

PROTOCOL®

**OCEANA™**

AMPHIBIOUS RC DRONE

INSTRUCTION MANUAL



# THANK YOU.

Thank you for your purchase of Protocol's **Oceana Amphibious RC Drone**. You are about to experience the best of what remote control flight has to offer. We strongly recommend that you take the time to read this manual thoroughly. It contains many tips and instructions on how to get the most out of this aircraft and maintain it for a long life.

As with any aircraft, this is a precision flying machine. Treat it well and enjoy all the fun it has to offer, flight after flight.

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## SAFETY WARNINGS

### HAVE FUN, BUT SAFETY FIRST!

- Read and follow instructions on how to synchronize electronics before each flight.
- To prevent damage to people or property, always avoid contact with other objects while in flight.
- Inspect aircraft prior to each flight and do not fly if damaged.
- Never expose product or any of its electronic parts to moisture, water, or heat sources.
- To prevent overheating, allow battery a cool-down period before recharging.
- To prolong engine life, allow a cool-down period between flights.
- Use only the charger and/or charging cable that is supplied with this item.
- Do not strike, cut, or pierce the internal battery or subject it to hard impacts.
- Do not mix old and new batteries or mix different types of batteries.
- Never attempt to modify function of vehicle or controller or attempt repairs using parts other than those supplied by Protocol. Spare parts are available at [www.ProtocolNY.com](http://www.ProtocolNY.com)

**THIS DEVICE USES COMPONENTS THAT OPERATE AT HIGH SPEEDS.  
AS WITH ANY SUCH DEVICE, USE CAUTION TO OPERATE SAFELY.**

**FAILURE TO FOLLOW ANY OF THESE GUIDELINES MAY RESULT IN BODILY  
INJURY OR DAMAGE TO PERSONAL OR PUBLIC PROPERTY.**

#### FAA FLIGHT REGULATIONS

- Observe local FAA rules and regulations for flight.
- Do not fly in unpermitted locations.
- Go to [www.faa.gov/uas](http://www.faa.gov/uas) to learn more about FAA drone regulations.
- This drone weighs over .55lbs and requires registration.

## PARTS



### DRONE

1. Canopy
2. Blade
3. Charging jack  
(pull up waterproof cover to expose)
4. On/Off Switch

## PARTS



### REMOTE

1. Power Switch
2. Modes – Preset to Flight
3. Forward/Backward
4. Bank Left/Right
5. Throttle
6. Turn Left/Right
7. Compass Mode
8. Trimmer
9. Speed:
  - a. Speed 1: 40%
  - b. Speed 2: 60%
  - c. Speed 3: 80%
  - d. Speed 4: 100%
10. Lights On/Off

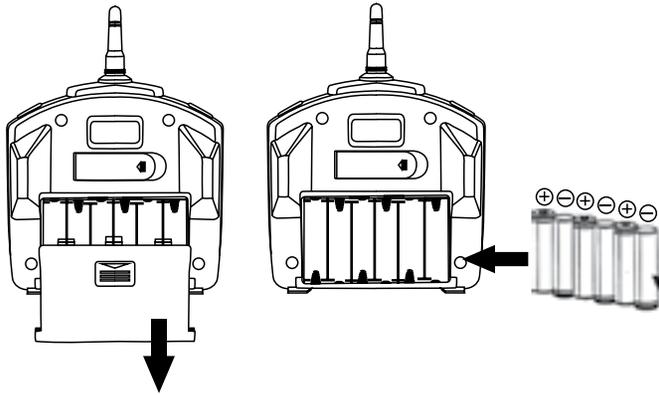
### LCD SCREEN

1. Remote Battery Level
2. Mode Indicator - *Does not change.*
3. Throttle Trim
4. Forward/Backward Trim
5. Bank Left/Right Trim
6. Spin L/R Trim

### SPARE PARTS INCLUDED

- Replacement Blades

## REMOTE BATTERY INSTALLATION



Remove battery cover from controller. Insert 6 x 'AA' batteries according to indicated polarities. Replace and screw back in battery cover.

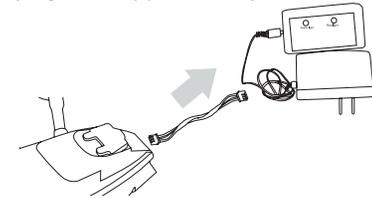
1. Install batteries carefully.
2. Do not mix old and new batteries.
3. Do not mix different types of batteries.

## CHARGING THE DRONE BATTERY

1. Pull up the rubber, waterproof cover to the charging jack.
2. Plug the connecting wire into the jack and connect to the charging pack. The connecting wire may be pre-connected.
3. Plug the charging pack into an outlet. The red light on the pack will turn on while charging and turn off once charged.
4. Remove the wire and pack from the drone and replace the waterproof cover making sure it is secure.

Charging time: 120 minutes --- Flying time: approximately 7 minutes

\*Low Battery Signal: The lights on the drone will begin to flash and the controller will beep during flight to indicate low battery.



DO NOT CHARGE OVERNIGHT OR BEYOND THE CHARGING TIME STATED. DO NOT LEAVE BATTERY UNATTENDED.

\*Battery: Li-Po, 7.4V, 1200mAh

If you purchased extra batteries, allow the engines to cool between flights in order to prolong engine life.

### CAUTION WHEN CHARGING

1. When charging, place product on a dry, well-ventilated surface and keep away from heat sources.
2. Always use adult supervision while charging.
3. In order to increase battery longevity, avoid repeat charging and excessive discharging.
4. As battery temperature is high immediately after flight, charge after cooling down for higher efficiency.
5. Do not strike or subject battery to hard impacts or sharp surfaces.
6. Do not use any other charger than that which is supplied with this item.
7. Do not use or leave battery near a heat source such as fire or space heater; exposure to heat may result in reduced performance or in some cases dangerous conditions.
8. If battery is left in charging state for an extended period of time after being fully charged, the battery may automatically discharge.
9. Never leave the battery unattended during charging.
10. Do not disassemble battery.
11. Do not submerge battery in water.

## START-UP PROCEDURE

Before flying, the drone and transmitter must be turned on in sequence and synchronized.

1. Place the drone on flat ground.
2. Press the power button for 2 seconds.
3. The green lights on the drone are at the front and the red are at the back.
4. Turn on the remote control.
5. The indicators on the drone will flash while they are syncing.
6. Push the throttle up and then down to sync. The lights will go steady to indicate the drone has synced.



### NOTE:

If after 30 seconds, it has not recognized the drone, turn off the controller and repeat Start-Up procedure.

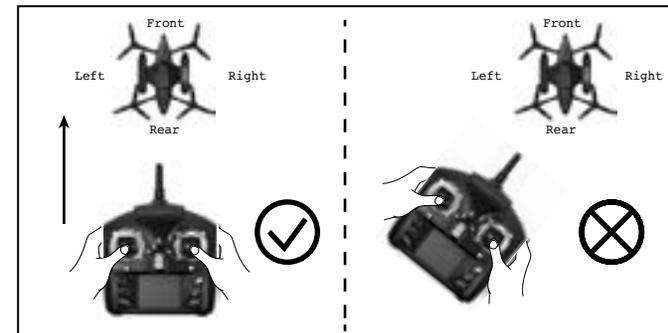
## COMPASS MODE

Users have the option to exit the default orientation (green lights at the front, red lights at the back). In Compass Mode, users can operate the drone without orientation. Regardless of where the drone is pointing, it will turn left or right according to the remote's command.

Compass Mode is good for beginners and is useful for drones that fly too far away for the user to be able to tell the orientation.

Follow the below instructions to change to Compass Mode:

1. It is easiest to set up Compass Mode before flight. Turn on and sync the drone and remote.
2. Make sure your drone is aligned with the remote as indicated in the picture.
3. Press down on the Compass Mode button for 2 seconds. The drone's left and right LEDs will start to flash. This indicates that the drone is now in Compass Mode.
4. Press the Compass Mode button again for 2 seconds to leave Compass Mode.



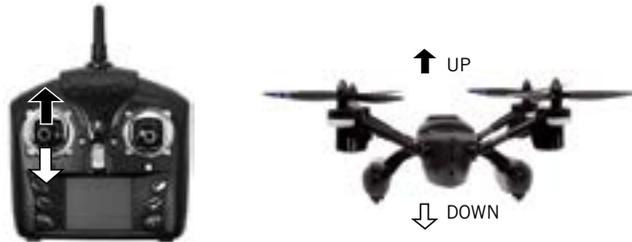
## OPERATION: FLYING THE DRONE

### TAKE-OFF:

Gently advance the throttle up to a desired height and hold.

### LANDING:

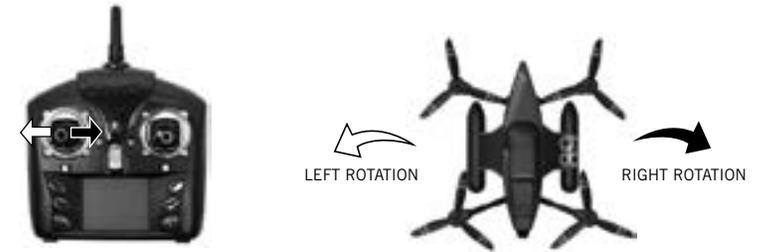
Push down on the throttle until the drone is on the ground.



## OPERATION: FLYING THE DRONE

### FIRST TIME FLYERS!!! TAKE YOUR TIME! GO SLOW!

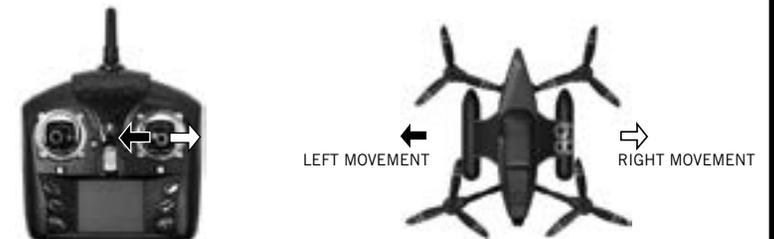
Practice hovering until you are comfortable with flight before attempting any other maneuvers. Make small movements letting the stick return to the center. If you start to lose control, don't panic. Just pull down the throttle.



Pull the throttle left or right,  
the drone turns to the left or right.



Push the direction lever up or down,  
the drone flies forward or backward.



Pull the direction lever to the left or right,  
the drone banks to the left or right.

## DRIVE & BOAT MODE

Oceana is pre-set to flight mode and will take off after syncing. To use Oceana on land or water, press the Mode button once. The rear propellers will tilt forward.

Push the throttle up to give Oceana power and move the throttle to the left or right to make turns.\*

To return to flight mode, press the Mode button again.

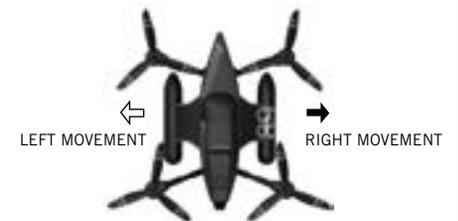
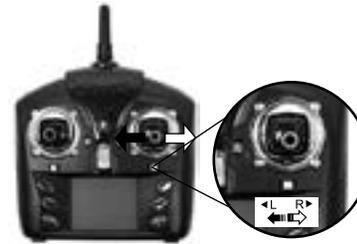
\*Oceana does not drive or boat backwards.

## SPEED MODES

The Oceana features four speed modes. Choose the speed based on flight experience and level of comfort. At high speed the drone will pitch more than at low speed. Oceana is quite fast at its high speed and requires more piloting skills to fly competently. For safety take time to develop advanced skills by practicing at low speed first. The drone is preset to low speed. Press the Speed button to change the speed mode.

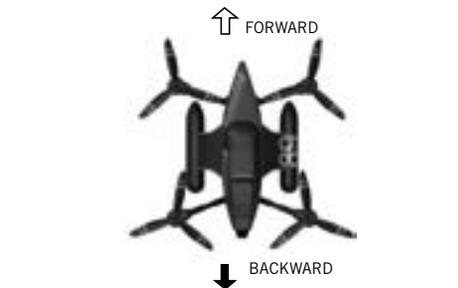
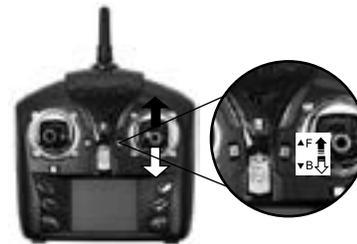


## TRIM ADJUSTMENT



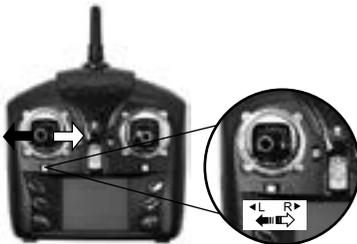
### SIDEWAYS TRIM

When the drone drifts to the left or right side unintentionally, you can correct it by pressing the trim button in the opposite direction until it evens out.



### FORWARD/BACKWARD TRIM

When the drone drifts forward/backward unintentionally, you can correct it by pressing the trim button in the opposite direction until it evens out.



### LEFT/RIGHT SPIN TRIM

When the drone spins left/right unintentionally, you can correct it by pressing the trim button in the opposite direction until it evens out.

\*NOTE: Trim adjustments are designed to counter drifts not caused by wind.

### THROTTLE TRIM

You can adjust the power level of the throttle by pressing the throttle trim button up or down.

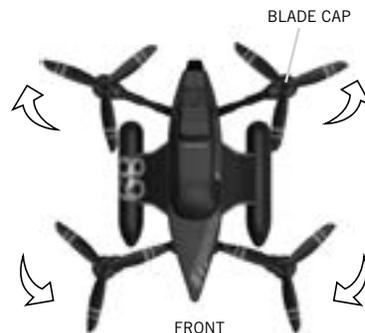
## TROUBLESHOOTING

\*Allow 15 minutes to pass between full flights as this will give the motors a chance to cool down. Failure to do so could wear out and shorten the life of the motors.

SYMPTOM	POSSIBLE CAUSE	POTENTIAL SOLUTION
Oceana does not respond	<ol style="list-style-type: none"> <li>1. Communication between controller and aircraft was not synchronized during set up</li> <li>2. Battery power depleted on aircraft, controller or both.</li> </ol>	<ol style="list-style-type: none"> <li>1. To synchronize, turn on aircraft first, place it on level ground, and then turn on controller.</li> <li>2. Charge aircraft and/or replace batteries in controller.</li> </ol>
Response to control inputs intermittent or erratic	<ol style="list-style-type: none"> <li>1. Controller battery power nearly depleted.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace batteries in controller.</li> </ol>
Oceana will not hover or strafe correctly	<ol style="list-style-type: none"> <li>1. The aircraft was not on level ground during synchronization.</li> <li>2. Trim settings are incorrect.</li> </ol>	<ol style="list-style-type: none"> <li>1. Re-synchronize aircraft and controller.</li> <li>2. Re-trim flight controls.</li> </ol>

### HOW TO CHANGE THE BLADES

- Twist off the blade cap and pull off the blade.
- Align the arrows on the blades to match the diagram.
- Slide the new blades on and screw on the blade caps.



## FLYING OUTDOORS

### HOW TO PREVENT FLY AWAYS

To prevent “fly-away” situations (where drones seem to fly away out of control) it is important to first test and practice within close range before letting the drone fly too far away.

Each drone is designed to turn off the engines if the radio signal is lost. It is important to know and test the range of your drone before flying. We recommend turning on and syncing the drone and walking away while testing the engines. Keep walking and testing until it is obvious when you reach the point where the signal is not controlling the drone. This will be the control limit for the conditions in which you are flying. Distance does vary somewhat based on environmental and weather conditions, so testing the limit is advised. Fly in a range that is good for easy visual operation of the drone.

### IF YOU CAN'T SEE YOUR DRONE, THEN YOU CAN'T CONTROL YOUR DRONE.

\* Fly-aways are not covered by warranty as they are overwhelmingly caused by pilot error.

## REPLACEMENT PARTS

Thank you for your purchase of Protocol's **Oceana Amphibious RC Drone**. We know that accidents can sometimes happen and that is why we offer spare parts kits on our website: **ProtocolNY.com**.

## LIMITED WARRANTY

At Protocol, we're dedicated to bringing you innovative and well-designed products that make living fun and easy. We stand behind all of our products and warrant this to be free from defects in workmanship and materials for 30 days from the date of purchase. The warranty does not cover transportation damage, misuse, accident, or similar events. Specific legal rights pertaining to this warranty may vary by state.

For service claims or questions please consult our website **www.ProtocolNY.com**.



