



## 1. Funktionen

This Advanced ESC has the following functions:

- Latest FET transistors equals minimum losses.
- Five different throttle profiles.
- Five different brake profiles.
- Five different battery cut-off.
- User friendly "One touch button" for easy programming.
- Multi colour LED guides you to easy and quick adjustments.
- Fail-Safe function safes car if you loose the transmitter signal.
- Thermal overload protection.
- Intelligent BEC system.
- Two voltage cut-off.
- Timing advance.

Thank you for purchasing a Speed Controller from Advanced Electronics. This electronic speed controller (ESC) offers the latest technology available on the market today. This ESC is the latest evolution of what has been going since it all started in 1984.

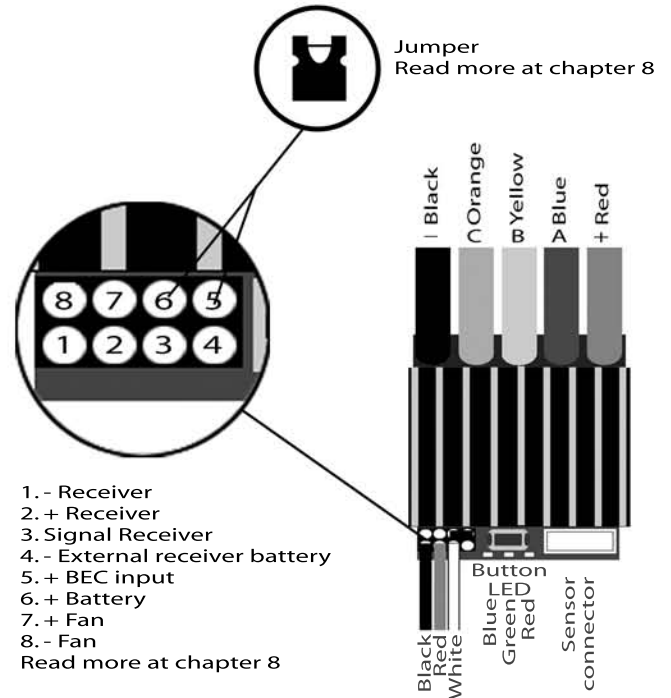
*In order to be successful, please read the manual carefully.*

## 2. Installation

- Use double sided tape to mount the ESC to the chassis.
- Keep the power wires away from other electronics.
- Check carefully that your installation does not interfere with any moving parts.
- This Advanced ESC is delivered with replaceable power wires and connects like this:

Red wire – Solder the red wire to positive (+) battery.  
 Blue wire – Solder the blue wire to motor phase A.  
 Yellow wire – Solder the yellow wire to motor phase B.  
 Orange wire – Solder the orange wire to motor phase C.  
 Black wire – Solder the black wire to negative (-) battery.

Cut the wires to be as short as possible after you have installed all components in the car.  
 Try to keep the power wires away from the receiver and the antenna.  
 Connect the sensor wire from the motor to the white sensor connector.  
 Connect the cable to the receiver.



## 3. Calibration

The "One touch button" has the following functions:

- Programming for full power, full brake and neutral.
- Choice of throttle profile.
- Choice of battery type.

If the ESC will be calibrated we recommend you to remove the pinion.

If the LED start flashing red under calibration or profile setting, follow the instructions in chapter 9. *Function Monitoring*.

Connect the sensor wire to the sensor connector.  
 Turn on the transmitter and connect the ESC to the power source.

**3:1 Programming full power, full brake and neutral.**  
 Press the button more than five seconds but less than ten seconds and release when the LED is flashing fast blue.

1. Pull the transmitter throttle to full power position and press the button for more than one second.
2. Release the button. The LED is flashing red
3. Pull the transmitter throttle to full brake position and press the button for more than one second.
4. Release the button. The LED is flashing green
5. Return transmitter throttle to neutral position and press the button for more than one second.
6. Release button. The LED is solid green

Your ESC is now calibrated.  
 Please check that the programming has been successful by checking the LED colour, full power (solid blue), full brake (solid red) and neutral (solid green).  
 If this is correct your new Advanced ESC is ready to use!

### 3:2 Throttle profiles

Your new Advanced ESC has 5 different throttle profiles and here is how to program them.

- Press down the button for more than ten seconds, release when the LED is solid blue.
- When you release the button the LED is flashing blue.

The number of flashes shows which one of the five throttle profiles that are currently programmed.

For example:

Throttle profile 3 will flash three times – paus – three flashes.

- To program the next throttle profile you press down the button more than one second but less then five seconds.
- When you have chosen the throttle profile you want, press the button until the LED turns solid blue.
- Release the button and you have left the throttle profile set up mode.

### 3:3 Choice of battery type

- Press the button until the LED turns solid green.
  - Release the button. The LED is now flashing green.
- The number off flashes shows which battery type currently is chosen.

- To program the next battery type you press down the button more than one second but less then five seconds.

For example:

1-cell Lipo lashes two times - paus - two times.

- When you have chosen battery type press the button until LED turns solid green.
- Release the button and you have left the battery set up mode.

## 3:4 Brake profiles

The Advanced ESC has 5 different brake profiles and here is how to program them.

- Press down the button for more than ten seconds, release when the LED is solid red.

- When you release the button the LED is flashing red.

The number of flashes shows which one of the five brake profiles that are currently programmed.

For example:

Brake profile 3 will flash three times – paus – three flashes.

- To program the next brake profile you press down the button more than one second but less then five seconds.

- When you have chosen the brake profile you want, press the button until the LED turns solid red.

- Release the button and you have left the brake set up mode.

## 4. More about throttle profiles

On this Advanced ESC you have 5 different throttle profiles. Throttle profile 1 is the most smooth profile, has least peak power and top speed. It is suitable for very aggressive motors.

Throttle profile 5 is the most aggressive profile with highest peak power and top speed and is suitable for stock- and spec motors.

## 5. More about to choose battery

The number off LED flashes shows which battery type currently is chosen.

LED flash one time: No cut off on battery

LED flashes two time: 1 cell Lipo

LED flashes three times: 5 cell Nimh

LED flashes four times: 6 cell Nimh

LED flashes five times: 2 cell Lipo (Factory setting)

## 6. More about brake profiles

On this Advanced ESC you have 5 different brake profiles.

Brake profile 4 contains dragbrake. When the ESC is programmed with this profile, the LED shows solid red/green.

## 7. Function monitoring

If the LED is flashing red, count the number of flashing and follow the instructions

LED flash one time: No connection with transmitter/receiver  
LED flashes two times: Termal overloaded. The ESC is temporarily shut down. When the ESC cools off it will switch on to normal functions

LED flashes three times: Battery voltage too low

LED flashes four times: Motor sensor fault (bad wires, bad motor or the ESC is damaged and is in need of service)

## 8. Optional wiring

8:1 External receiver battery

8:1:1 7,4V receiver battery

8:1:2 4 cell Nimh

8:2 On-Off swich

## 9. Spareparts

# ADV1106

- Silicone wires, AWG12 RED/BLACK/BLUE/YELLOW/ORANGE

# ADV1108

- Silicone wires, AWG16 RED/BLACK/BLUE/YELLOW/ORANGE

# ADV1109

- Fan Set

# ADV1110

- Receiver wire with heat shrink

# ADV1111

- Capacitor

## 10. Options

# ADV1112

- Receiver Battery 7,4V LiPo

# ADV1113

- Receiver battery connector

# ADV1114

- Silicone wires, AWG12, WHITE, 5 x 0,2m

# ADV1115

- Silicone wires, AWG12, RED, 5 x 0,2m

# ADV1116

- Silicone wires, AWG12, BLACK, 5 x 0,2m

# ADV1117

- Silicone wires, AWG12, YELLOW, 5 x 0,2m

# ADV1118

- Silicone wires, AWG12, ORANGE, 5 x 0,2m

# ADV1119

- Silicone wires, AWG12, GREEN, 5 x 0,2m

# ADV1120

- Silicone wires, AWG16, WHITE, 5 x 0,2m

# ADV1121

- Silicone wires, AWG16, RED, 5 x 0,2m

# ADV1122

- Silicone wires, AWG16, BLACK, 5 x 0,2m

# ADV1123

- Silicone wires, AWG16, YELLOW, 5 x 0,2m

# ADV1124

- Silicone wires, AWG16, ORANGE, 5 x 0,2m

# ADV1115

- Silicone wires, AWG16, GREEN, 5 x 0,2m

# Happy racing!

We hope that you will have great pleasure and be successful in your racing with your new Advanced electronic speed controller



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