MASTER Prog-Box
Menu Explanations

Hacker Brushless Motors

Menu Item		Parameter		Explanation
Brake		Off		Brake activation and brake intensity
		Extra Soft		
		Soft		
		Medium		
		Hard		
		Extra Hard		
Heli Mode		Normal / Constant RPM		RPM governor activation for Heli controllers
Motor Pole No.		2-4, 6-10, 12-14		Adaptation of the controlling algorithm to the motor type or number of poles (Heli controllers)
Reverse		On / Off		Selection: Forward/Brake — Forwards/Brake/Backwards (RC Car controllers)
Current Limit		No Limit		Activation and setting of current limits for RC Car controllers. Enables maximum current limitation. No effect on brake settings!
		20,30...100A	20,40,60	
Timing		0°, 1°,2°...30°	2°, 8°, 15° 30°	Timing settings (advance) may be adjusted to suit the motor type. 2 Pole: 0...7° 4 Pole: 5...15° 8 Pole: 10...20° 10 Pole and higher (outrunners like LRK): minimally 20°
Frequency		8, 16, 32 kHz		Enables setting the frequency to suit the motor type. 8 kHz: universally recommended, lowest efficiency losses in the controller 16 kHz: recommended for low resistance/impedance motors 32 kHz: only recommended for motors with low inductivity
Acceleration		Soft / Medium / Hard		"Delayed" throttle response
Accumulator Type		NiCd/NiMh - Li-Ion/Li-Pol		Battery type selection
NiCd/NiMh	NiCd/NiMh Cut Off	min., 0.4, 0.5, ..., 1.0 V/Cell		Enables setting the voltage per cell for the point at which the controller's cut off circuitry engages.
Li-Ion/ Li-Pol	Li-Ion/Li-Pol – Number of Cells	LiIo/Po AUTO		Activates the automatic recognition of the number of cells for Li-Ion/Li-Polymer batteries. Only for 2 and 3 cell battery packs.
		2,3 LiIo/Po		Manual selection of the number of cells
		2,3,4,5 LiIo/Po		
		3,4,5, 6 LiIo/Po		
		4,5,6...10 LiIo/Po		
		3,4,5...10 LiIo/Po		
	Li-Ion/Li-Pol Cut Off	2.0, 2.1, 2.2 ....3.2 V/Cell		Enables setting the voltage per cell for the point at which the controller's cut off circuitry engages. 3.0V/cell recommended!
Cut Off		Slow Down / Hard		Allows setting the low voltage cut off type. The hard setting is highly recommended if the brake is disabled (typical for non-sailplane models).
Initial Fixed Point		Automatic		Automatic recognition of the motor off throttle setting. The transmitter's throttle lever should be fully off. The trim should be set in the middle.
		Fixed 1,0...1,5 ms		Fixed setting for the throttle off point.
End Point		Automatic		Automatic recognition of the full throttle motor setting. The transmitter's throttle lever should be fully on. The trim should be set in the middle.
		Fest 1,7...2,0 ms		Fixed setting for the full throttle point.
Throttle Curve		Logarithmical		Enables setting the throttle curve independently of transmitter programming.
		Linear		
		Exponential		
ABS		On / Off		ABS for brake functions (RC Car controllers)
Power Limit		Forwards: OFF, 75%, 50%, 25%		RPM limiting for RC Car controllers
Power Limit		Backwards: OFF, 75%, 50%, 25%		RPM limiting for RC Car controllers
Delay		0.25, 0.5, 0.75, 1, 1.5, 2, 5s		Delay between motor stop and reverse for Navy and RC Car controllers
Forward Point		Automatic		Automatic recognition of the throttle lever position for forward motion
		Fixed 1,0...1,3ms		Fixed setting for the forward point
Reverse/Brake Point		Automatic		Automatic recognition of the throttle lever position at which the brake/reverse is activated
		Fixed 1,0...1,3ms		Fixed setting for the reverse/brake point
Rotation		Left / Right		Motor rotation reversal via the controller's software
Timing Monitor		On		Activation of the timing monitor
		Off		