



# CAT EYE VELO 8

## CYCLOCOMPUTER

### Model CC-FR8

Design Pat. Pending  
Copyright © 2001 CAT EYE Co., Ltd.  
CCMFR8-011220 066600190 1

### LIMITED WARRANTY

#### 2-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)

**CAT EYE CO., LTD.**

2-8-25, Kuwazu, Higashi Sumiyoshi-ku, Osaka 546-0041 Japan  
Attn.: CAT EYE Customer Service Section

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

### GARANTIE LIMITEE

#### 2 Ans de Garantie Unité Principale Uniquement

(à l'exclusion des accessoires et de la pile)

Ce produit est garanti, sous réserve d'une utilisation normale, pendant une période d'un an. Les réparations effectuées dans le cadre de la présente garantie sont gratuites et doivent être effectuées par CAT EYE Co., Ltd. Le produit à réparer doit être retourné à CAT EYE Co., Ltd. directement par l'acheteur. Tout produit retourné au département de réparation CAT EYE doit être soigneusement emballé et le certificat de garantie ainsi que les instructions de réparation doivent accompagner le produit. 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 lui soit directement retourné après réparation.

Le coût de l'assurance ainsi que les frais de manutention et de transport sont à charge de la personne souhaitant une réparation sous garantie.

(Adresse d'envoi pour réparation)

**CAT EYE CO., LTD.**

2-8-25, Kuwazu, Higashi Sumiyoshi-ku, Osaka 546-0041 Japon  
Attn. : CAT EYE Customer Service Section

### GARANTIE

#### 2 Jahres Garantie nur auf den Computer

(Die Zubehör-/Montageteile und Batterie sind von Garantieleistungen ausgeschlossen)

Falls während des normalen Gebrauchs Fehler auftreten, wird das entsprechende Teil des Computers kostenlos repariert oder ersetzt. Die Reparatur muß von Cat Eye Co., Ltd durchgeführt werden. Wenn Sie das Gerät einsenden, packen Sie es sorgfältig ein und fügen Sie die Garantiekarte sowie Reparaturhinweise anbei. Achten Sie darauf, Ihren Namen und Ihre Anschrift mit Schreibmaschine oder in Druckbuchstaben deutlich lesbar auf die Garantiekarte zu schreiben. Versicherungskosten und Kosten für den Transport bis zu unserem Kundendienst gehen zu Lasten der Person, die unseren Kundendienst in Anspruch nehmen möchte.

(Anschrift des Kundendienstes)

**CAT EYE CO., LTD.**

2-8-25 Kuwazu, Higashi Sumiyoshi-ku, Osaka, 546-0041 Japan  
Attn.: CAT EYE Customer Service Section

### GARANTIE BEPALINGEN

#### 2 jaar garantie op de computer unit

(bedrading, magneet, sensor, batterij en bevestigingsmateriaal uitgezonderd)

Indien er problemen optreden gedurende normaalgebruik, binnen de garantieperiode, dan geschiedt reparatie of vervanging kosteloos. Dit dient door de fabrikant Cat Eye Co. Ltd. uitgevoerd te worden, de computer moet door de importeur terug gezonden worden. Bij terugzenden van de computer moet deze zorgvuldig verpakt worden en dient het garantiebewijs, de aankoopbon en een beschrijving van het probleem meegezonden te worden. Verzekering- en verzend- en transportkosten zijn voor rekening van de koper.

(Service adres)

**CAT EYE CO., LTD.**

2-8-25, Kuwazu, Higashi Sumiyoshi-Ku, Osaka 546-0041 Japan  
Attn.: Cat eye consumer service section

### GARANZIA LIMITATA

#### 2 Anni 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 allegandogli 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)

**CAT EYE CO., LTD.**

2-8-25 Kuwazu, Higashi Sumiyoshi-ku, OSAKA 546-0041, Giappone.  
Att: Dipartimento Assistenza Clienti

### GARANTÍA LIMITADA

#### 2- Años de Garantía Sólo para la Unidad Principal

(Se excluyen Accesorios/Acoplamientos y Batería)

En caso de problemas durante su uso normal, la unidad principal será reparada o reemplazada sin coste alguno. El servicio debe ser realizado por el distribuidor CAT EYE en su país. Para enviar el producto al servicio de reparación, empaquételo primero cuidadosamente y no olvide incluir el certificado de garantía e instrucciones para el servicio de reparación. En el certificado de garantía deberá constar su nombre y dirección completa. Los gastos de seguro, manipulación y transporte o correo deberán correr a cargo de quien solicite dicho servicio.

(Dirección para las reparaciones)

**CAT EYE CO., LTD.**

2-8-25, Kuwazu, Higashi Sumiyoshi-Ku, Osaka 546-0041 JAPAN  
ATT: CAT EYE Customer Service Section

### REKLAMATIONS BETINGELSER

#### 2 års reklamationsret på kun hovedenheden

(Tilbehør/Batteri-forbrug ikke inkluderet)

Hvis der opstår problemer under brug, vil den beskadigede del af hovedenheden blive repareret eller udskiftet, gratis. Denne reparation skal udføres af Cat Eye Co., Ltd. For at returnere produktet, pak det forsigtigt sammen med garantibeviset, samt instruktioner om hvad der skal repareres. Sørg venligst for at dit navn og adresse fremgår tydeligt af garantibeviset. Forsikrings-, handling- og transportomkostninger af service vil blive betalt af den person der ønsker service.

#### ●Calorie Consumption \*1

The calorie consumption data is only the accumulated value that is calculated from the speed data of every second. It differs from the actual consumed calorie.

#### ●Consumption des calories\*1

Les détails de consommation des calories est seulement le total des dates de vitesse calculées par seconde. Alors ça n'est pas égale au consommation des calories actuel.

#### ●Kalorienverbrauch\*1

Der angegebene Kalorienverbrauch ist lediglich ein Annäherungswert, der anhand der je Sekunde gefahrenen Geschwindigkeit errechnet wird. Er entspricht nicht Ihrem tatsächlichen Kalorienverbrauch.

#### ●Calorie Verbruik\*1

De calorie verbruik gegevens zijn de totaal waarden die zijn berekend van de snelheidsgegevens die per seconde gemeten worden. Dit verschilt van het aktueel calorie verbruik.

#### ●Consumo calorico\*1

Il consumo calorico è solo il valore accumulato calcolato dai dati realtivi alla velocità, aggiornati ogni secondo. Si differenzia dal consumo calorico corrente.

#### ●Consumo de calorías\*1

La información del consumo de calorías es simplemente el valor acumulado de la velocidad cada segundo. Esta información difiere del actual consumo calorico.

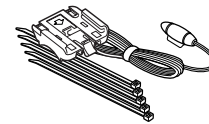
#### ●Kalorie forbrænding \*1

Kalorie forbrænding er kun vejledende, baseret på hastighedsdata. Det reelle kalorie forbrug kan afvige.

Speed	Kcal per hour	Speed	Kcal per hour
10 km/h	67.3 kcal	10 mph	155.2 kcal
20 km/h	244.5 kcal	20 mph	768.2 kcal
30 km/h	641.6 kcal	30 mph	2297.2 kcal

#### # 169-9500

Bracket Sensor Kit (for VELO 8)  
Kit de Montage du collier de Détecteur (pour VELO 8)  
Haltering und Radsensor (für VELO 8)  
Sensor bevestigingset (voor VELO 8)  
Kit di Montaggio del collare del Sensore (per VELO 8)  
Kit abrazadera de sensor (para VELO 8)  
Holder/Sensor-sæt (for VELO 8)



#### # 169-9520

Wheel Magnet  
Aimant de Roue  
Radmagnet  
Wielmagnet  
Magneete per ruota  
Imán de Rueda  
Hjul Magnet



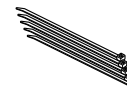
#### # 166-5150

Lithium Battery (CR2032)  
Pile au Lithium (CR2032)  
KLithiumbatterij (CR2032)  
Bateria al litio (CR2032)  
Bateria de Liti (CR2032)  
Lithium Battery (CR2032)



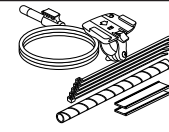
#### # 169-9510

Attachment Kit  
Kit de Gamitures  
Befestigungsmaterial  
Kabelbevestigingset  
Guarnizioni da montare  
Elementos de fijación  
Fastgørings-sæt



#### # 169-9730N

Heavy Duty Wire and Bracket Sensor Kit  
Kit Fil Renforcé, Support et Détecteur  
Draht und Halterung/Sensor-Kit für starke Beanspruchung  
Dikke draad- en bracketset  
Cavo rinforzato e kit supporto dell' unità principale e sensore  
Cable resistente y Kit Soporte del Sensor  
Forstærket Wire og Holder/Sensor-sæt



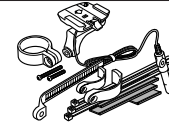
#### # 169-6567 [# 169-6562]

Center Mount Bracket Kit [Long]  
Kit Support pour Montage Central [Long]  
Halterungsskit für Mittelmontage [lang]  
Draadset centrale bevestiging [lang]  
Kit per montaggio del ciclocomputer al centro del manubrio [Lungo]  
Kit Soporte para Montaje Central [Grande]  
Holder Til Montering Midt for.



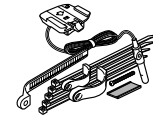
#### # 169-6568

Bracket Sensor Kit for Aero Bar  
Kit Support et Détecteur pour Barre Aéro  
Halterung/Sensor-Kit für Aero-Stange  
Draadset stuurpen bevestiging  
Kit supporto sensore per ruote Aero  
Kit Soporte del Sensor para Manillar Aero  
Holder/Sensor-sæt for Aero Bar



#### # 169-6569

Stem Mount Bracket Kit  
Kit Support pour Montage sur Broche de Guidon  
Halterungsskit für Montage am Lenkerschaft  
Draadset stuurpen bevestiging  
Kit per montaggio sull'attacco del manubrio  
Kit Soporte para Montaje en Potencia  
Holder Til Montering på Frempind



#### # 169-9760

Magnet for Composite Wheel  
Pour roue composite  
Für Verbundräder  
Voor o.a. carbonwielen  
Magneete per ruote  
Para rueda de palos  
Magnet Til Eger-Fri Hjul



#### # 169-9690

Hi-Power Wheel Magnet (both for normal spoke & aero spoke)  
Aimant de roue Hi-Power (Prévue pour rayon normal et rayon aéro)  
Hochleistungsradmagnet (für normale Speichen und Karbonspeichen)  
Hi-Power magneet (zowel geschikt voor gewone spaak als voor aero spaak)  
Magneete ruota Hi-Power (sia per raggio normale che per raggio aerodinamico)  
Imán de rueda de alta precisión (Compatible con radios normales y planas)  
Hi-Power hjul magnet (Til både normal og aero eger)



# E VELO 8 OPERATION INSTRUCTIONS

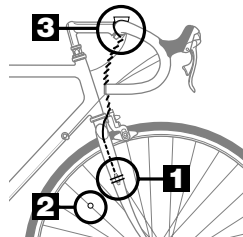
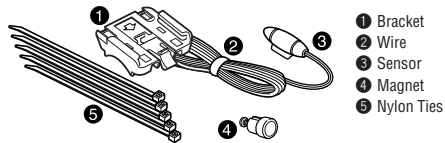


## Caution

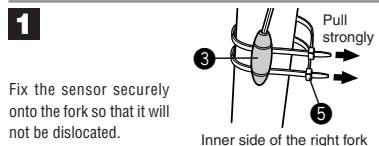
- Do not concentrate too much on the computer operations while riding. Always try to ensure safety riding.
- Be sure to securely mount the magnet, sensor and bracket on your bicycle, and periodically check if such components or screws have loosened.
- Used batteries are harmful if swallowed by mistake. They must be disposed in accordance with the method specified by regulations.
- Do not leave the main unit exposed to direct sunlight. Never disassemble the main unit.
- For cleaning of the main unit or accessories, use diluted neutral detergent on a soft cloth, and then wipe it off with a dry cloth. Do not use paint thinner, benzine or alcohol since such chemicals may damage the surface.

## Installing the Unit

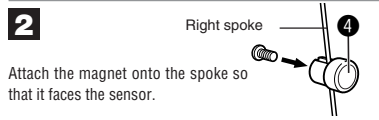
Install the parts on your bicycle in accordance with the following procedures.



Adjust the positions of the sensor and the magnet so that they meet the conditions **A** and **B** at the left.



**1** Fix the sensor securely onto the fork so that it will not be dislocated.



**2** Attach the magnet onto the spoke so that it faces the sensor.

### IMPORTANT!

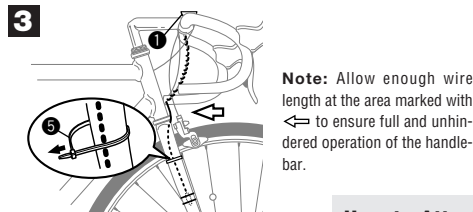
**Correct positions of the sensor and the magnet:**

**A**

When rotating the front wheel, the magnet's center must be aligned with the sensor's marking line.

**B**

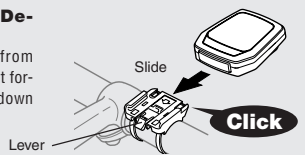
The clearance between the sensor and the magnet must be less than 3mm.



**Note:** Allow enough wire length at the area marked with ← to ensure full and unhindered operation of the handlebar.

Attach the main unit onto the bracket and spin the front wheel slowly. If the speed on the display is updated, installation is correct. If not, check the positions of the sensor and the magnet again according to the above **A** and **B**.

**How to Attach/Detach Main Unit**  
Slide the main unit from front. To detach, slide it forward while pressing down the lever.



## Setting up Computer

Set up the main unit according to the following procedure.

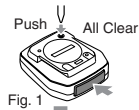
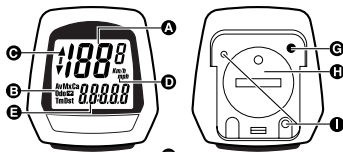


Fig. 1



- A. Speed
- B. Mode Symbol
- C. Pace Arrow
- D. Speed Scale
- E. Sub Display (selected function)
- F. Main Button
- G. SET Button
- H. Battery Case Cover
- I. Contact

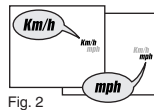


Fig. 2

**Km/h**=Kilometer  
**mph**=mile

### 1. Do all clear operation and set speed scale

Push SET button while pressing Main Button (All Clear Operation: fig. 1). By this operation, the entire memory is erased. All the displays illuminate for a while and then only "Km/h" flashes. Push Main Button to switch between "Km/h" and "mph" (fig. 2). Push SET button to fix the desired speed scale.

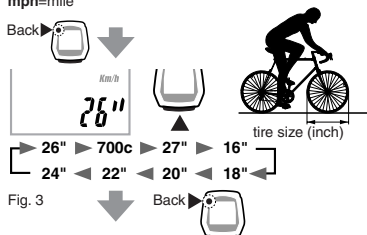


Fig. 3

### 2. Select Tire Size

With every press of Main Button, the tire size changes as: 26" → 700c → 27" → 16" → 18" → 20" → 22" → 24" → 26". Select your bicycle's tire size.

**Note:** The tire size is usually shown on the rim or on the side of your tire.

Push SET button to fix the tire size. The unit is set up and ready for riding.

## Setup Completed

## Operation

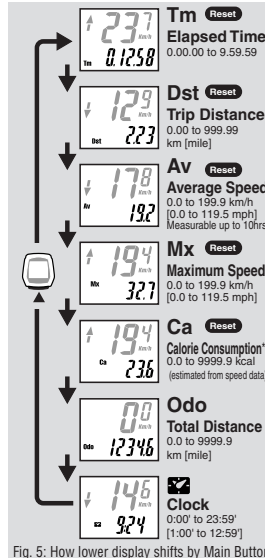


Fig. 5: How lower display shifts by Main Button

**Current Speed** (upper display)  
0.0(4.0) to 199.9 km/h [0.0(3.0) to 119.5 mph]



**Pace Arrow**  
Indicates if the current speed is faster or slower than the average speed.

Fig. 4

### Start/Stop of Measuring

The unit starts measuring automatically when you start your bicycle, and stops measuring when your bicycle stops.

The upper display always shows the Current Speed (fig. 4).

### Shift of Lower Display

By every press of Main Button the lower display changes as in fig. 5.

### Power Saving Function

When the main unit does not receive a signal for approximately 1 to 2 hours, it falls into Power Saving mode and only the clock display appears. When you press Main Button, or when you start your bicycle again, the main unit wakes up and the screen returns normal.

### Data Reset

The reset symbol **Reset** shown in the fig. 5 means that the recorded data of these functions can be reset to zero. Hold down Main Button to reset. The data of Total Distance and the clock cannot be reset.

### How to Set Clock

In the clock mode, press SET button on the back, and the display enters clock setting mode (fig. 6). \*If Km/h has been selected for speed scale, it becomes 24-hour clock. If mph has been selected, it becomes 12-hour clock.

- The digit for hour is flashing. To increase it, press Main Button. To fast-forward, hold down the button. Press SET button to fix it.
- The digit for minute is flashing. Do the same procedure as above. After completing the setting, the screen returns to the normal measuring display.

Fig. 6

### How to Change Tire Size

In the Total Distance (Odo) mode, press SET button (fig. 7).

- The tire size is flashing. Press Main Button to change it, and push SET Button to fix. The screen returns to the normal measuring display.

Fig. 7

## Maintenance

- If the contact of the unit or the bracket gets wet, dry it off with a cloth. If they become rusty, it will cause speed detection error.
- If the gaps between the buttons and the unit get clogged with mud or sand, wash them away with water.

## Troubleshooting

No display.

Has the battery in the main unit run down?

Replace it with a new one.

Incorrect data appears.

Do all clear operation.

Current speed does not appear. (First, short-circuit the contact of the main unit a few times with a piece of metal. If current speed appears, the main unit is working fine and the cause should be attributed to the bracket or the sensor.)

Is the wire broken?

Replace the bracket/sensor set with a new one.

Is the clearance between the sensor and the magnet too large?

Are the magnet's center and the sensor's marking line aligned?

Re-adjust the positions of the magnet and the sensor. (The clearance should be less than 3mm.)

Is there anything sticking on the contact of the main unit or the bracket?

Clean the contact with a cloth.

Current speed disappears when using in the rain.

Wipe water/dirt off the contact of the bracket and apply water-repellent agent (silicon grease) which is available at DIY shops. Do not apply general grease for machinery; it may cause damage on the bracket.

### Replacing Battery (fig. 8)

If the screen gets dim, it is the time to replace the battery.

\*Insert a new lithium battery (CR2032) with the (+) mark facing up.



Fig. 8



Fig. 9

### All Clear Operation

Press SET Button with a pen while pushing Main Button (fig. 9). All the memory (total distance, speed scale, wheel circumference and time) are erased, and the display shows the speed scale setting mode. Perform this operation after replacing the battery or when incorrect data appears on the screen.

## Specification

Battery	Lithium Battery CR2032 x 1 (battery life: approx. 3 years) (*The life of the factory-loaded battery might be shorter than this.)
Microcomputer	4-bit 1-chip (Crystal controlled oscillator)
Display	Liquid crystal display
Sensor	No-contact magnetic sensor
Tire Sizes	16, 18, 20, 22, 24, 26, 700c, 27" (default figure: 26")
Working Temperature	0°C - 40°C
Length of Wire	70cm
Dimension/Weight	1-7/8" x 1-25/32" x 23/32" (48 x 45 x 18 mm) / 1.06 oz (30 g)

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