apps or App Store to install the app on your mobile device or scan this QR code.

### Trademark

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General notice: some product names used in this manual are used for identification purposes only and may be trademarks of their respective companies.

# SharkX

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# 1. Preface

\*\*\***Notice** this manual is for the SharkX but also applicable to the SharkX Plus and the SharkX Pro. The SharkX is the basic model while the Plus and the Pro are upgraded versions so they include additional functions and features. Therefore, all the charts and graphics in this manual are just for a general reference and should be subject to actual applications and updates.

### 1.1. User Experience Requirements

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

### 1.2. Conventions Used in This Manual

The following style conventions are used in this document:

#### Bold

Names of product components, commands, options, programs, processes, services, and utilities.

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 Safety Warnings

### **A** DANGER

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

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

### 1.4. Read, Understand and Retain Instructions

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 injuries.

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

Ensure that each person who uses the product has read these warnings and instructions 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 and Information

#### 1.5.1. Internet

The latest version of the documentation, as well as video tutorials, is available at the following address: www.rippton.com/tutorial or Rippton's official YouTube channel.

#### 1.5.2. Ordering documentation

Documentation, user instructions and technical information can be ordered by sending an email to support@rippton.com.

#### 1.5.3. Documentation feedback

If you are reading Rippton product documentation on the internet, any comments can be submitted on the support website. Comments can also be sent to support@rippton.com. We appreciate your comments.

#### 1.5.4. Support and service

For service-related questions, please contact:

Rippton/Ningbo Pelican Drone Co., Ltd.

support@rippton.com

# 2. Description of the Product

### 2.1. Intended Use and Reasonably Foreseeable Misuse

The SharkX is intended to be used as a drone for recreational sea fishing purposes, such as:

• Flying and releasing the fishing line to the desired location.

The product should be used in open areas on the beach, above the sea, with no obstacles and should always stay within the sight of its user. The product is intended to carry a maximum payload of 3 kg.

The SharkX is NOT intended for:

- Indoor use.
- Use in or close to residential areas or areas frequented by people.
- Use in No-Fly Zones.
- Use as a toy. The SharkX must not be used by children under 14 years of age. The product is *not* a toy.
- Use in or near rough water and extreme weather conditions, such as strong winds (greater than 35 km/h), rain, snow or fog.
- Use close to large metal structures.
- 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 radius of 1 km.

The SharkX Fishing Drone should be used with the following software, original accessories and components only:

- SharkX battery (including charger)
- SharkX remote controller (including charging cable)
- SharkX propellers
- Rippton App
- Other new accessories listed on Rippton official website

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

### 2.2. Process Overview

The SharkX is a drone for recreational fishing purposes. It consists of a drone (with built-in fishing line release mechanism), a controller, mobile device clamp.

Flight data is automatically recorded on to the internal storage of the SharkX. This includes flight telemetry and SharkX status information.

The SharkX has a **fishing line release mechanism** which can easily perform accurate fishing line release. Your fishing line can be attached to the **fishing line release mechanism**. Once the fishing line is at the desired location, it can be dropped using the **controller** or via the Rippton App.

### 2.3. Technical Data

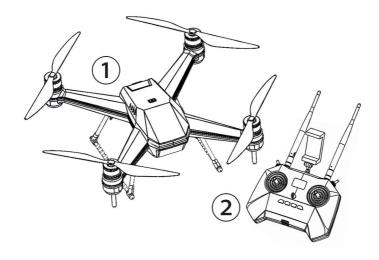
Parameter	Unit
SharkX	
Device Name	SharkX Smart Fishing Drone
Weight	3.2 kg
Dimensions	480 x 480 x 215 mm (Propeller Closed)
Propeller	16 inches
Max Speed	10 m/s (36 km/h)
Max Payload	3.0 kg
Max Wind Resistance	10 m/s (36 km/h)
Water Protection Level	Water Surface Floating (water resistant), however drone should not be submersed
	Controller is not water resistant
Operating Temperature	-10 °C to 40 °C
Operating Frequency	2400 ~ 2483.5 MHz
Transmitter Power (EIRP)	+20 dBm
Satellite Systems	GPS/GLONASS/GALILEO/BEIDOU
*Flying Time (Without Payload)	23 mins
*Suggested Casting Radius (With Payload)	1 km
Radio Technology	Wi-Fi Data Transmission
	Controller Spread Spectrum Wireless
Frequency Band	2.4 Ghz Wi-Fi Data Transmission
	2.4 Ghz Controller Spread
	Spectrum Wireless

SharkX Remote Controller	
LCD Screen	0.96 inches
Operating Frequency	2400~2483.5 MHz
Max Transmission Distance (Unobstructed, Free of Interference)	1 km
SharkX Battery	
Capacity	6,000 mAh
Battery Type	LI – PO

### 2.4. Product Compliance

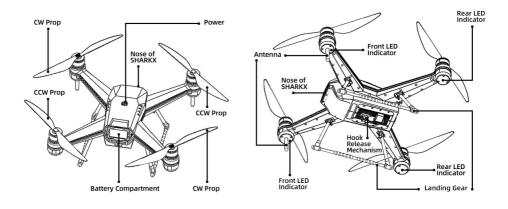
This product complies with all relevant Australia & New Zealand Directives.

### 2.5. Product Components

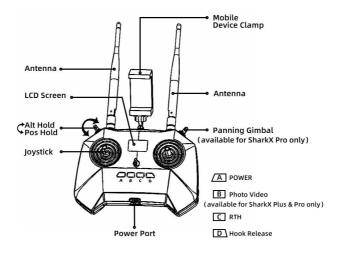


- ① SharkX Smart Fishing Drone
- 2 SharkX Remote Controller

#### 2.5.1. SharkX



#### 2.5.2. Controller

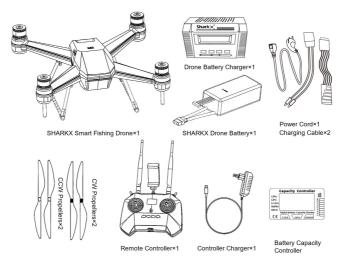


# 3. Preparation and Installation

# NOTICE

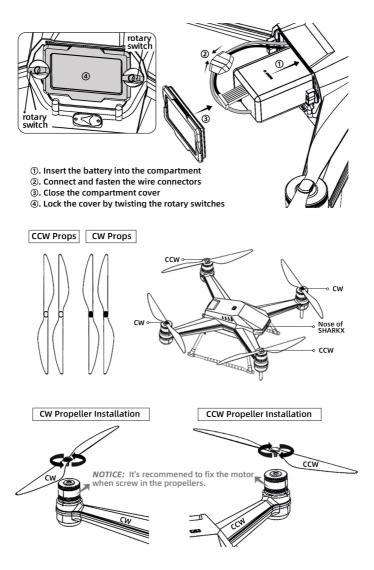
- Handle, lift, carry and transport the product with great care to prevent it from being damaged.
- 3.1. Unpack the Package and Check the Contents

The package should fully contain the following items:



- 3.2. Conditions before Assembling the SharkX
- 3.2.1. Make sure you have downloaded and installed the **Rippton App** from the Google Play Store, Samsung Galaxy Apps or Apple App Store. Register as a Rippton App user.
- 3.2.2. Make sure that the SharkX battery and controller are fully charged.

### 3.3. Setup of the SharkX

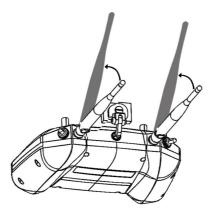


Notice please refer to step 6.2.1 to disassemble the propellers

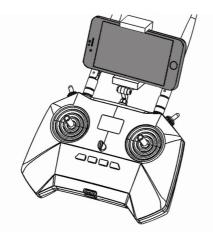
### 3.4. Preparation of the Controller

**Notice:** for optimal range the sides controller antenna need to face the drone while it is in flight, and NOT point at the drone

1. Tilt the antennas up.



2.Fasten your mobile device securely to the clamp.



# 4. Operations & Use

### 4.1. Check before Using the SharkX

#### 4.1.1. Minimum space needed

Ensure there are no people or any other obstacles within a range of 20 meters before you start flying in order to avoid possible injury or damage. Only use the product in open areas on the beach and above the sea.

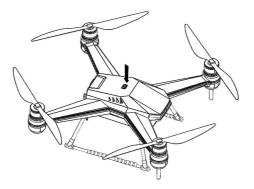
4.1.2. Preload the map on the App

When using the SHARKX in any new areas, it's always necessary to enter the 'Rippton' app with network connection and finish preloading the map before connecting the SHARKX to your mobile device.

- 4.1.3. Before launching the SharkX, please make sure the satellite number is no less than 15, otherwise the drone will not take off successfully
- 4.1.4. Before flight please ensure that the Controller is set on "Position Hold / POS Hold" mode rather than "Altitude Hold / ALT Hold" mode.

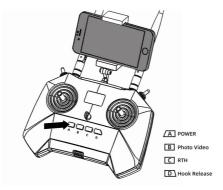
### 4.2. Start the SharkX

Long press the 'POWER' button till LED indicators are on and SharkX beeping.

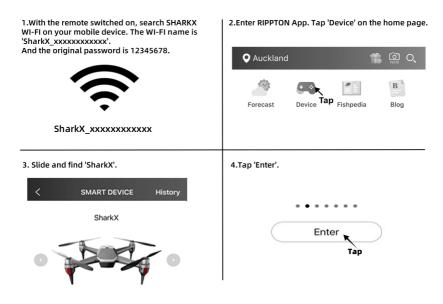


### 4.3. Start the Controller

Long press the '**POWER**' button, the controller will vibrate and beep, and then the screen lights on.



4.4. Connect the SharkX Controller to Your Mobile Device



**Notice** there is a voice prompt indicating SharkX connected successfully 18

### 4.5. Calibrate the Compass



The compass needs to be calibrated in the following situations:

- When you use the SharkX for the first time
- When you fly at a new place (more than 100m away)
- When the SharkX has not been used for more than one month

DO NOT calibrate the compass in the presence of a strong magnetic interference, such as magnetite, parking structures, and steel reinforcements underground.

DO NOT carry ferromagnetic materials with you during calibration, such as mobile phones (aside from the phone you may have already connected to your controller)

DO NOT mute your mobile device during calibration in case you cannot hear voice prompts.

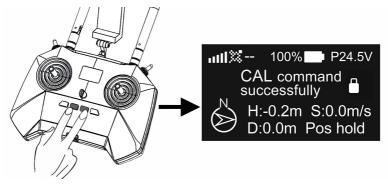
#### To calibrate the SharkX compass

**NOTICE** choose an outdoor open area to carry out the calibration procedures.

Two ALTERNATIVE ways of entering compass calibration:

4.5.1. Entering calibration on RC

**Step 1**: Press and hold two middle buttons (see image below) till the RC beep and the screen will show "CAL command successfully".



*Step 2*: When the screen shows "Horizontal calibration", hold the drone horizontally with its nose outwards and start rotating. The RC will emit a long beep indicating the horizontal calibration has succeeded.



*Step 3*: When the screen shows "Vertical calibration", hold the drone vertically with its nose downwards and start rotating. The RC will emit a short beep indicating the horizontal calibration has succeeded. Then the screen will show "Calibration succeeded".

Notice please refer to step 2&3 in 4.5.2 on how to hold the drone during calibration

After successful calibration please place Shark X on a flat surface and switch the drone OFF and then Back ON to "save" the calibration.

SharkX Indicator Status of Horizontal Calibration:

Calibration Process	SharkX Turned On	GPS Signal Received	Horizontally Calibrating	Horizontal Calibration Completed
Color	Front- <mark>red</mark> Rear- blue	Front- <mark>red</mark> Rear- green	Front- yellow & blue Rear- yellow & blue	Front- red & blue Rear- red & blue
Status	Flashing	Flashing	Flashing	Flashing

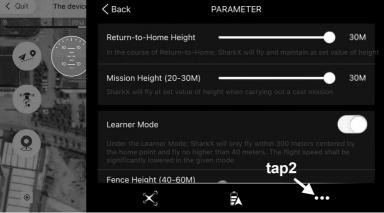
SharkX Indicator Status of Vertical Calibration:

Calibration Vertically Process Calibrating		Vertical Calibration Completed	Whole Process Completed	
Color	Front- yellow & blue	Front- blue	Front- red	
	Rear- yellow & blue	Rear- blue	Rear- green	
Status	Flashing	Flashing	Flashing	

#### 4.5.2. Entering Calibration on App

Step 1: Open the Rippton App. Enter the flight control interface. Tap 'Set' on top right and follow the steps below to enter 'COMMON SETTINGS'.



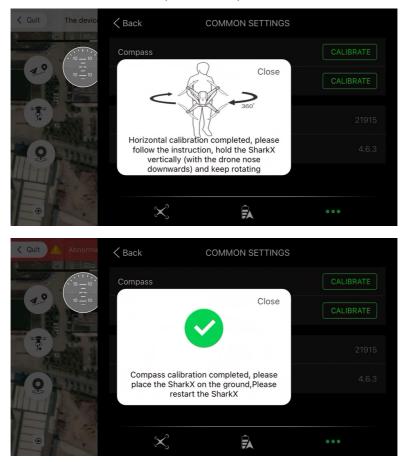


CQuit The device	<b>〈</b> Back	COMMON SETTINGS	
10-10	Compass	tap3 🗕	CALIBRATE
	IMU		CALIBRATE
	Flight Control Serial N	umber	21915
1 9 1 111	Version Number		4.6.3
	×	Â	•••

Step 2: Tap 'CALIBRATE' icon and enter the compass calibration interface.

Quit The device	<b>&lt;</b> Back	COMMON	SETTINGS	
10-10	Compass			CALIBRATE
			Close	CALIBRATE
		360		
0	the in	calibration starts, ple nstruction, hold the SI zontally and start rota	narkX	
	101.		ading	
	$\times$		À	000

Step 3: Following the voice prompt, hold the drone horizontally with its nose outwards and complete the horizontal calibration. And then hold the drone vertically with its nose downwards and complete the compass calibration.



Notice calibrate the compass when there are no less than 15 satellites

After successful calibration please place Shark X on a flat surface and switch the drone OFF and then Back ON to "save" the calibration.



#### To calibrate the IMU

**NOTICE** : IMU calibration is only required after a crash or a repair.

4.5.3. Refer to **4.5.2** and enter '**COMMON SETTINGS**'. Tap the lower '**CALIBRATE**' icon. Enter the IMU calibration interface.

		X	Â	000
<b></b>		Cancel	Continue	– tap
0	Version Nu	horizontal ground be	efore IMU calibration.	4.6.3
	Flight Cont	Please ensure the dr	rone must be put on a	0
	IMU			CALIBRATE
10 (*	Compass		11	CALIBRATE
CQuit Th	<b>&lt;</b> Back		COMMON SETTINGS	;
©		$\lesssim$	Â	•••
2	Version Nun	nber		4.6.3
	Flight Contro	ol Serial Number		
<b>*°</b> (	IMU			
	Compass			CALIBRATE
< Quit Th	< Back		COMMON SETTINGS	

4.5.4. Place the SharkX on very flat and level ground. Tap '**Continue**'. IMU calibration will be completed automatically.

< Quit Th	<b>&lt;</b> Back		COMMON SETTINGS	
	Compass			
10	IMU			CALIBRATE
The second se	Flight Control	Serial Number		
0	Version Numb	Calibration ha		
		Cancel	Continue	
0		X	Ê	

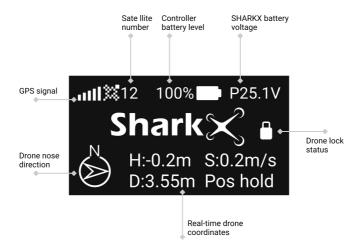
**Notice** if the SharkX appears to shift forward or backward, does uncontrolled circles or does not respond to controls, or flies erratically – land immediately and re-calibrate the compass. If problem still persists, this could be a number of factors including external magnetic or radio interference so contact local distributor/dealer and seek help.

*Notice* after completing calibrating the compass and IMU, turn off the drone and place it on the level ground where you desire to take off the SharkX. And then restart the drone, the controller and the Rippton App.

### 4.6. Pre-flight Check List:

- Make sure that the controller, SharkX battery, and mobile device are fully charged.
- Make sure that the propellers are mounted correctly and firmly.
- Make sure that the mobile device clamp is mounted correctly and firmly.
- Make sure that the hook release mechanism operates correctly.
- Make sure the Payload does not exceed 3KG.
- Make sure that the Rippton App operates correctly and is connected
- Ensure the Shark X Controller is in "Position Hold" Mode.
- Make sure you have a large clear space around you, free of children, pets and people before attempting to fly.
- Always have the nose of the drone facing away from you & nose facing the sea before takeoff.

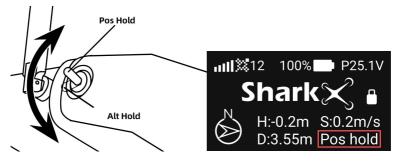
### 4.7. Controller Interface



### 4.8. Take off the SharkX via the Controller

#### 4.8.1. Switch the flight mode to Pos Hold

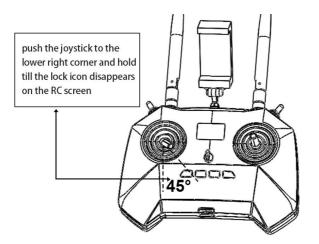
It's recommended to set the drone on **Pos Hold** mode at all times. **Alt Hold** mode is for professional drone pilot only.

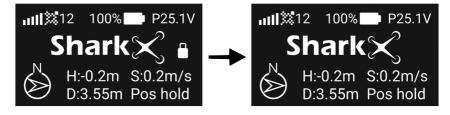


*Notice* when both joysticks are centered, if on **Pos Hold** mode, the drone will hover at the current position, and if on **Alt Hold** mode, the drone might get pushed away from the current position by wind.

#### 4.8.2. Unlock the SharkX

Push the **left joystick** to the lower right corner and hold until the controller beeps, the lock icon disappears on the controller screen and then all propellers start rotating, which means the drone has been unlocked. Slowly push the **left joystick** back to the center and the SharkX is ready to take off.



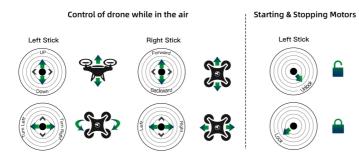


Notice the location where the SharkX gets unlocked will be the HOME point

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4.8.3. Taking off the SharkX

Push the left joystick up and gently lift the SharkX off the ground.



- 4.9. Control the SharkX
- 4.9.1. Vertical flight
  - Push the left joystick up to ascend and down to descend. Always push the joystick gently to prevent sudden and unexpected elevation changes.
  - Moving the left joystick left and right adjusts the direction of the drone nose. Push the left joystick left to rotate the SharkX counter-clockwise and right to rotate the SharkX clockwise.
- 4.9.2. Horizontal flight
  - Push the right joystick up to fly forward and down to fly backward.
  - Push the right joystick left to fly left and right to fly right.

*Notice* when both joysticks are centered, the SharkX will hover at the current position.

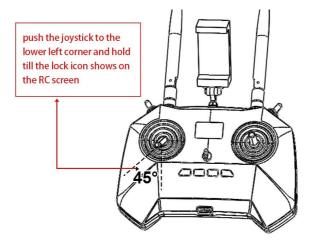
*Notice* do not pull the fishing line if it gets snagged with the drone in case it may effect the drone's balance.

*Notice* Do Not attempt to stop the motors (disarm) while the Shark X is in flight, as this will cause a crash.

### 4.10. Return & Land the SharkX Manually via Controller

- 4.10.1. Use the joysticks to return the SharkX to the desired landing spot.
- 4.10.2. Push the left joystick down gently. The SharkX will descend to the height of 5 meters and hover a short while before landing safely on the ground. And then push the **left joystick** to the lower left corner and hold until the controller beeps, the lock icon shows on the controller screen and all **propellers** stop rotating, which means the SharkX has been locked.

Notice pushing the left joystick down and holding can also lock the drone.



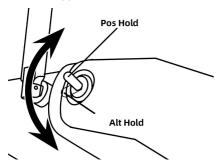


### 4.11. Return & Land the SharkX Automatically via Controller

- 4.11.1.Short press the '**RTH**' button on the controller until '**RTH**' shows on the controller screen and the controller beeps.
- 4.11.2. The SharkX will start flying to the **HOME** point, descend to the height of 10 meters and hover a short while before landing safely on the ground. After landing, the SharkX will lock (stop) the motors automatically.



- 4.12. Cancel RTH
- 4.12.1. Toggle the lever to 'Alt Hold' and then back to 'Pos Hold' on the controller.

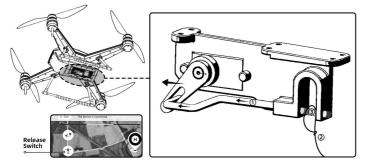


*Notice* always remember to ensure the SharkX is in Position Hold Mode before taking off again

### 4.13. Cast the Fishing Line via Controller

The Hook Release Mechanism is on the middle bottom of the drone.

#### 4.13.1. Attach the fishing line



0. Press the 'Release Switch' button on the remote control to open the hook release mechanism.

②. Put the fishing line in the device.

③. Press the 'Release Switch' button on the remote control to close the hook release mechanism.

*Notice* recommended not to attach the fishing line when the SharkX is flying in the air to avoid accidents

4.13.2. Fly the SharkX to the desired fishing spot and press the 'Hook Release' button on the controller to cast the fishing line.

# 5. Maintenance

### 5.1. Take Care of the SharkX

- 5.1.1. Cleaning, disinfecting and rinsing
  - The controller is not water resistant or waterproof so it cannot be washed with water, but it can be cleaned with a damp (freshwater) cloth.
  - Clean the SharkX with a damp cloth after each use and use a dry cloth to wipe the SharkX. Do not rinse the controller with water, but wipe it with a soft, clean, damp cloth.
  - Use commercial cleaning agents and disinfectants if necessary.
  - Do not use alcohol (such as spirits), chemical cleaning agents or solvents as they can damage plastic parts.
  - Do not apply cleaning agents directly onto the devices directly. Always apply them onto a soft cloth to clean the devices.
  - Do not clean any electrical or mechanical parts.

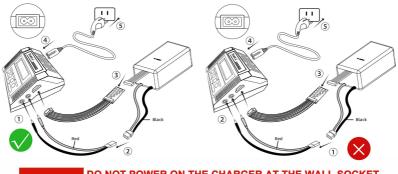
- 5.1.2. Storing the SharkX during intervals of normal use
  - Make sure that everything works properly before storing the product.
  - Disassemble the propellers.
  - Put the product in its original packaging.
  - Store the product within a temperature range of 5°C to 40°C and with a relative humidity of max. 50% at +40°C.
  - Take out the SharkX battery.
  - Store the SharkX battery in cool and dry place
  - Store the battery at temperatures between -20°C to 25°C
  - Regularly charge the battery to avoid the over-discharge that may lead the loss of battery's function. Ensure to recharge the battery if it has been left non-charged for one month.
  - For ensuring the longevity of the battery when leaving for long periods please store at approx. 50% battery charge.

### 5.2. Charge the SharkX Battery

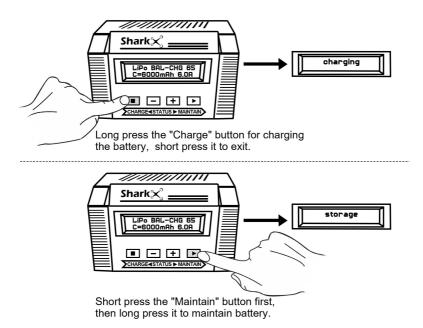
*Notice* always charge the battery when the temperature is between 10°C and 45°C.

The charger will stop charging if the temperature is not within the range.

- Only charge the battery with the provided battery charger
- Connect all cables properly before powering on the charger at the wall socket



WARNING DO NOT POWER ON THE CHARGER AT THE WALL SOCKET UNTIL THE CABLES ARE ALL CONNECTED PROPERLY



#### Note: For Maintenance

Considering the potential battery-life loss caused by regular high-power fast charging, we recommend doing a battery **maintenance** every 3 months, which can protect the battery from the battery-life loss. When '**storage**' appears on the screen, the charger will provide maintenance to the battery.

In the event that the battery has not been used for a long time (such as 1 month), it is recommended to perform a maintenance first before charging.

It takes approx. 2 hours to fully charge the drone battery. When the battery is fully charged:

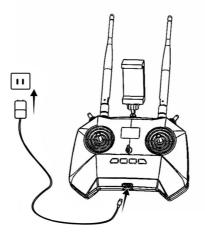
- Unplug the power cord from the power supply
- Disconnect the charging cables with the SharkX battery and the charger
- Disconnect the power cord with the battery charger

### 5.3. Charge the Controller

Notice always charge the controller when the temperature is between 10°C and 45°C.

The charger will stop charging if the temperature is not within this range.

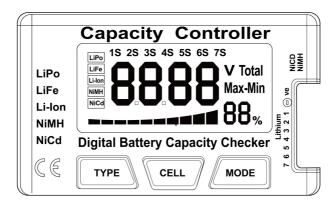
- The charger should be only used for charging the SharkX remote controller. Do not use it to charge other devices such as a laptop
- Connect the charger with the controller, and insert the plug into the power supply



It takes approx. 3.5 hours to fully charge the controller. When it is fully charged:

- Unplug the power cord from the power supply
- Disconnect the charging cable with the controller

### 5.4. Battery Capacity Checker Instructions



	LiPo	LiFe	Li-lon	NiCd	NiMH
Input Cells	1~7 cells	1~7 cells	1~7 cells	4~7 cells	4~7 cells
Total Voltage		V	V	$\checkmark$	
Total Cell Battery Capacity(0- 99%)	$\checkmark$	$\checkmark$	$\checkmark$	×	×
Individual Battery Cell Voltage	$\checkmark$	V	V	×	×
Lowest Cell Voltage	$\checkmark$		$\checkmark$	×	×
Highest Cell Voltage	V	$\checkmark$	$\checkmark$	×	×
Voltage Difference between Highest and Lowest Cell Voltages	$\checkmark$	$\checkmark$	$\checkmark$	×	×

Notice Please read the instructions carefully

#### 5.4.1. Balance function

Long press the first button, LIPO/LIIO will blink, says it is in balance, balance process according to the second button can view each battery voltage, balance is take the battery in the lowest section as the benchmark to discharge balance.

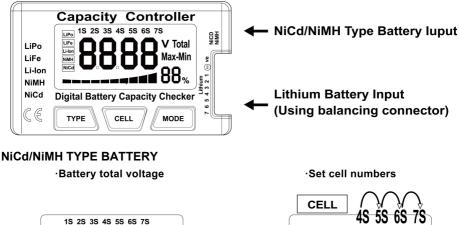
5.4.2. Battery checker layout

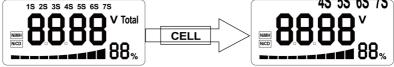
#### Buttons:

Battery Type: NiCd/NiMH, Li-Po, LiFe, Li-Ion

Cell Number: NiCd/NiMH(4~7 cells), Lithium type (1~7 cells)

Display Mode: battery cell voltages, total voltages, lowest cell voltage, highest cell voltage, voltage gap between highest cell voltage and lowest cell voltage, remaining battery capacity (%)

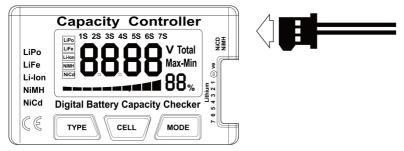




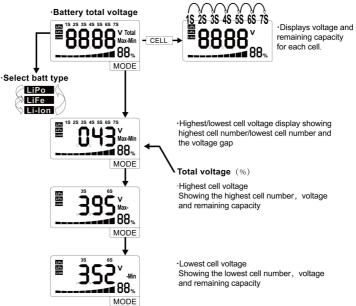
Total voltages, and remaining capacity (%)

n.b.The capacity shown for Nixx type cells is not accurate and should not be relied upon.

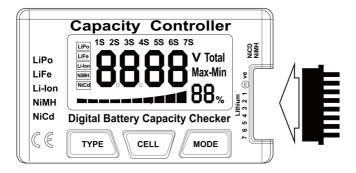
NiCd and NiMH batteries for the TX and RX (4~7 cells) can be connected to this capacity checker.



#### LITHIUM TYPE BATTERIES



JST EH and JST XH type plugs on lithium battery packs can be directly connected to this battery checker.



When using with Thunder Power/Flight Power and Poly quest type batteries, it is necessary to use an adaptor board with balance adaptor board lead.

FS-BLEAD Balance Adaptor Board Lead.

FS-BAPQ Balance Adaptor Board Poly Quest.

FS-BATP Balance Adaptor Board Flight Power/Thunder Power

### 5.5. Inspect the Product

#### 5.5.1. Weekly inspection tasks

Task		Frequency
1.	Check if the motors function properly	Before each use and weekly
2.	Check if the propellers are firmly tightened	Before each use and weekly
3.	Check Controller to ensure the buttons and Joysticks are fully functioning	Before each use and weekly
4.	Check for any visible damage or wear and tear to drone	Before each use and weekly

### 5.6. After-sales Information

Visit the following pages to learn more about after-sales policy and warranty information.

https://www.rippton.com/support

# 6. Troubleshooting and Repair

### 6.1. Identify and Solve Problems

Error	Possible Cause	Solution
	Empty battery	Charge the battery
Product does not start	Product not calibrated	Please Calibrate
	Not enough GPS Satellites & in Pos Hold Mode	Wait for at least 15 Satellites before arming motors.
Motors do not function	Empty battery	Charge the battery
Propeller(s) malfunction	Damaged propeller(s)	Replace the propeller(s)
SharkX Flies Erratically or	Compass not calibrated correctly	Re-calibrate the Compass
you lose control	External Magnetic of Radio interference	Do not fly at this fishing spot & consult your dealer

### 6.2. Replacing the Propellers

6.2.1. Disassemble the propellers



6.2.2. Please refer to step 3.3 to install the propellers.

# 7. Disposal

### 7.1. Disposal of Electronic Components



The symbol on the product, the accessories and packaging indicate 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 if you live within the EU and in other European countries that operate separate collection systems for waste electrical and electronic equipment. By disposing of the device in the proper manner, you help to avoid possible hazards to the environment and public health that could otherwise be caused by improper treatment of waste equipment. The recycling of materials contributes to the conservation of natural resources. Therefore, do not dispose of your old electrical and electronic equipment together with the unsorted municipal waste.

### 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 of PAP.

### 7.3. Disposal of Batteries

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.

# 8. FCC Compliance

### 8.1. FCC Compliance

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

### 8.2. FCC Warning Message

Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

### 8.3. 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.

### 8.4. FCC RF Exposure Information (SAR)

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard for wireless devices employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. This is because the device is designed to operate at multiple power levels so as to use only the power required to reach the network.

In general, the closer you are to a wireless base station antenna, the lower the power output. While there may be differences between the SAR levels of various devices and at various positions, they all meet the government requirement.

Email: support@rippton.com