



DIGIBOARD

CYCLING COMPUTER



COMPLETE MANUAL

BCP-51W

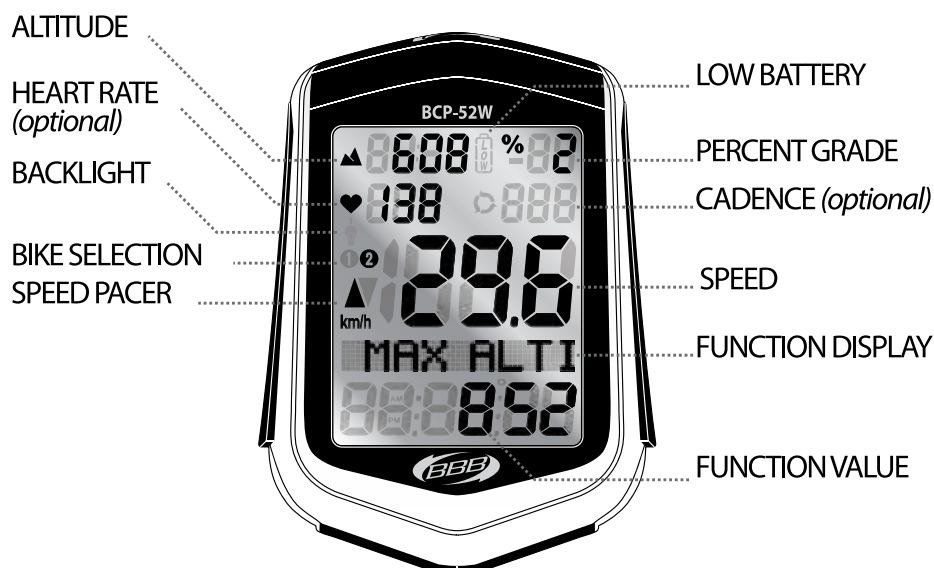
BCP-51WH

BCP-52WA

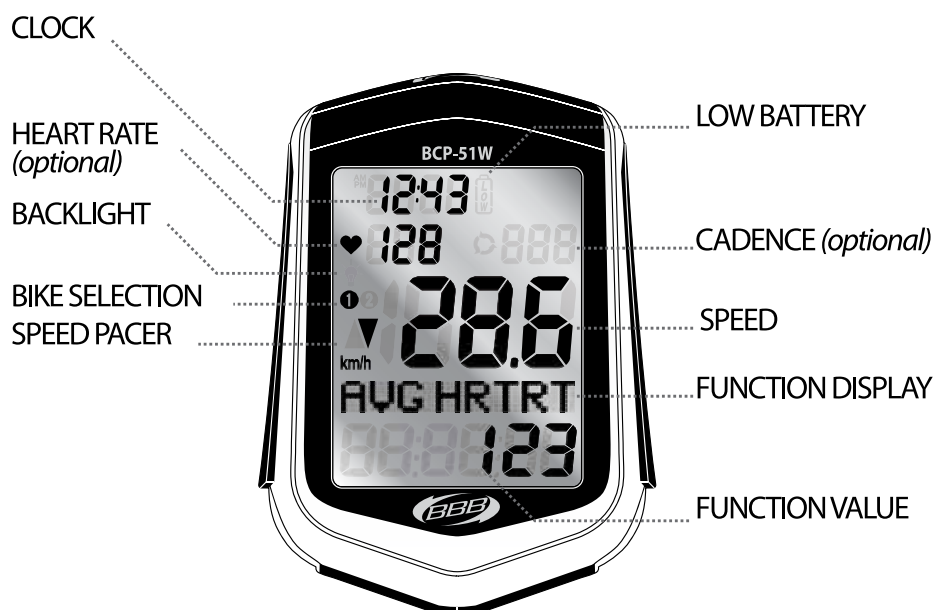
BCP-52WAH

SCREEN ELEMENTS

» BCP-52WA / BCP-52WAH



» BCP-51W / BCP-51WH



OPERATIONS BUTTON



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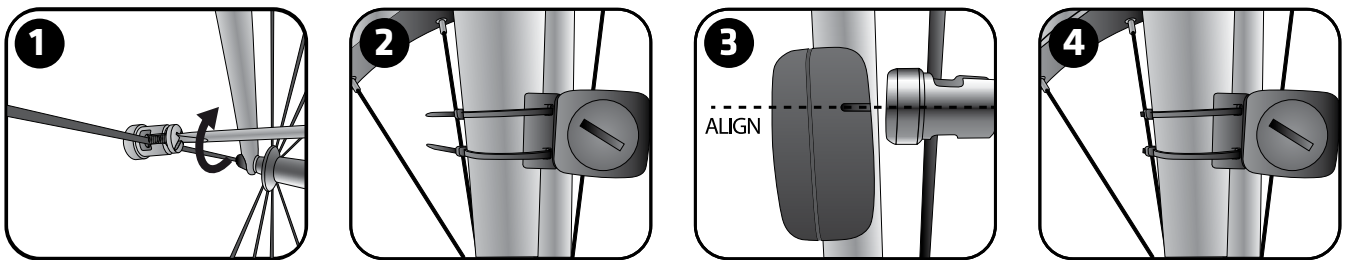
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SECTION 1

INSTALLATION

INSTALLING THE WHEEL MAGNET AND SPEED SENSOR

1. Install the wheel magnet on a spoke, using a Phillips screwdriver.
2. Position the speed sensor on the fork leg to achieve the correct alignment with the wheel magnet. If needed, move the wheel magnet. When you have achieved the correct alignment, pass two zip-ties through the speed sensor and around the fork leg.
3. Re-check the alignment of the speed sensor, and tighten both zip-ties. The distance between the wheel magnet and the sensor point should be maximum 5mm.
4. Cut off the excess length of the zip-ties.

**INSTALLING THE COMPUTER BRACKET**

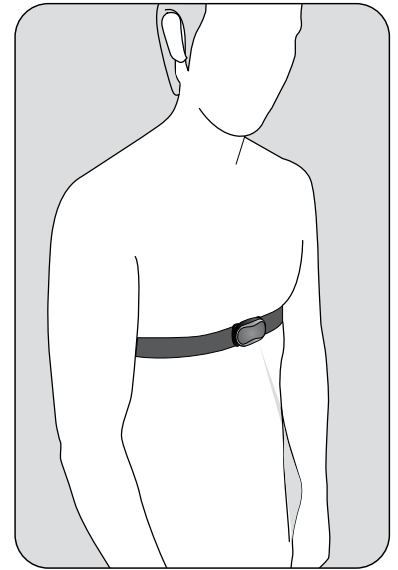
5. The bracket can be installed on the stem as well as the handlebar. The bracket is pre-assembled in the handlebar position.
6. If you would like to have your computer on the stem, loosen the four screws on the bracket, rotate the bracket 90 degrees and tighten the four screws.
7. Pass two zip-ties through the bracket and around the stem/handlebar. Cut off the excess length of the zip-ties.
8. Place the BBB computer in the bracket and rotate clockwise till you hear a “click” sound.



INSTALLING THE HEART RATE SENSOR

The heart rate sensors are integrated in the soft elastic belt. For a correct heart rate measurement, the belt must be positioned slightly below your chest, directly on your skin.

1. Make the two contact areas moist before you start your exercise.
2. The chest belt needs to be snug to stay in place. Slide the buckles to adjust the length of the belt for a snug but comfortable fit.
3. Press the ANT+ transmitter to the elastic belt on the two push-button connectors.

**Maintenance**

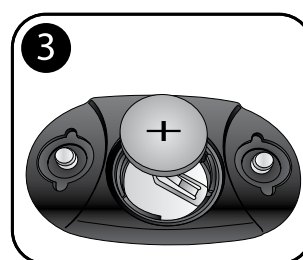
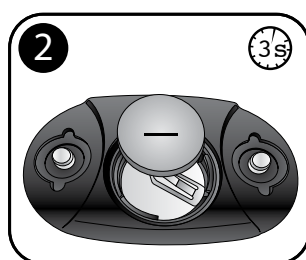
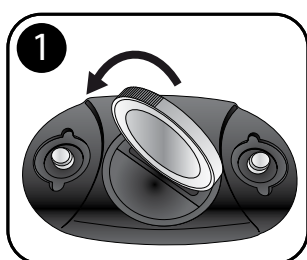
- Remove the transmitter from the elastic belt after every use and dry the push-buttons connectors on the transmitter. Rinse the soft elastic belt under running water after every use.
- Wash the elastic belt regularly in a washing machine at 30°C. Use a washing pouch. Do not spin-dry, iron, dry clean or bleach the elastic belt. Do not use detergent with bleach or fabric softener.
- Never put the transmitter in the washing machine!

» BATTERY REPLACEMENT FOR THE HEART RATE SENSOR

The sensor batteries are pre-installed. When needed, check below illustrations for correct replacement.

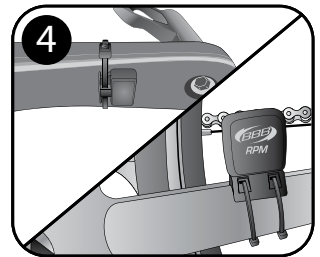
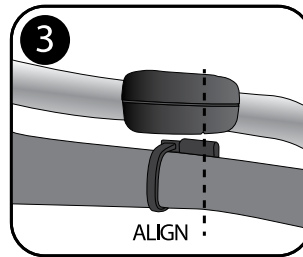
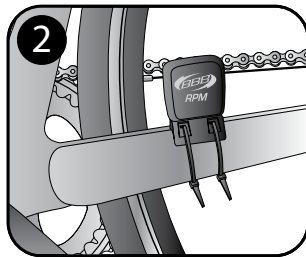
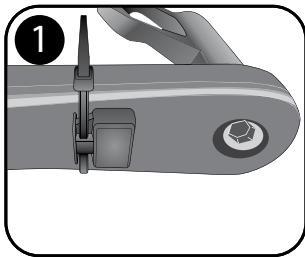
1. Open the battery cover by turning the cover counter clockwise.
2. Insert the battery (CR 2032) with the negative side (-) facing up for 3 seconds. This will reset the sensor.
3. Insert the battery (CR 2032) with the positive side (+) facing up. Close the battery cover by turning it clockwise.

Batteries should be disposed of in compliance with local regulations.



INSTALLING THE CADENCE MAGNET AND CADENCE SENSOR

1. Install the cadence magnet on the non drive train side of the crank.
2. Install the cadence sensor on the chainstay.
3. Position the cadence sensor on the chainstay to achieve the correct alignment with the cadence magnet. If needed, move the cadence magnet. The distance between the magnet and the sensor point should be maximum 3mm. When you have achieved the correct alignment, pass two zip-ties through the sensor and around the chainstay.
4. Cut off the excess length of the zip-ties.

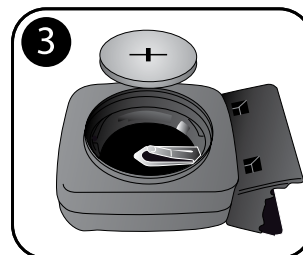
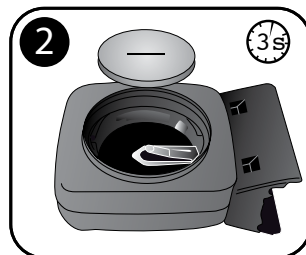
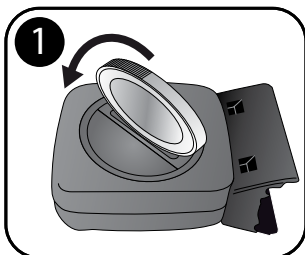


» BATTERY REPLACEMENT FOR THE CADENCE SENSOR

The sensor batteries are pre-installed. When needed, check below illustrations for correct replacement.

1. Open the battery cover by turning the cover counter clockwise.
2. Insert the battery (CR 2032) with the negative side (-) facing up for 3 seconds. The will reset the sensor.
3. Insert the battery (CR 2032) with the positive side (+) facing up. Close the battery cover by turning it clockwise.

Batteries should be disposed of in compliance with local regulations.



SECTION 2

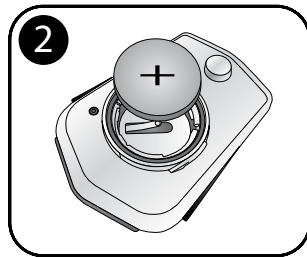
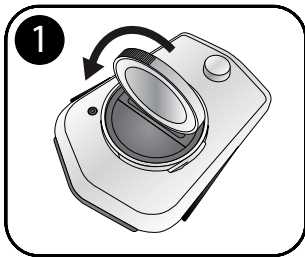
FIRST TIME SET-UP

INSTALLING BATTERY INTO THE COMPUTER

1. Open the battery cover by turning the cover counter clockwise.
2. Insert the battery (CR 2032) with the positive side (+) facing up. Close the battery cover by turning it clockwise

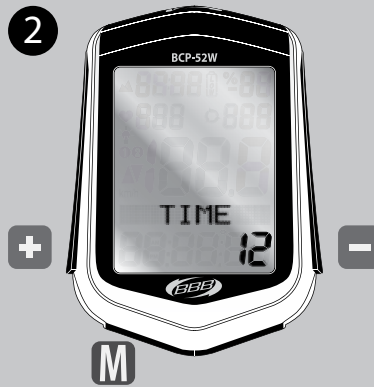
After the battery installation the first time setup menu will start automatically.

The first time setup procedure can be restarted by pressing the “AC” button on the backside the of computer.

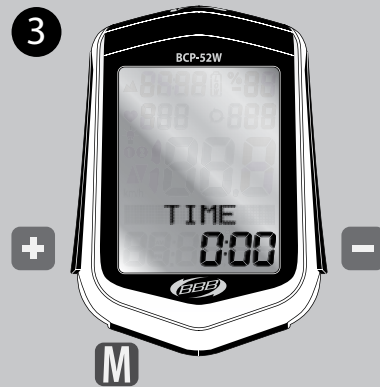


SETTING CLOCK

1. To change clock or clock, press **+** or **-**.
2. To select, press **M**.



3. To set the TIME press **+** or **-**.
4. To select, press **M**.



SETTING HEART RATE VALUES

High Limit / Low Limit

For a healthy and effective training your heart rate should not be too high or too low. Your computer will warn you when you are training too hard or not hard enough. The heart rate shown on the display will start to flash when you are under or over your limits.

During an exercise test done by a sports doctor your high and low heart rate limit can be determined precisely. There is a simple, less precise, way to determine these values:

High limit = (220(man) / 224(woman)) - age) x 90%

Low limit = (220(man) / 224(woman)) - age) x 60%

1. To set HI LIMIT press + or -. To select, press **M**.
2. To set LO LIMIT press + or -. To select, press **M**.



SETTING GENDER

High limit = (220(man) / 224(woman)) - age) x 90%

Low limit = (220(man) / 224(woman)) - age) x 60%

1. To set the SEX press + or -. (M = Male, F = Female).
2. To select, press M.



SETTING WEIGHT

1. To change or, press + or -.
2. To select, press M.



3. To set the WEIGHT press + or -.
4. To select, press M.



SETTING WHEEL SIZE

This computer has wheel size presets for easy wheel size selection.

1. To set the correct press **+** or **-**. To select, press **M**.

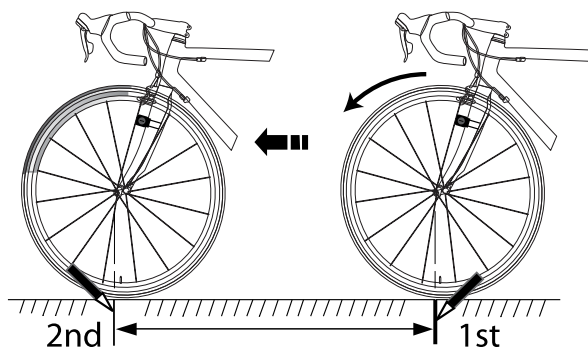
PRESET	MM
700 - 23	2096
700 - 25	2105
700 - 28	2136
700 - 32	2155
700 - 35	2168
700 - 38	2180
26 - 1.5	2010
26 - 1.9	2045
26 - 1.95	2050
26 - 2.0	2055
26 - 2.1	2068
26 - 2.2	2075
CUSTOM	0000 - 3999



SETTING CUSTOM WHEEL SIZE

1. When the preferred wheel size is not listed in the preset list, select **CUSTOM**. To select, press **M**.

To set the **WHEEL SIZE** digits press **+** or **-**. To select, press **M**. Repeat these steps to set the other digits.



To set the most precise wheel size, do a test.
(*Make sure the tires are at the correct tire pressure*)

- Sit on the bicycle, place the valve of the front wheel on the floor.
- Mark the floor at the valve position.
- While you sit on the bicycle, have a helper roll the bicycle forward with one revolution of the wheel, so that the valve is directly on the floor again.
- Mark the new position of the valve.
- Measure the distance between the two marks, in millimeters.
- Set this value in the DigiBoard computer.

SETTING KM/H OR M/H

1. To change the **SPEED UNIT** to **KM/H** or **M/H**, press **+** or **-**.
2. To select, press **M**.

**SETTING ODOMETER 1**

1. It is possible to set the **ODOMETER** data into your new bicycle computer. To select the first digit, press **+** or **-**.
2. To select, press **M**. Repeat these steps to select the other digits.



SETTING TOTAL TIME 1

1. It is possible to set the **TOTAL TIME** data into your new bicycle computer. To select the first digit, press **+** or **-**.
2. To select, press **M**. Repeat these steps to select the other digits.



PAIRING

1. During the pairing procedure the computer makes a secured digital connection with the sensors. Once a sensor is found the computer will show "**SPD FOUND**", "**CAD FOUND**" and/or "**HRT FOUND**", depending on the type of sensors you are using.

During the pairing process the **heart rate**, **cadence** and **speed** symbol will flash in the display. When a sensor is found, the symbol will stop flashing. Before you start using your bicycle wait until the pairing process is completely finished and the computer display shows the main screen.

Once sensors are paired the connection is stored in the computer memory. The pairing process does not have to be repeated before each ride.

*The pairing procedure can be repeated manually by pressing the **M** and **F** button together for 3 seconds.*

Starting the pairing procedure manually is needed when sensors cannot be found or when a later bought sensor needs to be paired.



SETTING ALTITUDE (BCP-52WA / BCP-52WAH ONLY)

The altitude in this computer is measured by a pressure sensitive barometer. Not only altitude, but also changing weather will influence the height showed on your computer.

Before each ride you have to calibrate the altitude to let the computer compare your home altitude with the current weather situation.

Home altitude can also be described as start altitude. The home altitude is a saved preset for easy calibration.

Are you on holiday?

Save your start altitude as home for calibration before each ride.

Will your ride start from a different altitude each day?

Check page 27, Advanced Altitude settings, for changing the current altitude.

Calibration of the altitude is described at page 20.

1. Start with the **ALTITUDE** menu (**ALTI GAIN** shown in display). Press **M** button for 3 seconds.



Home altitude information for your specific position can be found by various sources like maps, tourist information or on the internet.

SETTING HOME ALTITUDE (BCP-52WA / BCP-52WAH ONLY)

2. To set the **ALTITUDE** press + or -. To select, press **M**. Repeat to set the other digits.
3. To save the **HOME ALTITUDE**, press **M** to save the value.



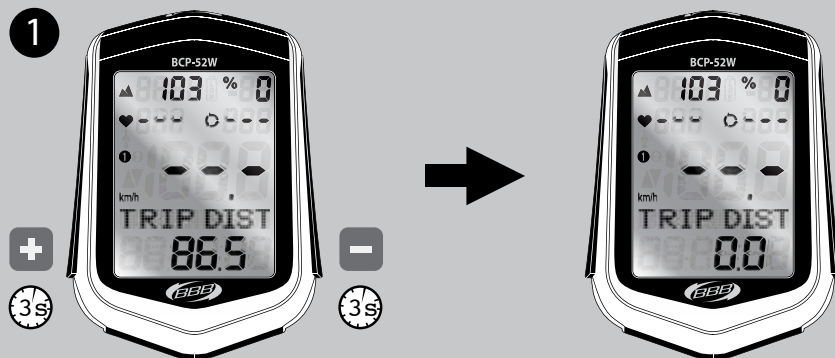
SECTION 3

BEFORE EACH RIDE

TRIP DATA RESET (BCP-52WA / BCP-52WAH ONLY)

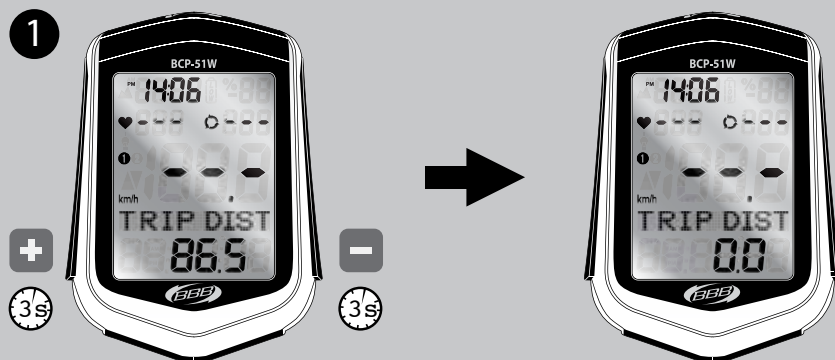
1. The TRIP data can be reset in any menu by pressing + and - button for 3 seconds.

Please note: Every trip related data is reset including **CADENCE**, **HEART RATE** and **ALTITUDE**. Totals like **ODO** and **TOTAL TIME** will not be reset.

**TRIP DATA RESET (BCP-51W / BCP-51WH ONLY)**

1. The TRIP data can be reset in any menu by pressing + and - button for 3 seconds.

Please note: Every trip related data is reset including **CADENCE** and **HEART RATE**. Totals like **ODO** and **TOTAL TIME** will not be reset.

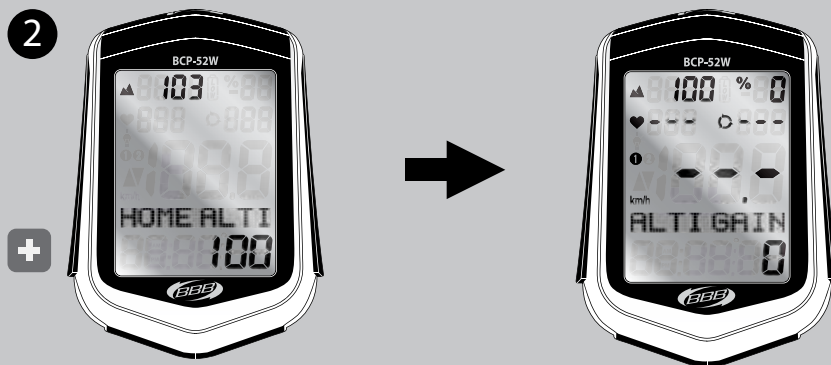


HOME ALTITUDE CALIBRATION (BCP-52WA / BCP-52WAH ONLY)

1. Start with the ALTITUDE menu (ALTI GAIN shown in display). Press + button for 3 seconds.



2. Confirm the HOME ALTI by pressing the + button. The display will now show your home ALTITUDE and is calibrated with the current weather situation.



SECTION 4

ADVANCED SETTINGS

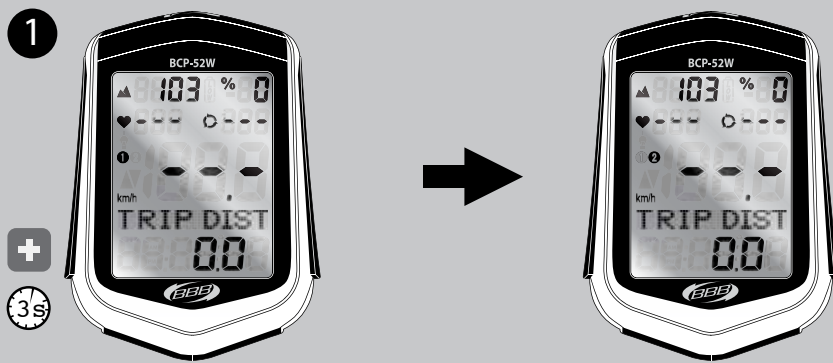
SECOND BIKE SET-UP

Mount the bracket on your second bicycle as instructed on page 5.

Mount the wheel magnet and speed sensor on your second bicycle as instructed on page 5.

Mount the cadence magnet and sensor on your second bicycle as instructed on page 7.

1. Start with the **DISTANCE** menu (TRIP DIST shown in display). Press + button for 3 seconds. The second bike is selected when the ① is changed into ② in the display.



2. Press the **M** button for 3 seconds for setting the wheel size. Follow the same procedure as described on page 14.
3. Press **M** and **F** button for 3 seconds to start pairing with your second bike speed sensor and cadence sensor (if applicable). Make sure the distance between bicycle 1 and bicycle 2 is at least 10 meters.
4. To switch between bicycle 1 and bicycle 2, start with the **DISTANCE** menu (TRIP DIST shown in display). Press + button for 3 seconds.



TIME SET-UP

The Time is set during the First-Time Set-Up, page 10.

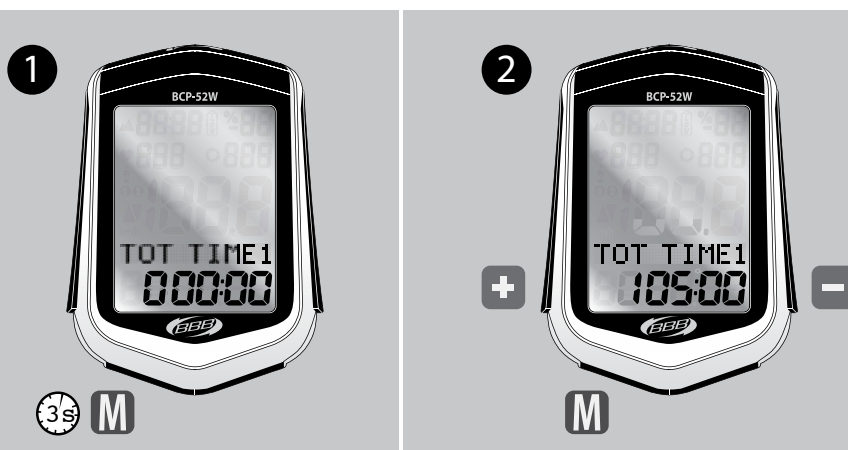
1. To change the clock start with the **TIME** menu (**TIME** shown in display). Press **M** button for 3 seconds.
2. To change **24HR** clock or **12HR** clock, press **+** or **-**. To select press **M**.
3. To set the time press **+** or **-**. To select press **M**. Repeat these steps to set the other digits. If the **12HR** clock is selected, you must also select **AM** or **PM**.

**SETTING TOTAL RIDE TIME**

The Total Ride Time is set during the First-Time Set-Up, page 16.

1. To change this data start with the **TIME** menu (**TOT TIME1** shown in display). Press **M** button for 3 seconds.
2. To select the first digit, press **+** or **-**. To select press **M**. Repeat these steps to select the other digits.

To change the Total Ride Time for the second bike, repeat these step starting with **TOT TIME2** shown in display.



ODOMETER SET-UP

The Odometer is set during the First-Time Set-Up, page 15.

1. To change this data start with the **DISTANCE** menu (**ODOMETER1** shown in display). Press **M** button for 3 seconds.
2. To change the speed unit to **KM/H** or **M/H**, press **+** or **-**. To select press **M**.



3. To select the first digit, press **+** or **-**. To select press **M**. Repeat these steps to select the other digits.

To change the odometer for the second bike, repeat these step starting with **ODOMETER2** shown in display.



HEART RATE LIMIT SET-UP

The user's Heart Rate HI LIMIT and LO LIMIT are set during the First-Time Set-Up, page 11.

1. To change these limits start with the **HEART RATE** menu (KCAL shown in display). Press **M** button for 3 seconds.
2. If the display shows **USER DATA**, change into **HR LIMIT** by pressing + or -. To select press **M**.
3. Set the heart rate values as described on page 11.

**USER DATA SET-UP**

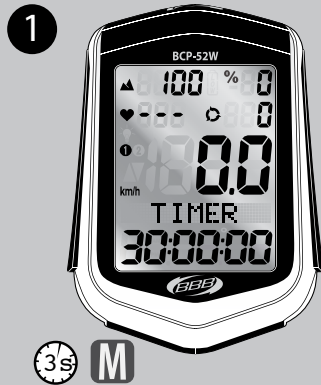
The User Data (Sex, Weight) are set during the First-Time Set-Up, page 12.

1. To change these data start with the **HEART RATE** menu (KCAL shown in display). Press **M** button for 3 seconds.
2. If the display shows **HR LIMIT**, change into **USER DATA** by pressing + or -. To select press **M**.
3. Set the **SEX** and **WEIGHT** values as described on page 12.

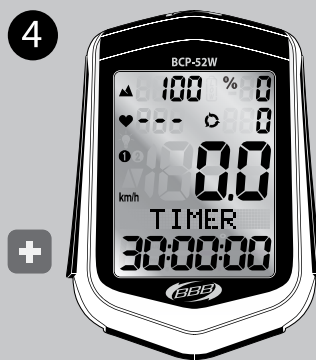


DISTANCE OR COUNTDOWN TIMER SET-UP

1. To set up the distance countdown function start with the **CADENCE** menu (**TIMER** or **DIST. CD** shown in display). Press **M** button for 3 seconds.
2. To choose between **DISTANCE COUNTDOWN** or **TIME COUNTDOWN** , press **+** or **-**. To select press **M**.



3. To select the first digit, press **+** or **-**. To select press **M**. Repeat these steps to select the other digits.
4. To start the **DISTANCE COUNTDOWN** or **TIME COUNTDOWN**, press **+**.

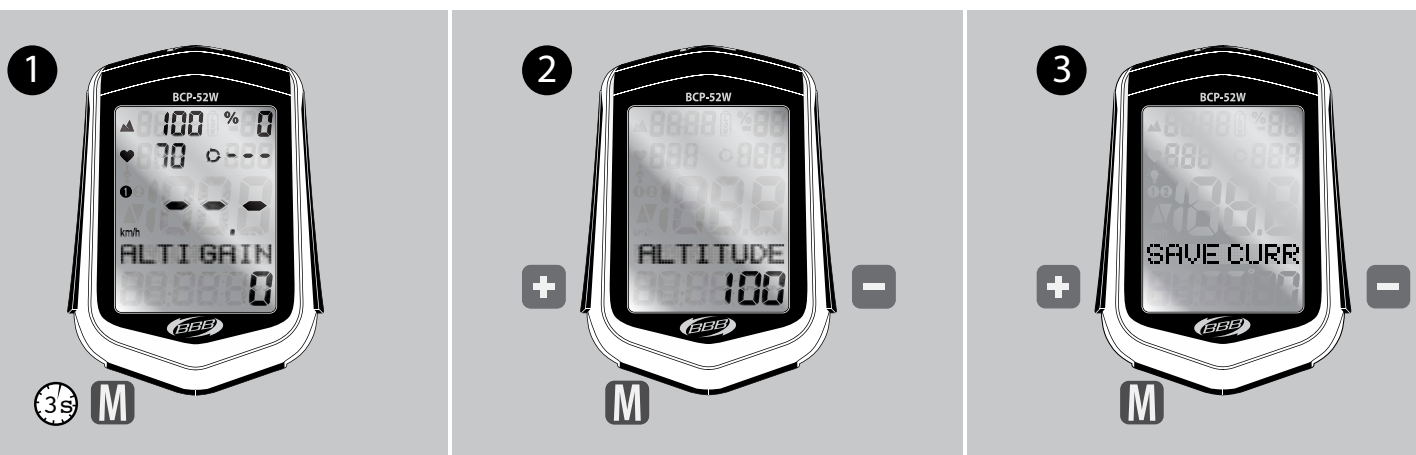


HOME ALTITUDE OR CURRENT ALTITUDE (BCP-52WA / BCP-52WAH ONLY)

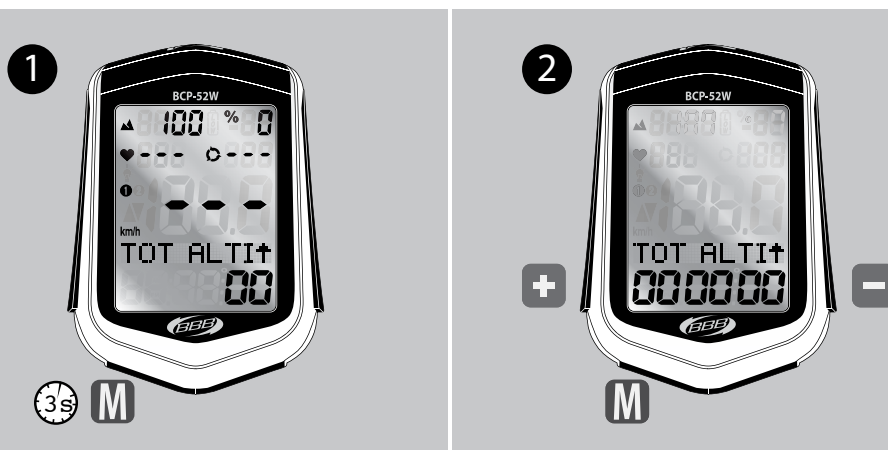
Page 17 shows how to set the home altitude. The home altitude can be described as preset start altitude.

It is also possible to change the start altitude without changing the home preset. This can be useful when you want to change the start altitude without losing the saved home altitude. For example when you ride only one day on an altitude that is different from home or when your ride starts at a different altitude every day.

1. Start with the **ALTITUDE** menu (**ALTI GAIN** shown in display). Press **M** button for 3 seconds.
2. To set the **ALTITUDE**, press **+** or **-**. To select press **M**. Repeat to set the other digits.
3. To change between **SAVE HOME** and **SAVE CURR** press **+** or **-**. Select **SAVE CURR** and press **M**. Now the altitude in the display is changed to the altitude you entered. The preset home altitude is not changed.

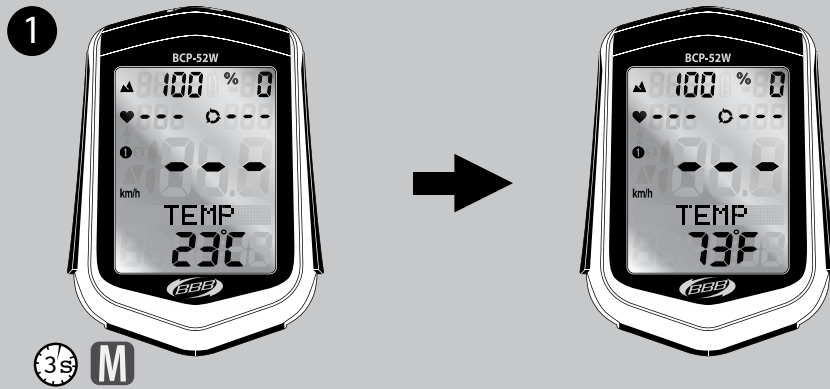
**TOTAL ALTITUDE GAIN SET-UP (BCP-52WA / BCP-52WAH ONLY)**

1. To enter the total gained altitude data manually, start with the **ALTITUDE** menu (**TOT ALTI↑** shown in display). Press **M** button for 3 seconds.
2. To set the **TOT ALTI↑** press **+** or **-**. To select press **M**. Repeat these steps to set the other digits.



SETTING °C or °F (BCP-52WA / BCP-52WAH ONLY)

1. To change between °C or °F start with the ALTITUDE menu (TEMP shown in display). Press M button for 3 seconds.

**BACKLIGHT**

1. The backlight can be activated in any function by pressing the - button. The backlight will automatically go off after 3 seconds.
2. To activate the automatic backlight function press - button for 3 seconds in any function. When the automatic backlight function is activated the backlight symbol  is visible in the LCD display. When automatic backlight is activated the backlight will switch on for 3 seconds when a button is pressed.
3. To switch off the automatic backlight function press - button for 3 seconds in any function. The backlight symbol  will disappear from the LCD display.



SECTION 5

ADDITIONAL INFORMATION

A. MENU STRUCTURE

To change between the different menu's press **M**.

To check different functions within a menu press **F**.

MENU	FUNCTIONS
SPEED	Avg Speed > Max Speed
TIME	Time > Ride Time > Tot Time 1 > Tot Time 2 (if paired)
DISTANCE	Trip Dist > Odometer 1 > Odometer 2 (if paired)
ALTITUDE	Alti Gain > Alti Loss > Tot Alti ↑ > Min Alti > Max Alti > Temp
CADENCE	Avg Cad > Max Cad > Timer
HEART RATE	Avg Hrtrt > Max Hrtrt > Kcal

B. DISPLAY ELEMENTS**SPEED PACER**

The **SPEED PACER** compares your current speed with your average speed.

 = Current speed is above average speed.

 = Current speed is below average speed.

LOW BATTERY INDICATOR

When the **LOW BATTERY** indicator appears on the display the battery in the main unit needs to be changed. Before changing the battery, write down your **ODO** and **TOTAL TIME** data.

The computer will automatically reset when the battery is removed. After installing a new battery you can set your **ODO** and **TOTAL TIME** data.



Batteries should be disposed in compliance with local regulations.

C. FUNCTIONS OVERVIEW

	BCP-52WAH (30 functions)	BCP-52WA (25 functions)	BCP-51WH (22 functions)	BCP-51W (17 functions)
Current speed	0	0	0	0
Average speed	0	0	0	0
Maximum speed	0	0	0	0
Riding time	0	0	0	0
Trip distance	0	0	0	0
Odometer 1	0	0	0	0
Odometer 2	0	0	0	0
Total odometer (1+2)	0	0	0	0
Clock (12 / 24h)	0	0	0	0
Low battery indicator	0	0	0	0
Auto start / stop	0	0	0	0
Speed pacer	0	0	0	0
Backlight	0	0	0	0
Total riding time 1	0	0	0	0
Total riding time 2	0	0	0	0
2nd wheel size	0	0	0	0
Auto sleep	0	0	0	0
Altitude	0	0	-	-
Home altitude storage	0	0	-	-
Altitude gain / loss	0	0	-	-
Maximum altitude	0	0	-	-
Minimum altitude	0	0	-	-
Percent grade	0	0	-	-
Total altitude gain (1+2)	0	0	-	-
Temperature (°C / °F)	0	0	-	-
Heart rate	0	-	0	-
Maximum heart rate	0	-	0	-
Average heart rate	0	-	0	-
Calories used	0	-	0	-
Upper / lower limit	0	-	0	-
<i>Cadence transmitter set (BCP-56)</i>	Optional	Optional	Optional	Optional
<i>Heart rate transmitter set (BCP-57)</i>	Included	Optional	Included	Optional

D. TROUBLESHOOTING

Check the following before taking the BBB DigiBoard in for repairs.

PROBLEM	POSSIBLE CAUSES	SOLUTION
No speed or incorrect speed.	• Magnet is not aligned or distance between sensor and magnet is too big. • Transmitter is not paired. • Battery power is low. • Wheel size is incorrect.	• Adjust sensor and magnet position. • Manually pair sensors. • Replace battery. • Set correct wheel size.
No cadence or incorrect cadence.	• Magnet is not aligned or distance between sensor and magnet is too big. • Transmitter is not paired. • Battery power is low.	• Adjust sensor and magnet position. • Manually pair sensors. • Replace battery.
No heart rate or incorrect heart rate.	• Elastic belt is too loose. • Contact areas are not moist. • Transmitter is not paired. • Battery power is low.	• Readjust the elastic belt for a snug fit. • Make the contact areas moist. • Manually pair sensors. • Replace battery.
Transmitter will not pair.	• Transmitter is not active. • Battery power is low.	• Remove the battery for 40 secs. • Replace battery.
Blank screen.	• Battery is empty. • No battery installed.	• Replace battery. • Install battery.

E. TECHNICAL SPECIFICATIONS

Transmission platform:	ANT+
Operation temperature:	-10 °C to +60 °C / 14 °F to 140 °F.
Storage temperature:	-20 °C to +70 °C / -4 °F to 158 °F
Main unit battery power:	3V Lithium battery: 1x (CR2032)
Dimensions and weight of main unit:	63 x 46 x 19.5mm / 33g

Batteries should be disposed in compliance with local regulations.





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