

LRP Flow Works Team Brushless Speed Control with New Firmware V3.8

I've been around the hobby for many years and I've seen a lot of things come and go, but it seems there are those companies who keep turning out solid products that everyone tends to gravitate to. LRP is one of those companies and their ESC's are considered some of the best. Their Flow brushless speed control has been gaining a lot of followers lately and you'd think the company would just kick back, put their feet up and order a frosty beverage, but oh no. The company is at it again, and instead of just changing a graphic and the shape of the case along with some mumbo-jumbo marketing, they decided to come out with new firmware to turn their lethal speed control into another killer. Sure it's seen the top level of almost every major event, including the recent IFMAR Worlds won by Steven Hartson for 4WD buggy, but how would it hold up in not-such-world-class mitts like mine?

THE GOODS

I was itching to get my 2WD buggy racing on, so in to the buggy it went. To fully test it, I decided to mate it to LRP's Vector X20 BL Modified Motor along with a (recommended) 12.0mm sintered rotor. This is the typical power the Factory Team runs and I was feel-



ing pretty "special" in my matching set-up. After unpacking the ESC out of the small box, I took inventory on what was included. The box includes detailed instructions that hold your hand through the process of set up and changes. It can be a little overwhelming, but after a few minutes I was able to get everything set right. The milled aluminum two-piece case (unusual and trick all by itself) sensed ESC is dressed in LRP signature blue with an aluminum heatsink milled for optimum airflow. That's key since it mates with an included fan or can be run without. All this may seem well and good, but this system includes their newest Firmware Version 3.8 installed and it is exactly the software used by Steven Hartson and the rest of the team that helped develop it at the 2013 IFMAR Electric Offroad Worlds.

And this is where things really get going. The company believes that the heart of a system is in its software. As long as it sits on a solid foundation of hardware, having a new, updated software package is like having a new product. Existing LRP Flow owners don't

need new hardware, just hook it up to a PC using LRP's updater (#81801), download the latest software and that little unit is all freshened up. The nice thing is that after the firmware is installed (pre-installed in this unit), programming is done directly on the unit with a series of button pushes. No dragging that laptop to the track or attaching some weird little box. For those not wanting to get that deep in to it, the factory settings do just fine and are set to deliver settings that most would find way above average. Yep, racers are its intended market and as expected, reverse is absent. This isn't meant for launching that monster truck over your local sandlot, although I guess you could if you wanted.

I also need to mention that when running one of LRP's motors, like the Vector X20, things continue to improve. Sure it works fine with other brands, but when using specific LRP motors, the unit "talks" a little more with that motor and gives more info, including the ability to "read out the maximum internal temperature for each speedo and motor." Heck, you know the Germans make good things (inside joke).

VITAL STATS

MANUFACTURER: LRP
PART NUMBER: 80970
PRICE: \$199.99
INPUT VOLTAGE: 3.7-7.4V (1S-2S LiPo)
FOOTPRINT: 32 x 34 x 21mm
WEIGHT: 40g
BEC: 6.0V/3.0A Linear
POWER WIRES: 3.3mm²
MOTOR LIMIT: 3.0T
RATED CURRENT: 400A/phase
DIRECTION: Forward/brake
BATTERY CONNECTOR: Not included

WHAT WE LIKED:

- Jewel-like quality
- World-class performance
- Suitable for mod or stock racing
- Adjustability in just about every area

WHAT COULD BE IMPROVED:

- Need decent level of soldering ability

BEFORE YOU HIT THE TRACK

Installing was pretty standard albeit a bit tedious, since soldering of the leads to the motor and battery connectors is needed. The small footprint of the speedo makes it easier to place in most vehicles and with everything marked clearly, it goes pretty smooth. The unit does include color-coded wires to help, but since I was soldering on battery leads, I decided to “Murder Out” the system and go with all black. This isn’t recommended, but since experienced hands are going to be doing the soldering, going the extra step isn’t that unusual. Next was just to plug in the sensor wire that is about the right length for most electronic layouts. Oh yeah, I was winning the race – okay, bench racing at this point.

PERFORMANCE

Club racing is where I’m going and my set up for my buggy is tried and true. Sure, I may not be able to match lap times with some of the local fast pros like Hartson, but those are my skills and it’s obvious after only a few laps that it is limited to that. Practice laps early in the day were giving me loads of confidence. It’s obvious this system is all race business and even I could feel the small differences in the new firm-

ware. Traction at the track is pretty good, and usually this means a twitchy undertaking, but the Flow was smooth and allowed me to tame a normally white-knuckle beast. Inspections later revealed all systems go, and I even tried it without the fan with little to no change and no issues with excessive heat. Considering it was installed inline with my other electronics and covered in a pretty tightly sealed body, it is actually more of a surprise than you would think.

In no time, I was cranking off some pretty respectable laps on the edge of my coordination and showing this racer’s rarely-seen abilities. I always felt stable and confident and if it weren’t for my occasional brain-farts, I’d be right in the top mix. For stock, I think I’d dial back a little drag brake (the Flow lets you get detailed by taking braking in to categories of “auto brake,” “brake ramp,” and “initial brake”). Braking is where the real change happened and the “feel” is something I’m not used to.

WRAP UP

Yeah, this new Flow system and new firmware version 3.8 is serious business, but it doesn’t



LRP offers the X20 in a wide range of turns to fit the needs of racers and their specific race classes.

take a PhD to use. I like that and it makes a less-than-pro skill level go up a notch. Sure it’s a bit pricey, but when you are ready to take on some serious competition nothing but the best will do. Now my problem is, what the heck are the Germans going to do next? ☺

Link
LRP LRP-America.com, 949-276-6060

For more information, please see our source guide on page 129.