

## Owners Manual



#### **Specifications**

Hull Length	14 in (356mm)
Beam	4.125 in (105mm)
Motor	Hi-Performance 380-Size
Radio System	Pro Boat 2-Channel AM 27MHz Pistol-Grip
Drive System	Direct Drive
Steering System	Steerable Drive System
Battery (not included)	PRB1202 7.2V Ni-MH

## Introduction

Thank you for purchasing the Pro Boat<sup>™</sup> Mini-V Ready-To-Run boat. Please read these instructions carefully before attempting to operate your boat.

The Mini-V comes Ready-To-Run with the Pro Boat 27MHz AM radio system and electronic speed controller already installed. All assembly and building is done at the factory, allowing you to quickly get your boat running.

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#### **General Guidelines**

It is important that you read and follow this instruction manual before you run this exciting boat. Failure to read and understand the manual could result is personal injury, property damage or permanent damage to your boat. It is also important to run your boat responsibly. With proper care and maintenance, you will be able to proudly enjoy your Mini-V for many years to come.

When operating the boat, stay clear of people, full-scale boats, stationary objects and wildlife. It is preferable to operate the Mini-V in low wake, low wind conditions and in areas free of people, wildlife and objects.

Before you operate your model, make sure that

your frequency is clear. If someone is operating on the same frequency, both models could go out of control, possibly causing damage to the models or to others. Check all of the hardware and the propeller for damage and loose screws before and after each run.

If at any time while operating your model you sense any abnormal function, end your operation immediately. Do not operate your boat again until you are certain the problem has been corrected. Always stay clear of the propeller.

#### **Warranty Period**

Horizon Hobby, Inc., (Horizon) warranties that the Products purchased (the "Product") will be free from defects in materials and workmanship at the date of purchase by the Purchaser.

#### **Limited Warranty**

- (a) This warranty is limited to the original Purchaser ("Purchaser") and is not transferable. REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. This warranty covers only those Products purchased from an authorized Horizon dealer. Third party transactions are not covered by this warranty. Proof of purchase is required for warranty claims. Further, Horizon reserves the right to change or modify this warranty without notice and disclaims all other warranties, express or implied.
- (b) Limitations- HORIZON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCT. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.
- (c) Purchaser Remedy- Horizon's sole obligation hereunder shall be that Horizon will, at its option, (i) repair or (ii) replace, any Product determined by Horizon to be defective. In the event of a defect, these are the Purchaser's exclusive remedies. Horizon reserves the right to inspect any and all equipment involved in a warranty claim. Repair or replacement decisions are at the sole discretion of Horizon. This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of or to any part of the Product. This warranty does not cover damage due to improper installation, operation, maintenance, or attempted repair by anyone other than Horizon. Return of any goods by Purchaser must be approved in writing by Horizon before shipment.

## **Damage Limits**

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCT, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY. Further, in no event shall the liability of Horizon exceed the individual price of the Product on which liability is asserted. As Horizon has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability.

If you as the Purchaser or user are not prepared to accept the liability associated with the use of this Product, you are advised to return this Product immediately in new and unused condition to the place of purchase.

Law: These Terms are governed by Illinois law (without regard to conflict of law principals).

#### **Safety Precautions**

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.

The Product 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 injury.

#### **Questions, Assistance, and Repairs**

Your local hobby store and/or place of purchase cannot provide warranty support or repair. Once assembly, setup or use of the Product has been started, you must contact Horizon directly. This will enable Horizon to better answer your questions should you require assistance.

For questions or assistance, please direct your email to productsupport@horizonhobby.com, or call 877.504.0233 toll-free to speak to a service technician.

## **Inspection or Repairs**

If this Product needs to be inspected or repaired, please call for a Return Merchandise Authorization (RMA). Pack the Product securely using a shipping carton. Please note that original boxes may be included, but are not designed to withstand the rigors of shipping without additional protection. Ship via a carrier that provides tracking and insurance for lost or damaged parcels, as *Horizon is not responsible for merchandise until it arrives and is accepted at our facility*. A Service Repair Request is available at www.horizonhobby.com on the "Support" tab. If you do not have internet access,

please include a letter with your complete name, street address, email address and phone number where you can be reached during business days, your RMA number, a list of the included items, method of payment for any non-warranty expenses and a brief summary of the problem. Your original sales receipt must also be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

#### **Warranty Inspection and Repairs**

To receive warranty service, you must include your original sales receipt verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be repaired or replaced free of charge.

Repair or replacement decisions are at the sole discretion of Horizon Hobby.

#### **Non-Warranty Repairs**

Should your repair not be covered by warranty the repair will be completed and payment will be required without notification or estimate of the expense unless the expense exceeds 50% of the retail purchase cost. By submitting the item for repair you are agreeing to payment of the repair without notification. Repair estimates are available upon request. You must include this request with your repair. Non-warranty repair estimates will be billed a minimum of ½ hour of labor. In addition you will be billed for return freight. Please advise us of your preferred method of payment. Horizon accepts money orders and cashiers checks, as well as Visa, MasterCard, American Express, and Discover cards. If you choose to pay by credit card, please include your credit card number and expiration date. Any repair left unpaid or unclaimed after 90 days will be considered abandoned and will be disposed of accordingly. Please note: non-warranty repair is only available on electronics and model engines.

Electronics and engines requiring inspection or repair should be shipped to the following address:

Horizon Service Center 4105 Fieldstone Road Champaign, Illinois 61822

All other Products requiring warranty inspection or repair should be shipped to the following address:

Horizon Product Support 4105 Fieldstone Road Champaign, Illinois 61822

Please call 877-504-0233 with any questions or concerns regarding this product or warranty.

## Safety, Precautions, and Warnings

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

Carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable battery packs, etc.) that you use.

This model is controlled by a radio signal that is subject to interference from many sources outside your control. This interference can cause momentary loss of control so it is necessary to always keep a safe distance in all directions around your model, as this margin will help to avoid collisions or injury.

- Always operate your model in an open area away from people.
- Avoid operating your model where injury or damage can occur.
- Never operate the model out in populated areas for any reason.
- Never operate your model with low transmitter batteries.
- Carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable battery packs, etc.) that you use.
- Keep all chemicals, small parts and anything electrical out of the reach of children.
- Moisture causes damage to electronics. Avoid prolonged water exposure to all equipment not specifically designed and protected for this purpose.

## **Additional Required Items**

You will need to purchase the following to get your boat on the water:

- 8 "AA" alkaline batteries for the radio transmitter
- 7.2V Battery and Wall Charger (PRB1200)
- 7.2V Battery Only (optional) (PRB1202)

#### Inspection

Carefully remove the boat and radio transmitter from the box. Inspect the boat to make sure no damage is present. Contact Product Support (see Question, Assistance and Repairs Section for details).

#### **Contents**



#### **Section 1: Installation of the Transmitter Batteries**

Remove the battery cover from the bottom of the transmitter by pressing down where indicated (OPEN) and sliding the cover.



Install 8 "AA" alkaline batteries into the transmitter. Pay attention to the proper polarity (+ and -) for the batteries as marked on the battery holder.



## Section 2: Installation of the 7.2V Ni-MH Battery Pack

Turn on your transmitter, making sure the radio is in neutral (see Section 6: Adjusting the Transmitter). Carefully remove the hatch (scale pilot cockpit).



Remove the backing material from the hook & loop material and use it to secure the battery into the battery holder. Install a fully charged 7.2V Ni-MH battery pack into the radio box. Follow the instructions included with your fast charger to ensure a safe charge. Plug the battery into the female battery connector attached to the electronic speed controller.



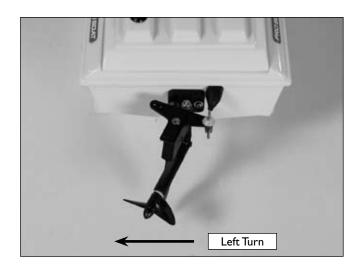
#### **Section 3: Checking the Radio System**

Push the antenna tube into the antenna mount. Insert the antenna wire through the antenna mount and into the antenna tube pushing it through until it comes out the other end.



Turn the transmitter on then the receiver switch. Check for correct operation of the radio system. The rudder control arm should move toward the front of the boat when right input is given. Conversely, when left input is given, the control arm should move toward the back of the boat.





With the propeller free from any objects, give a small amount of throttle input to ensure the motor is working. If everything appears to be functioning correctly, you are ready to run your boat.

Note: If you are transporting your Mini-V, make sure you disconnect the battery from the speed controller and then turn your radio off until you are ready to run the boat. Once ready, simply turn the radio on and plug the battery into the speed controller, again making sure that the boat is in neutral.

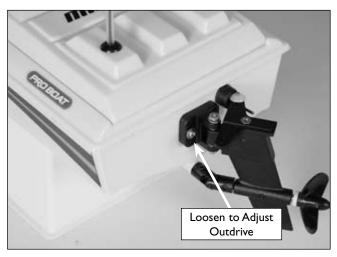
#### **Section 4: Testing Your Boat in the Water**

Make sure the radio is "ON" and the battery is plugged into the speed controller. Test the radio system for proper operation and then carefully place the boat in the water. Pilot the boat at slow speeds, staying close to the shoreline to ensure you have good control and that the boat is functioning correctly. Be certain to avoid all objects in the water at all times.

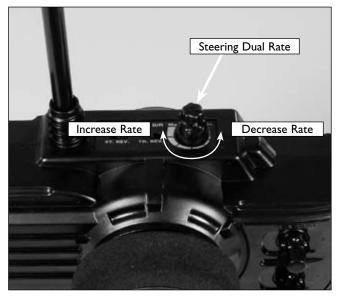
Once you feel comfortable with the control of your boat, it is safe to go further away from the shoreline and at faster speeds. When you notice the boat begin to lose speed, bring the boat back to shore. It will be necessary to allow the electronic components to cool down and to replace or recharge the battery before heading out again.

### **Section 5: Handling Adjustment**

Operate your Mini-V in low wake conditions to avoid having problems with the boat overturning. If the conditions are questionable, adjust the prop strut down a bit to reduce the likelihood of having the boat overturn.



You may also turn the dual rate dial down to reduce rudder travel in rough water conditions or if the boat tends to over-steer (hook) during sharp turns.



## **Section 6: Adjusting the Transmitter**

It may be necessary to adjust the throttle trim knob to stop the propeller from turning while the throttle trigger is in the neutral position.



Adjust the rudder trim knob so the rudder is centered prior to operation. You may also need to adjust the steering trim to make sure the boat runs straight during operation.



#### **Section 7: Maintenance**

Before and at the end of each run, make sure all screws are tight and the propeller is free from any entanglement.

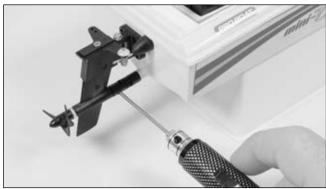
#### **Section 8: Lubricating the Drive Shaft**

The drive shaft should be lubricated immediately after running in salt water, after every 3-4 hours of use and at the end of each boating season prior to storage to ensure proper operation of your boat. The following illustrates removing and lubricating the drive shaft.

O I. Loosen the I.5mm setscrew connecting the drive shaft to the motor coupler.



• 2. Loosen the 1.5mm setscrew connecting the universal joint to the drive shaft.



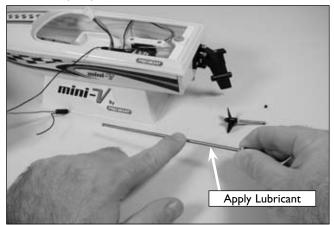
○ 3. Carefully slide the propeller shaft from the rudder assembly and set aside.



• 4. Move the rudder assembly to either full left or full right turn and slide the drive shaft out of the stuffing box.



O 5. Lubricate the drive shaft and propeller shaft with water-proof grease (see your local hobby shop). Reinstall the drive shaft and propeller shaft in reverse order. Be sure to reinstall the nylon washers between the universal and the stuffing box at the motor, and between the propeller and rudder assembly for the propeller shaft.



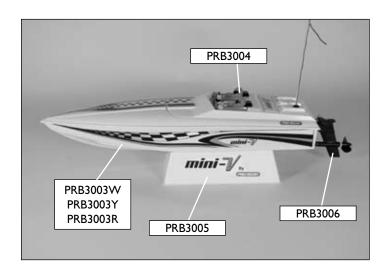
**Note**: Running the Mini-V RTR in salt water could cause some parts to corrode. If you run the boat in salt water, rinse it thoroughly in fresh water after each use and lubricate the drive system.

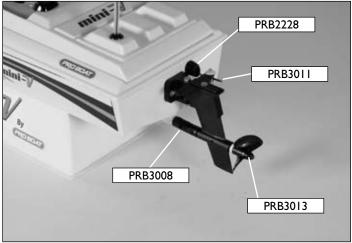
## **Section 9: Replacement Parts**

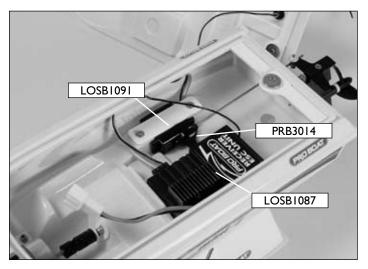
If you have any questions concerning the setup or running of your Mini-V, please call the Horizon Service Center toll-free at (877) 504-0233.

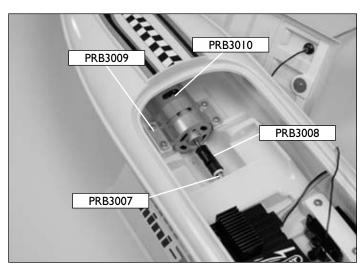
PRB3003W	Hull Only: White	PRB3011	Steering Rod w/Links
PRB3003Y	Hull Only: Yellow	PRB2228	Rubber Boot
PRB3003R	Hull Only: Red	PRB3012	Decal sheet
PRB3004	Hatch	PRB3013	Propeller w/Shaft and Bushings
PRB3005	Boat Stand	PRB3014	Steering Servo Arm
PRB3006	Outdrive Unit Complete	PRB1200	7.2V Battery with 110V AC Charger
PRB3007	Driveshaft	PRB1202	7.2V Battery
PRB3008	Universal Joint Set (2)	LOSB1084	Transmitter
PRB3009	Motor Mount	LOSB1091	Servo
PRB3010	Motor	LOSB1092	Servo Gear Set
		LOSB1087	Receiver/ESC Unit

## **Section 10: Identification of Components**









# Section 11: Instructions for Disposal of WEEE by Users in the European Union



This product must not be disposed of with other waste. Instead, it is the user's responsibility to dispose of their waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or where you purchased the product.

Section 12: Assembly and Operating Notes				





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