

Please read the following instructions very careful before installing your new EIMod module!

The ThinkTank TLS (Turret, Light & Sound) only works in connection with the ThinkTank Booster as it is supplied with data and power by the booster module.

Contents

- One PCB ThinkTank TLS,
- One grey EMNet cable (A),
- One lengthening cable white/red (B),
- One rear light cable black/red (C)

Functionality

Functionalities

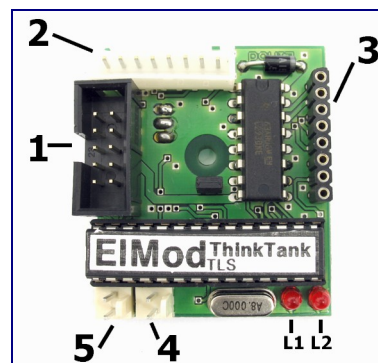
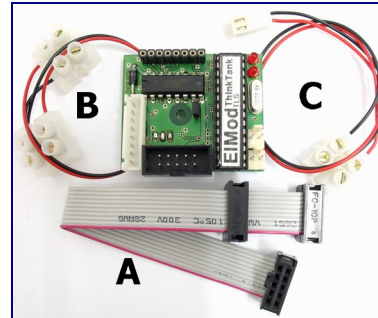
- + controls the turret, gun and light functions.
- + in scale turret rotating speed.
- + the canon can be moved up and down separately.
- + enhanced shot function
 - activates the original soft air gun
 - flashes an optional LED (muzzle flash)
- + controls the light
 - front light on/off
 - optional second light on/off (ex. rear light, Kolonnenfahrgeraet)
 - MG LED
- + EMNet-System: easy to connect with other EMNet-Modules.

Tools you need for the installation

- Small screwdriver and a small Philips screwdriver®
- Wire cutting pliers or appropriate knife or pair of scissors.

Overview of connectors

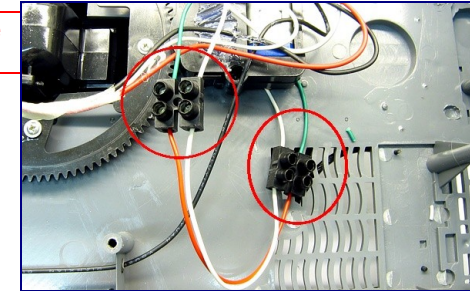
- 1 EMNet connector (Cable A)
- 2 Tower unit (from HengLong PCB)
- 3 Tower unit (from turret function group)
- 4 Output for optional light, ex. rear light (cable C)
- 5 Output for an optional muzzle flash
- L1 power LED
- L2 command LED



1. lengthening cable (white/red, cable B)

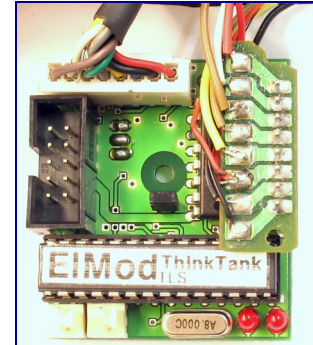
In case you want to install the PCB at another place than we envisioned, this step might be superfluous.

- Cut through the two-wire red and white cable or the green and white cable which leads away from the turret motor.
- Remove approx. 1/5" of the isolation at the ends of the cables.
- Connect the cable B to the ends as can be seen on the picture.
- Pay attention not to establish a crossed connection!

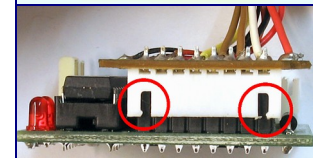


2. Connecting of the TLS Module

- Unplug the 8-pin connector to the turret group.
- Connect the two plugs to:
Connector 2 on the TLS with the female socket.
Connector 3 on the TLS with the male plug.



WARNING! THE MARKINGS MUST BE DIRECTED TO THE BORDER OF THE PCB (see picture) !!!



Pay attention on the right alignment as a wrong polarity can damage the module and the electronic of the tank!

3. Jumper

- Remove the Jumper from TLS if you don't intend to use a third party barell recoil unit. Otherwise see our website for further information.

4. EMNet-Cable grey (cable A)

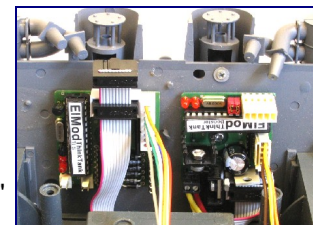
Use the EMNet cable to connect the ThinkTank Booster and the ThinkTank TLS at connection 1. It is protected against wrong polarity.

5. Fixing of the circuit boards

The circuit boards can be fixed in different ways depending on the model.

Heng Long Tiger: The circuit boards can be installed inside on the back board using the retaining screw of the silencer. Use the provided hole in the circuit board.

Heng Long Pershing: Here the circuit boards fit into the "side bags" (no more available in later tanks).



Initiation

- Make sure that all connections have been established correctly, that all connections are fixed and that no conductive parts can touch each other. The connections have to correspond to those on the pictures!
- Put in a fully charged accumulator and switch on the tank.
- The power LED should light.
- In Smoke & Sound - Tanks: Start the motor.
- Move the left lever of the remote control. The tank executes the command.

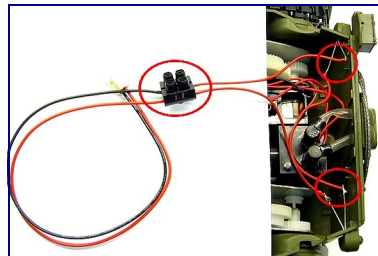
Operation state LEDs

Power-LED	on	module is operational
	blinking	module is searching the ThinkTank Booster
Command-LED	steering stick not in neutral position / command received from sender	used for recognition of operability and to control neutral position

Optional connections for light

Connection 4 for Heng Long Pershing / Walker Bulldog:

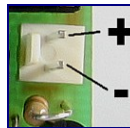
To connect the back lights use the included cable (cable C). Connect the (in driving direction) right (red) cable with the insulating screw joint to the black cable. The red cable on the left side has to be connected with the red cable of the insulating screw joint. Then plug the cable into connection 4.



Connection 4 for other models: You can provide your model with an additional light (for example for back or search light, Kolonnenfahrgeraet) which can be switched using the radio.

Connection 5: Connection 5 can be used to install the optional muzzle flash. Any directly connected LED creates a lightning when a shot is put into execution once in 9 seconds.

Current limits of connections 4 and 5: the current is limited to 70 mA. That is sufficient for one to four LEDs (normal luminosity, red, yellow, green) or for one to two LEDs (white, blue or ultra bright). Consequently no external resistors are necessary.



Controlling the TLS with RC equipment

Use the left stick to control the turret and light functions

↑ Lift cannon	↗ Shot and muzzle flash
↓ Lower cannon	↖ Not used
→ Turn turret right	↘ Front light
← Turn turret left	↙ Optional light (ex. rear light)

TLS and proportional control

To control your tank proportionally with your own remote control you can obtain the optional ThinkTank Prop set for commercially available radio controls.

**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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