This device complies with Part 15 of the FCC Rules. Operation is subject to the following 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.

Modifications
The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by CatEye Co., Ltd. may void the user’s authority to operate the equipment.

WARNING / CAUTION
- Do not concentrate on the computer while riding. Ride safely!
- Install the magnet, sensor, and bracket securely. Check these periodically.
- If a child swallows a battery, consult a doctor immediately.
- Do not leave the computer in direct sunlight for a long period of time.
- Temperature drop and battery drain may worsen the receiving sensitivity even if they are within the transmission range. Interference may occur, resulting in incorrect data, if the computer is:
  - Near a TV, PC, radio, motor, or in a car or train.
  - Close to a railroad crossing, railway tracks, TV stations and/or radar base.
- Using with other wireless devices, or some particular battery lights.

Before using the computer, please thoroughly read this manual and keep it for future reference.

Preparing the computer

When using the computer for the first time or resetting to the factory default setting, format according to the following procedure.

1. Format (initialize)
   - Press and hold the MENU button.
   - Press the AC button.
   - Release the AC button.
   - Release the MENU button.

2. Select the speed and temperature unit
   - Press MODE and SSE simultaneously.
   - Switch the screen (By pressing simultaneously).

3. Enter the tire circumference
   - Enter the tire circumference of your bicycle in mm.
   - Refer to the tire circumference reference table.

4. Set the sensor ID
   - Hold the computer body close to the sensor (20 - 72cm), and press and hold the RESET button on the sensor with a sharp object. Sensor ID will automatically move on to Clock setting screen.
   - When setting the sensor ID, place the sensor at least 20 cm (approximately 8 inches) away from the computer. Press and hold the RESET button, the sensor will send the ID when releasing the button.
   - The computer is on standby for 5 minutes while setting the sensor ID. It displays “ERROR”, and cancels the ID when no ID signal is received during the standby, or you press Mode and SSE simultaneously. Screen will move on to clock setting when no ID signal is received and displayed. Be sure to set the sensor ID according to “Sensor ID setting” on the menu screen.
   - Original ID is saved if you cancel the ID.

5. Set the clock
   - When MODE and SSE are pressed simultaneously, “Display time”, “Hour”, and “Minute” will appear, in this order.
   - Switch the screen or move digits (By pressing simultaneously).

When using the computer installed on your bike

1. Measure wheel circumference (L) of your bike
   - Stop the bike on a level surface with the wheel you intend to use. Have the rider sit on the bike. All four tires should be inflated to the recommended pressure. If the tire size is not known, measure the tire circumference using the formula: L = 2πr, where L is the circumference and r is the radius of the tire. The radius of the tire can be calculated using the formula: r = (D/2) - (π/2), where D is the diameter of the tire. The circumference can be calculated using the formula: L = 2πr = 2π(D/2) - (π/2) = πD/2 - (π/2).

2. Calibrate number.
   - When using the computer installed on your bike, do not use thinner, benzene, or alcohol.
   - A temperature sensor is built in the computer. If the sensor is heated by direct sunlight or body heat, it may not indicate the temperature correctly.
   - The altitude data with this unit is for reference only; accordingly, do not use this unit as a measuring device for professional use.
   - Disposal of used batteries according to local regulations.
   - LCD screen may be distorted when viewed through polarized sunglasses.

Wireless Sensor

In order to prevent any interference with the sensor signal, the transmission range is designed to be 20 to 72 cm, in addition to use of the ID code. (This receiving range is only a reference.) Please note the following points:
- To use this unit, the sensor ID has to be set.
- Two different IDs, ID1 and ID2, can be registered to this unit, which are identified automatically. The computer cannot receive when the distance between the sensor and computer is too long.
- Temperature drop and battery drain may worsen the receiving sensitivity even if they are within the transmission range.
- Interference may occur, resulting in incorrect data, if the computer is:
  - Near a TV, PC, radio, motor, or in a car or train.
  - Close to a railroad crossing, railway tracks, TV stations and/or radar base.
- Using with other wireless devices, or some particular battery lights.

How to restart

After changing the battery, or when the computer displays a error, restart the computer according to the following procedure.

1. Press the AC button on the back of the computer.
2. Set the clock. Refer to “Preparing the computer”.

How to install the unit on your bicycle

1. Install the sensor and magnet
   - The distance from the computer to the sensor is within the transmission range.

2. Attach the bracket to the stem or handlebar
   - When attaching the bracket to the stem

3. Remove/install the computer
   - While supporting it by hand, push it out as if lifting the front up.

* For type handlebar or oversized stem, bracket can be mounted using the Bracket Holder and nylon ties. (Option)
### Operating the computer (Measuring screen)

#### Starting/Stopping measurement
You can select the Auto mode (automatic measuring) or manual mode. During measurement, km/h or mph flashes. The maximum speed and total distance are updated regardless of starting/stopping the measurement.
- **Auto mode** (on)
  - Measurements start automatically when the bicycle is in motion.
- **Manual mode**
  - When the computer is mounted on the bracket, start/stop measuring by pressing the MODE and SSE buttons simultaneously.
  - For switching between Auto and Manual mode, refer to “Auto mode setting” on the menu screen.

#### Switching computer function
Pressing the MODE changes the middle bottom row display.

#### Measuring screen
- **Bottom display**
  - **Temperature**
  - **Level Altitude**
  - **Slope (%)**
  - **Dst**
  - **Trip Distance-2**
  - **Av**
  - **Maximum Speed**

#### Changes of screen
- **Miniature**
  - **Av Average Speed**
  - **Max Maximum Speed**
  - **Cept Count Down Distance**
  - **Odo Total Distance**

#### Resetting data
While displaying any data other than **Dst-2**, pressing and holding the MODE and SSE simultaneously resets the measurement data to 0. While displaying **Dst-2**, pressing and holding the MODE and SSE simultaneously resets only **Dst-2** to 0. In both cases, the total distance and total altitude gain are not reset.

#### Power-saving mode
If the computer has not received a signal for 10 minutes, power-saving mode will activate and only the clock will be displayed. When the computer receives a sensor signal again, the measuring screen reappears. If 60 minutes’ inactivity elapses, power-saving mode will change to SLEEP mode. Pressing the MODE in SLEEP mode brings up the measuring screen.

#### Altitude measurement
This unit detects the change in atmospheric pressure and temperature using a pressure sensor built in the computer, and converts it to the altitude using the relationship between the altitude and pressure according to ISO 2533 (Standard atmosphere), which was developed based on the international standard atmosphere specified by the International Civil Aviation Organization (ICAO). According to ISO 2533, the measurements may change more than 30 m from the early morning to the evening under a stable weather condition. The altitude measurements can be incorrect in the following places or environment.

- **Operating the computer**
  - **Measuring screen**
  - **Changing the computer settings**
  - **Speed/temperature unit selection**
  - **Total distance manual entry**

#### Temperature
- **The current temperature is displayed.**
  - The altitude measurement is updated every 3 seconds during measurement and while checking the displayed data.
  - *The altitude measurement is updated every 3 seconds during measurement and while checking the displayed data.*
  - When the computer is receiving no signal from sensor.

#### Sea level altitude correction
This unit determines the altitude by converting the change in atmospheric pressure and temperature, therefore, it may cause deviation from the actual sea level altitude. It is recommended to correct the sea level altitude just before measurement, using either of the following methods.
- **Auto mode setting (sea level altitude correction)**
  - Enter the altitude at the current point.
  - The sea level altitude is corrected on the menu screen “Sea level altitude correction”. Move to the sea level altitude correction screen by pressing MENU or the relevant shortcut from the measuring screen.

#### Countdown distance
Once the target trip distance is set, the unit displays the countdown distance to the target, and notifies at arrival. When the unit reaches the target distance, the countdown distance disappears and the current value is displayed. The screen returns to the original display in 5 seconds.

#### Speed/temperature unit selection
- **Changing the unit**
  - **Setting change**
  - **Operate as described in “Preparing the computer 5”.
  - **Total distance manual entry**
  - **Operate as described in “Preparing the computer 5”.
  - **Operate as described in “Preparing the computer 5”.”

- **Select ID1 or ID2**
  - **Operate as described in “Preparing the computer 6”.”


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*For detailed information, refer to the manual supplied with the product.*

*For details, refer to “Sea level altitude correction”.*

* For effective use of the sea level altitude, refer to “Sea level altitude correction”.*
Maintenance

To clean the computer or accessories, use diluted neutral detergent on a soft cloth, and wipe it off with a dry cloth.

Replacing the battery

Computer
If it turns on, replace the battery. Install a new lithium battery (CR2032) with the (+) side facing upward. After the battery change, go through the restart operation, by pressing the AC button.
* Then restart the computer according to “How to restart”.

Sensor
Replace the battery when the Speed digit flashes while riding. After replacement, check the positions of the sensor and magnet.
* After the battery is replaced, ID setting is required again. For details, refer to “Sensor ID setting” on the menu screen.

Troubleshooting

MODE does not work when the computer is mounted on its bracket.
Check that there is no dirt between the bracket and the computer.
Wash off the bracket with water to get rid of any dirt.

The sensor signal reception icon does not flash (the speed is not displayed). (Move the computer near the sensor, and turn the front wheel. If the sensor signal reception icon flashes, this trouble may be a matter of transmission distance due to battery drain, but not any malfunction.)
Set the sensor ID.
Set the ID according to “Sensor ID setting” on the menu screen.
Check that the clearance between the sensor and magnet is not too large. (Clearance: within 5 mm)
Check that the magnet passes through the sensor zone correctly.
Check that the distance between the computer and sensor is correct. (Distance: within 20 to 70 cm)

Incorrect data of the sea level altitude.
Is the sea level altitude corrected?
The sea level altitude may vary due to changes in atmospheric pressure. Correct the sea level altitude according to “Sea level altitude correction” on the menu screen.

No display.
Is battery in the computer run down?
Replace it. Then restart the computer referring to “How to restart”.

Incorrect data appear.
Restart the computer referring to “How to restart”.

Specification

Battery ............ Computer : Lithium battery (CR2032) x 1, Sensor : Lithium battery (CR2032) x 1
Battery life ........ Computer : Approx. 10 months (If the computer is used for 1 hour/day, the battery life will vary depending on the conditions of use.)
Sensor : Approx. 8 months (If the computer is used for 1 hour/day, the battery life will vary depending on the conditions of use.)
* This is the average figure of being used under 20 °C temperature and the distance between the computer and the sensor is 65 cm.

Controller ... 8 bit, 1-chip microcomputer (Crystal controlled oscillator)
Display ......... Liquid crystal display
Sensor .......... No contact magnetic sensor
Transmission distance .... Between 20 and 70 cm
Wheel circumference range... 2000 mm - 3699 mm (Limited value: A: 2066 mm, B: 2064 mm)
Working temperature ....... -15 °C - 40 °C (-5 °C - 40 °C) (This product will not display appropriately when exceeding the Working Temperature range. Slow response or black LCD at lower or higher temperature may happen respectively.)
Dimensions/weight ............ Computer : 2-1/4 x 1-11/32 x 19/32  (57 x 34 x 15 mm) / 1.05 oz (30 g)
Sensor : 1-41/64 x 1-3/8 x 19/32  (41.5 x 35 x 15 mm) / 0.53 oz (15 g)
* The factory-loaded battery life might be shorter than the above-mentioned specification.
* The specifications and design are subject to change without notice.

Standard parts

Optional parts

<table>
<thead>
<tr>
<th>Part no.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>#160-2890</td>
<td>Speed sensor</td>
</tr>
<tr>
<td>#160-2880</td>
<td>Bracket band</td>
</tr>
<tr>
<td>#160-2193</td>
<td>Bracket holder</td>
</tr>
<tr>
<td>#160-0280N</td>
<td>Speed sensor</td>
</tr>
<tr>
<td>#169-9681N</td>
<td>Wheel magnet</td>
</tr>
<tr>
<td>#166-5150</td>
<td>Lithium battery</td>
</tr>
<tr>
<td>#160-2770</td>
<td>Bracket holder</td>
</tr>
</tbody>
</table>

Battery specifications:
- Computer: CR2032, 3V Lithium battery
- Sensor: CR2032, 3V Lithium battery

Battery life:
- Computer: Approx. 10 months (1 hour/day)
- Sensor: Approx. 8 months (1 hour/day)