# Team Wave RB-50 & RB-30 speed controller

Contributed by REV Scale Tuesday, 02 December 2008 Last Updated Wednesday, 28 January 2009

TEAM WAVE released their RB-50 & RB-30 Professional speed controller.

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RB50 is the top-of-the line, competition grade model while RB-30 provides all the features of RB-50 but at a fraction of the price for budget and club racers. Both controllers provide a wide range of tuning options for professional users including adjustable drag brake, turbo drive, time shift, throttle curve, brake curve, LiPo cut, temperature cut and brushless reverse. They are also easy to use, small in size and brushed motor compatible.

Source: TEAM WAVE

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### Sensored technology

Nowadays, sensored brushless system is the choice of virtually all World-class A-main drivers. All leading manufacturers are focusing on sensored technology instead of sensorless. With feedback coming from the sensor, no software calculation of rotor position is needed and the controller can react faster without cogging and delay (response time is less than 0.000001 sec). There is no more dependency on the type of motor you use nor the speed the car is travelling

Compare with traditional sensored brushless system, TEAM WAVE raised the technology to the next level by introducing the Time Shift technology - motor timing is no longer fixed in sensored brushless system. Together with our Turbo Drive technology which gives an instant extra boost to the motor at full throttle, smoothness and high top-end speed can now be achieved at the same time!

# Smooth throttle response

Smooth throttle and brake responses are the keys to fast and consistent lap time. All TEAM WAVE racing brushless controller features 10-bit resolution in both forward and brake mode, i.e. 1024 steps for forward and 1024 steps for brake! Together with 9 throttle and 9 brake curves, there is always a profile that suits your driving style.

#### Big power in small size

The size of the controller is not compromised for high performance in the RB series. By utilizing high density multilayer multistack PCB, RB series brushless controllers provide enormous power to today's high-drain motor and at the same time features an ULDO (Ultra Low Drop Out) BEC (Battery Eliminated Circuit) which can deliver 3A continuous current without significant voltage drop (BEC output 6V at normal and over 5.6V at 3A load). Your expensive steering servo can now work at full force and won't loss power/speed at high traction tracks or quick chicane.

In RB50, a high power cooling fan is installed on top of the controller. A specially designed ventilation hole is drilled through the heatsink such that cool air can be blown directly into the controller to cool down the lower stack MOSFET and the hot air can then escape from the back of the controller. The heatsink is strategically shorter than the cooling fan such that cool air can also reach the bullet connector at the back for further cooling.

## High quality and high fidelity

Every component used in the RB series is carefully chosen and specially designed with high quality and fidelity at a reasonable price. All components are imported from the original manufacturer and all controllers are designed/made in Hong Kong which ensures highest quality. Our passion is embedded in every design detail and no other OEM products can compare.

#### Expandable design

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Both RB30 and RB50 are capable to update firmware through the optional handheld programmer. The handheld programmer not only provide easy setup of the controller but also features a USB link. With updateable firmware, you can enjoy all new features later without paying extra

SpecificationRB-30RB-50Brushless motorover 7.5Tover 3.5TBrushed motorover 7Tno limitRated current200A/Phase, brushless400A/Phase, brushlessInput4-8cells NiMH, 2-3cells Lipo4-8cells NiMH, 2-3cells LipoSize34mm x 31mm x 31mm x 33mm Weight30gram without wires50gram without wiresBrushless drive modeForward/Brake/ReverseForward/Brake/ReverseBrushed drive modeForward/BrakeForward/BrakePower capacitorIncludedIncludedCooling fanOptional IncludedWires supplied14AWGultra flex 12AWG

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