

Altion key features

Unprecedented charging efficiency

- **20-35% faster charging than internal and traditional external regulators:** Altion's advanced algorithms ensure optimal charging for lead-acid and Lithium-ion batteries, charging them faster and extending their lifespan.
- **Works with any externally regulated alternator:** Altion seamlessly integrates with virtually any alternator size or voltage system, handling up to 16 amp fields in systems from 12-48 volts.
- **Intelligent control:** Altion utilizes cutting-edge **PID control algorithms** to maximize charging speed and meticulously fine-tune alternator output, efficiency, and reliability. It dynamically adjusts power based on a multitude of factors, including alternator and battery temperatures, voltage, and amperage.
- **Advanced protection:** Altion safeguards your alternator from overheating, even under the heavy loads associated with large batteries and lithium charging.
- **Flexible alternator compatibility:** Altion works effortlessly with both P-type or N-type alternators with its supplied wiring harness.
- **Efficient power management:** Altion charges only when excess engine power is available, intelligently monitoring engine RPM to prevent unnecessary strain in idle and high output situations.
- **Dual alternator control (Altion Max):** For two engine setups, Altion Max coordinates regulation of two alternators in a single device.

Unparalleled battery management

- **Universal battery support:** Altion adapts to any battery chemistry, including lead-acid (flooded, AGM) and lithium (LiFePo4), meticulously optimizing charging parameters for each type.
- **Precise measurement:** Altion supports current shunts ranging from 25-160 mv and accommodates all amperages, delivering accurate battery current measurement for any battery bank size.
- **Optimized charging:** Altion's advanced PID algorithms ensure optimal battery voltage and current, quickly reaching and maintaining a full state of charge while preventing the alternator from overheating.
- **Configurable charge cutoff:** Establish a charging cutoff based on user-defined signals, such as relays, voltage spikes, or battery temperature.
- **Dual battery bank control (Altion Max):** Altion Max tackles even the most demanding setups, enabling independent charging of two battery banks with potentially different voltages and chemistries.

Effortless setup and configuration

- **Seamless installation:** Altion prioritizes ease of use. Utilize our pre-made harnesses for a rapid installation, or leverage the configurable connectors for a customized setup.
- **Simplified wiring:** Altion installations require **only 5-7 wires** in most configurations, with up to 26 connections for elaborate multi-alternator/multi-battery systems.
- **Compact design:** The Altion's small footprint (5.1 x 3.1 x 1.2 inches) ensures it fits discreetly into tight spaces.
- **Intuitive configuration:** Get up and running in minutes. Select from pre-programmed settings for a wide range of batteries, or customize your parameters for a truly personalized experience.
- **Wireless connectivity:** Connect wirelessly using any smartphone, tablet, or PC (Windows or Mac) – **no app or cables required.**

- **Reliable connectivity options:** Altion prioritizes Wi-Fi or ethernet connectivity for superior reliability, extended range, and ease of use compared to traditional Bluetooth options.

Wireless firmware updates

Enjoy the convenience of wireless firmware updates, ensuring your Altion remains at the forefront of technology for years to come.

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