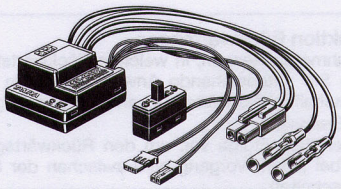
ITEM 45029

TEU-101BK

TAMIYA ELECTRONIC SPEED CONTROLLER



TAMIYA

TEU-101BK is a forward / reverse running electronic speed controller featuring a high frequency wave drive system. Read this instruction manual carefully before operation. For safety pre-cautions, always follow the instructions provided. Improper operation may result in a serious accident.

★Never use electronic parts that prevent current flow, such as schottky diodes. They cause counter current when car is in reverse damaging the electronic speed controller. Remove any such parts if already installed.

★Disconnect motor cables during set-up.

Tamiya TEU-101BK (forward / reverse)

★Compatible receiver : TAMIYA, KO, FUTABA, JR, SANWA (with Z connector)

●Control system : High frequency wave drive system

●Max. continuous current (FET spec) : Forward 60A, Reverse 60A

●Power supply : 7.2V (with 6 cells)

●Compatible motor : Electric motor for R/C cars (Sport-Tuned Motor)

●Driving frequency : 1kHz

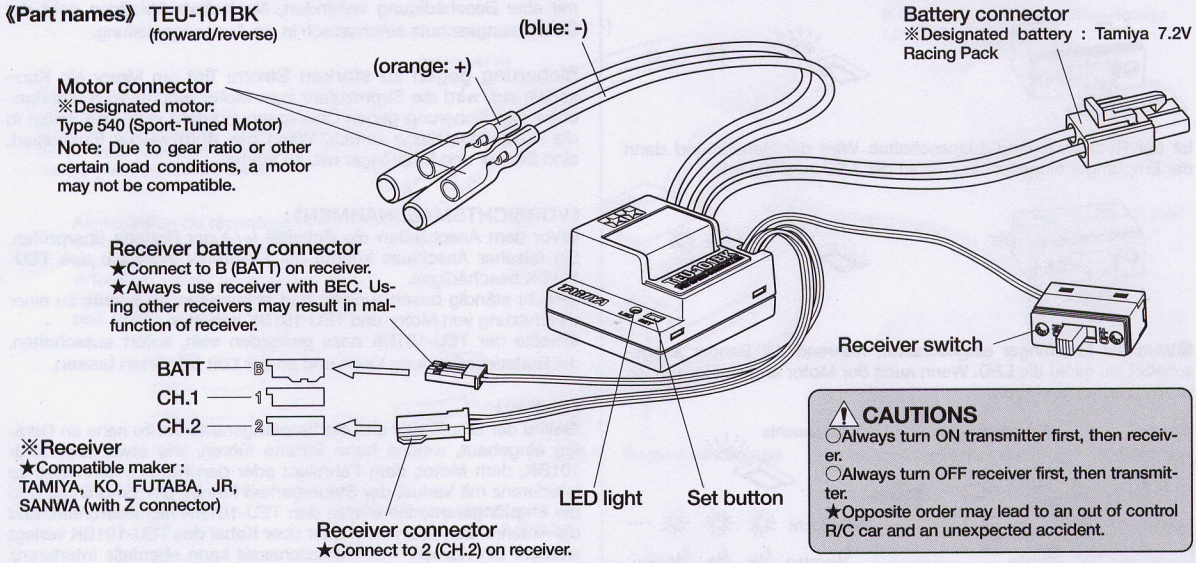
●Output voltage for receiver : 7.2V

●Dimensions : 40.7 x 36.8 x 22.4mm (except projections)

●Weight : 54g

※Specifications are subject to change without notice.

《Part names》 TEU-101BK (forward/reverse)



⚠ CAUTIONS

○Always turn ON transmitter first, then receiver.

○Always turn OFF receiver first, then transmitter.

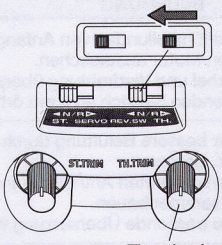
★Opposite order may lead to an out of control R/C car and an unexpected accident.

《Set-up》

★When programming settings, disconnect motor cables.

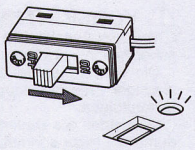
① Securely connect wiring according to above illustration (except motor). Turn on transmitter first, position throttle trim to neutral and reverse switch to normal.

★If your transmitter is capable of programmed settings such as ABS or acceleration function, turn off all settings.



Throttle trim

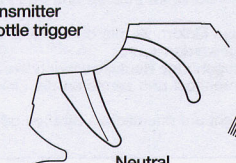
② Turn on receiver. When installing for the first time, LED light will flash red once.



③ Push set button once with throttle trigger in neutral.

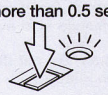
LED flashes once.

※Transmitter throttle trigger



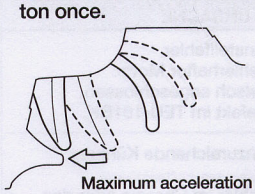
Neutral

Push set button (for more than 0.5 sec.).



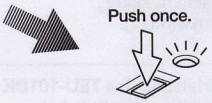
LED flashes.

④ Pull throttle trigger to maximum acceleration and push set button once.



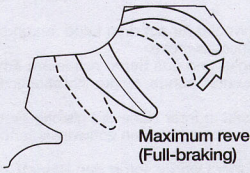
Maximum acceleration

Push once.



LED changes to a double flash.

⑤ Push throttle trigger to maximum reversing and push set button once.



Maximum reversing (Full-braking)

Push once.

LED turns off.

⑥ Setting completed. (Standard settings)

★Throttle positioning must be set in this sequence and can not be set individually.

★If power is turned off before completion, the new settings will be lost and old throttle positioning will remain.

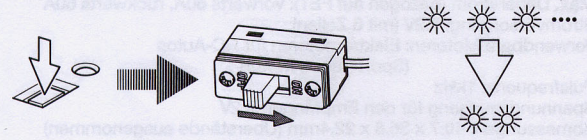
★Until you correctly complete the step, you can not progress to the next one.

★You must set new throttle positioning when changing transmitters.

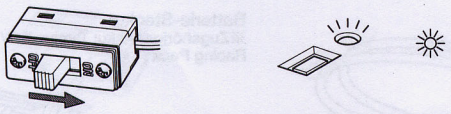
Turning reverse function off

★Allows you to enter races forbidding reverse running. Follow the instructions below to turn reverse function off (pushing throttle trigger will activate brakes only).
★Follow same sequence to turn reverse function on (switches between on / off setting each time done).

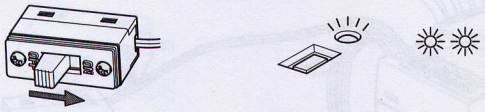
Turn on transmitter. Turn on receiver while holding down the set button, then release button immediately (within 3 sec.). Flashing LED quickly flashes red twice and turns off (only flashes once when turning reverse function on). Setting completed.



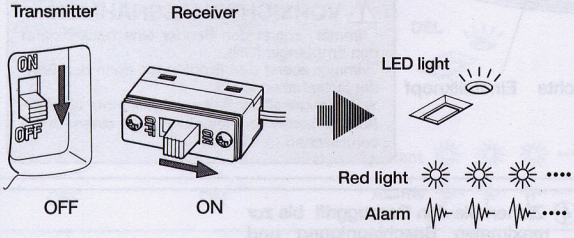
★Checking if reverse function is on or off.
When reverse function is on: LED will flash red once when turning on transmitter and then receiver.



When reverse function is off: LED will flash red twice when turning on transmitter and then receiver.

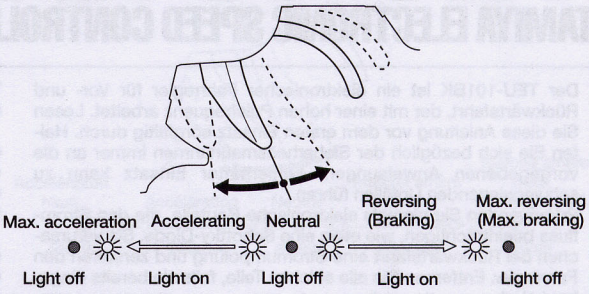


●If receiver is turned on while transmitter is off, LED will flash. If motor is connected an alarm will also sound.



Throttle operation and LED light

●If settings are correct, LED will turn off when trigger is in neutral, turn on when accelerating / reversing, and turn off when at maximum acceleration / reversing.



Tamiya TEU-101BK is equipped with two safety functions.

Heat protection mechanism : If TEU-101BK starts to overheat due to long use, power to motor is reduced, causing car to slow. If further overheating occurs, power to motor is stopped, preventing any damage. After cooling, the heat protection mechanism will automatically reset.

Overcurrent protection mechanism : When motor short circuits, power to motor is automatically stopped. Overcurrent protection mechanism will not reset automatically. After fixing the car, restart the transmitter and receiver.

《CAUTION》

●Check polarity (+/-) of battery before connecting. Incorrect connection could damage internal electronics of TEU-101BK.
●Do not repeatedly accelerate and reverse as may cause motor and TEU-101BK to overheat.
●If TEU-101BK gets wet, immediately turn off, disconnect battery and allow to air dry.

《Installation》

●Putting receiver and receiver antenna near devices circulating large amounts of electrical current, such as TEU-101BK, motor, running battery or cables, will lead to interference causing loss of control. Receiver and receiver antenna must not touch TEU-101BK, and antenna must not cross over with cables from TEU-101BK. Carbon or metal chassis may also transfer interference.

《Trouble shooting》 ★Before sending your R/C model for repair, check it again using the chart below.

PROBLEM	CAUSE	SOLUTION
Motor does not work. No brake control.	★Setting error. ★Faulty motor. ★Connection error. ★Faulty TEU-101BK.	●Re-program settings from the beginning. ●Replace motor. ●Inspect cables and wiring. ●Contact your local dealer/agent.
Overheating of TEU-101BK. (Heat protector is active)	★Insufficient cooling. ★Faulty chassis driving gear. ★Improper gear ratio.	●Create better ventilation by making holes on body shell, etc. ●Inspect rotating area of chassis. Reassemble if required. ●Set proper gear ratio.

⚠ WARNING

●This product is an electronic speed controller for land based R/C models. Do not use for any other purpose.
●Securely connect electronic speed controller and servo to receiver. Cables can become disconnected due to strong vibrations during use, resulting in loss of control.
●Make sure no one else in the area is using the same frequency as you. Frequency interference can cause serious accidents.
●Stop operation if lightening or thunder occurs, as lightening may strike the transmitter antenna.
●Do not operate your R/C model in puddles or in rain. Interior electronics may get wet resulting in loss of control.
●To prevent fire or an out of control car, always remove or disconnect batteries after use.
●Keep transmitter, battery and R/C model away from small children to prevent possibility of personal injury, burns, intoxication, suffocation etc.

⚠ CAUTIONS

○Check polarity (+/-) of motor and battery before connecting. Incorrect connection could damage internal electronics.
○Using a low turn motor at low frequency may damage electronic speed controller and motor.
○Avoid continuous operation. Battery connector may melt or become deformed by heat. To prevent burns, do not touch motor or electronic speed controller straight after use.
○Short circuits to cables will damage internal electronics and chassis.
○This product contains precision electronic parts that may be damaged by high impact, water or humidity.
○Do not disassemble or modify. Use designated parts only. Foreign parts may not be compatible causing damage to internal electronics.
○Do not operate R/C model on the street or in a crowded area.

★In case of a fault or malfunction, consult your local Tamiya agent / dealer.

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45029 TEU-101BK FET Speed Controller (1054354)