



Cateye Micro

CYCLOCOMPUTER

MODEL CC-6000



INSTRUCTION MANUAL

MODE D'EMPLOI

BETRIEBSANLEITUNG

取扱説明書

**OPERATING INSTRUCTIONS
CATEYE MICRO MODEL CC-6000
CAT EYE CO., LTD.
JAPAN
CATEYE MICRO
INDEX**

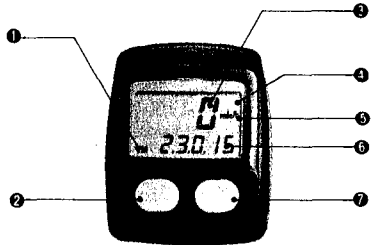
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Introduction

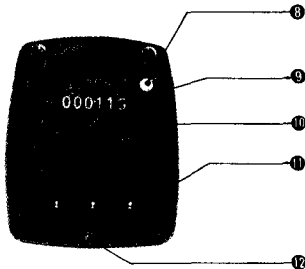
Thank you very much for purchasing a CATEYE MICRO CYCLOCOMPUTER Model CC-6000. This cyclocomputer not only can display either speed or cadence but also measures, stores, and displays maximum speed, total distance, trip distance, average speed and elapsed time. Set the distance scale (km or mile) and wheel circumference for your bike. Before operating, thoroughly familiarize yourself with this manual so you completely understand the functions of the cyclocomputer, and enjoy computerized cycling. Store this manual in a safe place for future reference.

1 Main Unit

Front view of main unit

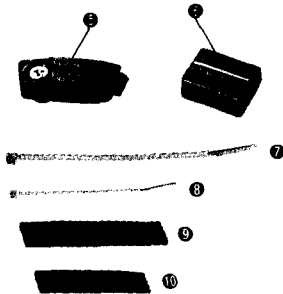
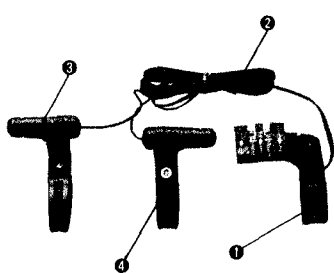


Back view of main unit



- ① Mode symbol
- ② Mode button
- ③ Speed/cadence display
- ④ Cadence scale symbol
- ⑤ Speed scale symbol
- ⑥ Selected function display
- ⑦ Start/stop button
- ⑧ Select button
- ⑨ Serial No.
- ⑩ Battery case cover
- ⑪ Contact
- ⑫ Depression

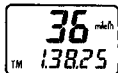
2 Accessories



- ① Bracket
- ② Wire
- ③ Cadence sensor
- ④ Wheel sensor
- ⑤ Wheel magnet
- ⑥ Cadence (pedal) magnet
- ⑦ Wire clip, large (7 pieces)
- ⑧ Wire clip, small (1 piece)
- ⑨ Bracket rubber pad (1 mm, 2 mm)
- ⑩ Sensor band rubber pad (1 mm, 2 mm)

3 Measuring and Display Functions

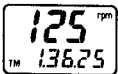
SPD Current Speed



The current speed is displayed on the upper line of the display and updated once a second over a range of 0(3) to 65 miles/h. (0(4) to 105 km/h). The upper limit of measurable speed depends on the wheel size as shown in the table. Pressing the select button displays the cadence.

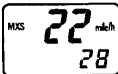
1	Wheel size	(inch)	20	22	24	26	27	28
2	Wheel circumference	(cm)	160	176	192	208	216	224
3	Speed limit	(Km/h)	78	86	93	101	105	109
		(mile/h)	48	53	58	63	65	68

CDC Cadence



The cadence is displayed on the upper line of the display. It shows the number of pedal revolutions per minute (rpm). Pressing the select button alternates back to current speed display.

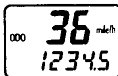
MXS **Maximum Speed**



The maximum speed is stored in memory and displayed on the lower line of the display. Measurable in the range of 0(3) to 65 miles/h. (0(4) to 105 km/h). The upper limit is the same as the current speed.

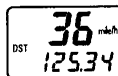
Note: When cadence is displayed on the upper line of the display, the MXS mode is skipped and the maximum speed is not displayed.

ODO **Total Distance (ODOMETER)**

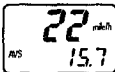


The total distance is continuously measured, accumulated and displayed on the lower line of the display until the battery wears down. The range is 0.0 to 9999.9 miles (km) in 0.1 mile (km) increments. When 10,000 miles (km) are reached, the odometer returns to zero and counting begins anew.

DST **Trip Distance**

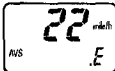
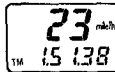


The trip distance from the starting point to the current point is calculated and displayed on the lower line of the display. The range is 0.00 to 999.99 miles (km) in 0.01 mile (km) increments. When 1,000 miles (km) are reached, the trip distance returns to zero and counting begins anew.

AVS**Average Speed**

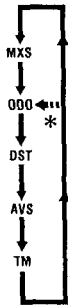
The average speed is calculated on the basis of the elapsed time and the trip distance from the starting point to the current point, and displayed on the lower line of the display.

Measurable up to 27 hours 46 minutes 39 seconds (99,999 seconds) for the elapsed time or 999.99 miles (km) for the trip distance. If either is exceeded, E is displayed and calculation ceases.

**TM****Elapsed Time**

The elapsed time is measured from the starting point to the current point, and displayed on the lower line of the display in units of hours, minutes and seconds. The range is 0:00:00 to 9:59:59 in second increments. When 10 hours have elapsed, the counter returns to zero and time calculation is restarted.

4 Button Functions



Select Button (SELECT)

The upper line of the display alternates between the current speed and the cadence modes when the select button is pressed.

Mode Button

The display mode mark shifts in the illustrated sequence each since the button is pressed, and the corresponding data is simultaneously displayed on the lower line of the display.

(Note) When cadence is displayed, the maximum speed (MXS) is no longer displayed. But the maximum speed (MXS) data is stored to memory.

Start/Stop Button

Measurement of the trip distance and elapsed time is simultaneously started or stopped when the start/stop button is pressed. During operation the cadence or the speed scale symbol flashes.

- **RESET:**

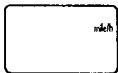
Select any other mode except total distance (ODO), and press the mode button and start/stop button simultaneously. (Maximum speed (MXS), trip distance (DST), average speed (AVS) and elapsed time (TM) should be zero.)

- **ALL CLEAR:**

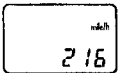
When the mode button, start/stop button, and select button are pressed simultaneously, all data stored in memory (including ODO and wheel circumference data) are cleared, all displays illuminate for 2 seconds, then the mile/h symbol illuminates.

This operation should only be executed after replacing the battery or when irregular display of information occurs.

5 Main Unit Preparation



(Fig. 1)



(Fig. 2)



(Fig. 3)

- The following must be completed before operating.
(A battery is already loaded in the main unit when purchased.)
 - **Setting the distance scale**
Press all three buttons simultaneously (select button, mode button and start/stop button) to clear all data. All displays will illuminate for 2 seconds. Then mile/h alone will be displayed as illustrated in Fig. 1. Km/h and mile/h are alternately displayed each time the start/stop button is pressed. Select either as desired. Next, press the mode button, and the distance scale will be set and displayed as shown in Fig. 2.
- * **How to replace the battery**
Turn the main unit over, remove the battery case cover using coin or similar opener as illustrated in Fig. 3, and insert a new lithium battery (CR 2032). Positioning the (+) pole upward as illustrated, place the battery properly into the case and close the cover securely.



(Fig. 4)

○ **Setting the wheel circumference**

(1) How to measure wheel circumference

Measure the radius R (cm) with the rider on the bicycle as shown in Fig. 4, and calculate the wheel circumference L (cm) using the following formula:

$$L = 2\pi R = 6.283 R \text{ (cm)}$$

Or, paint a mark on the ground contact surface of the wheel, and directly obtain the wheel circumference by measuring the distance between the marks printed on the ground.

* Table 1 shows R (cm), L (cm) and wheel diameter (inch).

(2) Setting the wheel circumference

216 (standard wheel circumference (cm) for 27" wheel) is displayed as shown in Fig. 2. When using 216 without revision, press the mode button, and (ODO) will be displayed, and 216 is set. To revise 216, press the start/stop button when the wheel circumference is initially displayed, and 216 will be changed to a flickering 217. Then, the number will increase by 1 every time the start/stop button is pressed.

When the button is held down, it will rapidly increase.

Select a number in the range of 130 to 229, according to your bicycle. When the desired number appears, press the mode button. When (ODO) appears, preparation is completed.

(3) Resetting or changing the wheel circumference

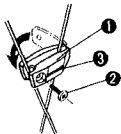
Get the stop state in the (ODO) mode, and press the mode button and the select button simultaneously. The wheel circumference number stored will flicker on the lower line of the display. Revise the number as required according to the instructions given in (2).

* The stored wheel circumference number is only displayed while the mode and start/stop buttons are simultaneously pressed in the (ODO) mode during operation.

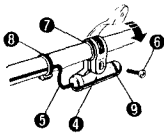
Table 1. Setting Values Cross Reference Table

						R (cm) Radius	L (cm) Circumference	D (inch) Tire diameter		* Tubular	
R (cm)	L (cm)	D (inch)	R (cm)	L (cm)	D (inch)	R (cm)	L (cm)	D (inch)	R (cm)	L (cm)	D (inch)
25,4~5	160	20,0	28,3~4	178	1/4	31,1~2	196	1/2	34,0~1	214	3/4 700x28C
25,6~7	161	1/4	28,5	179	3/4	31,3	197	5/8	34,2	215	7/8
25,8	162	1/4	28,6~7	180	1/2	31,4~5	198	3/4	34,3~4	216	27,0 700x32C
25,9~26,0	163	3/8	28,8	181	5/8	31,6~7	199	7/8	34,5~6	217	1/8
26,1	164	1/2	28,9~29,0	182	3/4	31,8	200	25,0	34,7	218	1/4
26,2~3	165	5/8	29,1~2	183	7/8	31,9~32,0	201	1/8	34,8~9	219	3/8
26,4	166	3/4	29,3	184	23,0	32,1~2	202	1/4	35,0	220	1/2
26,5~6	167	7/8	29,4~5	185	1/4	32,3	203	3/8	35,1~2	221	5/8
26,7~8	168	21,0	29,6	186	1/4	32,4~5	204	1/2	35,3~4	222	3/4
26,9	169	1/4	29,7~8	187	3/8	32,6~7	205	5/8	35,5	223	7/8
27,0~1	170	1/4	29,9~30,0	188	1/2	32,8	206	3/4	35,6~7	224	28,0 700B
27,2	171	3/8	30,1	189	5/8	32,9~33,0	207	7/8	35,8	225	1/8
27,3~4	172	1/2	30,2~3	190	3/4	33,1	208	26,0 650A	35,9~36,0	226	1/4
27,5~6	173	5/8	30,4	191	7/8	33,2~3	209	1/8 650B	36,1~2	227	3/8
27,7	174	3/4	30,5	192	24,0	33,4~5	210	1/4 700x25C	36,3	228	1/2
27,8~9	175	7/8	30,6~7	193	1/4	33,6	211	3/8	36,4~5	229	5/8
28,0	176	22,0	30,8~9	194	1/4	33,7~8	212	1/2 * Tubular			
28,1~2	177	1/4	31,0	195	3/8	33,9	213	5/8			

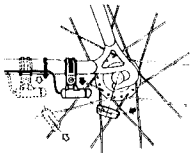
6 Wheel Magnet/Wheel Sensor Mounting



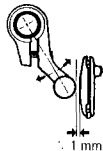
(Fig. 5)



(Fig. 6)



(Fig. 7)

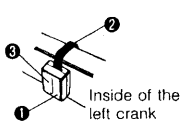


(Fig. 8)

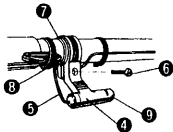
- ① Wheel magnet
- ② Screw
- ③ Marking line
- ④ Wheel sensor
- ⑤ Sensor wire
- ⑥ Screw
- ⑦ Sensor band, rubber pad
- ⑧ Wire clip
- ⑨ Marking line

- (1) Attach the wheel magnet by clamping the left spokes of the rear wheel as shown in Fig. 5.
- (2) Attach the wheel sensor on the rear of the left chain stay with either the 1 mm- or the 2 mm-thick band pad, whichever matches the tube diameter of your bicycle, as shown in Fig. 6.
Suitably position the wheel magnet and the sensor, referring to Fig. 7.
- (3) To adjust the relationship between the wheel magnet and the sensor, align the marking lines as shown in Fig. 7 and make sure there is about 1 mm clearance between them, as shown in Fig. 8.

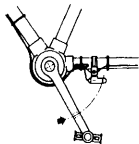
7 Cadence Magnet/Cadence Sensor Mounting



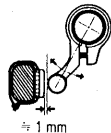
(Fig. 9)



(Fig. 10)



(Fig. 11)

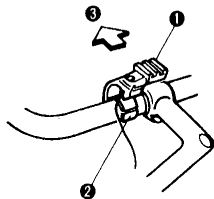


(Fig. 12)

- ① Cadence magnet
- ② Wire clip
- ③ Marking line
- ④ Cadence sensor
- ⑤ Sensor wire
- ⑥ Screw
- ⑦ Sensor band, rubber pad
- ⑧ Wire clip
- ⑨ Marking line

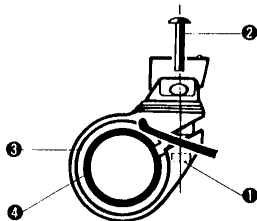
- (1) Securely fasten the cadence magnet on the inside of the left crank with the wire clip (large) as shown in Fig. 9.
- (2) Attach the cadence sensor on the front area of the left chain stay as shown in Fig. 10.
- (3) To adjust the relationship between the cadence magnet and the sensor, align the marking lines as shown in Fig. 11 and make sure there is about 1 mm clearance between them, as shown in Fig. 12.

8 Bracket Mounting



(Fig. 13)

- ① Bracket
- ② Rubber pad
- ③ Front

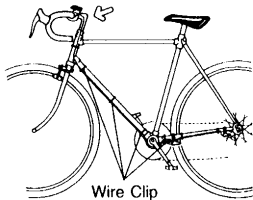


(Fig. 14)

- ① Nut
- ② Screw
- ③ Rubber pad
- ④ Handlebar

Use either the 1 mm- or the 2 mm-thick rubber pad if necessary, according to the handlebar diameter. Attach the bracket to the left side of the handlebar stem so that the main unit is positioned at the center of the handlebar as shown in Fig. 13, and tighten the screw as shown in Fig. 14 so that the bracket cannot turn.

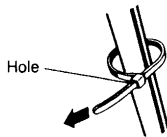
9 Securing the Wire



(Fig. 15)



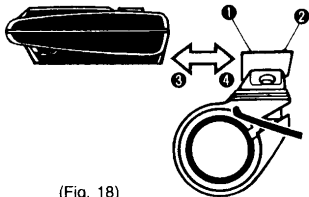
(Fig. 16)



(Fig. 17)

Clamp the wire with wire clips as shown in Fig. 15. Loosen the wire in the area marked with the arrow (→) so that the wire does not hinder handlebar operation. Fold the excess wire at the clip area as shown in Fig. 16. Pass the clip end through the clip hole as shown in Fig. 17, and firmly pull the end with pliers or similar tool. Cut off the projecting part of the clip.

10 Main Unit Mounting



(Fig. 18)

Slide the main unit from the front to engage the lock hook of the main unit into the bracket groove. Be sure to click the projection of the bracket into the depression of the main unit. The contacts are automatically connected. To remove, pull the main unit forward and off.

- ① Contact
- ② Projection
- ③ Remove
- ④ Insert

11 Test

Mount the main unit on the bracket. Clear the rear wheel off the ground and spin the wheel to check that the speed is displayed.

12 How to read data

Basic Data

- (a) Check that the speed scale symbol (mile/h or km/h) or the cadence scale symbol (rpm) does not flicker. (Set the operation on stop.)
- (b) Select any other mode except total distance (ODO), and press the mode button and start/stop button simultaneously. (Maximum speed) (MXS), trip distance (DST), average speed (AVS) and elapsed time (TM) should be zero.)
- (c) Press the start/stop button when starting.
("mile/h (Km/h)" or "rpm" (in the cadence mode) will flicker.)
- (d) Press the start/stop button when reaching your destination. (When the speed scale symbol or cadence scale symbol stops flickering, the unit enters the stop state.)
- (e) Press the mode button to read the data.

Application of data

- (a) To accumulate actual trip data during riding, the rest time can be eliminated by pressing the start/stop button before and after resting.
- (b) To accumulate lap time and maximum speed data on a track, press the start/stop button when passing the start line and again, when passing the finish line.

Precautions

- (a) Do not leave the main unit exposed to direct sunlight when the unit is not in use.
- (b) Do not disassemble the main unit or its accessories.
- (c) Don't pay too much attention to your Micro's functions while riding! Keep your eyes on the road and give due consideration to traffic safety.

Specifications			
Functions	Current Speed	SPD	0 (4) ~ 105 km/h 0 (3) ~ 65 miles/h (27 inches)
	Cadence	CDC	0 (20) ~ 199 rpm
	Maximum Speed	MXS	0 (4) ~ 105 km/h 0 (3) ~ 65 miles/h (27 inches)
	Total Distance	ODO	0.0 ~ 9999.9 km or miles
	Trip Distance	DST	0.00 ~ 999.99 km or miles
	Average Speed	AVS	0.0 ~ 65.0 miles/h · 105.0 km/h
	Elapsed Time	TM	0:00'00" ~ 9:59'59"
Controller	4-bit 1-chip Microcomputer (Crystal Controlled Oscillator)		
Display	Liquid Crystal		
Sensor	No Contact Magnetic Sensor		
Power Supply	LITHIUM BATTERY (CR2032) × 1		

Specifications		
Operating Temperature Range		0°C ~ 50°C (32°F ~ 122°F)
Storage Temperature Range		-20°C ~ 60°C (-4°F ~ 140°F)
Applicable Cycle Sizes		16 ³ / ₈ " ~ 28 ⁵ / ₈ "
Standard Accuracy	Current Speed	±1 km/h or mile/h UNDER 50 km/h
	Cadence	±1 rpm UNDER 100 rpm
	Maximum Speed	±1 km/h or mile/h
	Total Distance	±0.1 km or mile
	Trip Distance	±0.01 km or mile
	Average Speed	±0.2 km/h or mile/h
	Elapsed Time	±0.003 %
Battery Life		Approx. 2 ~ 3 years * The life of the first factory-loaded battery may be shorter than this period.
Dimension/Weight		2-3/16" × 1-13/16" × 13/16" (56 × 46 × 20 mm)/1.34 oz. (38 g)

The specifications and design are subject to change without notice.