HiModel Fly Series 30A Electric Speed Controller for Helicopters

Instruction Manual

● Easy to configure and operate, special designed for electric helicopters, working voltage 5 to 14V.

● Prog-box configure capable, can easily set up variety parameters.

● By prog-box, you can set the cut-off voltage between 2.0-3.2V per cell at 0.1V incremental. *

● Timing mode (0-30)degree, at one degree interval *

● 3 throttle curve modes: LOGARITHMICAL\ LINEAR\EXPONENTIA, you can feel different throttle response styles by using different throttle modes *

● 3 accelerating response control modes, SOFT / MEDIUM / HARD. Setup in conjunction with throttle curve modes, you can gain your own ideal throttle curve. *

● Auto detect and setup throttle range, and you can also set to a fixed amount manually by Prog-box. *

● Soft start and governor function.

● Under governor mode, you can set motor poles to 2-4, 6-10, 12-14 *

● Motor reverse function, avoid the annoyance of swapping motor wires.

● Lost signal protection: cut off after 3 seconds when lost signal.

Note: features marked with '*' can only be configured by Prog-box.

◎Setring one

Standard mode (soft start) and governor mode

●Switch on transmitter power, move throttle stick into full power position;

●Switch on the motor power;

●You will hear 4 'Beeps' after 5 seconds when you power on the speed controller. (not loop)

Move the throttle to the full close position after the 4 'Beeps', after moving you will hear One 'Beep' that means Standard Mode or two 'Beeps' means Governor mode.

To change the mode, just repeat above procedures

Throttle should be set to 60%-100% of full throttle in Governor mode.

Note: If you use the controller for the first time, Standard (Soft Start) mode is recommended; If you want to change the mode again or set Timing mode, disconnect the motor battery pack and then repeat the procedure.

◎Setting Two

Timing mode**:**

Set timing mode according to the brands and types of brushless motors.

Factory default set is mode **1**.

Timing mode 1 : (0-7°)

Timing mode 2 : (8-18°)

Timing mode 3 : (19-24°)

Timing mode 4 : (25-30°)

● Switch on transmitter，move throttle stick to full power position.

● Connect the main power pack to ESC.

● Wait 5 seconds, you will hear 4 beeps (· · · ·), do not move the throttle stick.

● Wait 5 more seconds, you will hear 5 “Single Beeps” (Timing mode 1, 0-7°); then 5 “double Beeps” (Timing mode 2, 8-18 °); then 5 “thrice Beeps” (Timing mode 3, 19-24 °); and then 5 “Quartet Beeps” (Timing mode 4, 25-30 °).

● Swiftly move the throttle stick to position “close” after the first 5 “Single beeps” (if choosing mode 1); or after the 5 “Double Beeps” (if choosing mode 2), and so on.
● After 1-2 seconds, hear 1 “single beep” (Soft Start mode) or 2 “single beeps” (Governor mode). No confirmation sound for timing, then timing mode setting complete.

● If you do not move the stick in 5 seconds after you power on the ESC, you will hear 5 ‘single Beeps’ or ‘double Beeps’ etc. depending on the current mode , this is the auto detect of the ESC which is normal.

● Once setup the timing mode, if you found it is not the mode you want, then you can disconnect power pack, re-power on, and repeat the procedures above.

◎ Setting three

Cutting-off modes

Mode **1:** For Ni-Mh/Ni-Cd batteries, auto detect cell number and setup the cut-off voltage

Mode **2:** For 2 cell li-po, the lowest cut-off is 5V.

Mode **3:** For 3 cell Li-po, lowest cut-off 7.5V.

Motor reverse：reverse the rotation direction of the motor

Factory default setting: mode **1**

Cut-off voltage and motor reverse:

● Switch on transmitter，move throttle stick to full power position.
● Connect the main power pack to ESC, and receiver etc.
● Wait 5 seconds, till 4 ‘single beeps’, do not move the stick.
● Wait another 5 seconds, you will hear 5 long “Dong” sounds: (Cut off mode 1: intellectual cut-off for Ni-MH/Ni-CD battery);and then 5 long “Dong-Beep” sounds: (Cut-off mode 2, cut-off voltage 5V for 2 cell LiPo battery); and then 5 long “double Beeps”: (Cut-off mode 3, cut-off voltage 7.5V for 3 cell LiPo battery).and then 5 long “Dong-Beep Dong” sounds: (Motor Reverse Rotation Adjustment)

Swiftly move the throttle stick to position “close” after the first 5 long “Dong” sounds if choosing Cut-off mode 1; or after 5 long “Dong Beep” sounds if choosing Cut-off mode 2; or after 5 long “double Beeps” if choosing Cut-off mode 3; or after 5 long Dong-Beep-Dong” if choosing Motor Reverse Rotation.

If you want to change the mode again, please disconnect the motor and battery pack, then repeat the procedure.