

Booma RC

Ignition (Iggy) Switch



www.boomarc.com

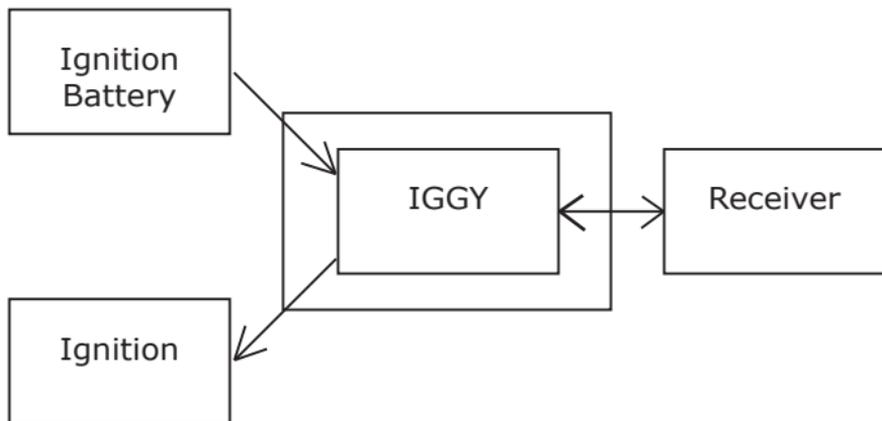
Congratulations for choosing the Booma RC Ignition (Iggy) Switch. IGGY is the result of 24 months of design and testing and was designed for giant scale RC enthusiasts by a giant scale RC enthusiast. IGGY is the world's first 3 stage fail safe ignition switch in a compact, light weight, attractive and affordable package.

Before you install IGGY please take the time to read these instructions. A few simple steps will have you successfully using this advanced product in no time at all.

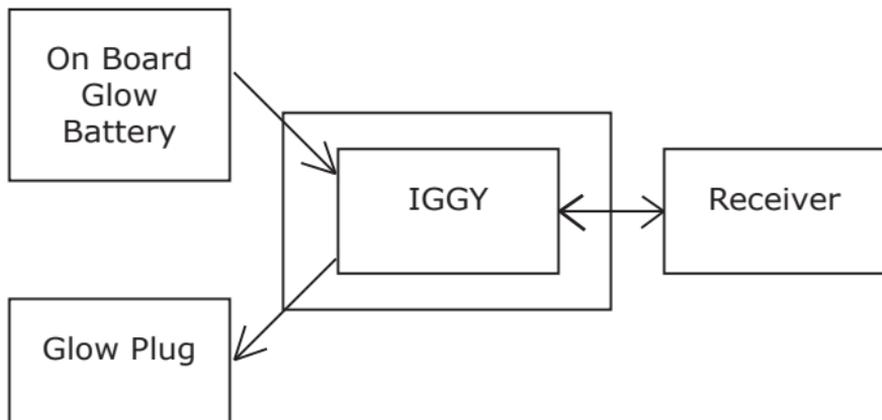
IGGY Features:

- **Microprocessor control** - of Optical Isolated digital switching circuit.
- **Fail Safe Switching** - follows fail safe switching of receiver setup.
- **High Bright Blue LED** - for easy daylight viewing.
- **3 Stage Arming** - for complete monitoring of potential live ignition.
- **3 Stage Emergency Ignition Kill** -
 - By front panel switch.
 - By transmitter signal.
 - By switching off power to the receiver.
- **Remote Ignition Kill** - via transmitter.
- **Receiver Power connected Indication** - via LED flashing indication.
- **Micro-Power** design less than 1uA in standby mode. Less drain on your model's ignition battery than battery leakage so you can leave IGGY connected to the ignition battery permanently.
- **Battery Input Voltage 1v to 60v.**
- **Can also be used as an "On-board" Glow Driver.**
- **Weight 17 grams.**
- **Dimensions 36mm x 17mm (1.41 x 0.66 inches).**

Typical Connection Examples for IGGY.



IGGY as a Gas powered Ignition switch



IGGY as an "On Board" Glow switch

Lead Connection Examples for IGGY.



Battery input



To Ignition



Connection to
Receiver Channel



Battery input



To Ignition

Lets get started

Connect IGGY as shown above.

IGGY 's microprocessor draws it's power from your receiver and is only in awake state while your receiver is switched on. Switching off power to your receiver will put IGGY to sleep and kill the ignition.

IGGY does not need to be connected to the Ignition/glow battery for system set up so it is recommended to connect only to your model's receiver for setup.

PLEASE NOTE: One of the safety features is that IGGY draws its power from your models' receiver so IGGY is completely inoperable unless connected to your model's receiver and the receiver is powered up!

Iggy also requires one receiver channel to operate and is set to switch at approximately 50% of stick position. It is recommended to connect Iggy to a switch channel on your receiver and adjust the switch until IGGY operates as required. Setting up a transmitter for switching will differ for each transmitter type so please refer to your transmitter manual for switch channel setting.

FOR THE TECHNICALLY MINDED ONLY

IGGY has a dead-band where neither an On or Off state is active. This functionality is built into Iggy so that Switch flutter cannot happen.

Also a bad signal (no pulse or less than 50% mark space ratio) must be present for more than 20 continuous frames before Iggy will kill the ignition. In most modern receivers fail safe is built in so this condition should never be met except as a complete system safety feature.

This dead band feature comes at a cost of a small delay (approximately 500 - 600 milliseconds) in switching ON/OFF.

PLEASE NOTE

Please observe correct connection polarity i.e. **RED is battery positive** and **BLACK is battery negative**.

An Incorrect polarity connecting will not allow your battery to supply power to the Ignition.

Turning IGGY ON



After connecting IGGY (as shown on page 4) turn on the model's receiver, IGGY will start to flash slowly. This is an indication that receiver power is being supplied to IGGY.

While the Blue LED is flashing.



PRESS the **Yellow "ON/OFF"** button. IGGY's blue LED will start to flash **faster** indicating that IGGY is ready to arm the ignition circuit. Now, if you have adjusted your receiver channel correctly, switching on the selected transmitter switch/channel will arm IGGY (Ignition state is on) and the LED will be permanently lit. If the blue LED does not light up permanently then you will need to adjust your transmitter. Please refer to your transmitter instruction manual.

HINT use a stick channel (moving the stick up down or left right) to verify IGGY's arming function (Blue LED permanently On) and then once satisfied all is well move IGGY to a switch channel on your models receiver.

Turning IGGY OFF

IGGY can disarm your models ignition system using 3 methods.

1) Normal Mode - Switch off via the transmitter. Approximately 0.5 of a second to switch off. Then switch off the receiver power.

2) Flight Buddy Mode - **PRESS AND HOLD** the **Yellow "ON/OFF"** button. IGGY will kill the ignition.

3) **EMERGENCY Mode** (all else fails) switch off the receiver's power.

No matter what mode you use IGGY will be ready to react to your command.



Template Cutout for IGGY

17 mm



36 mm

FACTS

Why does IGGY turn OFF when I switch to a turn on condition via my transmitter? IGGY is designed to switch on from a pulse width greater than 50%. Reverse the switch condition on your transmitter will set it right.

Can I use IGGY as a General Purpose Optically Isolated switch i.e not as an ignition switch? Yes you can, IGGY can be used for any general purpose function as long as the maximum recommended voltage (60V) and current draw (4A or 6A) is observed.

Current carrying capacity of connectors - IGGY will handle up to 4A current on the battery/ignition circuit so a JR type connector is more than adequate for most uses. If a higher current rating is required we also offer IGGY in a 6A version with Ultra connectors. Current capacity will then be limited to IGGY design.

Using IGGY with a voltage regulator - IGGY was designed to work with all current RC products regulated and unregulated. If you prefer using LifePO4 chemistry batteries (nominal 6.4v) then IGGY will work excellently in most RC Ignition applications without a regulator.

If you prefer to use newer higher 7.2 volt servos then we recommend using IGGY with Lion (nominal 8.2v) or Lipo batteries (nominal 8.4v). These batteries will in most cases require a voltage regulator.

Specifications

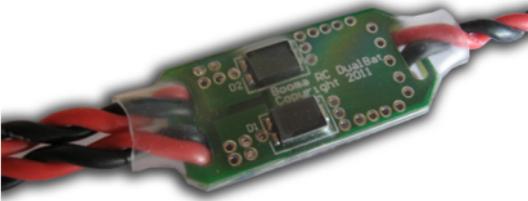
- **Optical Isolated digital switching circuit with better than 1500V Isolation.**
- **Works with Battery chemistry**
 - LifeP04 (2 cells) In most cases a regulator not required.**
 - LiPo (2 cells) Ignition may require a regulator.**
 - Lion (2 cells) Ignition may require a regulator.**
 - NiCd (5 Cells) Ignition no regulator required.**
 - NiMH (5 Cells) Ignition no regulator required.**
 - NiCd (1 Cell) Glow Driver.**
 - NiMH (1 Cell) Glow Driver.**
- **Maximum input voltage 60 volts.**
- **Minimum input voltage 1 volt. (Ideal also for glow driver)**
- **Max continuous current: 4A or 6A depending on version**
- **Weight 17 grams.**
- **Approximately 1uA current draw from ignition battery.**
- **Length 36 mm x width 17 mm x Depth 17 mm**
- **Operating Temperature - 40 to 80 degrees Celsius**

12 Month Replacement Warranty

Booma RC will replace this product within 12 months if found to be defective in material and/or workmanship when used in the intended purpose. The warranty does not cover - Shipping charges related to any warranty claim. An over voltage or over current usage beyond stated specification. Damage due to system failure, negligence, abuse, accident, improper installation or freezing. Loss of time, inconvenience, loss of model, or other incidental or consequential damages.



Booma RC Wallaby Switch



Booma RC DualBat



Booma RC Intelliswitch

Template Cutout for IGGY

17 mm



36 mm

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