

NiteRider Technical Lighting Systems, Inc. 8205 Ronson Rd., Suite E San Diego, Ca 92111

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#### Factory Settings

Factory settings are locked and cannot be changed. The Pro Series factory settings include 3 light levels – high, med and low, and one flash pattern (the NiteRider Standard Flash). See table below.

	Light Level	Lumens	Run Times*
Pro 700 / Race	1	700	4:00 / 2:40
	2	350	8:00 / 5:00
	3	150	16:00 / 10:00
Pro 1400	1	700 Spot	5:00
	2	700 Flood	5:00
	3	1400 Combo	2:30

★Run times are aproximations and will vary.

#### Thermal Step Down

If the Pro Series headlamp is used in a static air environment, such as bench testing, heat retention, due to inadequate airflow, may cause the light output to "step down" to a lower level to avoid damage. In rare cases of extreme heat retention the light will power off to protect the LEDs from overheating.

## **DOCKING STATION**

The Docking Station has two uses.

- To recharge the Pro Series Li-lon battery
- 2. To download Programs from the D.I.Y Software to the headlamp

## BATTERY CHARGING AND CARE

## Initializing the Battery

For maximum accuracy of the fuel gauge it is important to initially pair the battery with the fuel gauge. To accomplish the pairing, fully recharge the battery both before and after its first use and completely discharge the battery during that first use.

## Battery Recharging

The (6-cell, 7.2Ah, Li-lon) will fully recharge in 3:30 and the (8-cell, 9.6Ah, Li-lon) in 4:30. In addition a 4-cell, 4.8Ah, Li-lon battery is available as an accessory. All 3 batteries are interchangeable with the 2 Pro Series headlamps.

- Plug the AC Adapter into the Docking Station and then into the wall socket. The "Power" indicator on the docking station will illuminate solid red.
- Plug one end of the USB Cable into the Docking Station and the other end into the USB port of a computer. The "USB/PC" indicator will illuminate solid yellow. (Recharging the Pro Series battery can be done stand-alone, without being attached to a computer.)
- Place the battery into the Docking Station. The "Battery" indicator will illuminate solid yellow indicating contact and that the battery is ready to charge. A blinking yellow indicator signifies the battery is out of the permissible temperature range for charging.
- Status of the 5-step charging process is displayed on the front panel of the Docking Station.
- When the battery is fully charged the "Charged" indicator will illuminate solid green and charging will shut off automatically.
- Leaving the battery in the Docking Station indefinitely will not harm the battery. Every 24-hours the Docking Station will test the battery level and apply a charge if required.

Warning: If the "Batt Error" indicator illuminates solid red contact NiteRider Customer Service for assistance.

**Note:** With communication between the <u>D.I.Y. Software</u> and the docking station the "USB/PC" indicator will blink yellow.

## DOWNLOAD PROGRAMS FROM THE D.I.Y. SOFTWARE

To download Programs from the <u>D.I.Y. Software</u>, the Docking Station must be powered by a wall outlet, the Docking Station must be connected to the host computer and the headlamp must be connected to the Docking Station.

- Plug the AC Adapter into the Docking Station and then into the wall socket.
  The "Power" indicator on the docking station will illuminate solid red.
- Plug one end of the USB Cable into the Docking Station and the other end into the USB port of a computer. The "USB/PC" indicator will illuminate solid yellow.
- Connect the Pro Series headlamp to the Docking Station. The "Headlamp" indicator will illuminate solid yellow.
- Click the "Update" button on the D.I.Y. Software control panel to initiate transmission of Programs to the headlamp. Refer to the "D.I.Y. Pro LED Series Software Guide" for detailed information on the software features and how they function.
- Both the "USB/PC" and "Headlamp" indicators will blink indicating Programs are being downloaded through the Docking Station and into the headlamp.
- With a successful download, the headlamp LED indicator changes from red to green.

**Warning:** Disconnecting the headlamp from the docking station, or the docking station from the computer, or disrupting power to the docking station while transmitting Programs from the <u>D.I.Y. Software</u> will create a problem. The headlamp will either not operate or operate unpredictably. To correct this situation, disconnect power to the docking station, wait 10 seconds, then reconnect power. The <u>D.I.Y. Software</u> and docking station will reconnect, then repeat the downloading process.

## D.I.Y. SOFTWARE

The latest version of the <u>D.I.Y Software</u> is available to download at www.niteriderservices.com. The software runs under Windows 2000 and above. For detailed information on the software please refer to the "<u>D.I.Y. Pro</u> <u>LED Series Software Guide</u>".

#### RIDING AT NIGHT

While a Pro Series lighting system will dramatically improve your view, 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

Properly charge your battery to maximize its lifespan (see the "Battery Charging and Care" section for detailed information). When not in use, always disconnect the headlamp from the battery tray. To unplug, grasp the connector, not the cable.

The Pro Series will perform in wet weather conditions, but 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, extension 4. You may also e-mail us at support@niterider.com.





# **Pro Series Users Guide**



#### DISCOVER THE NIGHT!

Thank you for choosing the Pro Series™ from NiteRider, the innovator in technical lighting systems. The systems incorporate the latest in hardware technology, but what differentiates these systems is the incorporation of "software". The internet based, D.I.Y. Software, gives you the flexibility to tailor your light's operation to fit your ride. Download the D.I.Y. Software at www.niteriderservices.com.

To get the most from your NiteRider light, we urge you to familiarize yourself with the following safety and operating instructions. To learn about the features of the D.I.Y. Software please refer to a separate, companion document entitled, D.I.Y. Pro LED Series Software Guide.

## PARTS LIST AND IDENTIFICATION

# Parts for Pro 1400 System only

- A1. Dual Beam Headlamp
- A2. Li-Ion Battery, 8-cell 9.6Ah



## Parts for Pro 700 System only

- B1. Single Beam Headlamp
- B2. Li-Ion Battery, 6-cell 7.2Ah



#### Common Parts for both Pro 700 & Pro 1400 Systems

- C. Handlebar Mount
- D. Helmet Mount
- E. Docking Station
- F. AC Adapter
- G.36" Extension Cord H.USB-to-Mini-B Cable
- I. Quick Release Battery Tray













## MOUNTING THE HEADLAMP

The Pro Series 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 SCREW SUDDRICLE 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.
- 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.
- Fasten the straps by inserting them into the clamps.







## Inserting the Headlamp into the Handlebar or Helmet Mount

Insert the headlamp into the handlebar or helmet mount slider clip from the rear forward. Gently rocking the lamp as you slide it may help. Do not push the release lever wheninserting the headlamp into the slider clip; let thelamp snap



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

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

#### MOUNTING THE BATTERY SYSTEM

The "battery system" consists of a tray, which mounts to the bike frame, and a Li-lon battery that releases guickly from the tray for charging. The battery system can also be placed in a jersey pocket, hydration pack or fanny pack when helmet mounting the headlamp.

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 system to the frame. Conversely, if the headlamp is mounted to the handlebar, do not place the battery system in a pocket or pack.

#### Frame Mount

- 1. Thread the Velcro straps through the 2 slots on the bottom of the
- 2. Attach the concave surface of the tray 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. The cable from the tray should extend toward the stem.
- 3. Secure the headlamp and battery tray cables to the frame using the thin Velcro ties. Make sure the cables do not interfere with any moving parts.
- 4. Aligning the arrow on the bottom of the battery with the red arrow inside the tray, slide the battery into the tray until you hear a noticeable click.

Note: If a click is not heard when sliding the battery into the tray, proper mating did not occur. Remove battery from tray and repeat the process.



## 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**

#### **LED Indicators**

The four LED indicators on top of the headlamp, in front of the power button, have multiple uses - as fuel gauge steps and as identifiers when in the Program Select Mode.



## Fuel Gauge

The 8-step, LED fuel gauge is located on top of the headlamp in front of the power button. When all four LED's are lit solid green, the battery is fully charged. As the battery discharges 1/2 increments of capacity, the LED's, from right to left, successively go from solid to blinking green, to out.

With only the final 1/2 capacity remaining one LED blinks red. At this time, the headlamp should be turned off and the battery recharged.

## **Program Select Mode**

There are a total of 5 Programs to select from. The Pro Series headlamp has factory settings which are locked and cannot be modified. In addition, the headlamp has memory to store four (4) additional operating Programs which you create, modify and download to the Pro Series headlamp using the Docking Station and D.I.Y. Software. Download the D.I.Y. Software at www.niteriderservices.com.

- 1. From the "Off" position, press and hold the power button for 6 seconds to enter the Program Select Mode. The number of lit LED's indentifies the Program currently being used.
- 2. One LED being lit red indicates the factory settings Program. while one lit green indicates Program-1. The 2 leftmost LED's being lit green indicates Program-2, the 3 leftmost LED's being lit green indicates Program-3 and all four being lit indicates Program-4.
- 3. Cycle through the (5) Programs by pressing and releasing the power
- 4. To select a Program, press and hold the power button until all lit LED's begin to blink rapidly 5 times.

Once a Program has been selected, the light will operate under that Program's specifications. Before shipping, NiteRider has initialized the memory for the 4 additional operating Programs with factory settings.

#### Power Button Uses

The power button, located on the top of the headlamp, is used to turn the light on, change light and flash levels, turn the light off and access the Program Select mode.

#### Light On

- o Press and release the power button to turn the light on.
- o Cycle through the brightness levels by pressing and releasing the power button.

## Flash

- o To access flash mode press and hold the power button for greater
- o Cycle through the flash patterns by pressing and releasing the power button

#### Light Off

o To turn the light off while in either normal light or flash mode, press and hold the power button for greater than 1 and less than 3 seconds.

## Program Mode

- o From the "Off" position, press and hold the power button for 6 seconds to enter the ProgramSelect Mode.
- o Cycle through the 5 Programs by pressing and releasing the power button.
- o To select a Program, press and hold the power button until the lit LED's blink rapidly 5 times.