TOWERPRO CO.LTD

BRUSHLESS MOTOR CONTROLLER SETUP MENU (for new 18A /20A)

1. Solder an appropriate connector on the battery + (red) and battery - (Black) leads. We recommend Deans Ultra If using a polarized connector; make sure the polarity matches your batteries,

2. Connect the three motor wires to your brushless motor (ignore the wire colors). If the motor spins in the wrong direction, swap any two of the motor wires to reverse the direction. We recommend using gold plated spring connectors (also known as bullet connectors) between the motor and the speed control to facilitate swapping the wires. Make sure to cover the bullet connectors with heat shrink tubing.

3. Plug the servo connector into the appropriate channel on your receiver. Most receivers use channel 3 for the throttle, but some use channel 1. Consult the manual for your receiver for details.
The red wire on the servo connector is positive (+), the brown or black wire is negative (-), and the orange or white wire is the signal.
4. Make sure your transmitter throttle channel is not reversed. Most Futaba transmitters have the throttle channel reversed by default.

5. Before flight, you can program the battery type, number of cells, and cut-off voltage.

6. Install your ESC in a location in your airplane that receives good cooling airflow. Keep the motor and battery wires away from your receiver and antenna.

CAUTION: Secure the aircraft and stay clear of the propeller to prevent bodily harm.

CAUTION: Running the motor at high RPM without a propeller attached will damage the motor.

Connecting the Motor:

1. Remove battery power from the speed controller.
2. Connect the motor and receiver to the speed controller
3. Turn on the transmitter.
4. Move throttle stick to the full power position (UP Position)
5. Reconnect battery power to the speed controller

After 3 seconds you will hear…(repeated 3 times)

—	Music Tone + 1 Beep	Cell Type & Number
— —	Music Tone + 2 Beep	Brake
— — —	Music Tone + 3 Beep	Timing Mode
— — — —	Music Tone + 4 Beep	Voltage Protection

When you hear the sequence for the parameter you wish to program, move the throttle stick to the Center position to enter Sub-Option menu.

Cell type and number of Cells	—
•—	NiMh
•— —	2LIPO 7.4V
•— — —	3LIPO 11.1V

Brake	— —
••—	None
•••— —	Soft
•••— — —	Mid
•••— — — —	Hard

Timing	— — —
•••••—	2º
•••••— —	7º
•••••— — —	15º
•••••— — — —	30º

Voltage Protection	— — — —
•••••••—	2.8V/CELL
•••••••— —	2.9V/CELL
•••••••— — —	3.0V/CELL

To save the sub options settings, move the throttle to the UP position. A long audio BEEP will sound to confirm the option settings. After this beep, you will return back to the main programming menu.
To save and exit the program menu, move the throttle stick to the down position. After 1 second, the ESC will save all the options and the motor will return to normal operation.

***Attention:* GraysonHobby suggests using a 10C or higher Lithium Battery Pack and to set the cut off at 3.0V as the protection voltage to prevent damage to the lithium battery pack.**