**INSTRUCTION MANUAL RECHARGEABLE LIGHTING SYSTEM**

**MODEL HL-NC200**

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**Introduction**

Thank you for purchasing the RECHARGEABLE LIGHTING SYSTEM Model HL-NC200. This Sealed-lead-acid Rechargeable Battery powered lighting system can be used continuously by recharging the battery from home AC Power outlet. Before initial operation, read this manual thoroughly and familiarize yourself with the function of this product. Reserve this manual for your future reference.

**Note before use**

This lighting system cannot be lighted or will not serve usual running time due to self discharge at initial use or after it is not used for a prolonged period. Be sure to recharge it before use. Overdischarging the battery, e.g., continuous light on until power completely runs off, will affect the battery function. Turn off the light and recharge the battery when beam turns dim.

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**Name of Parts**

This lighting system consists of the following components. Make sure all the components are included in the package.

- **Bracket (H-23)**
- **Clamp (SP-6)**
- **Screw**
- **Rubber Packing**
- **Cord**
- **Double Faced Tape**
- **Battery Bag**
- **Battery Set (NC-200)**
- **Lamp Unit**
- **Battery Charger (CHR-6V4)**
- **Plug Cover**
- **Wire Cover**
- **Velcro**
- **Frame**
- **Double Faced Tape**

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**Mounting the Bracket**

The lighting system can be mounted on the handlebar in two manners, with the switch on top or on bottom, by selecting the surface of the bracket. Refer to the above mounting examples and mount it as desired.

1. Wrap rubber packings on the handlebar and cover the clamps (SP-6) on the packings with the nut side down. SP-6 can fit to various handlebars by adjusting thickness of the packing.
2. Put the bracket on the SP-6 clamps and fasten with the screws temporary as shown.
3. Adjust tilted angle as desired.
4. Fasten the screws securely.

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**Mounting the Battery Bag**

1. Take out the battery from the battery bag. Remove the plug cover and insert the plug of the cord into the jack on the battery bag.
2. Put the plug cover back with the cord sent into the jack on the battery set. Connect the charger to a home AC power outlet.
3. Put the battery set back into the bag. Tape the battery bag on the top tube with velcro. Wrap the strap around the down tube and adjust strap length by running it through the slots on the male buckle. Insert male buckle to female buckle until they click.

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**Mounting and Removing the Lamp Unit**

1. Slide the lamp unit onto the mounted bracket until it clicks.
2. Plug the cord outlet from battery set into the jack on the lamp unit. Adjust cord length by putting extra cord into the battery bag or wind the cord around the frame.
3. To remove the lamp unit, slide it outward while pushing the lever on the bracket in the direction shown by the arrow.

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**How to Operate**

- Beams can be adjusted individually to 180° vertically and 10° horizontally. Refer to illustrations on left and adjust beam pattern as desired.
- Single or dual beam operation is controlled by the see-saw switch. Dual beam operation by pushing the switch from forward and single beam operation by pushing the switch rearward. Turn off the system by pushing the switch in balance position.

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**How to Replace Bulb**

Switch off the system before replacing the bulb. The bulbs and the lamp unit are at high temperature right after the system is switched off. Wait until temperature is lowered before replacing the bulbs.

1. Remove the head beam from lamp unit by turning it approximately 35° counterclockwise (view from front).
2. Remove the bulb holder and replace the bulb with a new one. Insert the bulb aligning the cut portion of the cap with the triangular projection of the mirror. Replace the beam head to the lamp unit by turning it approximately 35° clockwise (view from front). Always keep the line on the broad beam lens vertically. Use only the CatEye bulbs.

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**How to Replace Fuse**

A 5A fuse is connecting the circuit to secure safety and it will cut a malfunctioned electricity circuit.

1. Take out the battery set from the battery bag. Remove the plug cover and retract the cord.
2. Remove the battery cover and then the fuse case. Replace with a new fuse.
3. Reverse the above steps.

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**Notes on use**

1. A prolonged period of storage or non-use will lower the voltage of the battery set (NC-200) due to self discharge. Always keep the battery set (NC-200) fully charged especially before storage and prolonged periods of non-use.
2. Never use damaged or broken cord.
3. Short circuiting the battery's terminal with the charger's plug may cause overheat and damage the battery set.
4. The battery pack (NC-200) is restricted to use for this unit. Never use it with other products.
5. Avoid overdischarging the lighting system, e.g., switch it on until power completely run off. It will shorten the battery life.
6. Never charge the lighting system over 10 hours.
7. If the lighting system does not serve the proper running time on fully charged battery, the battery will have to be replaced. Replace with a new battery set (NC-200).

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**Specifications**

- **Bulbs:** Broad Beam: 6V-2.4W P13.5S halogen
  Spot Beam: 6V-10W P13.5S halogen
- **Battery:** NC-200 Sealed-Lead-Acid Rechargeable Battery
- **Charger:** Battery Charger CHR-6V4
- **Operation Time:** 2.4W approx. 10-hour continuous use
  10W approx. 2-hour continuous use
- **Charging Time:** 8 to 10 hours
- **Useable Temperature Range:** When Charging: 0°C to 40°C
  When Operating: 10°C to 45°C
- **Rechargeable Number of Times:** At least 150 times (until rated capacity drops to 50%)

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**Limited warranty**

This CAT EYE product is warranted under normal usage against defects in workmanship and materials to the original purchaser for a period of one year from the date of purchase free of charge providing the following conditions are met. Insurance, handling and transportation charges to our service department shall be borne by the person desiring service. This warranty is limited to the repair for the lamp unit and battery charger excluding the bulb, battery set, the bracket, and other attachments.

1. This warranty certificate must be duly completed and stamped or signed by dealer to validate the warranty.
2. This warranty becomes void if the product shows evidence of (a) use contrary to the applicable instruction manual, (b) damages resulting from repairs, changes or disassembly performed by other than CAT EYE service department, (c) improper safety keeping/using, (d) drop and impact by a traffic accident and/or the like, (e) damages by fire, acts of God and earthquake.

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**Service procedure**

1. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
2. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

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**Address for service**

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