

Ignition System

Ignitions Ver 2.0 INSTRUCTIONS

1.) Specifications

I.) **WARNING** - ignitions were designed for use in model aircraft and should NEVER be used in a Human Carrying Vehicle!!

II.) BPMR6F 14mm and BMR6A Ignition:

Input voltage 4.8-7v

Output voltage 12-16 kV

Max Draw @8000 rpm - 650 ma

Case - ABS with Nickel plate

Weight Single: less battery - 4.4oz

Weight Twin: less battery - 6.1oz

Plug size - 14MM NGK (BPMR6F)

III.) CM6 10mm and ME-8 1/4 32 Ignition:

Input voltage 4.8 only

Output voltage 12-16 kV

Max Draw @8000 rpm - 650 ma

Case - ABS with Nickel plate

Weight Single: less battery - Single 4.4oz

Weight Twin: less battery - 6.1oz

Plug size - 10MM NGK (CM-6)

2.) Selecting a Power Source

I.) 4.8 and 6v volt NiCd/NiMh Packs:

The Ignition ver 2.0 is rated 4.8 .A 4 cell 4.8v pack with a minimum of 800 mAh is fine and creates a hot spark. The ignition ver 2.0 runs most efficiently on 4 cell. Do not use an old Pack!! If it's not good enough for your receiver, it's not good enough for your ignition..

II) 6.4 Volt Li-Fe(A123) Packs:

2cell Li-Fe(A123) - Max voltage of 7.2 volts. Nominal 6.6 Volts. The use of a voltage regulator is necessary

III.) 7.4+ Volt Li-Poly Packs:

2cel Li-Poly Packs at peak charge can be as high as 8 +v. If you are going to use a 2 cell Li-Poly Packs, you must use a voltage regulator. The ignition runs more efficiently between 4.8-6 Volts. Running the system with a higher voltage may also cause unwanted RFI interference to you radio system. Please do not use old packs to power your ignition!

3.) Installation

I.) Spiral Wrapping:

Use the supplied Spiral Wrapping included with your Ignition to protect the wires from heat and chafing. Wrap the braided Spark Plug Lead, Hall Sensor Harnesses and Battery Harnesses.

II.) Mounting:

Mount your Ignition on the engine box if possible. Wrap the ignition in foam to reduce the effects of engine vibration on the circuitry. You can use the mounting tabs on the ignition but we recommend using zip ties or Velcro ties to secure it. Do not install your ignition in the fuselage. Keep the ignition as far away from you receiver as possible and never use the same power source to run your ignition and receiver jointly.

III.) Connecting the Battery:

The ignition utilizes the Futaba style plug ends and comes with an additional pigtail to add to your ignition switch if necessary. Be sure to follow the color coding (Red +, Black -) when attaching your to your power source and on / off switch to your ignition power leads. Wrap your battery with foam and mount it as far away from the receiver as possible, preferably on the motor box.

Note: There are no serviceable parts in the ignition system. Opening the case will void the engine warranty.

4.) Trouble Shooting your Ignition.

I.) **Battery:** Check the voltage on your battery and make sure it's healthy and fully charged.

Insure that the voltage is 6v or less to the ignition.

II.) **Connections:** Check that all connections are correct from the battery, to the switch, to the ignition. Use a volt meter on the switch to ensure the ignition is getting power and the polarity is correct.

III.) **Hall Effects Sensor:** Ensure that the orientation of the hall sensor is correct with the

orientation of your hub magnet.

5.) Safety Precautions.

Never power the ignition with the plug in the head when you're working on your engine, it could fire off!! Always wear a glove when starting your engine!! After turning off your ignition, be ware that ignitions and still have a charge and fire the motor. Always range check your model !

