

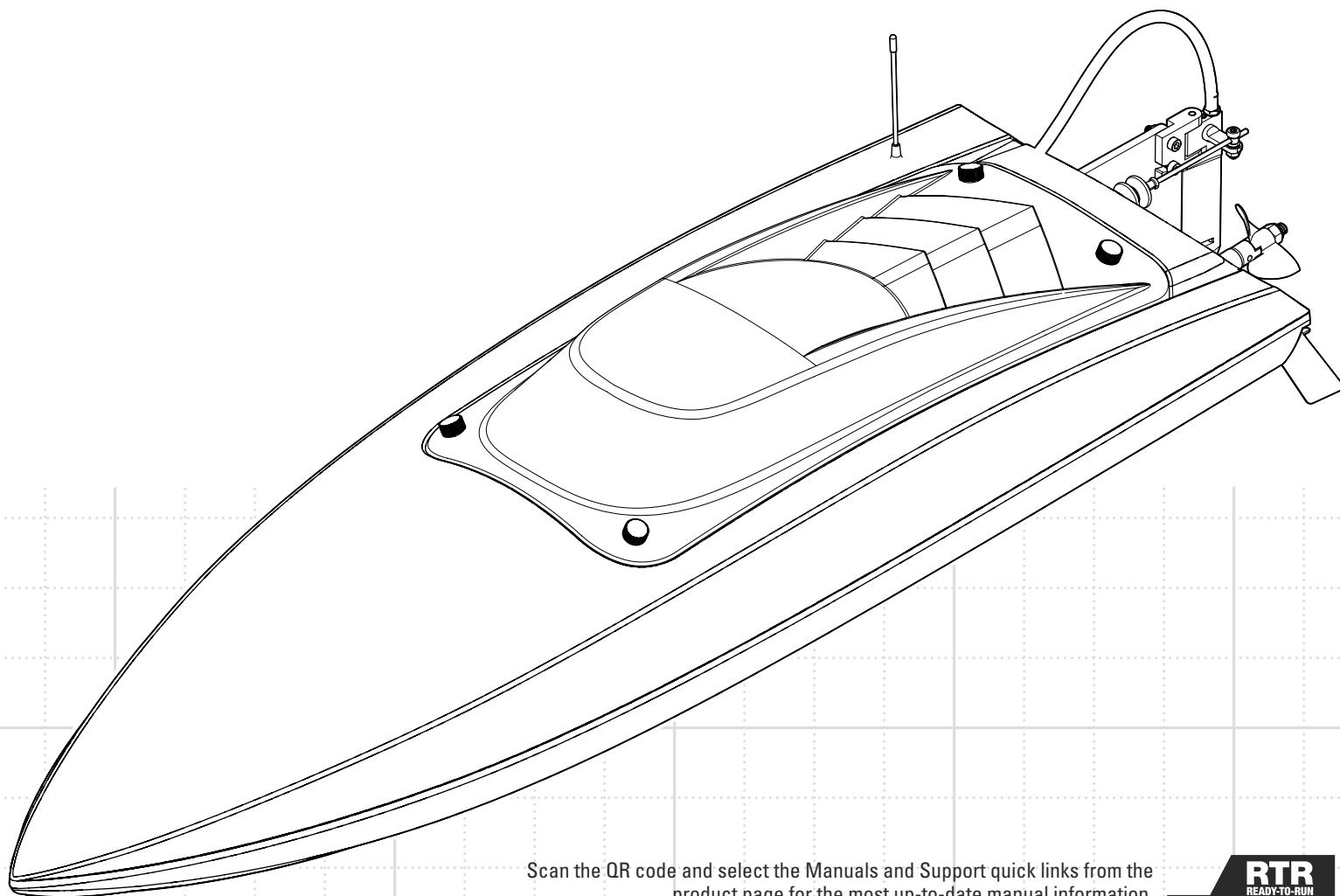


PROBOAT™

ProBoatModels.com

RECRIL2®

26-INCH SELF-RIGHTING DEEP-V BRUSHLESS RTR



Scan the QR code and select the Manuals and Support quick links from the product page for the most up-to-date manual information.
Scannen Sie den QR-Code und wählen Sie auf der Produktseite die Quicklinks Handbücher und Unterstützung, um die aktuellsten Informationen zu Handbücher.
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PRB08041

**Owners Manual • Bedienungsanleitung
Manuel de l'utilisateur • Manuale dell'utente**

HORIZON®
H O B B Y




NOTICE

All instructions, warranties and other collateral documents are subject to change at the sole discretion of Horizon Hobby, LLC. For up-to-date product literature, visit www.horizonhobby.com or www.towerhobbies.com and click on the support or resources tab for this product.

MEANING OF SPECIAL LANGUAGE

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product:
WARNING: Procedures, which if not properly followed, create the probability of property damage, collateral damage, and serious injury OR create a high probability of superficial injury.
CAUTION: Procedures, which if not properly followed, create the probability of physical property damage AND a possibility of serious injury.
NOTICE: Procedures, which if not properly followed, create a possibility of physical property damage AND little or no possibility of injury.



WARNING: Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property and cause serious injury.

This is a sophisticated hobby product and NOT a toy. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. Do not use with incompatible components or alter this product in any way outside of the instructions provided by Horizon Hobby, LLC. This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury.

Age Recommendation: Not for children under 14 years. This is not a toy.

Safety Precautions and Warnings

As the user of this product, you are solely responsible for operating in a manner that does not endanger yourself and others or result in damage to the product or the property of others.

- When handling and/or transporting your boat, always pick up the boat from the front, keeping all moving parts pointed away from you.
- Always keep a safe distance in all directions around your model to avoid collisions or injury. This model is controlled by a radio signal subject to interference from many sources outside your control. Interference can cause momentary loss of control.
- Always operate your model in open spaces away from full-size vehicles, traffic and people.


- Always carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable battery packs, etc.).
- Always keep all chemicals, small parts and anything electrical out of the reach of children.
- Always avoid water exposure to all equipment not specifically designed and protected for this purpose. Moisture causes damage to unprotected electronics.
- Never place any portion of the model in your mouth as it could cause serious injury or even death.
- Never operate your model with low transmitter batteries.

Water-Resistant Boat with Waterproof Electronics

Your new Horizon Hobby boat has been designed and built with a combination of waterproof and water-resistant components to allow you to operate the product in calm, fresh water conditions.

While the entire boat is highly water-resistant, it is not completely waterproof and your boat should NOT be treated like a submarine. The various electronic components used in the boat, such as the ESC, servo(s) and receiver are waterproof, however, most of the mechanical components are water-resistant and require additional maintenance after use.

Metal parts, including the bearings, pins, screws and nuts, propeller, rudder, rudder mounts, prop struts, as well as the contacts in the electrical cables, will be susceptible to corrosion if additional maintenance is not performed after running in wet conditions. To maximize the long-term performance of your boat and to keep the warranty intact, the procedures described in the **WET CONDITIONS MAINTENANCE** section must be performed regularly.



CAUTION: Failure to exercise caution while using this product and complying with the following precautions could result in product malfunction and/or void the warranty.

General Precautions

- Read the **WET CONDITIONS MAINTENANCE** procedures and make sure that you have all the tools you will need to properly maintain your boat.
- Not all batteries can be used in wet conditions. Consult the battery manufacturer before use. Caution should be taken when using Li-Po batteries in wet conditions.
- Most transmitters are not water-resistant. Consult your transmitter's manual or the manufacturer before operation.
- Never operate your transmitter or boat when lightning is present.
- Salt water is very conductive and highly corrosive. If you choose to run your boat in salt water, immediately rinse the boat in fresh water after each use. Operating your boat in salt water is at the sole discretion of the modeler.

Wet Conditions Maintenance

- Drain any water that has collected in the hull by removing the drain plug or canopy and tilting the boat in the appropriate direction to drain the water.



CAUTION: Always keep hands, fingers, tools and any loose or hanging objects away from rotating parts.

- Remove the battery pack(s) and dry the contacts. If you have an air compressor or a can of compressed air, blow out any water that may be inside the recessed connector housings.
- Remove all moving parts. Dry and lubricate parts after every 30 minutes of operation or if the boat becomes submerged.

NOTICE: Never use a pressure washer to clean your boat.

- Use an air compressor or a can of compressed air to dry the boat and help remove any water that may have gotten into small crevices or corners.
- Spray the bearings, fasteners and other metal parts with a water-displacing light oil or lubricant.
- Let the boat air dry before you store it. Water (and oil) may continue to drip for a few hours.

Charging Warnings



WARNING: Failure to exercise caution while using this product and comply with the following warnings could result in product malfunction, electrical issues, excessive heat, FIRE, and ultimately injury and property damage.

- **NEVER LEAVE CHARGING BATTERIES UNATTENDED.**
- **NEVER CHARGE BATTERIES OVERNIGHT.**
- Never attempt to charge dead, damaged or wet battery packs.
- Never attempt to charge a battery pack containing different types of batteries.
- Never allow children under 14 years of age to charge battery packs.
- Never charge batteries in extremely hot or cold places or place in direct sunlight.
- Never charge a battery if the cable has been pinched or shorted.
- Never connect the charger if the power cable has been pinched or shorted.
- Never attempt to dismantle the charger or use a damaged charger.
- Always use only rechargeable batteries designed for use with this type of charger.
- Always inspect the battery before charging.
- Always keep the battery away from any material that could be affected by heat.
- Always monitor the charging area and have a fire extinguisher available at all times.

- Always end the charging process if the battery becomes hot to the touch or starts to change form (swell) during the charge process.
- Always connect the positive leads (+) and negative leads (–) correctly.
- Always disconnect the battery after charging, and let the charger cool between charges.
- Always charge in a well-ventilated area.
- Always terminate all processes and contact Horizon Hobby if the product malfunctions.
- Charge only rechargeable batteries. Charging non-rechargeable batteries may cause the batteries to burst, resulting in injury to persons and/or damage to property.
- The USB outlet shall be installed near the equipment and shall be easily accessible.



CAUTION: Always ensure the battery you are charging meets the specifications of this charger. Not doing so can result in excessive heat and other related product malfunctions, which can lead to user injury or property damage.



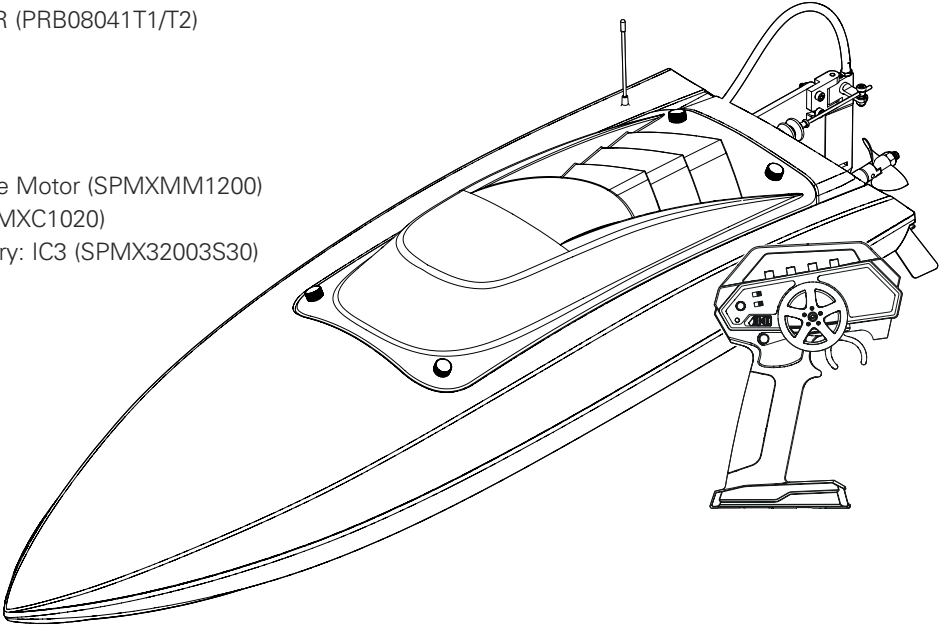
CAUTION: If at any time during the charging process the battery pack becomes hot or begins to puff, disconnect the battery immediately and discontinue the charge process as batteries can cause fire, collateral damage and injuries.

Box Contents

- Pro Boat® Recoil 2® 26-Inch Self-Righting Deep-V RTR (PRB08041T1/T2)
- Spektrum™ 100A Marine ESC (SPMXME1A)
- Horizon 4-Channel Receiver (HRZ00016)
- Servo 5.3kg 4.826V WP Analog (PRB18039)
- Horizon Multi Model LT Transmitter (HRZ00020)
- Spektrum™ Firma 2300Kv Brushless Outrunner Marine Motor (SPMXMM1200)
- Spektrum™ S120 USB-C Smart Charger, 1 x 20W (SPMXC1020)
- Spektrum™ 11.1V 3200mAh 3S 30C Smart LiPo Battery: IC3 (SPMX32003S30)

Recommended Tools and Materials

- Paper towel
- Rubbing alcohol
- Open-end wrench: 10mm (1), 12mm (1)
- Nut driver: 5.5mm, 7mm
- Hex wrench: 2mm, 2.5mm
- Clear tape (DYNM0102)
- Dynamite® Marine Grease and Gun (DYNE4200)
- Hook and Loop Tape Set, WP 4pcs (DYNK0300)
- Clean towels



Specifications

| | |
|---------------|------------------|
| Length | 26 in. (660mm) |
| Height | 5.75 in. (146mm) |
| Beam | 7.96 in. (202mm) |
| Hull Material | ABS |

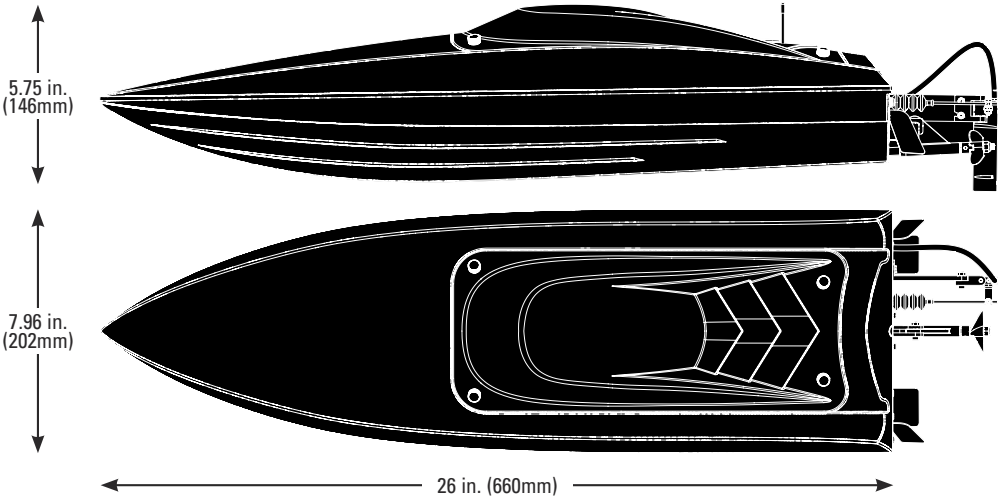
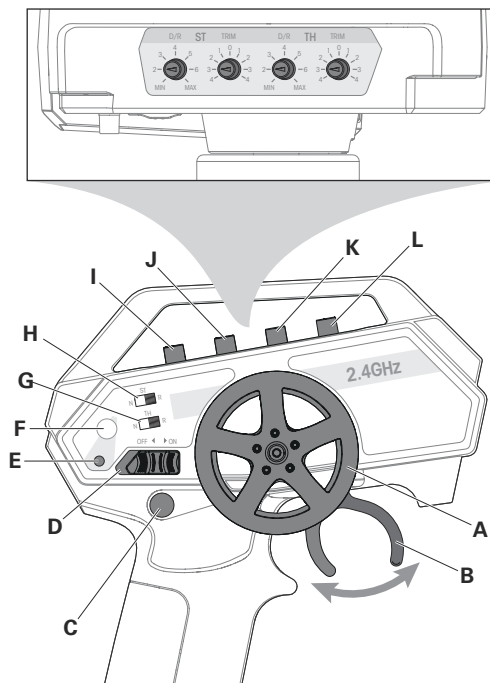


Table of Contents

| | | | |
|--|---|--|----|
| Safety Precautions and Warnings..... | 2 | Boating Tips | 8 |
| Water-Resistant Boat with Waterproof Electronics | 2 | Maintenance..... | 8 |
| General Precautions | 3 | Propeller Service | 8 |
| Wet Conditions Maintenance..... | 3 | Water Cooling System..... | 9 |
| Charging Warnings | 3 | Flex Shaft Maintenance | 9 |
| Box Contents..... | 4 | General Information..... | 10 |
| Recommended Tools and Materials | 4 | Binding | 10 |
| Specifications | 4 | Failsafe | 10 |
| Transmitter Functions | 5 | Replacement Parts | 10 |
| Antenna Tube Installation..... | 5 | Optional Parts | 10 |
| Battery Pack Installation | 6 | Troubleshooting Guide..... | 11 |
| Low Voltage Cutoff (LVC) | 6 | 2-Year Limited Warranty | 12 |
| Range Check | 6 | Warranty and Service Contact Information | 13 |
| Getting Started | 7 | FCC Information | 13 |
| When You Are Finished | 7 | IC Information..... | 13 |
| Self-Righting | 7 | Compliance Information for the European Union..... | 14 |

Transmitter Functions

- A. **Steering Wheel** Controls direction (left/right) of the model
- B. **Throttle Trigger** Controls speed and direction (forward/brake/reverse) of the model
- C. **LED** Controls the lights On/Off (if equipped)
- D. **ON/OFF Switch** Turns the power ON/OFF
- E. **Indicator Light**
 - **Solid red lights**—Indicates radio connectivity and adequate battery power
 - **Flashing red lights**—Indicates the battery voltage is critically low. Replace batteries
- F. **CH 3** Activates Self-Righting Feature
- G. **TH Reverse** Reverses the function of the speed control when pulled back or pushed forward
- H. **ST Reverse** Reverses the function of the steering when the wheel is turned left or right
- I. **ST Rate** Adjusts the steering rate switch
- J. **ST Trim** Adjusts the steering center point
- K. **TH Rate** Adjusts the throttle limit switch
- L. **TH Trim** Adjusts the throttle neutral point



Transmitter Battery Installation

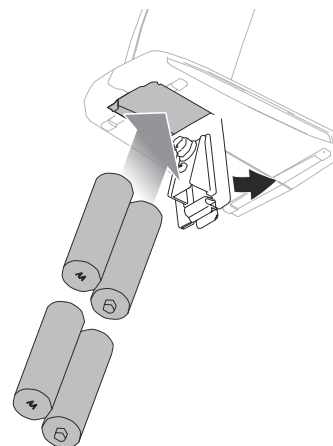
This transmitter requires 4 AA batteries (**Not Included**).

1. Remove the battery cover from the transmitter.
2. Install the batteries as shown.
3. Install the battery cover.

CAUTION: Never remove the transmitter batteries while the model is powered ON. Loss of model control, damage, or injury may occur.

CAUTION: If using rechargeable batteries, charge only rechargeable batteries. Charging non-rechargeable batteries may cause the batteries to burst, resulting in injury to persons and/or damage to property.

CAUTION: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to national regulations.

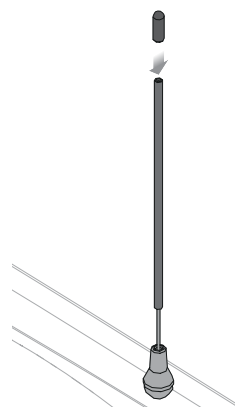


Antenna Tube Installation

Install the receiver antenna in the tube as shown. Do not bend end of antenna over antenna tube and place cap over it. The antenna does not have to be outside of the tube to operate properly.

Keep the end of the antenna above the boat's waterline to get the best transmitter reception. Apply clear tape (DYNM0102), if desired.

NOTICE: Do not cut or kink the receiver antenna or damage may result.



Battery Pack Installation

1. Loosen the 4 canopy screws.
2. Carefully lift the canopy from the hull.
3. Install the battery in the battery tray.
4. Connect the battery to the ESC power connectors.
5. Before placing your boat in the water, secure the canopy on the hull. Apply clear tape (DYNM0102), if desired.

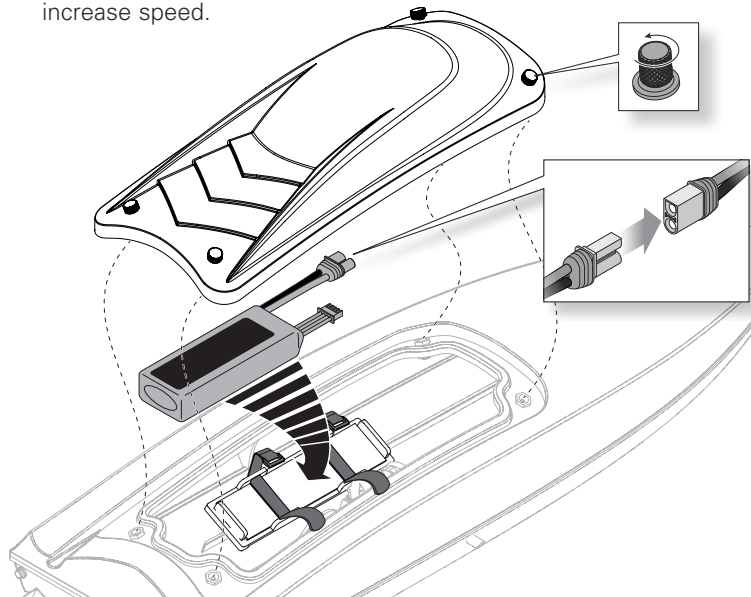
TIP: Place the canopy flat onto the hull and secure the two front screws simultaneously. Then secure the two rear screws simultaneously. This helps prevent cross threading and damage to the thumb-screws and/or threaded inserts.

TIP: Begin with the batteries as far forward as possible, moving them back ½ inch (13mm) at a time toward the stern until the boat reaches maximum speed.

Positioning the Battery Pack

- **Toward the Bow:** In rough water or strong wind conditions, place the battery toward the front of the battery tray to ensure stability.
- **Centered:** In smooth water and calm wind, move the battery rearward in the hull to allow the bow to ride higher and increase speed. Be aware that positioning the battery farther aft increases the likelihood of the boat blowing over at speed or becoming unstable.

- **Toward the Stern:** Positioning the battery toward the back of the battery tray can provide higher top speeds but can cause instability. Experiment with this position only in very calm conditions while closely monitoring the hull's attitude as you increase speed.



Low Voltage Cutoff (LVC)

The factory default setting for the LVC in the ESC included with your boat is set at 3.2V per cell. Discharging a Li-Po battery below 3V per cell may damage your battery. The included ESC protects the boat battery from over-discharge using Low Voltage Cutoff (LVC). Before the battery charge decreases too much, LVC removes power supplied to the motor.

The boat drastically slows or stops completely once LVC is activated. Releasing the throttle and reapplying it will provide a limited amount of power to safely return the boat to shore. Repeated use after LVC is activated will damage the batteries.

Once LVC has been activated, the ESC status light will flash red continuously indicating that the ESC is in LVC mode.

NOTICE: Repeated operation to LVC will damage the battery.

LVC can activate prematurely if you use (1) low C-rated batteries or (2) old, worn, and/or weak batteries.

The average run time—using the recommended batteries (SPMX32003S30)—is between 3–4 minutes at non-stop, open throttle. Limited run time may indicate worn or weak batteries.

TIP: If you've installed freshly charged batteries, and LVC activates within the first minute of operation, replace your worn or weak batteries with the recommended batteries.

TIP: Monitor your boat battery's voltage before and after boating by using a Li-Po Cell Voltage Checker (SPMXBC100, sold separately).

Disconnect and remove the Li-Po battery from the boat after use to prevent trickle discharge. Charge your Li-Po battery to half capacity before storage. During storage, make sure the battery charge does not fall below 3V per cell. LVC does not prevent the battery from over-discharge during storage.

Range Check

IMPORTANT: Perform a range check at the beginning of each boating session, after repair or after installation of a new battery.

Ensure that the battery is fully charged.

1. With the radio system powered on and connected, walk away from your boat 90 feet (32 m).
2. Have an assistant remain with the boat to check for proper control movement of the steering mechanism in response to your transmitter input.
3. If everything appears to be operating correctly, prepare to operate the boat in the water.

