Hobbywing Quicrun WP 1080 Crawler ESC Programming

#	Item name	Description
1	Running Mode	(1) Forward and Brake (2) Forward and Brake/Reverse (3) Forward and Reverse *In mode 2, the motor must first come to a complete halt and the trigger needs to be pushed again, before the vehicle starts driving in reverse.*
2	Battery Type	(1) LiPo or (2) NiMH *Selects the type of battery used. Will affect the cutoff voltages (see #3 below).*
3	Battery Cutoff Voltage	(1) Disabled, (2) Low, (3) Medium, (4) High *NiMH (per cell): 0,9 V (Low), 1 V (Medium) oder 1,1 V (High)* *LiPo (per cell): 3 V (Low), 3,2 V (Medium) oder 3,4 V (High)* *Examples: NiMH 6S, Low: 5,4 V; LiPo 2S, High: 6,8 V; LiPo 2S, Medium: 6,4V*
4	Initial Start Force	(1) 0% – (9) 16% (2% per step) *Force that will be applied at first (or at least), when pulling the throttle trigger.* *When using a crawler: Try (1) at first and raise, if desired.*
5	Maximum Forward Speed	(1) 25% – (4) 100% (25% per step) *Maximum speed, when driving forward. Usually (4).*
6	Maximum Reverse Speed	(1) 25% – (4) 100% (25% per step) *Maximum speed, when driving in reverse.*
7	Trigger Brake, Force	(1) 0% – (9) 100% (12,5% per step) *This applies only to running modes with a brake function (#1 (1) and (2)).* *Force that is used when braking. May result in increased stress for hardware.*
8	Trigger Brake, Response Time	(1) 0% – (9) 50% (6,25% per step) *Refers to #7. Softer or more punctual response of the brake, when pushing the trigger. Higher values may result in an increased load on motor and gears.*
9	Drag Brake, Force	(1) 0% – (9) 100% (10% per step) *Force of the drag brake (rolling resistance), when the trigger is released and/or in neutral position. Also depends on the total weight of the vehicle. When using with a crawler, (5) or higher is recommended.*
10	Drag Brake, Response Time	(1) Level 1 – (9) Level 9; *Gentle (delayed) to aggressive (swift) response time of the drag brake, when the throttle trigger is released and returns to neutral position.* *For a crawler start at (1) and raise gradually, if desired.*
11	Throttle Neutral Range	(1) 0,02 ms – (9) 0,12 ms (0.01 ms per step) *(1) is ideal. If there are issues when accelerating and/or braking, try to raise level gradually until it works. Also try to recalibrate the ESC first!*
12	Start Mode/Punch	(1) Level 1 – (9) Level 9 *Higher values will draw significantly higher currents from the battery. May result in stutter. With crawlers try starting at (1) and raise gradually, if desired.*
13	PWM Frequency	(1) 1 kHz – (5) 16 kHz (doubles per step) *Higher values will result in smoother acceleration and more silent motor operation, but higher ESC temperatures. For a crawler (5) is recommend!*
14	Internal BEC Voltage	(1) 6 V or (2) 7,4 V *Only set to (2), if servos and receiver are able to handle the higher voltage.*
15	Freewheeling	(1) Enabled, (2) Disabled *Active regulation of the freewheeling current of the motor.* *For a crawler, set to enabled.*