

MA00206

BEST.NR.

50240 6T/7900KV
50250 7T/6900KV
50260 8T/5600KV

VECTOR MICRO 370
BRUSHLESS MODIFIED

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**BRUSHLESS
SENSORLESS
HANDWOUND
SINTERED MAGNET**

USER MANUAL

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1. ⚠️ WARNING NOTES

No toy. Not suitable for children under 14 years.

Keep the product out of the reach of children.

Pay close attention to the following points, as they can destroy the product and void your warranty. Non-observance of these points can lead to property damage, personal and severe injuries!

- Never leave the product unsupervised while it is switched on, in use or connected with a power source. If a defect occurs, it could set fire to the product or the surroundings.
- Avoid incorrect connections or connections with reversed polarity of the product.
- All wires and connections have to be well insulated. Short-circuits can possibly destroy the product.
- Never allow this product or other electronic components to come in contact with water, oil or fuels or other electroconductive liquids, as these could contain minerals, which are harmful for electronic circuits. If this happens, stop the use of your product immediately and let it dry carefully.
- Never cut off or modify the original plugs and original wires.
- Never open the product and never solder on the PCB or other components.
- Avoid overtightening the motor screws. Damaged threads are not covered under warranty!
- Avoid overloading the motor due to wrong or too long gear ratios.
- **Never apply full throttle if the motor is not installed. Due to the extremely high RPMs without load, the motor can get damaged.**
- Always wire up all the parts of the equipment carefully. If any of the connections come loose as a result of vibration, you could lose control over your model.
- Avoid soldering longer than 5 seconds per soldering joint when replacing the power wires to prevent possible damage to the product due to overheating of the components. Use a high power soldering station with at least 60W for soldering.

The manufacturer can not be held responsible for damages, which are a result of non-observance of the warning notes and security advices.

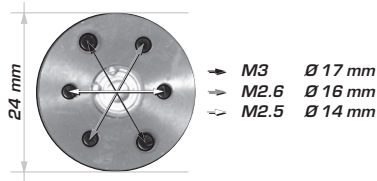
2. MULTI MOUNTING SYSTEM

The unique multi-mounting-system allows simple installation into almost all micro models. But be careful to use correct screw size (diameter and length) in order not to damage the threads or internals of the motor.

Make sure you use the correct screw/thread size since there are M2.5, M2.6 and M3 threads in the mounting face in order to suit all cars!

Caution: Be extra careful for correct screw length since oversized screws will damage the windings! The maximum length entering the motor must not be longer than 4.0mm.

As an example, if your motor mount is 3mm thick, the maximum screw length you can use is 3.0+4.0mm = 7.0mm.



3. INSTALLATION / CONNECTIONS

The LRP VECTOR Micro 370 is a sensorless motor design and can only be used with speed-controls capable to operate in sensorless mode such as the LRP Nexxt 4X (#86500).

POWER WIRES:

The LRP VECTOR Micro 370 comes pre-wired and equipped with high-quality G3.5 gold connectors. We recommended not to solder on the power wires of the motor and to leave the connectors in place at all times.

Caution: Avoid soldering longer than 5sec per soldering joint when replacing the power wires to prevent possible damage to the product due to overheating of the windings. Use a high power soldering station for soldering. Talk to your local hobbyshop if you are concerned about replacing the wires yourself.

WIRING SEQUENCE

There is no correct wiring sequence when using sensorless motors and speed-controls. You can connect them in either way, in case your model runs in reverse mode you should simply swap two of the power-wires and the rotation of the motor will be opposite to before!

- Install the motor in the model.
- **Caution:** Check for correct screw/thread and check for the maximum screw length!
- Connect the power wires of the speed-control to the motor.
- Finally check all the connections before using the motor.

REPAIR PROCEDURES / LIMITED WARRANTY

All products from LRP electronic GmbH (hereinafter called "LRP") are manufactured according to the highest quality standards. LRP guarantees this product to be free from defects in materials or workmanship for 90 days (non-european countries only) from the original date of purchase verified by sales receipt. This limited warranty doesn't cover defects, which are a result of misuse, improper maintenance, outside interference or mechanical damage. „This applies among other things on:

- Overload (for example: unsoldered Star-ring)
- Excessive amounts of dirt inside the motor
- Rotor damage due to debris inside motor
- Mechanical damage due to external causes
- Rust"

To eliminate all other possibilities or improper handling, first check all other components in your model and the trouble shooting guide, if available, before you send in this product for repair. If products are sent in for repair, which do operate perfectly, we have to charge a service fee according to our pricelist.

With sending in this product, the customer has to advise LRP if the product should be repaired in either case. If there is neither a warranty nor guarantee claim, the inspection of the product and the repairs, if necessary, in either case will be charged with a fee at the customers expense according to our price list. A proof of purchase including date of purchase needs to be included. Otherwise, no warranty can be granted. For quick repair- and return service, add your address and

Dear Customer,

thank you for your trust in this LRP product. By purchasing a LRP VECTOR Micro 370 motor, you have chosen a high-performance micro brushless motor. LRP's R&D team took all the experience and testing results from the last years of racing and put it into the new VECTOR Micro 370 motor design!

Please read the following instructions carefully before you start using your LRP VECTOR Micro 370 motor. This user guide contains important notes for the installation, the safety, the use and the maintenance of this product. Thus protecting yourself and avoid damages of the product.

Proceed according to the user guide in order to understand your LRP VECTOR Micro 370 motor better. Please take your time as you will have much more joy with your product if you know it exactly.

This user manual shall be kept in a safe place. If another customer is using this product, this manual has to be handed out together with it.

4. SPECIFICATION

VECTOR Micro 370	6T 7900	7T 6900	8T 5600
Order No.	50240	50250	50260
RPM ¹	56'880	49'680	40'320
Specific RPM per volt [kV]	7900	6900	5600
Number of Turns	6	7	8
Voltage input [Volt]	4.8 - 7.4		
Weight [g]	69.0		
Housing Diameter [mm]	24.0		
Housing Length [mm]	34.0		
Shaft Diameter [mm]	2.3		
Rotor	Sintered		
Winding Style	Delta, Slotless		
Recommended speed-control	LRP Nexxt 4X (#86500)		

¹Measured at 7.2V. Specifications subject to change without notice.

5. GEARING

Never overgear your LRP VECTOR Micro 370 motor. A wrong gear-ratio causes much more heating and may result in a temperature shutdown of your speed-control or damage to the motor under extreme conditions.

Since 1:16 and 1:18 cars do have a very large variety of tire sizes, battery types, track sizes, etc it is impossible to give gearing or pinion advise for each model.

Therefore we recommend you start with the smallest possible pinion for your model, since this is a high-rpm type motor, and increase pinion size from there until performance suits your track and car well.

Always keep an eye on motor temperature as it should not rise above 90°C (190°F), if temperature is higher then use a smaller pinion.

6. DISASSEMBLY

The LRP VECTOR Micro 370 motor is almost fully maintenance free, only the ball bearings need to be looked after from time to time. Check the ball bearings and oil them from time to time, you can also remove or replace both ball bearings by removing the E-clips on both ends.

Other than for the ball-bearings, the motor can not (and does not need) be disassembled any further!

7. SPARE- + OPTIONAL PARTS

Pinions:

#112416	11T Pinion for Shark (2.3mm shaft)
#112493	12T Pinion for Shark (2.3mm shaft)
#112195	13T Pinion for Shark (2.3mm shaft)
#112494	14T Pinion for Shark (2.3mm shaft)
#112495	15T Pinion for Shark (2.3mm shaft)
#112124	16T Pinion for Shark (2.3mm shaft)
#112496	17T Pinion for Shark (2.3mm shaft)
#112497	18T Pinion for Shark (2.3mm shaft)
#112166	19T Pinion for Shark (2.3mm shaft)



The crossed-out wheeled bin means that within the European Union the product must be taken to separate collection at the product end-of-life. Do not dispose of these products as unsorted municipal waste.

detailed description of the malfunction.

If LRP no longer manufactures a returned defective product and we are unable to service it, we shall provide you with a product that has at least the same value from one of the successor series.

The specifications like weight, size and others should be seen as guide values. Due to ongoing technical improvements, which are done in the interest of the product, LRP does not take any responsibility for the accuracy of these specs.

LRP-Distributor-Service:

- Package your product carefully and include sales receipt and detailed description of malfunction.
- Send parcel to your national LRP distributor.
- Distributor repairs or exchanges the product.
- Shipment back to you usually by COD (cash on delivery), but this is subject to your national LRP distributor's general policy.