G-FORCE LINK SOFTWARE INTRODUCTION GFORCE

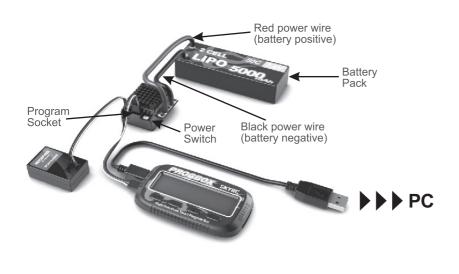
G-Force Link software is used to program ESC precisely and update the latest firmware to the ESC. At the same time, it also can check the motor timing, then advise the suitable timing of the ESC.

FEATURES

- Compatible with Windows XP, Windows 7, Windows Vista and Windows 8.
- Compatible with G-Force TS120A(G0011), TS120A Aluminum version(G0067) and TS160A(G0108).
- Four languages available. (English, Chinese, German, Japanese)
- View, change, and customize the ESC setting precisely.
- Upgrade the latest firmware to the ESC.
- Check Max.temperature of ESC and Motor .
- Check Max Motor RPM.
- · Check Motor Timing.

INSTALLATION

- 1. Install G-Force Link Software to your PC or Notebook. You can download it from G-Force website.
- 2. Connect the Program Box(G0017) to ESC and PC like diagram below,
- 3. Start the program and switch on the ESC,
- 4. It is ready for ESC setting.

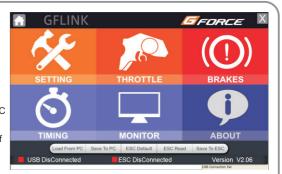


ON- SCREEN INSTRUCTION

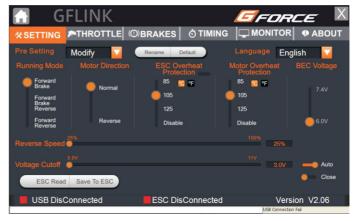
When you power on the ESC and start the program, you should see this Home Page:

1.

Load from PC	Load data to ESC from PC
Save To PC	Save ESC data to PC
ESC Default	Load factory default setting to ESC
ESC Read	Read ESC data
Save To ESC	Save the setting or modification of
	the program to ESC.



2. **XSETTING**

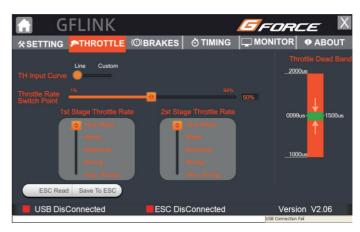


Rename Rename the profile at your preference.

Default The factory default setting (Modify Mode) will be loaded and replaces the current setting.

BASIC SETTING: Running Mode, Motor Direction, ESC/Motor Overheat Protection, BEC Voltage, Language, Reverse Speed/Voltage Cutoff

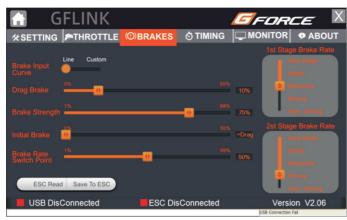
3. THROTTLE



THROTTLE SETTING: Throttle Input Curve, Throttle Rate Switch Point, Throttle Dead Band

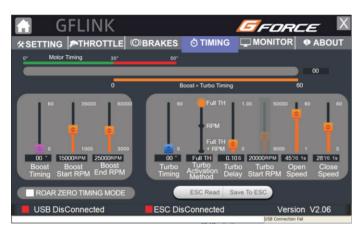
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BRAKES SETTING: Brake Input Curve, Drag Brake, Brake Strength





Motor timing: It is usually called "mechanical timing" (short for "M"). The result is taking from "Motor Timing" from "Monitor" page and will be displayed by green part.

Boost + Turbo timing: It is usually called "electrical timing" (short for "E"). In G-Force ESC setting, it equals to the value of the turbo timing.

When you set the timing, please pay attention to following notes,

- 1. The max value for "M" is 50°.
- 2. If "M" $\leq 30^{\circ}$, then "E" max = 60°; if "M" $\geq 30^{\circ}$, then "E" max = 60°-("M"-30°)
- 3. "E" value equals to Turbo timing value.
- 4. Turbo timing value is ALWAYS higher than boost timing or equals to it.

Take below table for example.

_								
	М	E max	Boost	Turbo	Е	Remark		
	30°	60°	20°	45°	45°	It works.		
	40°	50°	35°	35°	35°	It works.		
	30°	60°	40°	20°	//	It doesn't work as turbo timing should be higher than boost timing.		

ROAR ZERO TIMING MODE

If you tick ROAR ZERO TIMING MODE, then the timing function will be off (we call it ZERO TIMING MODE) which compliant to ROAR.





It can check the max temperature of ESC and Motor, max RPM and speed of last run. Please follow below steps.

- 1. Turn off the ESC after the run and then restart it.
- 2. Connect the ESC to PC via program box(G0017).
- 3. Start the G-Force Link software and check the referred value.

Note: When you check the max motor RPM and speed of last run, please make sure to key in the right information of the motor: Pole number, gear ratio and wheel diameter, or you will get wrong information.

It can also check the motor mechanical timing by clicking "test" and the testing result will also be displayed in Timing Page.

ABOUT



You could find the current firmware and hardware version and check whether there is updated version. If yes, you could click Update to update your ESC and program box.









Products by

G-FORCE. Inc. www.aforce-hobby.ip

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