

ThinkTank Booster KKrad

Instruction manual

Please read carefully!

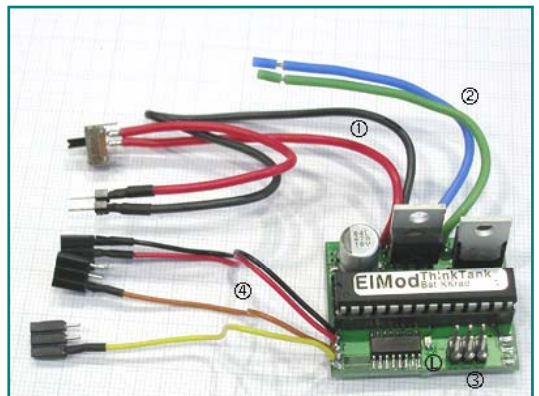
Functions

- Drive and function board for the Kettenkraftrad
- Unique simulation of mass inertia:
 - true to original acceleration and braking behaviour
 - true to scale maximum speed
 - the acceleration decreases with increasing speed
 - full proportional braking
 - motor brake when releasing the throttle stick
 - increasing braking force with deflection 10% and 90%
 - emergency stop when lever full deflected in opposite direction
 - short pause after direction change simulates the change of gear
- Lights true to original
 - front / rear light
 - Camouflage lighting (Notek / convoy vehicle light)
 - Brake light
- Connection to a 2-channel proportional receiver with BEC (a further channel is necessary for a steering servo)
- Overload protection for the drive engine (up to 5A)
- Small dimensions (ca. 37mm x 31mm / 1,45" x 1,22")



Connectors and control elements

- 1 Main-Battery (6V or 7.2V rechargeable battery)
- 2 Motor
- 3 Light connectors
 - (L) Main light
 - (N) Camouflage light (Notek)
 - (B) Brake light
- 4 Receiver connectors
 - (BEC) red/black: power for the receiver
 - (CH1) brown: channel 1 – drive motor
 - (CH3) yellow: channel 3 – light control
- L Status LED



Assembly and connection

Faulty wiring may cause permanent damage to the electronics!

- Connect the black wire of the power supply cable with the negative pole "-" of the battery and the red wire to plus pole "+" on the power switch.
- Connect the drive motor to the motor wires. If the vehicle drives in the wrong direction after the installation, swap the lines.

It is essential that the motor is interference suppressed. See the appropriate chapter for details.

- Connect the receiver to the BEC and the receiver cables.
- Optionally, connect the vehicle's lighting to the appropriate connectors on the PCB. Up to four LEDs can be connected directly on each pad. The camouflage light and the brake light don't require dropping resistors.
- Connect the second channel of the receiver to the steering servo.

Shorten all cables as much as possible! The wires to the receiver and the antenna must be laid as faraway as possible from the motor and power supply lines.

Initialising

- Connect a fresh battery and switch on the remote control and the vehicle.
- Make sure that all connections are well fixed and that no conductive parts can touch each other.
- The status LED blinks 1-2 times and remains on.
- The ThinkTank KKRad is operational now.

Operation state LEDs

LED on	operating
blinking	No valid, or no signal from receiver*
blinking fast	Stick moved

*A fast-blinking power LED means that there is no connection to the sender or that the transmission path between sender and receiver is disrupted. Please check the wiring and the operational state of the RC radio and receiver. If necessary check the operability of the RC equipment with a servo.

Light functions

The third channel controls the light functions. When activated (the switch of channel 3 switched on and off again) the following light states are proceeded: main light → camouflage light → light off.

Interference suppression

It is essential for reliable functionality and good operating range that all motors are suppressed correctly. For this purpose three condensators have to be soldered to the motor connections:

- 47nF ceramic condensator to each connection and the case of the motor (blue parts on the picture).
- 100nF ceramic condensator between the motor connections (yellow part on the picture).

The condensators must be attached as close to the soldering points as possible!

Trouble shooting

To achieve optimal functionality of the electronics, check the following:

- Is the wiring OK?
- Are all batteries fully charged?
- Are all wires as short as possible?
- Is the motor correctly suppressed?
- Is the antenna laid correctly?
- Are the mechanics smooth-running?

Is a high quality and disturbance proved receiver installed?

Please visit our website www.el-mod.de and take a look on the FAQ for further details.

Nicht geeignet für Kinder unter 14 Jahren.

Not suitable for Children under 14 years.

Ne convient pas pour des enfants de moins de 14 ans.

Niet geschikt voor kinderen onder de 14 jaar.



EIMod Dipl.-Inf.(FH) Thomas Kusch und Jürgen K. Huber GbR
Millotstraße 15/1, D-72622 Nürtingen <http://www.el-mod.de> info@el-mod.de

Hergestellt im Auftrag von:

XION

PC-Quadrat GmbH · Äußere Bayreuther Str. 57 · 90409 Nürnberg · Germany
Telefon: +49 911 995 14-0 · Fax: +49 911 995 14-66 · E-mail: kontakt@xion.de

Tipps zum Einbau

