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BEFORE YOU PROCEED READ THE OWNER'S MANUAL

Thank you for purchasing a Radline RC vehicle! We are confident you will appreciate its race ready design and precision performance.

Radline RC offers you the ultimate radio control racing experience. This Owner's Manual is designed for use with 1:18th Scale RadlineRC Master Series vehicles and contains the instructions you will need to assemble, operate and maintain your vehicle for years to come.

We know you are anxious to start racing---but it is very important that you take the time to read the Owner's Manual even if you are an experienced R/C racer.

Carefully read and follow all instructions in this and any other manuals included with your vehicle. Failure to follow the instructions will be considered abuse and or neglect and may void your factory warranty.

Your vehicle is designed to run on uneven or rough terrain. However dust, sand, water, and carpet fibers can lodge in the working parts of your vehicle and if not removed promptly, can damage your vehicle. We do not guarantee your vehicle from damage due to outside elements including sand, dirt or water. This product is not a toy. It is not designed for users under 14 years old. You are responsible for the maintenance and safe operation of this vehicle.

Before operating your vehicle, please read this manual completely and examine your vehicle and transmitter. ***If for any reason you are not satisfied with your purchase, please return it to your retailer before running your vehicle. Your retailer cannot accept a vehicle or transmitter for return or exchange after it has been run.***

SUPPORT

A highly experienced support team dedicated to making your RC experience totally enjoyable backs your Radline RC.

If you have any questions about your vehicle or the Radline RC radio system, please email to support@radlinerc.com. Technical assistance is also available on line at www.radlinerc.com.

Radline RC offers full-service repair to handle both warranty repair or replacement and out-of-warranty service. Do not hesitate to contact Radline RC for any product support needs. We are anxious to help.

SAFETY PRECAUTIONS

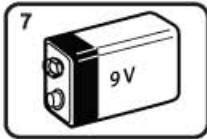
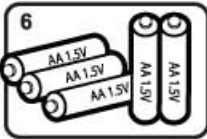
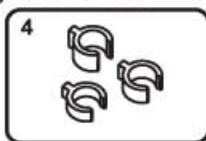
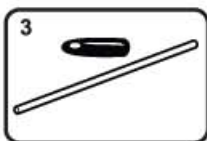
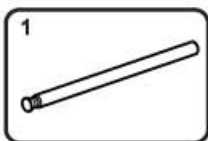
Radline RC wants you to enjoy your new vehicle and to operate it with care and safety. Failure to operate your vehicle in a safe and responsible manner may result in injury to yourself, others or property around you. You are responsible for following the guidelines mentioned here and to operate your vehicle safely.

- Do not run your vehicle on public roads or any area where you may interrupt pedestrian or vehicle traffic.
- Do not operate in a congested area or in crowds. Your vehicle can cause harm if it collides with any other person.
- Do not operate your vehicle with obstructed line of sight, at night, or near water.
- The motor and batteries can become hot during use. Do not handle either immediately or after use to avoid injury.
- Your vehicle is controlled by radio. Radio waves are subject to interference from outside sources. Radio interference can cause loss of control of your vehicle.
- Always allow a margin of safety in all directions.
- Keep all small parts and anything electric out of the reach of small children.

CONTENTS

Your vehicle comes with some accessories and batteries you will need to operate it.

- | | | |
|-------------------------|--------------------|--------------------|
| 1.) Transmitter antenna | 4.) Shock Spacers | 7.) 1 x 9V battery |
| 2.) Body pins | 5.) Owner's manual | 8.) Transmitter |
| 3.) Antenna cap & Tube | 6.) 5 x AA battery | 9.) Vehicle |
| | | 10.) Label Sheet |



The batteries included (5 AA Alkaline Batteries and one 9V Heavy Duty battery) are provided to get you started. These batteries will have a very short effective life and will need to be replaced very quickly.

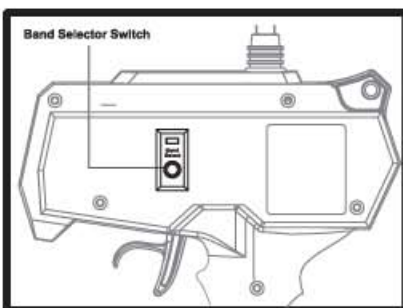
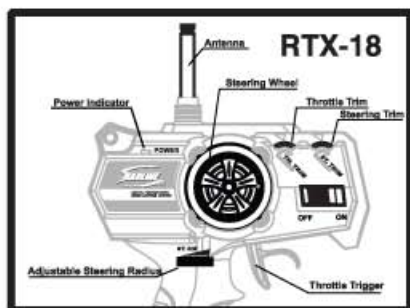
Radline RC recommends you purchase either 5 Rechargeable Nickel Metal Hydride (NiMH) AA batteries or a custom-made 7.2V Rechargeable Battery Pack for use in your vehicle. You will also need a quality NiMH charger for your batteries. Please follow battery and charger manufacturer's directions when using rechargeable batteries.

YOUR RTX-18 RADIO SYSTEM

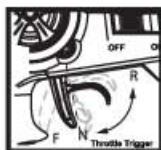
Your vehicle is equipped with an RTX-18 Radio System. The RTX-18 Radio System is a 2-channel, 3-Band system that operates on 27 MHz radio frequency. The frequency your transmitter operates on is clearly marked on the back of the transmitter. The 27 MHz frequency is divided into one of three bands: Red, Orange or Green. The vehicle included runs on the same frequency as the transmitter, and can run on all three bands: Red, Orange and Green.

Matching the transmitter and car frequency and band is simple and mandatory for proper operation. The three bands allow you to race up to three different cars at the same time.

The transmitter (controller) controls your vehicles steering, forward/reverse and speed.



Throttle Control: The throttle control allows you to accelerate your vehicle in forward or reverse. You can push your throttle control from forward to reverse to apply the brake.



Throttle Trim: The throttle trim located on the face of your transmitter adjusts the IDLE point or neutral point of the vehicle while at rest. You will need to adjust the throttle trim later when you have set up your vehicle.



Steering Wheel: The steering wheel allows you to steer your vehicle left and right.

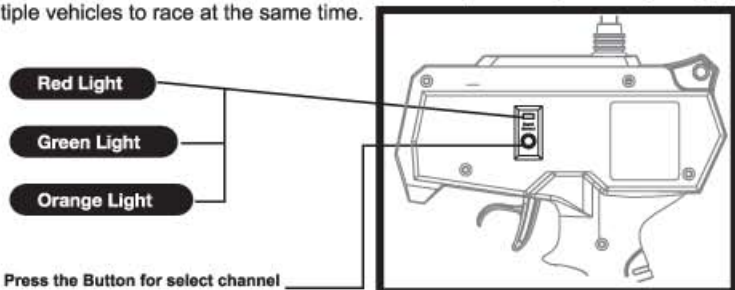
Steering Trim: The steering trim located on the face of your transmitter adjusts the neutral point of the steering servo. Adjust this control to make your vehicle drive straight with no steering input from the steering wheel. You will adjust the steering trim after you have set up your vehicle.



Steering Radius Control: The steering radius control knob located on the face of your transmitter allows you to select the radius of your turns. Moving the knob to the left increases the turning radius and is designed for novice drivers. Moving the knob to the right decreases the turning radius and is designed for experienced drivers.



Band Selector Switch: The band selector switch is located at the back of your transmitter and allows you to easily select one of three bands: Red, Orange or Green. This band must match the band on the vehicle that you select when you set up your vehicle, and may be changed by you at any time to allow multiple vehicles to race at the same time.



Installation of Antenna: Place antenna in antenna receptacle and turn clockwise until snug. Do not over tighten. Fully extend antenna before driving car. Always turn on your transmitter before turning on your car, as your car could be effected by outside radio signals if your transmitter is not on and properly functioning.

Installation of Battery: Your transmitter uses one 9V battery. The battery compartment is located in the base of the transmitter. Press down and towards the back of the transmitter to remove the battery cover. Insert the 9V battery in the correct orientation according to the polarity marked inside (+ and -).

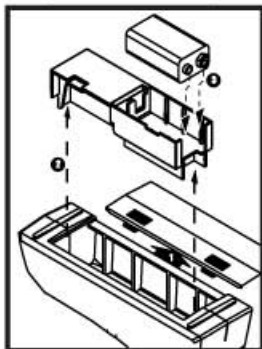
Turn on the transmitter using the Off/On Switch. Confirm the Power Light is on. If the power light is not illuminated, check the polarity (+ and-) of the battery. If you are confident you have properly positioned the battery and the power light is not on, then try a new battery.

Once the battery light is on you may turn off the transmitter and replace the battery cover.

When you notice the BAND light is blinking or the control range of your vehicle decreases, replace the battery.

Battery Notes:

- Use only fresh batteries of the required size and type.
- Do not mix old and new batteries or different types of batteries (standard, alkaline or rechargeable) or rechargeable batteries of different types (NiCd or NiMH).
- If you are not planning to use your vehicle for more than 2 days, remove the batteries. Batteries can leak and damage your vehicle.
- Dispose of batteries properly. Do not burn or bury batteries.



THE CHASSIS



SETTING UP THE ANTENNA

You must install the antenna mast (tube) before you operate your vehicle.

Locate the antenna wire that is fixed to the receiver.

Straighten the wire, and then insert the end of it into one end of the antenna tube. Push the wire all the way through. It may extend through the length of the tube. Do not cut the wire, as its length is tuned to the frequency.

Insert the base of the tube into the molded post on the chassis. Hold the antenna tube at the bottom of the tube. Do not push from the top. Feed the antenna wire into the slot provided on the post. Gently secure the tube into the post.

Fold any remaining wire over the tube and secure the wire and/or cap the tube with the antenna tip. The wire may not extend past the tube.

Always fully extend the antenna on the transmitter and face the antenna on the transmitter straight up for best performance.



SELECT ONE OF THE THREE BANDS (RED, ORANGE OR GREEN)

You can also run your car on one of three bands, and allows you to race three cars with the same frequency at once without one interfering with the others.

Locate the 3-Band switch that is located at the bottom chassis. This switch has three positions: R-red, G-green and O-orange. Your transmitter default band is red. Your car is also preset on the red band. If you are planning to be racing against other cars, you may want to select another band now or select an alternate band at a later time.

To change bands, simply slide the band switch. The middle stop is the green band and the right stop is the orange band. The default band is red. You will match the transmitter band to the car band later when you tune your vehicle.



INSTALL BATTERIES

To prepare for battery installation, gently unscrew the 2 screws on the top edge of the battery cover by using a screwdriver. Then gently lift and push out the battery cover.

The five AA batteries provided are alkaline batteries and will have a very limited life. They are provided to get you up and running. You will need to replace the batteries very soon. We suggest you replace with five AA rechargeable Nickel Metal Hydride batteries (NiMH) available or 7.2 V battery pack



Battery Notes:

- When you notice the speed of your car is decreasing or the BAND light is blinking, it is time to replace the batteries.
- Always turn off the power when removing the body and batteries.
- Do not use damaged batteries.
- Never try to charge non-chargeable batteries.
- Batteries must be inserted properly with the correct polarity.

ATTACHING THE BODY TO THE CHASSIS

Guide the antenna through the antenna hole in the car body.

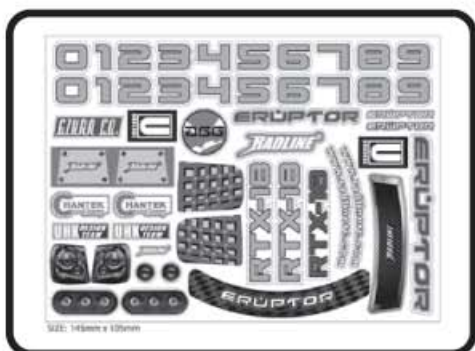
Set the car body over the four posts on the chassis.

Using the four body pins provided, slide one into the hole on each of the four posts.



Using the four body pins provided, slide one into the hole on each of the four posts.

DECORATE YOUR VEHICLE BODY



The decals are printed on self adhesive label stock. Gently remove the labels from the backing and place one edge in the proper position on the car body. Gently smooth the decal down with your finger. This process of smoothing from one side to the other will prevent air bubbles under the label.

RANGE TEST YOUR VEHICLE

You have completed all the preparation above (SETTING UP THE ANTENNA -> SELECT ONE OF THE THREE BANDS (RED, ORANGE OR GREEN) -> INSTALL BATTERIES -> ATTACHING THE BODY TO THE CHASSIS -> DECORATE YOUR VEHICLE BODY) but one last project is required---you should range test your vehicle before each run session.

Because your vehicle is controlled by radio frequency, it is subject to interference from outside sources including electric wires, adjacent building and other radio transmitters in the area. This interference can affect the distance or range your transmitter will effectively control the vehicle.

Turn on your transmitter first to ensure your car is not controlled by stray signals from another transmitter in the area. Fully extend the transmitter antenna. Hold the vehicle in your hand making sure not to touch the wheels. Turn on the vehicle. Confirm that your vehicle is responding to your transmitter only. If there are other transmitters in the area you want to assure you are on different frequencies and or bands.

Place the car on the ground and slowly drive it out to the farthest point you plan to operate the vehicle. As you do this you can make last minute adjustments to the steering trim if necessary.

RUNNING YOUR VEHICLE

You are now ready to run your vehicle more aggressively. Have fun, but remember that your vehicle travels quickly and turns quickly. Your driving skill must be developed to properly control the vehicle at high speed. Start out at slow speeds to assure you do not damage your vehicle.

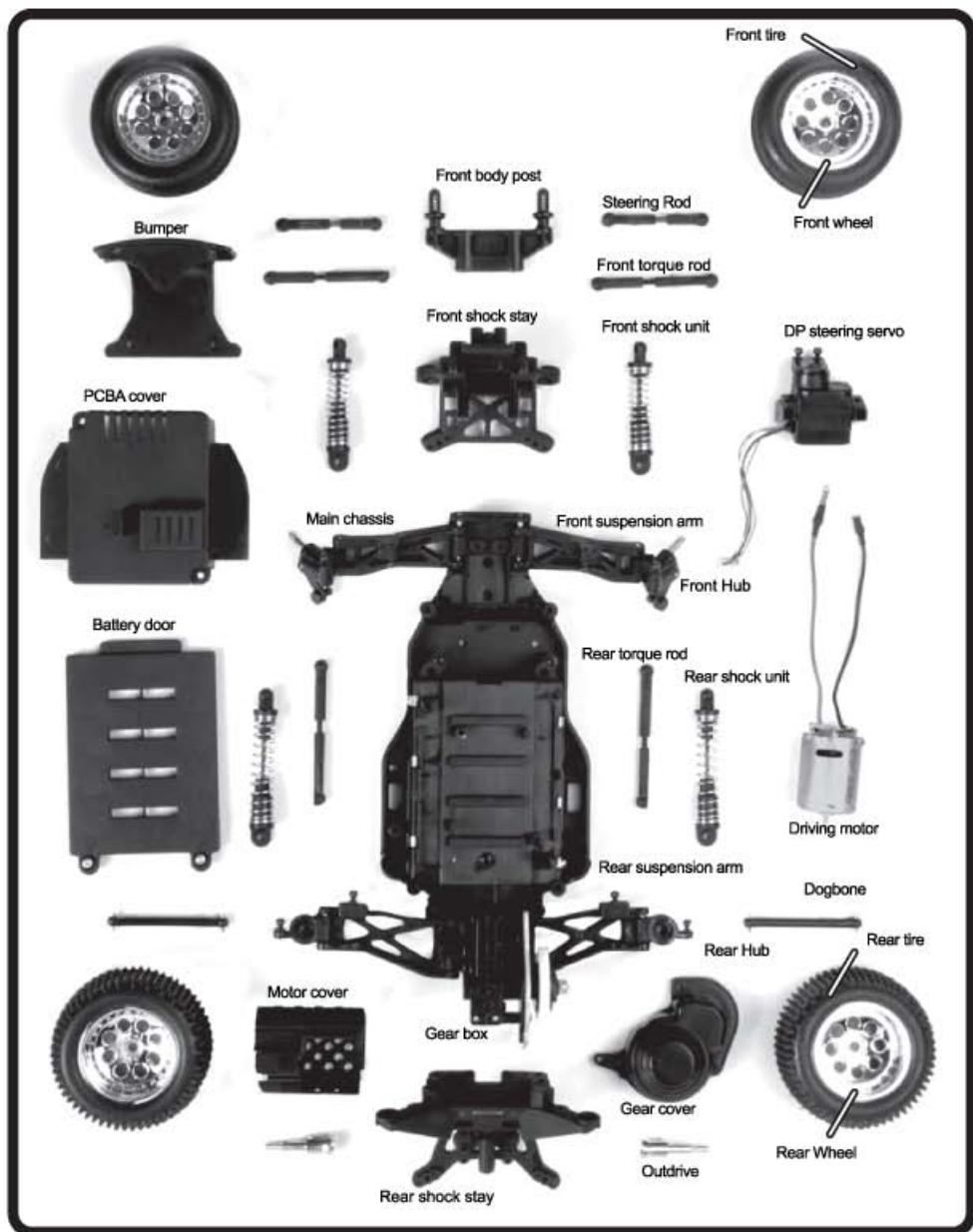
During and after operation, the motor and batteries will be hot. Do not touch them until they have cooled down.

MAINTAINING YOUR VEHICLE

The following procedures should be performed frequently and will keep your vehicle running strong.

- Inspect the vehicle for any obvious damage.
- Check the gears for wear, debris or broken teeth.
- Check the wheels and tighten the wheel screws properly.
- Check for loose screws in the chassis.
- Check the wiring for frayed or damaged wires or connectors.
- Check the steering servo, which will wear out over time and require replacement.
- Check all batteries.
- Keep the chassis clean and free of sand, dust, dirt and moisture.
- Remove and clean the motor if necessary. Use electric motor cleaning solution available at your local hobby dealer to clean out dirt, sand and dust. Lubricate the bushings of the motor with lightweight electric motor oil.
- When you put your vehicle away after running, dust off with a soft bristle brush or cloth.
- Remove batteries from vehicle and transmitter if you are going to store them for more than two days.

EXPLODED PARTS VIEW



My car doesn't work at all:

1. Check to see if transmitter and car are on.
2. Make sure frequency LED colors on both the car and transmitter match.
3. If any other remote control products are on, turn them off.
4. Adjust throttle trim.
5. Check antennas on car and transmitter.
6. Try operating the vehicle in another location.
7. Replace batteries.

The throttle works, but I can't steer:

1. Check the steering trim. Adjust ST DR. to maximum.
2. If the servo feels jammed, try centering it by hand.
3. Check and see if the steering links are connected.
4. Make sure you haven't over tightened any part of the steering linkage. If so, slightly loosen screws. The steering linkage should move freely.
5. If any other remote control products are on, turn them off.
6. Replace batteries.

My car runs slow:

1. Change batteries. (Use NiMH for best performance.)
2. Make sure the car is geared properly and the pinion and spur gears are not over tightened.
3. Clean and oil bushings or ball bearings.
4. Check for stripped or dirty gears.
5. Make sure the wheels are fastened properly to the wheel drive shafts. Do not over tighten the wheels.
This will create excess friction and may damage the wheels, drive shafts and/or differential.

My car is noisy:

1. Check for stripped or dirty gears.
2. Clean and oil bushings or ball bearings.
3. Check to see if the tires are secured properly.

I hear the engine spinning, but the wheels do not move:

1. Make sure the pinion is not stripped and/or spinning loosely on the motor shaft.
2. Check the dog bone and drive shafts for obstructions.
3. Make sure the three bevel gears inside the differential gear are not stripped.
4. Make sure the wheel tires are fastened properly to the drive shaft and have not been stripped.

After I crash, the ball cup links keep unsnapping:

1. Upon a moderate or severe impact, it's quite common for the ball joint to pop off the ball stud. Take pliers and snap ball joint back on the stud.
2. If this continuously happens, the ball cups are either dirty or worn. Replace ball cups with new ones.

My car won't track straight even after adjusting the steering trim:

1. Make sure the steering rod links aren't bent. If they are, bend them back into place or replace.
2. Pop off ball joints and remove steering rod link. Tighten to increase toe out.
Loosen to increase to toe in.
(Note: Make sure when the servo and tires are centered, the tires point slightly inward.)
3. Check and see if the servo is jammed or servo saver is broken.

My car steers, but throttles uncontrollably, even when the trigger position is neutral:

1. Adjust throttle trim.
2. If any other remote control products are on, turn them off.
3. Try in another room or outside.
4. Replace batteries.

RSS-310 Compliance Statement

Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Carrier frequency 27.145MHz

Field strength 59.0 dBuV/m@27.145MHz and measurement distance 3 meters

This category II radiocommunication device complies with Industry Canada Standard RSS-310.

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

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

About FCC compliance

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 undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- **Consult the dealer or an experienced radio/TV technician for help.**