



ThinkTank Tank Module ECO

Instructions for assembly and handling

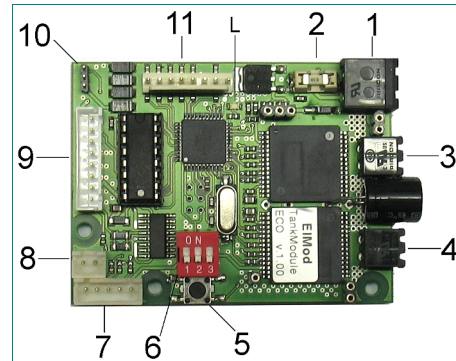
Please read this document carefully!

Product contents

- ThinkTank Tank Module ECO PCB
- ready to use power supply cable set
- motor connectors
- proportional receiver cable set

Overview of connectors

- 1 Power supply
- 2 Fuse for turret elements
- 3 Connector for left chain motor
- 4 Connector for right chain motor
- 5 Setup mode push button
- 6 DIP-switches for selecting the tank profile
- 7 Connector for HengLong muzzle flash, AsiaTam recoil unit and PC Configurator
- 8 Connector for HengLong muzzle flash
- 9 Connector for turret elements
- 10 Connector for Tamiya recoil unit
- 11 Connector for proportional receiver with power supply
- L Status LED



Assembly

HINT: the function of all connectors is printed on the back side of the PCB!

Power supply

Solder the loose ends of the power supply cable to a battery connector that fits to your battery type. Use the included shrinking tube to insulate the soldered wires.

Warning! The use of the switch and fuse is mandatory! Fire hazard when disregarded!

Chain motors

Use the included plugs to connect the motors to the board. Keep the wires as short as possible.

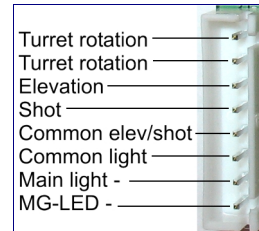
To check the correct wiring of the motors perform the following procedure:

- Jack the tank up, so that the chains can move freely.
- Attach a full charged battery to the power supply connector and switch the electronics on.
- Wait 3-4 seconds and press the pushbutton.
- The chains start to move. The wiring is set up correctly if both chains move forwards and the light chain runs faster than the left one. In other case, correct the wiring by swapping the adequate cables.
- Go ahead with the installation when the motors run in described manner.

Turret elements

Connect the white 8-pin turret plug to the corresponding connector.

- If using the genuine HengLong LED muzzle flash, attach it's cables (a 5-wire and a 2-wire cable) to the board.
- If using the genuine AsiaTam turret mechanics and high voltage muzzle flash, proceed as described in the manual of the units.
- If using the genuine Tamiya recoil unit, attach it to the corresponding connector on the board. The white cable faces the edge of the board.



Choosing the tank profile

The driving and function setup is determined by the position of the DIP switches. The Tank Module ECO offers seven fixed and one user defined profile

	German, WW2, plastic gearboxes		US, WW2, metal gearboxes
	German, WW2, metal gearboxes		T-34
	German, WW2, 3:1 reduced gearbox		easy-to-drive tank
	US, WW2, plastic gearboxes		user defined setup used by the ThinkTank Configurator and PC Configurator

Status LED

The onboard LED shows the current status of the module

on	Tank Module is in operational state
Short going out	Stick movement detected
Fast blinking	No valid signal from receiver*
Slow blinking	Faulty communication with another module

*no connection to the sender or the transmission path between sender and receiver is disturbed. Please check the wiring and the proper function of the RC radio and receiver. If necessary check the operability of the RC equipment with a servo.

RC receiver

The Tank Module ECO may be connected with four, five or six channel receiver. The currently active mode of operation is recognized automatically. Please consider that the radio must be setup correctly (all mixers must be deactivated, the servo deflection must be 100% and the trimming is centered)

If the channels five and/or six are used, they must be equipped either as a slider, knob or 3-way-switch (up-off-down). Otherwise only four-channel operation is possible (although mostly all functions are also available with only four channels). The wires of unused channels may not be connected to the receiver.

The receiver cable has to be attached to the receiver connector on the Tank Module. The wire color pin assignment is as follows:

Ch.	Control	4-ch. mode	4+1-ch. mode	5-ch. mode	5+1-ch. mode
1	rechter Knüppel	Acceleration	Acceleration	Acceleration	Acceleration
2		Steering	Steering	Steering	Steering
3	linker Knüppel	Turret, weapon and special functions	Turret, weapon and special functions	Turret and weapon control	Turret and weapon control
4		Not connected	Not connected	Ignition and light	Ignition and light
5	3-way switch	Not connected	User defined sounds	User defined sounds	User defined sounds
6	3-way switch	Not connected			

Depending on the receiver it may be necessary to adjust the channel order or swap its movement direction. Check the manual of your rc gear for details.

Turret, weapon and special functions using 4-channels mode

This mode is active if the blue wire of the receiver cable isn't attached to the receiver. The turret, weapon and special functions are controlled solely by the left stick of the radio.

Left stick (channels 3 and 4)	
↑ Lift the main gun (half deflection)	↑ Shot (maximum deflection)
↓ Lower the main gun (half deflection)	↓ Machine gun (maximum deflection)
→ Rotate turret right	↖ Main light on/off
← Rotate turret left	↗ Ignition (requires ThinkTank Blaster)

Turret, weapon and special functions using 5-channels mode

This mode is active if the blue wire of the receiver cable is attached to the receiver. The turret and weapon functions are controlled by the left stick of the radio, ignition and light is mapped to the 3-way switch connected to channel 5 of the radio.

Left stick (channels 3 and 4)	Switch (channel 5)
↑ Lift the main gun (half deflection)	↑ Shot (max. deflection)
↓ Lower the main gun (half deflection)	↓ Machine gun (max. defl.)
→ Rotate turret right	↑ Ignition (requires TTank Blaster)
← Rotate turret left	↓ Main light on/off

User defined sounds

If a ThinkTank Blaster is connected to the ThankModule ECO, up to two user defined sounds may be activated optionally by the user. To use this feature, the violet wire of the receiver cable has to be attached to the 6th channel of the receiver. The samples are activated by switching the corresponding control in the radio to upper most (user sample 1) or lower most (user sample 2) position. The playback may be aborted by moving the switch in the opposite direction.

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.

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