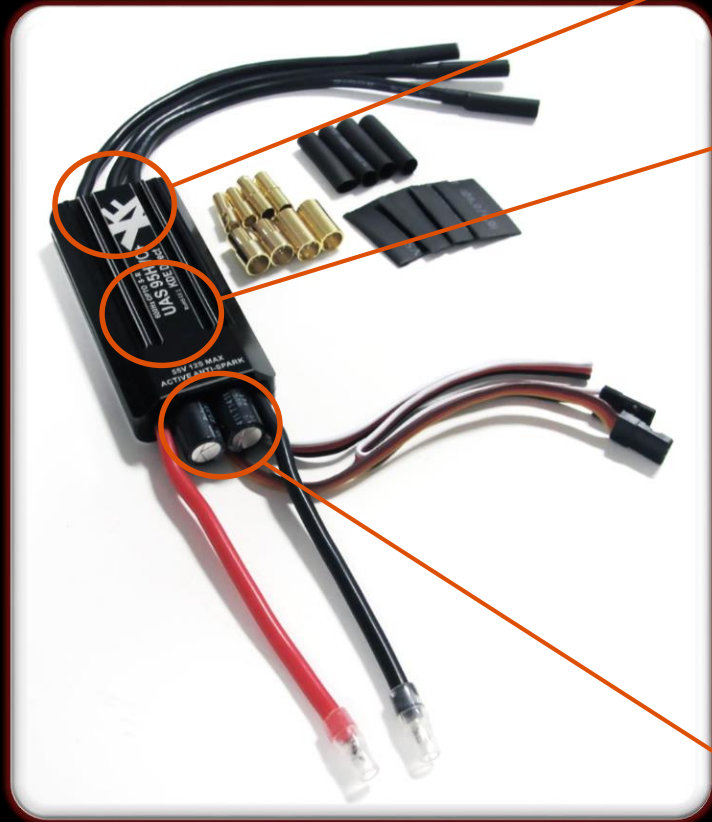


# KDE DIRECT UAS HVC ELECTRONIC SPEED CONTROLLER SERIES TECHNOLOGY REVIEW

## INDUSTRY-LEADING PERFORMANCE

The KDE Direct UAS HVC Series Electronic Speed Controllers (ESC) are optimized for commercial and industrial-level UAS and Multi-Rotor applications; incorporating the latest market-leading technologies and advanced motor control algorithms for optimal flight performance. The ESCs are specifically tuned to the KDE Direct UAS Multi-Rotor Brushless Motors for peak performance and plug-and-play compatibility.



## ENVIRONMENTAL PROTECTION

High-temperature (200°C/392°F), silicon-wire power leads and 24K gold-plated bullet connectors provided for easy, hassle-free installation. Power and motor exit leads are protected via rubberized-polymer grommets and epoxy, sealing the critical internal electronics from weather (rain and snow), dust and debris, and vibration for safe operation in the most-demanding applications.



## MARKET-LEADING TECHNOLOGIES

The new UAS HVC series brings to life the next-generation of technology; including an all-Aluminum 6061-T6 case for extremely cool-running temperatures and rugged-construction, allowing the ESCs to be used in a wide-range of harsh environments and commercial/industrial applications without detrimental effects.



The new series comes pre-loaded with the latest production firmware, including a host of new, market-leading technologies such as:

- **Regenerative Braking** – active braking during motor deceleration phase, providing instantaneous response to the flight controller commands and matched-control speed to acceleration profiles (less “float” during flight).
- **Temperature-Controlled Synchronous Rectification** – new proprietary algorithm for smooth running motors at low-throttle and improved, faster response under high-peak loads; all while significantly increasing flight-time efficiency and reducing operating temperatures (“active-freewheeling”).

## INDUSTRIAL-QUALITY COMPONENTS

All UAS HVC Electronic Speed Controllers use the highest-grade, extremely-low resistance (1.9 mΩ) HV MOSFETs for industry-leading performance and maximum efficiency. 10,000+ hour, long-life and low-ESR Aluminum Electrolytic Capacitors are used for high-durability and an active anti-spark internal circuit prevents initial power-on sparks and voltage shocks.

