



MICRO 4X4

1/24-SCALE ELECTRIC RTR 4X4 SCALE TRAIL TREKKER™

Operation Manual



competitionX
A WEB SITE FOR THE SERIOUS RACER

Not responsible for errors.
Losi, a Division of Horizon Hobby, Inc.
Before operating this vehicle, please read all printed materials thoroughly.

Notice

All instructions, warranties and other collateral documents are subject to change at the sole discretion of Horizon Hobby, Inc. For up-to-date product literature, visit <http://www.horizonhobby.com> and click on the support tab for this product.

Meaning of Special Language

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product:

NOTICE: Procedures, which if not properly followed, create a possibility of physical property damage AND a little or no possibility of injury.

CAUTION: Procedures, which if not properly followed, create the probability of physical property damage AND a possibility of serious injury.

WARNING: Procedures, which if not properly followed, create the probability of property damage, collateral damage, and serious injury OR create a high probability of superficial injury.



WARNING: Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property and cause serious injury.

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.

Do not attempt to disassemble, use with incompatible components or augment product in any way without the approval of Horizon Hobby, Inc. This 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 serious injury.

Introduction

Thank you for choosing the Micro 4x4 from Losi. This guide contains the basic instructions for operating your new Micro 4x4. While the Micro 4x4 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.

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Register your Losi Product Online

Register your vehicle now and be the first to find out about the latest option parts, product updates and more. Log on to WWW.LOSI.COM and follow the product registration link to stay connected.

Connect - Register - Win

Visit WWW.LOSI.COM/REGISTER 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 of \$1,000 (retail value) based on winner preference.

Losi/Horizon Support

If you have any questions concerning setup or operation of your 1/24 vehicle please contact the appropriate Horizon Product Support office (see warranty).

Kit Contents



- Vehicle
- Transmitter
- 4 AA batteries (for transmitter)
- Losi 4.8V 220mAh NiMH Pack
- Losi AC wall charger (110V)
- 4-way wrench

Warning

Although the best material 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 4x4 could cause damage.

Charging Warnings and Precautions

Failure to exercise caution while using this product and comply with the following warnings could result in product malfunction, electrical issues, excessive heat, FIRE, and ultimately injury and property damage.

- Read all safety precautions and literature prior to use of this product.
- Never leave the battery and charger unattended during use.
- Never attempt to dismantle the charger.
- Never attach your charger to both an AC and DC power source at the same time.
- Never allow minors to charge battery packs.
- Never impact charger or batteries.
- Never attempt to charge dead or damaged batteries.
- Never attempt to charge a battery pack containing different types of batteries.
- Never charge a battery if the cable has been pinched or shorted.
- Never allow batteries or battery packs to come into contact with moisture at any time.
- Never charge batteries in extremely hot or cold places (recommended between 50-80 degrees F) or place in direct sunlight.
- Always use only rechargeable batteries. This charger cannot charge batteries such as "heavy duty," "Alkaline battery," or "Mercury battery."
- Always disconnect the battery after charging, and let the charger cool between charges.
- Always inspect the battery before charging.
- Always terminate all processes and contact Horizon Hobby if the product malfunctions.
- Always keep batteries and charger away from any material that could be affected by heat (such as ceramic and tile), as they can get hot.
- Always monitor the area, use a fire alarm and have a fire extinguisher.
- Always connect the charge cable to the charger first, then connect the battery to avoid short circuit between the charge leads. Reverse the sequence when disconnecting.
- Always constantly monitor the temperature of the battery pack while charging.
- Always end the charging process if the charger or battery becomes hot to the touch or starts to change form (swell) during the charge process.

RTR Getting Started



Plug the AC charger into the proper wall receptacle (110v-US version). Plug the battery into the charger and let it charge for 1 hour for the first time. After running or when the Micro 4x4 slows noticeably, recharge the battery pack for 2-3 hours for a full charge.



Your Losi Micro 4x4 includes (4) AA, heavy-duty, non-alkaline batteries for the transmitter. Remove the transmitter battery cover by sliding the cover from left to right. Install the four (4) AA batteries into the battery holder. Pay close attention to the correct direction of the positive (+) and negative (-) ends as marked in the tray. Once all 4 batteries have been installed, reinstall the battery cover by sliding it on from right to left.



3. Plug in the battery lead into the speed controller lead and

replace the body. Secure the body with the included body clips.



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, check for low or incorrectly installed batteries.



With the transmitter on, turn on your vehicle by sliding the switch to the "On" position (located on the bottom 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 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 4x4 off FIRST by sliding the switch to the "OFF" position. After the model has been turned off, turn off the transmitter by sliding the switch to the "OFF" position.

Safety Precautions

Age Recommendation: Not for children under 14 years. This is not a toy.

This is a sophisticated radio controlled model that must be operated with caution and common sense. Failure to operate your Micro 4x4 in a safe and responsible manner could result in damage to the model and property. Horizon Hobby, Inc. 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 that is subject to interference from many sources outside your control. This interference can cause momentary loss of control so it is advisable to always keep a safety margin in all directions to avoid collisions.
- Always operate your model in an open area away from cars, traffic and people.
- Never run out into the street for any reason.
- Never run your Micro 4x4 with low transmitter batteries.
- Carefully follow the directions and warnings for this and any optional support equipment that you use.
- Keep all chemicals, small parts and anything electrical out of the reach of children.

Tools and Items You Will Find Handy

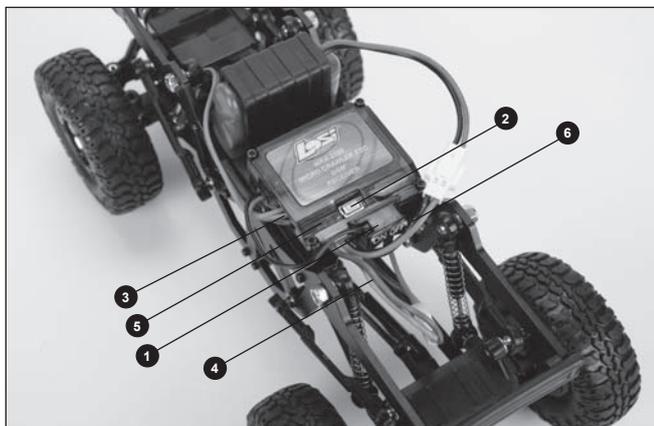
- Soft bristle brush for cleaning
- 1.5mm Allen Wrench (LOSA99105)
- 2mm Allen Wrench (LOSA99106)
- .050-inch Allen Wrench (LOSA99100)
- Losi Nutdriver: 4.5mm - LOSA99160
- Losi Micro Screwdriver (LOSB1602)

Note: Use only Losi 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 4x4 radio system. Since the Micro 4x4 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



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/off for the transmitter.
5. Indicator Lights: Green (right) light indicates adequate battery power. Red (left) indicates signal strength.
6. ST. Trim: Adjusts the "hands off" direction of the model.
7. 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 and right.

9. ST. REV: Reverses the function of the steering when the wheel is turned left or right.
10. TH. REV: Reverses the function of the speed control when pulled back or pushed forward.
11. Bottom Cover: Covers and holds the batteries that power the transmitter.

Chassis Tuning

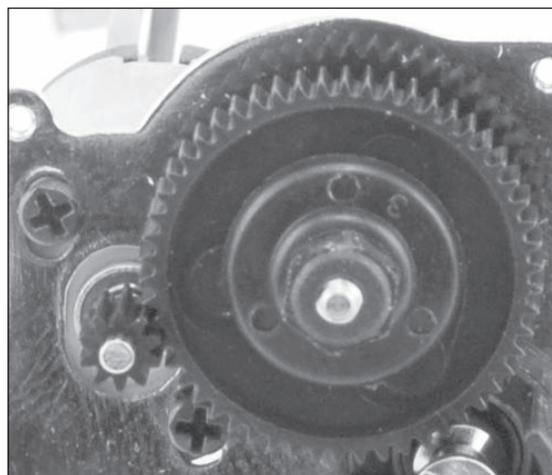
The following are simple adjustments and easily maintained settings to assure proper operation and performance. When making any adjustments, do so in small increments. Always check for other parts of the chassis that are affected.

Center Transmission Slipper

The Micro 4x4 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 its 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.

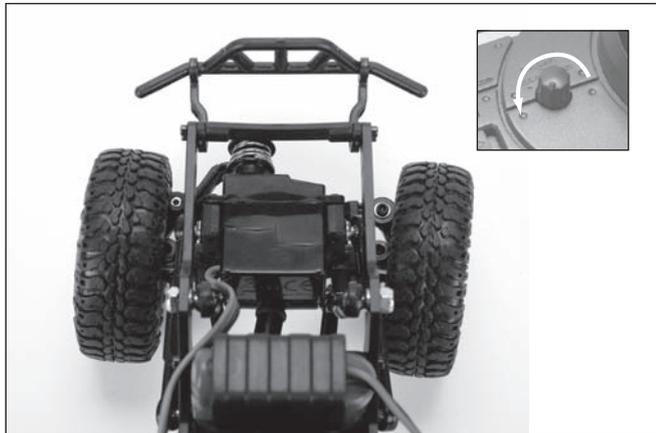
Setting the Gear Mesh

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 or 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 spur gear can be spun freely with very little noise. Make sure to tighten both motor screws and replace the gear cover before running.



Steering Rate

The included transmitter is equipped with a steering rate control to the left of the steering wheel. This advanced feature, usually found only on competition-style 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.



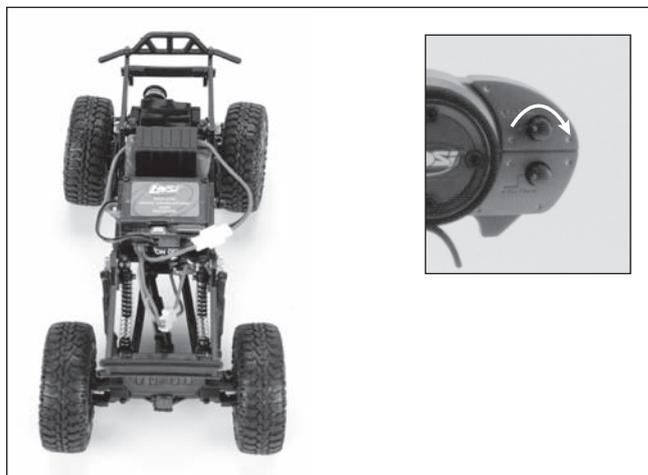
If your vehicle turns too sharply and/or spins out easily, try turning the steering rate down by rotating the knob counterclockwise (to the left).



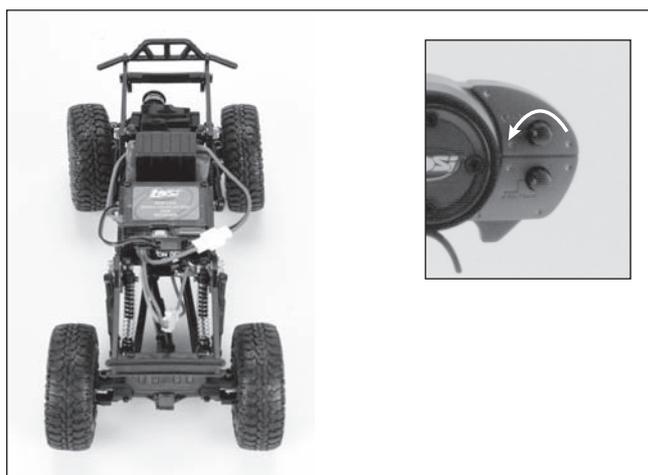
For sharper or additional steering, try turning the knob.

Steering Trim

The Losi Micro 4x4 should go in a straight line without turning the steering wheel. If not, on the included transmitter 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 left.





Troubleshooting Guide

Doesn't operate

- Battery not charged
- Receiver switch not "on"
- Transmitter not "on"
- Low battery

Motor runs but rear wheels don't move

- Pinion not meshing with spur gear
- Pinion spinning on motor shaft
- Slipper too loose
- Transmission gears stripped

Steering doesn't work

- Servo plug not in receiver
- Servo gears
- Servo motor damaged.

Motor doesn't run

- Motor plugs loose
- Motor wire broken
- ESC damaged

ESC gets hot

- Motor over-gearred
- Driveline bound up.

Poor run time and/or sluggish acceleration

- Batteries low (need longer charge)
- Slipper clutch slipping too much
- Motor worn out
- Driveline bound up
- Wheel and axle bushing worn.

Poor range/glitching

- Transmitter batteries low
- Transmitter antenna loose
- Vehicle battery low
- Loose plugs or wires

Slipper won't adjust

- Slipper adjustment nut worn out
- Spur gear face worn down.

Warranty and Repair Policy

WARRANTY PERIOD

Exclusive Warranty- Horizon Hobby, Inc., (Horizon) warrants 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

Horizon reserves the right to change or modify this warranty without notice and disclaims all other warranties, express or implied.

(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 all warranty claims.

(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 Product 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).

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Warranty Services

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 Product Support representative. You may also find information on our website at www.horizonhobby.com.

INSPECTION OR REPAIRS

If this Product needs to be inspected or repaired, please use the Horizon Online Repair Request submission process found on our website or call Horizon to obtain a Return Merchandise Authorization (RMA) number. 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. An Online Repair Request is available at www.horizonhobby.com <http://www.horizonhobby.com> under the Repairs tab. If you do not have internet access, please contact Horizon Product Support to obtain a RMA number along with instructions for submitting your product for repair. When calling Horizon, you will be asked to provide your complete name, street address, email address and phone number where you can be reached during business hours. When sending product into Horizon, please include your RMA number, a list of the included items, and a brief summary of the problem. A copy of your original sales receipt must be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

NOTICE: Do not ship batteries to Horizon. If you have any issue with a battery, please contact the appropriate Horizon Product Support office.

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.

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. Horizon accepts money orders and cashiers checks, as well as Visa, MasterCard, American Express, and Discover cards. By submitting any item to Horizon for inspection or repair, you are agreeing to Horizon's Terms and Conditions found on our website under the Repairs tab.

UNITED STATES

(Electronics and engines)

Horizon Service Center
4105 Fieldstone Rd
Champaign, Illinois
61822 USA
www.horizonhobby.com/repairs
877-504-0233

(All other products)

Horizon Product Support
4105 Fieldstone Rd
Champaign, Illinois
61822 USA
productsupport@horizonhobby.com
877-504-0233

UNITED KINGDOM

Horizon Hobby Limited
Units 1-4 Ployters Rd
Staple Tye
Harlow, Essex
CM18 7NS
United Kingdom
sales@horizonhobby.co.uk
+44 (0) 1279 641 097

GERMANY

Horizon Technischer Service
Hamburger Str. 10
25335 Elmshorn
Germany
service@horizonhobby.de
+49 4121 46199 66

FRANCE

Horizon Hobby SAS
14 Rue Gustave Eiffel
Zone d'Activité du Réveil Matin
91230 Montgeron
+33 (0) 1 60 47 44 70

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FCC Information

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause unde-sired operation.

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This product contains a radio transmitter with wireless technology which has been tested and found to be compliant with the ap-plicable regulations governing a radio transmitter in the 2.400 GHz to 2.4835 GHz frequency range.

Compliance Information for the European Union

CE DECLARATION OF CONFORMITY

(in accordance with ISO/IEC 17050-1)

No. HH2010081603

Product(s): 1/24 Micro 4x4 RTR
Item Number(s): LOSB0238I

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 300-328 Technical requirements for Radio equipment.
EN 301 489 General EMC requirements
EN 60950 Safety

Signed for and on behalf of:
Horizon Hobby, Inc.
Champaign, IL USA
Aug 16, 2010

Steven A. Hall

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

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.

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Included Parts Price List

- LOSB0805 LSR-3000 Transmitter
- LOSB0831 MRX-3100 ESC/DSM: McRc, Mc4x4
- LOSB0832 MS24DS Servo: McRc, Mc4x4
- LOSB0878 4.8v 220mAh Ni-MH Battery
- LOSB0879 Micro Wall Charger, Ni-MH
- LOSB0833 Micro-T/B Motor with Wires
- LOSB1051 Ball Stud Set (10)
- LOSB1430 4x8x3mm Ball Bearing
- LOSB1702 Front Spindle, Carrier, and Rear Hub set
- LOSB1704 Steering Links, Servo Saver Hardware
- LOSB1707 Axle Housings (2)
- LOSB1708 Skid Plate, Chassis Brace, Battery Door
- LOSB1709 Center Transmission Gear Set,
Spur and Pinions
- LOSB1710 Center Transmission Case Set
- LOSB1711 Brass Worm Spool & Pinion (1 ea.)
- LOSB1722 Spring Damper Shock Set
- LOSB1725 2x6 Shoulder Screw (10)
- LOSB1728 2x5x2.5mm Ball Bearing (2)
- LOSB1729 3x6x2.5mm Ball Bearing (2)
- LOSB1731 Aluminum Chassis Plates: Mc4x4
- LOSB1732 Upper, Lower Suspension Links: Mc4x4
- LOSB1733 Molded Center Drive Shaft Set: Mc4x4
- LOSB1734 Body Mounts and Body Clips: Mc4x4
- LOSB1735 Front and Rear Bumpers, Battery
Door and Tray: Mc4x4
- LOSB1578 Scale AT Tire and Wheel Mounted: Mc4x4
- LOSB1587 Black Chrome Wheels: Mc4x4
- LOSB1579 Scale AT Tires: Mc4x4
- LOSB1588 Wheel Weights: Mc4x4
- LOSB1736 Roll Cage Set: Mc4x4

Option Parts

- LOSB0861 NiMH AC Peak Wall Charger
- LOSB0862 LiPo Battery and Charger
- LOSB0863 LiPo Battery



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