RCU Review: HELION RC Invictus 10MT

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Helion Invictus – Excitement, Speed, Performance

HELION RC INVICTUS 10MT 1/10th scale 4×4 brushless powered monster

LiPo Compatibility: 3S
Motor: 3000 kV Radiant Rotor 4 Pole Brushless, Sensorless
The 1/10 Invictus 10MT story begins with the Dominus 10SC and the brushless Dominus 10TR. According to Helion RC, the Invictus 10MT is about giving its customer’s a product they wanted but didn’t know how to ask for.

The Invictus has a familiar layout to the Dominus, so I felt like I knew what I was looking at and what to expect.

In fact, it’s during the unboxing I really didn’t feel I would have much more to say about the Invictus than I did the Dominus SCv2 a year ago. Then I started thumbing through the manual and realized the ESC adjustments seemed to have improved in the past year. There are a lot of settings and instructions in manual I didn’t remember being included in the Dominus. It’s a hint of things to come perhaps.

I also took note of the difference in build; there is notably more heft to this chassis. Naturally, I was now curious about this truck’s capabilities over the Dominus that I’m well familiar with and drive regularly. It didn’t feel overweight and the tires are pretty big, so it should be a capable and durable basher based on what I was seeing.

THE TRUCK

EVERY THING IS SETUP AND READY to drive out of the box, you only need to install the transmitter batteries and wait for the receiver battery pack to fully charge. It’s recommended you get to know your r/c prior to driving it, so you’ll have plenty of time to inspect the truck and browse the manual while the battery is charging.

THE CHASSIS is a rugged, engineering grade high impact composite chassis according to Helion. I don’t know what that means, but it sounds fantastic. I’m guessing it means the truck will take some abuse for a long time, but it also houses all the components nicely for a well balanced vehicle.

The battery tray has two hook and loop straps to secure the battery and allows space for a hump pack. I’m using the included 1800 mAh 9.6v 8c NiMH with a high current T-plug.

The Invictus has a 4-wheel, adjustable independent suspension. They’re an oil filled, coil-over shock with bladders. Front toe, camber, suspension angles and height are all options you can adjust. It also has a pivot ball style front suspension and aluminum hinge pin braces.

THE DRIVETRAIN is rubber sealed, ball bearing supported with planetary metal gear differentials in the front and rear. It has an aluminum center drive shaft, connected to the rear input shaft and motor mount assembly.

THE HRS – 3 .1 TRANSMITTER is designed to work with the Invictus and the provided ESC, including the primary adjustments for steering rate and trim, throttle and dual rates.

The adjustments are pretty straight forward and the owner’s manual does a pretty nice job explaining what all the beeps and LED flashing mean. The programming procedures are straight forward thanks to the manual as well.

There’s a nice ESC Programming Tree included in the manual to help navigate the menu. It gives a visual to the instructions, which makes it easier to
THE ELECTRONICS offer many options allowing you to enjoy the Invictus according to your driving style and preference. The receiver and ESC have the settings you’d expect; it comes with digital trim settings for steering and throttle and of course channel reversing.

The steering has dual rates that can be set from 20-100% and end point adjustment is available. That means you can adjust steering, throttle and brakes to your liking.

There is a power alarm for both idle and low-battery. When the battery drops below 4.5v, a slow beeping alarm sounds and the LED light blinks.

The ESC is waterproof, but it is recommended to remove the fan if you’re spending excessive amount of time submersing the Invictus in water. Be mindful the ESC will heat up more as a result of not having the fan attached and the water or puddles aren’t going to do as good of a job keeping cool as the fan would.

It can run both forward with brake and forward/reverse with brake. The brakes have a proportional ABS function allowing 4 step brake force and 8 step drag brake force adjustments. Along with that are 4 punch modes from soft to very aggressive (70%, 80%, 90%, 100%). So depending on how you set up the truck and with what tires, you can really dial in the throttle response.

And it should go without saying this ESC comes with all the low voltage cut-off’s protections you’d expect.
The Invictus is a 1/10th scale truck. It's overall size is average and the weight is good. The steering servo is noticeably responsive, and the larger tires swing back and forth with ease on the pavement; the equipped waterproof 6kg high torque steering servo feels good. With a blip of the throttle, you hear the drivetrain come to life a little more audibly than some vehicles, and the truck springs into action.

The factory Punch mode is set to 90% and it’s nicely responsive at this rate, with no risk of lifting the front tires off the ground. The default Maximum Brake Force setting is 75% and traction is not a problem. In fact, the rear end would easily come off the pavement, even when wet. On dirt however, it was just fine. When letting off the throttle, Drag Brake Force kicks in at the default 10%, which is ok, but my preference was to move it to 5% for bashing.

I didn’t find the transmitter to be as comfortable as I would prefer. It wasn’t distractingly uncomfortable, but it’s just a bit bulky and squared off for my liking. All the digital trims are in places I would expect and they’re easily accessible while driving, making adjustments pretty easy. It’s a very capable combination, but could use some refinement.

I thought I knew what to expect when first inspecting the Invictus. To some degree, that’s true. I started driving where I always do, up and down my street, dialing in the truck as I build speed. I have been driving the Dominus regularly so the speed was predictable, but the brakes caught me off guard. At the factory setting, you can endo this thing all day long on the pavement.

The sand pit was next, and while I didn’t think it would have any trouble there, I almost didn’t think it would do well on the sand hills. It was soft, fine sand and didn’t seem suited very well for anything r/c except a crawler. With a little head start, the Invictus flew over the sand mounds with ease. There was absolutely no drama driving over, through and on the side of those mounds, it just did what you asked. Even slow attempts, when matched with throttle control was doable. That was unexpected.

Taking the Invictus to the air takes flips and tricks to another level. I’ve had the truck completely out of sorts and land safely because of, steering, throttle and brake responsiveness. You can see some of that in the video off the small ramp I was using. It almost has buggy-like control in the air, which made it the test subject of my own twisted ideas of how hard I could push its durability boundaries beyond that small ramp.

The battery provided enough juice to make driving the Invictus fun, but it needs a LiPo. I wasn’t impressed with the run times of the included battery even though the speed was good. My best run was 28mph, and that does mean the Invictus gets around adequately, but the battery will drain quickly if you’re heavy on the throttle throughout your run. If you want to see 30+mph, LiPo is your battery of choice. You’ll also get better run times.
FINAL LAP

I didn’t track the Invictus, but I didn’t really need to, as it’s not a vehicle I think many people will take to the track. This is the type of vehicle you open your back door to where ever you live and you light the fires and kick the tires. It’s a basher… and it’s pretty good at it.

When I pulled the truck body out of the box and saw those two flags on the back, secured with screws, I couldn’t help but wonder how long they would last, and in general how long the truck itself would last before something broke. I’m happy to say, the flags and the truck survived nicely.

Ok, so flag part is said in jest, but it’s a statement to the rest of the truck and the durability with which it is built. Those little flags now make me smile every time I’m done driving the truck and they’re still flying strong. Go check on the Invictus yourself, it’s worth a closer look.

ABOUT AUTHOR

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“Don’t cry because it’s over, smile because it happened.” ? Dr. Seuss

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There are no comments

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