CAT EYE ASTRALE 8
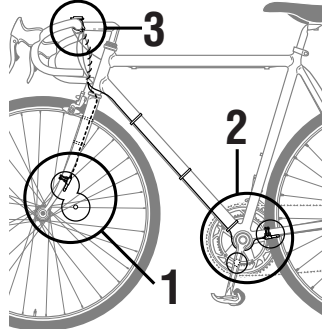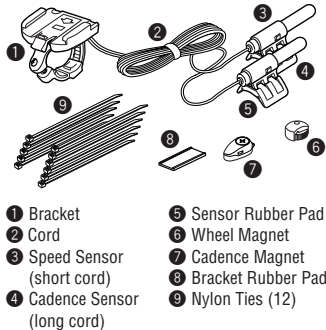## CYCLOCOMPUTER CC-CD200
E: Owner's Manual

ASTRALE8

Please read these instructions carefully before installing or using the CAT EYE ASTRALE 8.
Please don't throw away this manual, Keep the manual at a place easily accessible.

Installation of the Computer on Your Bike
The computer comeswith the following parts.

❶ Bracket
❷ Cord
❸ Speed Sensor (short cord)
❹ Cadence Sensor (long cord)
❺ Sensor Rubber Pad
❻ Wheel Magnet
❼ Cadence Magnet
❽ Bracket Rubber Pad
❾ Nylon Ties (12)

1 Mount the wheel magnet and speed sensor
• Mount the wheel magnet ❻ on a spoke of the front wheel so the surface of the magnet will face the sensor.
• Secure the speed sensor ❸ on the front fork with the larger nylon ties ❾.
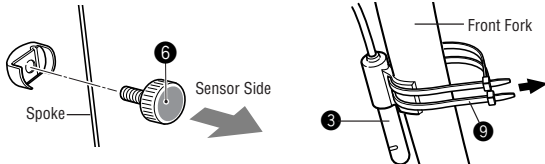
2 Mount the cadence magnet and cadence sensor.
• Mount the cadence magnet ❼ on the crank arm so that it faces the sensor.
• Secure the cadence sensor ❹ on the left chain stay with the nylon ties ❾.
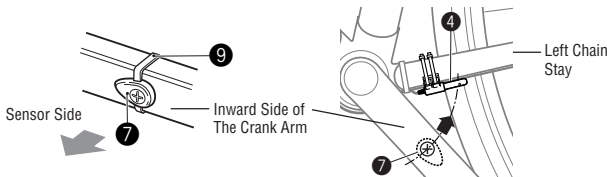
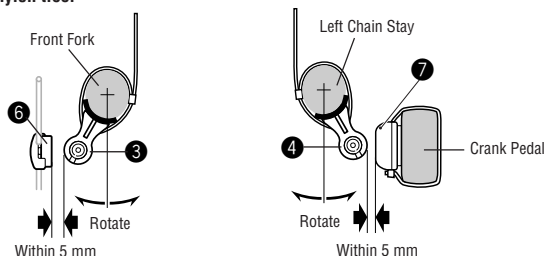#### Important Note
Mount the magnets ❻ (❼) and the sensors ❸ (❹) on the appropriate positions so that the center of each magnet ❻ (❼) may align with the the marked line on the sensor when the front wheel (or the crank arm) is rotated.
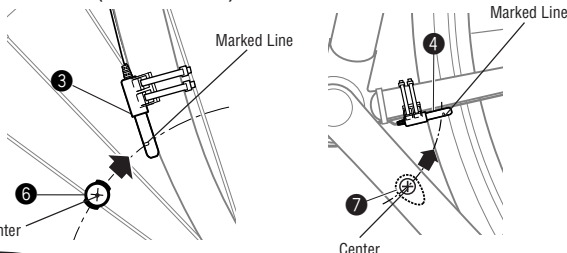
Important Note
**Adjust the position of each sensor so they are within 5mm of the ❻ (❼) magnet. Secure the nylon ties.**

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3 Mount The Bracket
Secure the cord on the frame or the fork with the nylon ties ❾ and coil it around the brake cable to lead to the handle bar.
Put the rubber pad ❽ on the bracket ❶ and secure the bracket on the handle bar with the screw. Slide the computer into the bracket until you hear the click sound. The contact points are automatically closed. When you need to remove the computer, slide forward the computer with the lever pushed simultaneously.

Note Allow enough wire clearance in the area marked with ⇨ to insure you can turn the handlebars all the way from side to side without pulling the wire.
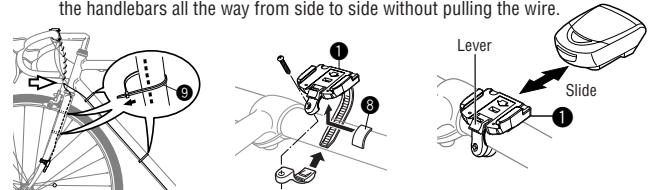
4 Basic Functions Test
Spin the front wheel to see if Speed is reading properly. Push the mode button until Cadence (Cdc) is in the sub-display. Spin the crank arm backwards to test if Cadence is reading properly.
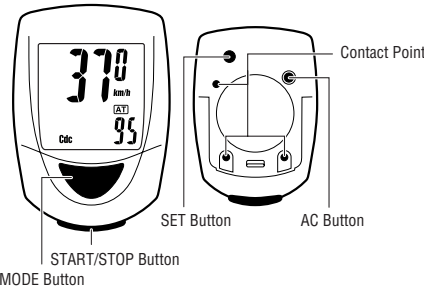
Note When the computer does not indicate the speed/cadence, check the position of the magnet and the sensor.

Rotate the front wheel. **OK**   Rotate the crank arm **OK**

Computer Set-up
(For first use or after replacing the battery)
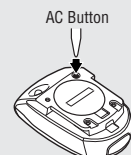
You need to know the tire circumference (L mm) beforehand.

You can refer to the guide chart to roughly know the tire circumference.

SET Button   AC Button
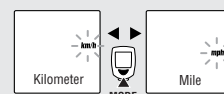START/STOP Button
MODE Button
Contact Point

1 All Clear
Push the AC button on the backside.
* Push the AC button when using this system for the first time and every time the battery is replaced.

AC Button

2 Measurement Selection
Select the measurement unit, kilometer or mile, by pushing the MODE button. And fix it by pushing the SET button.

Kilometer — MODE — Mile
SET

3 Set The Tire Circumference
Set the tire circumference in mm.
Note Refer to the chart shown on the right.
Setting is fixed and completed by pushing the SET button.

SET
MODE — Increase the number Max. 2999 mm
ST/STOP — Decrease the number Min. 10 mm
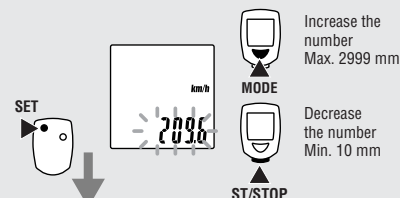
Preparation Complete.
(the screen will show the time measurement in this state)

* The auto mode is ON in this state.

Tire size	L(mm)
12 x1.75	935
14 x 1.50	1020
14 x 1.75	1055
16 x 1.50	1185
16 x 1.75	1195
18 x 1.50	1340
18 x 1.75	1350
20 x 1.75	1515
20 x 1-3/8	1615
22 x 1-3/8	1770
22 x 1-1/2	1785
24 x 1	1753
24 x 3/4 Tubular	1785
24 x 1-1/8	1795
24 x 1-1/4	1905
24 x 1.75	1890
24 x 2.00	1925
24 x 2.125	1965
26 x 7/8	1920
26 x 1(59)	1913
26 x 1(65)	1952
26 x 1.25	1953
26 x 1-1/8	1970
26 x 1-3/8	2068
26 x 1-1/2	2100
26 x 1.40	2005
26 x 1.50	2010
26 x 1.75	2023
26 x 1.95	**2050**
26 x 2.00	2055
26 x 2.10	2068
26 x 2.125	2070
26 x 2.35	2083
26 x 3.00	2170
27 x 1	2155
27 x 1-1/8	2161
27 x 1-1/4	2161
27 x 1-3/8	2169
650 x 35A	2090
650 x 38A	2125
650 x 38B	2105
700 x 18C	2070
700 x 19C	2080
700 x 20C	2086
700 x 23C	**2096**
700 x 25C	2105
700 x 28C	2136
700 x 30C	2170
700 x 32C	2155
700C Tubular	2130
700 x 35C	2168
700 x 38C	2180
700 x 40C	2200

Tire size is usually shown on the sidewall of tires.

Computer Operations

Selection of the data-display mode (bottom of the screen)
Press the Mode button to navigate to each of the sub-displays listed on the right.
Press and hold the mode button for two seconds in any mode to display the Clock Time.

Start or Stop of Measurements
The computer can be programmed to run in either MANUAL MODE or AUTO TIME MODE. In Manual Mode you must press the START / STOP button to turn on and off the Timer, which records Distance and Average Speeds. In Auto Time the computer turns the Timer on and off depending on a signal from the sensor.

When speed is detected by the computer and the Timer is running, the km/h or mph will flash. Speed will appear on the computer screen and the Odometer will record, regardless if the Timer is running or not.

• Auto Time Mode (Automatic Measurement)
When the icon AT is lit, the measurements are automatically done. This is called auto-mode in which the rotation of the wheel is detected to make the measurements start or stop automatically. (When the icon AT is lit, you cannot start or stop the measurements by pushing the START/STOP button)

• Manual Measurements
When you don't see the icon AT on the screen, you can start or stop the measurements by pushing the START/STOP button.
When you push the button, measurements Elapsed Time, Average Speed and Trip Distance are started, and stopped with the second push of the button.

• How to set ON or OFF the Auto-Mode
Push the SET button while Elapsed Time (Tm) Trip Distance (Dst) or Average Speed (Av) is displayed, then the icon AT is "lit" (ON) or turned OFF.

Resetting Elapsed Time, Trip Distance, Average and Max. Speed
Push the MODE button and the START/STOP button at the same time while the measurement other than Odometer, Elapsed time, Maximum Speed, Average Speed and Trip Distance are zeroed. The Odometer cannot be reset.

Computer Functions
• Power-Saving Function
When no signal has been received for about 1 hr, the computer switches to the power-saving mode and only displays the Clock. When any button is pushed or the bicycle is ridden, the measurement mode comes back.

• Selection of The Data-display Mode
In Auto-Mode you can choose between Speed or Cadence to be displayed in the top screen.

Speed is initially selected in the upper display. When the computer is in AT mode, press the START/STOP button. Cadence will now appear in the upper display. Speed will be in the lower display. Switch it back with the same procedure.

Speed | ST/STOP | Cadence
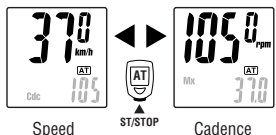
Troubleshooting
No display appears.
　Is the battery dead?
　Replace it and do all clear procedure.
Strange data appears
　Do all clear procedure.
　Data of odometer is also erased.
Measurements do not start when the START/STOP button is pushed.
　Is the icon AT ON?
　Make the Auto-Mode off to enable the start or stop of the measurements by manual operation of the button.
No speed data (cadence) can be measured.
(If the speed data (cadence) is not displayed, have the contact points short-circuited a few times by a metal plate. In the case that this short-circuiting is detected by the computer, the computer is considered normal and the bracket and the sensor possibly have the cause of trouble.)

Is the contact points located on the backside short-circuited intermittently.

Speed | Cadence

　Is the gap between the sensor and the magnet too big? (should be within 5 mm)
　Does the marked line of the sensor align with the center of the magnet?
　Adjust the position of the magnet and the sensor.
　Make sure that the contact points of the bracket or of the main body are free from dirt. Wipe the contact points clean.
　Is the cord not broken? Even if the outside of the cord looks normal, a breakage in the wire can occur. Replace the bracket and sensor set with a new one.

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

Close / Open

Replacing The Battery
When the display becomes dim, replace the battery.
• Put a lithium battery CR2032 in the computer with the (+) mark facing up.
• After replacing the battery, do the necessary set-up of the computer in accordance with the "Computer Set-up".
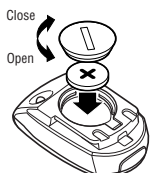
Display for Measurements

Speed
0.0 (4.0) - 300 km/h
[0.0 (3.0) - 185 mph]
or
Cadence
0.0 (20.0) - 299.9 rpm

Auto-mode Icon
When lit, the measurements starts or stops automatically.

Power-Saving Screen
(When no signal is received for about 1 hr. the screen switches to the power-saving screen)
When you push either of the MODE button or the START/STOP button or you ride the bicycle, the display comes back to the measurement display.

Mode Selection Illustrations (bottom of the screen)

Cdc Cadence 0(20) - 299 rpm
or
Speed 0.0 (4.0) - 300.0 km/h

Odo Odometer
0.0 - 99999 km [mile]

Mx Maximum speed
0.0 (4.0) - 300.0 km/h
[0.0 (3.0) - 180.5 mph]

Av Average Speed
0.0 - 300 km/h
[0.0 - 185.0 mph]

Dst Trip Distance
0.00 - 999.99 km[mile]

Tm Elapsed Time
0:00'00" - 9:59'59"

For 2 sec. MODE
While any measurement is displayed on the screen
Return to Elapsed Time display

Clock
0:00 - 23:59
[1:00 - 12:59]

You can program the tire size.
Range of set: 10 - 2999 mm

SET
When the measurements are stopped

MODE — Increase the number
ST/STOP — Decrease the number

SET — Return to the Elapsed Time

Setting The Clock Time
24 hour or 12 hour system is to be used with km/h or mph unit respectively.

MODE — Increase the number
Return to Clock display
SET
When the measurements are stopped.
Set the hour | ST/STOP | Set the minute

Specifications
Battery/Its Life : ---------------------------- A Lithium Battery (CR2032), Approx:3 yrs. (Approx:1 hr per day usage.)
Control System : ---------------------------- 4-bit 1-chip micro-computer (with a crystal oscillator)
Display : -------------------------------------- Liquid crystal display
Sensing System : ---------------------------- No-contact magnetic sensor
Range of tire circumference setting : ----- 10 mm - 2999 mm (Initial value 2096 mm)
Range of Operational Temperature : ------ 0°C - 40°C (32°F - 104°F)
Dimension and Weight(Computer) : ------ 38 x 54 x 17.5 mm [1-1/2 x 2-1/8 x 11/16"] / 28 g [1.0 oz]
* The factory-loaded battery life might be shorter than the above-mentioned specification.
* The specifications and design are subject to change without notice.

Limited Warranty
2-Year Warranty : Computer Head Only (excluding the attached parts and deteriorated battery)
If any trouble or damage occurs during normal use, the product computer will be repaired or replaced free of charge. Type your name, address, telephone number or e-mail address, date of purchase and the situation of trouble and send it back together with the product to the closest address below. Transportation charges shall be borne by the customer. After being repaired, the product will be shipped back to the customer.

* Accessory parts are available for the customers as shown below.

Standard Parts
#169-9400 Bracket Sensor Kit
#169-9757 Attachment Kit
#169-9765 Cadence Magnet
#169-9691 Wheel Magnet
#166-5150 Lithium Battery (CR2032)

Optional Parts
#169-9402 Center Mount Bracket Kit
#169-9403 Bracket Sensor Kit for Aero Bar
#169-9404 Stem Mount Bracket Kit
#169-9760 Magnet for Composit Wheel