



PRESS RELEASE

For Immediate Release

#3801 Ballistic 8 Sensored Brushless Motor-1.5Y/1,950Kv

#3802 Ballistic 8 Sensored Brushless Motor-2D/2,650Kv



BIGGER, BOLDER BALLISTIC

Irvine, CA – July 7, 2011 – Novak is announcing the newest member of its Ballistic motor family—the **Ballistic 8 Sensored Brushless Motor**. The Ballistic 8 is specifically designed for the rigors of today's 1:8 racing arena, and will be initially available in two motor winds—1.5Y (Wye-wound) and 2D (Delta-wound). Novak listened to top-level racers to produce the most rugged, feature-rich motor on the market. The Ballistic 8 includes **adjustable motor timing**, an **inter-changeable wound-stator design**, and is built to **ROAR specifications**. It is perfect for 1:8 scale buggies, truggies and monster trucks from well-known companies such as Associated®, Losi®, Traxxas®, OFNA®, Hot Bodies®, Mugen®, and XRAY®.



The Ballistic 8 installed in a Losi® 8IGHT-E 2.0 4WD Buggy

NOVAK-DEVELOPED TECHNOLOGY

The first question anyone will ask: What sets the Novak Ballistic 8 apart from the other brands? Novak Electronics has been designing and manufacturing products in the USA using the best components and manufacturing processes from around the world since 1978, and sensored brushless motors since 2002—longer than any other manufacturer in the RC car market. Developing the Ballistic 8 started from the ground up at the Novak headquarters in Irvine, California. Each motor is **hand-wound**, and is put through stringent tests to ensure the **highest quality**.

PERFECTLY BALANCED ROTOR

For years, motor builders have struggled to keep their balancing weights on the motors. 1:8 scale motors operate at extremely high RPM, so adding weights to balance can become problematic. Novak's Ballistic 8 rotor sets itself apart from the other brands in that it is **drill balanced**, which removes material. The fact that no epoxy weights are added to the rotor means trouble-free operation since it is virtually impossible for your motor to become out of balance. For further reliability, Novak uses **four high-strength Neodymium magnetic segments**. These segments are secured not only with high-strength epoxy, but are also precisely located with machined guides that are keyed to the shaft to ensure **exact magnetic alignment** and prevent the magnets from slipping on the shaft. As a final step, each rotor is given a complete **Kevlar wrap** and **rolled in epoxy** to make certain no harm can come to the rotor while in operation.



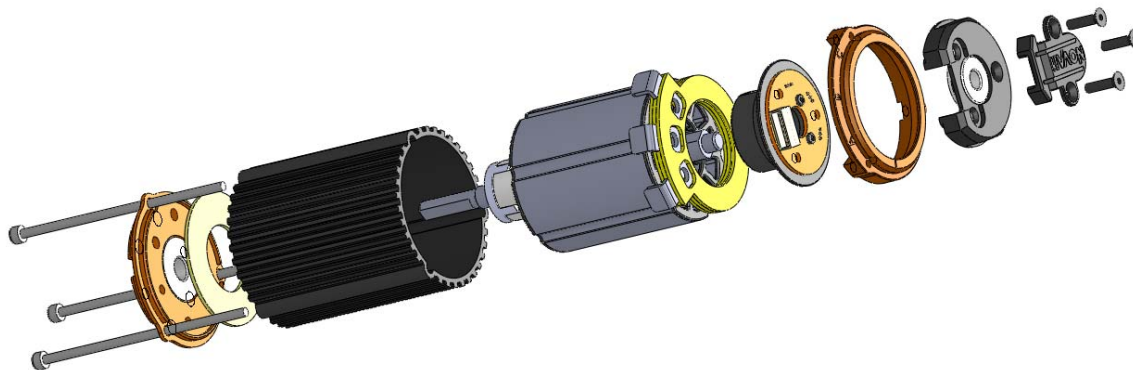
Novak Ballistic 8 rotor is drill-balanced and Kevlar-wrapped for the best performance

COMPLETELY REBUILDABLE DESIGN

1:8 scale electric racing is one of the premier forms of off-road today. Having the option to fix any and every aspect of your equipment while at the track is crucial to a successful race weekend. Novak was the first to offer a **completely serviceable, rebuildable brushless motor** with the original Ballistic 540 and 550 motors, and is extremely pleased to bring this must-have feature to electric 1:8 racing. Every component or assembly of the motor can be purchased separately. The wound stator can even be interchanged to experiment with a different Kv wind.



Hand-wound, epoxy-dipped stator can be replaced with the same or different Kv wind



The Ballistic 8 Motor is 100% rebuildable. Every component and assembly is available for cost-savings field repair of motor, including rotor, stator, sensor harness, and bearings.

MORE FEATURES

One of the unique features of the Ballistic 8 is its **adjustable mechanical motor timing**. Simply loosen the three timing screws on the back end bell and rotate to the desired timing. Once the timing is set, the rear bearing cover can be removed by simply taking out two of the timing screws. This allows removal of the **user-replaceable sensor harness** and inspection of the rear bearing without altering the timing, and locks the sensor harness in place during normal operation. For problem-free and easy soldering to the ESC, the Ballistic 8 features **widely-spaced, solder tabs**. Each rugged tab is spaced 35 degrees and is made from extremely, heavy-gauge low-loss copper. Finishing out its rugged design is its 5mm output shaft that is hardened for extra durability.

The Ballistic 8 continues Novak Electronics' tradition of high quality brushless motor manufacturing. **Order one today and make your electric 1:8 scale vehicle go Ballistic!**

*The **Ballistic 8 Sensored Brushless Motor** (1.5Y/#3801 & 2D/#3802) will be available in **September 2011**. Motor replacement parts will be announced and will be available prior to shipping the Ballistic 8.*

Novak is also developing the longer length (76.5mm) Ballistic 8L Sensored Brushless Motor and Sensored 1:8 Brushless Speed Control. Refer to the Novak website www.teamnovak.com for further information as it becomes available.

BALLISTIC 8 MOTOR SPECIFICATIONS

Winds	1.5-turn Wye-wound (#3801); 2-turn Delta-wound (#3802)
Motor Weight.....	12.7 oz. (360 g)
Input Voltage	2S-4S Li-Po
Kv (unloaded).....	1,950 (1.5Y); 2,650 (2D)
Resistance (mΩ)	6.5 (1.5Y); 6.75 (2D)
Motor Size	1514 Size: 2.80”L x 1.71”D with fins (71 x 43.5mm)
Output Shaft Dimensions	5mm diameter x 18mm length w/flat
Rotor Diameter	16mm
Design	Sensored-base
Magnet	4-pole, Sintered Neodymium
Bearing.....	Oversized, flanged ABEC-5
Mounting Holes	M3X0.5 (on 25mmØ), M4X0.7 (on 25mm & 29mmØ)



Novak's 32-Pitch (#5152-5157) and Mod 1 (#5100-5114) pinion gears fit the Ballistic 8's hardened, 5mm output shaft

BALLISTIC 8 MOTOR FEATURES

- ✓ Sensor-based for excellent torque control and low-speed driveability.
- ✓ Compatible with both sensored and sensorless speed controls
- ✓ 100% rebuildable design with removable shielded sensor harness, sensor assembly, wound stator, rotor, sleeve, hardware, bearing caps, and front bearing
- ✓ Designed to meet all ROAR 1:8 motor specifications (*ROAR approval coming soon!*)
- ✓ Adjustable mechanical motor timing
- ✓ Nickel-plated sintered 4-pole Neodymium rotor with a hardened 5mm output shaft that is Kevlar-wrapped and epoxied for maximum performance
- ✓ Drill-balanced rotor for the best performance and consistency—rotor always stays in balance
- ✓ Epoxy-dipped, 12-slot, hand-wound stator for maximum reliability and heat dissipation
- ✓ Oversized, flanged ABEC-5 front and rear bearings for increased load handling and bearing life
- ✓ Locked in, replaceable sensor harness
- ✓ Widely-spaced (35 deg), extremely heavy-duty solder tabs for easy wiring connection to ESC
- ✓ Multiple bolt patterns and sizes allow for compatibility with all popular 1:8 vehicles
- ✓ Full-length screw design to ensure for maximum durability
- ✓ Black anodized sleeve with ribbed heat sink design to help dissipate heat
- ✓ Meets RoHS compliance and includes 120-Day Warranty
- ✓ Designed, hand wound and dyno-tested by Novak in Irvine, Calif., using globally sourced components

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