CATEYE COMMUTER
CYCLOCOMPUTER CC-COM10W

ENG

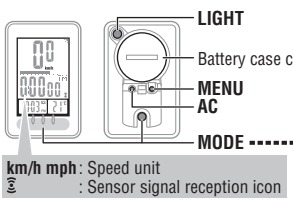
U.S. Pat. Nos. 5236759/5308419/6957926 Pat./Design Pat. Pending
CCCOM1W-110930 066600950 3

⚠ 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.
- Do not disassemble the computer.
- Do not drop the computer to avoid malfunction or damage.
- When you attempt to press **MODE** with the computer installed to the bracket, press around the marking section on the surface of the computer. Pressing other sections strongly may result in malfunction or damage.

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

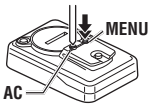
Preparing the computer



Operation of buttons when the computer is mounted on the bracket

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

1 Format (initialize)



1. Press and hold the **MENU** button.
2. Press the **AC** button.
3. Release the **AC** button.
   (Keep pressing the **MENU** button.)
4. Release the **MENU** button.

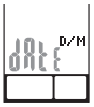
2 Select the speed and temperature unit

When **MODE** is pressed and held, "Speed unit" and "Temperature unit" will appear for selection. Select "**km/h**" or "**mph**" for the speed unit, and "**°C**" or "**°F**" for the temperature unit.

MODE: Unit selection
MODE: Switch the screen (press & hold)
MENU: Register the setting

3 Set the date

When **MODE** is pressed and held, "Date format", "Day", "Month", and "Year" will appear, in this order. Press **MODE** to change the value, and press **MENU** to register it. Set the values in the subsequent settings with in the same procedure.



MODE: Switch **D/M** and **M/D** or increase the value
MODE: Switch the screen (press & hold)
MENU: Register the setting

4 Set the clock

When **MODE** is pressed and held, "Display format", "Hour", and "Minute" will appear, in this order.

* When **12h** is selected, "AM/PM selection" is required.

MODE: **12h ↔ 24h** **(AM ↔ PM)** or increase the value
MODE: Switch the screen (press & hold)
MENU: Register the setting

5 Enter the tire circumference

Enter the tire circumference of your bicycle in mm.

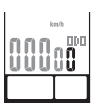
* Refer to the tire circumference reference table.

MODE: Increase the value
MODE: Move digits (press & hold)
MENU: Register the setting

6 To carry over the total distance

After you performed the formatting operation, or purchased a new computer, you can start the total distance with the value you enter. The total distance is entered as a 5-digit integer number in km [mile].

* To start the total distance with 0, press **MENU** without entering any value, and complete the setting.



MODE: Increase the value
MODE: Move digits (press & hold)
MENU: Register the setting (Finish)

Tire circumference reference table

ETRTO	Tire size	L (mm)
47-203	12x1.75	935
54-203	12x1.95	940
40-254	14x1.50	1020
47-254	14x1.75	1055
40-305	16x1.50	1185
47-305	16x1.75	1195
54-305	16x2.00	1245
28-349	16x1-1/8	1290
37-349	16x1-3/8	1300
32-369	17x1-1/4 (369)	1340
40-355	18x1.50	1340
47-355	18x1.75	1350
32-406	20x1.25	1450
35-406	20x1.35	1460
40-406	20x1.50	1490
47-406	20x1.75	1515
50-406	20x1.95	1565
28-451	20x1-1/8	1545
37-451	20x1-3/8	1615
37-501	22x1-3/8	1770
40-501	22x1-1/2	1785
47-507	24x1.75	1890
50-507	24x2.00	1925
54-507	24x2.125	1965
25-520	24x1(520)	1753
	24x3/4 Tubuler	1785
28-540	24x1-1/8	1795
32-540	24x1-1/4	1905
25-559	26x1(559)	1913
32-559	26x1.25	1950
37-559	26x1.40	2005
40-559	26x1.50	2010
47-559	26x1.75	2023
50-559	26x1.95	2050
54-559	26x2.10	2068
57-559	26x2.125	2070
58-559	26x2.35	2083
75-559	26x3.00	2170
28-590	26x1-1/8	1970
37-590	26x1-3/8	2068
37-584	26x1-1/2	2100
	650C Tubuler 26x7/8	1920
20-571	650x20C	1938
23-571	650x23C	1944
25-571	650x25C 26x1(571)	1952
40-590	650x38A	2125
40-584	650x38B	2105
25-630	27x1(630)	2145
28-630	27x1-1/8	2155
32-630	27x1-1/4	2161
37-630	27x1-3/8	2169
18-622	700x18C	2070
19-622	700x19C	2080
20-622	700x20C	2086
23-622	**700x23C**	**2096**
25-622	700x25C	2105
28-622	700x28C	2136
30-622	700x30C	2146
32-622	700x32C	2155
	700C Tubuler	2130
35-622	700x35C	2168
38-622	700x38C	2180
40-622	700x40C	2200
42-622	700x42C	2224
44-622	700x44C	2235
45-622	700x45C	2242
47-622	700x47C	2268
54-622	29x2.1	2288
60-622	29x2.3	2326

Measure more accurate tire circumference (L) of your bike

To get the most accurate calibration do a wheel roll out. With the valve stem perpendicular to the ground, mark the pavement at the valve stem. With the riders weight on the bike, roll the wheel one tire revolution in a straight line and mark the ground when the valve stem is perpendicular to the ground again. Measure the distance in millimeters. This is the most accurate wheel calibration number.

- Be sure to tighten the dial of the FlexTight bracket by hand. Tightening it strongly using a tool, etc. may damage the screw thread.
- When cleaning the computer, bracket and sensor, do not use thinners, 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.
- Dispose of used batteries according to local regulations.
- LCD screen may be distorted when viewed through polarized sunglass lenses.

Wireless Sensor

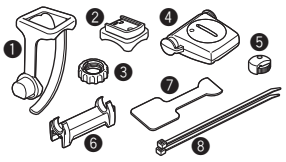
The sensor was designed to receive signals within a maximum range of 70 cm, to reduce chance of interference. When adjusting the wireless sensor, note the following:

- Signals cannot be received if the distance between the sensor and the computer is too large.
- The receiving distance may be shortened due to low temperature and exhausted batteries.
- Signals can be received only when the back of the computer is facing the sensor.

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 in close proximity.

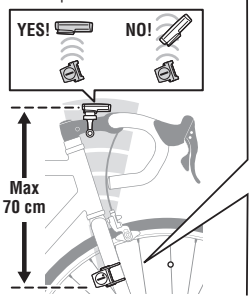
How to install the unit on your bicycle



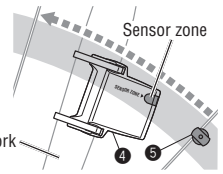
❶Bracket band
❷Bracket
❸Nut
❹Sensor
❺Magnet
❻Sensor rubber pad
❼Bracket rubber pad
❽Nylon ties (x2)

Install the sensor and magnet

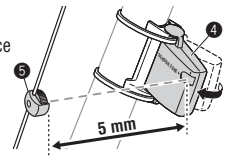
A The distance between the computer and the sensor must not exceed the transmission range of 70 cm. The back of the computer must face the sensor.



B The magnet passes through the sensor zone.

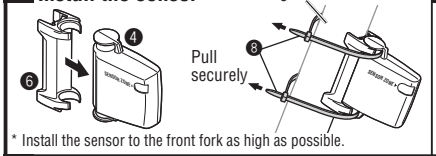


C The clearance between the sensor and magnet is 5 mm or less.



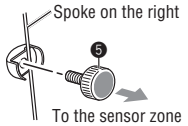
* The magnet may be installed anywhere on the spoke if the above installation conditions are satisfied.

1 Install the sensor



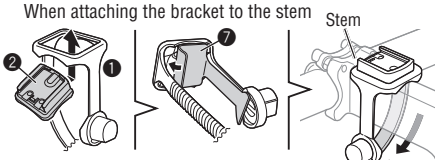
* Install the sensor to the front fork as high as possible.

2 Install the magnet



3 Attach the bracket to the stem or handlebar

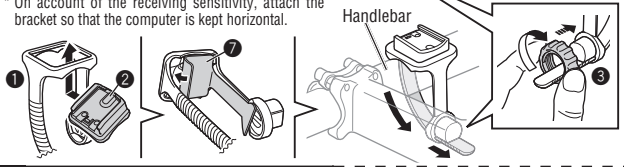
When attaching the bracket to the stem



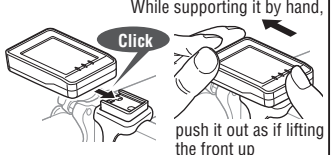
Caution:
Round off the cut edge of the bracket band to prevent injury.

When attaching the bracket to the handlebar

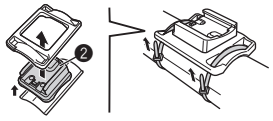
* On account of the receiving sensitivity, attach the bracket so that the computer is kept horizontal.



4 Remove/install the computer



* For wing type handlebar or oversized stem, bracket can be mounted using the Bracket Holder and nylon ties. (Option)

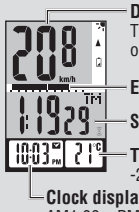


* After installation, check that the speed is displayed on the computer when gently turning the front wheel. When it is not displayed, check the positions of **A**, **B** and **C**.

Operating the computer [Measuring screen]

▲▼ : Pace arrow
Indicates whether the current speed is faster (▲) or slower (▼) than the average speed.
: Night mode icon
: Computer battery icon

* With the measuring screen, the clock and the temperature are always displayed at the bottom row.



Data at the top row display
The ETA estimated time of arrival or current speed is displayed.

ETA progress graph

Selected mode at the middle row

Temperature display
-20 – 60 ˚C

Clock display
AM1:00 – PM12:59 [0:00 – 23:59]

Starting/Stopping measurement
Measurements start automatically when the bicycle is in motion. During measurement, **km/h** or **mph** flashes.

Switching computer function
As shown in the figure, pressing **MODE** changes the measurement data at the top/bottom row display.

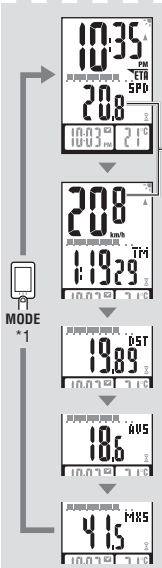
Resetting data
Pressing and holding **MODE** on the measuring screen returns the measurement data to 0.

Backlight
Pressing **LIGHT** turns on the screen illumination for about 3 seconds.

* Pressing any button while backlight is still on extends the illumination for another 3 seconds.

Night mode ( )
Pressing and holding **LIGHT** turns on , night mode will activate. Night mode is a function to control the screen illumination by pressing **MODE**. Pressing **MODE** turns on the illumination, and pressing it again changes the selected mode. While is turned on, if you press and hold **LIGHT**, or the computer does not receive a signal for 10 minutes, night mode will be turned off.

Power-saving mode
If the computer has not received a signal for 10 minutes, power-saving mode will activate and only the date/clock will be displayed. When you press **MODE**, or the computer receives a sensor signal, the measuring screen reappears. If another 60 minutes of inactivity elapses, **SLEEP** will be displayed on the screen. With the **SLEEP** display, pressing **MODE** returns to the measuring screen.



ETA Estimated time of arrival
AM1:00 – PM12:59
[0:00 – 23:59]

SPD Current speed
0.0 (4.0) – 99.9 km/h
[0.0 (3.0) – 62.5 mph]

TM Elapsed Time
0:00'00 – 9:59'59

DST Trip Distance
0.00 – 999.99 km [mile]

AVS Average Speed *2
0.0 – 99.9 km/h
[0.0 – 62.5 mph]

MXS Maximum Speed
0.0 (4.0) – 99.9 km/h
[0.0 (3.0) – 62.5 mph]

MODE *1

*1 With the computer installed to the bracket, press the marking section on the computer.

*2 When **Tm** exceeds about 27 hours or **Dst** exceeds 999.99 km, the average speed display turns to **.E**, thus it cannot be measured. Reset the data.

ETA estimated time of arrival and progress graph
When you set the distance from your departure point to your destination point, the estimated time of arrival at the destination point will be estimated and displayed based on the remaining distance and the average speed, and the progress in distance is displayed in a graph.

Estimated time of arrival (ETA)
To set the target trip distance, you can select automatic setting or manual setting.

- Automatic setting (**AUTO**)
  Once you perform the resetting operation, the trip distance just before resetting is automatically set as a target trip distance.
  * Automatic setting is applied once you change the "Target trip distance setting" on the Menu screen to **AUTO**. For the setting procedure, refer to the "Target trip distance setting" on the Menu screen.
- Manual setting (**MANU**)
  The distance from your departure point to your destination point is set manually from the "Target trip distance setting" on the Menu screen.
  * For the setting procedure, refer to the "Target trip distance setting" on the Menu screen.

* When the estimated time of arrival is estimated to be after 24 hours, the estimated time of arrival display changes to **ET**. When the estimated time of arrival is estimated to be within 24 hours, it returns to the estimated time of arrival display.

* The estimated time of arrival is not fixed, but changes according to the trip conditions (speed, stop, etc.).

* When the unit reaches the target trip distance, it changes to the **ETA** screen regardless of the measuring screen displayed, and then returns to the original measuring screen in 5 seconds after notifying the arrival. The **ETA** "Estimated time of arrival" stops while displaying the current time; however, the computer continues measuring.

ETA progress graph
Once the target trip distance is set, you can view the progress in a graph, where the distance from your departure point to your destination point is divided into 10 segments. The current progress position appears and flashes.

Data view (DST VIEW / CO2 VIEW)
This unit automatically saves the trip distance and the Carbon offset, which can be viewed for the day, week, month, year, and total.

Data view's contents and update timing
Trip distance and the Carbon offset saved are updated at 0:00 in the morning. The update timing for the day, week, month, and year is as follows.

Item	Description
DAY	Trip distance per day. Data can be viewed for today and yesterday. At the time of updating at 0:00 in the morning, the unit saves yesterday's data, and discards the data for the day before yesterday.
WEEK	The data for every 7 days starting from January 1st, regardless of the day of the week, is stored as data for the week. Data can be viewed for this week and last week. At the time of updating every 7 days, the unit stores the data for last week, and discards the data for the week before the last week.
MON	The data starting from the 1st to the end of the month is stored as data for the month. Data can be viewed for this month and last month. At the time of updating at the beginning of a month, the unit stores the data for last month, and discards the data for the month before the last month.
YEAR	The data starting from January 1st to December 31st is stored as data for the year. Data can be viewed for this year and last year. At the time of updating on January 1st, the unit saves the data for last year, and discards the data for the year before the last year.
TOTAL	The total trip distance (Total Distance) can be viewed and the total Carbon offset since the computer started measuring. * When the total distance is entered manually, the entered value is reflected.

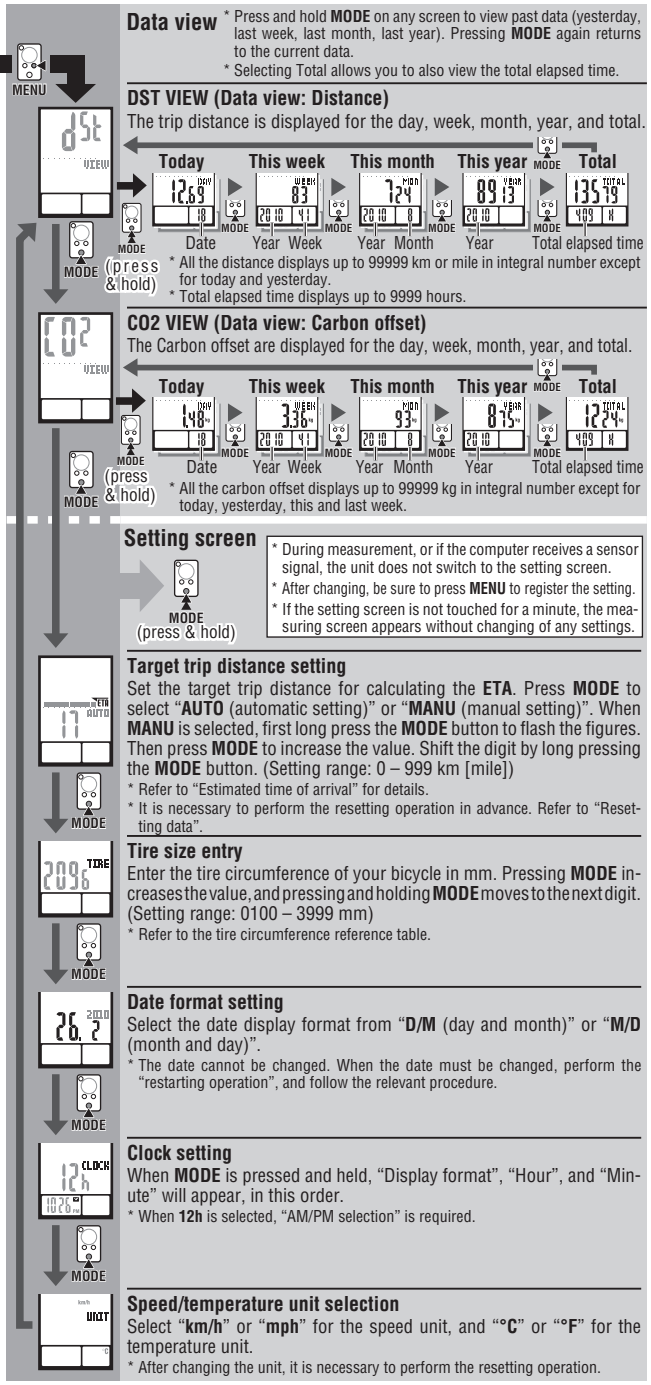
How to calculate the Carbon offset (CO2 VIEW)
The Carbon offset are calculated as follows.
Trip distance (km) x 0.15 = Carbon offset (kg)

* This factor of 0.15 is determined by applying the average value of the overall gasoline-powered passenger cars in 2008 to the equation of the "Carbon offset from 1km drive of a gasoline-powered car" described on the website of the Ministry of Land, Infrastructure and Transport and Tourism.

Viewing the data view and changing the settings [Menu screen]

Pressing **MENU** on the measuring screen moves to the menu screen for setup change. With the Menu screen, you can view the data view, and change the computer settings. Press **MODE** to change to the item of interest, and then press and hold **MODE** to select the menu item.

* For details of **DST VIEW** and **CO2 VIEW**, refer to the "Data view".



How to restart

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

* With the restarting operation, the speed unit, date, tire size, and record data in the data view are retained.
* When the restarting operation is performed before 0:00 in the morning, the trip distance and the Carbon offset for the day are not saved due to the data view's update timing. To retain the measurement data for the day, perform the restarting operation before starting measurement on the next day. Refer to "Data view's update timing" for the procedure to save the data view.

1. Press the **AC** button on the back of the computer.
2. Set the date. To set the date, refer to "Preparing the computer-3".
   * At the time of setting the date, the latest record date in the data view is initially displayed, and any date before that cannot be set.
3. Set the clock. Refer to "Preparing the computer 4".

Maintenance

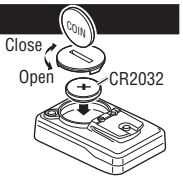
To clean the computer or accessories, use diluted neutral detergent on a soft cloth, and wipe it off with a dry cloth.

Replacing the battery

Computer

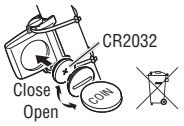
If [battery] turns on, replace the battery. Install a new lithium battery (CR2032) with the (+) side facing upward. After the battery change, go through the restart operation, by pressing the **AC** button.

* Then restart the computer according to "How to restart".



Sensor

When the speed is not displayed even after adjusting correctly, replace the battery. Install a new lithium battery (CR2032) with the (+) side facing upward. After replacement, check the positions of the sensor and magnet.



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.)

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.
Adjust the positions of the magnet and sensor.

Is the computer installed at the correct angle?
Back of computer must face toward the sensor.

Check that the distance between the computer and sensor is correct. (Distance: within 20 to 70 cm)
Install the sensor within the specified range.

Is the computer or sensor battery weak?
In winter, battery performance diminishes.
Replace with new batteries. After replacement, follow the procedure "Replacing the battery".

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. 1 years (If the computer is used for 1 hour/day; the battery life will vary depending on the conditions of use.)
Sensor : Unit Total Distance reaches about 10000 km (6250 mile)
* It may be shortened significantly when backlight is used frequently.
* 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 ..... 4 bit, 1-chip microcomputer (Crystal controlled oscillator)
Display ..... Liquid crystal display
Sensor ..... No contact magnetic sensor
Transmission distance ..... Between 20 and 70 cm
Tire circumference range ..... 0100 mm - 3999 mm (Initial value: 2096 mm)
Working temperature ..... 32 °F - 104 °F (0 °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 : 2-9/32" x 1-1/2" x 3/4" (58 x 38 x 19 mm) / 1.02 oz (29 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

#160-2190N Parts kit

#160-2196 Speed sensor

#160-0280N Bracket band

#160-2193 Bracket

#169-9691N Wheel magnet

#166-5150 Lithium battery (CR2032)

Optional parts

#160-2770 Bracket holder