



CATEYE Cordless 2

CYCLOCOMPUTER

Model CC-CL200



US. PAT. NO.4633216,4636769,4642606,5089775,5236759 & Design Patented.
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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.

Modifications

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

Setting Values Cross Reference Table (The tire size is marked on both sides of the tire.)
Table de Correspondance des Valeurs de Réglage (La dimension du pneu figure de chaque côté du pneu)
Wertetabelle zur Einstellung des Radumfanges (die Radgröße entnehmen Sie der Aufschrift des Reifens)
Tabel voor het bepalen van de wielomtrek (de bandenmaat staat vermeld aan beide zijden van de band)
Tabella delle Corrispondenze dei Valori di Regolazione (La dimensione del pneumatico figura su ogni lato del pneumatico)
Tabla de Valores (El tamaño de la rueda está marcado al lado de la llanta)

TIRE SIZE dimension du pneu Radgröße bandenmaat dimensione del pneumatico Tamaño de rueda	L(mm)	TIRE SIZE dimension du pneu Radgröße bandenmaat dimensione del pneumatico Tamaño de rueda	L(mm)	TIRE SIZE dimension du pneu Radgröße bandenmaat dimensione del pneumatico Tamaño de rueda	L(mm)
24 x 1	1753	26 x 1.50	1985	700 x 18C	2070
24 x 3/4 Tubular	1785	26 x 1.75	2030	700 x 19C	2090
24 x 1-1/8 Tubular	1795	26 x 1.95	2050	700 x 20C	2086
24 x 1-1/4	1905	26 x 2.00	2055	700 x 23C	2096
24 x 1.75	1890	26 x 2.1	2068	700 x 25C	2105
24 x 2.00	1925	26 x 2.125	2070	700 x 28C	2136
24 x 2.125	1965	26 x 2.35	2083	700 x 30C	2170
26 x 1(559mm)	1913	27 x 1	2145	700 x 32C	2155
26 x 1(650c)	1952	27 x 1-1/8	2155	700C Tubular	2130
26 x 1.25	1953	27 x 1-1/4	2161	700 x 35C	2168
26 x 1-1/8 Tubular	1970	27 x 1-3/8	2169	700 x 38C	2180
26 x 1-3/8	2068	650 x 35A	2090	700 x 44C	2224
26 x 1-1/2	2100	650 x 38A	2125		
26 x 1.40	2005	650 x 38B	2105		

Specifications/Caracteristiques techniques/Technische daten/Specificaties/
Caratteristiche tecniche/Especificaciones
Controller/Calculateur/Controler/Controleur/Elaboratore/Contador
----- 4-bit 1-chip Microcomputer (Crystal Controlled Oscillator)
Display/Affichage/Anzeige/Display/Visualizzazione/Pantalla
----- Liquid Crystal Display
Sensor/Détecteur/Sensor/Sensor/Rivelatore/Sensor
----- No Contact Magnetic Sensor
Cordless System/System sans fil/Kabelloses System/Draadloze system/Sistema sin hilos/Sistema cordless
----- Directional electromagnetic induction
Operating Temperature Range/Température d'utilisation/zulässige Betriebstemperatur/Toegestane temp./Temperatura di utilizzo
----- 0°C - 40°C(32°F - 104°F)

LIMITED WARRANTY

2-Year Warranty: Only Main Unit/Sensor
If trouble occurs during normal use, the part is repaired or replaced free of charge. The service must be performed by CATEYE Co., Ltd.. and the product needs service must be returned to CATEYE Co., Ltd. directly by purchaser. When returning the product for CATEYE warranty service, pack it very carefully, and enclose the warranty certificate and instructions for repair. Please make sure to write or 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 service shall be borne by person desiring service.
Address for service
CATEYE CO.,LTD.
2-8-25, Kuwazu, Higashi Sumiyoshi-ku, Osaka 546-0041 Japan
Attn.: CATEYE Customer Service Section
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-SCATEYE
Fax: 303-473-0006 e-mail: CatEyeUSA@aol.com

GARANTIE LIMITEE

Garantie de 2 ans : Unité Principale / Détecteur uniquement
En cas de problème en cours d'utilisation normale, le produit sera réparé ou remplacé gratuitement. Les réparations doivent être effectuées par CAT EYE Co., Ltd. et le produit à réparer doit être retourné à CAT EYE Co., Ltd. directement par l'acheteur. Tout produit retourné au service de réparation CAT EYE doit être soigneusement emballé et le certificat de garantie ainsi que les instructions de réparation doivent accompagner le produit à réparer. Il est conseillé à l'acheteur d'écrire lisiblement ou de dactylographier ses nom et adresse sur le certificat de garantie, afin que le produit puisse lui être directement retourné dès que les réparations/réglages nécessaires sont terminés. Le coût de l'assurance ainsi que les frais de manutention et de transport vers le service de réparation CAT EYE sont à charge de la personne souhaitant une réparation sous garantie.
Adresse d'envoi pour réparation
CATEYE CO.,LTD.
2-8-25, Kuwazu, Higashi Sumiyoshi-ku, Osaka 546-0041 Japon.
Attn : CAT EYE Customer Service Section.

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Falls während des normalen Gebrauchs Fehler auftreten, wird das entsprechende Teil kostenlos repariert oder ersetzt. Die Reparatur muß von CAT EYE Co., Ltd. durchgeführt werden, und das zu reparierende Produkt muß direkt durch den Händler an CAT EYE Co., Ltd. gesandt werden. Bei der Rückgabe des Gerätes zur Reparatur packen Sie es sorgfältig anbei. Achten Sie darauf, Ihren Namen und Ihre Anschrift klar und deutlich lesbar auf die Garantiekarte zu schreiben, damit das Gerät so schnell wie möglich nach Beendigung der notwendigen Reparatur/Einstellung an Sie zurückgesandt werden kann.
Anschrift bei Garantieansprüchen
CATEYE CO.,LTD.
2-8-25, Kuwazu, Higashi Sumiyoshi-ku, Osaka 546-0041 Japan
z. H.: CAT EYE Kundendienstabteilung oder wenden Sie sich bitte an den entsprechenden Importeur.

GARANTIEBEPALINGEN

Garantie: 2 jaar op computer en sensor
Mochten er problemen optreden gedurende normaal gebruik, dan geschiedt reparatie of vervanging kosteloos. Dit dient door de fabrikant Cateye Co., Ltd. uitgevoerd te worden. De computer moet door de importeur aan Cateye Co., Ltd. teruggezonden worden. Bij terugzending van de computer moet deze zorgvuldig verpakt worden en dient het garantiebewijs, de aankoopbon en een beschrijving van het probleem meegezonden te worden. Vermeldt duidelijk uw naam en adres in blokletter of met de schrijfmachine op het garantiebewijs, zodat de computer in goede orde teruggestuurd kan worden. Verzekerings-, verzend- en transportkosten zijn voor rekening van de koper.
Adres:
CATEYE CO.,LTD.
2-8-25, Kuwazu, Higashi Sumiyoshi-ku, Osaka 546-0041 Japan
Ter attentie van: Cateye klantenservice
Zogauw als de reparatie/vervanging geschiedt is, wordt de computer aan u geretourneerd.

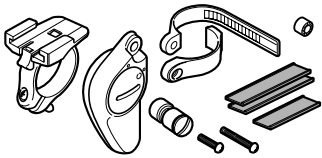
LIMITAZIONE DELLA GARANZIA

Garanzia di due anni
Questo prodotto CATEYE è garantito con la riserva di una utilizzazione corretta, contro ogni difetto di fabbrica e di materiale. Le riparazioni effettuate nel quadro della presente garanzia sono gratuite a condizione che siano rispettate le seguenti disposizioni. Il costo dell'assicurazione come le spese di stoccaggio e di trasposto sono a carico di chi richiede la riparazione. Questa garanzia è limitata alla riparazione dell'unità principale esclusi il filo, il supporto e qualsiasi accessorio. Si prega il compratore di scrivere chiaramente il proprio Cognome Nome ed indirizzo sul Certificato di garanzia completandolo in tutte le sue parti (Rivenditore/Data di acquisto etc.).
Indirizzo per la rispedizione per riparazione
CATEYE CO.,LTD.
2-8-25, Kuwazu, Higashi-Sumiyoshi-ku, Osaka 546-0041, Giappone.
Att.: Dipartimento Assistenza Clienti

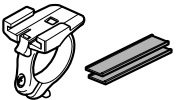
GARANTÍA LIMITADA.

2 Años de Garantía: Sólo Unidad Principal/Sensor.
Si sucedieran problemas durante un uso normal, la pieza será reparada o reemplazada gratuitamente. El servicio debe ser realizado por CATEYE CO., LTD. y el producto que necesite del servicio debe ser devuelto a CATEYE directamente por el comprador. Cuando se envíe el producto al servicio de garantía de CATEYE se ha de empaquetar muy cuidadosamente y adjuntar el certificado de garantía e instrucciones para la reparación. Por favor, asegúrese de escribir claramente su nombre y dirección en el certificado de garantía, con objeto de que el producto le sea devuelto a Vd. tan pronto como la reparación o ajuste necesario haya sido efectuado. Los gastos del seguro, manejo y transporte hasta nuestro servicio serán a cargo de la persona demandante de servicio.
Para reparación enviar a:
CATEYE CO.,LTD.
2-8-25, Kuwazu, Higashi Sumiyoshi-ku, Osaka 546-0041 Japan
Attn.: CAT EYE Customer Service Section

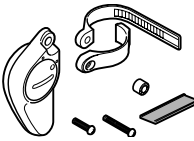
#169-6690
Parts Kit
Kit d'accessoires
Ersatzteil
Onderdelen set
Kit d'accessori
Kit de piezas



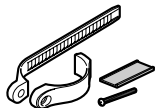
#169-6660
Bracket Kit
Kit support d'unité principale
Halterung
Bracketkit
Kit supporto
Soporte



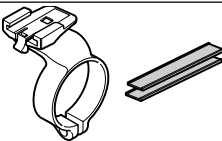
#169-6670
Cordless Sensor
Palpeur (Emetteur)
Sensor mit Sender
Sensor-draadloos
Sensore "Senzafilo"
Sensor sin cable



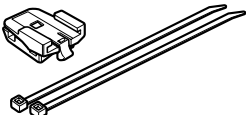
#169-6680
Universal Sensor Band
Collier Universel de Détecteur
Universalsensorband
Universale Sensorband
Fascetta Universale di sensore
Banda universal del sensor



#169-6667
Center Mount Bracket Kit
Kit de montage central del l'unité principale
Halterung für Montage en der Lenkermitte
Stuurbocht Bevestiging Set
Kit di Montaggio al Centro del manubrio
Kit Soporte para Montaje Central



#169-6669
Stem Mount Bracket Kit
Kit de montage de l'unité principale sur la broche du guidon
Halterung für Montage en der Lenkerstange
Stuurpen Bevestiging Set
Kit di Montaggio sull' attacco manubrio
Kit Soporte para Montaje en Tija

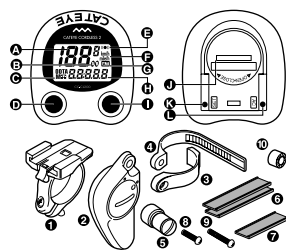


#169-6070
Wheel Magnet
Aimant pour roue
Radmagnet
Wielmagneet
Magnetete ruota
Iman de la rueda



#166-5150
Lithium Battery (CR2032)
Pile au lithium (CR2032)
Lithium-Batterie (CR2032)
Lithium Batterij (CR2032)
Batteria al Litio (CR2032)
Bateria de Litio (CR2032)





- A. Main Display(Speed)
 - B. Wheel Circumference Mark
 - C. Mode Symbol
 - D. Mode Button
 - E. Wheel Sensor Pulse Symbol
 - F. Speed Scale Symbol
 - G. Auto Mode Symbol
 - H. Sub-Display (Selected function)
 - I. Start/Stop Button
 - J. Battery Case Cover
 - K. Set Button
 - L. AC Button
1. Bracket
 2. Sensor(Transmitter)
 3. Sensor Band A
 4. Sensor Band B
 5. Magnet
 6. Bracket Rubber Pad (1mm,2mm)
 7. Sensor Rubber Pad
 8. Screw
 9. Long Screw
 10. Spacer

OPERATION FEATURES

Two buttons are provided on the top of the main unit and two on the bottom. These buttons are used as follows:

•Mode Button (top left button)

Whenever this button is pressed, the mode display changes in the order shown in fig.1, and the data is displayed on the sub-display. **Note:** If this button is kept pressed for more than 2 seconds, **32** display appears.

•Start/Stop Button (top right button)

Measurement of trip distance, elapsed time and average speed is started or stopped when the start/stop button is pressed. Whenever this button is pressed, start and stop are repeated. During measurement the speed scale symbol blinks.

Note: This button does not function if the auto mode function is set to ON [Refer to the explanation of the Auto (Automatic Start/Stop) Function below].

•Set Button (bottom left button)

- To set the wheel circumference: Stop the measurement in the (O) mode, then press the SET button.
- To set the 24-hour clock time: Stop the measurement in (**32**) mode, then press the SET button.
- To set auto mode to ON or OFF: Select the (T),(A) or (D) mode, then press the SET button.

•AC (All Clear) Button (bottom right button)

When this button is pressed, all the data stored in memory is cleared. After all displays illuminate, the "mile/h" symbol illuminates. This button should be pressed only after replacing the battery or when irregular display of information occurs due to static electricity, etc. Once this button is pressed and all memory is erased, it will be necessary to set the wheel circumference, time, etc. again. (refer to Main Unit Preparation)

Reset Operation: (Fig.2)

Press left button to select any mode except total distance (O) and press left and right buttons together. Stored data of trip distance (D), elapsed time (T), average speed (A) and maximum speed (M) are all reset to zero. (In the total distance display mode, the current wheel circumference (A) or (B) is shown.)

MAIN UNIT PREPARATION

User must make the following setting according to instructions before the cyclocomputer can be used properly.

1. How to measure the exact Wheel Circumference (L)(Fig.3) First, adjust tire pressure and then put a mark on the tire tread and the ground simultaneously. Then ride the bike one full wheel revolution. Mark the ground at the end of one revolution and then measure the distance between the two marks. This measure is your actual wheel circumference. Or, the "Setting Values Cross Reference Table" can help you to find out an approximate wheel circumference according to tire size.

2. Setting the Speed Scale (Fig.4)

When the AC button is pressed and all displays illuminate then the "mile/h" appears as shown in fig.4. "km/h" and "mile/h" are displayed alternatively each time the right button is pressed. Select any speed scale as desired and press SET button to complete the setting.

3. Setting the Wheel Circumference (Fig.5.6)

This cyclocomputer is able to memorize two different wheel circumferences. One main unit can be used on two bicycles subject to buy another set of bracket and sensor.

Two wheel circumferences, (A) 2155mm and (B) 2030mm, have been set before the cyclocomputer left our factory. The (A) wheel circumference 2155mm (standard for 27 inch tire) will blink as shown in fig.5. If you want to enter 2155mm and 2030mm, simply press the SET button. If you want to change, press either the right button to increase or left button to decrease the number. To change the number rapidly keep the button pressed. Once you reach the setting you want, press the SET button. If you want to set a second circumference, press the left and right buttons together before pressing the SET button. The wheel circumference 2030mm is displayed and blinks(fig.6). Set to a desired wheel circumference in the same manner as the first circumference setting and press SET button to complete the setting.

4. Selecting one of the two Wheel Circumference (Fig.7)

Set the Auto Mode to ON. (Refer to the explanation of Auto Mode function.) While keeping the right button pressed, press the SET button. The first wheel circumference measurement will be displayed for a few seconds, then the second setting will appear.

5. How to reset the Wheel Circumference

Select the (O) mode and stop the measurement. Press SET button and the already set wheel circumference will blink on the sub-display. Refer to '3.Setting the wheel circumference' to complete the setting.

Setting the 24-hour Clock (Fig.8)

Press left button for more than 2 seconds to select the 24-hour clock display. Stop the measurement by pressing the right button. Press SET button and the minute display will start to blink. Press right button to select a minute time ahead of the current time by 1 to 2 minutes. Next press left button and the hour will blink. Press right button to set to current hour time. Press SET button to complete the setting.

MOUNTING TO BIKE

If necessary, use either the 1mm or 2mm thick rubber pads according to the handlebar diameter. Mount the bracket as shown in fig.9.

- Slide the main unit onto the bracket from front until it clicks into position. To remove the main unit, pull it forward while depressing the lever on bracket (fig.10).

How to Mount the Sensor on the Right Front Fork Leg.(fig.11) Mount the sensor in the highest possible position on the right front fork leg. Adjust the position, clearance and direction as follows:

- (1) Insert the band B into the slit of the band A, and put the rubber pad inside of the band A (fig. 12). Adjust the length of the bands in order that the screw-fastening part of the bands is parallel when mounted to the fork (fig. 13). * To pull out the band B from band A, tug strongly.
- (2) Mount the adjusted bands to fork along with the sensor, by temporarily tightening the screw (fig. 14). If the space between front fork and spoke of your bike is big, use the spacer and long screw as in the fig.15, so that the clearance between sensor and magnet will be approx. 5mm.
- (3) Use a coin to install the magnet securely to the spoke so that it face the sensor zone.(fig.16 & 17)
- (4) A 5mm clearance shall be kept between the sensor and magnet(fig.18). Then align the magnet with sensor zone (fig.16). Meanwhile, the sensor shall aim at the main unit indicated by the triangle marked on the sensor. Then tighten the screw to secure the sensor in position. Cut the excess sensor band B with scissors or the like.

Check points for sensor mounting:

1. Keep a 5mm clearance between the sensor and magnet.
2. The magnet surface shall align to the sensor zone.
3. The triangle mark on the sensor shall aim at the main unit.

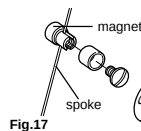


Fig.17

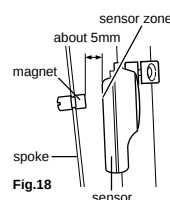


Fig.18

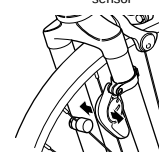


Fig.19

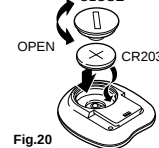


Fig.20

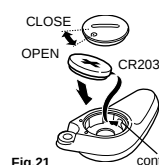


Fig.21

TEST

Mount the main unit on the bracket. If current speed doesn't appear on the main display, press either left or right button to release the unit from the power saving mode. Then spin the front wheel to make sure the wheel sensor pulse symbol flickers. If it does not flicker, adjust the position of sensor until it flickers normally. The mounting is completed and the cyclocomputer is operational.

THE CORDLESS SYSTEM

The sensor picks up wheel revolution signal and transmits the signal to the receiver in the main unit. The main unit receives, calculates and displays the data. The approximate service hour of batteries is as follows:

The main unit (receiver): --- Approx. 2 years (average 1 hour's use per day)
The sensor (transmitter): ----- Total distance of approx. 10,000 miles (16,000 km)

Note: To prevent external signal interference, the sensor signal reception range is restricted. For best performance, the triangle mark on the sensor shall aim at the direction to the main unit. The distance between the sensor and main unit must be kept within 45 cm. The signal reception range may shorten as a result of low ambient temperature or lowered battery power. It is advisable to replace the sensor battery before it fails. The battery service hours quoted above is the average for a 45cm distance between the sensor and main unit.

• The cordless system may be interfered with in the following situation, so that main unit may display false data.

1. Riding near railroad crossings and trains.
2. Riding in places where intensive electromagnetic wave or field exist, such as TV transmission station and radar installations.
3. When two bicycles carrying similar cyclocomputers are ridden side by side.

REPLACING THE BATTERIES

Batteries are already loaded in the main unit and the sensor.

How to replace battery in Main Unit (Fig.20)

Open the battery cover on the back and insert a new CR2032 (lithium) with the (+) pole upward, while pressing the side of the battery against the contact. Press AC button to erase all stored data and then redo the settings.

How to replace battery in Sensor (Fig.21)

Take off the sensor from the bicycle. Open the battery cover on the back and insert a new CR2032 (lithium) with the (+) pole upward, while pressing the side of the battery against the contact. Mount the sensor back to the bicycle and adjust to relative position, clearance and direction.

DISPLAY FUNCTIONS

S Current Speed	0.0(3.0) to 65.9 miles/hr ±0.3mile/h
This is always displayed on the main display and updated once a second.	
O Total Distance	0.0 to 99,999 miles ±0.1mile
This is continuously measured until battery wears down or all clear operation is done. At 10,000 miles(km), it returns to zero and counting begins anew.	
D Trip Distance	0.00 to 999.99 miles 0.01mile
The trip distance from start to current point is displayed. With Reset operation, it returns to zero.	
T Elapsed Time	0:00'00" to 9:59'59" ±0.003%
Elapsed time is measured from start to current point, in units of hours, minutes and seconds. At 10 hours, it returns to zero and counting begins anew. With Reset operation, it returns to zero.	
A Average Speed	0.0 to 65.9 miles/hr ±0.3mile/h
The average speed from start to current point is displayed within 27 hours 46 minutes 39 seconds (99,999 seconds) or 999.99 miles (km). If either is exceeded, (.E) is displayed and calculation ceases.	
M Maximum Speed	0.0 (3.0) to 65.9 miles/hr ±0.3mile/h
With Reset operation, it returns to zero and counting begins anew.	
32 24 hr. Clock Time	0:00' to 23:59' ±0.003%
The current time is displayed by a 24-hour clock.	

POWER SAVING FUNCTION

When the main unit is left without receiving any signal for one hour, the power will be turned off automatically. Resulting in SLEEP state in which only the 24-hour clock displays. The main unit can not receive any signal in this state. Press left or right button to restore signal reception.

Note: Remember to restore signal reception before every journey.

AUTO (AUTOMATIC START/STOP) FUNCTION

The Cordless 2 is equipped with a selective auto function allowing automatic start or stop of measurement without using the right button.

How to Set On/Off the Auto Function

Select (T), (D) or (A) to sub-display and then press SET button. The (AT) symbol will display when auto function is set ON. Repeat to set OFF the auto function.

Note: In SLEEP state, auto start will not function. Press left or right button to restore signal reception first. (Refer to Power Saving Function)

MAINTENANCE/PRECAUTIONS

- Do not leave the main unit exposed to direct sunlight when the unit is not in use. Do not disassemble the main unit.
- Don't pay too much attention to your computer's functions while riding! Keep your eyes on the road and give due consideration to traffic safety.
- Check the relative position of magnet and sensor periodically.
- For cleaning, use neutral detergent on soft cloth, and wipe off later with dry cloth. Do not apply paint thinner, benzene, or alcohol, which may damage on the surface.

TROUBLE SHOOTING

No display.	Replace the main unit battery with new one.
Incorrect data appears.	Execute "All Clear" operation.
Figures do not appear on the main display	Cancel the power saving function.
Current speed does not appear.	Check the sensor position and direction.
Speed is not displayed when riding with high speed or at low temperature.	Check the sensor position and direction.
	Has the battery worn out?
Even when the right button is pressed, the cyclocomputer does not operate.	Set the auto mode to OFF.
The entire liquid crystal screen is dark and unusual display is seen where it should not be.	It returns to normal state if left in the shade.
Display response is slow.	It returns to normal state when temperature rises.

SPECIFICATIONS

Applicable Cycle Sizes	10 mm - 2,999 mm(Initial value:A:2155 mm B:2030 mm)
Power Supply	Main unit: ----- Lithium Battery (CR2032)x1/approx. 2years Sensor with transmitter: ----- Lithium Battery (CR2032)x1/approx.1,000miles
Dimension / Weight	2"x 1-13/10"x 29/32" / 1.2 oz (29 g)

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