

# CYCLOMETER 40



MADE IN USA

# AVOCET

## BUTTONS



**OPTION  
BUTTON**

**FUNCTION  
BUTTON**

**Function button** is on the right. Press it to move in a loop sequence from one function to another.

**Option button** is on the left. It selects available options in the lower display.

**Reset** the function displayed to zero by pressing both buttons at the same time. Average speed, maximum speed, trip distance, and stopwatch are resettable individually.

**Global Reset.** Reset all resettable functions by pressing and holding both buttons for 3 seconds. Release the buttons when all display segments show. If you inadvertently reach setup while resetting (by holding the buttons more than 3 seconds), press the right button 6 times to return to the last function displayed. Setup data will not be altered.

## FUNCTIONS

### SPEED (V)



CURRENT SPEED is shown in the upper display. Press the option (left) button to select Average Speed (AV), Maximum Speed (MX) or Cadence (RPM).

### DISTANCE (D)



TRIP DISTANCE is shown in the upper display and Total Distance in the lower display.

### TIME (:)



STOPWATCH is in the upper display and Clock in the lower display. Press option (left) button to start and stop the stopwatch.

## SPEED

### CURRENT SPEED



**Average Speed**

Press left button for maximum speed

### CURRENT SPEED



**Maximum Speed**

Press left button for cadence

### CURRENT SPEED



**Cadence**

Press left button for average speed

**CURRENT SPEED (V)** displays current speed up to 122 mph or 194 km/h.

**Average Speed (AV)** calculates average speed in .1 mph or km/h increments only while the bicycle is moving. Average speed can be recorded up to 290 hours. After 290 hours updating freezes. Press both buttons to reset.

**Maximum Speed (MX)** records maximum speeds up to 122 mph or 194 km/h. Reset by pressing both buttons.

**Cadence (RPM)** displays crank revolutions-per-minute from 15 to 240 rpm. Requires cadence mount kit (included with this unit).

**Pace Arrow** ↑ ↓ (Pat. Pending). When current speed exceeds average speed, the arrow to the right of the lower display points upward; when it is below average speed, the arrow points downward. The arrow is displayed in all functions when the bicycle is moving.

## DISTANCE

### TRIP DISTANCE



**Total Distance**

**TRIP DISTANCE.** Displays trip distances up to 1999.99 miles or km in .01 increments. Reset by pressing both buttons.

**Total Distance.** Shows total distance in whole miles or km up to 19999 in the lower display. Will not reset unless the battery is removed. (Note: Removing the battery erases setup data.)

## TIME



**STOPWATCH**

**Clock**

Press left button to stop or start stopwatch

**STOPWATCH.** Upper display shows elapsed time. Press the left button to start or stop. Shows times up to 9 hours, 59 minutes, 59 seconds, then returns to 0 and resumes counting. Reset by pressing both buttons.

**Clock.** The lower display shows time of day in either 12 or 24 hour format.

## SETUP OVERVIEW

The five setup functions allow you to configure the Cyclometer 40 to your particular needs. Choose whether speed and distance will be displayed in miles or kilometers, calibrate for your tire size, choose whether cadence will display, choose between a 12 or 24 hour clock, and set the time.

**MILES OR KILOMETERS**

1. 

**WHEEL SIZE CALIBRATION**

2. 

**CADENCE ON/OFF**

3. 

**12 OR 24 HOUR CLOCK**

4. 

**CLOCK SET**

5. 

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

Press the left button to select between available setup options.

## REACHING SETUP



Setup can be reached from any function by holding both buttons down for approximately 5 seconds. All segments will show briefly. Release the buttons when *mi* or *km* appears on the right of the display. Also, when the battery is installed, all display segments show for ten seconds, then the setup sequence begins with miles or kilometers selection. Setup does not reset functions.

## SETUP-STEP 1

### MILES OR KILOMETERS



Left button selects miles or kilometers

**Miles or Kilometers.** 'mi' shows. Press the left button to switch between miles and kilometers. When switching between miles and kilometers, stored speed and distance data are automatically converted to the units chosen. Press the right button to go to wheel size calibration.

## SETUP-STEP 2

### WHEEL SIZE CALIBRATION



Left button increments calibration numbers up or down depending on arrow direction

**Wheel Size Calibration.** The calibration default of 84.84 (miles) or 2155 (kilometers) shows, and an arrow to the right of the display points up then down. Pressing the left button increases the numbers one increment at a time when the arrow points up and decreases them when the arrow points down. Holding down the left button steps the numbers rapidly. Calibration numbers equal tire circumference in either inches or mm. Choose a calibration number from the table

## SETUP-STEP 2A

Tire Size	Number		Tire Size	Number	
	Miles	Km		Miles	Km
20 x 1.75	60.15 in	1528 mm	700C tubular	82.12 in	2083 mm
24 x 1	69.01	1753	700 x 20	81.02	2058
24 tubular	69.25	1759	700 x 25	82.12	2086
26 tubular	75.94	1929	700 x 28	82.55	2096
26 x 1	75.31	1913	700 x 32	83.22	2114
26 x 1.25	77.44	1967	700 x 35	84.21	2139
26 x 1.5	77.71	1974	27 x 7/8	81.77	2077
26 x 1.9/1.95	80.63	2048	27 x 1	82.91	2105
26 x 2.125/2.2	81.65	2074	27 x 1 1/8	83.58	2123
26 x 1 3/8	81.41	2068	27 x 1 1/4	84.33	2142

Note: Tire sizes are molded into tire sidewalls. This table is based on popular tire brands and assumes recommended inflation pressure and a rider weight of 150 lbs. (68 kg). If your tire size is not included, or if you want to account for your particular combination of weight, tire pressure, and tire brand, measure your tire circumference according to the precise calibration method.

**Precise Calibration.** To take full advantage of the unit's precision, measure the front tire's "rolling circumference" by the following method.

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, and measure the distance between the marks. This measurement is the rolling circumference of the tire and also the precise calibration number.

Enter this calibration number, then press the right button to go to cadence on/off.

## SETUP-STEPS 3 & 4



**Cadence On/Off.** 'RPM' shows. Press the left button to activate cadence. CA<sub>d</sub> shows. Press the right button to go to 12 or 24 hour clock. **Note:** If you use this unit on a non-cadence mount (with 2 contacts instead of 3), turn cadence off to remove cadence from the speed function.



**12 or 24 Hour Clock.** '12 hr' shows. Press the left button if you want a 24 hour clock. Press the right button to go to clock set.

## SETUP-STEP 5

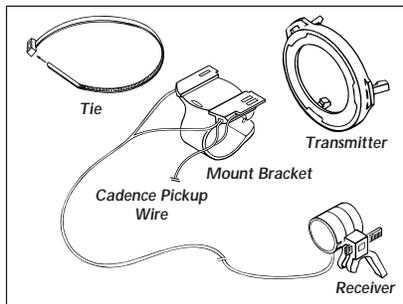


**Clock Set.** The hour digits show. Press the left button to advance the hour. At the correct hour press the right button to set the minutes.



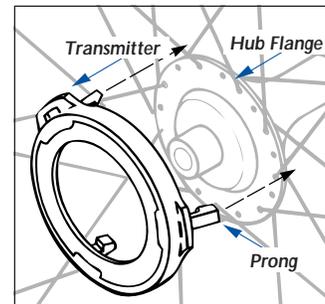
The minute digits show. Press the left button to advance the minutes one at a time, or hold it down to advance them rapidly. At the correct minute, press the right button to complete setup.

## PARTS AND TOOLS



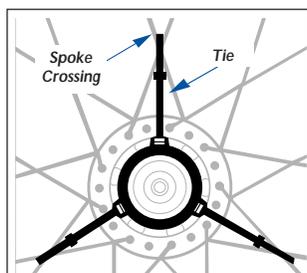
**Tools for installation.** You will need a small screwdriver, scissors, and a wrench to remove the front wheel if it does not have a quick-release hub. See cadence kit instructions for installation of cadence pick-up, magnet, and wire.

## INSTALLATION STEP 1



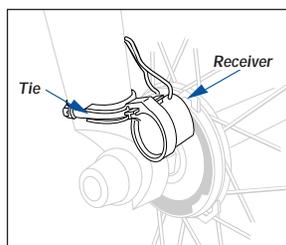
**Transmitter.** Remove the front wheel. The three-prong transmitter supplied snaps on the right hub flange of most 36-spoke wheels. For 32-spoke wheels, use a 4-prong transmitter available separately. Reinstall the wheel.

## INSTALLATION STEP 1A



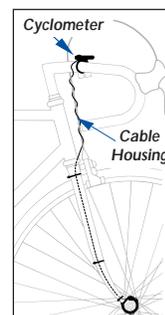
**Transmitter-Cable Tie Method.** If the ring does not snap on the hub flange, cut off its prongs. Attach it to the three nearest spoke crossings with cable ties. Center the ring while gradually tightening the ties. Trim the tie ends and reinstall the wheel. A rear wheel transmitter kit is also available separately.

## INSTALLATION STEP 2



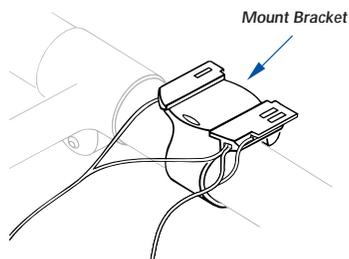
**Receiver.** Position the receiver in front of the fork on the right side opposite the transmitter magnet (dark stripe). Squeeze the legs of the clamp together to mount on forks with thin ends. Spread the clamp wide open and mount on the round part of fat forks. Thread a cable tie through the hole in the mounting clamp and around the fork. Pull the cable tie tight, then adjust the receiver so that it is close as possible to the transmitter.

## INSTALLATION STEP 3



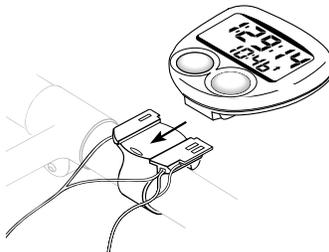
**Receiver Wire.** Secure the wire with ties or tape starting at the receiver. Attach the wire only to parts that rotate when the bicycle is steered—the fork, the handlebar stem, or the front brake cable. Do not attach the wire to the head tube. Wrap excess wire around the front brake cable housing.

#### INSTALLATION STEP 4



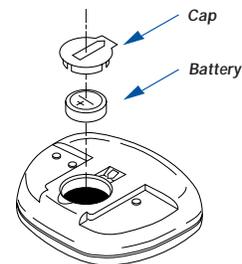
**Mount Bracket.** Remove the clamp screw and place the mount bracket on the handlebar near the right side of the stem. Insert the clamp screw and tighten it until the bracket does not move when the Cyclometer is inserted or removed. Small diameter handlebars may require one or more wraps of tape beneath the clamp for a tight fit.

#### INSTALLATION STEP 5



**Cyclometer 40 Installation.** Slide the Cyclometer into the mount bracket from front to rear until it snaps on. Choose the speed function, then spin the front wheel and watch for a reading. If the display remains at zero make sure that the receiver and transmitter are aligned and nearly touching.

#### BATTERY



To remove the battery, pry up the cap on the back of the Cyclometer with a screwdriver. Install the new battery with its positive (+) side toward the cap, then press in the cap with your thumb. Use a Cyclometer 40 battery only—see specifications. Note: removing the battery erases setup data. After installing a battery complete the setup procedure.

#### CYCLOMETER 40 SPECIFICATIONS

Instrument displays either miles or kilometers

**Speed Functions:**

SPEED: To 122 MPH in 0.5 MPH increments

Average Speed: To 122 MPH in 0.1 MPH increments

(calculated only while wheel is turning; averages up to 290 hrs without resetting)

PaceArrow™ indicates whether current speed is above or below average speed in all functions (Pat. Pend.)

Maximum Speed: To 122 MPH in 0.5 MPH increments

Cadence: 15 to 240 crank RPM

**Distance Functions:**

TRIP DISTANCE: To 1,999.99 mi in .01 mi increments

Total Distance: To 19,999 in 1 mi increments

**Time Functions:**

STOPWATCH: Elapsed time to 9:59:59

Clock: 12/24 hour

**Note:** Functions can be reset individually or globally

**Dimensions:** 1.75" X 1.75" X 0.3"

**Weight:** 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

**Wheel Sizes:** Calibration for wheels from 30.23" circumference to 130.98" circumference in .04" increments

**Data:** Speed display updated every second. MultiPulse transmitter sends 20 pulses per wheel revolution

**Water Resistance:** Waterproof

**Mount System:** Compatible with all Avocet computers.

Requires cadence mount kit to display cadence (included with this unit)

**Battery:** 1.4 volt, 2 year life. Use Avocet Cyclometer 45 battery or Eveready AC675E, Duracell DA675, Panasonic PZ675P, Varta V675A, Ray-O-Vac 675A

**Accessories:**

4-prong transmitter—for 32 spoke wheels

(3-prong transmitter—for 36 spoke wheels supplied)



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