

MSH 80A

Speed Controller (ESC) for Brushless Motor

UBEC System 4A



General Specifications

Battery:	5 -18 NiCd / NiMh or 2 - 6 LiPo / LiLo
UBEC System:	Up to 8 servos 4Amp cont.
Brake:	On /Off
Start:	Hard / Soft
Switching frequency:	8 kHz / 16 kHz
Timing mode :	Mode 1 – Mode 2 – Mode 3
Rotation:	Normal/Inverse
Cutt off voltage:	Stop / Reduce power / Disabled
Temp control:	Cut off motor on temp above 212°F / 100°C
Max RPM (2-pole):	200,000
Governor (Active RPM):	On / Off

Do NOT use more than 6S Lipo or 18 NiCd-Nimh

Set Standard configuration

1. Set throttle channel at +/-100 (on Futaba radios REVERSE throttle channel)
2. Set stick to lower position (min)
3. Switch Transmitter ON
4. Connect battery to ESC
ESC beeps: **One BEEP** Brake ON
Two BEEPS Brake OFF

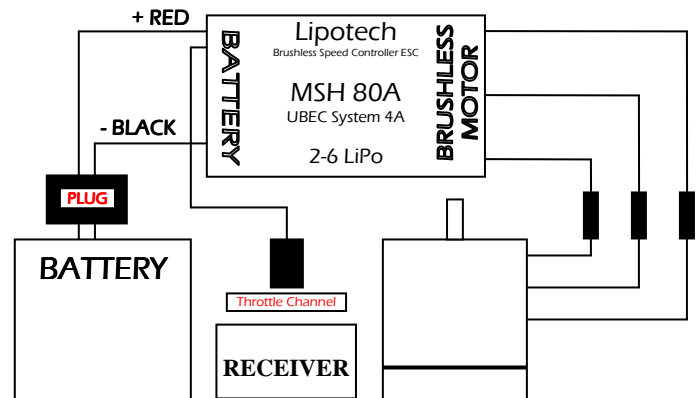
ESC auto sets Full throttle range.

ESC is now ready to operate.

Default configuration

Battery:	Autosense LiPo battery
Brake:	OFF
Start:	Soft
Switching frequency:	8 kHz
Timing mode:	Mode 1- Auto-setting (Automatic 0° to 30° deg.)
Cut off mode:	Reduce power
Governor:	On

Connection diagram



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Programming the MSH 80

1. Disconnect battery from ESC (if connected)
2. Set stick to Full throttle position
3. Connect battery to ESC
4. After 5sec ESC emits 4 tones: __ --

You are now in SETUP mode

NOTE:

- Only one parameter at the time can be changed
- Every time a parameter is changed disconnect battery
- If more parameters need to be changed repeat procedure for each one

Programming options:

Now the ESC will emit a series of tones as described below, to select an option just put stick to min position and new option will be stored.

1 Brake

- 1.1 After 5 seconds from entering setup mode put stick to minimum position and brake will toggle from ON to OFF or vice versa.

2 Battery

- 2.1 Ni-cad o Ni-Mh

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- 2.2 Autosense from 2S to 6S Lipo

.. .. .

3 Rotation

- 3.1 Reverse Rotation (questa funzione cambia il senso di rotazione del motore)

W W W W W

4 Start

- 4.1 Soft

W W W W W

- 4.2 Hard

DO NOT USE WITH HELI OR PLANES WITH GEARBOX REDUCTION

V V V V V

5 Cut-Off Mode

- 5.1 Disabled

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- 5.2 Reduces Power

- - - - -

- 5.3 Switches motor OFF

- - - - -

6 Timing

- 6.1 Mode 1 Automatic from 0° to 30°

- - - - -

- 6.2 Mode 2 (from 0° to 7°) for 2, 4, 6 poles motors

- - - - -

- 6.3 Mode 3 (from 22° to 30°) for 8,10,12,14 poles motors

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7 Switching Frequency

Check with your motor's manufacturer with frequency to use.

For use with Protos stock motor please select 8 Khz frequency.

- 7.1 8 kHz

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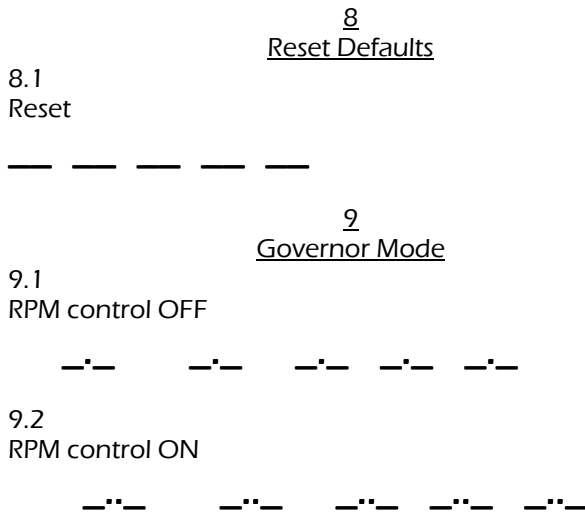
- 7.2 16 kHz

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MSH 80A

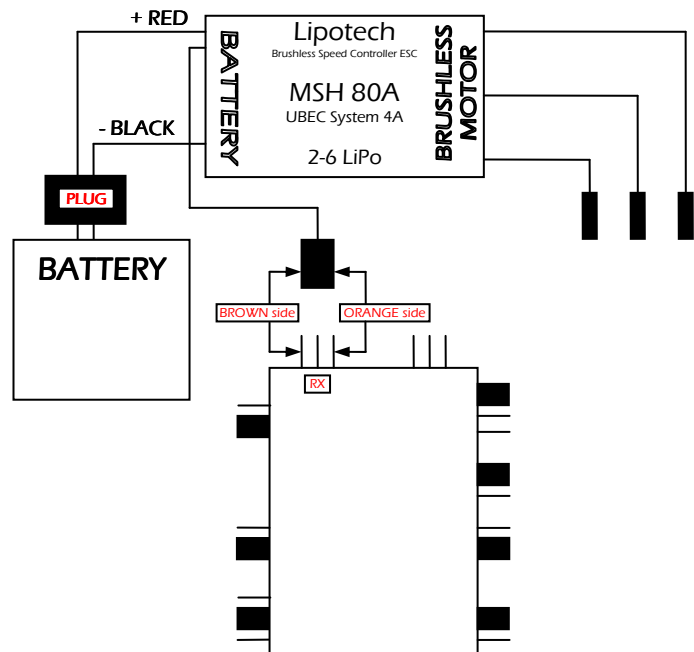
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Programming the MSH 80 with the Programming Card

1. Disconnect battery from ESC (if connected)
2. Select the desired options on the card with the jumpers
3. Connect the ESC receiver lead to the RX signed plug on the card
Pay attention to polarity
4. Connect main battery to ESC
After a second the ESC will beep
Configuration is stored



ATTENTION:

- FOR SAFETY REASONS ALWAYS DISCONNECT MOTOR WHILE PROGRAMMING THE UNIT
- Disconnect battery IMMEDIATELY after each flight
- Pay close attention to model with connected battery!

For info and support info@msheli.com