ASCENT

10FC Wireless Cycle Computer Owner's Manual

INTRODUCTION

Congratulations on your purchase of the Ascent 10FC Wireless cycle computer. Packed with all the features that a professional rider needs to keep track of a workout, the 10FC Wireless is a perfect training tool for any cyclist. The added convenience of wireless transmission makes installation simple.
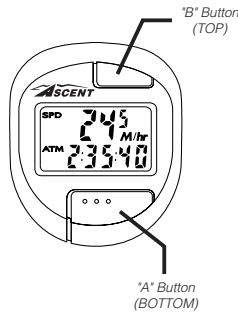
"B" Button (TOP)

"A" Button (BOTTOM)

BUTTON FUNCTIONS

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

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

COMPUTER FUNCTIONS

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

Speedometer & Automatic Ride Timer Functions

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

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 & Odometer Functions

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

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

Maximum Speed & Clock Functions

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

CLOCK
Displays time of day in a 12 hour format.

AUTO SLEEP
To prolong battery life, the 10FC 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 top 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 bottom computer key (A).

DEACTIVATE FREEZE FRAME MEMORY
Press the top 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 head unit of the 10FC Wireless uses a common 2032 3v lithium button cell battery. The transmitter uses a common 23A 12v 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.
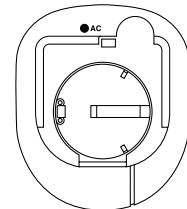
INSTALLATION OF HEAD UNIT BATTERY

STEP 1
Remove the battery cap from the bottom of the computer using a small flat blade screwdriver.

STEP 2
Install the battery into 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.

2032 3v Lithium 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.
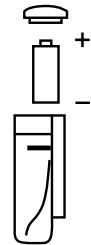
INSTALLATION OF TRANSMITTER BATTERY
The transmitter should come from the factory with the 23A 12v battery installed.

STEP 1
To replace the battery, first remove the battery cap on the top of the transmitter with a coin. Remove the old battery and dispose of properly. NOTE: Check the inside of the transmitter for corrosion. If corrosion is visible replace the transmitter with a new unit.

STEP 2
Install a new battery with the positive (+) end facing the cap, and reinstall the battery cap. Make sure that the battery cap is tight to prevent moisture from entering the transmitter unit. An improperly installed battery can damage the transmitter unit. NOTE: To prolong the life of the head unit battery and transmitter battery, we recommend removing the head unit from the handlebar bracket between rides.

PROGRAMMING THE COMPUTER

Now that you are familiar with the features of your Ascent 10FC cycle computer, you are ready to begin programming the unit specifically for your bike.

Selecting Miles or Kilometers
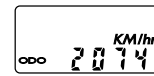
SELECTING MILES OR KILOMETERS
The Ascent 10FC Wireless is capable of displaying speed and distance information in either miles or kilometers. It is also possible to change back and forth between miles and kilometers by entering the programming mode at any time, and changing your selection.
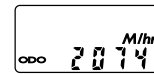
Selecting Miles or Kilometers

STEP 1
With the computer in the AVS / ODO display screen, press and hold the bottom 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 top key (B) to select either miles (M/hr) or kilometers (KM/hr).

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

DETERMINING WHEEL SIZE

The Ascent 10FC Wireless 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.
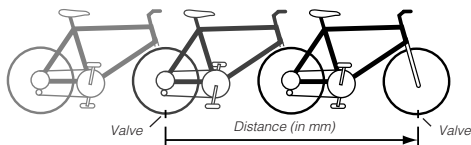
STEP 1

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").

Valve   Distance (in mm)   Valve

PROGRAMMING WHEEL SIZE

STEP 1

Once you select miles (M/hr) or kilometers (KM/hr) and press the bottom 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 top key (B) to adjust the value.

STEP 3

Press the bottom 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 bottom 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 10FC Wireless 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 bottom 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 top key (B). NOTE: Hold this key to quickly advance the hours. Press the bottom key (A) to set the value and advance to the minutes setting.

Setting the Clock Function

STEP 3

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

MAGNET, SENSOR AND BRACKET INSTALLATION

WHEEL MAGNET, TRANSMITTER AND BRACKET INSTALLATION

Because the 10FC is wireless, attaching the unit to your bike is simple and straight forward. Begin by attaching the mounting bracket and head unit to the handlebars.

STEP 1

Clamp the bracket around the handlebars and tighten in place. The 10FC uses an offset bracket that is designed to be supported by the handlebar stem when installed. It is NOT necessarily designed to fit directly over the center of the handlebar stem, especially if this causes the bracket to be bent or deformed. Install the 10FC bracket so that the stem provides support and a firm platform for the computer. The Ascent 10FC bracket fits 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.

Incorrect

Correct
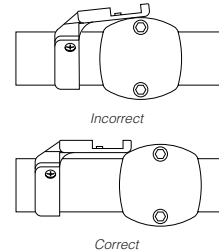
STEP 2

Loosely mount the 10FC transmitter to the leading edge of the right fork blade using the flat rubber block and the 2 zip-ties provided. The battery cap should face up. On some bikes it may be necessary to use the angled spacer that is provided in place of the flat spacer, in order to get the transmitter to line up correctly with the head unit.
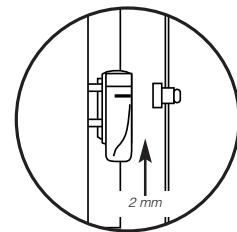
STEP 3

Attach the wheel magnet loosely to one of the spokes on the right side of the wheel, and adjust the alignment of the magnet and transmitter so that the magnet passes the transmitter within 1-2mm of the small molded line near the top of the transmitter case.

2 mm

STEP 4

Once the transmitter and wheel magnet are aligned properly, securely tighten both in place.

HEAD UNIT INSTALLATION

The head unit of the 10FC Wireless 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 10FC slides into the bracket from the back to the front. NOTE: Because the 10FC is a wireless cycle computer, it will operate even when the head unit is not fully secured in the bracket. BE SURE THAT THE HEAD UNIT IS FULLY LOCKED IN PLACE IN THE BRACKET BEFORE USING THE UNIT.

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 transmitter are aligned correctly, and that the space between the magnet and transmitter is 1-2mm or less. Adjust as necessary and re-test.

ASCENT
Chapel Hill, NC

Made in China, V.1 – April 2002