Thank you for purchasing *NightStar*®. We at Applied Innovative Technologies, Inc. are confident that you will find *NightStar* to be the most reliable and durable light source you have ever owned. To learn more about *NightStar* please visit our website: www.nightstar1.com

Instructions:

To charge *NightStar*, hold the light level or parallel to the ground and moderately shake so that the magnet completely passes through the wire coil. Initially, the capacitor may be completely discharged. If this occurs, *NightStar* will require approximately 3 minutes of shaking to fully recharge the capacitor. *NightStar* is most effectively recharged when it is turned off and shaken between 2 and 3 times per second over a distance of approximately 2" (5 cm) (see Figure 1). If shaken too vigorously or shaken in a vertical position, the charging magnet will hit the repulsion magnets. Although this will not damage the light, it is not recommended and is not the optimum method for charging *NightStar*. When *NightStar* is low on energy, it will take approximately 90 shakes (3 shakes per second for 30 seconds) to recharge the capacitor. On a full charge *NightStar* will provide highly effective illumination for over 20 minutes.

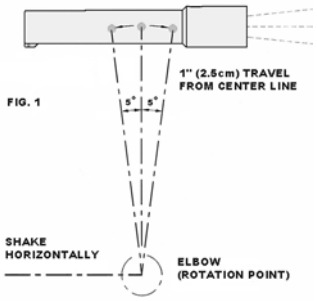

FIG. 1

Performance Optimization:

Shaking *NightStar* as described above results in a resonant condition that maximizes recharge efficiency. When resonance is reached, it will require fewer shakes to fully charge the capacitor. At resonance you will feel and hear the magnet smoothly changing direction due to the motion of the light matching the recoil of the magnetic repulsion system. (Optimum shaking of NightStar is analogous to pumping your legs correctly on a swing.)

Warning:

A STRONG MAGNETIC FIELD surrounds *NightStar*! Do not set *NightStar* within 16" (40cm) of computers, monitors, televisions, or magnetic storage media (cassette tapes, computer floppies, videotapes, credit cards, etc.). Increased distances may be necessary for highly sensitive compasses used in aircraft and boats. Exercise caution when using any magnetic device close to pacemakers. Applied Innovative Technologies, Inc. assumes no responsibility for damage to any magnetically sensitive component or magnetic storage media or consequences resulting from such damage. Applied Innovative Technologies, Inc. is not responsible for any damages, consequential or otherwise, resulting from the use of *NightStar*.

Care:

Use only warm water and mild soap to clean the housing. Rinse with fresh water. Do not use petroleum distillates (such as gasoline or kerosene) or solvents such as acetone to clean any part of the flashlight. Certain insect repellents may also act as a solvent. The lens can be cleaned with Windex® or any similar glass-cleaning product.

Additional Features:

When horizontally suspended by a string or wire, *NightStar* will align in a north-south orientation, serving as a compass with the front of the light pointing towards north.

NightStar's luminescent on/off switch contains a new extremely efficient light storing material. The switch will glow for several hours after only 10 minutes of direct exposure to room or sunlight. This feature allows *NightStar* to be easily located and operated in dark environments.

Form and Function:

Over 150 years ago Michael Faraday discovered that the movement of a magnet through a coil of wire induced an electrical current. *NightStar* integrates this fundamental principle into an elegant and simple design. With only one moving part *NightStar* transforms motion into light. Kinetic energy (energy of motion) is transformed into electrical energy by means of repeatedly passing a high field strength magnet through a coil of wire. Magnets oriented to repel the charging magnet are mounted at both ends of the flashlight. The magnetic repulsion recoil system smoothly decelerates and accelerates the charging magnet back through the coil with little loss in mechanical energy. Kinetic energy is therefore efficiently coupled into electrical energy with almost no degradation to the system. The electrical energy generated is stored in a capacitor. Superior to a battery, the capacitor will never corrode, can recharge several hundred thousand times and will power the LED even under extreme hot and cold temperatures. Equally impressive, the LED used in *NightStar* is practically unbreakable and has a rated lifetime of tens of thousands of hours. The full spectrum light from the LED is projected into a uniform beam by a specially designed acrylic lens and reflector. *NightStar* also has a unique switch design. As the on/off slider is moved forward, a magnet contained within it activates a Reed switch mounted inside the unit. This simple design is reliable, watertight and non-sparking. *NightStar's* state-of-the-art components are built within a lightweight, waterproof, nearly indestructible polycarbonate housing. This unique combination of design and materials ensures that *NightStar* will provide light whenever and wherever needed.

"*When ordinary flashlights fade away, NightStar will guide the way!*"

Specifications:

- Temperature:
  Storage: -50ºF (-45ºC) to + 140ºF (60ºC)
  Operation: -40ºF (-40ºC) to + 130ºF (55ºC)
- Submersion:
  Operational to an ocean depth of 430-ft (131m). [Equivalent pressure crush point: 180 PSI]
- Electromagnetic Compatibility:
  Conforms to Council Directive 89/336/EC. Measured RF levels are far below limits for all frequencies.
- Shock:
  Fully functional after repeated drops onto a concrete surface from a height of 4-ft (1.2m).
- Chemical Resistance:
  Operational after 3 days immersion in solutions of salt water, isopropyl alcohol, methanol, bleach, ammonia, acetic acid* and phosphoric acid* (*10% solutions). Black and yellow housings will also withstand repeated exposures to motor oil, diesel fuel and gasoline.
- Weight / Mass
  11 ounces / 308 grams

Warranty:

In the unlikely event that *NightStar* fails within 5 years of the date of purchase, we will repair or replace it at no cost. This warranty is granted to the original owner who has registered the product. It is necessary to include your name and current address with the returned product. This warranty is void if failure is due to severe mishandling or abuse.

Deliver your *NightStar* as well as questions and comments to:

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Cover background image taken by NASA's Hubble Space Telescope. Image title, "The Reflection Nebula in Orion". Image # PR00-10. To learn more about this and other amazing stellar objects visit NASA's Hubble Space Telescope Institute Images at: http://grin.hq.nasa.gov