ASCENT

8FC Cycle Computer Owner's Manual

INTRODUCTION

Congratulations on your purchase of the Ascent 8FC cycle computer. Packed with all the features that a professional rider needs to keep track of a workout, the 8FC is a perfect training tool for any cyclist.
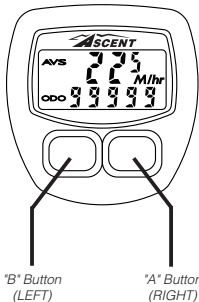
BUTTON FUNCTION

"A" BUTTON (RIGHT)
Use this button to progress through the display screens and set-up screens.

"B" BUTTON (LEFT)
Use this button to advance the digits while programming the computer, and to activate the Freeze Frame Memory feature.

"B" Button (LEFT)   *"A" Button (RIGHT)*

COMPUTER FUNCTIONS

SPEEDOMETER (SPD) (M/hr or KM/hr)
Displays instantaneous speed. Accurate to 0.5m/h or KM/h

AUTOMATIC RIDE TIMER (ATM)
Stopwatch activated by front wheel movement, records true ride time (time spent actually riding) up to 9:59:59.

Speedometer & Automatic Ride Timer Functions

SPEED COMPARISON (+ or —)
Compares current speed to average speed. As you ride, a (+) or (—) will appear in the upper right hand corner of the display. This will indicate whether your current speed is faster (+) or slower (—) than your average speed. This function is automatic, requires no programming, and cannot be disabled.
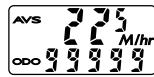
Speed Comparison & Trip Distance Functions

TRIP DISTANCE (DST)
Displays the distance traveled during current ride up to 999.9 mi. or km.

AVERAGE SPEED (AVS)
Displays average speed calculated using your true ride time and trip distance.

Average Speed & Odometer Functions

ODOMETER (ODO)
Displays cumulative ride distance up to 99,999 mi. or km.

MAXIMUM SPEED (MXS)
Displays the fastest speed attained during a ride.

Maximum Speed & Clock Functions

CLOCK
Displays time of day in a 12 hour format.

AUTO SLEEP
To prolong battery life, the 8FC will automatically enter "sleep" mode after 5-10 minutes of non-use. The computer will automatically restart itself as soon as it receives input from the front wheel, or as soon as any of the buttons are pushed.

FREEZE FRAME MEMORY (Flashing Display)
This feature allows you to store a snapshot of the display for an extended period of time. This feature is useful at the end of a race, allowing you to hold a record of your time, distance, average speed and maximum speed while continuing to collect data during your cool-down. While the freeze frame feature is activated, the computer will continue to receive data, but will not update the display information until the freeze frame feature is deactivated.

ACTIVATE FREEZE FRAME MEMORY
In any mode, press and hold the left computer key (B) for approximately 1 second. The entire display will flash, indicating the freeze frame feature is activated. You may now toggle through the display screens by pressing the right computer key (A).

DEACTIVATE FREEZE FRAME MEMORY
Press the left computer key (B) to deactivate freeze frame memory and return to normal operation. The display screens will automatically be updated.

RESET DISPLAY SCREENS
In the SPD / ATM display screen, press and hold both keys for 2 seconds to clear the ATM, DST, AVS and MXS displays.

AUTO CLEAR BUTTON
Press the AC button on the back of the unit for total reset of the computer. All stored data will be erased.

BATTERY INSTALLATION

The 8FC uses a common **186 1.5v** button cell battery. Replacement batteries are available at most camera and electronic shops. Under normal usage a battery should last approximately one year. NOTE: Most problems that occur with cycle computers are caused by dead or weak batteries. If you are having problems with your computer's operation, check and replace the battery first.
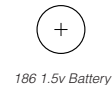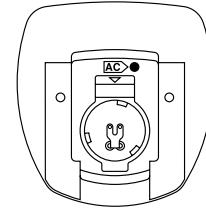
STEP 1
Remove the battery cap from the bottom of the computer using a small flat blade screwdriver.

STEP 2
Install the battery in the battery compartment with the positive (+) side of the battery facing the battery cap. Be careful when you are installing the battery not to bend any of the battery contacts.

186 1.5v Battery

STEP 3
Press the battery cap firmly into place making sure that the rubber o-ring does not get pinched or distorted, as this will compromise the unit's watertight seal.

PROGRAMMING THE COMPUTER

Now that you are familiar with the features of your Ascent 8FC cycle computer, you are ready to begin programming the unit specifically for your bike.

SELECTING MILES OR KILOMETERS
The Ascent 8FC is capable of displaying speed and distance information in either miles or kilometers. It is also possible to change back and forth between miles and kilometers by entering the programming mode at any time, and changing your selection.
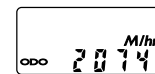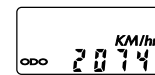
Selecting Miles or Kilometers

STEP 1
With the computer in the AVS / ODO display screen, press and hold the right key (A) for more than 2 seconds.

STEP 2
The screen will display the default wheel size setting of 2074mm (700 x 20C), and the M/hr icon will flash. Press the left key (B) to select either miles (M/hr) or kilometers (KM/hr).

Selecting Miles or Kilometers

STEP 3
Set your choice and advance to the wheel size set-up screen by pressing the right key (A) again.

DETERMINING WHEEL SIZE

The Ascent 8FC computer uses wheel circumference (measured in millimeters) to calculate speed and distance. Note that while your computer can be programmed to +/- 1mm for total accuracy, discrepancies of as much as 50mm will not have a significant effect on the accuracy of the unit for most normal rides. The following chart lists the programming sizes for some of the most popular tire sizes currently in use. These numbers are estimations which may not precisely match the circumference of your wheel due to variations in tire size between brands and models.

TIRE SIZE	CIRC.	TIRE SIZE	CIRC.	TIRE SIZE	CIRC.
26 x 1.7	2035	27 x 1-1/4	2180	700 x 25c	2124
26 x 1.9	2055	650 x 20c	1945	700 x 28c	2140
26 x 2.0	2075	650 x 23c	1990	700 x 32c	2155
26 x 2.1	2095	700 x 20c	2074	700 x 38c	2170
27 x 1.0	2140	700 x 23c	2114	700c Tubular	2130

WHEEL SIZE CALCULATION

If your specific tire size is not listed in the chart, follow these steps to measure wheel circumference.
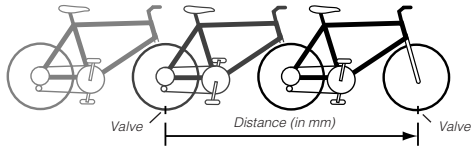
STEP 1

Stand your bicycle upright. With your tire inflated to its proper pressure, rotate your front wheel so that the valve is located at the bottom (6 o'clock position). Make a mark on the floor to indicate the valve location.

STEP 2

Roll the bicycle forward in a straight line for one complete wheel revolution, until the valve is again at the bottom. Make a mark on the floor to indicate the valve location.
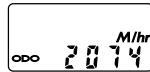
STEP 3

Measure the distance between the marks in millimeters (1 inch = 25.4mm). This value is your wheel circumference. Enter this value in the computer (see "Programming Wheel Size" below).

Valve　　*Distance (in mm)*　　*Valve*

PROGRAMMING WHEEL SIZE

STEP 1

Once you select miles (M/hr) or kilometers (KM/hr) and press the right key (A), the computer will automatically advance to the wheel size programming screen.

Programming Wheel Size

STEP 2

The factory default setting is 2074 (700 x 20C). The right hand digit (4) will flash. Use the left key (B) to adjust the value.

STEP 3

Press the right key (A) to set the value and advance to the next flashing digit (7).

STEP 4

Repeat this sequence until all digits have been set to the appropriate value.

STEP 5

Press the right key (A) one final time to enter the wheel size setting into memory, and return to the AVS / ODO display screen.

SETTING THE CLOCK

The 8FC cycle computer is equipped with a digital clock that displays time of day in a 12 hour format.
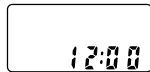
STEP 1

With the computer in the MXS display screen, press and hold the right key (A) for 2 seconds.

Display Showing Clock Function

STEP 2

The screen will clear and the hours will flash. Advance the hours using the left key (B). NOTE: Hold this key to quickly advance the hours. Press the right key (A) to set the value and advance to the minutes setting.

Setting the Clock Function

STEP 3

Advance the minutes using the left key (B). NOTE: Hold this key to quickly advance the minutes. Press the right key (A) to set the value and return to the MXS display screen.

MAGNET, SENSOR AND BRACKET INSTALLATION

**WHEEL MAGNET, SENSOR AND BRACKET INSTALLATION**

We recommend that you install your 8FC in the following manner, starting with the sensor unit on the fork and working up to the mounting bracket on the handlebar.

STEP 1

Mount the sensor loosely (so that you can slide it around) to the fork blade using the zip-tie provided. The sensor can be mounted at any point along the fork. However, we recommend a position on the back side and near the top of the left fork blade. This will protect the sensor from rocks, trees and other objects.

STEP 2

Attach the wheel magnet loosely to one of the spokes on the left side of the front wheel. Adjust the magnet and sensor positions by sliding both pieces around until you get the sensor as high on the fork blade as possible while still maintaining the necessary magnet to sensor spacing (1-2mm). NOTE: The magnet should pass within 1-2mm of the sensor, and the top of the magnet should be no higher than the top of the small arrow molded into the face of the sensor!

Sensor　*Zip Tie*　*Alignment Arrow*　*Wheel Magnet*　*Fork Leg*　*1-2mm*
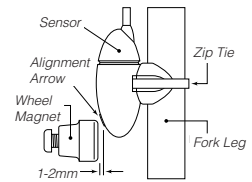
STEP 3

Route the sensor wire up the back of the fork and secure it with electrical tape. Do not use zip-ties to secure the sensor wire to the fork, as this may result in cut or broken wires. Be sure to leave enough slack in the wire to allow for the movement of the handlebar while steering, and the motion of the suspension fork, if your bike is equipped with one.

STEP 4

Carefully wrap the excess sensor wire around the front brake cable housing, securing with electrical tape as necessary. When you are finished, you should have just enough slack for the computer mounting bracket to reach the handlebar. Check to make sure that all of the excess sensor wire is either taped down or wrapped around the brake cable so that nothing can snag it during a ride.

BRACKET INSTALLATION

Clamp the bracket around the handlebars and tighten in place. The Ascent 8FC brackets is designed to fit standard 26.0 - 26.4mm diameter road handlebars. Shims are provided to fit smaller 25.4mm diameter mountain or road bars. Make sure not to over tighten the bracket as this may result in breakage. The bracket needs to be tightened only enough to prevent rotation on the handlebar during normal riding.

HEAD UNIT INSTALLATION

The head unit of the 8FC computer is designed to lock into the bracket. When installing the head unit in the bracket, you should hear an audible "SNAP" indicating that the unit is locked firmly in place. The head of the 8FC slides into the bracket from the front to the back.

TEST OF INSTALLATION

Once you complete the installation procedure, test the unit to make sure that it works.

STEP 1

Advance the computer to the SPD / ATM display screen.

STEP 2

Pick up the front of the bicycle and spin the front wheel. The computer should register speed within 1-2 seconds. If you do not get a speed reading, check to be sure that the wheel magnet and sensor are aligned correctly, and that the space between the magnet and sensor is 1-2mm or less. Adjust as necessary and re-test.

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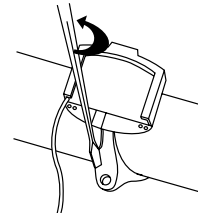
Chapel Hill, NC　　　*Made in China, V.1 – April 2002*