

Tech - Aero Designs LLC

“Ultra IBEC” Ignition Battery Eliminator Circuit

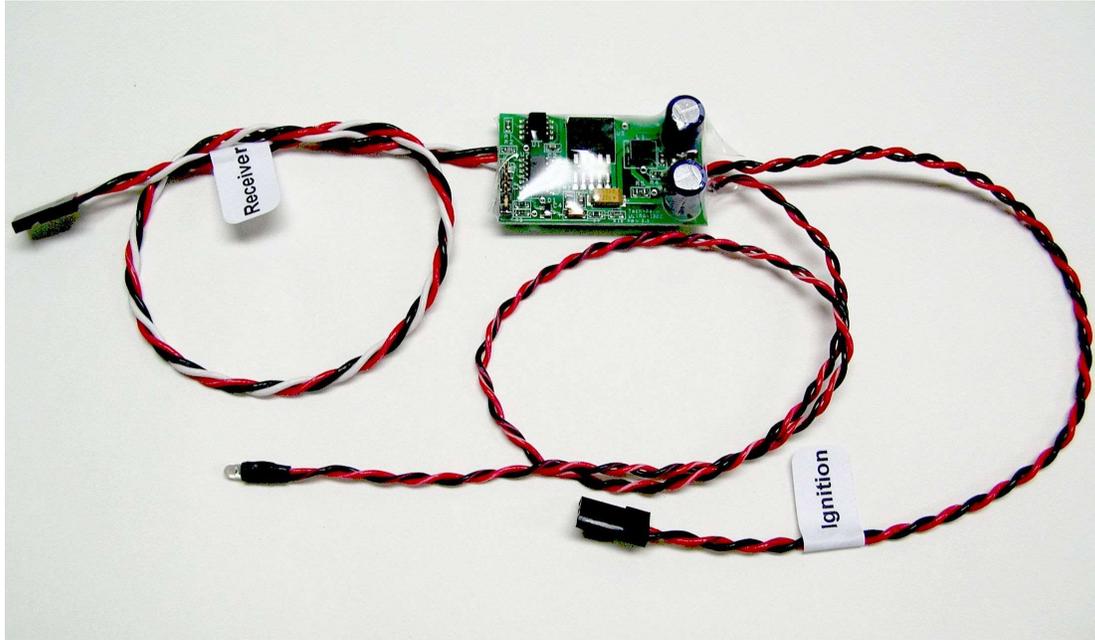


Figure 1 - Tech-Aero Ultra IBEC

”Ultra IBEC” Features

- ✓ Eliminates the need for a separate ignition battery and mechanical on/off ignition switch.
- ✓ Compatible with the power requirements of single and multi-cylinder model CDI ignition modules via jumper selectable 5V, 5.3V, 6.1V and 6.6V voltage outputs.
- ✓ Enhanced flexibility and safety via transmitter control of CDI ignition power from a spare receiver auxiliary channel.
- ✓ Tech-Aero exclusive 4 stage filtering removes interference from CDI ignition noise in the wiring path to the receiver, permitting use with 2.4 GHz Spread Spectrum and 72 MHz FM radio receivers. *
 - **Filter stages 1 & 2:** An advanced 2nd order common mode LC power lead filter.
 - **Filter stage 3:** Triple power filter capacitors form a low pass filter and enhance peak impulse current delivery to the CDI module.
 - **Filter stage 4:** An optical isolator circuit prevents any stray noise from feeding back into sensitive receiver electronics via the signal lead.
- ✓ A high precision, very low dropout power regulator design further assures power receiver bus isolation with superior performance during peak current demand.
- ✓ One IBEC model fits all: compatible with any battery technology commonly used for radio control use, with a usable input voltage range from 5.1V to 8.4V.
- ✓ Bright 5mm LED CDI power on/off indicator with mounting bezel.
- ✓ High reliability Surface Mount components reduce weight to only 0.6 oz and size to 1” x 1 3/4”.
- ✓ Heavy duty 22 gauge twisted wire power extensions.

*** Always follow receiver manufacturer range testing guidelines prior to flight!**