

**ROUNDHOUSE LOCOGLYDE**

**Electronic Speed Controller**

*Features of this Unit:-*  
 100% Waterproof  
 10A motor limit  
 6.0V to 14.4V Operating voltage  
 0.025V drop at 10A  
 Maximum current rating, 10A  
 1.2A BEC  
 In built Directional Lighting circuit

**ROUNDHOUSE ENGINEERING CO. LTD.**  
 Units 6-10 Churchill Business Park, Churchill Road,  
 Wheatley, Doncaster, DN1 2TF, England

Telephone 01302 328035 Fax 01302 761312  
 Email mail@roundhouse-eng.com



[www.roundhouse-eng.com](http://www.roundhouse-eng.com)

Please read the instructions carefully before use. If there is anything that you do not understand or are unsure of, check with Roundhouse before fitting.

**Installing the Roundhouse LocoGlyde Electronic Speed Controller.**

Mount the LocoGlyde Electronic Speed Controller (LESC) as far as possible away from the receiver to avoid any interference. Care should be taken to position the LESC so that it is kept as cool as possible. Ensure that the motor being used is fitted with 2 motor capacitors (0.1uF) - one from the negative terminal to the can and one from the positive terminal to the can.

**Receiver Connections**

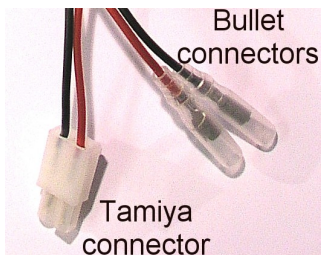
The servo load on the LESC is wired for all current R/C manufacturers apart from Airtronics - for these receivers the black and red wires require swapping in the plug.

Receiver Type	Position 1	Position 2	Position 3
Futaba, Sanwa, KQ	White / Blue	Red	Black
Hi-Tec	Yellow	Red	Black
Graupner, JR, Kyosho	White / Orange	Red	Brown
Acoms	Yellow	Red	Black
Airtronics	White / Orange	Black	Red

**N.B. - Be aware that this speed controller should only be used on a channel which has a sprung neutral. If you intend using an Aircraft/Helicopter Transmitter, Do Not plug the LESC into the Throttle side of the receiver. Doing so will cause permanent damage to the LESC.**

N.B. The LESC requires a battery pack to be connected to the Tamiya connector to power it. **It is essential that the correct polarity is observed.** If the battery pack is connected wrongly it will immediately destroy the electronics in the speed controller which cannot then be repaired. Connecting the battery pack incorrectly is not covered by the warranty.

LESC's are fitted with a 1.2A BEC plug (Battery Eliminator Circuit). This means that the battery pack powers the Speed Controller, and this in turn supplies power to the receiver - Do Not connect a separate battery pack to the receiver.



**Battery Connections**

The LESC is fitted with a Tamiya style plug and bullet connectors.

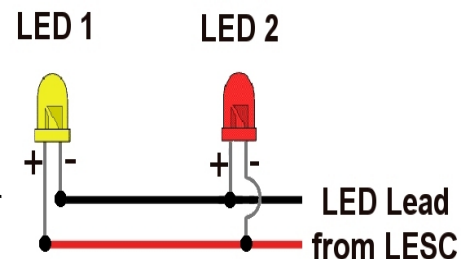
**Tamiya connector:** Black = Battery -ve Red = Battery +ve

**Bullet connectors:** Red = Motor +ve Black = Motor -ve

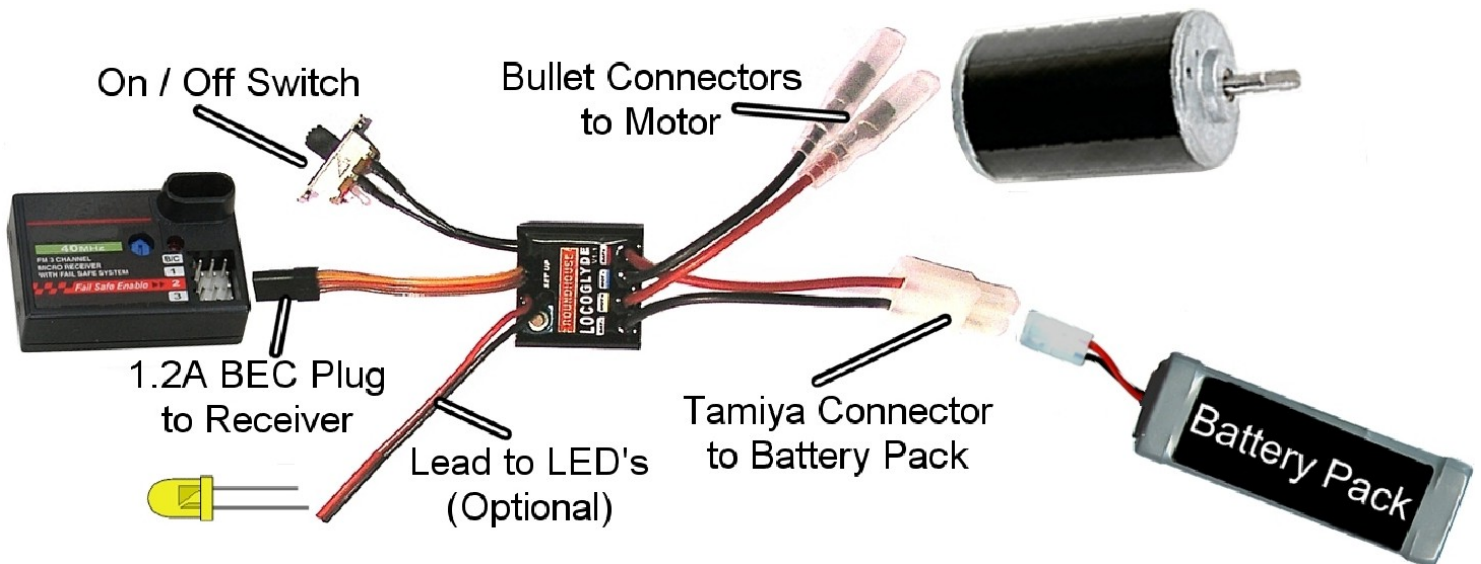
N.B. Always disconnect LESC from battery cells when not in use.

**Optional directional lighting**

Incorporated in the LESC is a directional lighting circuit, which allows up to 4 LED's to be powered (max two in forward and two in reverse). Connecting a couple of suitable LED's (as shown in the diagram opposite), to the thin black and red lead coming out of the LESC, will result in one LED lighting up when running in either direction. **N.B.** Do not use high-powered White or Blue LED's.



The diagram gives an example of how the LESC may be connected to operate a motor. Please note that the Receiver, Motor, LED and Battery Pack are not part of, or supplied with, this unit.



### Initial Set-Up Procedure

**The unit has been pre-set at the Roundhouse Factory and should work with most configurations. To use the pre-set configuration, follow steps 1 to 6 then stop. If you require different settings, follow all the steps below, 1 to 12.**

1. Plug the LESC into the receiver. Ensure plug is fitted with the signal wire facing inward toward the receiver label.
2. Connect the Red wire bullet connector to the positive on the motor.
3. Connect the Black wire bullet connector to the negative on the motor.
4. Switch on the transmitter ensuring all control positions and trims are central.
5. Plug the Speed Controller into the power source (battery), ensuring polarity is correct (Tamiya connector).
6. Switch on the LESC. If the factory settings are suitable, there is no need to complete the steps 7 - 12.
7. Disengage motor to prevent the movement during LESC set-up.
8. Switch on the LESC and wait two seconds then press the set up button - the neutral setting will be now stored.
9. Move the throttle control forward to position where you want full forward speed to be.
10. Move the throttle control back to the neutral position. The LESC will now store the full forward speed setting.
11. Move the throttle control backward to position where you want full reverse speed to be.
12. Move the throttle control back to the neutral position. The LESC will now store the full reverse speed setting. The motor can now be reconnected.

The LESC should now be programmed correctly. If you need to reprogram the LESC at anytime then just follow the above instruction from step 7 through to 12.

### Trouble Shooting

**When the LESC is turned on , the motor immediately starts to turn.**

1. Check to see if the LESC is connected to the receiver properly. Check your transmitter is turned on.
2. Try reprogramming the LESC.
3. If the motor is still turning after checking the above the unit may be damaged - Please contact Roundhouse Engineering Co. Ltd.

**Throttle stutters under acceleration.**

1. The receiver or aerial may be too close to the main power wires (see installation section).
2. Poor connection to the battery or motor. Check all connections are making good contact.
3. Motor brushes may be worn - replace the motor or brushes if possible.
4. Excessive current is being drawn by the motor - use a less powerful motor.

**The speed controller keeps cutting out.**

1. The motor is too powerful for this controller - use a milder motor (observe the stated motor limit).
2. The LESC is getting too hot - try to position the LESC so as to get more airflow across it.
3. Possible internal damage to the LESC - contact Roundhouse Engineering Co. Ltd.

**Motor runs backwards.**

1. The motor is wired backwards - check your wiring.

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