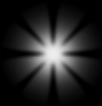




Halogen  
NiMH

# TrailRat 2.0



USER GUIDE



## DISCOVER THE NIGHT!

Thank you for choosing the TrailRat™ from NiteRider, the innovator in technical lighting systems. The TrailRat combines an easy-to-use, high-intensity halogen light with a compact, lightweight nickel metal hydride (NiMH) battery.

To get the most from your NiteRider light, we urge you to familiarize yourself with the following safety and operation instructions.

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All other trademarks are the property of their respective owners.

The information in this document is subject to change without notice.

## **RIDING AT NIGHT**

While the TrailRat will improve your control and enjoyment of night riding, please remember that cycling at night is an inherently dangerous activity. In addition to using your lighting system properly and riding with extreme caution, NiteRider urges you to:

- never ride alone
- always let someone know where you are going
- wear a helmet and reflective clothing
- carry an auxiliary light and emergency supplies.

## **PROTECTING YOUR INVESTMENT**

When not in use, always disconnect the headlamp from the battery. To unplug, grasp the connector, not the cable.

Properly charge your battery to maximize its lifespan (see “Battery Charging and Care” on page 8). To avoid damaging your system, only charge your NiteRider battery with the appropriate NiteRider charger.

While the TrailRat will perform in wet weather conditions, submerging it in water will damage the system. If you need a submersible light, NiteRider manufactures industrial-grade dive light systems. For information, contact NiteRider Dive Lights at 858.268.3850 or visit [www.niteriderdive.com](http://www.niteriderdive.com).

## SUPPORT

If you experience difficulties during product installation or operation, NiteRider provides free telephone support on weekdays from 8:00 AM to 4:30 PM (Pacific Time) at 800.466.8366, ext. 4. You may also e-mail us at [support@niterider.com](mailto:support@niterider.com).

## WARRANTY

NiteRider stands behind its products with the following warranties:

- Lifetime warranty on all mechanical components
- 1 year on cables and connectors, electronic components, and printed circuit boards
- 180 days on rechargeable batteries
- 90 days on overnight chargers
- 60 days on halogen bulbs

To repair or replace your product while under warranty, return it (postage prepaid and insured with original sales receipt) to the address below. Out-of-warranty repair service is also available. For complete warranty information, please visit our website.

NiteRider, Inc.  
8205 Ronson Road, Suite E  
San Diego, CA 92111 USA  
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[www.niterider.com](http://www.niterider.com)

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# **PARTS LIST AND IDENTIFICATION**

Please verify the contents of your TrailRat system:

- A. 10 Watt-6 Volt halogen headlamp
- B. 4.0 Ah-6 Volt NiMH battery (frame mount)
- C. 9-hour overnight charger
- D. Standard handlebar mount
- E. Velcro cable tie



## QUICK START

1. Charge the battery for nine hours before the first use. To maximize the life of the battery, it is important to disconnect the battery from the charger immediately after charging. See “Using the 9-hour Overnight Charger” on page 8.
2. To mount the headlamp and battery, see “Mounting the Headlamp” on page 6 and “Mounting the Battery” on page 7.
3. Connect the battery to the headlamp.
4. To turn the lamp on and off, press and release the headlamp power button.

# MOUNTING THE HEADLAMP

## Standard Handlebar Mount

The standard handlebar mount is installed by unscrewing the Phillips screw, pulling the mount open, and wrapping it around the handlebar. Orient the rectangular groove on the slider clip to the rear. Tighten the screw until the mount is secure. If necessary, the included rubber shims can be used to achieve a snug fit.



## Inserting the Headlamp into the Handlebar Mount

Insert the headlamp mount into the handlebar mount slider clip from the rear of the slider clip forward. Gently rocking the lamp as you slide it may help. Do not push the release lever when inserting the headlamp into the slider clip; let the lamp snap into place by itself.



*Headlamp mount with release lever*

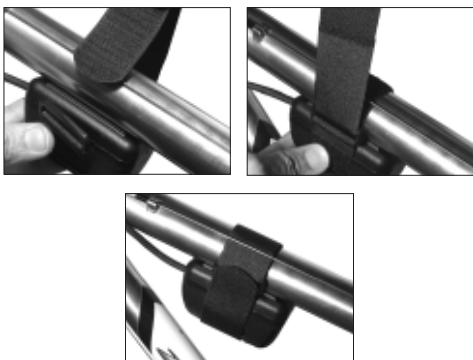
To remove the headlamp, push the release lever and slide the lamp backward.

**Note:** After mounting the headlamp, adjust the headlamp so it illuminates the road properly without distracting oncoming riders.



## MOUNTING THE BATTERY

1. Thread the wide Velcro tie through the slots on the top of the battery clip.
2. Attach the concave surface of the battery to a safe, convenient location on the frame (typically under the top or down tube), placing the Velcro strap over the tube but under any shift or brake cables.
3. Secure the handlebar cord to the frame using the thin Velcro tie. Make sure the cord does not interfere with any moving parts.



## OPERATION

1. Connect the battery cord to the headlamp cord.
2. To turn the lamp on and off, simply press and release the headlamp power button.

**Warning:** To protect the battery from over-discharging, turn off the lamp before it reaches complete darkness.

# BATTERY CHARGING AND CARE

Rechargeable batteries can last years with proper care. Most importantly, fully charge your battery:

- before the first use
- after each use
- before storing
- every 45 to 60 days when not in use.

## Using the 9-hour Overnight Charger

To maximize the life of the battery, avoid overcharging it. Estimate the depletion of the battery and charge it according to the following chart:

<u>Usage</u>	<u>Charge Time</u>
30 min	1 hr 30 min
1 hr	3 hrs 30 min
1 hr 30 min	5 hrs 45 min
2 hrs	7 hrs 30 min
2 hrs 20 min	9 hrs

It is very important to disconnect the battery from the charger after the above charge time has elapsed. Setting a timer may be helpful to avoid overcharging. When disconnecting the battery and charger, grasp the connectors, not the cables.

It is also important to avoid over-discharging the battery. When operating the light, turn the lamp off before it reaches complete darkness.

## Battery Initialization

Until the battery has been charged and discharged up to ten times, you may experience shorter than expected run times as well as higher than normal charger and battery temperatures.

**Warning:** NiteRider discourages battery initialization through “bench testing” (operating the light in stationary conditions) because the excessive heat generated can damage the headlamp.

### **Storage**

Rechargeable batteries perform better and last longer if they are brought to a complete charge before storing and every 45 to 60 days when not in use.

Disconnect the battery from the headlamp, and store the system in a cool dry place.



### **R U N T I M E**

The TrailRat will run for 2 hours 20 minutes on a fully charged battery.

Run times are approximations and will vary.



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