TREK

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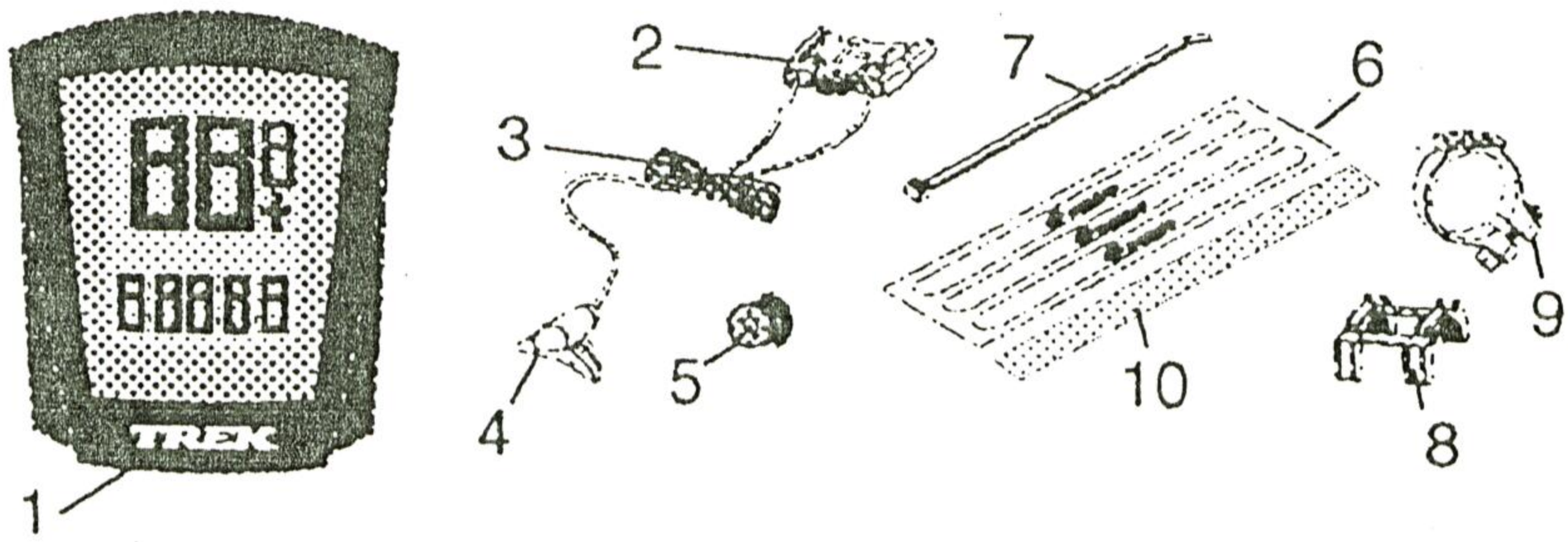
Trek Sonic 2.0 Cycling Computer Owners Manual

Congratulations and thank you for purchasing your Trek Cycling Computer. Before operation please read this instruction manual carefully and retain it for future reference. We recommend setting the speed scale and wheel circumference before installing the computer.

Precautions

Remember to watch the road or trail while riding. Watching your bicycle computer makes it difficult to see upcoming obstacles. Awareness of potential road, trail or traffic problems should be your main concern.

Main Unit/Accessories



Contents:

1. Main Unit
2. Bracket
3. Wire
4. Wheel Sensor
5. Magnet
6. Wire Securing Tape
7. Zip Tie
8. Bracket Rubber Pad
9. Mounting Clamp
10. Rubber Pad for Clamp



Measure the distance which is your circumference

Fig. 1

Table 1. Setting values reference table

Preparation - Must be completed before operation

Wheel/Tire Size	Wheel size Setting	Wheel/Tire Size	Wheel size Setting
16"	1300	700 X 20C	2074
20" X 1.75"	1600	700 X 23C	2085
24" X 1.95"	1920	700 X 25C	2114
26" X 1"	1950	700 X 28C	2124
650 X 20C	1945	700 X 32C	2155
650 X 23C	1990	700 X 35C	2175
26" X 1.5"	2030	700 X 38C	2180
26" X 1.9"	2055	700 X 40C	2190
26" X 2.0"	2074	700 X 1-1/4"	2160
26" X 2.2"	2114		

1. **Measure the wheel circumference before setup**
   Refer to fig. 1 (25.4 mm equals 1 inch) or Table 1 to get the wheel circumference in millimeters. Confirm and note this number in the manual for later use here:_____

2. **Installing/Replacing the battery.**
   Remove the battery cover by using a narrow flat blade or similar opener as illustrated in fig. 2. Insert a new battery (3v) CR2032, position the (+) pole upward as illustrated. Place the battery properly into the case and close the cover securely. After the battery is installed speed scale and wheel size can be set.

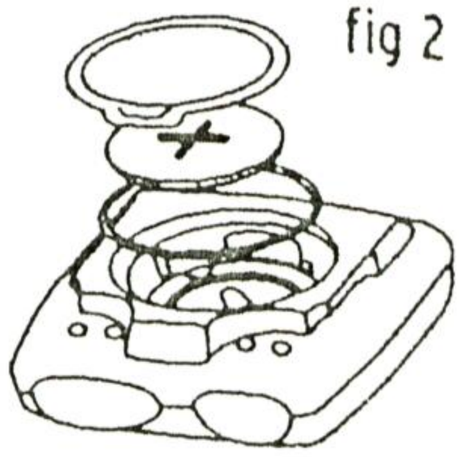


fig 2

3. **Setting Speed Scale Choose KM for Kilometers or MI for Miles.**
   After installing the battery, all displays will be illuminated, then "SEL km" will remain on the screen as in fig 3. Press either the Left (L) or Right (R)

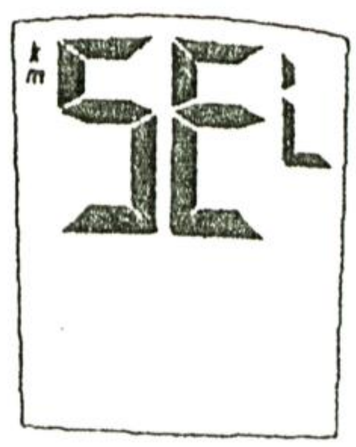
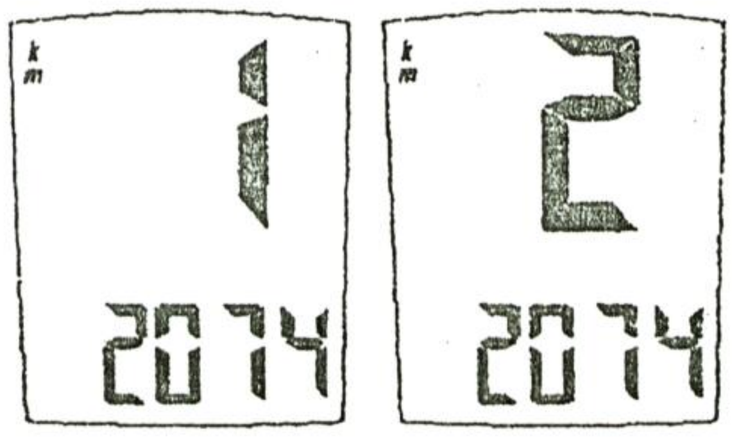


fig 3

button to switch between miles and kilometers. Press both L & R buttons to confirm and enter Wheel-Circumference setting as shown in fig 4.

fig 4



If incorrect data appears on the screen, please re-install battery.

4. Setting the wheel circumference (100-2999 mm).

Trek Wireless has 2 wheel circumference and odometer settings. The display shows 1/2074 and the 4 digits "2074" will flash. There are 4 presets included for each wheel setting (2074, 2114, 2124 and 2180). Press either L or R button to review the preset values then press L and R buttons for 2 seconds to confirm preset choice. If preset values are not what you need, press both L and R button momentarily in any preset value and the last two digits will flash. Advance them rapidly by holding R button or one at a time by pressing R button. (Press L button to go backward). When desired number (confirmed and marked from fig. 1 or Table 1 and between 100-2999mm) has been achieved, press both L and R buttons for confirmation and the first two digits will flash. Repeat method to complete wheel setting. The computer will then advance to Odometer function (screen will show "ODO 00000"). Please see the following instruction a. to complete Odometer setting, or press any button to advance to wheel circumference setting number 2. The display now shows 2/2074. Following the method of bike 1, complete bike 2's circumference and odometer settings.

a. Dual Odometer (Settable).

When "00000" shows & blinks press L & R buttons at the same time, the last two digits will flash. Advance them rapidly by holding down the R button, or one at a time by pressing the R button. When desired number has been achieved press both L & R buttons for confirmation and the next three digits will flash. Repeat the same method to complete. Press both L & R buttons to confirm and enter "ODO" function. If "ODO" program is not necessary, press L or R for next function setting. Note: Dual Odometer function is used for 2 bikes separate odometers. Bike 1 & bike 2 have their own Odometer record. (The maximum distance of the odometer is 9,999 km or 6,213 mi.)

b. Review wheel-circumference value. Go to (ODO) Odometer function, press both L & R buttons at same time to review display wheel-circumference value (will last for 3 seconds) when needed.

c. Bike 1 or 2 selecting & resetting the wheel-circumference value

When you are in wheel-circumference value review mode, press L or R button to select bike 1 or 2. For wheel-circumference resetting, press L & R at the same time again until the last two digits blink. Repeat steps as above (point 4) to reset the wheel circumference as your bike. This convenient design is handy for switching between different size bike tires.

5. Setting clock time

Under any display mode except Stopwatch, press R button for 1 second. Clock time displayed. Repress either L or R button to return to "Odometer (ODO)" mode. Follow step 2 to complete setting clock time and 12/24 hour alternate.

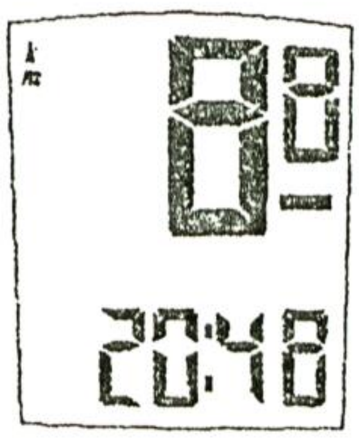
a. 12/24 hours alternative.

When clock is displayed, press both L & R buttons at the same time. Clock will blink then press L or R button to switch between 12 hours and 24 hours. To reset clock, press L & R at the same time (as following b.); after 3 seconds, clock will stop blinking automatically.

b. Resetting clock time

After choosing 12 or 24 hours, press L & R at the same time, minutes "MM" will blink (fig. 5). Advance them rapidly by holding the R button, or one at a time by pressing the R button (to go backward hold or press the L button). At the correct number press both L & R buttons to confirm. Follow the same method to adjust hour "HH" to complete the whole setting. Press R button to move to other display modes after clock is set.

fig 5

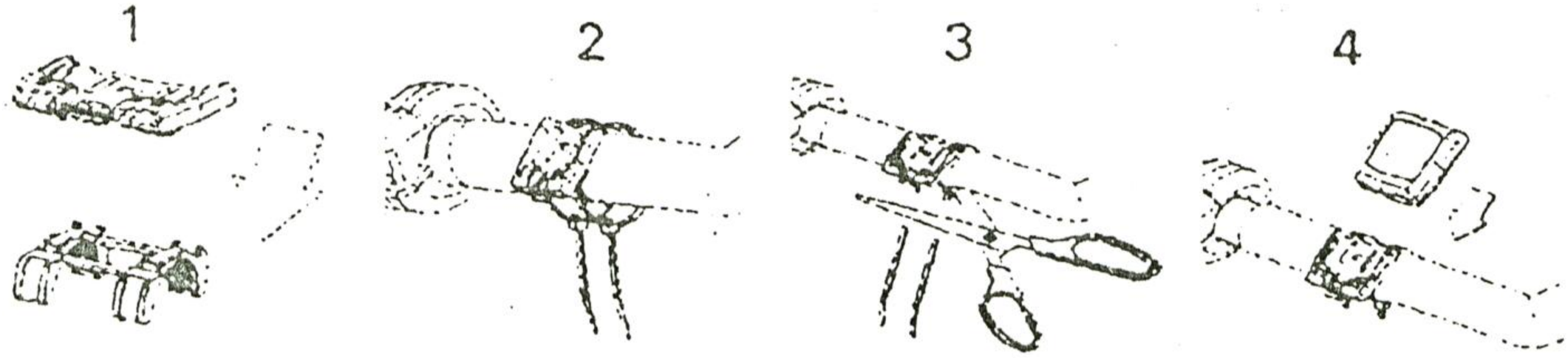


Installation

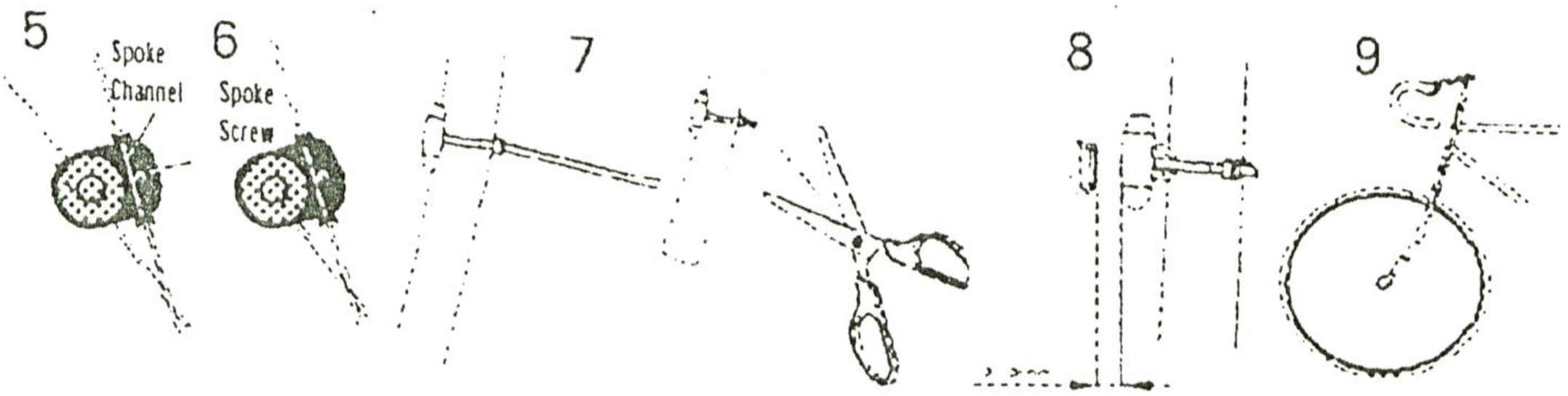
1. Use the attached rubber pad between the bracket and handlebar to provide a secure fit.
2. Slide the zip tie into bracket, position the bracket to the handlebar on

either side of the stem. Or use optional mounting clamp.

3. Cut the excess zip tie off.
4. Slide the main unit into the bracket until it snaps up.



5. Remove the screw from the magnet and install it on one of the feasible spokes opposite the wheel sensor.
6. Install screw then tighten.
7. Mount the wheel sensor on the fork blade opposite the magnet using the zip tie provided.
8. Adjust the sensor until it is 3-5mm from the magnet, then tighten it. Cut the excess zip tie off.

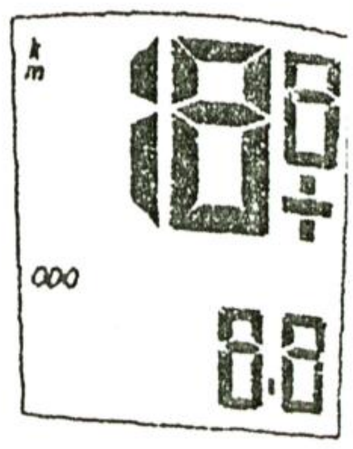


Test

Mount the computer in the bracket. Lift the front wheel off the ground and spin the wheel checking if current speed is displayed. If not, adjust positions of wheel magnet and fork sensor as described in installation steps 7-8. Refer to the following steps for the operation of your sensor computer.

Display Functions

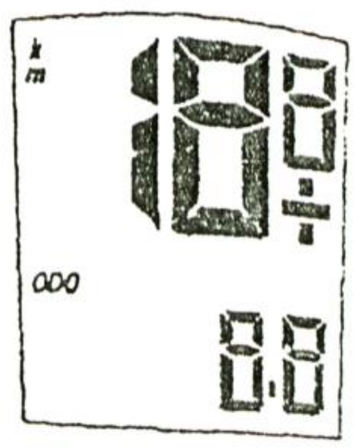
Speed	0-30km/h	31-60km/h	over 60 m/h
Minimal display unit	0.1km/h(mile/b)	0.5km/h(mile/h)	1km/h(mile/h)



Current Speed (0.0-99 kms or 62 miles)-S

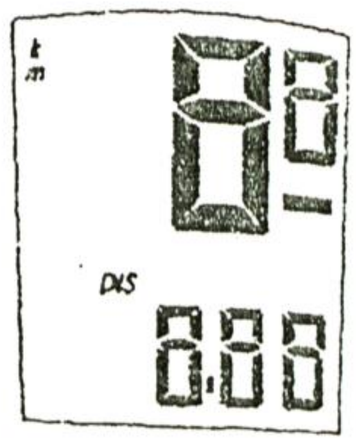
The current speed is displayed on the upper line of display and updated every second. Minimum display unit will be automatically adjusted according to speed.

Odometer (total Distance) (0.0-9999 kms or 6213 miles)-ODO



The total distance is continuously measured, accumulated and displayed until next reset or the battery is changed. When 9,999 kms or 6,213 miles is reached the odometer returns to zero and counting begins anew.

Trip Distance (0.0-999.9 kms or 621.3 miles)-DIS



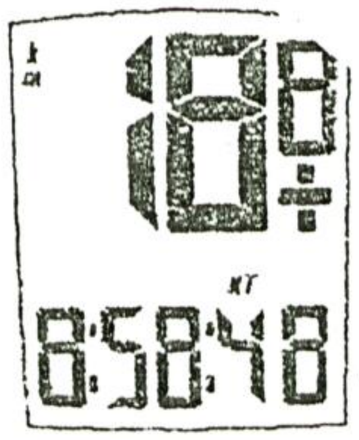
The starting point to the current point is calculated as Trip Distance. The Trip Distance will record automatically when riding.

To Clear: Clear the record at the end of each trip. Press L & R buttons at the same time, the record will be cleared to zero.

Pacer

Compare the current speed to the average speed. If the current speed is greater or equal to the average speed, the display shows +. Otherwise, it shows -. This function is active whenever the device receives a signal.

Riding time
(0:00:00-99:59:59) – RT



The Elapsed Time is measured from the start point to the current point. It starts counting automatically when signals are received, it stops when signals have stopped for over two seconds. When 10 hours have been reached, screen will display "HH" hr & "MM:SS" alternative for 1 second. When 100 hours have been reached, it will be recounted from zero. Average Speed (AVS), Distance (DIS) and Maximum Speed (MAX) will also reset and recount from Zero.

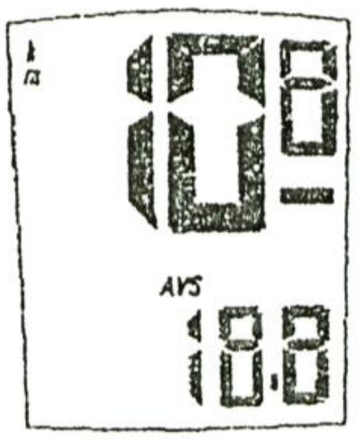
To Clear: Press L & R buttons at the same time to clear RT. Also Distance (DIS), Average Speed (AVS) and Maximum Speed (MAX) will be cleared. Odometer will count until cleared.

Maximum Speed
(0.00-99.9 kms or miles) - MAX



The maximum speed is calculated as the highest speed during the current trip. It is stored and displayed as requested until next reset or when the battery is changed.

Average Speed (01.0-99.9 kms or 01.0-62.1 miles) - AVS



The Average Speed is calculated as DIS (Trip Distance) /RT (Riding Time) The minimal display unit is 0.1 mile/h or km/h. Maximum Speed & Average Speed are operated in the same way as Trip Distance. Please refer to the instruction for Trip Distance function.

Cadence (15RPM-255RPM) - RPM

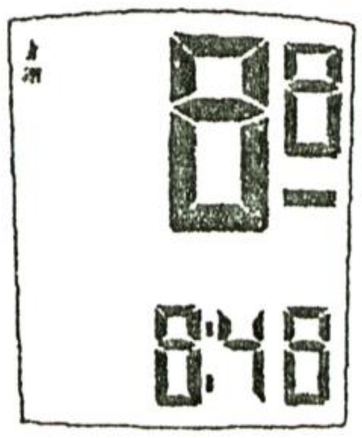
Cadence (pedal Rotations Per Minute-RPM) is displayed on the lower line of display, ranging from 15 to 255 RPM with 1 RPM accuracy. To customize screen readout push L and R buttons to move RPM data to upper line (Speed "S" will then be displayed on lower line) NOTE: Before using this function a Cadence Sensor Kit is required.

Km/mi. alternative

Under any display mode, hold L button for 3 seconds, the speed scale Km or mi. will automatically reverse. Once the speed scale has been changed, the data of ODO, DIS, AVS, & MAX will also be reversed.

12/24 - hour Clock

Under any display mode, press R button for 1 second. Clock time will displayed. Re-press either L or R button to return to "Odometer (ODO)" mode. Refer to the instruction of "Setting clock time" for 12/24- hour selecting and resetting.



Auto Start/Stop

All functions (ODO, DIS, AVS, RT, MAX) automatically start when a signal is detected, and stop when there is no signal detected. The Clock function is the only exception.

Auto Scan

Under any display mode, press the L button to enter the auto scan function. All display modes will cycle with each display mode lasting 3 seconds. Press L or R button to return to the current display mode in use.

Auto Power Saving

In any display mode, the unit will go into power-save mode after the computer has not received any input signal for 10 minutes. The last mode in use will disappear and be saved. The time will display automatically as fig. 6. The Current Speed/Odometer mode will resume once any button is pressed or you begin pedaling.

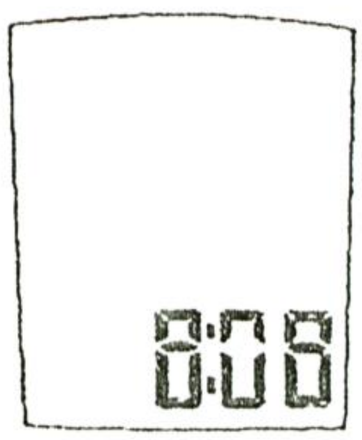


fig 6

TROUBLE SHOOTING

The following situations do not indicate malfunction of the computer. Check the following before taking unit for repair.

Trouble	Check Items	Remedy
Missed setting for speed scale or wheel circumference		Execute "All Clear" operation Re-install battery.
The entire liquid crystal screen is dark and unusual display is seen.	Was it left for a long time under direct sunlight?	It returns to normal state by leaving it in the shade. No adverse effect on data.
Display response is slow.	Is it at a low temperature under 32.0F (0.8C)?	It returns to normal state when temperature rises.
Incorrect data appears.		Re-insert the battery
No Display	Has the battery in the main unit worn out?	Replace the battery with a new one. (3V/DC)
Current Speed does not appear.	Is there anything on the contact of the main unit or on the bracket?	Wipe the contact clean
	Are the wheel sensor and magnet too far apart?	Refer to "installation fig. 8" and re-adjust correctly.
	Are the marking lines of the wheel sensor and the center of the magnet aligned?	Refer to "installation fig. 8" and re-adjust correctly.
	Is the wire broken?	Replace the bracket wire & wheel sensor with a new one.

Auto Clear/Reset

Under any display mode, press L & R buttons for 10 seconds, km or Mile will flash quickly, then all data stored in memory will be erased except Odometer data. All displays will illuminate for 1 second, then the km/h symbol displayed alone. This operation should only be executed after replacing the battery or when you change different bikes and need to program Odometer data or when an irregular display of the information occurs due to static electricity, etc. Since all the memories are erased, reset the main unit again according to "Preparation".

SPECIFICATIONS

Controller	4-bit 1-chip Microcomputer (Crystal Controlled Oscillator)
Display	Liquid Crystal Display (LCD)
Sensor	No Contact Magnetic Sensor
Power Supply	CR2032 x1 (3V)
Operating Temperature Range	0.0 C to 40.0 C (32.0 F to 104.0 F)
Storage Temperature Range	-20.0 C to 50.0 C (-40 F to 122.0 F)
Applicable wheel circumference	100mm-2999mm
Battery Life	Approx. 1 year

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