

# RC REPORT

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## Rage Black Marlin & Black Marlin BL

In the world of radio control hobbies boats are a small niche, but even as small as the market is, for those of us who have worked on and raced boats—I'm a fan of scale model boats and Cindy was at one time involved in racing model boats at the national level—it's one of the most rewarding segments.

The problem with most factory offerings is the entry-level products are more toy-like than hobby-quality, and the purchasers quickly grow bored with the item, wondering why they spent any money at all on the thing. Then there's this huge leap in design and performance where the boats become extremely expensive.

Many of these high-end performance boats tear through the water, there's no question of that, but they still aren't race ready, and here-in lies the next problem, and it is all too familiar a scenario. Boat racers don't share information. As an example, the first time I sharpened one of Cindy's propellers I took it to the point of a pocket knife. I had no idea the propeller needed to be honed to where I could shave with it. And many clubs still don't even have an entry-level, box-stock class. In-fact many clubs don't even have an electric class, which is insane as race-ready glow engines are no longer commonly available, and the only way radio control boat racing is going to prosper is if electric and stock classes are added at the club level (although this is starting to change).

The bottom line is the customer who shelled out a ton of cash for a boat, with all sorts of expectations of fun, is shunned by the local club and regulated to running a few laps around a pond when he takes his family on vacation. It's not what either the hobby dealer, or the customer, wanted to see.

What has been needed is an entry-level product that performs, yet is still modest in cost. This is the type of product that will give the potential customer the experience needed to learn and grow in the hobby of model boating, without the outlandish expense (and modest return) of a high-performance product. To this end Rage has released its Black Marlin. Available in two versions, the only difference between the Black Marlin and the Black Marlin BL is the BL is powered by a brushless motor and the associated difference in the ESC and battery requirements.

First up is the basic unit. The boat features a one piece molded ABS hull—no seams to fail when the newbie smashes into some flotsam (or the seawall at the NRSHA Convention boat pond demonstrations). The hull is listed in the manual as 23.5 inches long with a total length, running gear, of 28 inches. On the box as 24 inches and this was just enough of a discrepancy for me to bring out a tape measure. I'm not going to split hairs, and I didn't use precession calipers to take measurements, but I came up with a hull that is 24 inches long and a total length, including all of the running gear of 27.5 inches. Not at all a big deal but there's always that crazy customer who will throw a product back on the counter for not being represented exactly as stated in the product's description.

In addition to the one-piece hull, the boat is powered by a water-cooled 390-class brushed motor and features a 2-in-1 receiver and 20amp ESC combo. The steering servo is listed as water-proof, but during testing the boat wasn't submarined, so we'll take Rage's word on that. Power is supplied by a

### Performance in an entry-level package



7.4V 1500mAh Lithium-Ion battery and the package includes a USB style charger for the battery pack. Also included with the boat is an extra propeller, a length of hook-and-loop material for securing extra battery packs a hex wrench for servicing the prop shaft and a really handy wood display/service stand. The transmitter is a full-size wheel type and has all the necessary forward and reverse switches along with trim centering. Considering the price point, this is a nice package.

As always, the instruction manual was read while the battery charged. Because of the rudimentary—AND SAFE—style of the included charger, the manual states it will take 3.5 hours to charge the battery. Also, there is no peak cut-off, so the manual is specific in not charging for longer than four hours.

*Note: The manual states the LED on the USB charger glows red while charging and turns to green when finished. In the review sample the LED flashed red while charging and shut off when the battery was charged.*

*Not a huge issue, but this could cause some confusion for the target consumer. The manual is complete, covering everything the new model boater will need to know to get started, but it is only a dozen pages long and this left a lot of free time as the battery continued its charge.*

Although I am going to recommend a charger upgrade,

perhaps due to the nature of the boat it's best for the new boater to use the included charger until he begins to understand batteries, especially lithium chemistry batteries. Regardless, while working at my desk a free USB port on my computer was used to charge the battery. When the battery was charged it was disconnected and set to the side. Provided it's in good health, a lithium battery won't lose its charge while sitting on a shelf, so there was no problem putting the pack to the side until it was time for the trials.

With the arrival of a sunny day and calm water, the Black



*Years ago I was taught to dry a hull by removing the drain plug and suspending the boat using a bungee cord. It's still the best way I know, so feel free to share it.*

Marlin was readied for the trial run. Due to the entry-level nature of the boat, there is only a thin foam rubber seal between the hull and hatch. There is a pretty steep ledge that should work in conjunction with the seal to keep water out of the hull, but as a precaution, deck tape was used on the seam just so if things got a little carried away while making sharp high-speed zigzag turns the hull wouldn't fill with water.

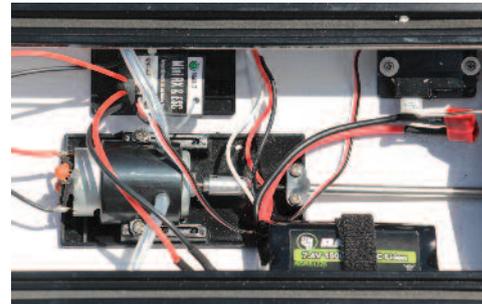
With the boat in the water throttle was applied and the Black Marlin began to move. This boat is a lot peppier than expected. As hobbyists we've become so acclimated to brushless systems we've sometimes forgotten just how well a brushed unit can perform. Acceleration was just about perfect for a new-

comer to the hobby of model boats, and the steering rate could be brought completely under control by using the dual rate function on the transmitter. Something that is ideal for younger drivers; those who have a tendency to use the throttle trigger likes it's an on-off switch and steering wheel like it's

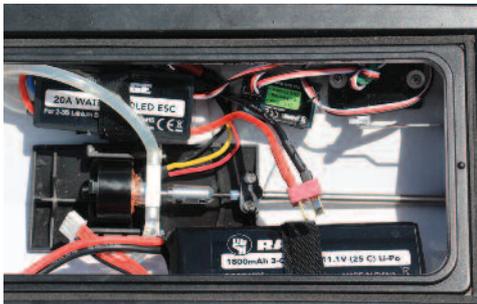
all or nothing.

Next up was the Black Marlin BL or brushless version. The boat uses the same hull and running gear, the only outward difference being the BL has blue graphics whereas the brushed version uses green. It is only when the hatch is removed and a look is taken inside the hull that the differences are really obvious.

The BL version uses a 3500kV brush-



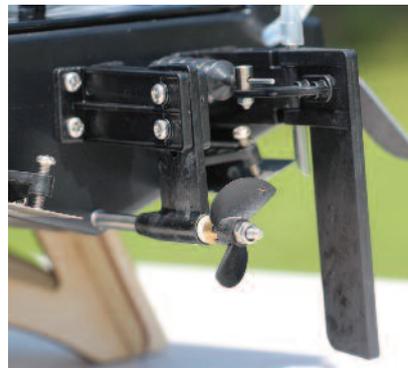
*The hulls of both the standard Black Marlin and the BL are the same, the only difference is the standard version (shown) uses a brushed motor and a 2-cell 7.2 volt lithium ion battery along with a similar ESC, but without the reverse function. Even with a brushed motor the standard version is peppy and perfect for a younger, beginning boater.*



*The BL version of the Black Marlin is equipped with a water cooled 3500kV brushless inrunner and includes a 20amp ESC with reverse and a water-proof steering servo. Powered by a 3S 11.1 volt 1800mAh LiPo. Considering its size, the BL really moves.*



*The Black Marlin's both include a full-size wheel style transmitter that include all of the basic needs such as dual rates and steering trim and in the case of the BL incorporate many of the functions found on more expensive machines, such as digital throttle and steering trim.*



*Manufactured from a composite plastic material, the business end is rather hefty and with proper maintenance should provide the end user with a good running product well into the future.*

less motor, and the same 2-in-1 20amp ESC, but with the brushless version the ESC is equipped with reverse. Included with the BL are an 11.1 volt 3S 1800mAh lithium polymer battery pack and a balancing wall charger for the battery. The BL uses a full-size wheel transmitter that shares the same easy to access steering and throttle trim switches located in plane with the steering wheel as the basic Black Marlin. Several additional features are included in the BL transmitter, such as a rotating steering rate trim switch, allowing for more precision tuning of the steering to suit conditions. Having the trim switches in

plane with the steering wheel has been proven to aid a driver in making minute trim changes while the vehicle, boat or surface, is in operation. It's a pretty nice feature for a product at this price point.

The manual for the BL is also a few pages longer and is slightly more comprehensive to match the performance of the product. In addition the BL also includes a handy display/service stand along with an extra propeller and a hex wrench for servicing the prop shaft.

I felt the brushed Black Marlin to be pretty peppy, but considering its size, the brushless version just plain hauls the mail. We're always preaching throttle management to get a little extra battery life, and therefore longer running time out of a lithium powered machine, but when running the brushless version of the Black Marlin all a person wants to do is nail the throttle, slow down enough to make a turn, and punch the throttle again. Full-bore running is the norm and it is exciting. The boat jumps up on plane, and for the most part it is pretty stable, showing only a little tendency to want to flip, and this is only in rough water. Obviously any plastic hull boat that only weighs less than two pounds is going to be affected by rough water, and I know I'm asking a lot of consumers, but if only common sense would prevail.

In addition to the power system, due to the speed, the brushless version is also equipped with adjustable trim tabs on the transom, whereas the brushed are fixed. Most likely the person who purchases this boat will want to experiment with adjustment, and I always encourage a modeler to experiment, but in this case my recommendation is to leave them alone until a little driving experience is acquired.

As with all boats, both versions of the Black Marlin require maintenance. Lubricating the prop shaft is paramount for the longevity of any boat. It's super easy, only requiring the loosening of a setscrew on the motor coupling, removing the shaft by pulling it out of the boat by the propeller, adding some waterproof marine grease to the shaft, and replacing



it. This operation only takes minutes, but is ignored by more boaters than can possibly be imagined, frequently resulting in customers complaining that their boat no longer responds like it used to.

Honestly it's such an easy and necessary task that in every case before a new boat is placed in the water I always remove and grease the shaft. There are times during mass production that numbers can get in the way of details, and I've found shafts both dry and with stuck-on hardened grease—and this on new boats. As mentioned it only takes minutes and will save a ton of

grief down the road, or should I say water.

Both versions of the Black Marlin perform within the limitations of the design and both can be recommended to a consumer. This is where the knowledgeable dealer comes into play. The brushed version is peppy, but may be more in-tune with a younger user, one that doesn't completely understand the relationship between trigger pull and speed, let alone that steering and a continually flipped boat is something that is always frustrating to the new model boater.

The brushless version is plain fast for a boat in this class and

it is more geared towards a slightly older and more coordinated consumer, one that better understands the relationship between the transmitter he is holding and the boat it is controlling.

Both versions would be welcome additions to any boat dealer's inventory. The BL is quite a bit more boat for the money, but both are attractive and perform well. Either is a great way for the potential model boater to be introduced to the hobby without the frustrations often experienced when trying to step up a notch from the toy products.

And let's not forget the price point along with the margin. This is something



*Packaging for the boats is the similar. Although the BL clearly indicates the box contains the brushless product, the only obvious visual difference between the two boats is the brushed version uses green graphics and the brushless version uses blue.*

every hobby dealer is looking for.

As with all Rage products both versions of the Black Marlin are available exclusively through HRP Distributing. **HM**

