CAT EYE®
CYCLOCOMPUTER
CC-AT100
WITH ALTIMETER FUNCTION

WITH ALTIMETER FUNCTION
Introduction
Thank you for purchasing CATEYE CYCLOCOMPUTER Model CC-AT100. As well as cyclocomputer function, this model has altimeter function, which measures altitude and atmospheric temperature, by sensing the changes of the atmospheric pressure with the pressure-sensor. When cycling in a hilly area with a mountain bike, it gives the current altitude (above sea level) and trip altitude gain in the 1 meter resolution. The screen is backlit for night viewing. In addition to functions for the bicycling activity, it can be used on its own as an independent altimeter for mountain climbing. The features are as follows:

Altimeter Functions:
• Measures current altitude (above sea level), trip altitude gain, total altitude gain in a temperature-compensated 1 meter resolution.
• Measures atmospheric temperature.
• Can reset trip altitude gain alone.
• Gives choices of usage, with two types of measuring modes.
• Can be used for activities other than bicycling, with accessory parts.

Cyclocomputer Functions:
• Current speed
• Average speed
• Trip distance
• Clock time
• Maximum speed
• Total distance
• Elapsed time
• Auto (Automatic start/stop) function
• Can reset maximum speed, average speed, trip distance, elapsed time.

Aspects of Main Unit:
• The screen backlight enables you to read the computer screen even at night.
• Any data stored in memory (total distance, total altitude gain, wheel circumference etc.) will not be lost with an all-clear operation or by changing the battery.

Before operating, thoroughly familiarize yourself with this manual so that you understand the functions completely. Please keep this manual, along with the warranty card, for future reference.
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**NAMES**

**Main Unit**

A Display
   1 Main Display
   2 Sub Display
   3 Bicycle Symbol
   4 Altitude Symbol
   5 Mode Symbol
   6 Speed Scale Symbol
   7 Temperature Scale Symbol
   8 Auto (Automatic Start/Stop) Function Symbol

B S/S (Start/Stop) Button
C Mode Button
D Light Button
E Set Button
F AC (All Clear) Button
G Battery Cover
H Contact
I Altitude Sensor Cover/Filter

**Accessories/Attachments**

J Bracket
K Wire
L Speed Sensor/Sensor Holster
M Sensor Band A (Large/Small)
N Sensor Band B
O Sensor Screw

P Magnet
Q Sensor Band Rubber Pad
R Bracket Rubber Pad (2 pcs.)
S Wire Securing Tape
T Lithium Battery (CR2032)
FOR SAFE OPERATIONS (IMPORTANT)

For safe and appropriate use, always observe the following.

Caution:
• Don’t pay too much attention to your cyclocomputer functions when riding. Keep your eyes on the road and give due consideration to safe riding.
• This altimeter is not intended to be a specialized measuring device.

Proper use and care:
• Never disassemble the main unit. It can not be re-assembled.
• The main unit is loaded with sensitive components. A strong impact may result in malfunction. Don’t intentionally submerge the main unit under water. Although the main unit is water-resistant (such as rain), it is not designed to be used underwater.
• Don’t leave the main unit exposed to direct sunlight for extended periods of time.
• If the main unit is superheated by direct sunlight, the temperature sensor inside of the main unit will not give the correct temperature.
• The Cat Eye CC-AT100 is essentially a barometer. It measures the change in barometric pressure whether caused by a change in altitude or a change in weather.
• The current altitude should be calibrated before each ride.
• Sudden temperature change can cause a temporary incorrect altitude display.
• When using this unit as an independent altimeter, switch off the bicycle symbol to allow it in the continuous measuring mode.
• Static electricity might cause incorrect data.
• If the S/S(Start/Stop) button, Mode button and Set button are pressed simultaneously, all the stored data will be erased.
• In an aircraft, the unit will not give a correct data because of the regulated pressure.

Maintenance:
• When the main unit or the contact gets wet, dry it off with a cloth; rust will cause functional errors.
• Fasten the magnet and the speed sensor securely, and check their relative position periodically. Incorrect attachment of these parts may cause an accident.
• If the altitude sensor cover is clogged with mud or sand, it will stop measuring accurately. Clean it off according to "Daily Care" instructions.
• If the main unit or accessories/attachments become dirty with mud etc., gently wash with mild soap and wipe dry with a soft cloth. Never apply paint thinner, benzine or alcohol; damage will result.
SET UP

1. How to Put in a Battery
1. Remove the battery cover on the back with a coin or a similar opener (Fig. 1).
2. Insert a new lithium battery (CR2032) with the (+) pole upward as illustrated. Close the cover securely.
3. Press the AC button, and reset the speed scale and the clock time again according to "Main Unit Preparation".

Replacing Battery
When the battery has worn out, replace it with a new one according to the following instruction.

Warning: Safely dispose of the old battery; and don't place it within children's reach. If swallowed by mistake, consult a doctor immediately.

Battery Life: approx. one year (one hour's altitude measuring per day)

Note: If the display disappears with the press of the light button, or often shows irregular altitude, it means the battery has worn out. Replace it with a new one.

Caution: Before replacing the battery, be sure to leave the unit for more than 5 minutes so that the power saving function is on; in this way, it will update the data and memorize the newest measurements. (Refer to page 13: "Power Saving Function".)

2. Main Unit Preparation
The following process must be completed before starting to use.

-1. How to Measure Wheel Circumference
In order to get the accurate value, measure the wheel circumference (L) actually from the tire of your bicycle (Fig. 2). Put a mark on the tire tread, and ride one full wheel revolution; then mark the ground at the end of one revolution and measure the distance between the two marks. Or, "Setting Values Cross Reference Table" (page 19) can tell the approximate wheel circumference according to the tire size.

-2. Setting Speed Scale
First, press the AC button; all displays illuminate and then "km/h" symbol appears (Fig.3). With each press of the S/S button, "km/h" and "mile/h" appears alternately. Select the desired scale and press the Set button to fix the scale. This speed scale corresponds to the altitude scale; if "km/h" is selected, the altitude scale will be "meter", and if "mile/h" is selected, the altitude scale will be "feet".
-3. Setting Temperature Scale
When the process of setting speed scale is completed, °C symbol illuminates (Fig. 4). With each press of the S/S button, °C and °F appears alternately. Select the desired scale and press the Set button to fix the scale.

-4. Setting Wheel Circumference
The preset value of this unit is 203 cm (standard value for 26 x 1.50 mountain bike wheel) (Fig. 5). When using 203 cm without revision, press the Set button and this value is set. For revision, press the S/S button to increase the number and the Mode button to decrease, when the number is blinking. To increase/decrease the number rapidly, hold down the button. When the desired number appears, press the Set button and the value is set.

Note: Once the wheel circumference is set, this number will be the initial value.

How to Reset or Change the Wheel Circumference
In the sub mode showing O (total distance), and when the current speed is zero, press the Set button; the stored number flickers. Then revise the number according to the above -4.

-5. Switching on the Auto (Automatic Start/Stop) Function
Operate the Mode button to display the main mode showing T, D or A. Press the S/S button to get the stop state, and then press the Set button. AT symbol appears and the Auto function is on (Fig. 6).

-6. Setting Clock Time
Operate the Mode button to display the sub mode showing clock time. When the speed is zero, press the Set button (Fig. 7). With each press of the S/S button, the flickering digits for hours increase by one. (To increase rapidly, hold down the button.) Then press the mode button, and the digits for minutes flicker. Adjust the minutes by pressing the S/S button. For accurate time setting, display the number which is 1 minute ahead of the present time; then at the tone of the time signal, press the Set button. (This 12-hour clock does not have a distinction between A.M. and P.M.)

BUTTON FUNCTIONS

A Mode Button (Lower Button)
- With each press of this button, the main mode shifts as shown in Fig. 9. In this mode, the main display (upper line) always shows the current speed.
• Each main mode has its respective sub mode. To switch to the sub mode, hold down this button. To switch back to the main mode from the sub mode, just press this button ordinarily. To shift from one mode to another, it is necessary to switch back to the main mode (from the sub mode) each time.

**B S/S (Start/Stop) Button (Upper Button)**
- With each press, this button starts or stops measuring trip distance (D), elapsed time (T) and average speed (A). During operation, the speed scale symbol or temperature scale symbol flashes.
- In the Auto (automatic start/stop) function [when AT symbol is on], this button does not work (refer to page 12).

**C Light Button (Right Side Button)**
- With each press, the display is backlit for approx. 3 seconds.

**D Set Button (Left Side Button)**
- This button is used for the following operations:
  - For correcting the current altitude: press this button in the Altitude mode (but only when the current speed is zero) ---- refer to page 10
  - For shifting the altitude measuring mode: press this button in the total altitude and the trip altitude gain mode ---------------- refer to page 10
  - For switching on/off the Auto (automatic start/stop) function: press this button in T, D or A mode (but only in complete stop state) -------------- refer to page 12
  - For changing the wheel circumference: press this button in O (total distance) mode (but only when the current speed is zero) 
    --------------------------------------------------------------- refer to page 7
  - For setting clock time: press this button in the clock time mode (but only when the current speed is zero) ---- refer to page 7

**AC (All Clear) Button (on the back)**
- This button erases the data stored in memory. Press this button when setting up the unit for bicycle for the first time, or when irregular display occurs. After pressing this AC button, all displays illuminate and then only the "km/h" symbol appears. The accumulated data (total distance and total altitude gain) and the stored wheel circumference are not deleted by this operation. After this operation, only the speed scale, temperature scale and clock time must be set again, according to "Main Unit Preparation" (refer to page 7).
Reset
When the S/S button and the Mode button are pressed simultaneously, the following data can be reset, depending on the mode.

For resetting trip distance (D), elapsed time (T), average speed (A) and maximum speed (M):
In other modes than altitude measuring mode, press the two buttons simultaneously; then the data of D, T, A and M returns to zero.

For resetting the trip altitude gain:
In the sub mode showing the trip altitude gain and total altitude gain, press the two buttons simultaneously; then the data of the trip altitude gain (█) returns to zero.

For resetting the current altitude correction value:
In the main mode showing the current altitude (胂), press the two buttons simultaneously; then the current altitude correction value will be zero and the data will be reset to the initial value of “International Standard Atmosphere” (ISO 2533).

HOW TO USE AS AN ALTIMETER

1. Altimeter Function
This unit, loaded with a pressure sensor, measures the altitude by using atmospheric pressure. It estimates the altitude by using the "correlation between altitude and pressure" of ISO 2533, based on the International Standard Atmosphere of ICAO (International Civil Aviation Organization). Generally, a conventional pressure sensor is affected by temperature and gives errors; but this unit is temperature-compensated every 20 seconds and records 1 meter resolution. Also, with a conventional altimeter, altitude data at the same venue varies from time to time because it is affected by the change of the pressure; however, the CATEYE CC-AT100 is not affected by pressure changes when not cycling. It measures three types of altitude data simultaneously: above sea level (current altitude), trip altitude gain (total of altitude gain from the start to the current point) and total altitude gain (accumulation).

Note: The current altitude data may give an incorrect value temporarily, such as when it is brought from indoor to outdoor, or when the energy-saving function is released. This is just an influence of the temperature change and is not a malfunction. It will quickly stabilize and return to normal.

The Correlation Between Altitude and Pressure
The higher the altitude gets, the lower the pressure becomes. At venues of which altitudes are under 500m, the pressure decreases by approx. 12hPa per each 100m (Table 1).

Weather and Barometric Pressure Changes
Changes in weather from a HIGH PRESSURE system (clearer, calmer weather) to a LOW PRESSURE system (over-cast, rain, storming weather) can cause a change in the Altitude reading of 300 feet or more. Thunderstorms or other strong low pressure weather conditions, you
may cause even a greater change. In seemingly stable weather conditions, you may expect to see the Altitude fluctuate as much as 100 feet from morning to evening because of the warming aspects of the sun on the atmosphere.

2. Cycling Mode (Bicycle Symbol: on) (Fig. 10)
When using this unit on bicycle, switch on the bicycle symbol. In this way, the change of the pressure will have an influence on the altitude data only when the unit perceives the speed signal, regardless of start/stop. Thus, the altitude data will not be affected even if pressure changes occur while bicycle is stopped. (Fig. 11).

Note: If the pressure changes while riding, the altitude data will give an error.

3. Continuous Measuring Mode (Bicycle Symbol: off)
When using this unit on its own apart from a bicycle, for hiking etc., switch off the bicycle symbol. In this way, the altitude data is always influenced by the change of the pressure (Fig. 12).
- In this mode, if the Auto (automatic start/stop) function is on, the elapsed time cannot be measured; switch off the symbol and operate with the S/S button in each start/stop. (Refer to "Auto Function", page 12.)

Note: As the pressure changes constantly, the altitude data will give an error to some extent. * Release the power saving function by pressing the S/S button or the Mode button.

4. How to Switch on/off the Bicycle Symbol
To switch on/off the bicycle symbol, first display the sub mode showing trip altitude gain and total altitude gain, with the operation of the Mode button, and press the Set button. Then press the Set button again, and the bicycle symbol will be switched on/off.

5. How to Correct the Current Altitude
Air pressure changes constantly, due to various weather conditions. As such, while riding, it is necessary to correct the altitude. It is recommended to make corrections whenever a reliable index (such as map or peak pointer) is available.
* The basic knowledge of the altitudes of your house, public facilities, etc. will be useful information for correction.
How to Correct the Altitude
First display the main mode showing \( \text{ALT} \), with the operation of the Mode button. Press the Set button when the speed is zero, and it turns to the correction mode (Fig. 13). The figure increases with each press of the S/S button, and decreases with each press of the Mode button. To increase/decrease the number rapidly, hold down the button. Adjust the figure to the correct altitude, and press the Set button to complete this operation.

HOW TO USE AS A CYCLOCOMPUTER

1. Mounting to Bicycle
   - Attach the magnet on the right spokes of the front wheel. The spokes must run correctly through the inside of the magnet as in Fig. 14.
   - Attach the speed sensor and sensor holster with sensor bands A/B to the right fork. Choose a band that fits the fork diameter (S size for up to 24, L for oversize).
     1. Insert the band B into the slit of the band A, and put the rubber pad inside of the band A (Fig. 15). Adjust the length in order that the screw-fastening part of the bands are parallel when mounted to the fork (Fig. 16). *To pull out the band B from the band A, tug strongly.
     2. Mount the adjusted bands to the fork along with the speed sensor and sensor holster, by temporarily tightening the screw (Fig. 17).
     3. Align the magnet's center and the sensor's marking line (Fig. 18), and clearance between the magnet and the sensor should be 2mm (Fig. 19). Then tighten the screw securely. Cut off the excess of the sensor band B.
   
   Note: If the space between the fork and the spokes are too narrow, mount the sensor without the holster.
Secure the wire with the wire securing tape as in Fig. 20. Wind the wire round the outer cable up to the handlebar. When adjusting the length, be careful that the wire will not hinder handlebar operation.

By using the rubber pad, attach the bracket close to the handlebar stem (Fig. 21).

### 2. Auto (Automatic Start/Stop) Function

This function enables the unit to start/stop automatically without operation of the S/S button. In this function, AT symbol appears on the screen (Fig. 23). It starts measuring automatically even when the power-saving function is on.

* In this function, it starts/stops by perceiving revolutions of the wheel, so it stops measuring when the wheel ceases moving.
* While this function is on, 2 seconds may be elapsed at the moment when the main unit is mounted onto the bracket.
* When using this unit on its own apart from bicycle, switch off this function. Operation of the S/S button is needed.

#### How to Switch on/off Auto Function

Operate the mode button to display the main mode showing T, D or A. Get the stop state by pressing the Set button; then AT symbol appears and the Auto function is on. To switch this function off, press the Set button again and AT symbol disappears.
3. Power Saving Function
When the main unit is left without receiving any signal for about 5 minutes continuously, power supply is shut down and the unit will be in "sleep" state displaying only the clock time (Fig. 24). By receiving a signal from the wheel, or by pressing the S/S button or the Mode button for over one second, the unit "wakes up" and the display returns.
• When the Auto function is on (AT symbol is on), the power saving function will be automatically released by riding the bicycle.
• When the power saving function is on, the data of trip altitude gain is not updated.
• When the power saving function starts, the unit automatically memorizes the data of the total distance, total altitude gain and wheel circumference of that moment.

MEASURING AND DISPLAY

S  Current Speed
Always displayed on the main display and updated once a second.
0.0(2.6) - 105.9 km/h [0.0(1.6) - 62.9 mile/h]

ALT  Current Altitude (Above Sea Level) (Main Mode)
Displayed on the sub display, in the 1 meter increment. In the scale of "feet", the increment is 5 feet.
–350 - 5800 m [–1050 - 17400 feet]

T  Elapsed Time (Main Mode)
Displays the time from the start to the current point on the sub display, in the units of hours, minutes and seconds. With the Reset operation, it returns to zero.
0:00'00" - 9:59'59"
A Average Speed (Main Mode)
Displays the average speed from the start to the current point on the sub display. With Reset operation, it returns to zero. When the elapsed time exceeds approx. 34 hours or the trip distance exceeds 2683.30 km [mile], the unit stops calculation of average speed and (E) mark appears.

0.0 - 105.9 km/h [0.0 - 62.9 mile/h]

D Trip Distance (Main Mode)
Displays the distance from the start to the current point on the sub display. With Reset operation, it returns to zero. 0.0 - 2684.3 km [mile]

Trip Altitude Gain (Sub Mode)
Displays the total of altitude gained from the start (i.e. the point where the reset is done) to the current point, on the main display. The data of altitude loss is not included. When the trip altitude gain reaches 2,999, it returns to zero and counting begins anew. The altitude symbol illuminates. On the sub display, total altitude is displayed. With reset operation, it returns to zero. In the scale of feet, the figure shows 1/10 value. 0 - 2999m [0 - 900 x 10 feet]

Note: After you reach 2,999, reset the display. If you do not reset, the top limit will become shorter than 2,999 next time.

x1000 Total Altitude Gain (Sub Mode)
Accumulates only the data of the altitude gain of each ride, and displays the figure on the sub display. The data of the altitude loss is not included in this accumulation. The increment is 0.1m [foot] from the 0.0 to 9999.9 range, and 1m [foot] from 10,000 to up. Not resettable. It is accompanied by the data of the trip altitude gain on the main display. 0.0 - 16777 x 1000 m [feet]

12-Hour Clock (Sub Mode)
Displays the present time on the sub display.
**M Maximum Speed (Sub Mode)**

Displays the maximum instantaneous speed on the sub display. With the Reset operation, it returns to zero. 0.0 (2.6) - 105.9 km/h [0.0 (1.6) - 62.9 mile/h]

**°C/°F Temperature (Sub Mode)**

Measures the current atmospheric temperature in every 20 seconds and displays the figure on the main display. It is accompanied by the data of the total distance on the sub display.

0 - 50°C [32 - 122°F]

**O Total Distance (Sub Mode)**

Counted continuously and displayed on the sub display. The increment is 0.1 km [mile] from the 0.0 to 9999.9 range, and 1 km [mile] from 10000 to up. Not resettable. It is accompanied by the data of the temperature in the main display. 0.0 - 42949 km [mile]

**TROUBLESHOOTING**

If a trouble or malfunction occurs, check the following before taking the unit to repair.

**How to Check the Main Unit (Fig. 25)**

When the current speed does not appear, short-circuit the two contacts on the back with metal a few times. If the speed display returns, the main unit is in normal condition.

**Trouble / Check Items / Remedy**

- **Display response is slow.**
  - Is it the temperature under 0°C (32°F)?
  - It returns to normal when the temperature rises. It does not affect the data.

- **No display appears. Or the display disappears when the light button is pressed.**
  - Has the battery worn out? Or is it about to wear out?
  - Replace it with a new one (CR2032). (*After replacing the battery, be sure to press the AC button and to reset the speed scale, temperature scale and the clock time again.*)
<table>
<thead>
<tr>
<th>Incorrect data appears.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The static electricity may cause an incorrect display.</td>
</tr>
<tr>
<td>Press the AC button and reset the speed scale and the clock time again.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current speed does not appear.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there anything on the contact of the main unit or the bracket?</td>
</tr>
<tr>
<td>Wipe the contact clean.</td>
</tr>
<tr>
<td>Is the distance between the sensor and the bracket too far?</td>
</tr>
<tr>
<td>Are the magnet's center and the sensor's marking line aligning?</td>
</tr>
<tr>
<td>Adjust the position of the magnet and the sensor correctly.</td>
</tr>
<tr>
<td>Is the wire broken?</td>
</tr>
<tr>
<td>Replace the bracket &amp; sensor part with a new one.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transmission signal loss in damp or wet conditions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water or condensation may collect between the bracket sensor and the computer causing an interruption in the data transmission.</td>
</tr>
<tr>
<td>Wipe the contacts with dry cloth. Contacts can also be treated with a water repellent silicon gel from an automotive parts or hardware store. Do not use industrial water repellent; it may damage the bracket.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The S/S button does not start/stop measuring.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the unit in the Auto function?</td>
</tr>
<tr>
<td>In the Auto function, this button doesn't work.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>When using the unit apart from bicycle, it doesn't measure altitude.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the bicycle symbol on (i.e. is it on the cycling mode)?</td>
</tr>
<tr>
<td>Clear off the bicycle symbol, and turn to the continuous measuring mode.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The unit does not measure altitude.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there anything clogged in the altitude sensor cover?</td>
</tr>
<tr>
<td>Clean it off according to “Daily Care”. (If the cleaning still doesn't work, press the AC button; and reset the speed scale, temperature scale and the clock time.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The current altitude shows incorrect data.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the correction of the current altitude appropriately done?</td>
</tr>
<tr>
<td>The current altitude is influenced by the change of the pressure. Make corrections in each ride.</td>
</tr>
</tbody>
</table>
DAILY CARE

If the altitude sensor cover is clogged with mud etc., the unit doesn’t measure altitude. After the ride on muddy roads or in the rain, check the situation of the sensor cover according to the following instruction.

1. Turn the sensor cover counterclockwise with a screwdriver and take it off.
2. Carefully take out the filter inside, and wash the sensor cover and the filter with clean water.
3. Put the filter back as it was, and close the sensor cover.

**Note:** There is an altitude sensor under the filter. Be sure not to insert pins or sharp objects.

SPARE ACCESSORIES

The following parts are available separately.

- #169-6560 Bracket Sensor Kit
- #169-6565 Bracket Sensor Kit (Long)
- #169-6567 Center Mount Bracket Kit
- #169-6562 Center Mount Bracket Kit (Long)
- #169-6569 Stem Mount Bracket Kit
- #166-5120 Wheel Magnet
- #169-6170 Attachment Kit
- #169-6280 Universal Sensor Band
- #169-9730 Heavy duty Wire and Bracket Sensor Kit
- #169-9870 Sensor Holster
- #169-9835 Wrist Band
- #169-9860 Main Unit Holder
- #166-5155 Lithium Battery (CR2032)
- #169-9880 Altitude Sensor Cover/Filter
**SPECIFICATIONS**

**Display Ranges**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Range</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Speed</td>
<td>S 0.0(2.6) - 105.9 km/h (27 inch)</td>
<td>±0.5 km/h (under 50 km/h)</td>
</tr>
<tr>
<td></td>
<td>[0.0(1.6) - 62.9 mile/h]</td>
<td>±0.5 mile/h (under 31 mile/h)</td>
</tr>
<tr>
<td>Total Distance</td>
<td>O 0.0 - 42949 km [mile]</td>
<td>±0.1 km [mile]</td>
</tr>
<tr>
<td>Maximum Speed</td>
<td>M 0.0(2.6) - 105.9 km/h (27 inch)</td>
<td>±0.5 km/h</td>
</tr>
<tr>
<td></td>
<td>[0.0(1.6) - 62.9 mile/h]</td>
<td>±0.5 mile/h</td>
</tr>
<tr>
<td>Average Speed</td>
<td>A 0.0 - 105.9 km/h [62.9 mile/h]</td>
<td>±0.5 km/h [mile/h]</td>
</tr>
<tr>
<td></td>
<td>(when elapsed time is over 10 minutes)</td>
<td></td>
</tr>
<tr>
<td>Trip Distance</td>
<td>D 0.0 - 2684.3 km [mile]</td>
<td>±0.1 km [mile]</td>
</tr>
<tr>
<td>Elapsed Time</td>
<td>T 0:00'00&quot; - 9:59'59&quot;</td>
<td>±0.003%</td>
</tr>
<tr>
<td>12-hr. Clock</td>
<td>≥ 0:00' - 11:59'</td>
<td>±0.003%</td>
</tr>
<tr>
<td>Temperature</td>
<td>°C/°F 0 - 50°C [32 - 122°F]</td>
<td></td>
</tr>
<tr>
<td>Current Altitude</td>
<td>(Above Sea Level) –350 - 5800 m</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[–1050 - 17400 feet]</td>
<td></td>
</tr>
<tr>
<td>Trip altitude gain</td>
<td>0 - 2999 m [0 - 900 x 10 feet]</td>
<td></td>
</tr>
<tr>
<td>Total Altitude Gain</td>
<td>0.0 - 16777 x 1000 m [feet]</td>
<td></td>
</tr>
</tbody>
</table>

**Controller** 4-bit 1-chip microcomputer (crystal controlled oscillator)

**Display** Liquid crystal (with LED backlight)

**Sensor** No-contact magnetic sensor (Length of the cord: 70 cm)

**Operating Temperature Range** 0°C - 40°C [32°F - 104°F]

**Storage Temperature Range** –20°C - 50°C [–4°F - 122°F]

**Applicable Cycle Size** 0 cm - 255 cm (Initial value: 203 cm)

**Power Supply/Service Life** Lithium battery (CR2032) x 1 pc./ approx. one year

(one hour’s altitude measuring per day)

**Dimension/Weight** 56 x 52 x 22.5 mm [2-7/32 x 2-1/16 x 29/32] / 41 grams [1.45 oz]

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

If the S/S button, Mode button and Set button are pressed simultaneously, all the stored data will be erased. Be careful not to do this operation by mistake.
**SETTING VALUES CROSS REFERENCE TABLE**

*The tire size is marked on both sides of the tire.*

<table>
<thead>
<tr>
<th>TIRE SIZE</th>
<th>L(cm)</th>
<th>TIRE SIZE</th>
<th>L(cm)</th>
<th>TIRE SIZE</th>
<th>L(cm)</th>
<th>TIRE SIZE</th>
<th>L(cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 x 1-3/8</td>
<td>128</td>
<td>26 x 1.25</td>
<td>195</td>
<td>26 x 2.35</td>
<td>208</td>
<td>700 X 23C</td>
<td>210</td>
</tr>
<tr>
<td>20 x 1.75</td>
<td>150</td>
<td>26 x 1-1/8 Tubular</td>
<td>197</td>
<td>27 x 1</td>
<td>215</td>
<td>700 X 25C</td>
<td>211</td>
</tr>
<tr>
<td>24 x 1</td>
<td>175</td>
<td>26 x 1-3/8</td>
<td>207</td>
<td>27 x 1-1/8</td>
<td>216</td>
<td>700 X 28C</td>
<td>214</td>
</tr>
<tr>
<td>24 x 3/4 Tubular</td>
<td>178</td>
<td>26 x 1-1/2</td>
<td>210</td>
<td>27 x 1-1/4</td>
<td>216</td>
<td>700 X 30C</td>
<td>217</td>
</tr>
<tr>
<td>24 x 1-1/8 Tubular</td>
<td>179</td>
<td>26 x 1.40</td>
<td>200</td>
<td>27 x 1-3/8</td>
<td>217</td>
<td>700 X 32C</td>
<td>216</td>
</tr>
<tr>
<td>24 x 1-1/4</td>
<td>191</td>
<td>26 x 1.50</td>
<td>199</td>
<td>650 x 35A</td>
<td>209</td>
<td>700C Tubular</td>
<td>213</td>
</tr>
<tr>
<td>24 x 1.75</td>
<td>189</td>
<td>26 x 1.75</td>
<td>203</td>
<td>650 x 38A</td>
<td>212</td>
<td>700 X 35C</td>
<td>217</td>
</tr>
<tr>
<td>24 x 2.00</td>
<td>192</td>
<td>26 x 1.95</td>
<td>205</td>
<td>650 x 38B</td>
<td>211</td>
<td>700 X 38C</td>
<td>218</td>
</tr>
<tr>
<td>24 x 2.125</td>
<td>196</td>
<td>26 x 2.00</td>
<td>206</td>
<td>700 x 18C</td>
<td>207</td>
<td>700 X 44C</td>
<td>222</td>
</tr>
<tr>
<td>26 x 1(559mm)</td>
<td>191</td>
<td>26 x 2.1</td>
<td>207</td>
<td>700 x 19C</td>
<td>209</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 x 1(650c)</td>
<td>195</td>
<td>26 x 2.125</td>
<td>207</td>
<td>700 X 20C</td>
<td>209</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**LIMITED WARRANTY**

**2-Year Warranty:** Only Main Unit (excluding battery)

If trouble occurs during normal use specified in this manual, the part is repaired or replaced free of charge. The service must be performed by CATEYE Co., Ltd., and the product which needs service must be returned to CATEYE Co., Ltd. directly by purchaser. When returning the product for CATEYE warranty service, pack it carefully, and enclose the warranty certificate and instructions for repair. Please make sure to type your name and address clearly on the warranty certificate, so that the product can be shipped back to you as soon as the necessary repair/adjustment is completed. Insurance, handling and transportation charges to our address shall be borne by the person desiring service. Attachments such as batteries, bracket, sensor etc. are not included in this warranty.

**Address for service:**

**CATEYE CO., LTD.**

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

Attention: CATEYE Customer Service Section

Phone: 81-6-6719-7781 Fax: 81-6-6719-2362

**Service & Research Address for United States Consumers:**

**CATEYE Service & Research Center**

1705 14th St. 115 Boulder, CO 80302

Phone: 303-443-4595 Toll Free: 800-5CATEYE

Fax: 303-473-0006 e-mail: CatEyeUSA@aol.com