

## **INSTALLING YOUR VIPER ESC**

### ***Positioning of your ESC in the model***

Mount the **VIPER ESC** as far away as possible from the receiver, using double sided tape or velcro.

Keep the thick power wires away from the antenna and other thin wires to avoid interference problems (See Fig.1 for example install).

The antenna should come straight out of the receiver into the antenna tube and up out of the model. Do not attempt to use any part of the model as an antenna!

The ESC should be positioned to allow cooling air to pass over the heatsink fins, this reduces the risk of over-temperature shutdown.

Make sure your motor is fitted with two (2) motor capacitors (0.1uF) - one from the negative terminal to the can and one from the positive terminal to the can.

### ***Wiring up of ESC in model (See Fig.1)***

The **VIPER ESCs** are supplied with Tamiya style plug and bullet connectors at the factory. (Some of the higher powered versions come fitted with solder posts and loose wires.)

### ***Colour coding for wires:***

**Black=Batt -ve, Red=Batt +ve, Blue=Mot -ve, Yellow=Mot +ve**

**NOTE: ALWAYS DISCONNECT ESC FROM BATTERY CELLS WHEN NOT IN USE, we recommend fitting an in line fuse in the positive wire between the cells and the ESC. (Usually 5A lower than the ESC's stated limit. eg.. 10A fuse for a 15A ESC)**

# **VIPER INSTRUCTION SHEET AND WARRANTY**

## **PLEASE READ & FULLY UNDERSTAND THE INSTRUCTIONS & WARRANTY BEFORE USE**

### ***Receiver Lead Connections***

The receiver lead on the **VIPER ESC** is the JR type, see chart below. For some receivers you may need to swap the red and brown wires in the plug.

RECEIVER TYPE	SIGNAL POSITION 1	+VE POSITION 2	-VE POSITION 3
FUTABA, SANWA, KO	White/Blue	Red	Black
HI-TEC	Yellow	Red	Black
JR, GRAUPNER, KYOSHO	White/Orange	Red	Brown
ACOMS	Yellow	Red	Black
AIRTRONICS	White/Orange	Black	Red

***CAUTION! If using an external receiver battery, you must remove the red wire from the ESC's receiver lead first. If using more than one ESC in your model with an external receiver battery you must disconnect the red wire from ALL ESC's. If using more than one ESC in your model without an external receiver battery ensure that only one of the ESC's has the red wire connected.***

***All VIPER ESCs are fitted with 1.2A BEC unless otherwise stated.***

### **ESC SET-UP**

Before beginning set-up you need to connect up your **VIPER ESC** as in Fig.1. (When plugging the ESC's receiver lead into the receiver make sure that the signal wire - orange - is facing inwards).

### ***Calibrating the ESC to your transmitter***

Now that you have installed your **VIPER ESC** in your model you need to set the ESC so that it responds to your transmitter.

1. Switch on your transmitter and ensure the throttle control and throttle trim are in the neutral position.
2. Plug your **VIPER ESC** into your battery pack and turn the ESC on with on/off switch. (The red & green LED's will flash for 2 seconds - This is the set-up window, if you press the button whilst the LED's are flashing you enter set-up, if you let the LED's flash for 2 seconds then stop, the ESC will operate with previously input set up values.)

**NOTE: If you have removed the factory fitted battery connector, (see warranty) ensure polarity is correct.**

NOTE2: If LED's do not flash but instead there is a solid red LED this indicates no signal, check transmitter is turned on & that the receiver lead is correctly plugged into the receiver.

3. Whilst the LED's are still flashing, press the set button, this will set your neutral position, the green LED will come on.

4. Push the throttle control to the full forward position and return to the neutral position, (This has set maximum forward speed point) the red LED will come on.

5. Pull the throttle control to the full reverse/astern position and return to the neutral position. (This has set the maximum brake/reverse/astern point)

***Calibration is complete!***

Your **VIPER ESC** is now ready to use!

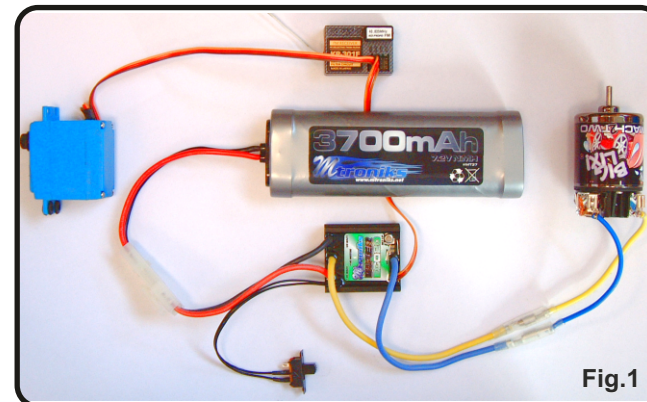


Fig.1