

TAO III Smart Access : List of Function

Basic Function

ESC Setting Menu	Setting Range	Function Description
Drive Frq Drive Frequency (KHz)	1-32kHz (1-16=1kHz step, 16-32kHz=2kHz step)	Adjust Acceleration. Lower Number (Acceleration : increase / Smoothness : Decrease) Higher Number (Acceleration : Decrease / Smoothness : Increase)
NeuBrkFrq Neutral brake frequency (KHz)	0.5kHz & 1-32kHz (1-16=1kHz step, 16-32kHz=2kHz step)	Select the motor neutral brake smoothness when the transmitter throttle is at neutral. Lower Number (Braking : increase / Smoothness : Decrease) Higher Number (Braking : Decrease / Smoothness : Increase)
BrakeFrq Brake frequency (KHz)	0.5kHz & 1-32kHz (1-16=1kHz step, 16-32kHz=2kHz step)	Select the brake smoothness when applying the brake. Lower Number (Braking : Increase / Smoothness : Decrease) Higher Number (Braking : Decrease / Smoothness : Increase)
InitialSpeed Initial speed (%)	0-50% (2% step)	Select the initial speed when accelerating from a stop. Higher number : More sudden start. Because you add load to the motor and drive system, please be careful of overheating issues. Gear your vehicle appropriately.
NeuBrake Neutral break power (%)	0-100% (2% step)	Select the motor neutral brake initial power when the transmitter throttle is at neutral. Lower Number : Soft Breaking, Higher Number : Strong Breaking.
InitialBrake Initial break power (%)	0-50% (2% step)	Select the initial brakes power when the brake is applied. Lower Number : Soft Breaking, Higher Number : Strong Breaking.
FullBrake Full break power (%)	0-100% (2% step)	Select the maximum brake power when applying full brakes during a run. Lower Number : Soft Breaking, Higher Number : Strong Breaking.
FwdSpeed Forward maximum speed limit (%)	50-100% (2% step)	Function that limit the maximum speed at full throttle.
RevSpeed Reverse maximum speed limit (%)	25-100% (25% step)	Function that limit the maximum speed while reversing.
OpnrMode Operation Mode Direction / Break / Reverse	N/F/B I/F/B N/F/B/R I/F/B/R N/F/R I/F/R	Select the direction of the motor, brakes availability, and reverse function availability. N=Normal Motor Direction / R=Reverse Motor Direction / F=Moving Forward / B=Brake / R=Reverse [Important] When applying the throttle in reverse, the item without "B" notation will reverse instantly without pausing between the braking and reversing state.
COV Cut off voltage (V)	NONE & 2.6-3.6V/cell (0.1V/cell step)	The TAO II warns the driver of low battery voltage by cutting the output power to a low level state. This will prevent your vehicle to become uncontrollable. This feature will also protect LiPo users from over-discharging their batteries and potentially damage them.
FZAdjust Free Zone Adjust (%)	1-10% (1% Step)	This function adjusts the output characteristics at the moment when the throttle is shifted from neutral to drive. The lower the value, the quicker the output characteristics at the start of acceleration, and the higher the value, the smoother and milder.
Torque Level [XX only] Torque Level※	-5 ~ +5 (1 step)	Setting value 0 is normal. The higher the value, the faster and slower the deceleration with a sense of torque, and the lower the value, the slower the rise and the more rapid the deceleration.
Torque End Point [XX only] Torque End Point(%)※	20 ~ 100 (5% step)	Set the throttle range where the torque level function operates (operates from 0% to the set value). Normal output characteristics after the torque end point.
BEC Output [XX only] BEC Output voltage(V)	6.0 / 7.4	Set the voltage that ESC supplies to the receiver. When selecting 7.4V, be sure to check that each device supplying power from the receiver supports high voltage.

※ [Important] The torque level and torque end point function normally only when our brushless motor "LUXON AGILE" and "FLEDGE" are used. When using a motor of our company LUXON BS or earlier or a motor of another company, setting is not possible or it does not operate properly.

Boost / Turbo Function

Setting Menu	Setting Range	Function Description	Additional Information
BstTim Maximum boost digital timing. (deg.)	Disabled(0)-60deg. (1deg. step)	It is the normal timing effective throughout your throttle range. It affects the motor speed.	
BstStRp Boost start RPM (rpm)	1,000-40,000rpm (500rpm step)	It is the RPM value at which the Boost starts. The throttle stays linear until this RPM is reached.	The Boost Start RPM value and Boost End RPM value should be given enough space for the timing to ramp up smoothly. CAUTION!! When using this function for the first time, start with a setting that keep enough interval between both RPM, and narrow it accordingly to your liking until satisfied. IMPORTANT!! Always set the boost end RPM higher than the boost start RPM.
BstEndRp Boost end RPM (rpm)	10,000-100,000rpm (500rpm step)	It is the RPM value at which the Boost reaches the "full boost digital timing". Beyond this RPM value, the throttle turns linear again.	
ThBstCon Throttle boost control	ON / OFF	This feature is to prevent the sudden change of the motor RPM in sudden throttle operation when using the Boost feature.	
TrbAct Turbo activation	Full Throttle & RPM ----- RPM ----- Full Throttle	It is the deciding factor that triggers the Turbo. [Full Throttle and RPM]----- The Turbo is triggered either by Full Throttle or when it reaches the RPM value of the "Turbo Start RPM". [RPM]----- The Turbo is triggered when the RPM value of the "Turbo Start RPM" is reached. [Full Throttle] ---- The Turbo is triggered at full throttle only.	
TrbTim Full turbo timing (deg.)	0-30deg. (1deg. step)	It is the additional timing added to the Boost timing.	
TrbStRp Turbo start RPM (rpm)	10,000-50,000rpm (500rpm step)	It is the motor RPM value at which the turbo function starts.	This item is effective only when the Turbo Activation is set in "RPM" or "Full Throttle & RPM"
TrbOnSlo Turbo on slope (deg./0.1sec.)	1-25deg./0.1sec. (1deg./0.1sec. step)	It refers to the Turbo Timing increasing rate. The higher it is, the faster the Turbo Timing increases, resulting in faster acceleration.	This feature is very sensitive and changes drastically with only a 0.1deg change. Adjust this setting slowly until reaching the desired result.
TrbOffSlo Turbo off slope (deg./0.1sec.)	1-25deg./0.1sec. (1deg./0.1sec. step)	It refers to the Turbo Timing decreasing rate. The higher it is, the faster the Turbo Timing decreases, slowing down turbo effects until it reaches the maximum timing value.	
TrbStTime Turbo start delay time (sec.)	OFF(0)-1.00sec. (0.05sec. step)	The time it takes for the turbo to start after the Full Throttle or Turbo RPM value is reached. (ex: if value is 0.50, it will take 0.5sec for the turbo to start.)	This item is effective only when the Turbo Activation is set in "RPM" or "Full Throttle & RPM"
TrbOffTime Turbo off delay time (sec.)	OFF(0)-1.00sec. (0.05sec. step)	The time it takes for the turbo to turn off after the full throttle is released. (ex: if value is 0.50, it will take 0.5sec for the turbo to stop)	This item is effective only when the Turbo Activation is set in "RPM" or "Full Throttle & RPM".
RevLimit Rev limit (RPM)	----- OFF ----- 10,000-100,000rpm (1,000rpm step)	This function limits the maximum motor revolution.	For limiting the maximum speed regardless of throttle position. It prevent the sudden rise in RPM of low turn motors.

Preset parameter

ESC Setting Item	For XARVIS XX						For XARVIS					
	DRIFT RWD	DRIFT AWD	TOURING	OFF ROAD 2WD	OFF ROAD 4WD	NON BOOST	DRIFT RWD	DRIFT AWD	TOURING	OFF ROAD 2WD	OFF ROAD 4WD	NON BOOST
Drive Frquency (kHz)	24	20	12	14	14	12	16	12	8	8	8	6
Neutral Brake Frquency (kHz)	16	8	12	2	2	8	16	8	12	2	2	8
Brake Frquency (kHz)	18	8	1	1	1	4	18	8	1	1	1	4
Initial Speed (%)	4	6	0	12	8	10	2	2	0	6	4	5
Neutral Brake Power (%)	16	14	0	12	14	10	16	14	0	12	14	10
Initial Brake Power (%)	0	0	0	2	2	0	0	0	0	2	2	0
Full Brake Power (%)	100	100	68	70	70	100	100	100	68	70	70	100
Forward Speed (%)	100	100	100	85	90	100	100	100	100	85	90	100
Reverse Speed (%)	25						25					
Operation Mode Direction / Brake / Reverse	N / F / B / R						N / F / B / R					
Cut Off Voltage (V)	3.2						3.2					
Boost Timing (deg.)	20	35	50	0	0	0	20	35	50	0	0	0
Boost Start RPM (rpm)	12,000	12,000	8,000	8,000	8,000	1,000	12,000	12,000	8,000	8,000	8,000	1,000
Boost End RPM (rpm)	42,000	50,000	28,000	28,000	28,000	10,000	42,000	50,000	28,000	28,000	28,000	10,000
Throttle Boost Control	ON	ON	ON	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
Turbo activation	Full Throttle						Full Throttle					
Turbo Timing (deg.)	5	5	25	0	0	0	5	5	25	0	0	0
Turbo Start RPM (rpm)	42,000	50,000	28,000	28,000	28,000	10,000	42,000	50,000	28,000	28,000	28,000	1,000
Turbo On Slope (deg./0.1sec.)	5	5	18	18	18	1	5	5	18	18	18	1
Turbo Off Slope (deg./0.1sec.)	5	5	3	3	3	1	5	5	3	3	3	1
Turbo Start (delay) Time (sec.)	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Turbo Off (delay) Time (sec.)	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Rev Limit (rpm)	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Free Zone Adjust (%)	3	3	4	5	5	5	3	3	4	5	5	5
Torque Level [XX Only]	+2	+1	+1	+1	+1	+2	0					
Torque End Point [XX Only] (%)	40	60	60	60	60	40	100					
BEC Output [XX Only] (V)	6						6					