

Congratulations and thank you for your purchase of the Planet Bike Protegé Bicycle Computer. The Protegé represents a breakthrough in bicycle computer design and function. The MacroMonitor™ LCD display, "buttonless" design, and overall compact size offer advantages to you the cyclist that no other computer can match. In addition, Planet Bike will donate 25% of our profits from this purchases and any other Planet Bike product you buy, to non-profit bicycle advocacy groups to further benefit your cycling experience. Enjoy your new Protegé Bicycle Computer and thank you for making a difference!

# 1. Parts List



# 2. Mounting Instructions

**STEP 1:** Attach the wheel sensor to the right or left fork using two quick ties (diagram #1). Note: Do not fully tighten quick ties until final placement is determined. We recommend a sensor placement of 1-2 inches up from hub axle (diagram #1). Position sensor and wire on backside (toward rider) of fork blade to offer protection from debris while riding.Ł

**STEP 2:** Attach magnet to spoke using screwdriver (diagram #2) so magnet lines up directly across from one of the flat round dots at the lower or upper portion of wheel sensor with a distance of 1-2 mm between sensor and magnet (diagram #3).Ł Caution: Do not over-tighten magnet screw.Ł

**STEP 3:** Attach the wire harness to the fork using quick ties (diagram #1). Excess wire can be wrapped around brake cable before securing bracket to handlebar. Note: Allow slight wire slack between fork and brake cable for turning handlebars.Ł

**STEP 4:** Attach the computer bracket to the handlebars near the stem (diagram #4). Use any combination of rubber shims to fit different diameter handlebars. Tighten the screw so the bracket will not rotate on the handlebars. Slide the computer head into the bracket until it "snaps" into place.Ł

**STEP 5:** TEST. Install computer head into bracket and rotate front wheel to test for proper function of magnet/wheel sensor alignment. The mph/kph indicator will flash if the sensor and magnet are properly aligned. Tighten quick ties on sensor when correct alignment is acheived.Ł

TO REMOVE COMPUTER HEAD FROM BRACKET: Push the computer in the opposite direction you would to mount it (diagram #5). The computer head will "snap" out. Note: You may have to push hard, do not be afraid of breaking it, it will pop out.

## 3. Functions & Specifications



|            |             |          |                  | LINE  | : LCD Specification : Line 1, 2 and 3 modes do not change  |   |  |
|------------|-------------|----------|------------------|---|--|---|--|
| NEXT PAGE. | 0/          | <u> </u> |                  | 12 CURRENT SPEED • Miles or Kilometers per hour • 0-99.9 mph/Kph • Increments of 0.1 mph/KphŁ |  |   |  |
|            |             | :38      | :20              | 2Ł  | RIDE TIME, "RTM" • Up to 9:59:59 • Increments of 1 secondŁ   |   |  |
| SCREEN:    | D<br>S<br>T | 32,      | .05              | 3Ł  | RIDE DISTANCE, "DST" • Up to 999.99 M or K • Increments of 0.01 M or KŁ  |   |  |
| 1          |             | 닉문       |                  | 4   | ODOMETER, "ODO" • Up to 999.99 M or K • Increments of 0.01 M or KŁ<br>(ODO= Cumulative distance for BIKE 1 and BIKE 2)   |   |  |
|            |             |          |                  | OR  | CHANGE MODE TO SCREEN 2-4 BY PUSHING COMPUTER FORWARD IN BRACKET TO ACCESS:  | - |  |
| 2          | Ł           | 20.3     | 92. <del>4</del> | OR  | AVERAGE SPEED, "AVS" • 0-99.9 mph/Kph • Increments of 0.1 mph/KphŁ<br>MAXIMUM SPEED, "MAX" • 0-99.9 mph/Kph • Increments of 0.1 mph/Kph<br>CAUTION:Ł<br>CAUTION:Ł<br>CAUTION:Ł   |   |  |
| 3          |             | 38°      | S:30             | OR  | TEMPERATURE • -19° to 120°F/ -19° to 50°C (Protegé 9.0 ONLY)Ł   CLOCK • 12 Hr format • Indicated by flashing colon ":"   |   |  |
| 4          |             | BIKE     |                  |   | <b>BIKE ODOMETER,</b> "BIKE ODO" • Up to 99,999 M or K • Increments of 0.1 M or KŁ<br>This is the distance for the wheel size currently being used, it only appears when distance is registered on both BIKE 1 and BIKE 2. |   |  |

## 4. Additional Features



SPEED COMPARATOR: Indicated by "▲" and "▼."Ł

- "indicates your current speed is faster than your current average speed.Ł
- "  $oldsymbol{\nabla}$  " indicates your current speed is slower than your current average speed.Ł

**DUAL WHEEL SIZE SETTINGS:** Indicated by "(1)" or "(2)." Allows user to program two separate wheel sizes so the computer can be used for two separate bikes with purchase of second handlebar bracket/wire harness (part #8000-1).L

"(1)" represents an ATB or Hybrid tire. (2)" represents a Road or smooth tire. Corresponds with which bike you are riding.

## 5. Computer Setup and Programming

The Protegé comes with the battery preinstalled. Setup and Programing are facilitated by using the "set" and "mode" buttons loc ated on the underside of the computer case (diagram #6). To initiate programming, press "mode" button to display SCREEN 1, with "ODO" displayed on line 4. Depress and hold the "set" button for 3-4 seconds (use a pen or other such pointy object). Upon release, the M/H or K/H icon will flash.Ł

1) Miles or Kilometers Selection: Once "M/H" or "K/H" is flashing, press "mode" to switch to desired selection. Press "set" to lock in your selection and advance the screen to Wheel Size Setting.Ł

- 2) Wheel Size Setting (1) (WSS): The screen will now display (1) default WSS "2154" with the "4" flashing.Ł
- \* Background information: The bicycle computer calculates information based upon the distance traveled each time your wheel goes around. The wheel Ł size setting equals the distance in mm traveled in one revolution of your wheel. There are two methods to determine the wheel size setting.
- \* For WSS less than 1000mm, input your WSS in WSS (2) WSS (1) does not allow a size less than 1000mm. Method 1: Read the tire size on the side wall of your tire and input the number that corresponds to your tire size on the wheel size chart to the right. Since there are many tire manufacturers and designs, tires listed as the same size from different manufacturers can actually vary significantly in their actual circumference. Therefore, we recommend for maximum accuracy in you computer readings, to use Method 2.4

Method 2: Wheel Roll Out: For best results, find a flat smooth surface to perform the wheel roll out and inflate your tires to riding pressure.

- 1) Place a piece of masking tape or draw a line on the surface to determine a starting position.Ł
- 2) Position the front tire valve at the 6:00 position (diagram #7) directly above the staring position.Ł

3) Roll the bicycle forward one revolution of the wheel on a straight line until the valve stem is again at the 6:00 position. (Note: Putting pressure on the handle bars to simulate body weight on the tire will give more accurate results.) Mark the finishing position with masking tape or a line. Repeat the procedure if necessary and average the results. Measure the distance between the starting and finishing positions in mm, this is your WSS. (Note: If you use an inch measuring tape, multiply inches by 25.4 to achieve mm.) This is your WSS in mm.Ł

### Imputing Wheel Size Setting (1) (WSS)Ł

- A) Press "mode" button to change "flashing" first digit to desired selection.Ł
- B) Press "set" button to lock in your selection and advance to the next flashing digit.Ł
- C) Repeat steps A-B until all four digits are set. After the forth digit is set, it will &
- advance the screen to Odometer setting.



ONE REVOLUTION = WHEEL SIZE SETTING (mm)

ADDED FEATURES:Ł

SET

- Auto-Start/Stop Automatically starts recording data or stops recording data Ł when you start or stop ridingŁ
- Auto LCD Off LCD automatically shuts off to conserve power after 5 Ł minutes of non-use. Clock will still be displayed.Ł
- MacroMonitor™ LCD display displays up to 4 functions at once, allowing for Ł fewer mode changes.Ł
- $\star$  "Buttonless" design for ease of use  $\cdot$  push computer forward in bracket to L change modes L
- + Weather proof construction and heavy duty wire harness for all-weather use.



PRESS HERE TOŁ

SWITCH BETWEENŁ

MODE

(1) AND (2)

3) Odometer Setting (1): The digit on the far right will be flashing. (If you don't need to set the Odometer, repeatedly press "set" to advance to WSS (2).) Repeat steps A-B again to set the Odometer.Ł

4) Wheel Size Setting (2) (WSS): The screen will now display (2) default WSS "0000" with the first "0" flashing. Repeat steps to set WSS (1).L

5) Odometer Setting (2): Repeat steps to set Odometer (1).Ł

**6) Clock Setting:** The hour digit on the far left will be flashing. Repeat steps A-B again to set the time. To reset the clock only, press mode button until clock function is displayed on line four. Press "set" button to initiate clock reset. Follow steps A-B above to set the time. When you are done, the computer will enter normal operating mode. Replace the computer in its bracket and you are ready to ride! To reset ride settings other than the clock, press the mode button until until the forth line displays any function except "CLOCK" or "BIKE ODO." Press and hold the set button for 3-4 seconds. Upon. release, the computer will enter "reset" mode. Follow the instructions as above.

### 6. Computer Operation

PRECAUTION: When using the Protegé Bicycle Computer, you should ride safely and pay primary attention to the road, traffic or trail conditions at all times.L

**MODE CHANGE:** Push the computer forward in the bracket as far as it will go and release. The forth line will change functions. It is recommended that the thumb be positioned in the center of the computer when activating mode changes. Note: Do not hold the computer forward in the bracket for more than one second or Ride Data will be reset to "0".Ł

**RESETTING RIDE DATA:** After your ride or before your next ride, you can reset "ride" data (Ride Time, Ride Distance) to "0" by pushing the computer forward in the bracket and holding for three seconds until ride data clears to "0". Release computer immediately when ride data clears to "0".



CHANGING WHEEL SIZES:Ł

Press 1/2 button on backside of computer. (diagram # 6)Ł .

#### L BATTERY INSTALLATION: The Protege Computer comes with the battery preinstalled prior to purchase. The battery should last for 1-2 years with normal use. If you find it necessary to replace the battery, remove the computer from its bracket. (Hint: Record your Odometer mileage before replacing the battery, so you can re-input your Odometer reading after the battery is installed.) Turn the computer over and remove battery cover using a coin (diagram #6). Install the battery (Model CR2032 3V Lithium) with the "\*" side facing up. Snap battery cover into case until secure. Make sure the rubber water seal gasket is in place and the

battery cover is flush with battery case. Refer to

Computer Setup and Programming to re-input setup data.

# 7. Trouble Shooting

### 1) Display is blank or shows partial digitsŁ

Remove and reinsert battery. If problem persists, a new battery may be required.Ł

### 2) LCD displays numbers but does not record data when riding.Ł

Check for proper wheel sensor/magnet alignment (See Section #2, Step #2). Check and clean contacts on bracket and computer. Use mild detergent and water and dry completely. DO NOT use alcohol or any kind of solvent.Ł

### 3) LCD screen is darkŁ

This is normally caused by overheating when computer is left sitting in the sun. Allow the computer to cool and it will return to normal.Ł

If you experience any other problems, Contact your Planet Bike dealer or Planet Bike.

Planet Bike,Ł PO Box 259267.Ł Madison, WI 53725Ł **www.planetbike.comŁ** 

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