



SYNC KINETIC™

CatEyeSYNC™ Compatible
Rechargeable Taillight

TL-NW100K Manual

Information in the instruction manual is subject to change without notice.

Introduction



How to Charge



**How to Mount to a
Bicycle**



Switch Operation



Firmware Update



**Frequently Asked
Questions**



Appendix





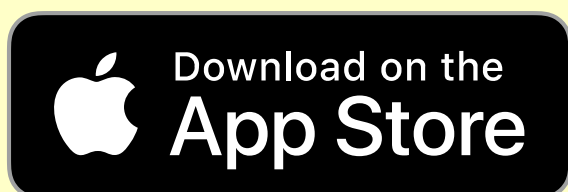
Install CatEyeSYNC™

SYNCKinetic™ is capable of the following when used with the CatEyeSYNC™ smartphone app.

- **Synchronize on/off operations with other CatEyeSYNC™-compatible lights**
- **Synchronize modes and flashing timing with other CatEyeSYNC™-compatible lights***
- **Synchronize Kinetic mode operation with other CatEyeSYNC™-compatible lights***
- **Configure light settings, check remaining battery level, and receive notifications via the app**

* Excluding headlights

If using an iPhone

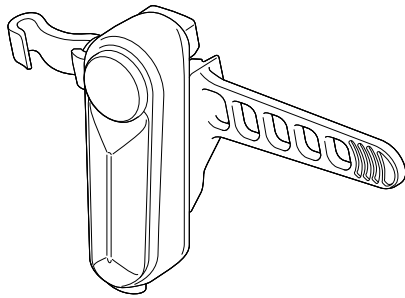


If using an Android smartphone

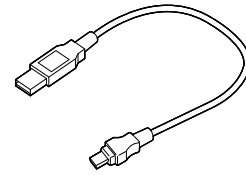


- * Downloading and using the app incurs communication fees. A Wi-Fi connection is recommended.
- * For the latest information on compatible smartphones, see [“CatEyeSYNC™ Compatible Devices”](#).
- * This manual describes how to perform operations using the light only. For information on operations using CatEyeSYNC™, refer to the [“CatEyeSYNC™ instruction manual”](#).
- * Pairing with CatEyeSYNC™ is required to synchronize the lights.

Checking package contents



Light unit



USB cable
(MICRO USB)

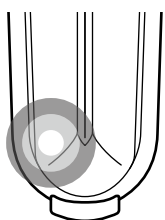
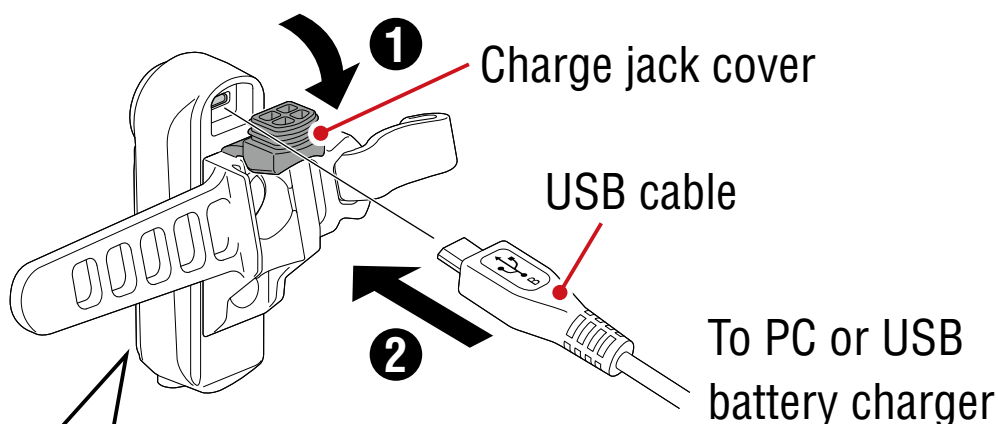
❗ Before Initial Use

This unit is shipped with small charge to check the light. Be sure to charge it before use, according to the instructions [“How to Charge” \(Page3\)](#) and [“Cautions on recharging” \(Page11\)](#).

How to Charge

1. Connect the light unit to your PC or a commercial USB battery charger using the USB cable.

The indicator turns on and charging starts.



Indicator

Steady red light : Charging
Off : Charging is completed
Flashing red light : Remaining battery low

Standard charging time

Approx. 2.5 h
(USB2.0)

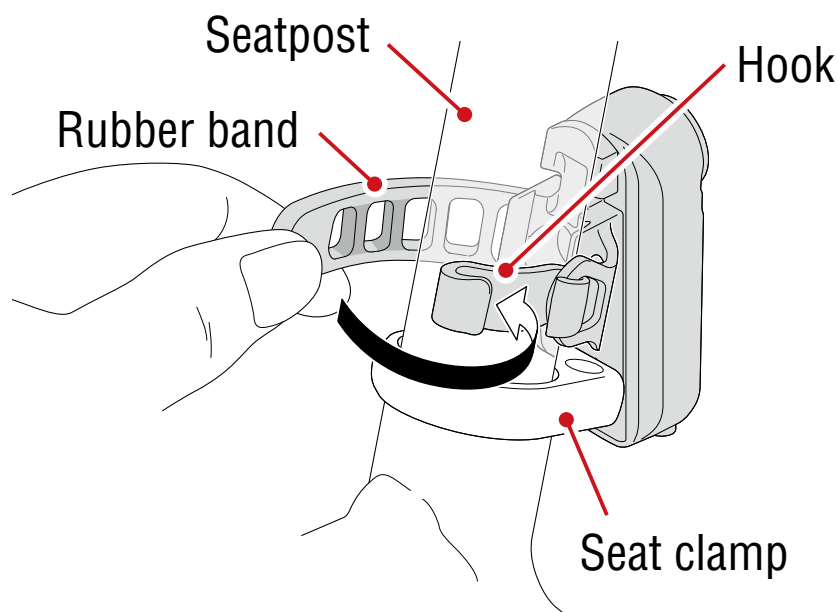
- * When your PC is in sleep state, the unit cannot be charged.
- * Use a USB battery charger of 500mAh (USB2.0) or more. The cartridge can be fast-charged with high capacity USB battery charger.

2. Once charging is complete, be sure to disconnect the USB plug.

- * Charging time is approximate values, and will vary depending on the environmental and usage conditions.

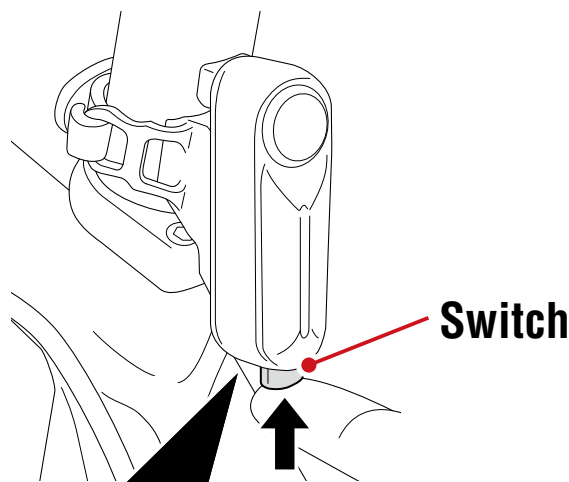
How to Mount to a Bicycle

Attach the light securely to the seatpost.

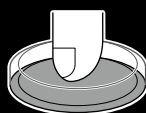


Switch Operation

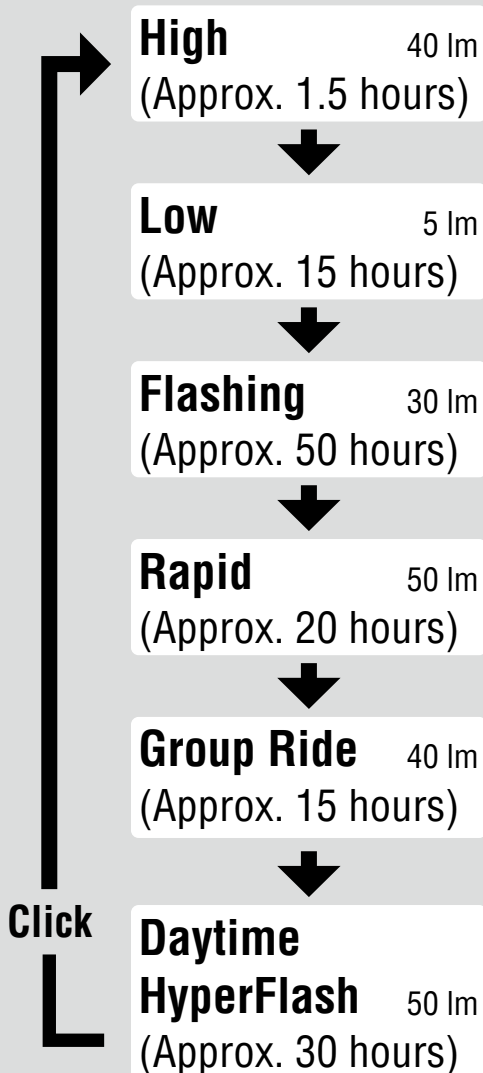
Press the switch to turn the light on / off or to select the mode.



OFF ↔ ON *2



Switch
Press and hold



Kinetic mode:

When deceleration is detected, the light will illuminate at 50 lumens for about 2.5 seconds regardless of the lighting mode selected. Illumination will continue while deceleration is detected.

* The stated runtime of each mode does not include Kinetic mode operation. The actual runtime may vary when the Kinetic mode is enabled.

* Illumination times will become shorter with increased frequency of Kinetic mode operation.

Approximate illumination times based on 60 operations of the Kinetic mode in 1 hour

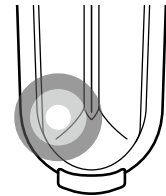
High (Constant)	: Approx. 1.4 hours
Low (Constant)	: Approx. 6 hours
Flashing	: Approx. 7 hours
Rapid	: Approx. 6 hours
Group Ride	: Approx. 6 hours
Daytime HyperFlash	: Approx. 7 hours

***2:** When turning the light on, it lights up in the mode that was used last time. (Mode memory function)

Battery auto-save function

When the remaining battery power is low, the lighting mode changes to slow flashing. Operation of the Kinetic mode will be disabled when the remaining battery power is low. Charge the product as soon as possible.

Indicator

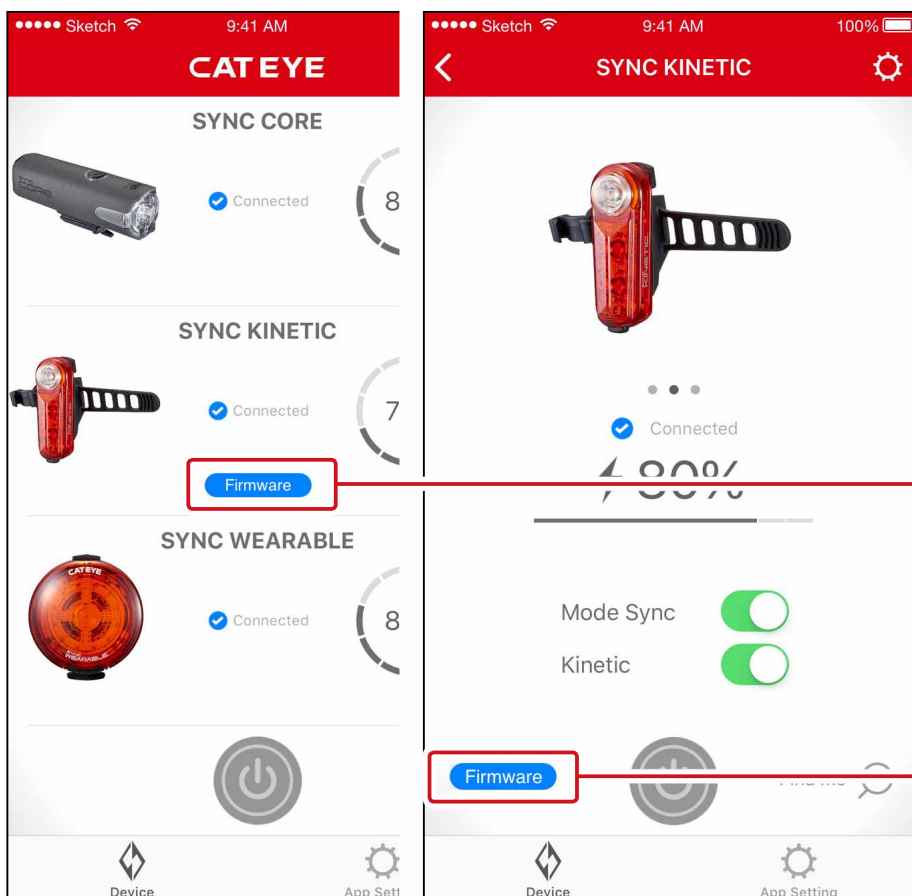


(Flashing red light)

Firmware Update

Update Notifications

When a new firmware version is available, CatEyeSYNC™ will show a notification.



Firmware update notification

Installing and Executing Firmware Updater for CatEyeSYNC™

To update the firmware, install Firmware Updater for CatEyeSYNC™ on your PC.

* The PC must be connected to the Internet.

**Operating environment : Windows 7 / 8 / 8.1 / 10, or
Mac OS 10.10 or later**

3. [Download the updater](#) from the CATEYE website.

Download location

Home page

> SUPPORT

> Downloads

> Software and App

> Firmware Updater for CatEyeSYNC™

4. Download the Firmware Updater for CatEyeSYNC™ that matches your OS.

After download is complete, follow the on-screen instructions to install.

Executing Firmware Updater for CatEyeSYNC™

* The PC must be connected to the Internet.

1. Fully charge the light being used.

Important : Please make sure the light is fully charged before updating the firmware.

2. Start Firmware Updater for CatEyeSYNC™.



3. Follow the on-screen instructions to connect the light to a PC and update the firmware.

Important :

- Be sure to use the included USB cable when connecting a light to a PC.
- Do not simultaneously connect any other lights.
- Do not power off the PC or disconnect the light while updating. Doing so may damage the light.

Click [Update] button to begin updating. Wait until a dialog appears with the message [Updating complete].

4. After the update is complete, disconnect the light.

After updated, the light will enter a sleep state.

Click the switch on the light to wake the light.

- * For information on operations using CatEyeSYNC™, refer to the “[CatEyeSYNC™ instruction manual](#)”.

Frequently Asked Questions

The firmware update does not finish, or an alert is displayed.

Try updating the firmware again from the beginning.

- * Please make sure the light is fully charged before updating the firmware.
- * Be sure to use the included USB cable when connecting a light to a PC.
- * Do not simultaneously connect any other lights.

Appendix

Warning!!!

- Check periodically to ensure that the light unit is attached securely. Do not use a damaged rubber band.
- Always attention to the remaining battery power by checking the indicator periodically while using.

Caution!

- This light detects deceleration through the use of acceleration sensor. Please note that activation of the Kinetic function depends on the degree of deceleration, the light may not react or the reaction may be delayed.
- Stop your bicycle to operate the switch.
- Do not place it within children's reach.
- This unit is not totally waterproof. Please wipe and dry it completely after using in rain. Otherwise, it may cause failure.
- If the light unit or parts become dirty with mud, etc., clean with a soft cloth which is moistened with mild soap. Never apply paint thinner, benzine or alcohol; damage will result.

Lithium-ion batteries

Cautions on recharging

- **Avoid charging in direct sunlight or in a vehicle parked under direct sunlight, and make sure to charge only when the ambient temperature is between 41°F and 104 °F (5 and 40°C).**
- **Before charging, be sure that no dust or other foreign objects attach to the USB plug.**
- **Do not subject the light to vibrations while charging.**
- **Once charging is complete, be sure to disconnect the USB plug.**

Cautions in use

- **Charging, discharging, and storing in high temperatures will cause the rechargeable battery to deteriorate faster. Do not place the light inside a vehicle or near a heater.**
- **If the illumination time is significantly reduced even after proper charging, the rechargeable battery may be nearing the end of its service life. Dispose of the battery as described in “Cautions for dispose”.**

Cautions on storage

Cool and dry storage is recommended. For long period storage, it is important to charge the battery 30 minutes every 6 months.

Cautions for dispose

When disposing of the light unit, remove the internal rechargeable battery and dispose of it according to local regulations.

Communication

Interference occurs in the following places and / or environments, which may result in incorrect operation.

- **Near TVs, PCs, radios, or motors or in cars or trains.**
- **Near railroad crossings, along railway tracks, around television transmitting stations and radar bases, etc.**
- **Used with other wireless devices or certain battery-powered lights.**

Frequency Band: 2.4 GHz Radiated Power: -16.2 dBm

Hereby, CATEYE Co., Ltd. declares that the radio equipment type TL-NW100K is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: cateye.com/doc

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- 1) L'appareil ne doit pas produire de brouillage;*
- 2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.*

Specifications

Battery	Rechargeable lithium-ion polymer battery 500 mAh	
Charge	Micro USB plug	
Operating time	High	: Approx. 1.5 hours
	Low	: Approx. 15 hours
	Flashing	: Approx. 50 hours
	Rapid	: Approx. 20 hours
	Group Ride	: Approx. 15 hours
	Daytime HyperFlash	: Approx. 30 hours
	* Average runtime at 20°C.	
Approximate illumination times based on 60 operations of the Kinetic mode in 1 hour	High	: Approx. 1.4 hours
	Low	: Approx. 6 hours
	Flashing	: Approx. 7 hours
	Rapid	: Approx. 6 hours
	Group Ride	: Approx. 6 hours
	Daytime HyperFlash	: Approx. 7 hours
Standard charging time	Approx. 2.5 hours	

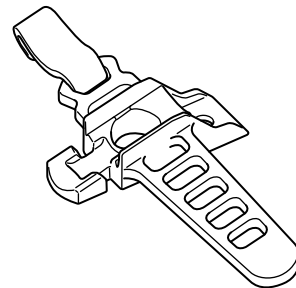
Temperature range	Charging : 41°F – 104°F (5°C – 40°C) Operating : 14°F – 104°F (-10°C – 40°C)
Recharge / discharge number of times	About 300 times (until the rated capacity drops to 70%)
Dimensions / weight	2-15/16" x 1-1/32" x 1-7/64" (74.5 x 26 x 28 mm) (Light unit only) / 1.52 oz (43 g) (Including rubber band)

* The specifications and design are subject to change without notice.

Spare / optional parts

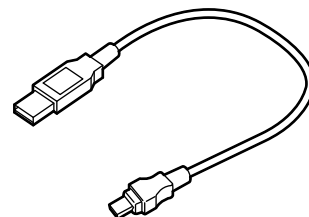
5443510

Rubber band
(NW100K)



5342730

USB cable
(MICRO USB)



Limited warranty

2-year Warranty: Light unit only (excludes battery deterioration)

CatEye products are warranted to be free of defects from materials and workmanship for a period of 2 years from original purchase. If the product fails to work during normal use, CatEye will repair or replace the defect at no charge. Service must be performed by CatEye or an authorized retailer. To return the product, pack it carefully and enclose the warranty certificate (proof of purchase) with instruction for repair. Please write or type your name and address clearly on the warranty certificate. Insurance, handling and transportation charges to CatEye shall be borne by person desiring service.

For UK and REPUBLIC OF IRELAND consumers, please return to the place of purchase. This does not affect your statutory rights.

CATEYE CO., LTD.

2-8-25, Kuwazu, Higashi Sumiyoshi-ku, Osaka 546-0041 Japan

Attn: CATEYE Customer Service

Phone : (06)6719-6863

Fax : (06)6719-6033

E-mail : support@cateye.co.jp URL : <https://www.cateye.com>

[For US Customers]

CATEYE AMERICA, INC.

2825 Wilderness Place Suite 1200, Boulder CO 80301-5494 USA

Phone : 303.443.4595

Toll Free : 800.5.CATEYE

Fax : 303.473.0006

E-mail : service@cateye.com