ESC mode flowchart

Press the set button once
Quickly press Set button twice
Quickly press Set button 3 times
Quickly press Set button 4 times
Press and hold the set button (2 second or more)

After initial setting is performed

Press and hold the POWER button for 2 to 3 seconds while the power is off

LED (green + orange) blinks for 3 seconds, LED (green) flashes

Initial setting of radio throttle position

In Normal State — Press the POWER button

LED (green + red) blinks for 3 times, LED (green + orange) flashes 4 times

Standby state (runnable)

ESC mode (blue LED) (blinking: boost and turbo invalid)
Program card mode (Red LED) (blinking: boost, turbo invalid)
Press and hold the set button for more than 4 seconds to change mode

When not saving

Storage Location Selection

User program ① (Green LED)
Every time the set button is pressed once, the storage location is switched to ① or ②.
User program ② (orange LED)

It automatically shifts to selection of save destination.

Program saving (All LED blinks)

When Saving

(Note)Since the changed value is reset when the power is turned off, be sure to save the setting value at the end of your programming.

※ If you select "Boost / Turbo Invalid" in "Program Load", the functions below full boost advance can not be used and will be skipped. In this case, the timing angle is fixed at 0°.

Select mode (cannot run)

① Program Load — flash twice
② Drive frequency — flash twice
③ Neutral brake frequency — flash twice
④ Brake frequency — flash twice
⑤ Initial speed — flash twice
⑥ Neutral brake power — flash twice
⑦ Initial brake power — flash twice
⑧ Full brake power — flash twice
⑨ Operation mode — flash twice
⑩ Cutoff voltage — flash twice
⑪ Full boost timing — flash 4 times
⑫ Boost start RPM — flash 4 times
⑬ Boost end RPM — flash 4 times
⑭ Full turbo timing — flash 4 times
⑮ Rev-limiter — flash 4 times
Back to ①

Setting mode (cannot run)

Drift, Non Boost, Touring, Off-Road 2WD, Off-Road 4WD, User Program 1, User Program 2

4kHz, 8kHz, 16kHz, 24kHz

2kHz, 4kHz, 8kHz, 16kHz

2kHz, 4kHz, 8kHz, 16kHz

0%, 8%, 14%

0%, 4%, 8%, 10%, 12%, 14%, 16%, 32%

6%, 12%, 16%, 26%

70%, 80%, 90%, 100%

(Fwd Rotation)Fwd/Brk, (FwdRotation)Fwd/Brk/Rev, (Fwd Rotation)Fwd/Rev, (Rev Rotation)Fwd/Brk, (Rev Rotation)Fwd/Brk/Rev, (Rev Rotation)Fwd/Rev

NONE, 2.8V/Cell, 3.0V/Cell, 3.1V/Cell, 3.2V/Cell, 3.4V/Cell

0deg, 15deg, 25deg, 45deg

5,000rpm, 10,000rpm, 15,000rpm, 20,000rpm

15,000rpm, 20,000rpm, 30,000rpm, 40,000rpm, 50,000rpm

0deg, 12deg, 20deg, 30deg

OFF, 15,000rpm, 30,000rpm, 50,000rpm

Xarvis XX Preset setting value / settable range comparison table

ACUVANCE

Setting items	Preset initial value					Settable range		Functional overview
	Drift	Boost/Turbo Invalid	Touring	Off-road 2WD	Off-road 4WD	XARVIS Unit	TAOⅡ (Ver.1.4)	
Drive frequency (kHz)	24	16	4	4	16	4～24 (4 Kinds)	1～32 (24 Kinds)	Determine the throttle feeling (quick or mild)
Neutral brake frequency (kHz)	16	16	8	2	8	2～16 (4 Kinds)	0.5～32 (24 Kinds)	Determine the brake feeling (quick or mild) that will be applied when the throttle returns to the neutral position while driving.
Brake frequency (kHz)	8	2	2	2	8	2～16 (4 Kinds)	0.5～32 (24 Kinds)	Determine the brake feeling (quick or mild) that will be applied when the throttle is on the brake side during running.
Initial speed (%)	8	0	8	14	8	0・8・14	0～50 (26 Kinds)	Determines the initial speed when starting acceleration from a stopped state. The bigger the number, the sharper the start.
Neutral brake power (%)	16	4	16	16	24	0～32 (8 Kinds)	0～100 (51 Kinds)	Determines the brake power applied when returning the throttle to the neutral position while driving.
Initial brake power (%)	26	6	26	26	12	6～26 (4 Kinds)	0～50 (26 Kinds)	Determines the brake power to be applied at the moment when the throttle is put on the brake side while driving.
Full brake power (%)	100					70～100 (4 Kinds)	0～100 (51 Kinds)	Determines the brake power applied when the throttle is put in full brake while driving.
Max forward speed(%)	100					100	50～100 (26 Kinds)	It is a function to limit the maximum speed on the forward side of the throttle.
Max reverse speed(%)	25					25	25～100 (4 Kinds)	It is a function to limit the maximum speed on the reverse side of the throttle.
Operation mode	N / F / B / R (forward rotation, reverse enabled)					6 Kinds		Determine the direction of motor rotation, presence of brake, and presence of reverse function.
Cutoff voltage (V / Cell)	3.2					OFF & 2.8～3.4	OFF & 2.6～3.6	When the battery voltage drops to the set value, the ESC will inform the driver that the battery voltage is decreasing by running at ultra low speed.
Full boost timing (deg.)	0	–	25	0	0	0～45 (4 Kinds)	0～60 (61 Kinds)	It is the maximum timing angle value achieved by the boost function.
Boost start rotation speed (rpm)	5000	–	10000	5000	5000	5000～ 20000(4 Kinds)	1000～ 40000(79 Kinds)	This is the motor speed at which boost starts. Below the set value, the throttle curve will remain linear.
Boost end rotation speed (rpm)	20000	–	30000	20000	20000	15000～ 50000(5 Kinds)	10000～ 100000(181 Kinds)	This is the motor speed at which boost ends. Passed the set value, the boost function stop and the throttle curve become linear again.
Throttle Boost Control	OFF					–	ON / OFF	It is a safety feature that automatically regulate the rotation speed to prevent sudden change in motor rotation speed under sudden throttle action.
Turbo activation	At Full Throttle	–	At Full Throttle			–	3 Types	Determines the factor that trigger the turbo activation. (When full throttle or when set rpm value is reached or both)
Full turbo timing (deg.)	12	–	20	12	0	0～30 (4 Kinds)	0～30 (31 Kinds)	It is the maximum timing angle value achieved by the turbo function.
Turbo start rotation speed (rpm)	20000	–	20000			–	10000～ 50000(81 Kinds)	This is the motor speed at which the turbo starts operating.
Turbo on slope (deg./0.1 sec.)	3	–	9	3	3	–	1～25	It is the ramping speed at which turbo reaches full timing from the moment it activates. Larger value equal to a faster timing increase.
Turbo off slope (deg./0.1 sec.)	6	–	6			–	1～25	It is the ramping speed at which the turbo decrease from full timing to inactive. Larger value equal to faster timing decrease.
Turbo start delay time (sec.)	0.15	–	0.15			–	0～1.00 (21 Kinds)	It is the time it takes for the turbo to turn ON once full throttle is reached.
Turbo off delay time (sec.)	0	–	0			–	0～1.00 (21 Kinds)	It is the time it takes for the turbo to turn OFF once full throttle is released.
Rev-limiter (rpm)	OFF					OFF・15000 30000・50000	OFF &10000～ 100000(92 Kinds)	The output to the motor is capped at an arbitrary rpm value. Unexpected speed increase can be prevented, such as when using a high-speed motor.
Free zone adjustment (%)	6					–	1～10 (10 Kinds)	Adjust the output characteristics at the moment the throttle shifts from neutral to drive. Lower value. Lower value create a quicker output, higher value create a mild/smooth output
Torque Level※	0					–	-5～+5 (11 Kinds)	Setting value 0 is liner condition. Increasing the value results in acceleration with torque and slow deceleration. Also, decreasing the value results in slow acceleration and rapid deceleration.
Torque end point(%)※	100					–	20～100 (17 Kinds)	Set the throttle range where the torque level function operates.(Operates from 0% to the set value) Outside the "torque end point" range outputs normal characteristics.
BEC output（V）	6.0					6.0 / 7.4		Set the voltage value that ESC supplies to the receiver. When using 7.4V, make sure that each device connected to the receiver supports 7.4V.

※※ [Important] "Torque level" and "Torque end point" function can operate only when using our brushless motor "LUXON AGILE" and "FLEDGE".
When using a motor of our company "LUXON BS" and "LUXON", or a motor of other manufacturers, setting isn't possible or it doesn't operate properly.