



2023 JRL Season News

Hello JRL Teams!

We need to make you aware of a change that is coming for the 2023 JRL season. Since 2011, our program has been using the Vex Robotics system that is called their Cortex system. In the last few years, Vex Robotics has come out with a new version called their V5 system. With the wider availability of the new V5 system, they are discontinuing their Cortex systems and we are already seeing that many of the Cortex electronics parts are becoming hard to find. While this is exciting because the new system offers some very cool features and upgrades, it does pose a bit of a problem for us since we need to convert to using the new system moving forward.

The good news is that we tested the new robots with the old and do not have an issue with being able to run both versions at the same time through our field management system during competition. This means that teams are not required to upgrade if they chose not to. We recognize some teams may choose to upgrade because of the new features but other teams may choose not to upgrade due to the added cost.

Starting with the 2023 JRL season, new teams that register will receive the new V5 system. This kit will have advantages over the old Cortex system. Some notable differences will be faster and stronger motors, better battery life and advanced system diagnostics.

This change is also a cost impact that will impact new teams and those wishing to upgrade their system. The new V5 kit's base price is \$749 compared to the previous price of \$549. For teams that want to upgrade their robot kit to the new V5 system, the upgraded electronics kit is available for \$699 and includes the electronics parts like the V5 Brain, Controller, Radio, Motors, Battery, Charger and cables. The registration fees that we charge teams outside of the robot costs are to cover the costs that are associated with materials needed to build the game field, any necessary electronics used on the field, shipping costs for the kits, credit card fees, and any supplies necessary for putting on the competition event.

We recognize this change is not ideal for any of us but is unfortunately outside of our control. This will impact our program for a few years until all teams are using the new V5 system. We are working to identify any ways to help reduce the competitive advantage this new system may have over teams that choose not to upgrade. In the meantime we want to share this information so that you are informed of this change.

In late August, we will have a parent information meeting where we will have one of the new V5 systems available as well as the old Cortex system so that people will have an opportunity to see the two systems side by side. Please watch our website at jrl.teamdriven.us and our Facebook page at <https://www.facebook.com/juniorroboticsleague> for more information on the date and time of the meeting.

Helpful links

You can find out more information on the new V5 system at <https://www.vexrobotics.com/v5-classroom-starter-kit.html>

Motor Comparison link

<https://kb.vex.com/hc/en-us/articles/360044325872-Understanding-V5-Smart-Motor-11W-Performance>

393 Motor Turbo Gear Set (4-pack) (will increase motor speed closer to that of the stock V5 speed)

https://www.vexrobotics.com/motors.html?queryID=58e97ecd78ba9f4eb75770cf963b98c1&objectID=1311&indexName=vex_m2_vexrobotics_products

V5 Electronics kit

https://www.vexrobotics.com/v5-system-bundle.html?queryID=8d053b61fc8b1856065a1ed6461d24ae&objectID=2369&indexName=vex_m2_vexrobotics_products