

Operation (cont'd)

- Once the scope is in viewing position the articulation lock may be engaged if needed to hold the tip steady. **But make sure the articulation lock is UNLOCKED before removing the scope.**



- Return the scope to the nominally straight-ahead position, with the lock UNLOCKED, before withdrawal.
- Be very careful not to snag the scope on sharp edges as you withdraw the scope. This is the most common form of damage.**
- Avoid damaging the tip optics. When withdrawing the scope, catch the tip by hand as it exits so it doesn't fall and strike a hard surface.

Care and Maintenance

Cleaning:

- Wipe the body with alcohol to remove stains and fingerprints. Do not soak the body in water. It is not watertight.
- Clean the insertion tube with soapy water, rinse and dry.
- Clean the glass surfaces of the tip, eyecup, and light post with a cotton swab moistened with Hawkeye lens cleaning solution or a commercial glass-cleaning product. Avoid dragging abrasive particles across the glass surfaces.



Storing in Case:

- Make sure the articulation lock is UNLOCKED.
- Place the body of the scope into its cutout first, then, guide the full length of the insertion tube into its cutout.
- Make sure entire length of insertion tube is securely in its cutout before closing the case lid.



Do not let the case lid fall on the insertion tube.

SuperNOVA™ LED Charging

The SuperNOVA™ LED must be fully charged before first use. The charging cradle has contacts that mate with the contacts on the SuperNOVA™ LED.

Charging Cradle Contacts



Plug the charger into a power outlet and slide the SuperNOVA™ LED into the charger until the contacts engage.



The charger indicator light will glow continuously while charging, and blink when the unit is fully charged. A full charge on a completely discharged light takes about 3 hours. A fully charged unit will run continuously for approximately 2 hours.



Gradient Lens Corporation®

207 Tremont Street, Rochester, New York 14608

800.536.0790 Fax: 585.235.6645



PRECISION BORESCOPIES

User Guide

HAWKEYE® PRO FLEXIBLE Precision Borescope



Gradient Lens Corporation® gradientlens.com



Hawkeye® Pro Flexible Precision Borescopes

The 2-way articulating Hawkeye Pro Flexible sets a new standard of excellence in quality and functionality, at a very reasonable price. An 18,000 fiber, acid-leached imaging bundle provides excellent resolution, sharpness, and contrast.

The Pro Flexible comes equipped with the new, more powerful, portable, rechargeable SuperNOVA™ LED Light. Optional, higher-intensity lighting, and video, are also available.



Hawkeye® SuperNOVA™ LED Light

The new Hawkeye SuperNOVA LED delivers more light, longer run time, LED longevity, and more convenient intensity control. It is 90% brighter, and runs twice as long as the old Hawkeye SuperNOVA, all in a 25% smaller package. Intensity control is now more convenient and versatile.

Setup

Thread the SuperNOVA™ LED onto the borescope's light post, until it contacts the body of the borescope.

DO NOT OVER-TIGHTEN!



Operation

Turn the SuperNOVA™ LED on by pressing the push-button switch in the tailcap.



- Lightly press the push-button for momentary operation.
- Fully press the button until it clicks to turn the light on at full intensity.
- Fully press and hold the button to cycle through high, medium and low intensity levels. Release the button at the desired level.
- Quickly double-click the button to activate strobe mode.
- Click the button once from any operating mode to turn the light off.

CAUTION: When operated for a long time at the high intensity setting, a non-handheld SuperNOVA™ LED may feel startlingly warm to the touch. This is normal for an LED light of similar size and performance, and NOT a defect. It is not a burn hazard. When using the light for extended periods, use the lowest intensity setting that will give a sufficient amount of light for the task.

Focusing:

- Turn the borescope's focusing ring to create the sharpest image.
- When finished viewing, slowly withdraw the borescope, being careful again to not bend the tube.
- Remember to turn the light source off.



Light Intensity:

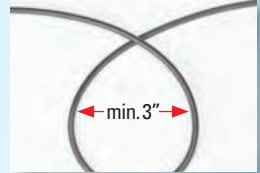
Light intensity can be varied in two ways:

- Press and hold the tailcap button to cycle through high, medium and low intensity levels.
- Turn the knurled ring to adjust the internal, mechanical shutter.



CAUTION: The knurled ring turns through a total of about 20° rotation. Don't try to force it further.

WARNING: Never bend the insertion tube in a radius tighter than 1.5 inches (3" diameter) to avoid damaging the imaging and illumination fibers.



- Make sure that the articulation lock is **UNLOCKED** and that the bending section of the insertion tube is straight and free to flex.



- Hold the head of the SuperNOVA™ LED in one hand and the insertion tube in the other.



- Gently guide the tip of the scope to the desired location. Look through the scope to see any obstacles and guide the tip into position. Use the articulation thumblever to steer the tip around obstacles.
- Do not force the scope. If a snag is encountered, try rotating the scope back and forth to spin the insertion tube as you work it in and out.