

## **36-INCH TWIN BRUSHLESS RTR BOAT** PRB08040

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





Miss GEICO Zelos® Twin 36

### 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 http://www.horizonhobby.com or 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. 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.

WARNING AGAINST COUNTERFEIT PRODUCTS: Always purchase from a Horizon Hobby, LLC authorized dealer to ensure authentic high-quality Spektrum product. Horizon Hobby, LLC disclaims all support and warranty with regards, but not limited to, compatibility and performance of counterfeit products or products claiming compatibility with DSM or Spektrum technology.

#### 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.

### **Table of Contents**

Water-Resistant Boat with Waterproof Electronics	3
General Precautions	3
Box Contents	4
Product Inspection	4
Recommended Tools and Materials	4
Battery and Battery Charger	4
Transmitter Controls	5
Transmitter Battery Installation	5
Antenna Tube Installation	5
Battery Pack Selection	6
Battery Pack Installation	7
Control Check	7
Getting Started	8
When You Are Finished	8
Boating Tips	8

- 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.

 Strut Angle Adjustment
 9

 Maintenance
 10

 General Information
 11

 Low Voltage Cutoff (LVC)
 12

 Electronic Speed Control (ESC) Programming
 12

 ESC Programming Procedure
 12

 Troubleshooting Guide
 12

 Limited Warranty
 14

 Contact Information
 15

 FCC Information
 15



### 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 Electronic Speed Control (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 below 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 through 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 where lightning may be 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 every 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 disconnect the ESC and motor. 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 the flex shaft and all moving parts. Dry and lubricate parts after every 15 minutes of operation or if the boat becomes submerged.
- If the boat becomes submerged in water, immediately service the motor bearings by spraying them with water displacement fluid. Then lubricate the bearings with medium oil (DYNE0100) and allow it to penetrate the bearings before running the boat again.

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. Do not spray the motor.
- Let the boat air dry before you store it. Water (and oil) may continue to drip for a few hours.

- Pro Boat® Miss GEICO Zelos® 36-Inch Brushless Catamaran
- Spektrum™ DX2E 2CH DSMR® Transmitter
- Spektrum™ MR4000 DSMR 4 CH MARINE RECEIVER (SPMR4000)
- Dynamite® 120A Brushless 2–6S Marine ESC (DYNM3878)
- Spektrum™ 9KG Servo, Waterproof, Metal, 23T (SPMS605)
- Dynamite
   2000Kv 6-Pole Brushless Marine Motor (DYNM3915)

A battery (**sold separately**) is required to operate the boat.





### **Recommended Tools and Materials**

- Needle nose pliers
- Paper towel
- Rubbing alcohol
- Open-end wrench: 10mm (2)
- Nut driver: 4mm, 5.5mm, 8mm (DYNT0502)
- Phillips screwdriver: #1
- Hex wrench: 1.5mm, 2mm, 2.5mm, 3mm (DYNT0502)

## **Battery and Battery Charger**

This product does not come with a battery. We recommend two (2) Dynamite Reaction 11.1V 5000mAh 50C 3S LiPo Hardcase batteries with EC5<sup>™</sup> connectors (DYN-B3811EC).

This product does not come with a charger. Choose a charger designed to charge the recomended battery. We Recommend the Dynamite Passport Ultra P2 100W AC Plus 2-Port AC/DC Multi-Charger (DYNC3016).

- Clear tape (DYNM0102)
- Pro Boat<sup>®</sup> Marine Grease and Gun (DYNE4200)
- Clean towels
- CA or Epoxy Glue (DYNK0030)
- Ball driver: 2.5mm
- 2 metric rulers

Refer to your charger manual for charging instructions and safety information.

**NOTICE:** Never charge a battery in the boat or damage may result.

Transmitter Controls



### **Transmitter Battery Installation**

This transmitter requires 4 AA batteries (Not Included)

- Remove the battery cover from the transmitter.
- Install the batteries as shown.
- Install the battery cover.

**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. We recommend extending the antenna outside of the boat to the maximum length allowable. Exposing the antenna fully outside of the hull will provide the best possible range and allow the use of the boat a long distance. Leaving the antenna within the hull of the boat and mounting a short antenna tube will affect the receiver's range.

Keep the end of the antenna above the boat's waterline to get the best transmitter reception.

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



When selecting the batteries for your boat it is important to remember that the limit to each speed control is 22.2V (6S).



The included adapter which is packaged in the boat and connected to the speed controls is intended to only be used with two (2) of the recommended batteries to power both speed control with voltage not to exceed 22.2V (6S). The adapter combines the voltage of 2 batteries in series and splits the voltage to power each speed control. The included adapter should never be used in with any other type of adapter.

**WARNING:** Do not use the adapter if you decide to use packs of voltage higher than 11.1V (3S). This will damage the ESCs and may result in fire or personal injury.



Using two (2) batteries, 7.4 (2S) or 11.1 (3S) with the included adapter will yield speeds ranging from 50-65 mph, depending on the battery's mAh and C rating. For optimal performance and speeds of 75+ mph we recommend using two (2) 11.1V (3S) packs in series to power each ESC with 22.2V (6S). Powering each ESC with 22.2V (6S) requires two (2) SPMXCA506 adapters to join each set of 11.1V (3S) batteries for a combined voltage of 22.2V (6S).



### **Battery Pack Installation**

Batteries can be installed in this boat using either a 2-battery or 4-battery configuration. 3S 11.1V LiPo batteries can be used, but all batteries used in a configuration must be of the same voltage, milliamp, C rating and in roughly the same condition. If you are using a 2-battery configuration, use the included battery adapter to connect two (2) batteries in series, then connect the battery series to the both ESCs in parallel. If you are using a 4-battery configuration, DO NOT USE THE INCLUDED ADAPTER. Instead, use two (2) 10 AWG EC5<sup>™</sup> Battery Series Harnesses (**SPMXCA506 – NOT INCLUDED**) to create two (2) sets of two (2) batteries connected in series, then connect each series directly into the ESCs.

Do not supply more than 6S to either ESC.

- 1. Loosen the 4 screws located at each corner of the canopy.
- 2. Remove the canopy from the hull starting with the 2 rear screws. Ensure that the 4 screws have disengaged from their bases before lifting the canopy carefully.
- Install the batteries all the way forward in the battery trays. Drive and test, move the battery back 1/4 in (10mm) increments until the boat drives as desired.

**NOTICE:** Moving the battery packs back too far will result in the boat becoming unstable and flipping backwards which could result in damage to the fiberglass hull.

**Tip:** To prevent the batteries from sliding forward or back in the tray, we recommend installing either the included padding or hook and loop tape to secure the batteries to the trays.

 Connect the battery packs to each of the adapters, or to each ESC's EC5<sup>™</sup> connector.

**WARNING:** The included adapter should ONLY be used for 2-battery configurations. Using the included adapter in a 4-battery configuration will damage the ESCs and may result in fire or personal injury.

**Tip:** Move the pack forward or back to adjust the center of gravity for your boat. Move the pack toward the bow so the bow rides lower in the water. Move the pack away from the bow so that the bow rides higher in the water.

#### **Positioning the Battery Packs**

- Toward the Bow: In rough water or strong wind conditions, place the battery packs at the front of the battery trays to ensure the greatest stability.
- Centered: Smooth water and calm winds may allow you to move the battery packs rear-ward in the hull to allow the bow to ride higher and increase speed. Be aware that positioning the batteries farther aft increases the likelihood of the boat blowing over at speed or becoming unstable.
- Toward the Stern: Positioning the batteries all the way back in their trays may 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.



### **Control Check**

**IMPORTANT:** Perform a control check at the beginning of each boating session, after repair or after installation of new batteries.

Ensure the receiver antenna is extended properly and all batteries are fully charged.

- 1. Power ON the transmitter and the boat. **Do not install the boat canopy.**
- 2. Place the boat securely on the boat stand.

**NOTICE:** Do not operate the motor without water cooling circulation or damage may result.

3. Check steering and throttle on the transmitter.



# EN

# **Getting Started**

- 1. Remove the canopy from the hull.
- 2. Install the receiver antenna in the antenna tube.
- 3. Install the fully charged batteries in the compartment and secure them with the hook and loop straps.
- 4. Power on the transmitter. Ensure the throttle is not reversed and the throttle trim is neutral.
- 5. Connect the battery to the ESC.
- Keep the throttle at neutral and power on both ESCs simultaneously by sliding the power switches to the ON Position.
- Once armed, the ESC will beep and the LED will flash, indicating the number of battery cells it has detected.
- The ESCs are joined with a Y harness, ensuring that only one ESC powers the receiver. If the ESCs are powered

on one at a time, the receiver may not power up. The secondary ESC will beep and the LED will flash every 3 seconds until the primary ESC is armed. The LED will turn solid when the ESC is armed.

7. Install the canopy on the hull.

**NOTCIE:** We recommend appying marine tape (DYNM0102) around the canopy to prevent water from entering the hull.

**NOTICE:** We recommend spaying automotive wax in the location where tape may be used to prevent the tape from damaging the finish of the hull. Tape may pull the clear off the hull when removed.



# When You Are Finished

- 1. Power off the ESCs by sliding the power switch to OFF.
- 2. Disconnect and remove the battery from the boat.
- 3. Power off the transmitter.
- 4. Drain water from inside the hull using the drain plug.
- Fully dry the inside and outside of the boat, including the water cooling lines and jacket around the motor.
- 6. Remove the canopy before storage or moisture may allow mold and mildew to grow in the boat.
- 7. Repair any damage or wear to the boat.
- Lubricate the flex shaft using Pro Boat® Marine Grease (DYNE4200 or DYNE4201) (see, **Drivetrain Lubrication**).

**NOTICE:** Never store the boat without greasing the flex shafts or they may rust.

9. Make note of lessons learned from the trimming of your boat, including water and wind conditions.



NOTICE: Never leave the boat in direct sunlight or in a hot, enclosed area such as a car. Doing so can damage the boat.

# **Boating Tips**

During the first run, we recommend calm wind and water conditions to ensure that the boat is properly set up. Maximum speeds of 75 MPH/+ can be achieved once you have set up the boat for your specific conditions.

Consult local laws and ordinances before choosing a location to pilot your boat.

- 1. Carefully place the boat in the water.
- Operate the boat at slow speeds near the shoreline. Avoid objects in the water at all times. When the boat is moving forward, ensure water flows out of the coolant outlet.
- Once you are comfortable operating the boat at slow speeds, it is safe to operate the boat farther from the shore at higher speeds.
- 4. When making turns, decrease the throttle to reduce the

probability of flipping the boat over.

5. Bring the boat back to shore when the motor starts to pulse.

**NOTICE:** Never operate your boat in less than 12 inches (30.5 cm) of water.

**CAUTION:** Never attempt to retrieve a downed boat by swimming. If you need to retrieve your boat from the water, use fishing equipment or another boat.

**NOTICE:** When running at full speed in choppy water, the propeller may exit and re-enter the water repeatedly and very quickly, subjecting the propeller and drive shaft to some stress. Frequent stress may damage the propeller and drive shaft.

In rough water and windy conditions, consider:

- mounting the batteries further forward for added stability
- adjusting the struts downward to prevent the boat from overturning
- Do Not drive directly in to the wind. The boat will flip easily which may result in damage to the hull.

#### Avoid boating near:

- watercraft
- people (swimming areas, fishing areas)
- stationary objects
- waves and wakes
- rapidly moving water
- wildlife
- floating debris
- overhanging trees
- vegetation

#### Strut Angle Adjustment

Your boat's propeller struts have been adjusted to provide the best performance while powering your boat with 22.2v (6S). The length of the struts allows for adjustments to be noticed much easier than the earlier Zelos 36 Twin (PRB08021).

There is no need to adjust your struts while using the boat in OEM form. You can adjust the boat's ride attitude by moving your battery packs either forward of back on the battery tray.

We suggest only adjusting the struts when changing the included propellers with your choice of optional propellers. Use two metric rulers to adjust the struts; one must be at least 304.8mm.

**WARNING:** Never attempt to adjust the propeller struts with the propellers installed or while the boat is powered on. Severe bodily harm can occur.

- 1. Remove the batteries and ensure the boat is powered off.
- Use a 2.5mm hex wrench and a 5.5mm nut driver or open-end wrench to loosen the stainless steel bolt that holds the strut's angle.
- 3. Remove the propeller for the strut that needs adjustment.
- 4. Place a ruler lengthwise along the length of the rear most ride pad. Placing the ruler along more than just the rear most ride pad will result in mis-measurement and could negatively affect the ride attitude of your boat.
- 5. Place the second ruler across the first ruler, forming a 90 degree angle against the propeller strut.



- 6. Measure the distance between the bottom ruler and the propeller strut, at the propeller strut's farthest point.
- 7. Make strut adjustments in intervals of 0.5mm to 1mm. Record the first strut adjustment and repeat the process on the second strut. The boat is sensitive to strut angle adjustment.

**NOTICE:** Do not adjust strut angles greater than 4 degrees positively (up) or negatively (down). If the boat requires more than 4 degrees of adjustment to run well, check the battery placement and ensure that both struts are even.

- Once the first strut is adjusted, carefully tighten the 2.5mm screw and 5.5mm nut that hold the strut's angle. Double check the measurement to verify the strut has not moved. If the measurement has not changed, tighten the screw completely.
- 9. Repeat this process on the second strut. Once both struts are adjusted, repeat processes 4-6 on both struts to ensure that the struts are even.
- 10. Once you have made adjustments, your boat is in the water and you are ready to test your adjustments, get your boat on plane and ease in to full throttle slowly, watching for erratic behavior. Your boat should run mostly on the last 2 ride pads, bouncing slightly as it passes over its own wake or cuts through chop. It should not be lifting the nose and slapping the water while running at full speed.

**Tip:** Keep a log of the strut adjustments, water conditions, and battery weight/sizes that may have required strut adjustment.





#### **Drivetrain Lubrication**

Always replace the drivetrain parts when they are damaged or show visible wear or injury and damage may result.

Lubricating the drive shaft is vital to the life of the drivetrain. The lubricant also acts as a water seal, keeping water from entering the hull through the stuffing tube.

We recommend lubricating the flex shafts after every use, not to exceed 15 minutes of use.

Remove one flex shaft at a time, or mark the shafts as right or left. The shafts are directional and if installed improperly, severe damage to the shaft assembly and housing will result.

- 1. In the hull, use two 10 mm open-end wrenches to loosen the motor coupler (**C**).
- 2. Slide the drive shaft out from the stuffing tube and drive strut at the rear of the boat.
- 3. Wipe the old lubricant and material from the drive shaft.

**NOTICE:** When lubricating the flex shaft, do not lubricate the first 20mm of the flex shaft. If grease gets into the motor coupler, it may cause the flex shaft to slip inside of the coupler, thereby damaging it and requiring replacement.

4. Carefully reinstall the drive shaft, ensuring that there is a 2.5mm gap between the propeller strut and the drive dog. This will allow space for the shaft as it shrinks under load. Without space, the drive dog could damage the aluminum propeller strut. **NOTICE:** Ensure the flex shaft is installed correctly. Installing the flex shaft incorrectly may result in irreparable damage to the boat.

- Carefully push the flex shaft into the motor coupler, making sure the grease does not carry into the coupler.
- 6. Tighten the coupler using two 10mm open-end wrenches.

**NOTICE:** Running the boat in saltwater could cause some parts to corrode. If you run the boat in saltwater, rinse it thoroughly in freshwater after each use, lubricate the drive system, and flush the coolant system.



#### **Propeller Service**

- 1. Use an 8mm nut driver to loosen the nut  $({\bf A})$  from the driveshaft  $({\bf B}).$
- 2. Remove the nut and propeller (C) from the driveshaft.
- 3. Inspect the propeller for any damage or wear and replace as necessary.
- 4. Assemble in reverse order. Correctly align the propeller with the drive dog on the driveshaft.

**NOTICE:** The counter-rotating propellers must rotate inward. The clockwise propeller goes on the left and the counterclockwise propeller goes on the right.



# General Information

#### Binding

The included transmitter and receiver are bound at the factory. To rebind:

- 1. Power off the transmitter and ESC.
- 2. Insert the bind plug into the BIND port on the receiver.
- Connect a fully charged battery to the ESC, then power on the ESC. The LED in the receiver flashes continuously, indicating that the receiver is in bind mode.
- 4. With the throttle in neutral, power on the transmitter by pressing the bind button. The LED in the receiver turns solid and the ESC will beep and arm when binding is complete. The ESC is ready for use.
- Always remove the bind plug from the receiver after binding is complete.

#### **Throttle Range Calibration**

- 1. Power on the transmitter and set the throttle TRIM dial to the center position.
- 2. Install the batteries in the boat and connect the batteries to the ESCs.
- With the ESCs powered off, pull the throttle trigger to full throttle and power ON both ESCs simultaneously. The ESCs will beep twice. The green light will flash with each beep.

#### Failsafe

Failsafe positions are also set during binding. In the unlikely event that the radio link is lost during use, the receiver will drive the servos to their preprogrammed failsafe positions. If the receiver is turned on prior to turning on the transmitter,

#### Water Cooling System

If water does not stream out of the water outlets while the boat is moving forward, immediately stop the boat and clean the obstruction from the water cooling system.

- 1. Disassemble and clean the water cooling system to remove blockage and prevent overheating.
- 2. Replace any damaged parts.

You must rebind when binding the receiver to a different transmitter.

# 4. Return the throttle to neutral. The ESCs will beep once and the green light will flash once.

The calibration process is now complete. The ESCs will arm with beeps and flashes to announce the number of battery cells it has detected. Reverse calibration is unnecessary.

the receiver will enter failsafe mode. When the transmitter is turned on, normal control is resumed. For more information on setting the failsafe, refer to the Binding section above.

**NOTICE:** The boat must run at least 30mph in order to force water through the cooling system. Running the boat below 30mph will prevent water from circulating through the electronics, causing them to overheat and possibly become damaged.





NOTICE: Do not attempt to bind the transmitter and receiver

within 400 feet. Doing so may result in unexpected binding.

if there are other compatible transmitters in bind mode

### 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.

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.

### **Electronic Speed Control (ESC) Programming**

#### **STEP 1: Enter Program Mode**

- 1. Power on the transmitter and set the throttle to full.
- Connect the battery pack to the ESC. After 2 seconds, the ESC will beep twice.
- 3. Wait 5 seconds and the ESC will emit a musical tone.

#### **STEP 2: Select Programmable Item**

The ESC will emit four groups of beeps in a loop.

Move the throttle to neutral within 3 seconds of the tone matching the item you want to select.

Веер	Running Mode
Веер Веер	LiPo Cells
Веер Веер	LVC Threshold
Веер Веер Веер	Timing

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 (DYNB3810EC or DYNB3811EC)—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 (EFLA111, sold separately).

#### **STEP 3: Set Item Value**

After selecting a programmable item, you will hear several tones in a loop.

- 1. Move the throttle to full to select the value matching the tone. The ESC will emit an alternating tone to indicate selection.
- 2. Keep the throttle in full to return to Step 2 and continue item selection. Move the throttle to the neutral within 2 seconds to exit the Program Mode.

#### STEP 4: Exit Program Mode

1. In Step 3, after hearing the alternating tone, move the throttle to neutral within 2 seconds.

-or-

2. Disconnect the battery pack from the ESC.

### **ESC Programming Procedure**

Programming can be accomplished using the Dynamite<sup>®</sup> LED Program Card (DYNS3005, sold separately) or via the transmitter. Please refer to your DYNM3875 manual for transmitter programming instructions.

	В	BB	BBB	BBBB	Веер—	Веер—В	Beep—BB	Beep—BBB
Programmable Items	1 short beep	2 short beeps	3 short beeps	4 short beeps	1 long beep	1 long 1 short	1 long 2 short	1 long 3 short
1 Running Mode	Forward Only	Forward/ Reverse						
2 Li-Po Cells	Auto-Calcu- late	2S	3S	4S	5S	6S		
3 LVC Threshold	No-protec- tion	2.8V/Cell	3.0V/Cell	3.2V/Cell	3.4V/Cell			
4 Timing	0.00°	3.75°	7.50°	11.25°	15.00°	18.75°	22.50°	26.25°

# **Troubleshooting Guide**

Problem Possible Cause		Solution	
Boat will not respond to throttle but responds to other controls	Throttle channel is reversed	Reverse throttle channel on transmitter	
	Damaged propeller, shaft or motor	Replace damaged parts	
Extra noise or extra	Propeller is out of balance	Balance or replace propeller	
vibration	Boat squeals or makes a high pitch sound when applying power to motors	Lubricate flex shafts	



Problem	Possible Cause	Solution	
	Boat battery charge is low	Completely recharge battery	
	Boat battery is damaged	Replace boat battery and follow battery instruc-	
	Blocking or friction on shaft or propeller	tions	
		Make sure the battery is warm (above $10^{\circ}$ C [50°	
	Boat conditions may be too cold	F)) before use	
Reduced runtime	Battery capacity may be too low for condi- tions	Replace battery or use a larger capacity battery	
	Drive dog is too near the stuffing tube	Loosen drive shaft side of the motor coupling and move drive shaft small amount back	
	Too little lubrication on drive shaft	Fully lubricate drive shaft	
	Vegetation or other obstacles block rudder or propeller	Remove vegetation or obstacles from rudder or propeller	
	Motor couplers are loose	Tighten motor couplers and ensure the coupler is free of lubrication	
	Transmitter is too near boat during binding process	Move powered transmitter a few feet from boat, disconnect and reconnect battery to boat	
Boat will not bind	Boat or transmitter is too close to large metal object, wireless source or another transmitter	Move the boat and transmitter to another location and attempt binding again	
(during binding) to transmitter	Another compatible transmitter is powered on within range of the receiver	Power off all compatible transmitters except the one you are trying to bind	
	Boat battery/Transmitter battery charge too low	Replace/recharge batteries	
	ESC switch is off	Power on ESC switch	
	Transmitter is too near boat during connect- ing process	Move powered transmitter a few feet from boat, disconnect and reconnect battery to boat	
Boat will not connect (after binding) to	Boat or transmitter is too close to large metal object, wireless source or another transmitter	Move boat or transmitter to another location and attempt to connect again	
	Boat battery/transmitter battery charge is too low	Replace/recharge batteries	
	ESC switch is off	Power on ESC switch	
Boat tends to dive in the	The boat hull is not completely closed	Dry out the boat and ensure the hatch is fully closed on the hull before returning the boat to the water	
	Center of gravity is too far forward	Move batteries back in the hull	
Boat tends to turn	Rudder or rudder trim is not centered	Repair rudder or adjust rudder and rudder trim for straight running when control is at neutral	
one direction	ESC may require full throttle range calibration	Calibrate the ESC	
	Rudder, linkage or servo damage	Replace or repair damaged parts and adjust controls	
	Steering servo wire is damaged or connections are loose	Do a check of steering servo wires and connec- tions, connect or replace as needed	
Rudder does not move	Transmitter is not bound correctly	Re-bind	
	BEC (Battery Elimination Circuit) of the ESC is damaged	Replace ESC	
	ESC switch is off	Power on ESC switch	
Controls reversed	Transmitter settings are reversed	Do the Control Direction Test and adjust controls on transmitter appropriately	
Motor overheats	Blocked water cooler tubes	Clean or replace water tubes	
	Weather conditions might be too cold	Postpone until weather is warmer	
	Battery is old, worn out or damaged	Replace battery	
	Batteries are too far back in the battery tray	Move the batteries forward to adjust the boat's center of gravity	
Boat blows over upon	Struts have too much positive angle, causing the nose of the boat to lift and blow over	Adjust a more neutral or negative strut angle	
	Water conditions are too choppy or windy	Adjust the struts downward to drive the bow of the boat down or move the batteries further forward for better weight distribution	

### **Limited Warranty**

#### What this Warranty Covers

Horizon Hobby, LLC, (Horizon) warrants to the original purchaser that the product purchased (the "Product") will be free from defects in materials and workmanship at the date of purchase.

#### What is Not Covered

This warranty is not transferable and does not cover (i) cosmetic damage, (ii) damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or due to improper use, installation, operation or maintenance, (iii) modification of or to any part of the Product, (iv) attempted service by anyone other than a Horizon Hobby authorized service center, (v) Product not purchased from an authorized Horizon dealer, or (vii) Product not compliant with applicable technical regulations or (vii) use that violates any applicable laws, rules, or regulations.

OTHER THAN THE EXPRESS WARRANTY ABOVE, HORIZON MAKES NO OTHER WARRANTY OR REPRESENTATION, AND HEREBY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.

#### **Purchaser's Remedy**

Horizon's sole obligation and purchaser's sole and exclusive remedy shall be that Horizon will, at its option, either (i) service, or (ii) replace, any Product determined by Horizon to be defective. Horizon reserves the right to inspect any and all Product(s) involved in a warranty claim. Service or replacement decisions are at the sole discretion of Horizon. Proof of purchase is required for all warranty claims. SERVICE OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY.

#### **Limitation of Liability**

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT. INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY, REGARDLESS OF WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR ANY OTHER THEORY OF LIABILITY. EVEN IF HORIZON HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. 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 the Product, purchaser is advised to return the 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). This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Horizon reserves the right to change or modify this warranty at any time without notice.

#### WARRANTY SERVICES

#### **Questions, Assistance, and Services**

Your local hobby store and/or place of purchase cannot provide warranty support or service. Once assembly, setup or use of the Product has been started, you must contact your local distributor or Horizon directly. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance. For questions or assistance, please visit our website at www.horizonhobby.com, submit a Product Support Inquiry, or call the toll free telephone number referenced in the Warranty and Service Contact Information section to speak with a Product Support representative.

#### Inspection or Services

If this Product needs to be inspected or serviced and is compliant in the country you live and use the Product in, please use the Horizon Online Service Request submission process found on our website or call Horizon to obtain a Return Merchandise Authorization (RMA) number. 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. An Online Service Request is available at http://www.horizonhobby.com/content/service-center\_renderservice-center. If you do not have internet access, please contact Horizon Product Support to obtain a RMA number along with instructions for submitting your product for service. When calling Horizon, you will be asked to provide your complete name, street address, email address and phone number where you can be reached during business hours. When sending product into Horizon, please include your RMA number, a list of the included items, and a brief summary of the problem. A copy of your original sales receipt must be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

**NOTICE:** Do not ship Li-Po batteries to Horizon. If you have any issue with a Li-Po battery, please contact the appropriate Horizon Product Support office.

#### Warranty Requirements

For Warranty consideration, you must include your original sales receipt verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be serviced or replaced free of charge. Service or replacement decisions are at the sole discretion of Horizon.

#### **Non-Warranty Service**

Should your service not be covered by warranty, service 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 service you are agreeing to payment of the service without notification. Service estimates are available upon request. You must include this request with your item submitted for service. Non-warranty service estimates will be billed a minimum of ½ hour of labor. In addition you will be billed for return freight. Horizon accepts money orders and cashier's checks, as well as Visa, MasterCard, American Express, and Discover cards. By submitting any item to Horizon for service, you are agreeing to Horizon's Terms and Conditions found on our website http://www.horizonhobby. com/content/service-center\_render-service-center.

**ATTENTION:** Horizon service is limited to Product compliant in the country of use and ownership. If received, a non-compliant Product will not be serviced. Further, the sender will be responsible for arranging return shipment of the un-serviced Product, through a carrier of the sender's choice and at the sender's expense. Horizon will hold non-compliant Product for a period of 60 days from notification, after which it will be discarded.

10/15



### **Contact Information**

Country of Purchase	Horizon Hobby	Contact Information	Address	
	Horizon Service Center (Repairs and Repair Requests)	servicecenter.horizonhobby.com/RequestForm/		
United	Horizon Product Support	productsupport@horizonhobby.com	2904 Research Rd	
States of America	(Product Technical Assistance)	877-504-0233	Champaign, Illinois, 61822 USA	
Sales		websales@horizonhobby.com		
		800-338-4639		
EU	Horizon Technischer Service	service@horizonhobby.eu	Hanskampring 9	
EU	Sales: Horizon Hobby GmbH	+49 (0) 4121 2655 100	Germany	

\*For the most up-to-date customer service contact information, please visit: www.horizonhobby.com/content/service-center-render-service-center

# **FCC Information**

FCC ID: BRWDX2EO2UC This equipment has been tested and found to comply with the limits for 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 to 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.

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.

**NOTICE:** Modifications to this product will void the user's authority to operate this equipment.

**C EU Compliance Statement:** Horizon Hobby, LLC hereby declares that this product is in compliance with the essential requirements and other relevant provisions of the RED and EMC Directives.

A copy of the EU Declaration of Conformity is available online at:

http://www.horizonhobby.com/content/support-render-compliance.



## **IC Information**

**IC: 6157A-DX2EO2UC** This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.



# 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 collections 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.



### Replacement Parts / Ersatzteile / Pièces de rechange / Pezzi di ricambio

Part #	English	Deutsch	Français	Italiano
DYNM3830	A3630-1800Kv, 6-pole, Water Cooled, Marine Motor	A3630-1800 kV, 6-poliger, wassergekühlter Motor	Moteur marin, à 6 pôles, refroidi à l'eau, A3630, 1800 kV	Motore A3630-1800Kv, a 6 poli, marino, raffred- dato ad acqua
PRB286020	Motor	Motorkupplung:	Coupleur moteur :	Attacco motore da 5
	Coupler:5mm/4.7mm	5 mm/4,7 mm	5 mm/4,7 mm	mm/4,7 mm
DYNM3875	120A BL MARINE ESC 2-6S	120A bürstenloser MARI- NE-Geschwindigkeitsregler 2–6S	Variateur ESC marin 120A BL 2-6 S	ESC marino 120A BL 2-6S
PRB286023	Cooling Lines: Zelos 36	Kühlleitung: Zelos 36 Twin	Conduites de refroidisse-	Linee di raffreddamento:
	Twin Cat	Cat	ment : Zelos 36 Twin Cat	Zelos 36 Twin Cat
PRB286024	Electronics Tray: Zelos	Halterung für Elektronik:	Plateau électronique :	Vassoio elettronica: Zelos
	36 Twin	Zelos 36 Twin	Zelos 36 Twin	36 Twin
"PRB18031	"NYA Batt Adptr, EC5:	"NYA Akku Adptr, EC5:	PED Adaptateur de batte-	"Adattatore batteria NYA,
	Miss GEICO 36"	Miss GEICO 36"	rie, EC5 : Miss GEICO 36	EC5: Miss GEICO 36"
PRB18032	NYA ESC Y Hrns: Miss GEICO 36	NYA Geschwindigkeits- regler Y-Kabelbaum: Miss GEICO 36	PED ESC Harnais en Y : Miss GEICO 36	prolunga Y ESC NYA: Miss GEICO 36
PRB281042	Rudder Set: Zelos 36 Twin	Rudersatz: Zelos 36 Twin	Kit de gouvernail : Zelos 36 Twin	Set timone: Zelos 36 Twin
PRB281045	Rudder: Zelos 36 Twin	Seitenruder: Zelos 36 Twin	Gouvernail : Zelos 36 Twin	Timone: Zelos 36 Twin
PRB281085	NYA Replacement Hull:	NYA Ersatzrumpf: Miss	PED Coque de rechange :	Scafo sostitutivo NYA:
	Miss GEICO 3	GEICO 3	Miss GEICO 3	Miss GEICO 3
PRB281086	NYA Replacement Canopy:Miss GEICO 3	NYA Ersatz- Kanzelabdeckung:Miss GEICO 3	PED Verrière de re- change :Miss GEICO 3	Strutt. coperta sostitutiva NYA: Miss GEICO 3
PRB282063	NYA Lft Sde Prop, CW	NYA Prop. links, CW , 1,7	PED Hélice côté gauche,	Elica sx NYA, CW, 1,7
	, 1.7x 1.6	x 1,6	CW, 1,7×1,6	x 1,6
PRB282065	NYA Lft Sde Flx Shft,	NYA Flx Welle links, CW:	PED Arbre flexible côté	Albero flex sx NYA, CW:
	CW: MG 36	MG 36	gauche CW, CW : MG 36	MG 36
PRB282066	NYA Rt Sde Flx Shft,	NYA Flx Welle rechts, CW:	PED Arbre flexible côté	Albero flex dx NYA,
	CCW: MG36	MG36	droit CCW : MG36	CCW: MG36
PRB282067	NYA Shaft Liner: Miss	NYA Schachtsegment:	PED Chemise d'arbre :	Rivestimento albero
	GEICO 36	Miss GEICO 36	Miss GEICO 36	NYA: Miss GEICO 36
PRB285000	"BREAKAWAY SCREW:	"ABLÖSESCHRAUBE:	VIS AUTOCASSANTE :	"Vite sganciabile: ZELOS
	ZELOS 36, UL-19"	ZELOS 36, UL-19"	ZELOS 36, UL·19	36, UL-19"
PRB286022	Rudr Psh Rd Set: Zelos	Steuerstangensatz f. Rudr.:	Kit tige poussoir de gou-	Set asta comando timo-
	36 Twin	Zelos 36 Twin	vernail : Zelos 36 Twin	ne: Zelos 36 Twin
PRB286030	Canopy Thumb	Daumenschrauben für Kan-	Vis de serrage de la ver-	Viti zigrinate strutt.
	Screws: Zelos 36	zelabdeckung: Zelos 36	rière : Zelos 36	coperta: Zelos 36
PRB286063	NYA Prp Strt Mnt: Miss	NYA Prop. Strt Halterg.:	PED Support de chaise	Montante di supporto eli-
	GEICO 36	Miss GEICO 36	d'arbre : Miss GEICO 36	ca NYA: Miss GEICO 36
SPM2335	DX2E ACTIVE 2ChDSMR Radiow/ SR310	DX2E ACTIVE 2ChDSMR Funk mit SR310	Radio DX2E ACTIVE 2 canaux DSMR avec SR310	Radiocomando DX2E ACTIVE 2 canali DSMR con SR310
SPMMR4000	MR4000 DSMR 4 Ch	MR4000 DSMR 4 Ch	Récepteur marin MR4000	Ricevitore marino
	Marine Receiver	Bootsempfänger	DSMR 4 canaux	MR4000 4 canali DSMR
SPMS605	"9KG Servo, WP, Metal	9 kg Servo, WP, zentrales	Servo 9KG, WP, Métal.	"Servo 9KG, WP, custo-
	Cent. Case 23T"	Metallgehäuse 23T"	Boîtier 23T	dia cent. in metallo 23T"



## Optional Parts / Diverse Teile / Pièces optionnelles / Pezzi opzionali

Part #	English	Deutsch	Français	Italiano
DYN2828	Screwdriver: #1 Phillips	Schraubenzieher: Nr. 1-Kreuzschlitz	Tournevis : Phillips, nº1	Cacciavite: a croce #1
DYN2803	Nut Driver: 5.5mm	Dynamite Steckschlüssel:5.5mm	Clé à écrou 5,5mm	Chiave per dadi: 5,5mm
DYN2805	Nut Driver: 8mm	Dynamite Steckschlüssel:8mm	Clé à écrou 8mm	Chiave per dadi: 8mm
DYN2819	5 pc Metric Hex Driver Assortment	Dynamite metrischer In- busschlüsselsatz 1,5-4 mm (5 Stk)	Assortiment de 5 clé hex- agonales métriques	Set chiavi esagonali metrici (5 pz)
DYN4401	GPS Speed Meter	Dynamite GPS-Geschwind- igkeitsmesser	Tachymètre GPS	GPS Speed Meter
DYNB3810EC	7.4V 5000mAh 2S 50C LiPo,Hrdcs:EC5	7,4 V 5000 mAh 2S 50C LiPo, Hartschale: EC5	Batterie Li-Po Hrdcs 7,4 V 5000 mAh 3S 50 C : EC5	Batteria LiPo 7,4 V 5000 mAh 2S 50C, hardcase: EC5
DYNB3811EC	11.1V 5000mAh 3S 50C LiPo,Hrdcs:EC5	11,1 V 5000 mAh 3S 50C LiPo, Hartschale: EC5	Batterie Li-Po Hrdcs 11,1 V 5000 mAh 3S 50 C : EC5	Batteria LiPo 11,1 V 5000 mAh 3S 50C, hardcase: EC5
DYNC0028	EC5 Battery Series Harness	EC5 Akku-Serie Kabelbaum	Harnais pour batteries EC5	Cablaggio per collega- mento in serie delle batte- rie EC5
SPMXCA506	IC5 Battery Series Harness with 4"/100mm Wire, 10 AWG	IC5 Akku-Serie Kabelbaum mit 4"/100 mm Kabel, 10 AWG	Harnais 100 mm pour batterie IC5, 10 AWG	Cablaggio batteria IC5 con cavo 100mm/4", 10 AWG
DYNC0031	EC5 Device Charge Lead, 12AWG	EC5 Gerät Ladeleitung, 12 AWG	Câble du chargeur de l'appareil EC5, 12 AWG	Cavo di carica dispositivo EC5, 12AWG
DYNC3005	Passport 400W Dual ACDC Touch	Passport 4000 W Dual Wechsel-/Gleichstrom Touch	Passport 400 W Dual CA/CC Touch	Caricabatterie con touch- screen doppia alimen- tazione CA/CC Passport 400W
DYNE4200	Grease Gun with Marine Grease 5 oz	Dynamite Fettpresse m. Marinefett 141 g	Pistolet avec graisse marine 140g	Grasso marino con pistola 5 oz
DYNE4201	Marine Grease 5 oz	Dynamite Marinefett 141 g	Graisse marine 140g	Grasso marino 5 oz
DYNF1055	Infrared Temp Gun w/ Laser	Infrarotmesspistole mit Laser	Détecteur infrarouge de température avec laser	Misuratore temperatura a infrarossi a pistola con puntamento laser
DYNM0102	Clear Flexible Marine Tape (18M)	Dynamite transparentes Marineklebeband 18 m	Adhésif Marin transparent flexible (18M)	Nastro marino traspar- ente flessibile (18M)
DYNS3005	Dynamite LED Program Card	Dynamite LED Program- mierkarte: Marine	Carte de programmation à DELs pour bateau	Dynamite scheda pro- grammazione LED
DYNT0502	Start Up Tool Set: Proboat	Dynamite Startup Werkzeug- set: Pro Boat	Proboat - Set d'outils de démarrage	Start Up Tool Set: Proboat
EFLA111	Li-Po Cell Voltage Checker	Dynamite LiPo-Zellenspan- nungsmessgerät	Testeur de tension d'élément Li-Po	Li-Po Cell Voltage Checker
EFLAEC512	EC5 Device Charge Lead with 6" Wire & Jacks, 12Awg	E-flite EC5 Ladekabel 12AWG	Câble de charge EC5, lon- gueur 150mm, diam 3,3	EC5 cavetto di carica dispositivo 6" con connet- tori, 12 AWG
KXSC1004	KX50D Duo 2 x 50W AC/DC Charger	KX50D Duo 2 x 50W Wech- sel-/Gleichstrom-Ladegerät	KX50D Duo 2 x Chargeur CA/CC 50W	Caricabatterie KX50D Duo 2 x 50W CA/CC
SPM2335	DX2E Active 2CH DSMR Radio w/ SR310	DX2E Aktives 2-Kanal DSMR Funkgerät mit SR310	Radio DX2E Active 2 canaux DSMR avec SR310	Radiocomando DX2E Active 2 canali DSMR con SR310

Part #	English	Deutsch	Français	Italiano
SPM5000	DX5R 5CH DSMR Tx w/SR6000T	DX5R 5 Kanal DSMR Tx mit SR6000T	DX5R 5CH DSMR Tx avec SR6000T	Radiocomando DX5R 5 canali DSMR con SR6000T
SPM6410	DX6R 6CH Smart Radio w WIFI/BT	DX6R 6 Kanal Smart-Funk- gerät mit WIFI/BT	Radio intelligente DX6R 6 canaux avec WI-FI/ BLUETOOTH	Radiocomando Smart DX6R 6 canali con WI-FI/Bluetooth
SPMMR4000	MR4000 DSMR 4CH Marine Receiver	MR4000 DSMR 4 Kanal Bootsempfänger	Récepteur marin MR4000 DSMR 4 canaux	Ricevitore marino MR4000 4 canali DSMR
SPMSS6170	S6170 Std Digital Surface Sx	S6170 Digitaler Standard- Oberflächenservo	Surface Sx numérique standard S6170	S6170 Servocomando digitale standard Sx
SPMSS6250	S6250 High Torque, HV Dig Servo	S6250 Digitaler HV-Servo mit hohem Drehmoment	Couple élevé S6250, servo numérique HV	S6250 Servocomando digitale a coppia elevata HV

60223 Created: 03/2019 ©2019 Horizon Hobby, LLC. Pro Boat, the Pro Boat logo, Zelos, Dynamite, Prophet, Reaction, EC5, DSM, DSMR, and the Horizon Hobby logo are trademarks or registered trademarks of Horizon Hobby, LLC. The Spektrum trademark is used with permission of Bachmann Industries, Inc. All other trademarks, service marks and logos are property of their respective owners. PRB08040