

MICRO ROCK CRAWLER

1/24-SCALE ELECTRIC ROCK CRAWLER



Operations Guide

Introduction

Thank you for choosing the Micro Rock Crawler from Losi. This guide contains the basic instructions for operating your new Micro Rock Crawler. While the Micro Rock Crawler is great for first-time RC drivers, it does require some mechanical experience. It is critical that you read all of the instructions and all accompanying printed material in order to operate your model correctly and avoid unnecessary damage. Please take a moment to look them over before running your model.

CONNECT - REGISTER - WIN

Register your product online so we can notify you about the latest option parts, product updates, tech tips, service bulletins and more. Visit WWW.LOSI.COM and follow the Product Registration link to stay connected.

For registering your Losi Product you will be automatically entered for a chance to win the Losi Pick Your Prize Sweepstakes. The winner will be allowed to select a total prize package of \$1,000 (retail value) based on his/her preference.

Warning

Although the best materials and components are used, and due to the size of this model, using anything other than genuine Losi replacement and performance parts specifically designed for the Losi Micro Rock Crawler could cause damage.



RTR Getting Started



1. Your Losi Micro Rock Crawler includes 2 complete sets of batteries. The heavy-duty non-alkaline batteries are for the transmitter.



3. Plug the battery lead into the charger lead. The RED LED on the charger will light up and stay solid while charging. When the battery is fully charged the light will shut off (approximately 20 minutes). If the charger light only lights up for about a minute, the AA batteries inside the charger are low and should be replaced.



5. Plug in the battery lead into the speed controller lead and replace the body. Secure the body with the included body clips.



7. Once the transmitter has been turned on, turn on the Losi Micro Rock Crawler by sliding the switch to the "On" position (located at the rear of the chassis). If the wheels spin, adjust the "TH. Trim" knob located to the lower right of the steering wheel until they stop. To go forward pull the trigger back. If you should need to reverse, wait for the model to stop then push the trigger forward. When going forward the model should move in a straight line. If not, adjust the "ST. Trim" so that it tracks in a straight line without having to turn the steering wheel. After you are finished running, turn the Losi Micro Rock Crawler off FIRST by sliding the switch to the "Off" position. After the model has been turned off, turn off the transmitter.



Charger

2. Remove the battery cover by sliding it in the direction noted on the cover. Install (8) AA alkaline batteries into the bottom of the charger. Pay close attention to the correct direction of the positive (+) and negative (-) ends as marked. Reinstall the battery cover.



4. Remove the transmitter battery cover by sliding it in the direction noted on the cover. Install four (4) AA batteries into the battery holder. Pay close attention to the correct direction of the positive (+) and negative (-) ends as marked. Once all 4 batteries have been installed, reinstall the battery cover.



6. ALWAYS turn on the transmitter first by sliding the switch "ON". The small red and green lights above the switch should both light up. If not, please check for low or incorrectly installed batteries.



1. Your Losi Micro Rock Crawler includes a complete set of batteries for the portable charger.



Charger

2. Remove the battery cover by sliding it in the direction noted on the cover. Install (8) AA alkaline batteries into the bottom of the charger. Pay close attention to the correct direction of the positive (+) and negative(-) ends as marked. Reinstall the battery cover.



3. Plug the battery lead into the charger lead. The RED LED will light up and stay solid while charging. When the battery is fully charged the light will shut off (approximately 20 minutes). If the charger light only lights up for about a minute, the AA batteries inside the charger are low and should be replaced.



4. Plug in the battery lead into the speed controller lead and replace the body.



5. While pressing the white "Bind" button, slide the switch to the "On" position. When the green LED begins to flash rapidly release the bind button.



Spektrum DX2, DX3 and radios equipped with Spektrum modules are also compatible with Bind-N-Drive

6. Switch on the transmitter and you should notice a blinking LED on the back of the transmitter with a translucent cover (MTX-Pro or LSR-3000). NOTE: If using other Spektrum transmitters, please consult your instruction manual for help with this process.



7. Once the transmitter has been bound with the Micro Rock Crawler on, if the wheels spin, adjust the "TH. Trim" on your transmitter until they stop. To go forward pull the trigger back. If you should need to reverse, push the trigger forward. When going forward the model should move in a straight line. If not, adjust the "ST. Trim" so that it tracks in a straight line without having to turn the steering wheel. After you are finished running, turn the Losi Micro Rock Crawler off FIRST by sliding the switch to the "Off" position. After the model has been turned off, turn off the transmitter.

Safety Precautions

Age Recommendation: 14 years or over. This is not a toy. This product is not intended for use by children without direct adult supervision.

This is a sophisticated radio controlled model that must be operated with caution and common sense. Failure to operate your Micro Rock Crawler in a safe and responsible manner could result in damage to the model and property. The Micro Rock Crawler is not intended for use by children without direct adult supervision. Losi and Horizon Hobby shall not be liable for any loss or damages, whether direct, indirect, special, incidental, or consequential, arising from the use, misuse, or abuse of this product or any product required to operate it.

- This model is controlled by a radio signal subject to interference from many sources outside your control. This interference may cause momentary loss of control, so it is advisable to always keep some distance in all directions around your model as a safety margin to avoid collisions.
- Always operate your model in an open area away from cars, traffic and people.
- Avoid running your model in the street where damage can occur.
- Never run your Micro Rock Crawler with low transmitter batteries.
- Carefully follow the directions and warnings for this and any optional support equipment.
- Keep all chemicals, small parts and anything electrical out of the reach of children.

Tools and Items You Will Find Handy

- Soft bristle brush for cleaning
- 1.5mm Allen Wrench (LOSA99105)
- 2mm Allen Wrench (LOSA99106)
- .050-inch Allen Wrench (LOSA99100)
- Losi Micro Screwdriver - LOSB1602

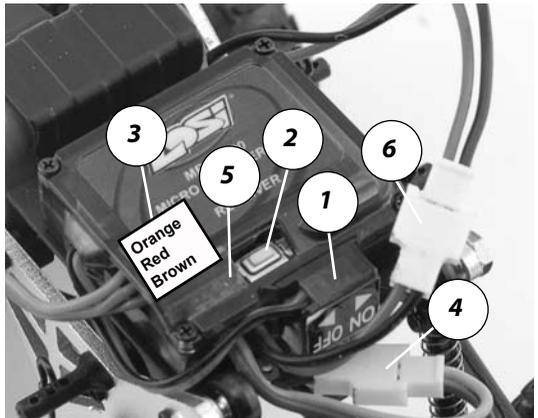
Note: Use only Losi tools or other high-quality tools. Use of inexpensive tools can cause damage to the small screws and parts used on this type of model.

The Radio System

The following is an overview of the various functions and adjustments found on the Micro Rock Crawler radio system. Since the Micro Rock Crawler operates on a radio signal you control, it is important for you to read and understand about all of these functions and adjustments before driving.

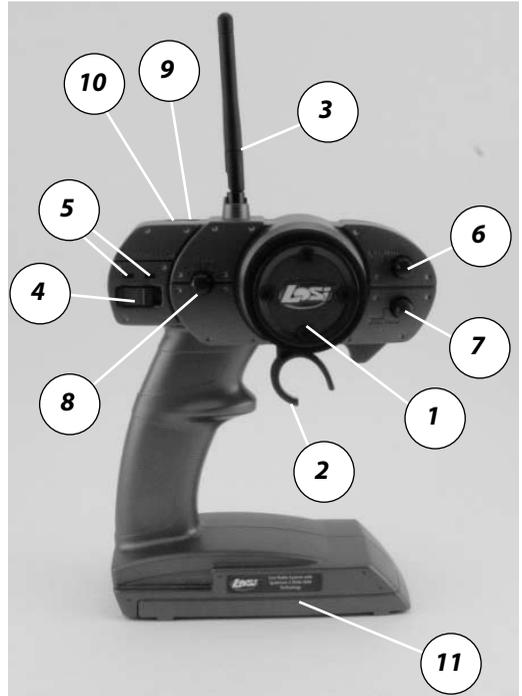
The ESC/Receiver

1. On/Off Switch: Powers the receiver and ESC.
2. Bind Button: Used to "bind" the receiver to the transmitter.
3. Steering Port: Where the steering servo(s) plugs in (note wire connection order).
4. Motor Lead: Connects to the wire leads from the motor.
5. Indicator Light: Shows that a frequency/channel is being received.
6. Battery Lead: Connects to the battery pack for power.



The Transmitter (RTR Version Only)

1. Steering Wheel: Controls direction (left/right) of the model.
2. Throttle Trigger: Controls speed and direction (forward/reverse) of the model.
3. Antenna: Transmits signal to the model.
4. On/Off Switch: Turns the power on for the transmitter operation.
5. Indicator Lights: Green (right) light indicates adequate battery power. Red (left) light indicates signal strength.
6. Steering Trim (ST. TRIM): Adjusts the "hands off" direction of the model.
7. Throttle Trim (TH. TRIM): Adjusts the motor speed to stop at neutral.
8. Steering Rate: Adjusts amount front wheels move when the steering wheel is turned left or right.
9. Steering Reverse Switch (ST. REV): Reverses the function of the steering when the wheel is turned left or right.
10. Throttle Reverse Switch (TH. REV): Reverses the function of the speed control when pulled back or pushed forward.
11. Bottom Cover: Covers and holds the batteries powering the transmitter.



Rebinding the Transmitter to the Receiver

If your Micro Rock Crawler becomes unbound, please refer to page 2 "Bind-N-Drive Getting Started" section of this manual.

Chassis Tuning

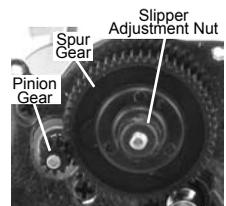
The following are simple adjustments and easily maintained settings to assure proper operation and performance. It is advised when making any adjustment that you do so in small increments and always check for other parts of the chassis that are affected.

Center Transmission Slipper

The Micro Rock Crawler is equipped with a slipper device that provides protection for the transmission. The slipper is primarily used to help absorb sudden impacts on the drivetrain and is set from the factory and sealed by the gear cover. If the slipper loosens (motor sounds like it moving but the vehicle doesn't move), remove the center transmission and cover per the exploded view. Adjustment is made by turning the adjustment nut clockwise (to the right) to reduce the slip.

Setting the Gear Mesh

The motor screws should be slightly loose. Slide the motor forward allowing the pinion gear to mesh with the spur gear. Snug (not tighten) the bottom motor screw and try rotating the spur back and forth. There should be a slight bit of movement before the motor is forced to turn over. If not, pull the top of the motor back slightly and recheck. If there is too much slop between the gears, push the top of the motor forward. When set properly, the wheels can be spun forward freely with very little noise. Make sure to tighten both motor screws and replace the gear cover before running.



Steering Rate

The included transmitter (RTR version only) is equipped with a steering rate control to the left of the steering wheel. This advanced feature, usually found only on competition-type radios, allows you to adjust the amount the front tires move when you turn the steering wheel. This is really helpful when you are on slick as well as high-traction surfaces. If your Micro Rock Crawler turns too sharply, try turning the steering rate down by rotating the knob counterclockwise (to the left). For sharper or additional steering, try turning the knob clockwise (to the right).

Less Rate



More Rate



Steering Trim

The Losi Micro Rock Crawler should go straight without turning the steering wheel. If not, on the included transmitter (RTR version only) rotate the ST.Trim knob located to the top right of the steering wheel in the direction needed for the truck to go straight.



If the vehicle moves towards the right, adjust the Steering trim to the left.



If the vehicle moves towards the left, adjust the Steering trim to the right.



Troubleshooting Guide

Doesn't operate: Battery not charged; receiver switch not "on"; transmitter not "on" or low battery.

Motor runs but wheels don't move: Pinion not meshing with spur gear; pinion spinning on motor shaft, slipper too loose or transmission gears stripped.

Steering doesn't work: Servo plug not in receiver; servo gears or motor damaged.

Won't turn in one direction: Servo gears damaged.

Motor doesn't run: Motor plugs loose; motor wire broken or ESC damaged.

Poor run time and/or sluggish acceleration: Batteries low; charger batteries low (not allowing for full charge); slipper slipping too much; motor worn out; driveline bound up or wheel and axle bushings worn.

Poor range/glitching: Transmitter batteries low; transmitter antenna loose; battery low in the Micro vehicle or loose plugs or wires.

Slipper nut will not hold adjustment: Slipper adjustment nut worn out or spur gear face worn down.

Battery does not charge: Charger batteries low.

SERVICE/REPAIR

If you have any problems other than those covered in the troubleshooting section of this operation guide, please call the Horizon Hobby Product Support line at 1-877-504-0233. They will be able to give you specific additional attention and instruct you as to what needs to be done.

Horizon Hobby Customer Service
4105 Fieldstone Rd.
Champaign, IL, 61822 USA
1-877-504-0233 www.horizonhobby.com
email: productsupport@horizonhobby.com

Warranty Period

Exclusive Warranty- Horizon Hobby, Inc., (Horizon) warranties that the Products purchased (the "Product") will be free from defects in materials and workmanship at the date of purchase by the Purchaser.

Limited Warranty

(a) This warranty is limited to the original Purchaser ("Purchaser") and is not transferable. REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. This warranty covers only those Products purchased from an authorized Horizon dealer. Third party transactions are not covered by this warranty. Proof of purchase is required for warranty claims. Further, Horizon reserves the right to change or modify this warranty without notice and disclaims all other warranties, express or implied.

(b) Limitations- HORIZON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCT. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.

(c) Purchaser Remedy- Horizon's sole obligation hereunder shall be that Horizon will, at its option, (i) repair or (ii) replace, any Product determined by Horizon to be defective. In the event of a defect, these are the Purchaser's exclusive remedies. Horizon reserves the right to inspect any and all equipment involved in a warranty claim. Repair or replacement decisions are at the sole discretion of Horizon. This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of or to any part of the Product. This warranty does not cover damage due to improper installation, operation, maintenance, or attempted repair by anyone other than Horizon. Return of any goods by Purchaser must be approved in writing by Horizon before shipment.

Damage Limits

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCT, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY. Further, in no event shall the liability of Horizon exceed the individual price of the Product on which liability is asserted. As Horizon has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability.

If you as the Purchaser or user are not prepared to accept the liability associated with the use of this Product, you are advised to return this Product immediately in new and unused condition to the place of purchase.

Law: These Terms are governed by Illinois law (without regard to conflict of law principals).

Safety Precautions

This is a sophisticated hobby Product and not a toy. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the Product or other property. This Product is not intended for use by children without direct adult supervision. The Product manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or injury.

Questions, Assistance, and Repairs

Your local hobby store and/or place of purchase cannot provide warranty support or repair. Once assembly, setup or use of the Product has been started, you must contact Horizon directly. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance. For questions or assistance, please direct your email to productsupport@horizonhobby.com, or call 877.504.0233 toll free to speak to a service technician.

Inspection or Repairs

If this Product needs to be inspected or repaired, please call for a Return Merchandise Authorization (RMA). Pack the Product securely using a shipping carton. Please note that original boxes may be included, but are not designed to withstand the rigors of shipping without additional protection. Ship via a carrier that provides tracking and insurance for lost or damaged parcels, as **Horizon is not responsible for merchandise until it arrives and is accepted at our facility**. A Service Repair Request is available at www.horizonhobby.com on the "Support" tab. If you do not have internet access, please include a letter with your complete name, street address, email address and phone number where you can be reached during business days, your RMA number, a list of the included items, method of payment for any non-warranty expenses and a brief summary of the problem. Your original sales receipt must also be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

Warranty Inspection and Repairs

To receive warranty service, you must include your original sales receipt verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be repaired or replaced free of charge. Repair or replacement decisions are at the sole discretion of Horizon Hobby.

Non-Warranty Repairs

Should your repair not be covered by warranty the repair will be completed and payment will be required without notification or estimate of the expense unless the expense exceeds 50% of the retail purchase cost. By submitting the item for repair you are agreeing to payment of the repair without notification. Repair estimates are available upon request. You must include this request with your repair. Non-warranty repair estimates will be billed a minimum of ½ hour of labor. In addition you will be billed for return freight. Please advise us of your preferred method of payment. Horizon accepts money orders and cashiers checks, as well as Visa, MasterCard, American Express, and Discover cards. If you choose to pay by credit card, please include your credit card number and expiration date. Any repair left unpaid or unclaimed after 90 days will be considered abandoned and will be disposed of accordingly. **Please note: non-warranty repair is only available on electronics and model engines.**

Electronics and engines requiring inspection or repair should be shipped to the following address:

**Horizon Service Center
4105 Fieldstone Road
Champaign, Illinois 61822 USA**

All other Products requiring warranty inspection or repair should be shipped to the following address:

**Horizon Product Support
4105 Fieldstone Road
Champaign, Illinois 61822 USA**

Please call 877-504-0233 with any questions or concerns regarding this product or warranty.

United Kingdom

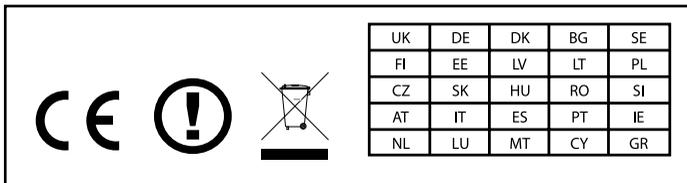
Electronics and engines requiring inspection or repair should be shipped to the following address:

**Horizon Hobby UK
Units 1-4 Ployters Rd
Staple Tye, Harlow
Essex
CM18 7NS
United Kingdom**

Please call +44 (0) 1279 641 097 or email us at sales@horizonhobby.co.uk with any questions or concerns regarding this product or warranty.

CE Compliance Information for the European Union Instructions for Disposal of WEEE by Users in the European Union

This product must not be disposed of with other waste. Instead, it is the user's responsibility to dispose of their waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or where you purchased the product.



Horizon Hobby, Inc.
4105 Fieldstone Road
Champaign, IL 61822 USA
Declaration of Conformity
(in accordance with ISO/IEC 17050-1)

No. HH20091018

Product(s): LOS Micro Rock Crawler
Item Number(s): LOSB0236

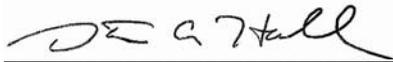
Equipment class: 2

The object of declaration described above is in conformity with the requirements of the specifications listed below, following the provisions of the European R&TTE directive 1999/5/EC:

EN 300-328 Technical requirements for Radio equipment.
EN 301 489-1, 301 489-17 General EMC requirements

Signed for and on behalf of:
Horizon Hobby, Inc.
Champaign, IL USA
Oct 18, 2009

Steven A. Hall
Vice President
International Operations and Risk Management
Horizon Hobby, Inc.



Horizon Hobby, Inc.
4105 Fieldstone Road
Champaign, IL 61822 USA
Declaration of Conformity
(in accordance with ISO/IEC 17050-1)

No. HH20091018

Product(s): LOS Micro Rock Crawler Bind-N-Drive
Item Number(s): LOSB0236BD

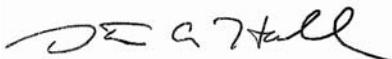
Equipment class: 1

The object of declaration described above is in conformity with the requirements of the specifications listed below, following the provisions of the European R&TTE directive 1999/5/EC:

EN 301 489-1, 301 489-17 General EMC requirements

Signed for and on behalf of:
Horizon Hobby, Inc.
Champaign, IL USA
September 22, 2009

Steven A. Hall
Vice President
International Operations and Risk Management
Horizon Hobby, Inc.



MICRO ROCK CRAWLER

1/24-SCALE ELECTRIC ROCK CRAWLER



WWW.LOSI.COM

Horizon Hobby, Inc.
4105 Fieldstone Road
Champaign, IL 61822
USA