

## SC 120A Electronic Speed Controller (SK-300052-01)

**120A Brushless Sensored ESC**



### SC120A Advanced Timing System

The Toro SC120 brushless ESC is a sensored speed control specifically designed to meet the rigors of short course racing. The built-in switching mode BEC has a powerful output to supply all electronic equipments even with 4S Lipo input.

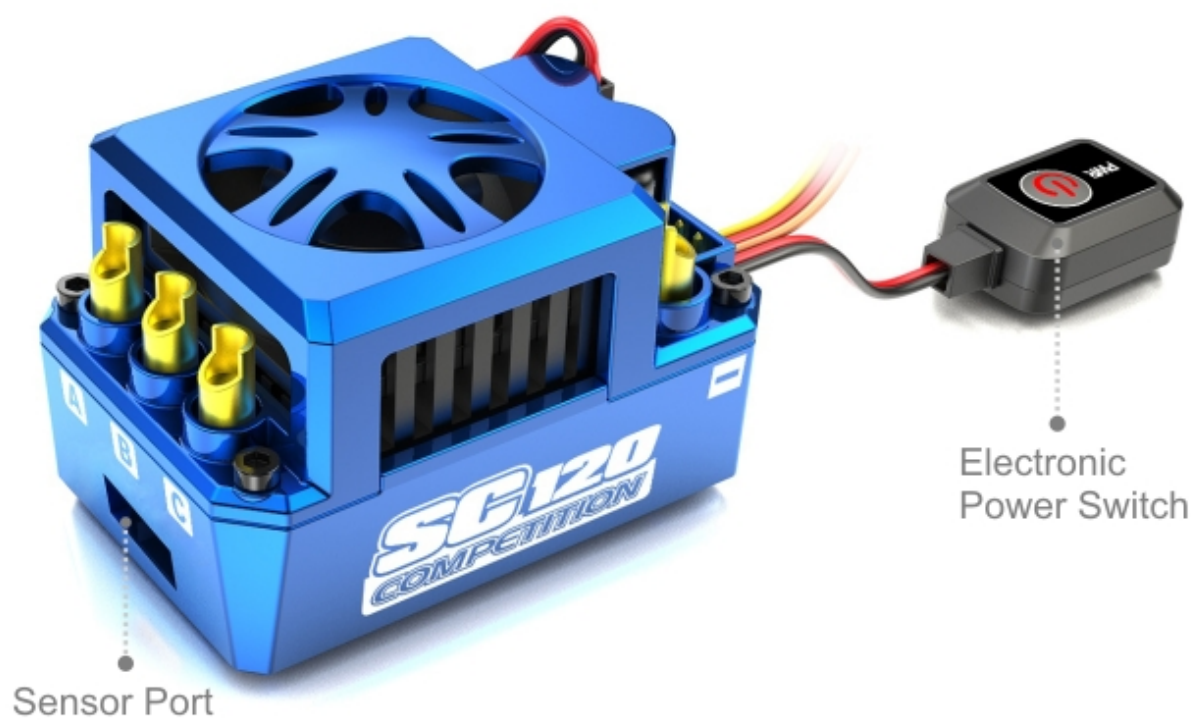
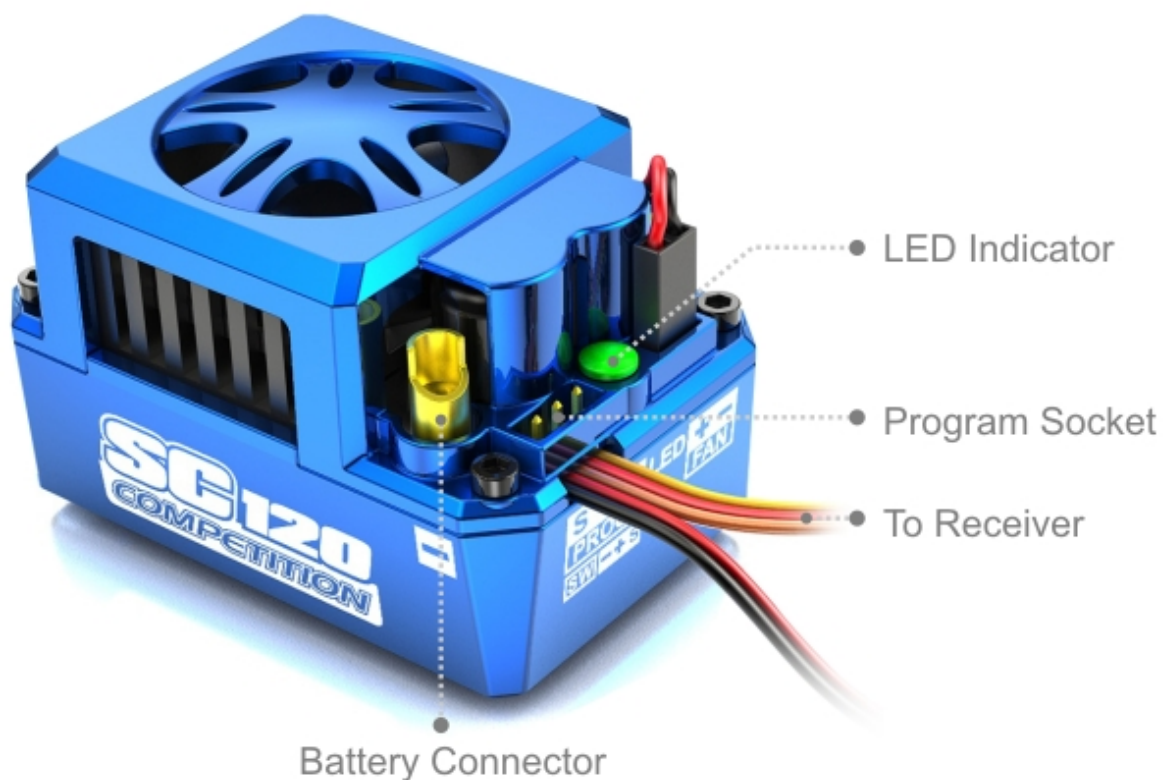
It comes with 3 running models and 9 start models from 'soft' to Very aggressive' to suitable for different tracks, also comes with multiple protection features: Low voltage cut-off protection for lithium or nickel battery / Over-heat protection / Throttle signal loss protection / Motor blocked protection. The ESC firmware is updatable via an USB adapter.

It is easily programmed via the Advanced LCD Program Box and the major electronic

components are sealed against splashing water and dust.

## Compact Design





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## **Electronic Power Switch**

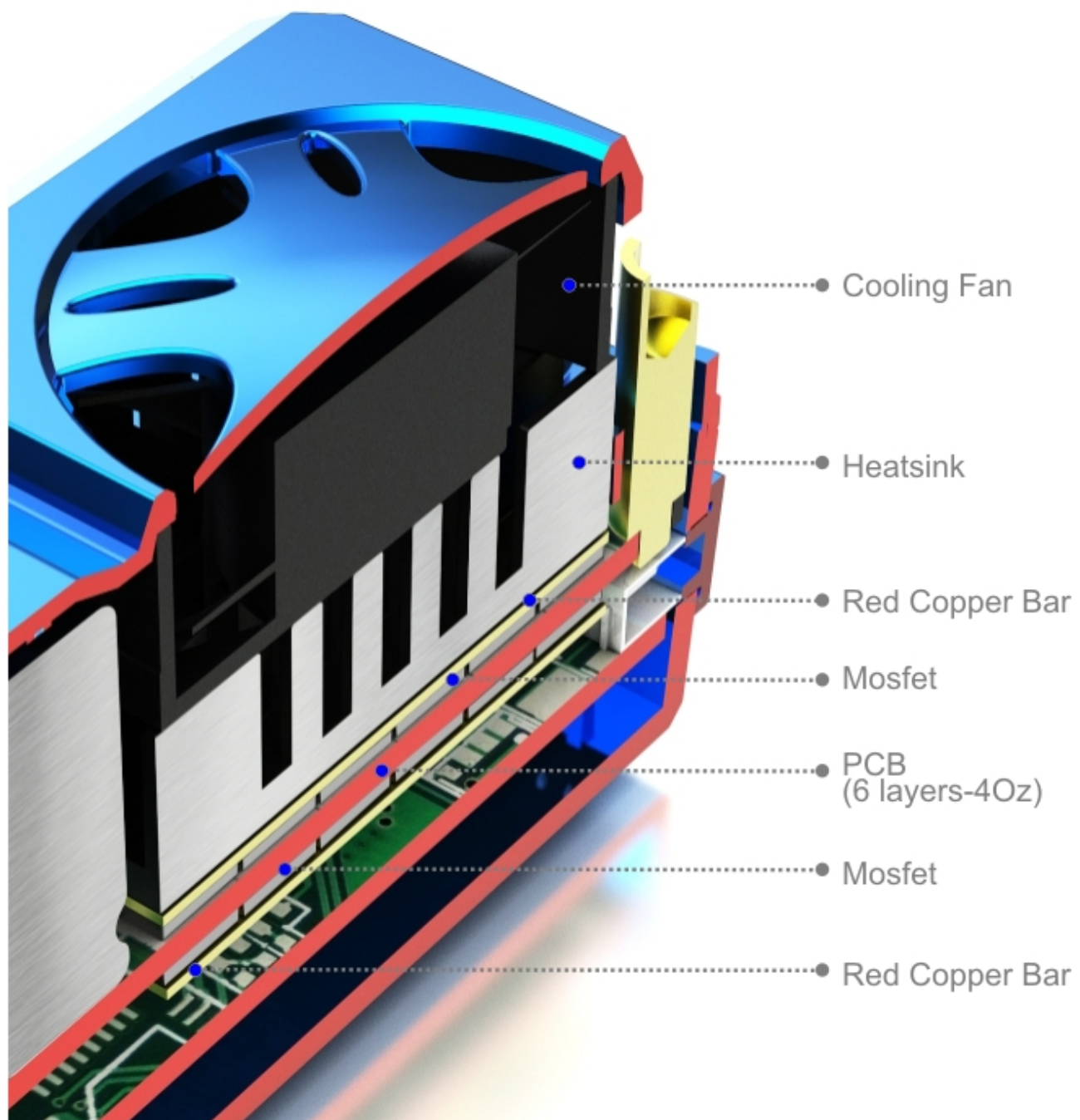
A simple push button operates the switch meaning to eliminate the problems associated with intermittent contact of an ordinary mechanical switch.





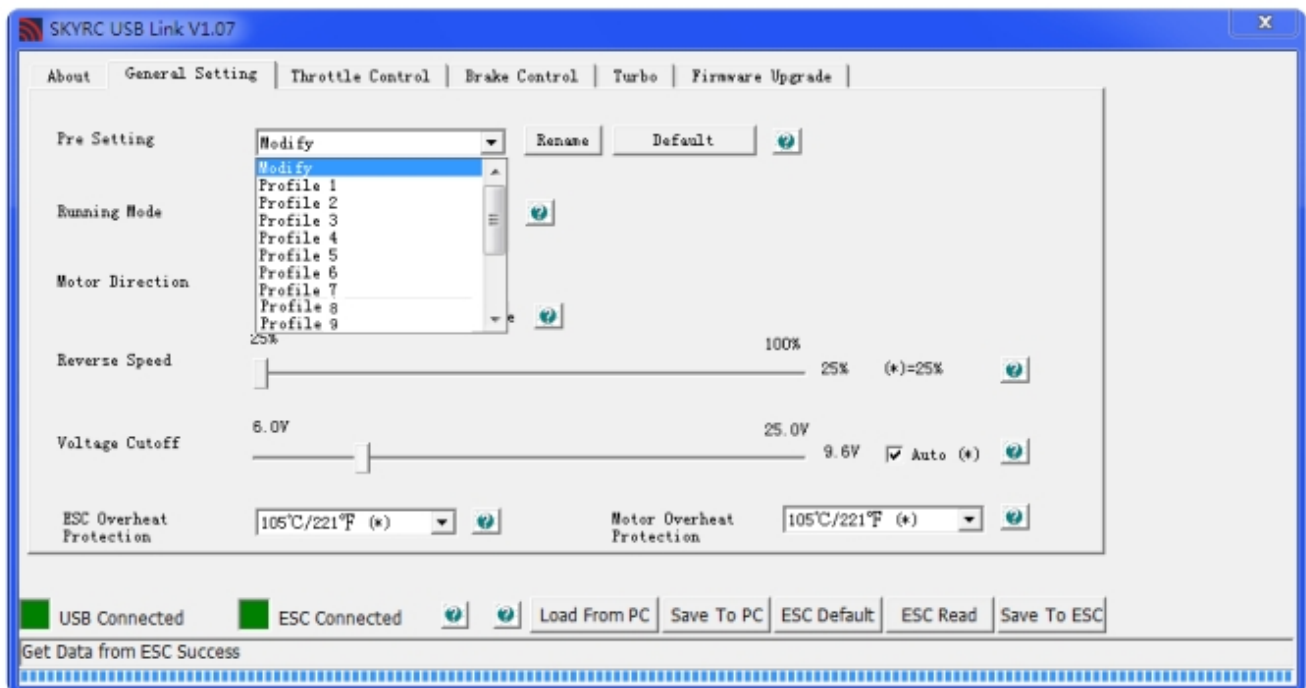
Less Resistance, Less Heat, More Efficiency





## 10 User Modifiable Profiles

The users could set and store 10 sets of profiles in the ESC. These data could be called out at any time without any special program setting. All the setting can be exported or imported so that the user could compare and analyze.



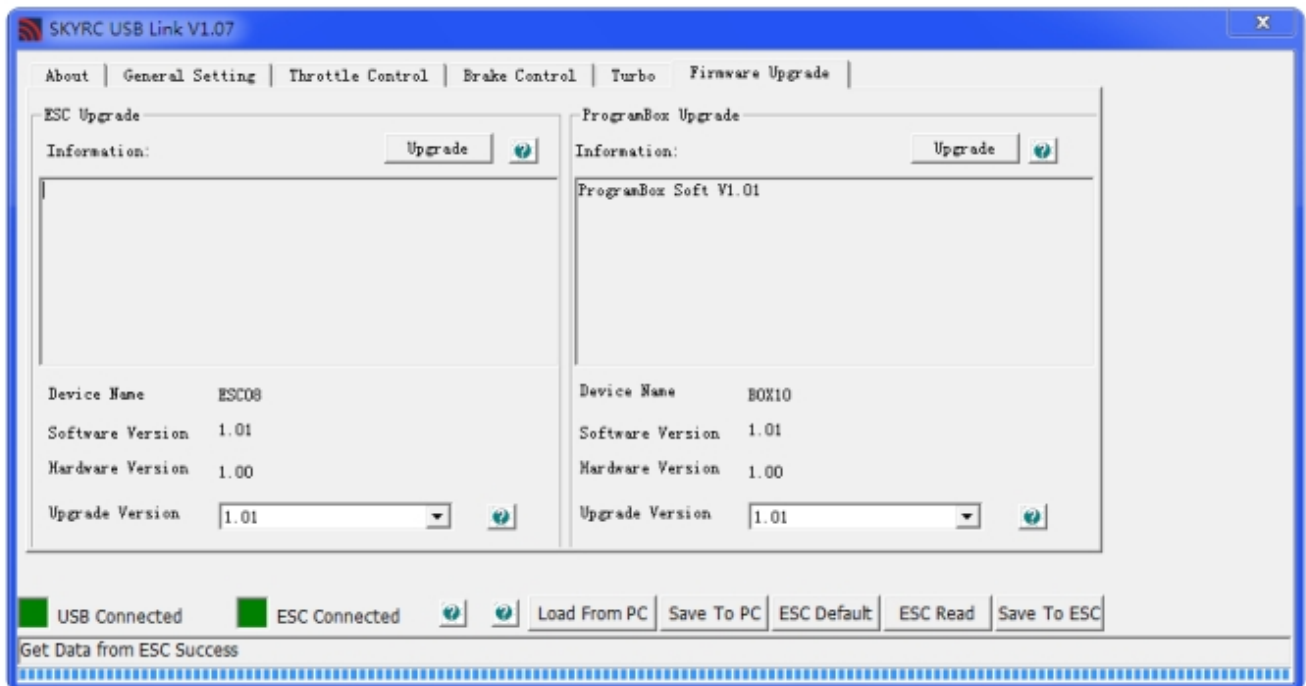
## Safety Features



Low voltage protection  
Motor and ESC overheat protection  
Signal lost protection

## Firmware Update

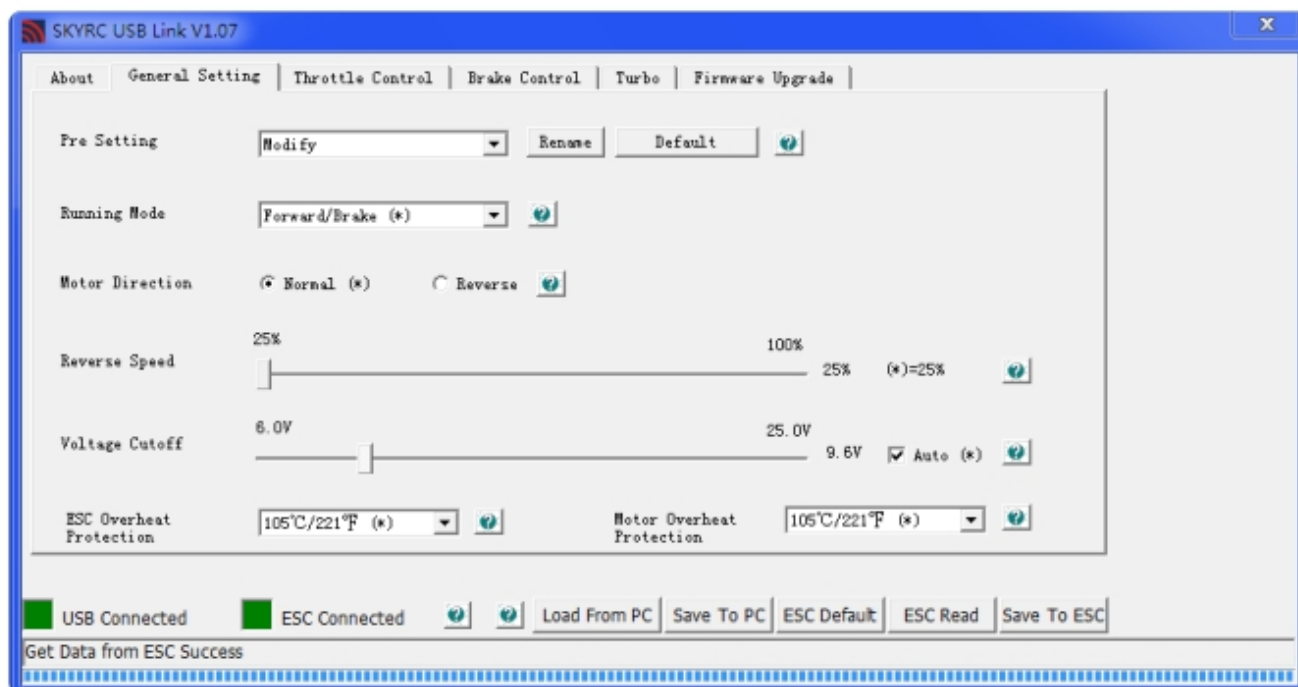
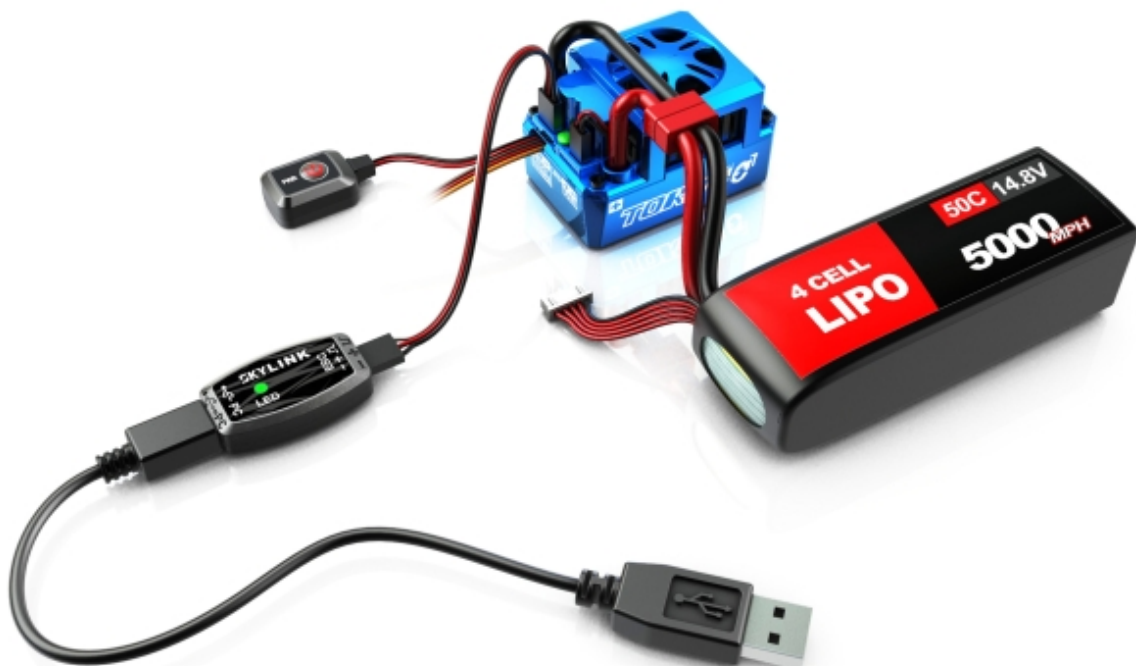
The firmware can be updated by connecting the ESC to a PC or a smart phone.



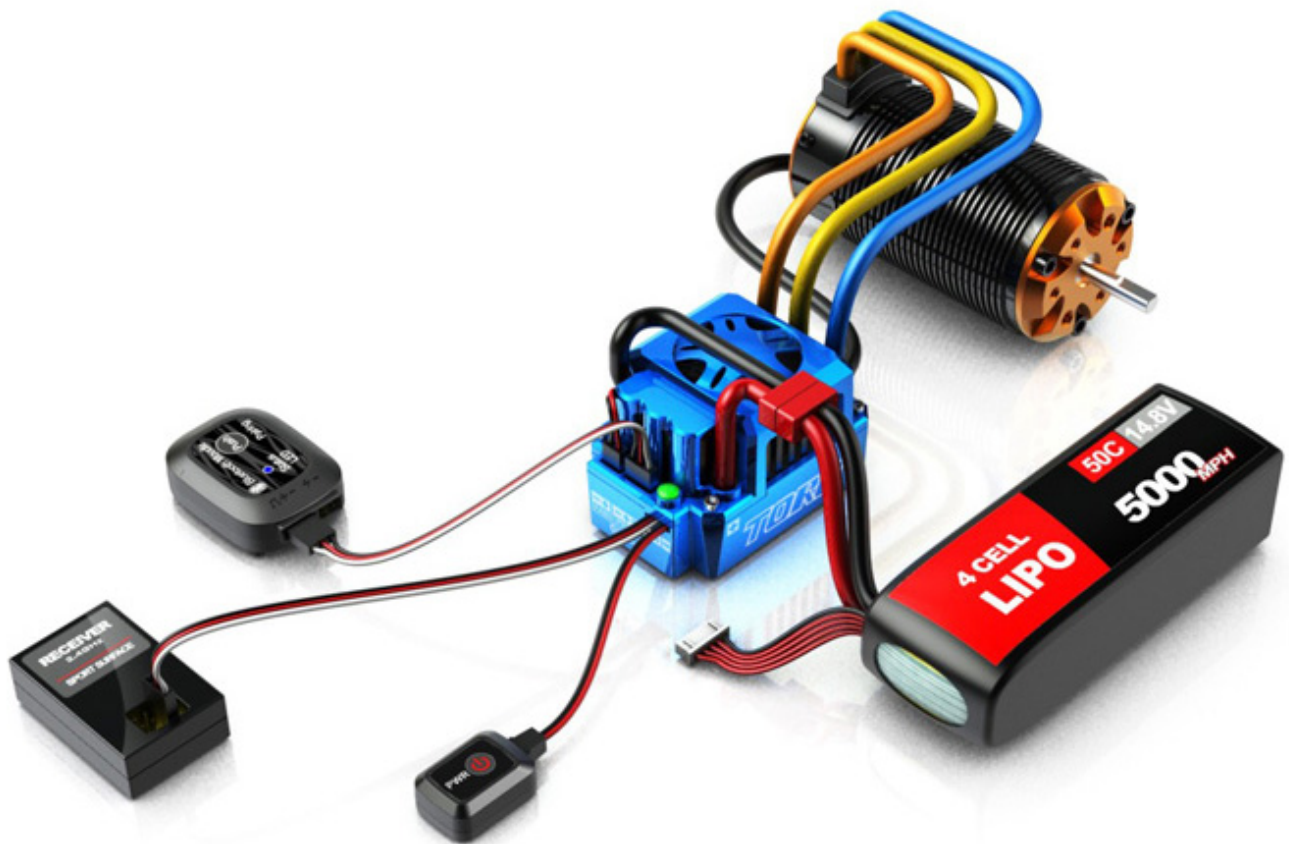
## Programming Methods

The ESC can be programmed with a PC connected with SKYLINK (SK-600013)

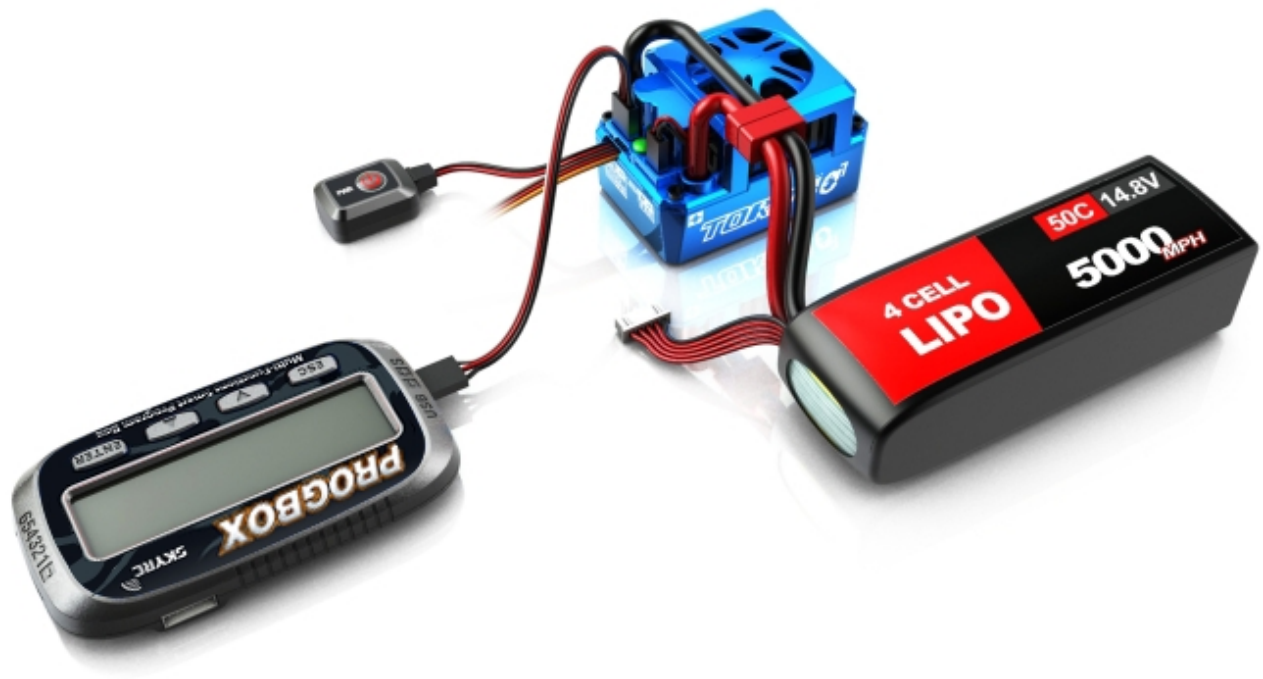




The ESC can be programmed with a smart phone via Bluetooth Module (SK-600058)



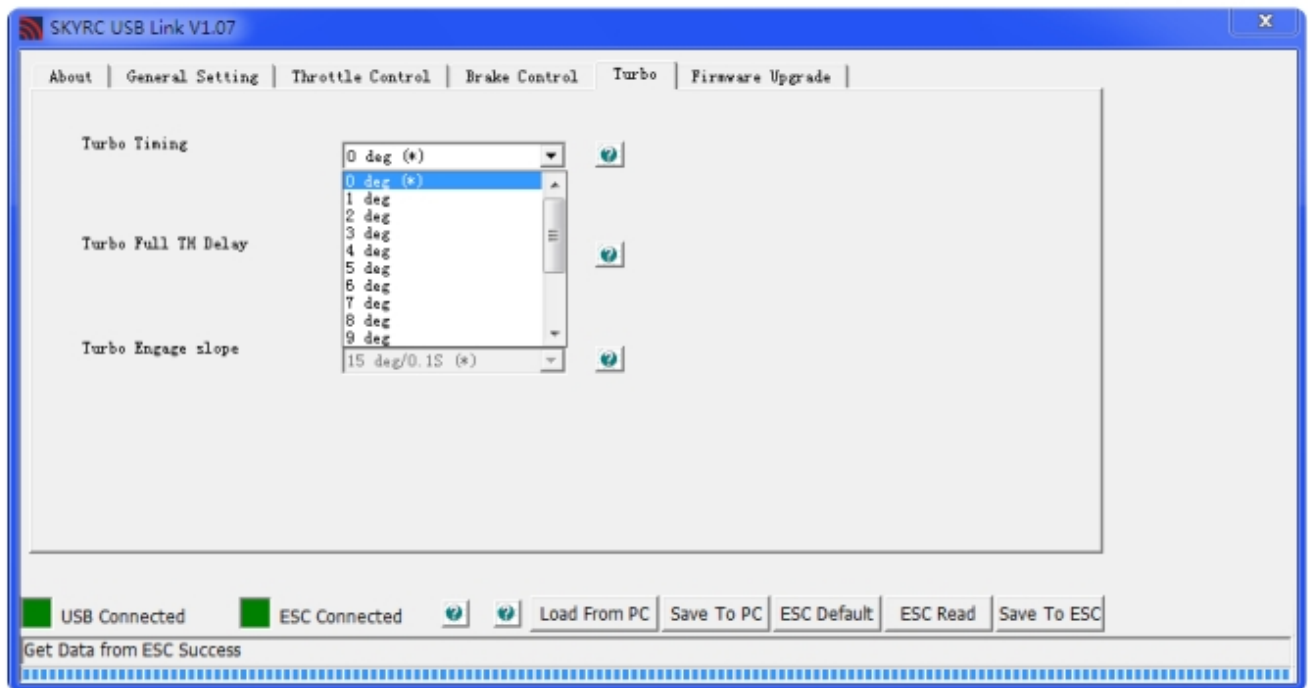
The ESC can be programmed with the PROGBOX (SK-600046)



## Precise Programmable Items

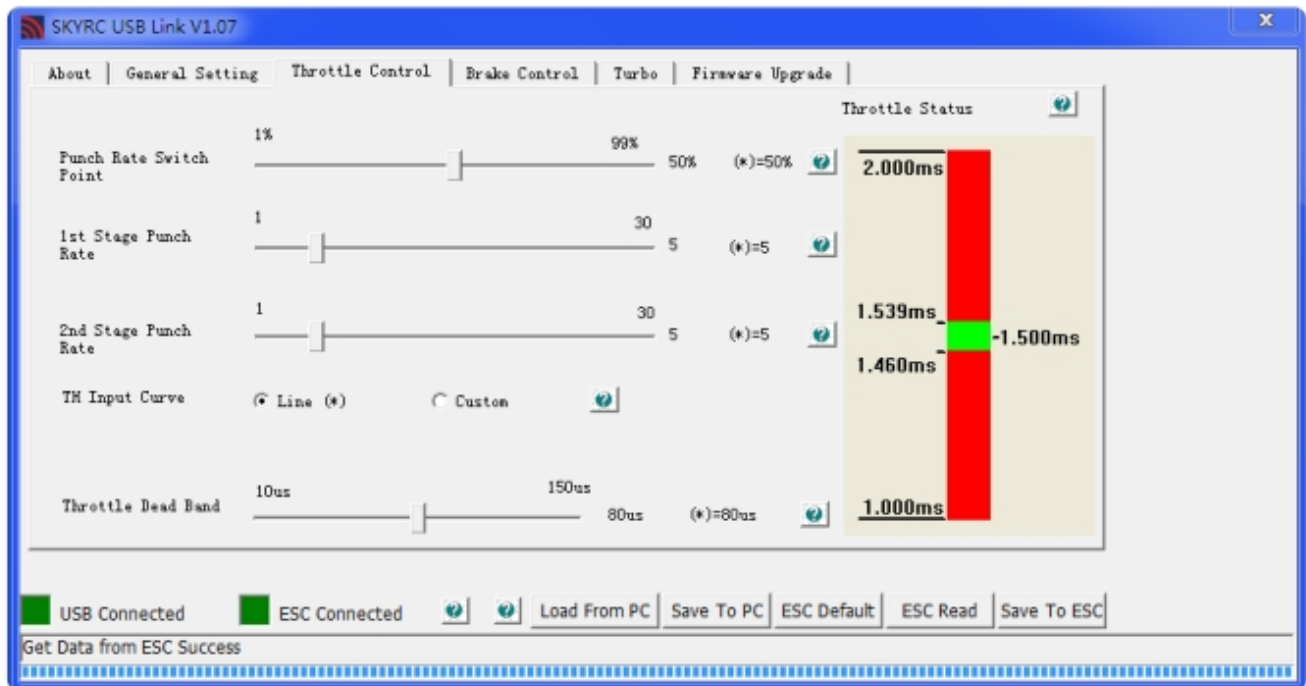
### Advanced Timing System

Users could set the turbo and boost timing which can improve the motor RPM to get its best performance.

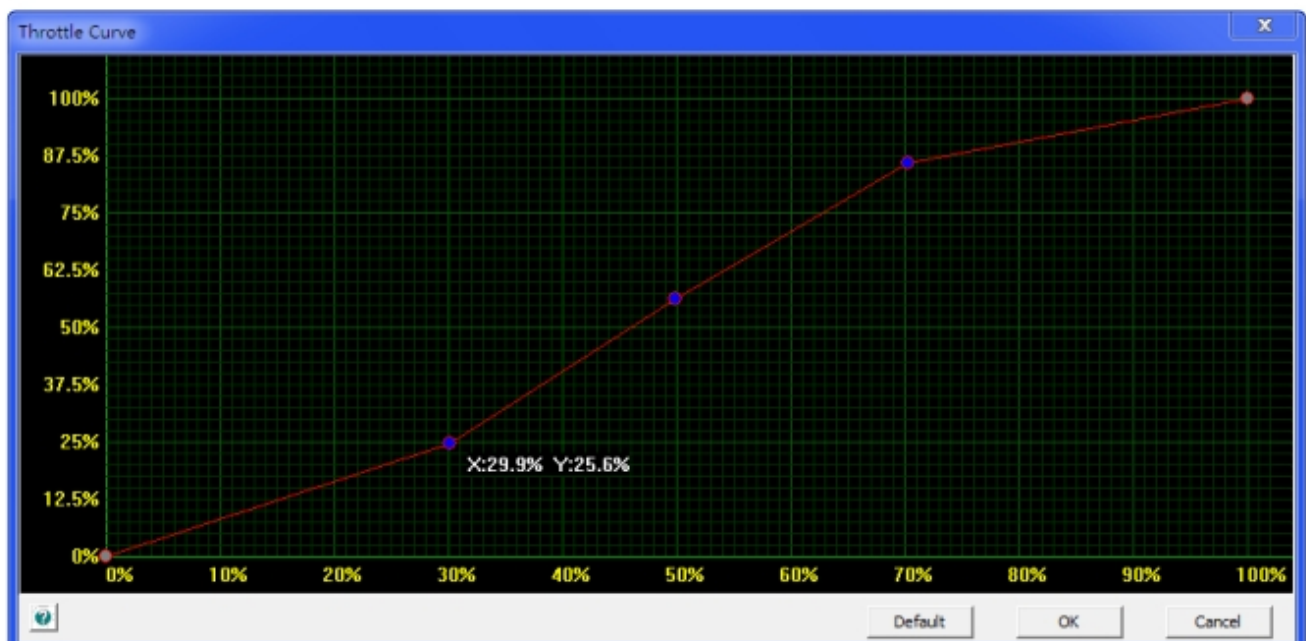


## Well-performed Throttle and Brake Control Function

Users could set the punch/brake control rate by point or customize the throttle/brake curve by themselves, and different customers' request for linear and power all can be met.



Throttle Control Setting



Throttle Curve Custom



SKYRC USB Link V1.07

[About](#) | [General Setting](#) | [Throttle Control](#) | [Brake Control](#) | [Turbo](#) | [Firmware Upgrade](#)

Drag Brake: 10% (\*) 
 Brake Strength: 75% (\*)

Initial Brake: =Drag Brake (\*) 
 Brake Rate Switch Point: 50% (\*)

1st Stage Brake Rate: 10 (\*)=10

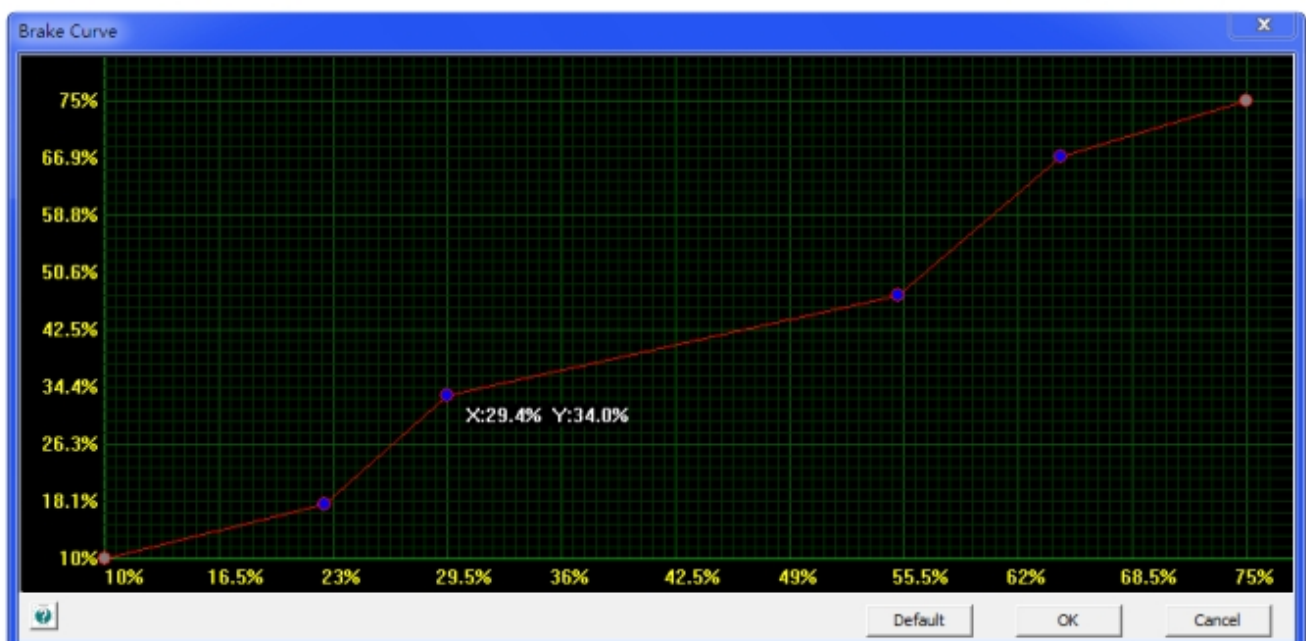
2nd Stage Brake Rate: 16 (\*)=16

Brake Input Curve: ☒ Line (\*) ☐ Custom

☒ USB Connected ☒ ESC Connected 
[Load From PC](#) [Save To PC](#) [ESC Default](#) [ESC Read](#) [Save To ESC](#)

Get Data from ESC Success

Brake Control Setting



Brake Curve Custom

## TECHNISCHE DATEN

Constant/Burst Current	120A / 760A
Motors	Sensor & Sensorless Brushless Motors
Cars	1/10 Short Course or Monster, 1/8 Short Course or Buggy
Motor Limits	6S NiMH or 2S LiPo: ≤6000KV 7-9S NiMH or 3S LiPo: ≤4000KV 10-12S NiMH or 4S LiPo: ≤3000KV
Resistance	0.0003 Ohm
Battery Cell Count	6-12S NiMH or 2-4S LiPo
BEC Output	6V 3A, Switched
Fan	6V 0.2A
Weight	76g (without wires)
Dimensions (LxWxH)	57x38x35mm

## DOWNLOADS

-  [SkyRC Toro SC 120A \[SK300052\] Manual \(974.5 KB\)](#)

-  [SkyRC UsbLink V1.07.zip \(1.1 MB\)](#)