

# ACS Above 40A Series of Brushless Speed Control Instruction

## Basic Specification :

1. Voltage: 6V—30V      6---20NIMH      2--7LIPO
2. Auto Cut off Li-Poly per 3V/cell ,
3. MOS-FET: 50A ; Peak Amp 60A within 10 second
4. Temp Protect, over 90degree start protect cut-off ( 100A have no Temp protection )
5. PWM Frequency 8KHZ/16KHZ

## Extra Automatic function :

1. Throttle position incorrect doesn't turn on motor
2. Incorrect PWM signal will automatic turn off motor
3. Lost signal protect, lost PWM signal

## Default Setting:

1. Battery: Automatic measure battery type
2. Automatic throttle control, low position
3. Soft-Break
4. Forward turning , soft cut off
5. Lead-Angle , 1degree

## Start Running:

First of all, connecting ESC output three wire with brushless motor, and connecting ESC signal wire to receiver throttle channel,(Notice: the ESC will not supply power to receiver), make sure throttle position set lowest, turn on receiver and transmitter power, connecting power.

Once the ESC turn on will make  $\$ \$$  2 time sound, it mean all of connecting correct [battery/RX signal/Brushless motor]. After 1second the motor will making 2 sound BEEP BEEP, it mean confirm safety sound.

## Program Setting:

1. Disconnect ESC & battery, turn on Transmitter / Receiver batter.
2. Set Throttle position to high
3. Connecting between ESC & battery
4. waiting for get into sound
5. then once confirm sound :  $\$ \$$

## Start entering program details :

### 1 time sound : BEEP - this is first select for battery type and cell

The sound re-cycle 3 times , if throttle no move, it will going next function selection.

If you wish to trim this function value, please set throttle at middle before cycle 3 times sound, waiting for new sound.

- choice NIMH/NICD battery 0.8V/cell

If you like confirm this function value, please set throttle at high before cycle 3 times sound, waiting for new sound.

Notice : change select main function is 1time peak sound.

- — choice Li-Poly battery 7S
- — — choice Li-Poly battery 6S
- — — — choice Li-Poly battery 5S
- — — — — choice Li-Poly battery 4S
- — — — — — choice Li-Poly battery 3S
- — — — — — — choice Li-Poly battery 2S

If no change throttle position, the system will re-cycle this details function until you want finish this function, then put throttle to high position, if you wish stop all of select or cancel any setting, you can set throttle to low position, waiting for system record program details about 1 second, then back to safety protection, then you can turn on the motor.

### 2 times sound : BEEP BEEP - Throttle Function

- Automatic Throttle start up

- — Governor Mode (1.1ms min , 1.8ms max , Recommended for General pitch helicopters)
- — — High start up , (Recommended for competition aircraft application.)
- — — — Middle start up , (Recommended for General aircraft & Fixed pitch helicopters)

### **3 times sound : BEEP BEEP BEEP – Break Function**

- — None of break
- — — Soft break – 3 second complete break.
- — — — Hard break – 3 second complete break.
- — — — — Strong Hard break – 3 second complete break.

### **4 times sound : BEEP BEEP BEEP BEEP – Motor Function**

- — Clockwise Forward
- — — Re-Clockwise Forward
- — — — moderately fast acceleration 0.3 second delay
- — — — — fast acceleration 0.15second second delay

### **5 times sound : BEEP BEEP BEEP BEEP BEEP – Lead Angle**

- — 1°
- — — 7°
- — — — 15°
- — — — — 30°

### **6 times sound : BEEP BEEP BEEP BEEP BEEP BEEP – PWM**

- — 8KHZ for most KV brushless motor, especially outrunner motor
- — — 16KHZ for high KV brushless motor, at least over 4000KV motor, that will be better power.

! Put throttle position at middle, waiting for you wishes value, and turn position to high, waiting for value record.

! if you wish cancel or out when ESC sound still cycle, you just need turn position to low, the value will not record.

! if all of value you had been setting and **confirmed sound**, you can simply turn position to low for out of program setting in any time.

### **Contact & Warranty Info**

The Alturn USA company is cover warranty for in year from date of purchase to be free from manufacturing and component defect, this warranty doesn't cover abuse, beglect, or damage due to incorrect wiring, over voltage, or overloading, if you have any question or got any problems, or wish to repair or replacement that you can contact ours support tem directly.

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