Blackburn

ATOM SL 3.0 / 4.0 / 5.0 / 6.0
CYCLOMETER

ENGLISH

Congratulations on the purchase of your new Blackburn Atom Series cyclometer. Blackburn cyclometers are manufactured using only the highest quality materials and production standards.

This manual is an integral part of your Blackburn cyclometer. Please read it carefully and use it while performing the initial programming and operating of the unit. After you are fully familiar with all of the features and functions of your Blackburn cyclometer, put this manual in a safe location for future reference.

ATOM SERIES FUNCTIONS	SL	3.0	4.0	5.0	6.0
Speed	●	●	●	●	●
Avg speed	●	●	●	●	●
Max speed	●	●	●	●	●
Trip distance	●	●	●	●	●
Odometer	●	●	●	●	●
Ride time	●	●	●	●	●
Time of day	●	●	●	●	●
Wheel sizes	●	●	●	●	●
ETA				●	●
Temperature				●	●
Altimeter				●	●
Slope				●	●
Total altitude gain				●	●
Max altitude gain				●	●
2nd bike settings				●	●
Cadence					●

1 **2** **3** **4** **5** **6**

7 **8** **9** **10** **11**

ENGLISH
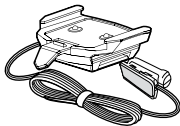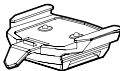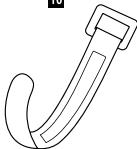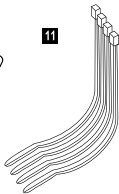
ATOM SERIES FUNCTIONS	SL	3.0	4.0	5.0	6.0
1. Cyclometer Unit	●	●	●	●	●
2. Front speed sensor		●		●	
3. Rear speed sensor			●		●
4. Cadence sensor					●
5. Spoke Magnet	●	●	●	●	●
6. Crank Magnet					●
7. Wired Mounting Bracket	●				
8. Wireless Mounting Bracket		●	●	●	●
9. Rubber Mount	●	●	●	●	●
10. Velcro	●	●	●	●	●
11. Zip-Ties	●	●	●	●	●

BATTERY

Blackburn Atom computers are powered by a CR2016 / CR2032 3v Lithium Battery. Under normal conditions, this battery should last approximately one year.

INSTALLING/REPLACING THE COMPUTER BATTERY

Using a small Philips screwdriver, turn screws counter clockwise until the door comes free.
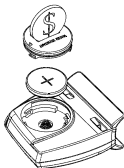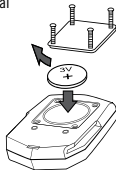
Use a small coin to remove the battery cover from wireless sensor.

LOW BATTERY INDICATOR

Cyclometer unit
Speed sensor
Cadence sensor

| LOW BATTERY INDICATOR	SL	3.0	4.0	5.0	6.0
1. Cyclometer unit	●	●	●	●	●
2. Speed sensor		●	●	●	●
3. Cadence sensor					●

Atom SL

The Blackburn Atom SL uses a single wired sensor attached to the front fork.

INSTALLING WIRED SPEED SENSOR AND BRACKET

1. Loosely attach the wheel sensor to either fork blade using the zip-ties. Do not fully tighten.
2. Attach the spoke magnet on same side of wheel as sensor.
3. Adjust the positions of sensor and magnet so the magnet passes 1–3 mm from the sensor.
4. Make certain that the center of the magnet aligns with the "sensor" markings on the back of the wheel sensor.
5. Route the remaining wire and bracket up the fork securing it with tape. Wrap the excess wire around the front brake cable housing allowing enough slack for the bracket to reach the handlebars. Attach the bracket to the handlebars or stem. Tighten magnet and zip-ties.
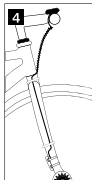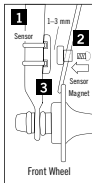
Atom 3.0 / 5.0

The Blackburn Atom 3.0 / 5.0 uses a single wireless sensor attached to the front fork.

INSTALLING WIRELESS SPEED SENSOR AND BRACKET

1. Loosely attach the wheel sensor to either fork blade using the zip-ties. Do not fully tighten.
2. Attach the spoke magnet on same side of wheel as sensor.
3. Adjust the positions of sensor and magnet so the magnet passes 1–3 mm from the sensor.
4. Make certain that the center of the magnet aligns with the "sensor" markings on the back of the wheel sensor.
5. Tighten magnet and zip-ties.
6. Attach the bracket to the handlebars or stem.
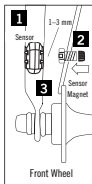
Atom 6.0 / Atom 4.0 follow steps 1–5

The Blackburn Atom 6.0 uses speed and cadence sensors attached to the chain stay.

INSTALLING WIRELESS SPEED SENSORS AND BRACKET

1. Loosely attach the two sensors to the left chain stay using the zip-ties. Do not fully tighten.
2. Attach the spoke magnet on same side of wheel as sensor.
3. Adjust the positions of sensor and magnet so the magnet passes 1–3 mm from the sensor.
4. Make certain that the center of the magnet aligns with the "sensor" markings on the back of the wheel sensor.
5. Tighten magnet and zip-ties.
6. Attach the cadence magnet on crank and adjust the position of cadence sensor, so the magnet passes 1–3 mm from the sensor. Tighten magnet and zip-ties.
7. Attach the bracket to the handlebars or stem.

Cadence sensor

Speed sensor
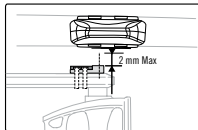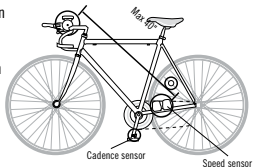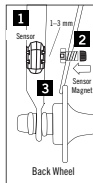
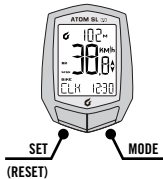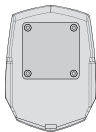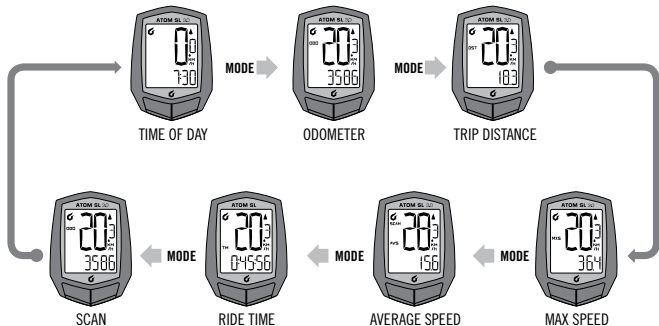**Blackburn ATOM SL** 30 / 40 / 50 / 60

Blackburn Atom cyclometers have 2 operating buttons located on the base of the unit.

SET
(RESET)

MODE

Atom SL / 3.0 / 4.0 Operation

TIME OF DAY **MODE →** ODOMETER **MODE →** TRIP DISTANCE

SCAN **← MODE** RIDE TIME **← MODE** AVERAGE SPEED **← MODE** MAX SPEED

Blackburn ATOM SL 30 / 40 / 50 / 60

Atom SL / 3.0 / 4.0 SETTING WHEEL SIZE

1. Press & Hold MODE and SET. (Note: this will clear all odometer information and reset time of day.)

2. Adjust blinking digit by Pressing MODE.

3. Set & advance by Pressing SET.

4. Continue through all fields.

5. Adjust Unit of Measurement (M/H or KM/H) by Pressing MODE.

6. Press SET to return to operating mode.

Atom 5.0 / 6.0 Operation

SCAN → **MODE** → BIKE → **MODE** → ALTIMETER

MODE ← CADENCE (for Atom 6.0 only) ← **MODE** ← ETA ← **MODE**

Blackburn **ATOM SL** 30 / 40 / 50 / 60
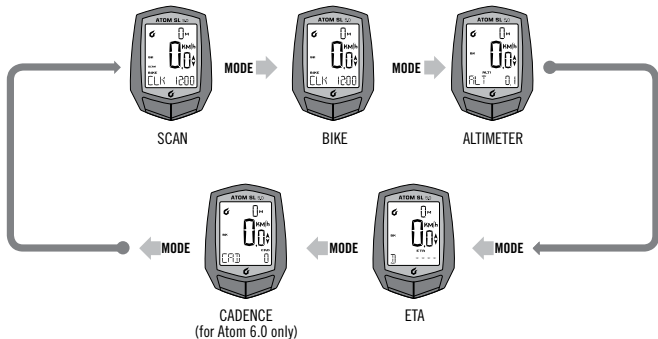
SCAN MODE:

SCAN mode automatically scrolls through the data in a continuous loop as below.

Clock ➡ Trip distance ➡ Trip time ➡ Temperature ➡ Altimeter ➡ Slope ➡ Gain ➡ ETA1 ➡ ETA2 ➡ Cadence

BIKE MODE:

Press Set Button in BIKE mode to select the data show as below sequence.

Clock ➡ Trip distance ➡ Odometer ➡ Bike 1+2 Odometer ➡ Avg. Speed ➡ Max Speed ➡ Trip Time ➡ Temp.

ALTIMETER MODE:

Press Set Button in ALTIMETER mode to select the data show as below sequence:

Altimeter ➡ Slope ➡ Altitude gain ➡ Maximum Altitude

CADENCE MODE:

Press Set Button in CADENCE mode to show the Average Cadence data.

Atom 5.0 / 6.0 SETTING WHEEL SIZE
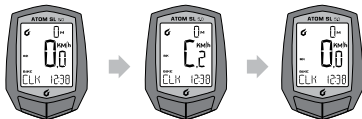
1. Press & hold MODE and SET. (note: this will reset the cyclometer and clear all setting data)
2. Adjust blinking digit by Pressing MODE.
3. Set & advance by Pressing SET.
4. Continue through all fields.
5. Set for Bike 2 after Bike 1 is set.
6. Adjust Unit of Measurement (M/H or KM/H) by Pressing MODE.
7. Press RESET to return to operating mode.

Blackburn **ATOM SL** 30 / 40 / 50 / 60

Atom 5.0 / 6.0 BIKE 1 & BIKE 2 switching

1. Press & hold MODE for 2 seconds to select either BIKE 1 or BIKE 2. This cyclometer can
   store 2 bikes data for wheel sizes, average speed, trip time and distance.

MEASURING WHEEL SIZE

To assure accurate Speed and Distance measurements, you must enter the correct wheel circumference (in millimeters). The adjacent chart (1) lists most popular wheel sizes and their circumferences. If you can not find your wheel size on the chart, use the following method for manually measuring your wheel size:

MANUALLY MEASURING WHEEL SIZE (2)

1. On a flat open surface make a mark on your tire and the floor exactly where they meet.

2. Roll your bike forward one full revolution of the wheel and mark the point on the floor.

3. Measure the distance between marks in millimeters.
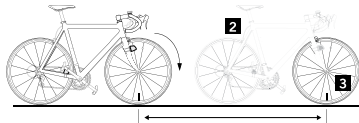
1

WHEEL	CIR.
700 X 23 =	2096
700 X 20 =	2086
700 X 25 =	2105
700 X 28 =	2136
700 X 32 =	2155
700 X 38 =	2180
650 X 20 =	1945
650 X 23 =	1990
26 X 1.9 =	2050
26 X 2.0 =	2055
26 X 2.1 =	2068
26 X 2.25 =	2077
29 X 2.1 =	2288
29 X 2.3 =	2326

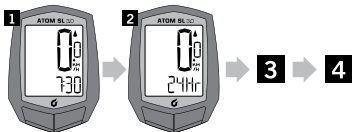**Blackburn** **ATOM SL** 30 / 40 / 50 / 60

SETTING TIME OF DAY

1. Select the Clock in Bike mode, Press & Hold the SET button.

2. Adjust 12- or 24-hour format by pressing the MODE button. Set by pressing Set button.

3. Adjust Hour by pressing MODE. Set by pressing SET button.

4. Adjust Minutes by pressing MODE. Set Minutes and resume normal operation by pressing SET button.

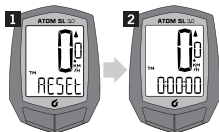Atom SL / 3.0 / 4.0

Atom SL / 5.0 / 6.0

To Set and reset current data — Atom SL / 3.0 / 4.0

1. To reset all current ride data, in Distance mode (DST), press & Hold RESET for 2 SECONDS.

2. Ride Time, Trip Distance, Average speed will be reset to zero (0).

3. To reset the Maximum speed, in maximum speed mode (MXS), Press & Hold RESET for 2 SECONDS.

To Set and reset current data — Atom 5.0 / 6.0

1. Odometer Speed in BIKE MODE, press and hold SET button, it will go to set ODO value and wheel size for BIKE 1 & 2.

2. Average Speed / Trip Time / Trip distance in BIKE MODE, press and hold SET button, it will reset to zero.

3. Maximum Speed in BIKE MODE, press and hold SET button to reset.

4. Altitude in ALTIMETER MODE, press and hold SET button to reset.

5. Maximum Altitude in ALTIMETER MODE, press and hold SET button to reset.

Average Cadence in CADENCE MODE, press and hold SET button to reset.

SLEEP MODE

1. To conserve battery life, the unit will go into SLEEP mode when there is no signal received for 5 minutes.

2. Press either MODE or SET to instantly resume normal operation with no loss of ride data.

3. For Atom 5.0 / 6.0, spin wheel or begin to ride, in less than 60 seconds, the unit will begin to operate.
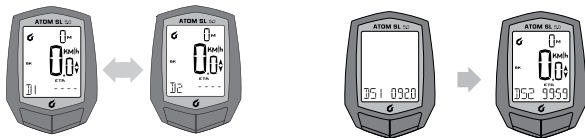
Estimate time to arrival function

1. Press SET button to select Destination 1 or 2.

2. Then press and hold SET button for 2 second, it sets the destination distance.

3. After the distance is set, it shows the estimated time of arrival in **hr** and **mins**. It will shows 99:59 initially, and after you ride a few seconds, the remaining time will change by the calculated riding speed.

WIRELESS TRANSMISSION ID CODE NUMBER

The wireless transmission system has five (no. 0 – 4) digit codes. To avoid interference between two or more people riding together use different codes. To check your existing code number press the button indicated below and the ID code number will be shown as illustrated on the screen below.

Atom SL / 3.0 / 4.0

Press and hold the MODE button for 5 seconds.

Atom 5.0 / 6.0

Atom 6.0 – Cadence channel (no. 5 – 9)

Press both buttons together quickly.

If the code is the same as your accompanying rider please change the ID code number by pressing the transmitter RESET button and continue riding. During this time you may see no data received, just keep riding for approximately 1 minute and the computer will register a new ID code automatically and work properly.

ID reset button

Press again to check the ID is changed.