

**INTRODUCTION**

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

**FEATURES**

For reference you can refer to the function table of your computer's features as stated on the box.

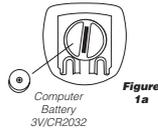
**Functions:**

- Speedometer (0-99.9 Km/hr or M/hr)
- Tripmeter (Up to 999.99 Km or M)
- Odometer (Up to 999.9 Km or M)
- Auto trip timer (99:59:59")
- Maximum Speed (up to 99.9 Km/hr or M/hr)
- Digital Clock
- 12/24 hour Selectable
- Average Speed (0-99.9 Km/hr or M/hr)
- Scan (for DST, MXS, AVS, TM)
- Freeze Frame Memory (for TM, AVS, DST)
- Speed Comparator (+ or -)
- Speed Tendency
- Odometer Save Function

**BATTERY INSTALLATION**

**Computer:**

Remove the battery cover from the bottom of the computer using a small coin. Install the 3V battery with positive (+) pole facing the cover as in Fig. 1a. If the LCD shows irregular figures, take out the battery and install again. This will clear and restart the computer's microprocessor.

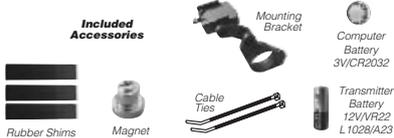


**Transmitter:**

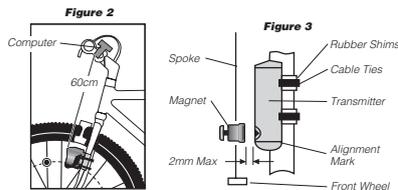
Remove the battery cover from the top of the transmitter using a small coin. Install the 12V battery with positive (+) pole facing the battery cap. Replace the cap and be sure it is tight to prevent moisture leakage. See Fig. 1b



**SENSOR INSTALLATION**



Clamp the magnet on the spoke of front wheel with the screw provided and attach the sensor to the right fork by using cable ties as shown in Fig. 2. Make sure the arc of magnet intersects the alignment mark on the sensor with 2mm clearance as shown in Fig. 3. Make sure transmitter is no further than 60cm from the computer head



**MOUNTING BRACKET**

Attach the mounting bracket to the right side of the handlebar by using a screwdriver as shown in Figs. 4a & 4b. Make sure the mounting bracket is clamped tightly and will not slip on the handlebar with the rubber shims provided. Adjust the position of the mounting bracket as shown in Fig 5 and fix it by locking the 3 screws tightly.

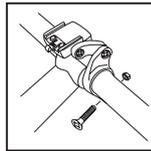
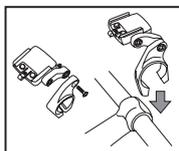


Figure 4b

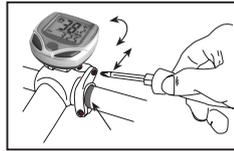


Figure 5

**COMPUTER**

Slide the computer onto the mounting bracket until it snaps firmly into position. Press the release button to take out the computer as shown in Fig. 6.

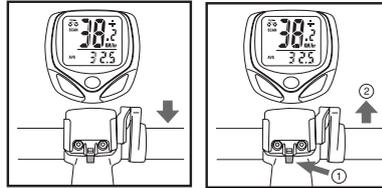


Figure 6

**Auto Start/Stop**

To preserve batteries, the cycle computer will automatically switch off if the unit is left unused for over 5 to 6 minutes. Display will reappear with a press on either button or input from the sensor.

**WHEEL SIZE INPUT**

Press and hold LEFT and RIGHT buttons for 2 seconds or after the replacement of battery, the unit will switch to wheel size input mode. Multiply wheel diameter, D (Fig. 7) in millimeters by 3.1416 to determine wheel factor, C.

For convenience you can refer to the chart of wheel diameter size factor inputs.

Wheel Diameter d	Wheel Factor c
20"	1596
22"	1759
24"	1916
26" (650A)	2073
26.5" (Tubular)	2117
26.6" (700x25C)	2124
26.8" (700x28C)	2136
27" (700x32C)	2155
28" (700B)	2237
(w/tire)	
ATB 24"x1.75	1888
ATB 26"x1.4	1995
ATB 26"x1.5	2030
ATB 26"x1.75	2045
ATB 26"x2 (650B)	2099
27"x1	2136
27"x1 1/4	2155

Figure 7

Press the LEFT button to select digit to be input and the RIGHT button to adjust the digit to the desired number (hold for fast advance). Press the LEFT button again to advance to KM/MILE selection. (Note: Removing battery will erase Wheel Size Input)

**KM/MILE Selection**

After the wheel size input, the following function is selection of units for distance (Km or miles). Press the RIGHT button to choose between Kilometer (KM) and Mile (M), press the LEFT button to confirm.

**COMPUTER FUNCTIONS**

**Clock (12H/24H)**

A 12 or 24-hour digital clock is displayed in the lower row of the screen. To switch between the 12 and 24 hour format or to adjust time, advance to the clock mode and press the LEFT button for 2 seconds. "24H" will start to flash. Use the RIGHT button to select "12H" for 12 hour format or "24H" for 24-hour format. Press the LEFT button to confirm. Next the hour digits will start to flash. Use the RIGHT button to select the hour. To change minutes, press LEFT button again. The minutes will start to flash. Use the RIGHT button to select the minutes. Press the LEFT button once more to return to clock mode. Press the RIGHT button to enter ODO mode.



**Speed Comparator**

A "+" or "-" sign appears to the right of the speed. "+" indicates you are traveling faster than your average speed (AVS). A "-" indicates you are riding slower than your average speed.



**Speed Tendency (Acceleration & Deceleration)**

A cyclist symbol appears to the left of the speed. The wheel turns forward to indicate acceleration. The wheel turns backwards to indicate deceleration.



**COMPUTER FUNCTIONS**

**Speedometer**

Instantaneous Speed is indicated on the top line. The range of measurement is from 0 to 99KM/hr (0 to 99M/hr) and accuracy is +/-0.5KM/hr (M/hr).



**Odometer (ODO)**

Total distance traveled is indicated by ODO and displayed on the bottom line. To reset ODO, press and hold LEFT and RIGHT buttons for 2 seconds or remove the battery. Press the right button to enter DST mode.



**Tripmeter (DST)**

Trip distance measurement is indicated by DST and is displayed on the bottom line. Tripmeter is activated automatically with speedometer input. Reset DST to zero by pressing the LEFT button for 2 seconds. NOTE: TM (Trip Time) and AVS (Average Speed) will also be reset at that time. Press the RIGHT button to enter MXS mode.



**Maximum Speed (MXS)**

Maximum speed measurement is indicated by MXS and is displayed on the bottom line. Maximum speed is stored in memory and updates only when a higher speed is reached. To reset MXS mode, press and hold the LEFT button in the MXS mode. Press the RIGHT button to enter AVS mode.



**Average Speed (AVS)**

Average Speed measurement is indicated by AVS and is displayed on the bottom line. AVS is calculated using the Trip Timer and Tripmeter. Press the RIGHT button to enter TM mode.



**Trip Timer (TM)**

Trip timer measurement is indicated by TM and is displayed on the bottom line. Trip Timer is activated automatically with speedometer input (when the front wheel is turning). It records only the time spent actually riding. Reset TM to zero by pressing the LEFT button for 2 seconds in DST mode.



**Scan (SCAN)**

The scan mode allows DST, MXS, AVS and TM to cycle on the screen without pressing any keys. Press and hold the RIGHT button for two seconds in any mode screen to cycle through each mode screen one time. Or, press the RIGHT button in the TM mode screen to enter continuous scan mode.



**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.



**Activate Freeze Frame Memory**

In any mode, press the LEFT button. The display will flash, indicating the freeze frame feature is activated. You may now toggle through the display screens by pressing the RIGHT button.

**Deactivate Freeze Frame Memory**

Press the LEFT button again to deactivate freeze frame memory and return to normal operation.

**Odometer Save Function**

The SAVE function allows you to keep the important data of total distance (ODO) even after battery replacement. To set ODO after battery replacement and wheel size setting, press RIGHT button to advance to ODO mode and then hold LEFT button for 2 seconds until the last digit is flashing.



To adjust number, press the RIGHT button and then press the LEFT button to confirm and select digit to be input. Repeat this sequence to reach the desired odometer value. Press the LEFT button again to return to normal ODO mode.

**Malfunction Problem**

Malfunction	Problem
No speedometer reading	Improper magnet/sensor alignment
Slow display response	Temperature outside of operating limits (0-55 degrees C)
Black display	Temperature too hot, or display exposed to direct sunlight too long
Display readout fades	Poor battery contacts or dead battery
No trip distance reading	Check correct sensor/magnet alignment Check battery and correct installation
Display shows irregular figures	Take out battery and install again



Chapel Hill, NC

Made in Hong Kong, V.2 - March 2003