

# USER MANUAL

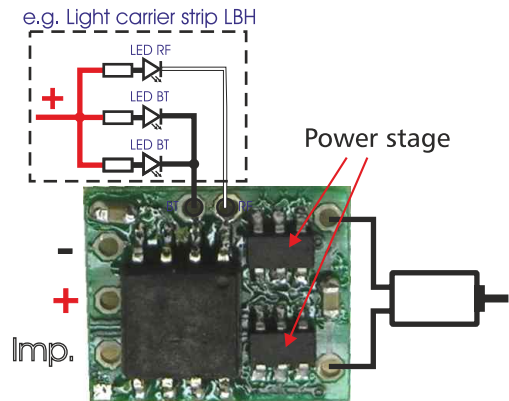
## ER600L SPEED CONTROLLER

Order No.: 00307

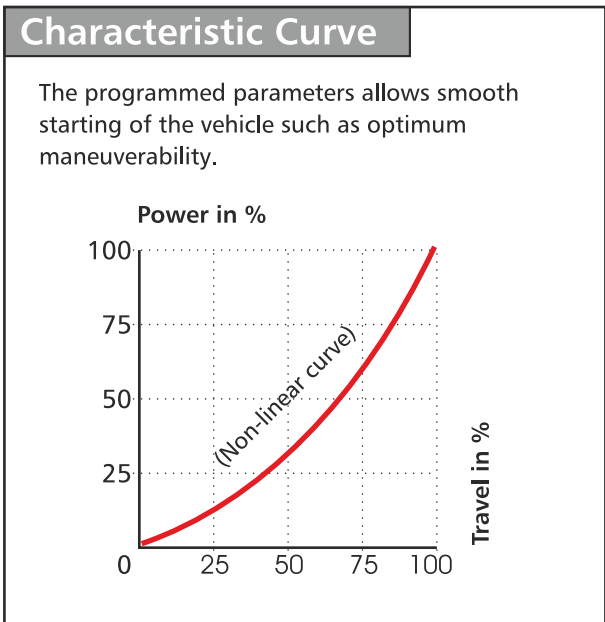
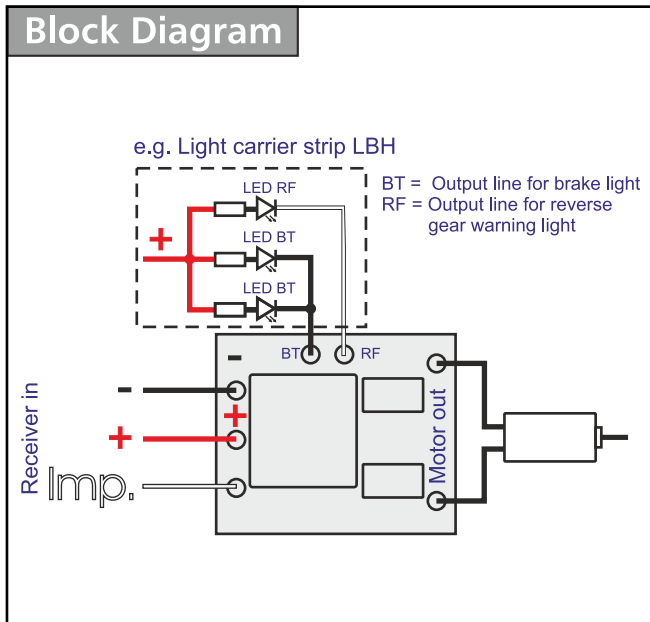
Motor Controller with Brake and Reverse Gear Warning Light Output Lines

Technical Data	ER600L
Supply Voltage [V]	2.7 - 5.5
Max. continuous motor current [mA]	1900 *
Max. peak current [A]	8 *
Mass without leads [gm]	0,37
Dimensions [mm] (length x width x height)	12 x 10 x 2,5
Brake light output	yes
Reverse warning light output	yes
Automatic zeroing	yes

\* Depending on the total load, the power stage may require heat sinks/cooling.



Dimensions:  
12 x 10 x 2.5 mm



### Safety checks

Prior to using the ER600L for the first time, perform the following safety checks in order to prevent damage to the controller:

- Verify supply voltage polarity
- Verify that there is no short circuit on the output lines.

Please review the trouble-shooting guidelines on our website: [www.1zu87modellbau.de](http://www.1zu87modellbau.de) if you encounter any trouble or malfunction. Our guidelines include hints on how to suppress interference.

Motor Controller with Brake and Reverse Gear Warning Light Output Lines

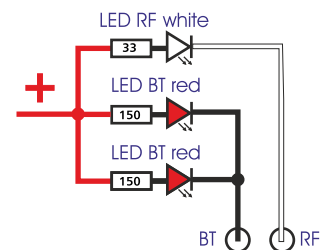
### ER600L Operation and Remarks

This motor controller integrates the latest features in the smallest package possible. Due to its maximal load current of 1900 mA and its peak pulse current of 8 A, the ER600L is not only suitable for 1:87 scale models, but also for significantly larger ones, such as 1:32 scale models. Preprogrammed characteristic curves guarantee that DC motors can be comfortably operated under a wide variety of conditions.

The ER600L comes equipped with **separate output lines for controlling brake and reverse warning lights**. When motor power is abruptly reduced, the brake light is automatically activated. The reverse warning light is lit whenever the vehicle is in reverse gear. Each light output can sink 40 mA. Suggested LED colors and current limiting resistor values are summarized in the following table:

Voltage Range 3.6-4.8V		
Function	Brake light	Reverse warning light
LED color	red	white
Current limiting resistor	150 Ohm	33 Ohm

BT = brake light  
RF = reverse warning light



### Turning Transmitter and Receiver ON

The transmitter needs to be turned on first, prior to turning on the receiver. Automatic zeroing requires that the joysticks are not moved until the LEDs are no longer lit (approx. 3 secs).