Pro-BOX Instruction Manual for Helicopter Speed Controllers

Function Item	Parameters	Function/Parameters Note
Heli Mode	Normal /Constant	Constant mode is for helicopters use only
Motor Pole No.	2-4 , 6-10 , 12-14	Set pole numbers in terms of different motors, enable speed controller operate and control speed (only for helicopter)
*Timing	*2 , 8 , 15 , $30(^{\circ})$ set by transmitter	Set correct timing mode according to the type of
	* 0 , 1 , 230(°)	motor:
	by Prog-BOX	2 poles: 0~7 (°)
		4 poles: 5~15 (°)
		8 poles: 10~20 (°)
		10 poles (and above): set to 20 (°) above
*FREQUENCY	*8,16,32 (Khz)	Set correct PWM according to the type of motor:
		8Khz: common setting, lowest efficiency loss
		16Khz: suite for low resistance motors
		32Khz: suit for low inductance motors
*ACCELERATION	*SOFT / MEDIUM / HARD	Acceleration modes by controlling throttle delay
*Accumulator type	Nicd /NiMh /lo (Li-ion) /po (Li-poly)	* Select battery types
* Nicd /NiMh (V)	*0.4,0.5,1.0 (V) per cell	* Set cut-off voltage per cell for Ni-Mh/Ni-Cd
		batteries
	*Auto	* Auto detect only work under 2-3 cells
	2, 3 cells Li-ion /Li-Po	Set cell number by Prog-BOX
Lo/po (V)	4,5,610 cells Ni-Mh/Ni-Cd	Set cell number by Prog-BOX
*Lo /Po Per cell (V)	*2.0,2.13.2(V) per cell	* Set cut-off voltage per cell, recommend no lower
		than 3.0 (V)
*CUT OFF SLOW DOWN	*Slow Down / Hard	*Set the mode of cut-off, lower throttle or cut-off
		immediately
INITIAL POINT	Auto	Auto detect throttle initial point (stop point)
END POINT	Fixed:1.0, 1.1 ··· 1.5(mS)	Manually set initial point (stop point)
	Auto	Auto detect throttle end point
	Fixed: 1.7, 1.8. 2.0(mS)	Manually set throttle end poin
*Throttle Curve	*LOGARITHMICAL	* Set throttle response curve, linear by default
	*LINEAR	
	*EXPONENTIAL	
ROTATION RIGHT/LIFT	clockwise or counter-clockwise	Motor reverse
*Timing Monitor	*on	* Timing Monitor for brushless motors with no
	*off	Sensor

- -Connect the motor to speed controller
- -For OPTO series speed controllers, you need 4.8-6V battery pack for the Prog-box
- -Connect JR plug to the correspondence position
- -Switch on speed controller power, select speed controller type
- -Follow the information displayed on the LED, and press Up\Down\Left\Right buttons to select the function you want to set.
- -You will hear a 'Beep' when an option is set successfully.
- -Once complete all the settings, switch off the power, and disconnect the JR plug.