

Tekin Vegas 208 Software for RS, RS PRO and RX8 controllers

The Vegas 208 software contains several major advances towards Tekin's never-ending pursuit of perfection. As well as increases in performance and lower temperatures, V208 includes a spec' mode required at some races and some new features to make it all easier to use. So this time its *Smarter, Cooler, Faster*

RS Spec Mode

The spec mode provides no Timing Advance or Boost in the controller. The center LED flashes when in neutral to make it easy to verify the unit is in spec mode.

RS Brakes

A major improvement is stronger braking at high speeds. Braking power is increased and is more linear throughout the RPM range.

RS and RX8 Power Delivery

To fine-tune the power delivery we have improved the Current Limiter. Most drivers have reported they can limit the current down to 80% before they even notice it. This can lower motor temps without sacrificing any power or feel. Many drivers have found it beneficial to use even use lower settings in low traction they find their car handles a lot better without the sudden jolt of torque that can be produced by brushless motors.

Results

Team driver reports have demonstrated that the smoother power delivery and improved brakes, combined with intelligent current limiting, is producing faster lap times and lower temperatures.

Making it easier. RS and RX8 On-Board Timing Profiles

Who needs a separate programming box when all the features are available on the ESC at the touch of a button? While the HotWire is needed for fine-tuning and software updates, we realize not everyone wants to carry a computer to the track. To make it easier, 208 has new Timing Profiles which are taking the place of Throttle Profiles on the RS's onboard interface. Throttle Profile settings are still available using the HotWire. Throttle curve adjustments can also be made on almost all good radios.

The user can now select from 5 preset Timing Profiles on the RS and RS PRO without a HotWire RS and RS PRO

TP1 Spec Mode 0deg Boost (LED flashes when in neutral so Tech can easily verify mode)

TP2 15deg Boost, 5442 RPM to 20,000 RPM

TP3 25deg Boost, 5442 RPM to 20,000 RPM

TP4 35deg Boost, 5442 RPM to 20,000 RPM

TP5 45deg Boost, 5442 RPM to 20,000 RPM

C1 Custom settings using Hotwire

C2 Custom settings using Hotwire

Custom 1 and *Custom 2* (C1 and C2) are user-savable Timing Profiles created in the HotWire and are selected via the RS's onboard interface. This will allow the user to run the same ESC in a spec class and have his or her own personal settings stored in *C1* or *C2* for the non-spec class at the same event/race.

RS, RSpro and RX8 Dual Mode Boost

Also new in 208 is Dual Mode Boost. This feature is most useful when used in the RS PRO with modified motors, or in the RX8 with all T8 motors. Dual Mode Boost lets users set the RPM range where Timing Advance is added, just like we already do with Boost in sensed-only mode. This is the best of both worlds for low turn motors, allowing low gearing/low timing for more torque out of the corners and higher timing for higher top speed/RPM on the straights. This is especially helpful on tracks with tight infields and a long straight.

RS and RSpro Dual Mode Boost Settings

The user can set Dual Mode Boost in the RS using the HotWire and the Custom Timing Profiles. The Start RPM should be in the upper ranges of 10,000 with an End RPM of 25,000+. The maximum timing in Dual Mode is 30deg. The setting range is 0% to 100% (0deg to 30deg) with the most common settings being 50% to 100% (15deg to 30deg).

Team drivers have noted that often they can go up one whole motor wind with the increased power band. For example if you run 4WD Off-road Mod with a 6.5T, in Dual Mode you can now run a 7.5T and get the same if not more useable power and top speed, all with lower motor temps.

RX8 Dual Mode Boost Settings

Tekin T8 motors are 4-pole, 12-slot motors with very low turns that need very little timing at higher RPM. The maximum timing in Dual Mode is 30deg, displayed in the HotWire as Timing Advance, with a range of 0% to 100%. The T8 motors are only able to efficiently use about 30% to 50% Timing Advance (10 to 15deg). Settings higher than 50% on Timing Advance is appropriate for standard 1/10 scale motors, for Tekin's SC4x SCT motors, and for the long-can motors that some sell as 1/8 scale motors.

While Timing Advance in a 1/10 scale motor can more than double the kV of a motor, the T8 motors only increase kV around 10%, after which the extra energy is wasted in the form of heat. Run times decrease when too much timing is applied.

The user can select from 5 preset Timing Profiles on the RS, RSpro and RX8 without a HotWire:

- TP1 10% Dual Mode Timing Advance,
- TP2 27% Dual Mode Timing Advance,
- TP3 45% Dual Mode Timing Advance,
- TP4 63% Dual Mode Timing Advance,
- TP5 80% Dual Mode Timing Advance
- C1 Custom settings using Hotwire
- C2 Custom settings using Hotwire

Custom 1 and *Custom 2* (C1 and C2) are user-savable Timing Profiles created in the HotWire and selected via the RX8's on-board interface. This will allow the user to have specific Timing Advance values or different RPM ranges, that are then available on the unit with just a few button pushes.