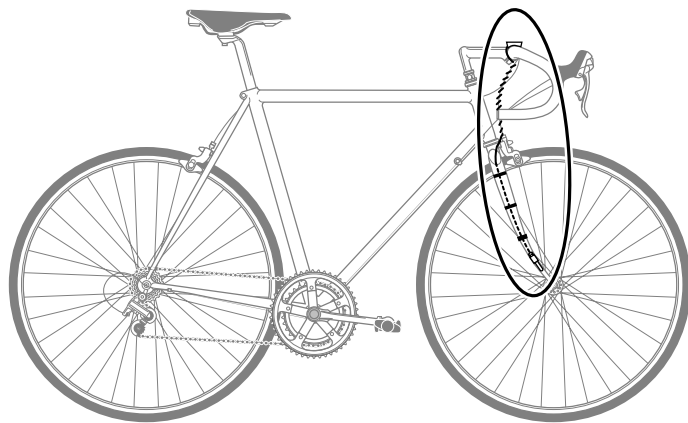


CATEYE TOMO XC

CYCLOCOMPUTER
Model CC-ST200



U.S. Pat. Nos. 4636769/4642606/5236759/5226340
and Design Patented
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CCMST2x-991210 Printed in Maraysia 066600030 4



Setting Values Cross Reference Table (The tire size is marked on both sides of the tire.)

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)

Table de Correspondance des Valeurs de Réglage (La dimension du pneu figure de chaque côté du pneu)

TIRE SIZE dimensione del pneumatico Tamaño de rueda dimension du pneu	L(cm)	TIRE SIZE dimensione del pneumatico Tamaño de rueda dimension du pneu	L(cm)	TIRE SIZE dimensione del pneumatico Tamaño de rueda dimension du pneu	L(cm)
20 x 1.75	150	26 x 1.40	200	650 x 38B	211
24 x 1	175	26 x 1.50	199	700 x 18C	207
24 x 3/4 Tubular	178	26 x 1.75	202	700 x 19C	209
24 x 1-1/8 Tubular	179	26 x 1.95	205	700 x 20C	209
24 x 1-1/4	191	26 x 2.00	206	700 x 23C	210
24 x 1.75	189	26 x 2.1	207	700 x 25C	211
24 x 2.00	192	26 x 2.125	207	700 x 28C	214
24 x 2.125	196	26 x 2.35	208	700 x 30C	217
26 x 1(559mm)	191	27 x 1	215	700 x 32C	216
26 x 1(650c)	195	27 x 1-1/8	216	700C Tubular	213
26 x 1.25	195	27 x 1-1/4	216	700 x 35C	217
26 x 1-1/8 Tubular	197	27 x 1-3/8	217	700 x 38C	218
26 x 1-3/8	207	650 x 35A	209	700 x 44C	222
26 x 1-1/2	210	650 x 38A	212		

169-9771

Bracket Sensor Kit

Kabelál

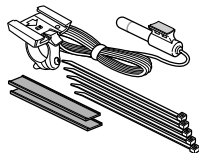
Tartóbilincs készlet, hosszú vezetékkel

Komplet do monta' u komputerka

Elemento da montare : Supporto Unità principale e Sensore

Conjunto de soporte y sensor

Kit Support Unità Principale et Détecteur



169-6168

Bracket Sensor Kit for Aero Bar

Kabelál pro triatlonové nástavce řídítek

Tartóbilincs készlet, aero kormányra

Komplet do monta' u na kierownicy' aero

Kit di Montaggio del Collare del Sensore per Barra Aero

Kit abrazadera de sensor para manillares Aero

Kit de Montaje del Collar de Détecteur pour Barre Aero



169-6167

Center Mount Bracket Kit

Kabelál pro umístění nad afix řídítek

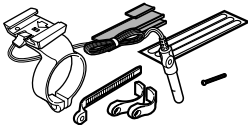
Középre hajló tartóbilincs készlet

Komplet do monta' u na Erodku kierownicy

Kit di Montaggio al Centro del manubrio

Kit Soporte para Montaje Central

Kit de montage central del l'unité principale



169-6169

Stem Mount Bracket Kit

Kabelál pro umístění na představec

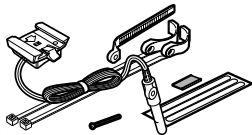
Tartóbilincs készlet, kormányzárra

Komplet do monta' u na wsporniku kierownicy

Kit di Montaggio sull' attacco manubrio

Kit Soporte para Montaje en Tija

Kit de montage de l'unité principale sur la broche du guidon



169-9731

Heavy Duty Wire and Bracket Sensor Kit

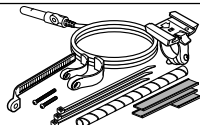
Zesiléná kabelál

Komplet monta' owy do komputerka o wzmacnionej konstrukcji

Filo Ultra Resistente e Attacco Completo

Kit Soporte del Sensor y Alambre de Servicio Pesado

Kit de Fil Reforço et Supports d'Unité Principale et de Détecteur



169-9751

Attachment Kit

Sada úchytů

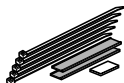
Alátétszalag készlet

Zestaw do mocowania czujników

Guarnizioni da montare

Elementos de fijación

Kit de Gamitures



166-5120

Wheel Magnet

Magnet do v'pletu

Kerékmágnés

Magnes nako[ro

Magnele ruota

Aimant pour roue



169-6180

Lithium Battery (CR1620)

Lithiová baterie (CR-1620)

Litium elem (CR1620)

Bateria litowa (CR1620)

Bateria al Lítio

Bateria de Lítio

Pile au lithium



Specifications/Caratteristiche tecniche/Especificaciones/Caracteristiques techniques

Controller/Elaboratore/Contador/Calculateur

----- 4-bit 1-chip Microcomputer (Crystal Controlled Oscillator)

Display/Visualizzazione/Pantalla/Affichage

----- Liquid Crystal Display

Sensor/Rivelatore/Sensor/Détecteur

----- No Contact Magnetic Sensor

Operating Temperature Range/Temperatura di utilizzo/Temperature d'utilisation

----- 0°C - 40°C(32°F - 104°F)

LIMITED WARRANTY

1-Year Warranty for Main Unit Only

(Accessories/Attachments and Battery Consumption excluded)

If trouble occurs during normal use, the part of the Main Unit will be repaired or replaced free of charge. The service must be performed by Cat Eye Co., Ltd. To return the product, pack it carefully and remember to enclose the warranty certificate with instruction for repair. Please write or type your name and address clearly on the warranty certificate. 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.: CAT EYE Customer Service Section

GARANZIA LIMITATA

1 Anno di Garanzia soltanto sull'Unità Principale

(Gli accessori e la pila sono esclusi dalla garanzia)

In caso di problema durante l'impiego normale, l'unità principale verrà riparata o sostituita gratuitamente da Cat Eye Co., Ltd.. Al momento del ritorno del prodotto occorre imballarlo con cura allegandovi il certificato di garanzia con le istruzioni per le riparazioni. Il nome e l'indirizzo dell'acquirente devono essere presenti in modo leggibile sul certificato di garanzia. Le spese di assicurazione, di manutenzione e di spedizione al nostro Servizio Riparazioni saranno a carico del richiedente la riparazione.

Indirizzo Servizio Riparazioni

CATEYE CO.,LTD.

2-8-25 Kuwazu, Higashi Sumiyoshi-ku, OSAKA 546-0041, Giappone.

Attn: Dipartimento Assistenza Clienti

GARANTIA LIMITADA

Se garantía por un año únicamente el grupo central

(Los accesorios, aditamentos y el consumo de la pila están excluidos)

Si ocurriera alguna avería durante el uso normal, se reparará o sustituirá la pieza o el grupo central. Cat Eye Co., Ltd. deberá realizar la reparación. Para devolver el producto, envuélvalo cuidadosamente y no olvide incluir el certificado de garantía y las instrucciones para repararlo. Rogamos escribir claramente a mano o a máquina su nombre y dirección. Los gastos de seguro, manipulación y transporte serán a cargo de la persona que solicite la reparación.

Dirección para las reparaciones:

CATEYE CO.,LTD.

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

Attn.: CAT EYE Customer Service Section

GARANTIE LIMITÉE

1 An de Garantie sur l'Unité Principale Uniquement

(Les accessoires et la pile sont exclus de la garantie)

En cas de problème en cours d'utilisation normale, l'unité principale sera réparée ou remplacée gratuitement. Par Cat Eye Co., Ltd. Lors du renvoi du produit, il y a lieu de l'emballer soigneusement et de joindre le certificat de garantie avec les instructions de réparation. Les nom et adresse de l'acheteur doivent figurer de manière lisible sur le certificat de garantie. Les frais d'assurance, de maintenance et d'envoi à notre Service Réparations seront supportés par le demandeur de la réparation.

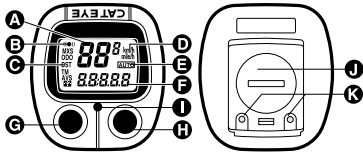
Adresse Service Réparations

CATEYE CO.,LTD.

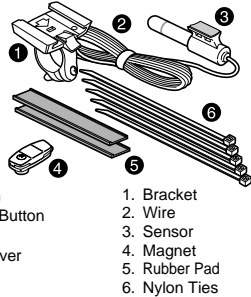
2-8-25, Kuwazu, Higashi Sumiyoshi-ku, Osaka 546-0041 Japan

Attn.: CAT EYE Customer Service Section

E OPERATING INSTRUCTIONS



- A. Main Display (Speed)
- B. Sensor Pulse Symbol
- C. Mode Symbol
- D. Speed Scale Symbol
- E. Auto Mode Symbol
- F. Sub-Display (Selected Function)
- G. M (Mode) Button
- H. S/S (Start/Stop) Button
- I. Set Button
- J. Battery Case Cover
- K. Contact



- 1. Bracket
- 2. Wire
- 3. Sensor
- 4. Magnet
- 5. Rubber Pad
- 6. Nylon Ties

BUTTON FUNCTION

• **M button (Fig.1)**
Changes the display in the order shown in fig. 1, and data is displayed on the sub-display. *If held over 2 seconds, 12-hour clock appears.

• **S/S button**
Starts and stops the measurement of trip distance and elapsed time. During operation, speed scale symbol flashes. In Auto Function, this button is invalid.

• **SET Button**
This is for setting the wheel circumference and clock time, switching on/off Auto Function and to clear all present data and any irregularity. When pressed in stop state in each mode, the following can be revised.

- In ODO mode ----- Wheel circumference
- In Σ mode ----- 12-hour clock
- In TM, DST or AVS mode ----- On/off the Auto function

Reset Operation: (Fig.2)

Select any mode except ODO, then press M button and S/S button simultaneously. MXS, AVS, DST and TM will become zero. (When done in ODO, registered wheel circumference will be displayed.)

All Clear Operation: (Fig.3)

When M button, S/S and set buttons are pressed simultaneously, all data stored (ODO, speed scale, Wheel circumference and clock time) is erased. All displays illuminate, then mile/h symbol illuminates. This should only be executed after replacing battery or when irregular display occurs due to static electricity, etc. Since all memories are erased, set necessary data again according to "Main Unit Preparation".

MAIN UNIT PREPARATION

The following must be completed before operating.

(1) **How to measure wheel circumference (L) of your bike (Fig.4)**
Put a mark on the tire tread and ride the bike one full wheel revolution. Mark the start and the end of the revolution on the ground and then measure the distance between the two marks. This is your actual circumference. Or, the "Selecting Values Cross Reference Table" tells you an approximate circumference according to tire size.

(2) Setting Speed Scale

Perform all clear operation. All displays will illuminate. Then mile/h alone will be displayed as illustrated in fig.5. Km/h and mile/h are alternately displayed with each press of S/S button. Press M button to set desired speed scale. The display will change as fig. 6.

(3) Setting the wheel circumference (Fig.6)

The standard wheel circumference of 216 cm for 27" wheel is displayed. When using 216 cm without revision, press M button. ODO will be displayed and 216 cm is set. For revision, press S/S button to increase the number by one. To increase rapidly, hold down the button. When the desired number appears, press M button. ODO will be displayed, and the desired number is set.

(4) Resetting or changing the wheel circumference

Set main unit in ODO with M button, and stop it with S/S button. Press SET button. The stored number will flicker on the sub-display. Revise the number as desired according to the instructions in (3).

Setting the clock time (Fig.7)

Press M button over 2 seconds to select Σ , and stop it with S/S button. Then press SET button, and minutes flash. Press S/S button to advance minutes by one. To advance rapidly, hold down the button. Set the time one or two minutes ahead of the current time. Then press M button, and hours will flash. Use S/S button the same way. Press SET button to complete time setting. *When you press the SET button, the undisplayed seconds will turn to zero. For accuracy, set by the radio time signal.

MOUNTING TO BIKE

Align the magnet's center and the sensor's marking line. Make sure of 2mm clearance between the magnet and sensor. Temporally attach the sensor to the fork with the self-adhesive patch. (Fig 8- Fig.11)

Test Slide the main unit onto the bracket according to "How to Attach Main Unit to Bracket" (below). Spin the front wheel and check if the velocity indicator is spinning. (If not, adjust the relative positions of the magnet and sensor again.) After the test, remove the main unit.

Fix the sensor with the nylon ties. (Fig.12)

Note: Fasten the ties securely.

Secure the wire along the fork with the nylon ties, and wind it round the brake cable up to the handlebar. (Fig.13 - Fig.14)

Note: Allow enough wire length in the area marked with \leftarrow in the illustration, to insure full movement and unhindered operation of the handlebar.

Slide the main unit onto the bracket from front until it clicks into position. To remove it, pull it off forward while pushing down the lever. (Fig.15)

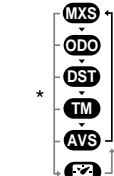


Fig.1



Fig.2



Fig.3



Fig.4



Fig.5



Fig.6



Fig.7

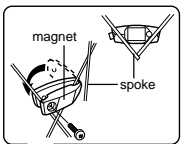


Fig.8

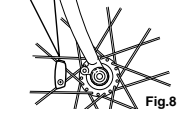


Fig.9

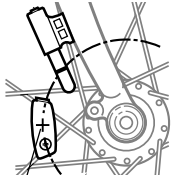


Fig.10

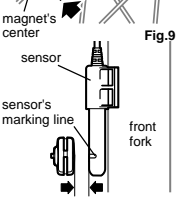


Fig.11

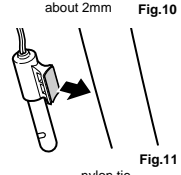


Fig.12

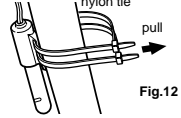


Fig.13

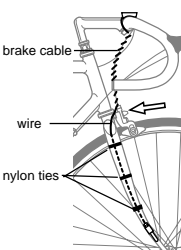


Fig.14

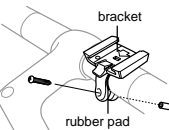


Fig.15

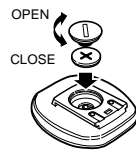


Fig.16

HOW TO REPLACE THE BATTERY

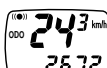
Turn main unit over, remove battery case cover with coin and insert a new lithium battery properly (CR1620 or CR1616) with the (+) pole upward (fig.16), and close the cover securely.

* Please make sure to do the All Clear operation after replacing battery, and to set the unit again.

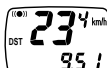
MEASURING AND DISPLAY FUNCTIONS



SPD Current Speed 0.0(3.0) - 65 mile/h(27inch) ± 1 mile/h under 31 miles/h
This is always displayed on the main display and updated once a second.



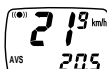
ODO Total Distance (Odometer) 0.0 - 9999.9 mile ± 0.1 mile
This is continuously measured until battery wears down or all clear operation is done. At 10,000 miles(km), it returns to zero and counting begins anew.



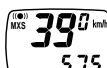
DST Trip Distance 0.00 - 999.99 mile ± 0.01 mile
The trip distance from start to current point is displayed. With Reset operation, it returns to zero.



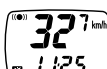
TM Elapsed Time 0:00'00" - 9:59'59" ± 0.003 %
Elapsed time is measured from start to current point, in units of hours, minutes and seconds. At 10 hours, it returns to zero and counting begins anew. With Reset operation, it returns to zero.



AVS Average Speed 0.0 - 65.0 mile/h ± 0.3 mile/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.



MXS Maximum Speed 0.0(3.0) - 65 mile/h(27inch) ± 1 mile/h
With Reset operation, it returns to zero and counting begins anew.



Σ 12-hour clock time 0:00' - 11:59' ± 0.003 %
The current time is displayed by a 12-hour clock.

AUTO (AUTOMATIC START/STOP) FUNCTION



This function switches the main unit to start or stop automatically, in which AUTO symbol appears on the screen, and you are free from pressing S/S button each time.

How to switch on/off the Auto Function.

In TM, DST or AVS, this function switches on/off with each press of SET button. When on, AUTO symbol appears. *With this function, it ceases measuring elapsed time during a stop.

* 2 seconds may be elapsed if mount the main unit to the bracket with this function on.

POWER SAVING FUNCTION



When main unit is left without receiving any signal for 60-70 minutes continuously, power supply is shut down and main unit will display (Σ) only as the figure. By pressing M button or S/S button, or by receiving signal, this function is released.

TROUBLE SHOOTING

• The following situations do not indicate malfunction of the cyclocomputer. Check the following before taking to repair.

* When current speed does not appear, short-circuit the contact on the back with metal. The unit will function normally if the speed display appears.

Display response is slow.

- Is it at a low temperature under 32°F(0°C)?
- It returns to normal state when temperature rises.

No display.

- Has the Lithium Battery in the main unit worn out?
- Replace the Lithium Battery with a new one.

Incorrect data appear.

----- Execute "All Clear" operation.

Current speed does not appear.

- Is there anything on the contact of the main unit or of the bracket?
- Wipe the contact clean.
- Is the distance between sensor and magnet too far?
- Are the marking line of the sensor and the center of magnet matched each other?
- Refer to "Sensor/Magnet Mounting" and re-adjust correctly.
- Is the wire broken?

----- Replace the Bracket & Sensor part with a new one.

Transmission signal loss in damp or wet conditions.

----- Water or condensation may collect between the bracket sensor and the computer causing an interruption in the data transmission. Wipe the contacts with dry cloth. Contacts can also be treated with a water repellent silicon jelly from an automotive parts or hardware store. Do not use industrial water repellent; it may damage the bracket.

When the S/S button is pressed, the unit doesn't activate or stop.

- Is the unit in the Auto function?
- The S/S button doesn't function in the Auto 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, sensor and magnet.
- Don't pay too much attention to your computer's functions while riding! Keep your eyes on the road and duly consider to traffic safety.
- Check relative position of sensor and magnet periodically.
- For cleaning, use neutral detergent on soft cloth, and wipe off later with dry cloth. Do not apply paint thinner, benzene, or alcohol, to avoid damages on the surface.
- If there is mud, sand or the like clogs between the button and the body, the movement of the button may be disturbed. Softly wash away such objects with water.

SPECIFICATIONS

Applicable Cycle Sizes	130cm - 229cm
Applicable Fork Diameter	11 ϕ - 36 ϕ (S:11 - 26 ϕ L:21 - 36 ϕ)
The length of the wire	70cm
Power Supply	Lithium Battery (CR1620/CR1616) x 1
Battery Life	Approx. 3 years(The life of the first factory-loaded battery may be shorter than this period.)
Dimension/Weight	1-15/16" x 1-25/32" x 5/8" (49 x 45 x 16 mm) / 0.74 oz (21 g)

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