

# AXIOM<sup>®</sup> A10W Cyclocomputer

Congratulations on your purchase of the Axiom<sup>®</sup> A10W cyclocomputer. With all the features that a professional rider needs to keep track of a ride, the A10W is the perfect training tool for any cyclist. The added convenience of wireless transmission makes installation simple.

## BUTTON FUNCTION

**LEFT KEY**  
Use this button to progress through the *TRIP*, *RID*, *AVS*, *STP* and *MAX* display screens and to access and progress through the set-up screens.

**RIGHT KEY**  
Use this button to progress through the *TCNT*, *CLK* and *ODO* screens, start and stop the stopwatch and to adjust values within the set-up screens.

## COMPUTER FUNCTIONS

### WHEEL SIZE SETTING (WSZ)

Wheel circumference is used to calculate speed and distance. Setting range is 000mm-339mm (KMH) and 00.0-157.4 (MPH). The A10W includes two wheel size settings, WSZ1 and WSZ2, allowing you to use the computer on two bikes with different wheel sizes (e.g. your road bike and mountain bike).

### SPEEDOMETER (SD) (MPH or KMH)

Displays instantaneous speed, up to 120KMH (75MPH). Accurate to whole mile or kilometer. Always displayed at the top of the screen.

### SPEED COMPARISON (▲▼)

Compares current speed to average speed. As you ride, a (▲) or (▼) will appear in the upper left corner of the display to indicate whether your current speed is above (▲) equal to (◊) or below (▼) your average speed. This function is automatic, requires no programming and cannot be disabled.

### TRIP DISTANCE (TRP)

Displays distance traveled during current ride, up to 999.99 mi. or km.

### AUTOMATIC RIDE TIMER (RID)

Auto start/stop timer records actual ride time up to 3:59:59. Activated by front wheel movement.

### AVERAGE SPEED (AVS)

Displays average speed. Calculated using true ride time (RID) and trip distance (TRP).

### STOPWATCH (STP)

Manual stopwatch allows you to time your entire ride or portions of your ride, up to 3:59:59.

### MAXIMUM SPEED (MAX)

Displays the fastest speed attained during a ride, up to 120KMH (75mph).

### SECOND TRIP COUNTER (TCNT)

Displays distance traveled with a quick reset option, which is particularly useful when following route sheets with turn by turn instructions or tracking point to point distances within a ride.

### CLOCK (CLK)

Displays time of day in a 12-hour or 24-hour format.

### ODOMETER (ODO)

Displays cumulative ride distance, up to 999.99 mi. or km.

### AUTO SLEEP

To prolong battery life, the A10W will automatically enter "sleep" mode after 5 minutes of non-use. The computer will automatically restart as soon as it receives input from the speed sensor, or when any button is pressed. **Note:** To prolong battery life, we recommend removing the head unit from the handlebar bracket between rides.

### SCROLL MODE

In the *RID*, *TRP* or *AVS* display screen, pressing the LEFT key for 1.5 seconds will activate the scroll function. The computer will automatically scroll once through the *RID*, *TRP* and *AVS* screens, displaying each screen for 1.5 seconds.

## RESET DISPLAY SCREENS

The *TRP*, *RID*, *AVS* and *MAX* display screens are reset simultaneously. In any of these four display screens, pressing the RIGHT key for 5 seconds will reset the data in all four screens to zero.

The *STP* display screen is reset independently. In the *STP* display screen, pressing the RIGHT key for 5 seconds will reset the stopwatch to zero.

The *TCNT* display screen is reset independently. In the *TCNT* display screen, pressing the RIGHT key for 5 seconds will reset the trip counter to zero.

To reset ALL display screens and ALL programmed settings (including *CLK*, *ODO* and wheel size settings), use a pencil to depress the "AC" button on the underside of the computer head. See Figure 1.

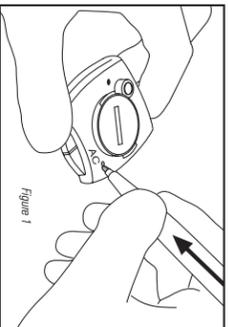


Figure 1

## BATTERY INSTALLATION

### COMPUTER HEAD/RECEIVER

To prolong battery life, the A10W battery is not installed at the factory. Before programming or using the computer the battery (included) must be installed. The Axiom<sup>®</sup> A10W uses a common 3V CR2032 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 cyclocomputers 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 coin. See Figure 2.

#### STEP 2

Install the battery in the battery compartment with the positive (+) side facing the battery cap. Be careful when installing the battery not to damage the battery contact.

#### STEP 3

Reinstall the battery cap and tighten firmly, making sure that the rubber O-ring does not get pinched or distorted, as this will compromise the unit's watertight seal.

**Note:** During a battery change your computer will retain programmed values and odometer mileage for approximately 30 seconds. If the battery is not replaced within 30 seconds, all data will be cleared and default settings restored. Make a note of your current wheel size settings and cumulative odometer mileage before replacing the battery so you can reprogram these values if necessary once the new battery is installed. (See "Programming Wheel Size" and "Setting the Odometer".)

#### STEP 4

If for some reason the screen is blank or shows an irregular display after a battery change, press the AC button on the underside of the computer head (see "Reset Display Screens").

### SENSOR/TRANSMITTER

The A10W sensor/transmitter comes from the factory with the A23 LR23 12V battery already installed.

#### STEP 1

To replace the battery, remove the battery cap from the top of the transmitter using a small coin. Remove the old battery and dispose of properly.

#### STEP 2

Install a new battery with the positive (+) end facing the cap. Reinstall the battery cap and tighten firmly, making sure that the rubber O-ring does not get pinched or distorted, as this will compromise the unit's watertight seal. See Figure 3.

## PROGRAMMING THE COMPUTER

Now that you are familiar with the features of your Axiom<sup>®</sup> A10W cyclocomputer, you are ready to program the unit specifically for your bike.

### SELECTING MILES OR KILOMETERS

The Axiom<sup>®</sup> A10W is capable of displaying speed and distance information in either miles or kilometers. You can switch between miles and kilometers at any time by entering the programming mode and changing your selection.

#### STEP 1

With the computer in the *TRP* display screen, press and hold the LEFT key for 5 seconds.

#### STEP 2

"KMH" or "MPH" will flash in the upper right corner of the screen. Press the RIGHT key to select miles (MPH) or kilometers (KMH).

#### STEP 3

Press the LEFT key to set your choice and advance to the first wheel size (WSZ) setting screen.

## DETERMINING WHEEL SIZE

The Axiom<sup>®</sup> A10W uses wheel circumference (measured in millimeters or inches) to calculate speed and distance. Note that while your computer can be programmed to +/-1mm (+/- .01") for total accuracy, discrepancies of as much as 50mm (2") 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 the size between brands and models.

TIRE SIZE	CIRCUMFERENCE MILLIMETERS	CIRCUMFERENCE INCHES	TIRE SIZE	CIRCUMFERENCE MILLIMETERS	CIRCUMFERENCE INCHES
16 x 1.75	1272	50.1	27 x 1 1/4	2199	86.6
20 x 1.75	1590	62.6	28 x 1.5	2224	87.6
24 x 1 1/4	1948	76.7	28 x 1.75	2268	89.3
24 x 1.75	1907	75.1	28 x 1 1/2	2265	89.2
26 x 0.75	1954	76.9	28 x 1 3/4	2205	86.8
26 x 1.0	1973	77.7	700 x 18c	2102	82.8
26 x 1 1/4	2105	82.9	700 x 20c	2114	83.2
26 x 1.5	2026	79.8	700 x 23c	2133	84.0
26 x 1.6	2051	80.7	700 x 25c	2146	84.5
26 x 1.75	2070	81.5	700 x 28c	2149	84.6
26 x 1.9	2089	82.2	700 x 32c	2174	85.6
26 x 2	2114	83.2	700 x 37c	2205	86.8
26 x 2 1/4	2133	84.0	700 x 40c	2224	87.6

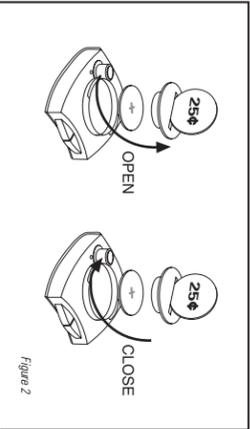


Figure 2

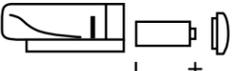


Figure 3

## 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. See Figure 4.

#### 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 or inches (1 inch = 25.4mm). This value is your wheel circumference. Enter this value in the computer (see "Programming Wheel Size"). **Note:** If you set your computer to read in kilometers, you must program the wheel size in millimeters. If you set your computer to read in miles, you must program the wheel size in inches.

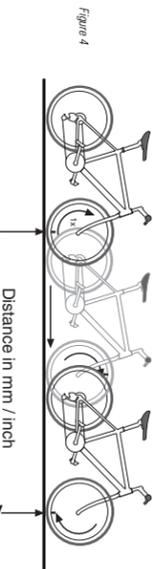


Figure 4

## PROGRAMMING WHEEL SIZE

Once you select miles (MPH) or kilometers (KMH) and press the LEFT key (see STEP 3 or "Programming the Computer"), the computer will automatically advance to the first wheel size (WSZ) programming screen. **Note:** If you set your computer to read in kilometers, you must program the wheel size in millimeters. If you set your computer to read in miles, you must program the wheel size in inches.

#### STEP 2

The WSZ1 default settings are 2155 for KMH and 84.8 for MPH. The digit at the right of the screen will flash. Use the RIGHT key to adjust the value.

#### STEP 3

Press the LEFT key to set the value and advance to the next flashing digit.

#### STEP 4

Repeat this sequence until all digits have been set to the appropriate value. Press the LEFT key again to set the WSZ1 value in memory and advance to the second wheel size (WSZ2) programming screen. If you do not wish to program a value for the second wheel size setting, press and hold the LEFT key for 5 seconds to return to the *TRP* display screen.

#### STEP 5

The WSZ2 default settings are 2000 for KMH and 78.7 for MPH. Use the RIGHT and LEFT keys to adjust the wheel size value as described above.

#### STEP 6

Once all the digits have been set to the appropriate value, press the LEFT key to set the WSZ2 value in memory, and return to the *TRP* display screen.

## SELECTING WHEEL SIZE

To select WSZ1 or WSZ2 before a ride, press and hold the LEFT key for 5 seconds in any of the *RID*, *AVS*, *STP* or *MAX* display screens, but not the *TRP* screen. Don't forget to select the correct wheel size when switching the computer between bikes.

## SETTING THE CLOCK

The Axiom<sup>®</sup> A10W is equipped with a digital clock that displays time of day in a 12-hour or 24-hour format.

#### STEP 1

With the computer in the *CLK* display screen, press and hold the LEFT key for 5 seconds.

#### STEP 2

"24" or "12" will flash in the lower line of the display. Press the RIGHT key to select the 12-hour or 24-hour mode. Press the LEFT key to set your choice and advance to the hours setting.

#### STEP 3

Press the RIGHT key to advance the hours. (Hold this key to quickly advance the hours.) Press the LEFT key to set the value and advance to the minutes setting.

#### STEP 4

Press the RIGHT key to advance the minutes. (Hold this key to quickly advance the minutes.) Press and hold the LEFT key for 5 seconds to set the value and return to the *CLK* display screen.

## SETTING THE ODOMETER

The odometer can be programmed so that cumulative mileage can be restored after a battery change or transferred from another computer.

#### STEP 1

With the computer in the *ODO* display screen, press and hold the LEFT key for 5 seconds.

#### STEP 2

The digit at the right of the screen will flash. Use the RIGHT key to adjust the value. Press the LEFT key to set your choice and advance to the next flashing digit.

#### STEP 3

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

#### STEP 4

Press and hold the LEFT key for 5 seconds to set the odometer value and return to the *ODO* display screen.



## SETTING THE SECOND TRIP COUNTER

The second trip distance counter can be programmed at any time—a useful feature while following a route sheet with turn by turn instructions.

#### STEP 1

With the computer in the *TCNT* display screen, press and hold the LEFT key for 3 seconds.

#### STEP 2

The digit at the right of the screen will flash. Use the RIGHT key to adjust the value. Press the LEFT key to set your choice and advance to the next flashing digit.

#### STEP 3

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

#### STEP 4

Press and hold the LEFT key for 3 seconds to set the value in memory and return to the *TCNT* display screen.

## MAGNET, SENSOR & BRACKET INSTALLATION

Since the A10W is wireless, installation is simple and straightforward. Begin by attaching the computer mounting bracket to the handlebars.

### BRACKET INSTALLATION

#### STEP 1

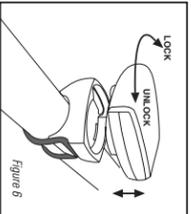
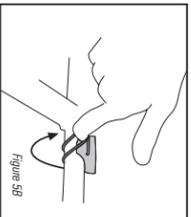
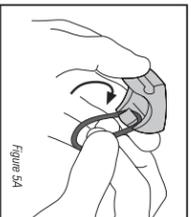
Determine whether you will mount the computer head to the left or right of your handlebar stem. The speed sensor/transmitter should then be attached to the fork on the same side of the bike as the computer head.

#### STEP 2

Remove the backing from the adhesive pad on the underside of the bracket. Use the included O-ring to attach the bracket to the handlebar as shown in Figures 5A & 5B. Use the included shim to accommodate smaller diameter handlebars, sticking the adhesive side of the shim to the underside of the bracket.

### HEAD UNIT INSTALLATION

The Twist-Click bracket design securely locks the A10W computer head into the bracket. Set the computer head into the bracket, and twist the head clockwise until you hear an audible CLICK, indicating that the unit is locked firmly in place. See Figure 6. To remove the head unit, twist the head counterclockwise and then lift it out of the bracket.



### WHEEL MAGNET AND SENSOR INSTALLATION

#### STEP 1

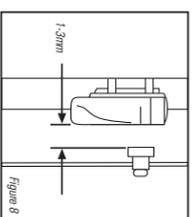
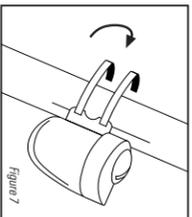
Using the included rubber shim and zip-ties, loosely mount the sensor (so that you can slide it around) to the fork blade so that it's on the same side of the bike as the handlebar bracket. The A10W transmission range is 24 (60cm). The sensor/transmitter must be mounted within 24" of the receiver (computer head) in order for the receiver to pick up the signal. The sensor/transmitter battery cap should face up. See Figure 7. **Note:** We recommend mounting the sensor to the front (leading) edge of the fork blade to avoid problems should the sensor ever come into contact with the spokes.

#### STEP 3

Attach the wheel magnet loosely to one of the spokes on the same side of the wheel and directly opposite the sensor/transmitter. Adjust the position of the magnet and sensor by sliding both pieces up or down to achieve a 1-3mm clearance between the two. **Note:** 1mm is about the thickness of a penny. If the magnet and sensor are not close enough, the computer will not pick up a reading or readings will be inconsistent and erratic. Most problems that occur when installing a new computer are related to magnet and sensor alignment and spacing. See Figure 8.

#### STEP 4

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



### TEST OF INSTALLATION

Once the installation procedure is complete, test the unit to make sure everything is adjusted and working properly.

#### STEP 1

Pick up the front end of the bicycle and spin the front wheel. The computer should register a speed reading within 1-2 seconds. If not, check the alignment of the wheel magnet and sensor, and make sure that the space between the magnet and sensor is 3mm or less. Adjust as necessary and re-test. **Note:** Wireless cyclocomputers are occasionally affected by electromagnetic interference. Common sources of electromagnetic signals include high voltage power lines, motor driven equipment and other wireless devices (such as heart rate monitors). If you experience unusually high speed readings, check your surroundings for possible sources of electromagnetic signals and move away from the source.