



Zeus User Manual

Product Description:

The Zeus is an innovative new development in ignition control. The Zeus provides a regulated supply voltage to your ignition system from your receiver power bus, as well as controlling remote switching of the ignition power. This eliminates the need for a separate ignition system battery or any sort of external electronic kill switch! **Zeus provides completely isolated power** to your ignition through a transformer-based switch-mode power supply design. This isolates the ignition system, eliminating the possibility of RF interference being coupled back into your sensitive radio equipment.

Specifications:

INPUT POWER: 3.3 – 8.6VDC

OUTPUT POWER: 5, 6 or 8.6VDC @ up to 25W

Installation & Use:

Installation & operation of the Zeus is simple.

1. Connect the radio *INPUT* connector of the Zeus to your receiver or power distribution system. Use the channel you would like to use to switch your ignition system ON/OFF.
2. Select the output voltage your ignition system requires by placing the provided jumper across the indicated header pins. The header block is near the *OUTPUT* connector, and you can select between 5V, 6V, or 8.6V.
3. Connect your ignition system power to the *OUTPUT* connector of the Zeus. If you desire a mechanical switch, you may place the switch in series with the leads to your ignition module.
4. Mount the indicator LED in a convenient location; it will indicate to you if the Zeus is currently providing power to your ignition. If the LED is ON, your ignition system is receiving power and is active. If the LED is OFF, the Zeus has turned off your ignition.
5. Radio set-up is also easy: Select a channel with a radio switch, and verify operation by powering up the transmitter and receiver. Set the transmitter ignition control switch to OFF. If the LED is ON, simply reverse the transmitter channel. Cycle the switch and confirm correct operation.
6. That's it! You are done with the installation of your new Zeus ignition controller.

Important Notes:

When using the Zeus with a power distribution system, be sure to plug the Zeus only into a servo output port – not directly into the receiver. Most power distribution systems provide a dedicated 5V regulator for the receiver, and these typically can only provide 1-2A, which may not be sufficient to power your ignition system. If this on-board receiver regulator overheats, it may shut down, causing your radio system to fail. **Make sure that whatever you plug the Zeus into for power can supply at least 3-5A to be safe.**

Be aware that without your ignition battery your flight batteries will have an increased load on them (up to 3-5A in the worst case), likely 1A or so. This will reduce run-time, so be sure to familiarize yourself with the amount of discharge your particular ignition module demands. **42% recommends that for the first few flights, you carefully monitor and charge your batteries to get an idea of the run-time you can expect. 42% also suggests using batteries of at least 2000mAh in capacity, because of the potentially large current draw.**

When mounting the Zeus, locate it inside or very near the Motor Box. This further reduces the possibility of any interference. **Please connect the Zeus's output connector directly to the ignition modules power wire directly going into your ignition.** An external hard switch is not recommended, but if you must have one, use a high-power type with leads that are as short as possible (again, keep all the wiring related to the engine as close to the engine as physically possible it all must remain inside the motor box itself).

The Zeus uses the same failsafe system as our *Opto Gas Kill*, which means that a loss of radio signal will shut the ignition off. Note that this feature is not applicable when using a PCM radio system that is programmed to keep the engine running upon fail safe condition. NOTE: If using a 2.4GHz system, bind your transmitter and receiver with the ignition control switch on your transmitter set to the failsafe mode you desire, that is Motor ON or Motor OFF upon Fail safe taking place.

SAFETY: Always make sure to keep an eye on the LED indicator before moving the propeller of your engine be safe! The Zeus has a large output capacitor bank which can store a charge for some time after the shutoff command is given – **for safety do not flip or turn prop for 30-45 seconds after shutting the system off.**

Questions or Problems?

Contact us for quick and friendly support!

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Always in the U.S.A