

INSTALLING YOUR MICRO VIPER ESC

Positioning of your ESC in the model

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

Keep the 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, 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 MICRO VIPER ESCs are supplied with Tamtech style connectors at the factory.

Colour coding for wires (denoted on ESC sticker):

Black(Outside edge of ESC) =Batt -ve

Red(Outside edge of ESC) =Batt +ve

Black(Towards centre of ESC) Blue on sticker =Mot -ve

Red(Towards centre of ESC) Yellow on sticker =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.. 5A fuse for a 10A ESC)

Receiver Lead Connections

The receiver lead on the MICRO 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	+VE	-VE
	POSITION 1	POSITION 2	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
MTRONIKS	Orange	Red	Brown

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. MICRO VIPER ESCs are fitted with 1.2A BEC unless otherwise

MICRO VIPER INSTRUCTION SHEET AND WARRANTY

PLEASE READ & FULLY UNDERSTAND THE INSTRUCTIONS & WARRANTY BEFORE USE

ESC SET-UP

Before beginning set-up you need to connect up your MICRO 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 MICRO 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 MICRO 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 brake/reverse/astern position and return to the neutral position. (This has set the maximum brake/reverse/astern point)
- Calibration is complete!**

Your MICRO VIPER ESC is now ready to use as it is now but if you want to fine tune your ESC read on.....

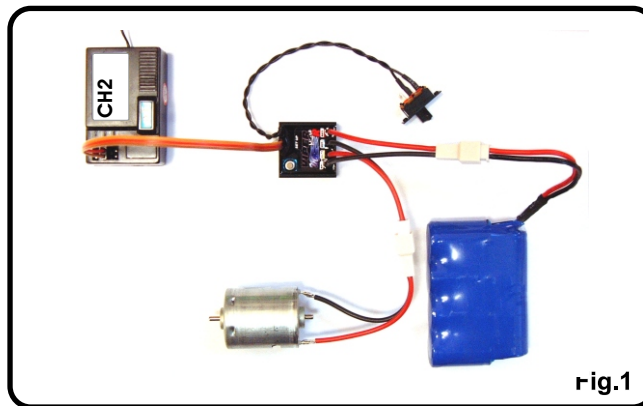
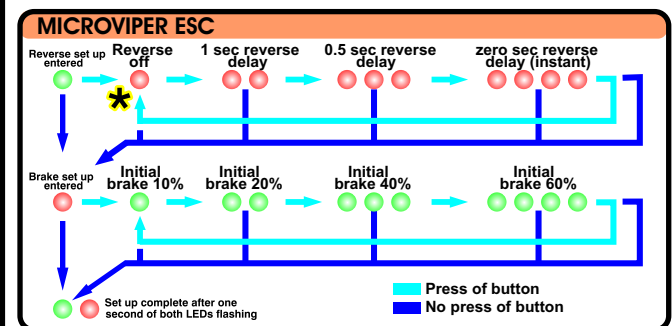


Fig.1

OPTIONAL - FINE TUNING YOUR MICRO VIPER ESC

This part of the set-up is purely optional, if you are happy with how your ESC is working you do not need to enter this set-up stage, however, if you do want to adjust your ESC or want to try and get more from your ESC, continue.....

Fine tuning set-up can be entered by pressing the set button on the ESC and holding it down for one (1) second whilst the ESC is in the neutral position (both the red & green LED on). Confirmation that you have entered fine tuning set-up is by a flashing green LED. See chart below for graphical explanation of working through the fine tuning set up procedure.



*** NOTE: IF YOUR REVERSIBLE ESC SEEMS TO HAVE NO REVERSE, PLEASE CHECK THE ABOVE DIAGRAM AS IT MAY NEED RE-SETTING!!!**

Example of fine tuning your MICRO VIPER ESC - Setting reverse delay to zero seconds (instant) with no change to brake settings. (Also handy if you have accidentally turned reverse off!)

1. With ESC in neutral position, press and hold the set button for 1 second, (Flashing green LED) & release.
2. Press set button once, pause (red LED flashes once), press for a second time, pause (red LED flashes twice), press for a third time, pause (red LED flashes 3 times), press for a fourth time (red LED flashes 4 times).
3. Red LED will flash for 2 seconds to allow me to go into brake set up - Leave it alone - ESC returns to solid red & green LED's.

Capacitor connection - if supplied

Connect positive wire of capacitor to positive battery wire on ESC, connect negative wire of capacitor to negative battery wire on ESC.