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IBEX ELECTRONIC SPEED CONTROLLER
SETTING RECOMMENDATION

Setting	Glider	F3A	3D Aerobatics
Acceleration	1s	1s	0.5s or less
Timing	Auto	Auto	Auto
Startup Power	Auto	Auto	Auto (or up to +10)
Motor Type	Standard	Standard	Standard [1]
Brake	Soft or Medium	Off	Off
Brake Start	-	-	-
Brake End	-	-	-
Brake Transition	-	-	-
Brake Wait Time	-	-	-
Gear Ratio	[1]	[1]	[1]
Motor Poles	[1]	[1]	[1]
Prop Position	-	-	-
Positioning PWM	-	-	-
Pos. Hold Time	-	-	-
Motor Enabled	Always	Always	Always
Freewheeling	Normal	Active Braking	Active Braking

[1] Depends on motor type.
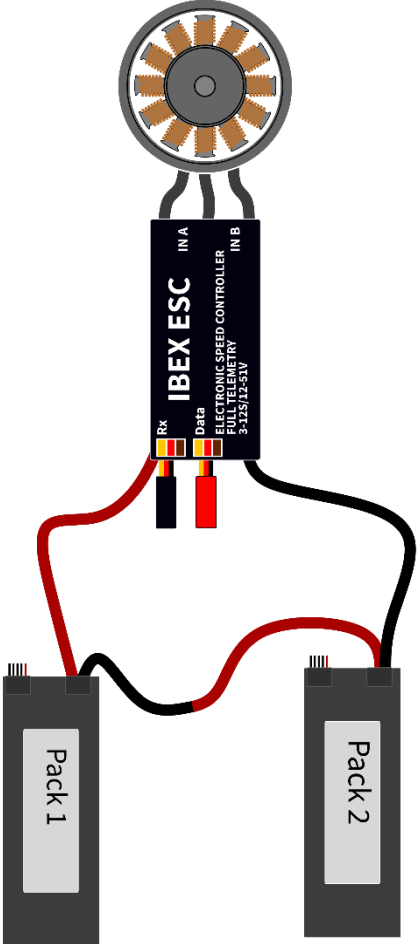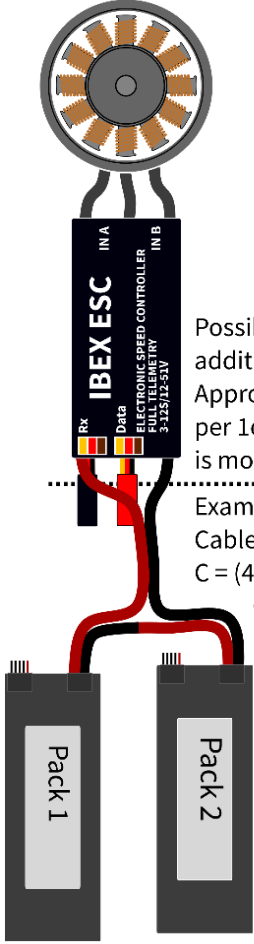
Setting	Glider with retractable engine	Hotliner/F5B	EDF
Acceleration	1s	0.5s	1-2s
Timing	Auto [1]	6-10° [1]	Auto or 8-14° [1]
Startup Power	Auto	+5	Auto
Motor Type	Standard	Standard	Standard or High Speed [1]
Brake	Soft or Medium	Manual	Off
Brake Start	-	20%	-
Brake End	-	100%	-
Brake Transition	-	0.2s	-
Brake Wait Time	-	0	-
Gear Ratio	[1]	[1]	[1]
Motor Poles	[1]	[1]	[1]
Prop Position	Hall Sensor	-	-
Positioning PWM	4-7%	-	-
Pos. Hold Time	10 – 60s	-	-
Motor Enabled	Always or InputPin Log.0/1	Always	Always
Freewheeling	Normal	Normal	Active Braking

[1] Depends on motor type.

DUAL BATTERY CONNECTION

For large models, it is sometimes necessary to connect two batteries in series. A correct wiring layout is important, especially when dealing with high voltage and currents of 100A and above.

Basically, the cables should be kept close to each other to prevent the effects of increased inductance and reduce any unexpected behavior. This becomes even more crucial with high-pole motors with large current peaks. Additionally, when active freewheeling (or active braking) is enabled, there is increased current ringing due to the constant switching of MOSFETs.

Not recommended cable layout	**Recommended cable layout**
              Pack 1 Pack 2	 Possibly install additional capacitors Approx. 1uF per Ampere per 1cm if cable length is more than 30cm Example: Cable length 40cm, 100A $C = (40cm - 30cm) * 100A$ $C = 1000uF$ approx. Pack 1 Pack 2
• Long cables and large distances between components. • Higher inductance, worse EMI noise. • Higher probability of interference with RC control.	• Cables as short as possible, close to each other. Batteries close to each other. Optionally installed additional capacitors. • Low inductance, decreased EMI noise. • Low interference with RC control.

IBEX 80/120/130 OPERATION WITH AN EXTERNAL BEC

If you utilize an external BEC that draws power from the same flight battery pack as the IBEX controller, please adhere to the provided connection diagram. To minimize the occurrence of any undesired current flow in the circuit, such as ground loops, it is advised to disconnect the positive and negative wires of the *Data* cable (which is equipped with a red JR-type connector).
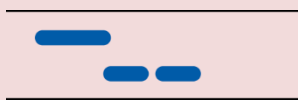
Please note that while the throttle signal is fully optically isolated, the aforementioned recommendation is relevant specifically to the *Data* cable.
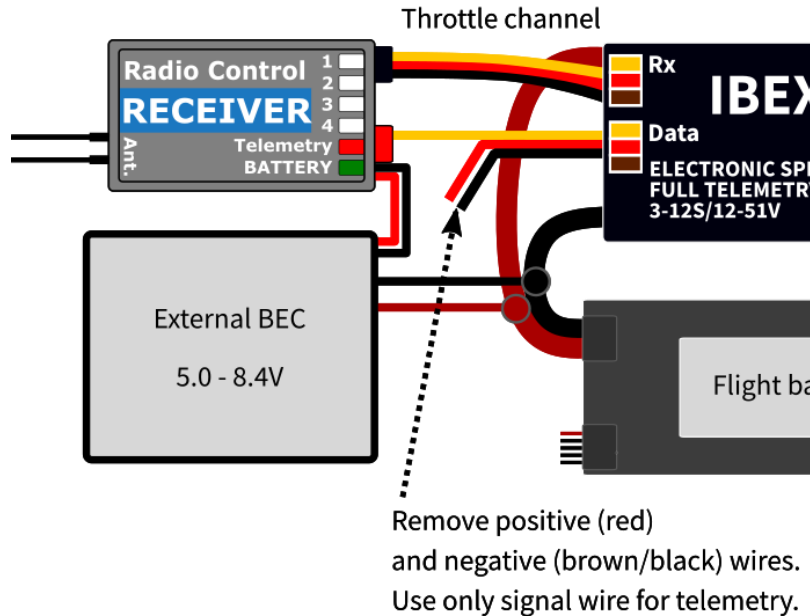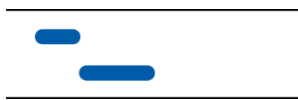

IBEX SOUNDS

Initialized (default sound). The user may configure this sound.

Invalid servo impulse detected on startup. The detected throttle impulse does not represent an idle position.

Low voltage detected on startup. This happens either if you plug in a discharged battery or a battery with different number of cells than configured. This sound is also played if the BEC voltage does not correspond to the value set in the configuration.
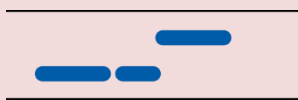
Spektrum: Entering the configuration menu over TextGen while holding throttle stick high.

Short tone repeats every 10s or 20s to indicate the controller is powered.