

rQPOD Quick Start Guide

The rQPOD Quick Start Guide is intended to provide you with the basic steps needed to set up your vehicle after unpacking it. This guide will walk you through first time setup, general assembly, and transmitter information. Before starting any of these steps, please visually inspect for any damage that may have occurred during shipment. If the rQPOD or any of the accessories are damaged or if a part is missing, please contact: info@ysi.com or +1 937-767-7241.

Components:

- Skid Guard Vertical Port (red)/ Starboard (green)
- Skid Guard Horizontal Port (red)/ Starboard (green)
- Main Pod Body
- RADIOMASTER TX16S transmitter
- Spare props - 2 counterclockwise
- Mk 2 Thrusters assembly with FCS mounts
- TORX driver and screws
- FCS key
- Magnetic Pen
- 2 Batteries - Phantom LiPo 3
- Charger
- Transmitter cover
- LiPo safe charging bag
- Spare 20 A fuses
- O-ring grease
- rQPOD mounting plate
- 8 x AA batteries



rQPOD remote controlled motor

Torrent Board with mounts for thrusters, rQPOD motor, and sensors



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Setup

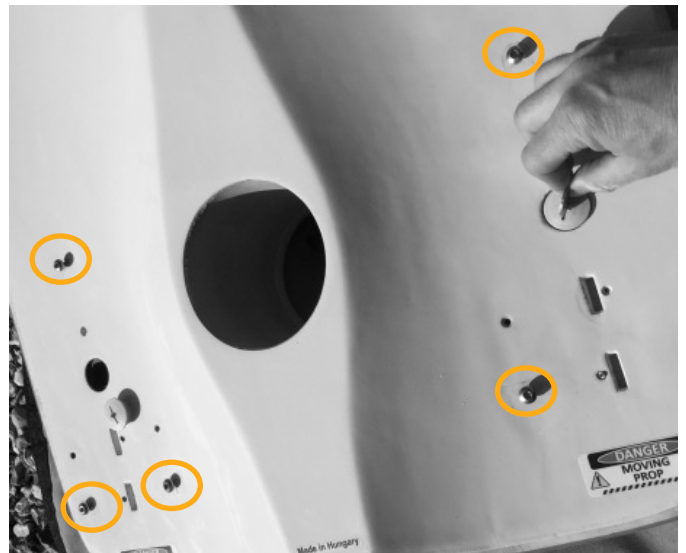
First Time Setup

Torrent Board Preparation

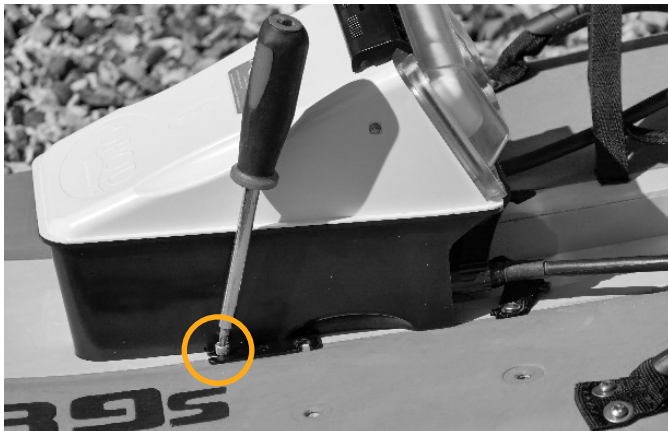
1. Stick Prop Guard warning safety labels on the board.



2. Insert 6 TORX self-tapping screws into holes supplied in the miscellaneous box.

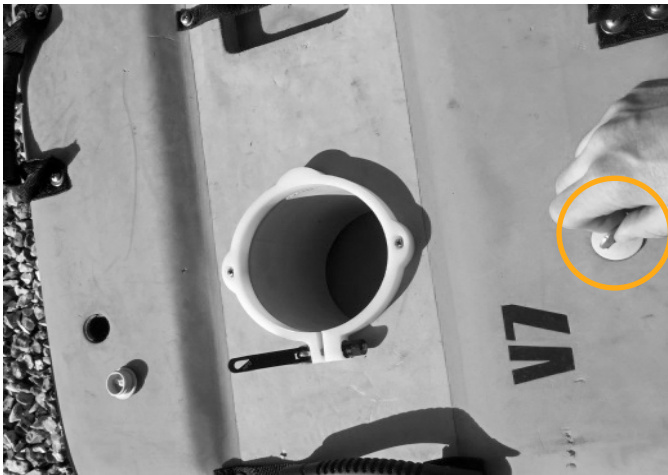


3. Fix 2 TORX M9 bolts into the top side of the board.

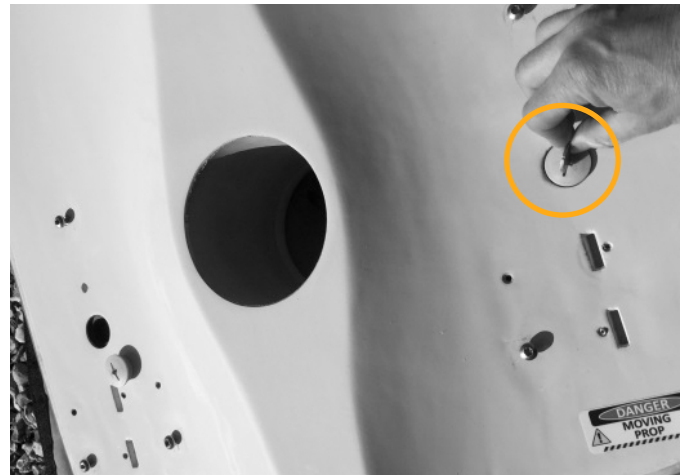


General Assembly

1. Remove plugs from torrent board V7 on top and bottom of the board using a coin or similar size object.

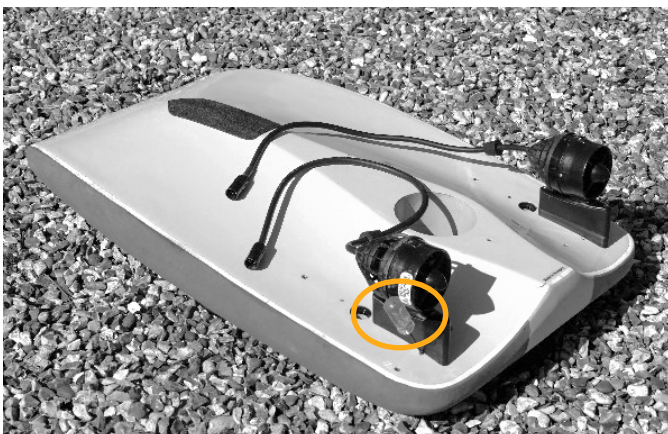


TOP



BOTTOM

2. Insert thruster assembly into FCS fin slots as shown below. The thrusters are interchangeable and work on either side of the board.



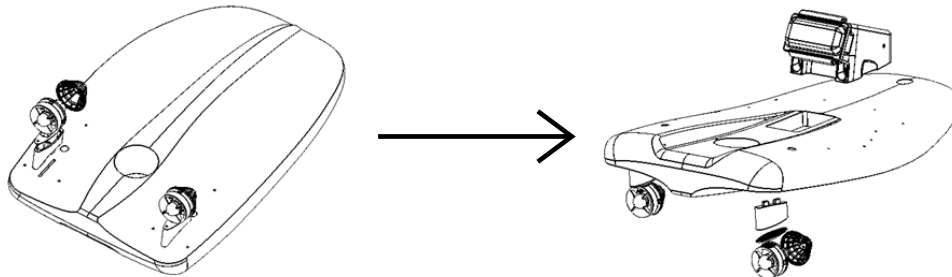
 **NOTE:** Only use the FCS key to secure the thruster assembly to the board and do not overtighten.

3. Fit the skid guards making sure they are paired, matching the color of the skid guard to the color of the dot on the board as each side is slightly different. Use the TORX driver to tighten the top bolt but be careful not to overtighten. Next place the skid guard on the correct side of the board matching the color of the skid guard to the colored dot on the underside of the board. Slide the mounts over the TORX screws in the bottom of the board. Tighten the TORX screws approximately ½ turn to secure. Once complete, turn the board over.



NOTE: If the TORX screws are not fitted then they will need to be fitted first.

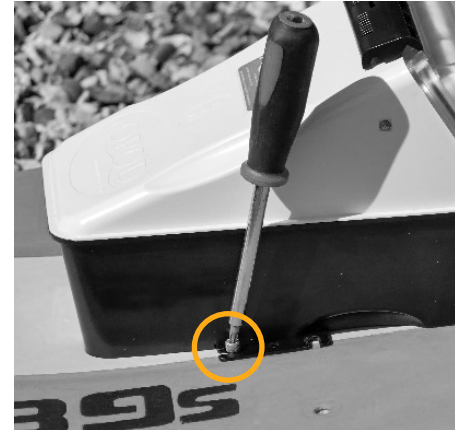
NOTE: When viewed in the normal operating position when the unit is floating on the water the red skid guard should be on the left (PORT) and the green skid guard should be on the right (STARBOARD) side of the board when viewed from behind. Pass the cables through the holes of the board and ensure the coned plugs fit firmly, this stops air from being sucked down through the board.



4. Connect the cables from the thrusters to the rQPOD. Do not overtighten the locking sleeves. Periodically grease the connectors with the supplied grease in the accessories case, especially if plugs are hard to insert.



5. Place the rQPOD on the board using the mounting plate, it should slide in from one side then rotate down. Tighten the TORX screws to hold in place but do not overtighten.



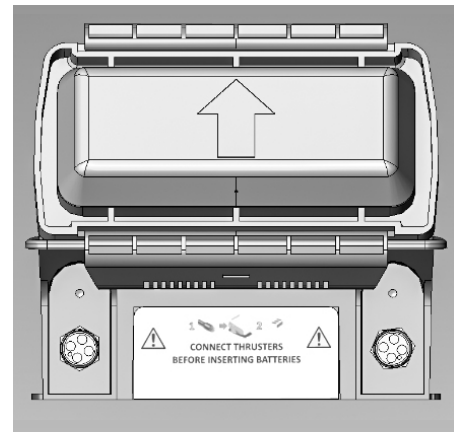
6. Turn the remote control transmitter and make sure that switch F is in the lower position and the throttle stick is in the center neutral position.




NOTE: Make sure switch F is in the lower position for low speed otherwise a warning will be displayed.

CAUTION: If it is raining or damp use the provided transmitter glove - the transmitter is not waterproof and may fail if it gets wet.

7. In a dry environment, undo the black handles and remove the clear battery cover. This has been designed to be a tight fit to stop water ingress. Insert the two batteries and push home, they click in place. Turn the batteries on - one short press to check the battery level and then a long press to activate them. Check the clear battery cover for dirt and clean if necessary and re-grease. Replace the battery cover making sure the arrow on the cover is pointing towards the sky, it is keyed and can only go on one way. Lock the handles in place and visually check all seals through the clear battery cover. Clean if necessary.



 **NOTE:** Only use batteries that have similar charge levels.

NOTE: Both batteries need to be installed.

NOTE: Check the O-Ring seals and re-grease if necessary.

NOTE: When activated, battery will chime and LED lights will turn green.

8. Using the pen magnet swipe over the ARM logo on the rQPOD. The navigation lights will come on and the thrusters will make a sound. Quickly check that the thrusters are working using the transmitter. Disarm the rQPOD using the magnet.



Navigation light

⚠ NOTE: Do not operate the thrusters in the air for longer than 10 seconds as they are water lubricated.

9. Place the board in the water carefully and keep hold of it. Use the magnet and swipe over the ARM position, the navigation lights on the side of the rQPOD should illuminate and the thrusters should make a sound. Whilst holding on to the side of the Torrent board do a quick check of the thrusters using the transmitter before deploying.



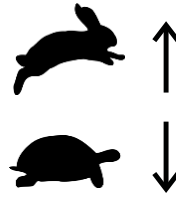
⚠ NOTE: The batteries for the rQPOD have a power-save mode to prevent them from discharging when not in use. If the thrusters are not turning for 15 minutes, the batteries will enter a power-saving mode and shut down. They will manually need to be turned back on.

NOTE: The batteries will need to be charged on a regular basis each month, even if they are not being used.

Transmitter Alarms & Tips



STEERING & TURNING



SPEED

Steering and Turning

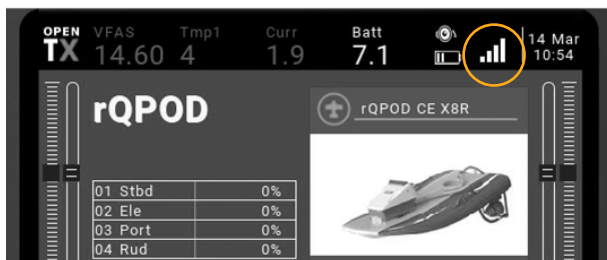
Use the left joystick to navigate the vehicle forward and backward. Use the right joystick to rotate the vehicle left and right.

Fast and Slow Speed Settings

Use the lower left-hand switch to control vehicle speed. Push it forward to go faster and pull it back to go slower. A warning will come up on the screen if the transmitter is turned on and Switch F is in the high rate position.

Signal Strength

The range of the transmitter will vary according to the line of sight and how elevated the user is in relation to the rQPOD. If both are approximately 1 m (3.28 ft) above ground level the range is approximately 304.8 m (1000 ft) but this can be increased if the user is elevated. A signal strength indicator is shown below. An audible warning will be given when the connection is getting weak.

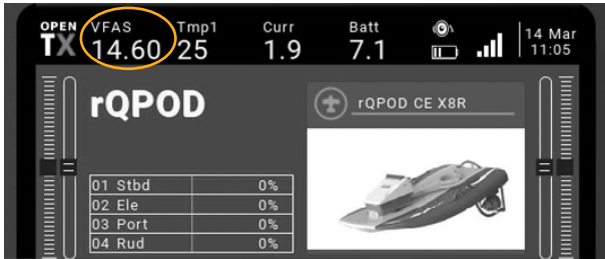


NOTE: If the rQPOD goes out of range it will not stop, but carry on going depending on the last command received.

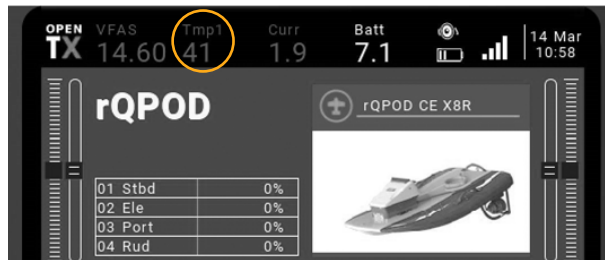
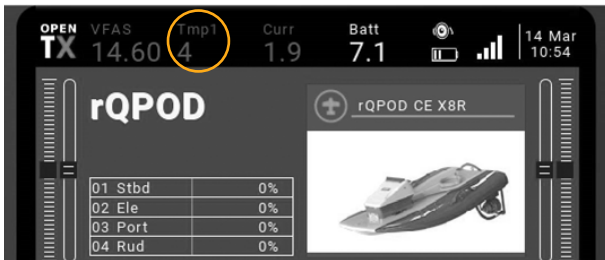
Telemetry and Servo Information

The telemetry information from the rQPOD is shown on the Radiomaster TX16s display as described below.

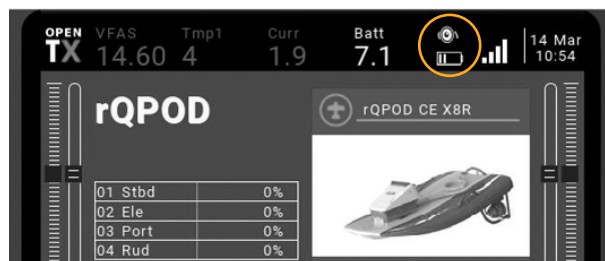
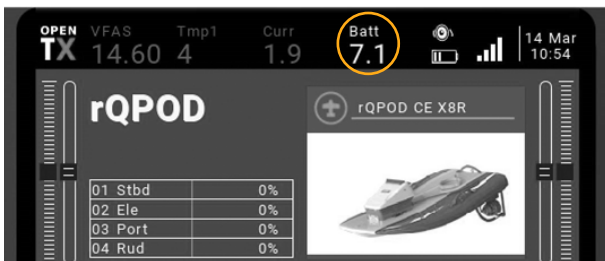
VFAS - This is the voltage from the rQPOD batteries and will vary depending on the amount of throttle that is being applied. A voltage at 17.4 V indicates fully charged batteries and 14.4 V indicates it to be nearly empty when no throttle is applied. When the propellers are turning, especially at a high speed, there will be a drop in the voltage. An audible "Battery Critical" alarm will go off if the voltage drops below 14.7 V and the current is less than 2 A.



Tmp1 - This is the internal temperature of the rQPOD housing. Audible alarms are set to go off at temperatures below 5°C (41°F) and above 40°C (104°F). If the temperature alarms are activated, do not continue the operation. Limits are set based on the warnings for the Lipo batteries.



Batt - This shows the voltage of the handheld transmitter. The battery icon shows transmitter battery capacity and will give an audible and visual warning when it is getting low.



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