

AVOCET



CYCLOMETER 25



SPECIFICATIONS

Instrument displays either miles or kilometers

Setup functions

Miles/Kilometers: Stored data converted when setup is changed

Wheel Size Calibration: Calibration for wheels from 100 mm (4") circumference to 2,999 mm (118") circumference in 1 mm increments

Automatic Power Saver: Displays clock to cut power consumption by 50% while retaining stored data

Dimensions: 1.75" X 1.75" x 0.3"

Weight: Unit, 0.5 oz

Display: Dual liquid crystal, upper numbers 0.3" high; lower numbers 0.2" high

Operational Temperature Range: 0°F to 150°F

Battery: 1.5 volt, 4 year life. Use Avocet Cyclometer 25 battery or 357 (Renata, Eveready, RayOVac, Phillips), SR44W (Maxell, National, Panasonic, Sony, Toshiba), D357H (Duracell).

Speed Functions

SPEED: To 75 mph

Maximum Speed (MX): To 75 mph (resettable)

Average Speed (AV): To 75 mph. Calculated only while the wheel is turning. Averages up to 10 hrs

Resolution of speed functions: 0-19.9 mph, to 0.1; 20-39.5 mph, to 0.5; 40-75 mph, to 1.0

Distance Functions

Total Distance (D): To 6,210 mi in 0.1 mi increments. Display rolls over at 6,210 miles

Trip Distance (d): To 621.00 mi in 0.01 mi increments

Time Functions

Ride Time (ST): To 9:59:59 (time used to compute average speed). At 10:00:00 rolls over

Stopwatch (ST): To 9:59:99 in 0.01 second increments then to 9:59:59 in 1.0 second increments. At 10:00:00 rolls over and resumes timing . When stopped displays to 0.01 second

Clock: 24 hour format; to 1 minute

BUTTONS



PRESSING THE RIGHT BUTTON

Displays Speed with the other main functions: Total Distance, Trip Distance, Average Speed, Ride Time, and Maximum Speed
Changes calibration number and clock time



HOLDING THE RIGHT BUTTON 2 SECONDS

Selects the Clock in any function



PRESSING THE LEFT BUTTON

Starts and stops the Stopwatch
Moves from one number to the next in calibration and clock set



HOLDING THE LEFT BUTTON

Reaches miles/kilometers select when Total Distance (D) is displayed
Reaches calibration when Trip Distance (d) is displayed



HOLDING LEFT THEN PRESSING RIGHT BUTTON

Resets Trip Distance, Average Speed, Ride Time, and Maximum Speed (all together) when any of these functions is displayed
Clears Stopwatch when Stopwatch is displayed
Reaches Clock set when Clock is displayed

RESET / POWER SAVER



Trip Distance, Average Speed, Ride Time, and Maximum Speed reset together

RESET. To reset hold down the left button then press the right button. Trip Distance, Average Speed, Ride Time, and Maximum Speed all reset together. You can reset from any of these four functions. When Ride Time reaches 10 hours, Trip Distance, Average Speed, and Ride Time reset automatically. Reset before starting each ride to avoid automatic reset.

ALL CLEAR. You can clear Total Distance manually by holding down the left button in the Total Distance (D) function until the test pattern appears (10 seconds). This erases all stored data.

AUTOMATIC POWER SAVER. After no buttons have been pressed and no wheel movement has been detected for 10 minutes, the the clock will display. Power consumption is reduced by 50%. The normal display returns when a button is pressed or the bicycle is moved.

FUNCTIONS



1. TOTAL DISTANCE-D



2. TRIP DISTANCE-d



3. AVERAGE SPEED-AV



4-RIDE TIME-ST



5. MAXIMUM SPEED-MX



6. STOPWATCH



CLOCK

OPERATION. Press the right button to move from one function to the next.

SPEED (displayed in all functions). Speed resolution is to 0.1 mph up to 19.9 mph, 0.5 mph from 20 to 39.5 mph, and 1.0 mph above 40 mph. 'mi' flashes when the Cyclometer is receiving speed and distance data from the wheel sensor.

1. TOTAL DISTANCE-D. Accumulates the total distance (D) you have ridden up to 6,209.9 miles. At 6,210 miles it clears to 0 and resumes accumulation.

2. TRIP DISTANCE-d. Displays the distance (d) ridden since the last reset up to 620.99 miles. At 621.00 miles it resets to 0 and resumes accumulation. Trip Distance also resets automatically when Ride Time reaches 10 hours. Reset at the start of each ride to avoid automatic reset.

3. AVERAGE SPEED-AV. Displays the average speed since the last reset. Averages speed for up to 10 hours. After 10 hours the Cyclometer 25 displays an 'E' instead of average speed. The

time over which the average has been calculated is shown in the Ride Time function.

4. RIDE TIME-ST. Displays ride times up to 9 hours 59 minutes. Resets automatically at 10 hours. Trip Distance and Average Speed also reset at 10 hours. Ride time is the time that the bicycle's wheels have been turning. Time stopped is not accumulated. Average speed equals the trip distance divided by the ride time.

5. MAXIMUM SPEED-MX. Displays the max speed since the last reset up to 75.0 mph.

6. STOPWATCH. When the Stopwatch is displayed, 'ST' blinks. Press the left button to start and stop the Stopwatch (ST). Records to 9:59:59. At 10 hours it rolls over to 0 . Clear by holding the left button then pressing the right button.

CLOCK. You can reach the clock from any function by holding the right button down for 2 seconds. Press the right button to return to the last function displayed. The clock shows 24-hour time in hours and minutes.

CALIBRATION



MILES OR KILOMETERS. Go to the Total Distance (D) function. Hold down the left button for 12 seconds until the test pattern appears and all stored data is cleared. Four seconds after releasing 'mi' or 'km' flashes. Press the right button to switch between miles and kilometers, then complete calibration. You can change between miles and kilometers without erasing stored data. To do this hold the left button in Total Distance (D) for six seconds and release when 'mi' or 'km' flashes. Switch between units with the right button. Stored maximum and average speeds and distance data are automatically converted to the units chosen when you use this method. Exit by pressing the left button.



Change the blinking digit of the calibration number with the right button

CALIBRATION. Find the calibration number that matches your tire size from the table, or measure tire circumference by the precise calibration method. Reach calibration from the Trip Distance function (d). Hold the left button until the calibration number 2155 shows in the lower display (4 seconds), release, then hold again 4 seconds until the right digit of the calibration number blinks. Change the number with the right button. Press the left button to go to the next digit. After adjusting all the digits, press the left button to exit. To check the calibration number, hold the left button in Trip Distance. After 4 seconds the calibration will appear, and it will remain displayed for 4 seconds after you release the button.

CALIBRATION NUMBERS. The calibration number is wheel circumference in millimeters or in inches multiplied by 25.4.

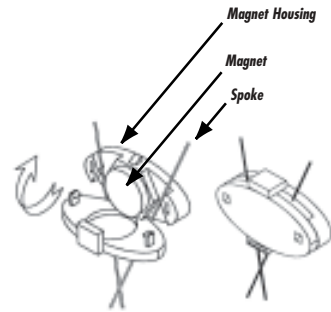
Tire Size	Number	Tire Size	Number	Tire Size	Number
20 x 1.75	1528 mm	26 x 1.95/2.0	2045 mm	700 x 28	2096 mm
24 x 1	1753	26 x 2.1	2056	700 x 32	2116
600 tubular	1759	26 x 1 3/8	2068	700 x 38	2159
650 tubular	1929	700C tubular	2083	27 x 7/8	2077
26 x 1	1913	700 x 20	2081	27 x 1	2105
26 x 1.25	1952	700 x 23	2087	27 x 1 1/8	2123
26 x 1.5	1986	700 x 25	2091	27 x 1 1/4	2142

PRECISE CALIBRATION. For the most precise calibration, measure the tire's circumference by the following method: Inflate your tires to your usual riding pressure. Mark the ground under the valve stem when the stem is at its lowest point. Get on the bicycle and have a helper push you in your normal riding position until the valve stem returns to its lowest point. Mark below the stem again, then measure the distance between the marks. If you measure in inches, multiply your measurement by 25.4 to convert to millimeters. The calibration number is the tire circumference in millimeters.

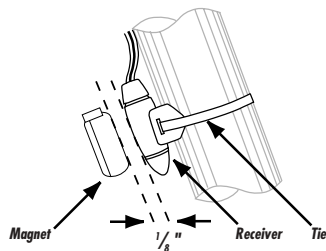
SETTING THE CLOCK. Hold down the right button in any function to display the clock. Hold down the left button then press the right button to reach clock adjust. The right digit will blink. Change it with the right button. Press the left button to go to the next digit. When you adjust the left digit, it will not change in the display. You will have to confirm that this digit is correct after you exit clock set. If it is incorrect, return to clock set, go to the left digit, and adjust it again with the right button. Note that you cannot set the clock when the Cyclometer 25 is asleep with only the clock displayed.

INSTALLATION

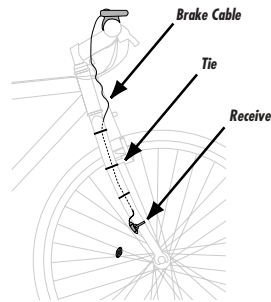
STEP 1 - TRANSMITTER. Position the magnet housing over a pair of crossed spokes with the spokes inside the slots. Insert the magnet in the well and close the housing pressing the parts together until they lock together over the spokes.



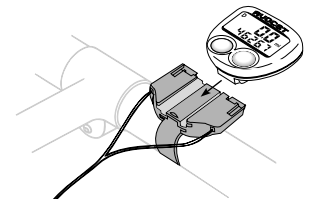
STEP 2 - RECEIVER. Position the receiver on the right fork blade opposite the magnet. Insert a zip tie through the slot and secure it loosely on the fork. Rotate the wheel until the transmitter is behind the receiver, then adjust the receiver on the fork so that it is opposite the magnet. Rotate the receiver until it is 1/8 to 3/16" from the transmitter magnet then tighten the tie and trim off its free end with scissors.



STEP 3 - RECEIVER WIRE. Attach the wire to the inside of the fork with cable ties, then wrap the wire around the front brake cable until the excess has been used up. Attach the wire only to parts that rotate when the bicycle is steered—the fork, handlebar stem, or the front brake cable. Do not attach the wire to the head tube.

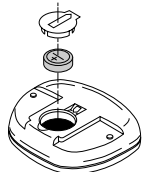


STEP 4 - MOUNT BRACKET. Wrap the rubber shim around the handlebar near the stem. Remove the clamp screw and place the bracket on the handlebar over the shim. If the shim is too long, trim it shorter with scissors. Insert the clamp screw and tighten it until the bracket is secure. Slide the Cyclometer into the bracket from front to rear until it snaps on. Spin the wheel and confirm that a speed reading is displayed. If the display remains at zero, check that the receiver and transmitter magnet are aligned and 1/8 to 3/16" apart.



BATTERY & TROUBLESHOOTING

INSTALLING A NEW BATTERY. Remove the battery by prying up the cap with a screwdriver. Install the new battery with its positive (+) side toward the cap, then press in the cap. Use only an Avocet Cyclometer 25 battery or equivalent (see specifications). After battery installation a blinking "km" appears on the display. Press the left button for "mi". Press the right button to calibrate. The default calibration number 2155 will appear. *Any number other than 2155 indicates improper reset, and the battery must be removed then reinstalled after waiting at least 10 minutes.*



TROUBLESHOOTING

Speed and distance seem too high or too low

- Check calibration number
- Confirm calibration number by tire rollout
- Check spacing between receiver and transmitter

No speed or distance

- Check transmitter/receiver alignment and spacing
- Check contacts on back of Cyclometer and on mount and clean with a pencil eraser if necessary
- Check for broken wire

No display or display dim

- Replace battery

Incorrect data or unusual display

- Remove battery, then reinstall after 15 seconds

AVOCET 1-YEAR LIMITED WARRANTY

This Avocet Cyclometer is warranted against defects in material and workmanship for one year after date of purchase, or two years after the manufacture date stamped on the PC board under the battery (YM), whichever comes first. Defective products will be repaired or replaced. The warranty will not cover the battery, normal wear, damage, or loss and is void if the Cyclometer is disassembled by anyone other than an authorized Avocet Service Center.

PROCESSING INFORMATION

Customer service and product information are available at www.avocet.com/service.html or by calling 650-470-0478. Warranty claims are to be sent to the Service Center by the owner, not by the retail store where the Cyclometer was purchased. Include a description of the problem. Only the original, dated cash register or charge card receipt will be accepted for proof of purchase date (no exceptions).

Send your Cyclometer freight prepaid to the Service Center at the address listed below. A traceable method of shipment is recommended in the event that your shipment to Avocet is lost in transit.

Avocet Service Center
170A University Ave.
Palo Alto, CA 94301

Customer service and product information are available at www.avocet.com or by calling 650-470-0478 ext 218



AVOCET, INC, P.O. Box 180, Palo Alto, CA 94302, USA