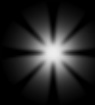
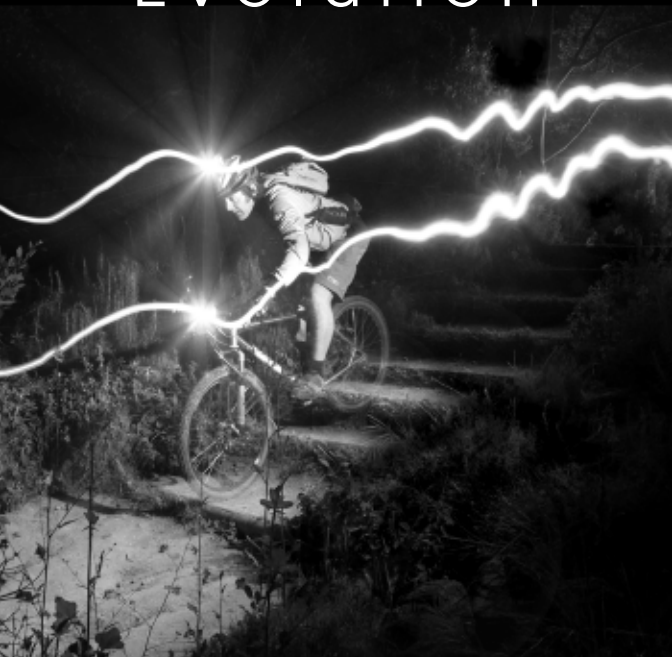




Halogen
NiMH

Evolution



USER GUIDE



DISCOVER THE NIGHT!

Thank you for choosing the Evolution™ system from NiteRider, the innovator in technical lighting systems. The Evolution is an easy-to-use, high-intensity halogen system that can be mounted to the frame or helmet.

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 Evolution 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 10). To avoid damaging your system, only charge your NiteRider battery with the appropriate NiteRider charger.

While the Evolution 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.

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.

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.

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Parts List and Identification	4
Quick Start	5
Mounting the Headlamp	6
Universal Handlebar Mount	6
Helmet Mount	7
Inserting the Headlamp	7
Mounting the Battery	8
Frame Mount	8
Pocket or Pack	8
Operation	9
Battery Charging and Care	10
Using the 9-hour Overnight Charger	10
Battery Initialization	11
Storage	11
Run Time	12

PARTS LIST AND IDENTIFICATION

Please verify the contents of your Evolution system:

- A. 10 Watt-6 Volt halogen headlamp
- B. 4.0 Ah-6 Volt NiMH battery (pocket/frame mount)
- C. Universal handlebar mount
- D. Helmet mount
- E. 9-hour overnight charger

- F. 36" helmet cord
- G. 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 10.
2. To mount the headlamp and battery, see “Mounting the Headlamp” on page 6 and “Mounting the Battery” on page 8.
3. Connect the battery to the headlamp or helmet cord.
4. To turn the lamp on and off, press and release the headlamp power button.

MOUNTING THE HEADLAMP

The Evolution headlamp can be mounted to the handlebar or a helmet.

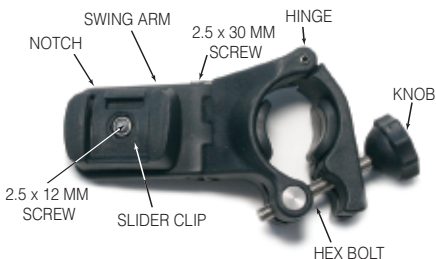
Universal Handlebar Mount

The Universal Handlebar Mount (UHM) is designed to fit on virtually any handlebar. Included with the mount is a 2.5-mm Allen wrench, a pair of black rubber bumpers already in place, and a thin rubber shim to customize the fit on large handlebars up to 32 mm in diameter.



Turn the knob counter-clockwise, allowing the hinge to swing open. Place the mount on the handlebar on the left side the stem, orienting the rectangular notch in the slider clip to the rear. Swing the hinge down to make contact with the handlebar. Swing the hex bolt up, seating the knob into its recess. Turn the knob clockwise to tighten and secure the mount to the handlebar.

The UHM can be adjusted to accommodate any handlebar angle. By loosening the 2.5 x 30 mm Allen screw, you can move the swing arm back and forth to straighten the headlamp. Tighten the 2.5 x 30 mm screw after the adjustment.



To pivot the headlamp, loosen the 2.5 x 12 mm screw located under the slider clip and swing arm and rotate the headlamp to the desired position. Make this adjustment before tightening the 2.5 x 30 mm screw.

Helmet Mount

1. Unclamp the straps on each side of the helmet mount and pull them free.
2. Position the plastic mounting plate as close to the centerline of the helmet as possible, orienting the parallel grooves on the slider clip to the rear.
3. Feed each strap into and out of two helmet vents, circling each strap back to the upper edge of the corresponding clamp.
4. Fasten the straps by inserting them into the clamps.



Inserting the Headlamp into the Handlebar or Helmet Mount

Insert the headlamp mount into the handlebar or helmet 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.

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

The battery can be mounted to the bike frame or placed in a jersey pocket, hydration pack, or fanny pack.

Warning: For safety reasons, a cyclist should never be tethered to the bike. If the headlamp is mounted to the helmet, do not mount the battery to the frame. Conversely, if the headlamp is mounted to the handlebar, do not place the battery in a pocket or pack.

Frame Mount

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.



Pocket or Pack

1. Route the helmet cord through a helmet vent or along the outside of the helmet using the thin Velcro tie to secure the cord.
2. Connect the helmet cord to the battery, making sure the cord does not interfere with any moving parts.
3. Simply place the battery in a pocket or pack.



OPERATION



1. Connect the battery cord to the headlamp or helmet 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.

W



R U N T I M E

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

Run times are approximations and will vary.



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