



CAT EYE ENDURO 2

CAT EYE MITY 3

CYCLOCOMPUTER

CC-ED200 [with Heavy Duty Wire]

CC-MT300 [with Normal Wire]



U.S. Pat. Nos. 4633216/4642606/5236759/5226340/5264791

Pat. and Design Pat. Pending

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CCMED2/MT3-980310 Printed in Japan [0687460] 2

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

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

* The values listed here are not definitive information. Wheel circumference varies with the tire pressure.

Specifications

Controller 4-bit 1-chip Microcomputer (Crystal Controlled Oscillator) ----- Liquid Crystal Display
Display ----- No Contact Magnetic Sensor
Operating Temperature Range ----- 0°C - 40°C(32°F - 104°F)

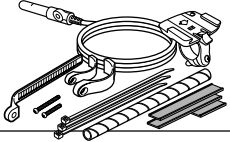
LIMITED WARRANTY

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.

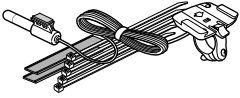
(Address for service)

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 : 800-5CAT EYE
Fax : 303-473-0006 e-mail : CatEyeUSA@aol.com

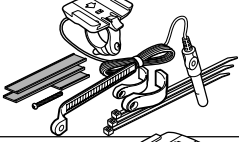
1 6 9 - 9 7 3 0
Heavy Duty Wire and Bracket Sensor Kit



1 6 9 - 9 7 7 0
Bracket Sensor Kit for Extra Large Fork



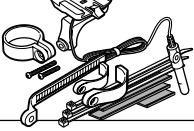
1 6 9 - 6 5 6 0 [# 1 6 9 - 6 5 6 5]
Bracket Sensor Kit [Long]



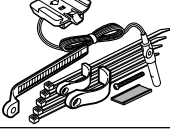
1 6 9 - 6 5 6 7 [# 1 6 9 - 6 5 6 2]
Center Mount Bracket Kit [Long]



1 6 9 - 6 5 6 8
Bracket Sensor Kit for Aero Bar



1 6 9 - 6 5 6 9
Stem Mount Bracket Kit



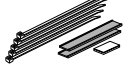
1 6 9 - 9 7 5 0
Attachment Kit (for CC-ED200)



1 6 9 - 6 1 7 0
Attachment Kit (for CC-MT300)



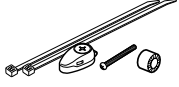
1 6 9 - 9 7 5 1
Attachment Kit (For Extra Large Fork)



1 6 9 - 6 2 8 0
Universal Sensor Band



1 6 9 - 9 7 6 0
Wheel Magnet for Composit Wheel



1 6 6 - 5 1 2 0
Wheel Magnet



1 6 6 - 5 1 5 0
Lithium Battery (CR2032)



CATEYE MITY3

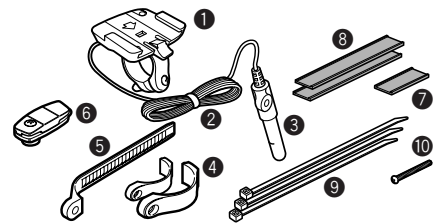
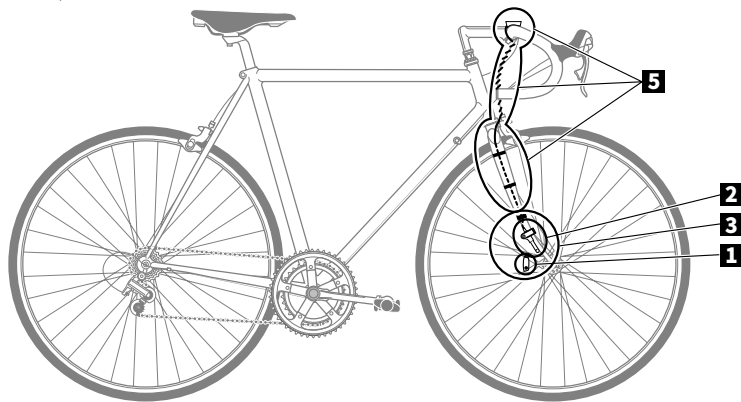
CC-MT300

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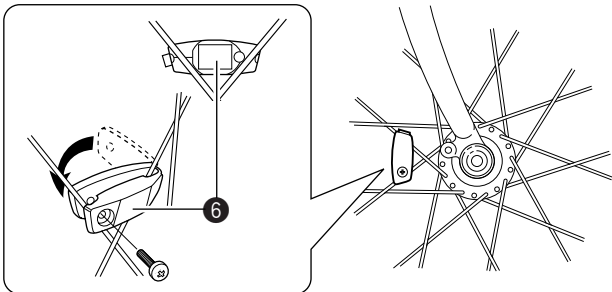


Installation Manual



- 1 Bracket
- 2 Wire
- 3 Sensor
- 4 Sensor Bands-A
- 5 Sensor Band-B
- 6 Magnet
- 7 Sensor Band Rubber Pad
- 8 Bracket Rubber Pad
- 9 Nylon Tie
- 10 Sensor Band Screw

1



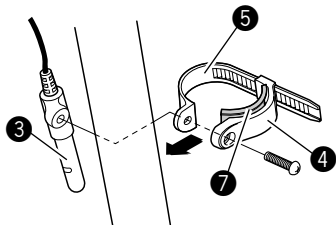
2

Attach the sensor temporarily.

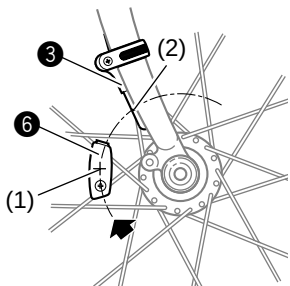
Note: Sensor Band-A

(Small) ----- 11Ø-26Ø

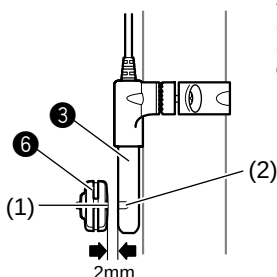
(Large) ----- 21Ø-36Ø



3



Align the magnet's center(1) and the sensor's marking line(2). Make sure of approx. 2mm clearance between the magnet 6 and sensor 3.

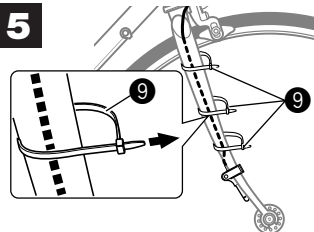


4

Test

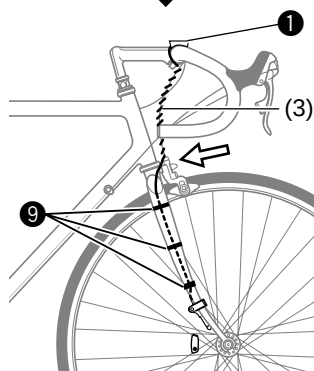
Slide the main unit onto the bracket according to "How to Attach Main Unit to Bracket" (below). Make sure the computer is fully attached to the bracket. Spin the front wheel and check if the speed display appears. (If not, adjust the relative positions of magnet and sensor again.) Fasten the sensor securely, and remove the main unit.

5

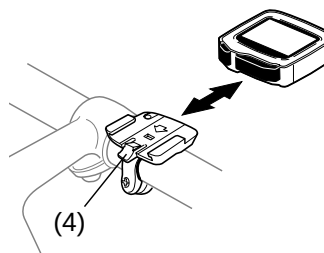
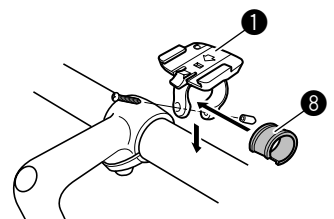


Secure the wire along the fork with the nylon ties 9, and wind it round the brake cable(3) up to the handlebar.

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

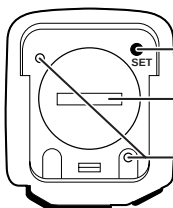
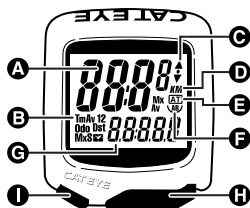


Test the alignment of the magnet and sensor with the main unit attached.



How to Attach Main Unit to Bracket

Slide main unit onto the bracket from front until it clicks into position. To remove, pull it off forward while pushing down the lever(4).



- A. Upper Display (Usually Current Speed)
 B. Mode Symbol
 C. Average Pace Arrow
 D. Speed Scale
 E. Auto Mode Symbol
 F. Wheel Selection Symbol
 G. Lower Display (Selected Function)
 H. Mode Button
 I. S Button (Start/Stop)
 J. SET Button
 K. Battery Cover
 L. Contact

Precautions

- Don't pay too much attention to your computer functions while riding. Keep your eyes on the road and pay attention to traffic conditions.
- Securely attach the magnet, sensor and bracket to your bicycle. Periodically check if the screws and secure bands have loosened.
- Safely dispose of the old battery. Do not place it within children's reach. If swallowed by mistake, consult a doctor immediately.
- Do not leave the main unit exposed to direct sunlight. Never disassemble the main unit.
- For cleaning, use neutral detergent on soft cloth, and wipe off with dry cloth. Do not apply paint thinner, benzine or alcohol, to avoid damages on the surface.
- If there is mud, sand or the like clogged between the button and the body, button operation can become impaired. Softly wash away such objects with water.
- Before each ride, insure the computer is completely and securely mounted to the bracket.

HOW TO ATTACH TO BICYCLE

Refer to the "Installation Manual".

MAIN UNIT PREPARATION

Using this unit for the first time After replacing battery

All Clear Operation

Press all the three buttons simultaneously.
 All displays illuminate, and then "K" symbol flashes.

Speed Scale Selection

Press MODE button and select "K"(=km) or "M"(=mile).

Odo Data Input

Hold down MODE button to reach Odo input display.
 Input the figure by MODE button.
 Press S button to change the flickering digit.

Press S or SET button to fix it

Wheel Circumference Setting

Input wheel circumference A by S button (-) or MODE button (+).

For inputting wheel circumference B, hold down SET button; the display changes to B. Input the figure in the same way.

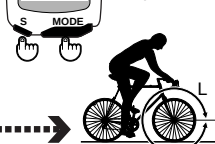
Press SET button to fix it

Preparation Completed

Set the Clock time

All Clear Operation

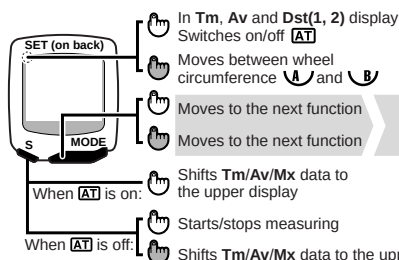
Press all the three buttons simultaneously.



Wheel circumference setting is the actual distance in centimeters on the ground of one wheel revolution measures. For the most accurate settings, do this roll-out. Otherwise, consult the Cross Reference Table for approximate setting.

In Measuring Functions:

When measuring, the speed scale flashes.

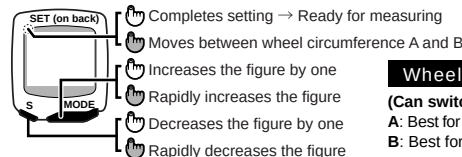


Button Operation

- Just press
- Hold down (2 sec.)

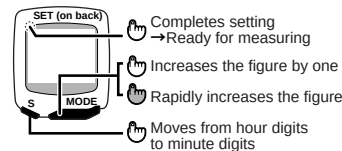
In Wheel Circumference Setting Display:

If SET button is pressed in Odo display (stop state), wheel circumference setting display appears.



In Clock Time Setting Display:

If SET button is pressed in **AT** (stop state), clock time setting display appears.



When "M" (=Mile) was chosen for speed scale, the clock time is in 12-hour. If "K" (=Km), the clock time is 24-hour.

Wheel Circumference A & B

(Can switch between A & B any time)

A: Best for road bikes and riding [Initial figure =210 cm]

B: Best for MTB riding and low speed sensitivity [Initial figure =205 cm]

When MODE button and S button are pressed simultaneously in Odo display, first the wheel circumference value appears. If these buttons are further held down for more than 3 seconds, the wheel circumference moves between A-B.

Reset Operation



Data to be reset:

In Tm, Av, Mx, Dst1 and **AT** display:
 ----- Resets Tm, Av, Mx and Dst1 data all together
 In Dst2 display: ----- Resets only Dst2 data



Spd Current Speed

Wheel A: 0.0(3.0)-65 mph ± 1 mph (under 31 mph) [0.0(4.0)-105 km/h ± 1 km/h]
 Wheel B: 0.0(2.0)-65 mph ± 1 mph (under 31 mph) [0.0(2.5)-105 km/h ± 1 km/h]

Usually displayed on the upper display and updated once a second. When Av or Mx data is shifted to the upper display, Spd shifts to the lower display.



Average Pace Arrow

Shows whether the current speed is faster or slower than the average speed.

- ↑ ----- Faster than the average speed
- ↓ ----- Slower than the average speed

When the average speed is zero, or when in the stop state, no pacer symbol appears.



Odo Total Distance (Odometer)

0.0 - 9999.9 / 10000 - 99999 mile[km] ± 0.1 mile[km]

Continuously measured until battery wears down. Displayed with 0.1 resolution up to 9999.9 km and with 1.0 resolution up to 99999 km. (With all clear operation, it returns to zero; to continue accumulation of data, input the previous Odo data after all clear operation.)



Dst(1, 2) Trip Distance(1, 2)

0.00 - 999.99 mile[km] ± 0.01 mile[km]

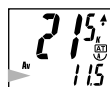
The trip distance from start to current point is displayed. Two different start points can be set (Dst1 and Dst2). Dst2 is best for measuring a sectional distance. With Reset operation, it returns to zero. [Reset of Dst1 is always done with reset of Tm, Av and Mx all together. Reset of Dst2 is done independently of the other reset and does not affect the other data.]



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 the press of S button, Tm data shifts to the upper display. In this case, the lower display shows the hour digits of Tm data (instead of Spd). With Reset operation, it returns to zero.



Av Average Speed

0.0 - 65 mph [105 km/h] ± 0.3 mph [km/h]

The average speed from start to current point is displayed. If the elapsed time exceeds 27 hours or Dst1 exceeds 999.9 km, (E) is displayed and calculation ceases. With the press of S button, Av data shifts to the upper display. In this case, Spd data is shifted to the lower display. With reset operation, it returns to zero.



Mx Maximum Speed

0.0(3.0) - 65 mph [105 km/h] ± 1 mph [km/h]

Displays the highest recorded speed. With the press of S button, Mx data shifts to the upper display. In this case, Spd data is shifted to the lower display. With reset operation, it returns to zero.



Clock time

1:00' - 12:59' or 0:00' - 23:59' ± 0.003 %

If "M" is selected for speed scale, the clock time is in 12 hour. If "K", the clock time is 24 hour.

Automatic Start/Stop Function

When the **AT** symbol is on, the unit automatically starts and stops measuring while a wheel pulse is detected. (See the above "In Measuring Functions" for how to switch on/off **AT**.)

Power Saving Function

When the main unit does not receive a signal, or a button has not been pressed for 60-70 minutes, the power supply is shut down and the main unit will only display the clock. By pressing either MODE or S button, or by receiving signal, this function is released.

Maintenance

When the main unit or the contact gets wet, dry it off with a cloth; rust will cause functional errors.

Trouble Shooting

No display.

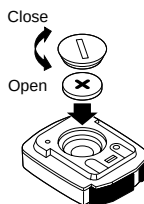
- Has the battery in the main unit worn out?
 Replace it with a new one.

Incorrect data appears or the screen is frozen.

- Do "All Clear" operation. (If possible, write down the Odo data before all clear operation, and input it again after the display returns normal.)

Current speed does not appear. (When current speed does not appear, first short-circuit the contact on the back with metal; if the speed display appears, the main unit is normal and the problem must be in the bracket or the sensor.)

- Is there anything on the contact of the main unit or of the bracket?
 Wipe the contact clean. DO NOT use abrasives, sandpaper, etc.
- Is the distance between the sensor and the magnet too far?
 Are the marking line of the sensor and the center of magnet aligned?
 Adjust the position of the sensor and magnet again.
- Is the wire broken?
 Replace it with a new one.



How to Replace Battery

Insert a new lithium battery (CR2032) with the (+) pole upward. Perform ALL CLEAR OPERATION after replacing the battery. In order to continue accumulation of Odo data, write down the stored Odo before replacing the battery.

Continuing Accumulation of Odo Data

Although the Odo data returns to zero by all clear operation, you can continue accumulation of data by inputting the previous Odo data. Be sure to write down the data before replacing the battery.

Specifications

Applicable Wheel Circumference	-- 100cm - 300cm
Applicable Fork Diameter	----- ED200; 11ø to 40ø (Sensor Band S: 11-26ø, Sensor Band L: 21-40ø)
	----- MT300; 11ø to 36ø (Sensor Band S: 11-26ø, Sensor Band L: 21-36ø)
Length of Wire	----- 70cm
Power Supply	----- Lithium Battery (CR2032) x 1
Battery Life	----- Approx. 3 years (The life of the first factory-loaded battery may be shorter than this period.)
Dimension/Weight	----- 1-13/16" x 1-17/32" x 9/32" [46 x 39 x 17mm] / 0.92 oz [26 g]

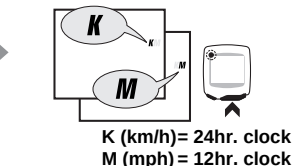
* The specifications and design are subject to change without notice.

1 ORIGINAL SET UP FOR THE MITY 3 AND ENDURO 2



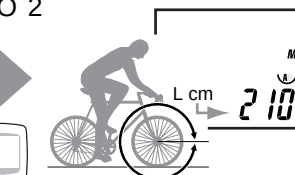
To set up your computer for the first time, perform an ALL CLEAR OPERATION first by pressing ALL THREE BUTTONS AT THE SAME TIME.

Hint: Hold the computer upside down holding the MODE and START/STOP (S) Buttons DOWN. Now PRESS the SET Button with a pencil or other pointed object.

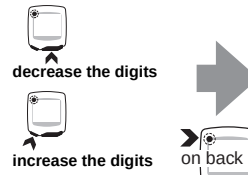


The complete screen will light up for a moment and then all fade away. The only thing on the screen will be a flashing "K". Select the speed scale you would like by pressing the MODE Button. "K" for kilometers and "M" for miles per hour. Note that the speed scale you select DICTATES CLOCK function in 12 or 24 hours. "K" will select a 24 hour clock. "M" will select a 12 hour clock.

Set the speed scale by PRESSING the ST./STOP (S) Button.



The number "210" will flash. This is a pre-set tire setting for 700X23C tires. Refer to the tire calibration chart in your manual or on our web site <www.cateye.com>. Please note that this number is actually the DISTANCE in Centimeters your tire rolls with each revolution while you are on the bike. If you want to input the most accurate number you will need to do a wheel roll out.

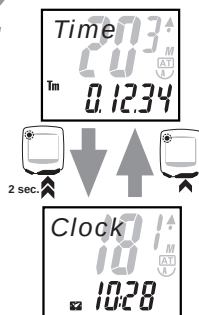


Increase the digits by PRESSING the MODE Button. Decrease the number by PRESSING the ST./STOP (S) Button. Set the number by PRESSING the SET Button on the back.

Your computer is now set up for riding.

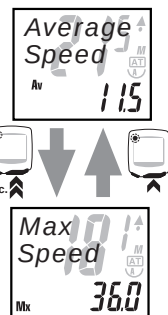
SET UP FOR RIDING

2 BUTTON NAVIGATION



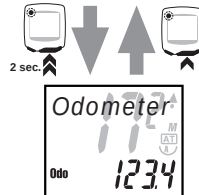
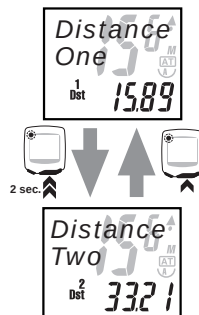
The right Button is the MODE Button. The left button is the START/STOP (S) Button. You use the MODE Button to navigate through the modes.

From the ELAPSED TIME function (Tm on the computer screen), you can PRESS the MODE Button to access the AVERAGE SPEED function (Av). PRESS the MODE Button to access the DISTANCE ONE (Dst1) function. This is the standard ride distance function. Now PRESS the MODE Button to get back to the TIME (Tm) function.



TIME has a sub-function of CLOCK. You access this by PRESSING and HOLDING the MODE Button for 2 Seconds. To get out of the CLOCK press the MODE Button. You are now back in TIME.

AVERAGE SPEED (Av) has a sub-function of MAXIMUM SPEED (Mx). To access MAX SPEED PRESS and HOLD the MODE Button when in AVERAGE SPEED. To get out of MAX SPEED PRESS the MODE Button.



DISTANCE ONE (Dst1) has two sub-functions. PRESS and HOLD the MODE Button for 2 seconds to access DISTANCE TWO (Dst2).

DISTANCE TWO is a separate Trip Distance that can be reset without resetting the other functions. To reset DISTANCE TWO, PRESS and HOLD the ST./STOP (S) and MODE Button for ONE SECOND.

From DISTANCE TWO (Dst2) you can access the ODOMETER function (Odo). PRESS and HOLD the MODE Button for TWO SECONDS in DISTANCE TWO and you will now be in ODOMETER (Odo.).

To navigate out of either of these two sub-functions to DISTANCE ONE, press the mode button.

Resetting TIME and DISTANCE functions

To reset the TIME, DISTANCE ONE, AVERAGE and MAX SPEEDS, PRESS AND HOLD the MODE and ST./STOP (S) Buttons for ONE SECOND.

DISTANCE TWO (Dst2) can only be reset while in DISTANCE TWO.

AUTO MODE (AT)
You can set the computer to record TIME, DISTANCE, MAX and AVERAGE SPEED automatically (AUTO MODE) or manually (STANDARD MODE).

In STANDARD MODE you must press the ST./STOP (S) Button to begin recording TIME and DISTANCE.

In AUTO MODE (AT) the computer starts and stops when ever it records a signal from the sensor at the wheel.

To set the computer to AUTO MODE with the computer in the DISTANCE function or TIME function, press the SET Button on the back of the computer. A small symbol with the letters AT will appear on the screen indicating AUTO MODE. You take the computer out of AUTO MODE the same way.

DISTANCE, AVERAGE or TIME function

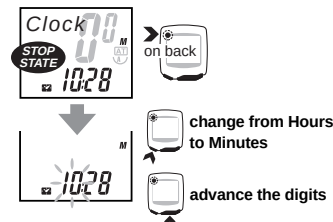
Setting the CLOCK

To set the CLOCK the computer must be turned off and the speed scale symbol (either M for Miles or K for Kilometers) must not be flashing. In the Time function PRESS AND HOLD the MODE Button.

You will see little CLOCK symbol. Now

PRESS the SET Button on the back of the computer. The hours will start flashing. The MODE Button advances the digits. The ST./STOP (S) Button changes from Hours to Minutes. PRESS the SET Button on the back to set the CLOCK.

The CLOCK is set to either 24 HOUR or 12 HOUR depending on the SPEED SCALE selected. In K (Kilometers per hour) a 24 HOUR CLOCK is selected. In M (Mile per hour) a 12 HOUR CLOCK is selected.



Moving TIME, AVERAGE and MAX SPEED to upper display
When the computer is set in AUTO MODE (AT), the functions of TIME, AVERAGE and MAX SPEED can be switched to the upper display by PRESSING the ST./STOP (S) Button. You can move SPEED back to the upper display by pressing the ST./STOP (S) Button again.



In STANDARD MODE (AT symbol is off) PRESS and HOLD ST./STOP (S) Button for 2 seconds.

WHEEL SETTING A or B

The computer has two wheel settings for quickly and conveniently moving the between two bikes with different size of tires. You can tell which WHEEL SETTING you are in by the semicircle symbol with an "A" or "B" on the computer screen. Wheel setting "A" has been preset with a tire size for a 700 X 23C road tire. Wheel setting "B" is preset for a mountain bike tire of 26 x 1.95. Wheel setting "B" is also specifically programmed for low speed sensitivity. If you are using the computer on a mountain bike we recommend that you use Wheel setting "B".

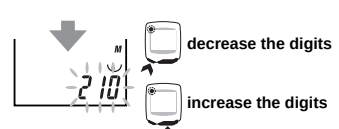
To select Wheel setting "A" or "B", HOLD the SET Button except in ODOMETER function.



CHANGING the WHEEL SETTING CALIBRATION NUMBER

When you are in the ODOMETER (Odo) function, you can view the WHEEL CALIBRATION NUMBER by PRESSING the ST./STOP (S) and the MODE Button.

To change the CALIBRATION NUMBER PRESS the SET Button on the back of the computer in ODOMETER (Odo) function. The WHEEL CALIBRATION NUMBER will flash on the screen. PRESS the MODE Button to increase the digits. PRESS the ST./STOP (S) button to decrease the digits. PRESS the SET Button on the back to set the new number.

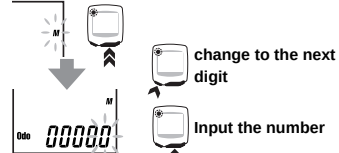


REPLACING MILEAGE INTO THE ODOMETER

This is done after replacing the battery in the unit or for transferring mileage from another computer.

First PRESS ALL THREE BUTTONS, the MODE Button, the ST./STOP (S) Button and the SET Button on the back. Now the "K" flashes indicating speed scale. PRESS the MODE Button to select between "K" for Kilometers or "M" for Miles per hour reading.

To add previous mileage or kilometers you must NOW PRESS and HOLD the MODE Button. ".0" will be flashing. Input the number with the MODE Button. PRESS the ST./STOP (S) Button to change to the next digit. You will be able to set distance up to 00,000.0 digits. Now press the SET Button on the back.



Now you must input your tire calibration number. Please note that this number is actually the DISTANCE in Centimeters your tire rolls with each revolution while you are on the bike.