N.E.R.D

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Wireless 9 Function Cycle Computer
Wireless 12 Function Cycle Computer *

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ENGLISH

* = N.E.R.D Wireless 12 Function Cycle Computer only
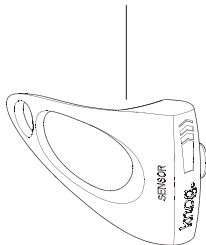
Wireless Cycle Computer   **Transmitter**   **Magnet**
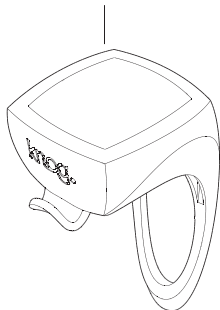
A MODE

ACTIVATION AREA

B SET
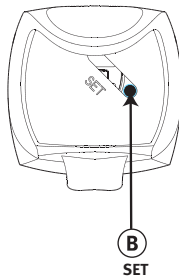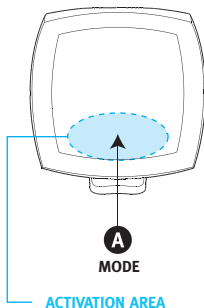
The Wireless N.E.R.D. has a **MODE** button that is activated by pressing the computer screen face in the area shown above. The **MODE** button is used for most normal operations of the computer. Throughout this manual, the **MODE** button is designated by **A**.

The **SET** button is located on the underside of the computer as indicated above. It is accessed by using a pen or other small object to depress it. The **SET** button is used for setup operations only. Throughout this manual, the **SET** button is designated by **B**.

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DATA SETTING PROCESS (Fig 1.1)

1. All user-input data is adjusted for each digit separately. The current digit to be set will flash.

2. Press Ⓐ to increase the digit value by 1.

3. Hold down Ⓐ for 2 seconds to advance to the next digit.

4. Press Ⓑ to store the on-screen data and advance to the next data setting.

5. Once all data setting is complete, hold down Ⓑ for 2 seconds to exit the data setting mode. This can also be done at any point whilst in data setting mode, leaving the remaining un-set data with a 🛇 reading.

Fig 1.1
DATA SETTING PROCESS
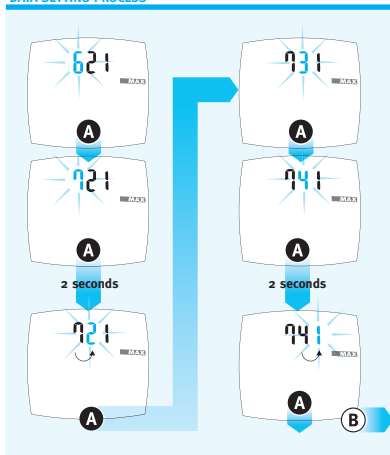
INITIATING THE COMPUTER (ALL CLEAR) (Fig 1.2)

1. A battery is already loaded in the main unit when purchased. Hold down Ⓐ and Ⓑ simultaneously for 3 seconds to initiate the computer and clear all data.

⚠️ *It is important to initiate the computer before first usage to prevent the computer producing errors.*

2. The LCD segments will be tested automatically after the unit is initiated.

3. Press Ⓐ to stop LCD test. You will then see a flashing **KM/H**.

UNIT SELECTION (Fig 1.3)

Press Ⓐ to toggle between **KM/H** or **M/H** (Mile/hour). Press Ⓑ to confirm the current selection.

CIRCUMFERENCE DATA SETTING (Fig 1.4a)

1. The display shows c2 155 for the Bike **1** default circumference value of 2155mm. Measure the value for your wheel by following the steps below. (The Bike **2** default circumference value is 2050mm.)*

MEASURING WHEEL CIRCUMFERENCE (Fig 1.4b)

Roll the wheel until the valve stem is at its lowest point (closest to the ground) then mark this first point on the ground. Roll the bicycle forward until the wheel has completed one full revolution and the valve stem returns to its lowest point. Mark the second point on the ground. Measure the distance between the marks. Enter this value to set the wheel circumference. It is important that this measurement is accurate to ensure correct data input when riding.
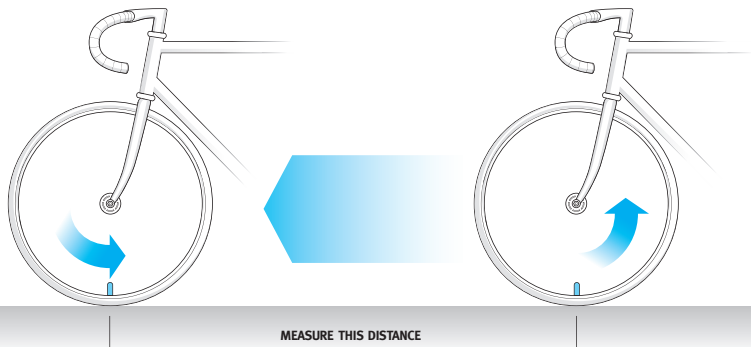
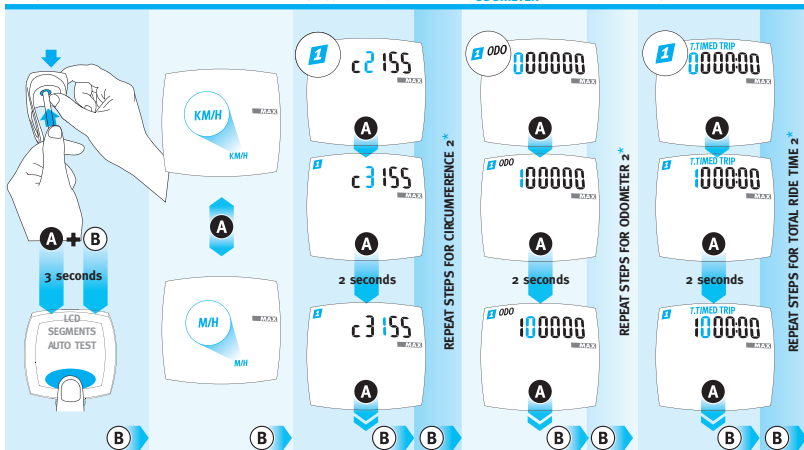## ODOMETER AND TOTAL TRIP TIME DATA SETTING (Fig 1.5)

1. Designed for entering in previous data of **ODO 1**, **ODO 2***, **T.TIMED TRIP 1** and **T.TIMED TRIP 2*** after a battery replacement. A new user does not need to set this data. Each press of Ⓑ advances to the next data setting screen.

2. Adjust the digits as described in the Data Setting Process. (Fig 1.1)

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Fig 1.4b
MEASURING WHEEL CIRCUMFERENCE

MEASURE THIS DISTANCE

Fig 1.2
ALL CLEAR

A + B

3 seconds

LCD
SEGMENTS
AUTO TEST

B

Fig 1.3
UNIT SELECTION

KM/H
MAX
KM/H

A

M/H
MAX
M/H

B

Fig 1.4a
CIRCUMFERENCE

1 c2155 MAX

A

1 c3155 MAX

A

2 seconds

1 c3155 MAX

A

B

REPEAT STEPS FOR CIRCUMFERENCE 2*

B

Fig 1.5
ODOMETER

1 ODO 000000 MAX

A

1 ODO 100000 MAX

A

2 seconds

1 ODO 100000 MAX

A

B

REPEAT STEPS FOR ODOMETER 2*

B

Fig 1.5
TOTAL RIDE TIME

1 T.TIMED TRIP 000000 MAX

A

1 T.TIMED TRIP 100000 MAX

A

2 seconds

1 T.TIMED TRIP 100000 MAX

A

B

REPEAT STEPS FOR TOTAL RIDE TIME 2*

B

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CLOCK SETTING (Fig 1.6)

1. The ⏱ symbol displays when setting the clock.
2. Select 12 hour AM/PM or 24 hour clock mode.

   Press Ⓐ to toggle between 12 hour AM/PM or 24 hour format. Hold down Ⓐ for 2 seconds to advance to the time setting screen.

3. Adjust the clock data according to the Data Setting Process. (Fig 1.1)
4. Press Ⓑ to save the modified data and exit the clock setting mode.

Fig 1.6
CLOCK SETTING PROCESS
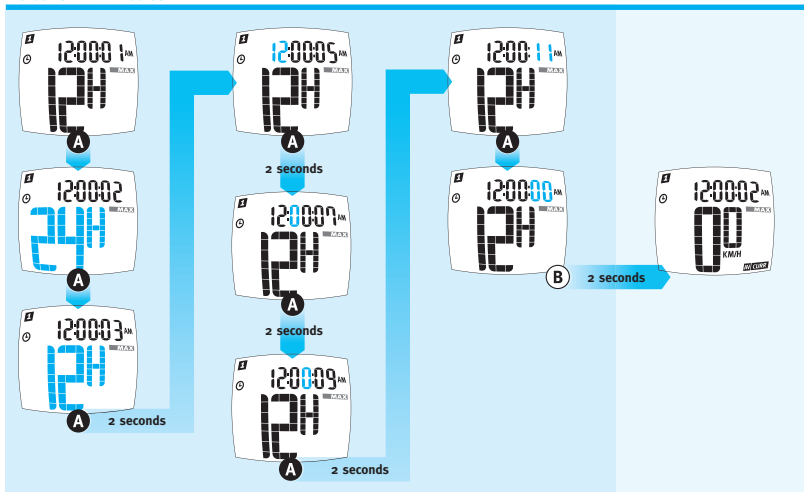
CURRENT SPEED

0.0–199.9 KM/H or 0.0–120.0 Mile/H

Displays the current speed on the main display when riding. The computer registers up to 199.9 KM/H or 120.0 M/H. (Suitable for wheel diameters of 24 inches and above only). When bike motion stops, speed calculations will continue for 4 seconds to confirm no more wheel signals have been transmitted.

⊘: 12H AM/PM OR 24H CLOCK

1:00:00–12:59:59 (AM/PM) or 0:00:00–23:59:59 (24H)

Displays the current time in 12 hour AM/PM or 24 hour format.

TRIP DIST: TRIP DISTANCE

0.00–999.99 KM or Mile

Displays the accumulated distance travelled from the last RESET operation.

TIMED TRIP: RIDING TIME

0:00:00 (H:MM:SS) – 99:59:59(HH:MM:SS)

Displays the total riding time from the last RESET operation.

Timing will automatically commence upon riding, and continue to count for 4 seconds after motion has stopped to confirm that no more wheel signals have been transmitted. The additional 4 seconds of counting are then subtracted automatically.

AVG: AVERAGE SPEED

0.0–199.9 (KM/H) or 0.0–120.0 (Mile/H)

Displays the average speed – calculated from the **TRIP DIST** divided by **TIMED TRIP**. This data is accumulated from the last RESET operation.

Displays 0.0 when **TIMED TRIP** is less than 6 seconds and is updated approximately every 1.2 seconds once **TIMED TRIP** is over 6 seconds.

⚠ *When* **TIMED TRIP** *is over 100 hours or* **TRIP DIST** *is over 1,000km/miles. The* **AVG** *,* **TIMED TRIP** *and* **TRIP DIST** *will automatically reset to* 0.

MAX: MAXIMUM SPEED

0.0–199.9 (km/hr) or 0.0–120.0 (mile/hr)

Displays the highest speed recorded from the last RESET operation.

RELATIVE SPEED GAUGE

A 16 segment gauge displaying the current and average speed as a side-by-side comparison – indexed from the recorded **MAX** speed. All information is calculated and accumulated from the last RESET operation.

DIST/DAY: DISTANCE PER DAY*

0.00–999.99 (KM or Mile)

Displays the accumulated distance travelled over a 24 hour period (12am–12am).

T.TIMED TRIP: TOTAL RIDING TIME (BIKE 1, 2*)

0:00:00 (H:MM:SS) – 99:59:59(HH:MM:SS), then 100:00 (HHH:MM) – 9999:59 (HHHH:MM)

Displays the total accumulated riding time from the beginning of the computer's use. **T. TIMED TRIP** 1 and 2* data cannot be cleared by a RESET operation.

ODO: ODOMETER (BIKE 1, 2*)

0–999999 (KM or Mile)

Displays the total distance travelled from the beginning of computer use. The **ODO** 1 and 2* data cannot be cleared to zero by a RESET operation.

SCAN : AUTO SCANNING DISPLAY MODE

Displays all functions in a looped sequence; automatically updating the display mode every 5 seconds.

LOW: LOW BATTERY INDICATOR

Displays the LOW symbol when the battery charge drops below 2.4V.

☾: DISPLAY BACKLIGHT*

When activated, the display illuminates for 5 seconds each time Ⓐ is pressed.

⚠ *Data for all functions is updated approximately every 1.2 seconds.*

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MODE BUTTON (Fig 2.1)
Press **Ⓐ** to advance from one mode display to another.

SET BUTTON
Press **Ⓑ** to enter the setting screens to re-set the bike circumference or the current time.

RESET OPERATION (Fig 2.2)
1. Hold down **Ⓐ** for 3 seconds until the display digits are cleared. The computer will reset the stored **AVG**, **TRIP DIST**, **TIMED TRIP** and **MAX** data back to **0**.

⚠ *A reset operation only resets the data for the currently selected bike (**1** or **2***) and does not reset the **ODO**, **T.TIMED TRIP** or **DIST/DAY** data.*

AUTO POWER OFF & STANDBY MODE
To preserve battery power, the computer will automatically power off to standby mode after 15 minutes. Standby mode displays only the clock. Normal operation will be returned on by pressing **Ⓐ** once whilst in standby mode.

AUTOMATIC START/STOP
The computer will automatically begin counting data upon riding and stop counting data when riding is stopped.

⚠ *In order to automatically begin counting, the computer must not be in standby mode.*

TURNING ON/OFF THE DISPLAY BACKLIGHT* (Fig 2.3)
1. To turn the backlight on, hold **Ⓐ** for 6 seconds until the display shows the 🌙 icon.
2. To turn the backlight off, repeat step 1 until the 🌙 icon disappears.

⚠ *While the backlight is active, pressing **Ⓐ** once illuminates the current mode display only— **Ⓐ** must be pressed again whilst the backlight is on to advance to the next mode display.*
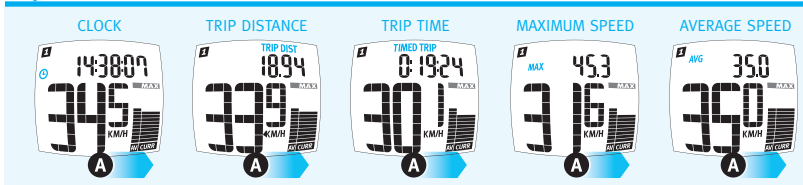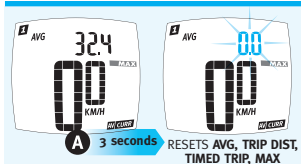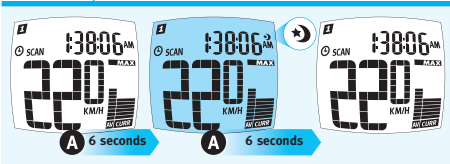
Fig 2.1
SEQUENCE OF FUNCTION MODES

CLOCK	TRIP DISTANCE	TRIP TIME	MAXIMUM SPEED	AVERAGE SPEED

Fig 2.2
RESET OPERATION

3 seconds — RESETS **AVG**, **TRIP DIST**, **TIMED TRIP**, **MAX**

Fig 2.3
TURNING ON/OFF THE DISPLAY BACKLIGHT*

6 seconds — **6 seconds**

CIRCUMFERENCE RE-SETTING

1. Press Ⓐ until the display advances to the **ODO** mode.
2. Press Ⓑ to enter the circumference setup screen.
3. Adjust the desired value according to the Data Setting Process. (Fig 1.1)
4. Hold Ⓑ for 2 seconds to store the modified data.

CLOCK RE-SETTING

1. Press Ⓐ until the display advances to the clock mode.
2. Press Ⓑ to enter the clock setup screen.
3. Adjust the desired value according to the Data Setting Process. (Fig 1.1)
4. Hold Ⓑ for 2 seconds to store the modified data.

BIKE 1 or BIKE 2 SELECTION* (Fig 2.4)

1. This computer has two sets of circumference memory to calculate data for two different bikes.

2. Hold down Ⓑ for 3 seconds until it enters the bike selection screen.

a) Press Ⓐ to toggle between Bike 1 or 2. It displays your wheel circumference "C****".

b) Hold Ⓐ for over 2 seconds to store the selection and jump to the normal operation mode.
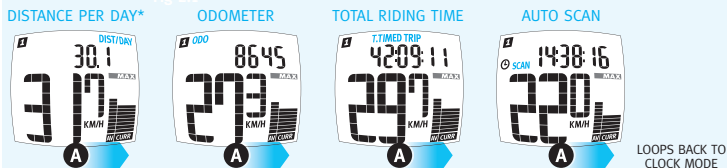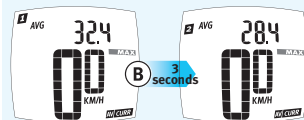
Fig 2.1
SEQUENCE OF FUNCTION MODES (CONT.)

DISTANCE PER DAY*   ODOMETER   TOTAL RIDING TIME   AUTO SCAN

LOOPS BACK TO CLOCK MODE

Fig 2.4
BIKE 1 OR BIKE 2 SELECTION*

MAIN UNIT (Fig 3.1)

The main computer unit is designed with a removable and rotatable main housing for mounting to handlebars or a handlebar stem. The silicon strap makes the installation on a bike super easy and fast.
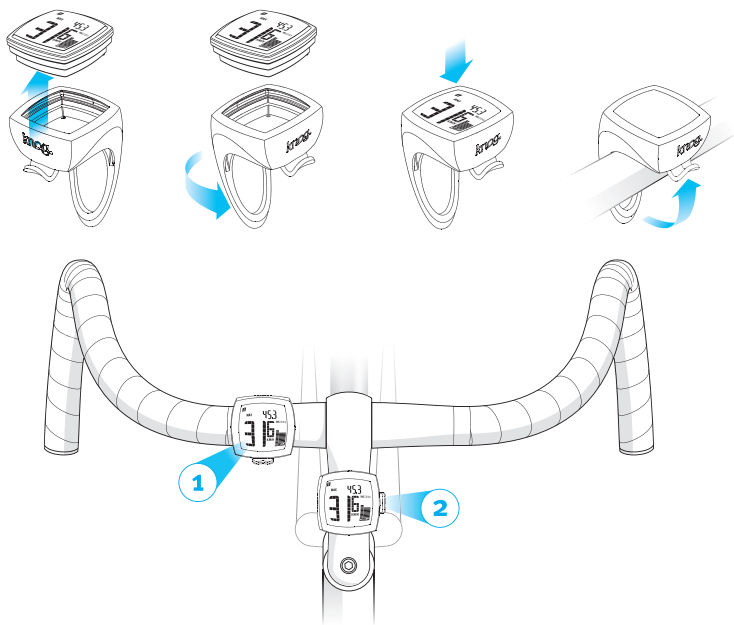
1. Chose a suitable location on your handlebars (**1**) or stem (**2**) that will enable a good line of sight down to the transmitter and the main unit with minimal physical obstructions.

2. Pull the silicon strap around the bars, fit it over the hook and you're done!

⚠ *The silicon strap on the main computer is designed to accommodate mounting diameters of 22mm up to 38mm.*

⚠ *For optimum wireless signal clarity your N.E.R.D. should be positioned 5cm (2 inches) away from your white bike light.*

Fig 3.1

* = N.E.R.D Wireless 12 Function Cycle Computer only

SPOKE MAGNET

1. Unscrew the two halves of the magnet and mount to a spoke on the front wheel of your bicycle. (Fig 3.4)
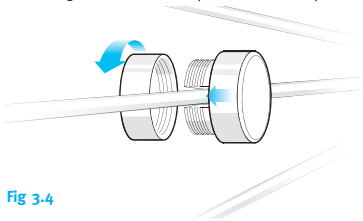2. Tighten the screw using a flat head screwdriver to ensure the magnet cannot move up and down the spoke.

Fig 3.4

TRANSMITTER UNIT

The wireless transmitter unit is designed to allow easy, fast fitment and removal to the front wheel forks.

1. Chose a suitable location on your forks that will enable a good line of sight between the transmitter up to the main unit with minimal physical obstructions. (Fig 3.5)
2. Ensure the **SENSOR** text is located on the wheel side of the fork to ensure a close proximity to the spoke magnet.
3. Ensure the arrow on the silicon housing is pointing upward towards the main unit.
4. Pull the silicon strap around the fork and fit it over the hook. Chose the most suitable one of the two hooks on the strap, depending on your fork diameter.
5. Once mounted, move the transmitter unit around to ensure the closest mounting position relative to the spoke magnet. Optimum sensing distance between the magnet and the transmitter housing is ‹5mm. (Fig 3.6)

⚠ *The silicon strap on the transmitter unit is has two loops and is designed to accommodate fork diameters from 20mm up to around 45mm.*
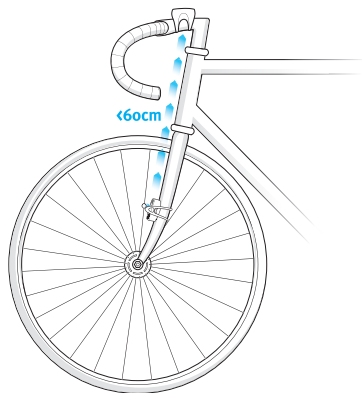

Fig 3.5

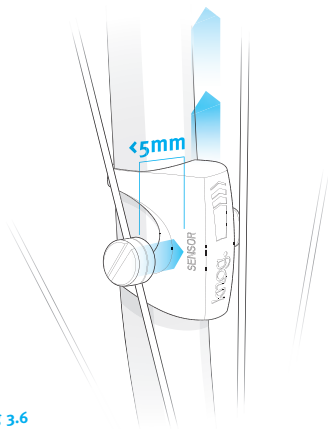**Fig 3.6**

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MAIN UNIT BATTERY CHANGE (Fig 4.1)

1. The symbol **LOW** will appear to indicate the battery power is low.
2. The battery should be replaced with a new battery within a week of this symbol appearing.
3. All data will be cleared when the battery is replaced, however you are able to re-enter the **ODO 1**, **ODO 2***, **T.TIMED TRIP 1** and **T.TIMED TRIP 2*** data accumulated up to the battery replacement. It is important to keep a record of this data, as well as the wheel circumferences before removing the old battery.
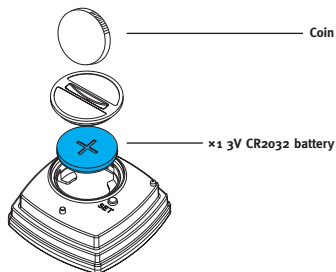4. Replace with a new CR2032 battery and initiate the main unit.

TRANSMITTER UNIT BATTERY CHANGE (Fig 4.2)

1. Remove the transmitter from the bike forks.
2. Peel the silicon body back from around the electronics housing.
3. Remove the sealed end cap and the old battery.
4. Replace with a new LR44 cell. The positive pole of the battery (indicated with a **+** sign, should be facing outwards.
5. Replace the housing lid making sure it is pressed firmly into the housing.
6. Re-fit the silicon body over the electronics housing, making sure the silicon is not twisted.
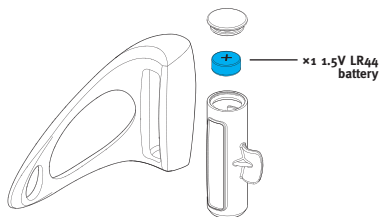

Coin

×1 3V CR2032 battery

Fig 4.1

×1 1.5V LR44 battery

Fig 4.2

CARE AND MAINTENANCE INSTRUCTIONS

1. Avoid leaving the main unit exposed to direct sunlight when not riding.
2. Once or twice a month, check the relative position and gap of the sensor magnet and the transmitter housing to ensure they have not moved.
3. To clean the unit, use a damp cloth and wipe lightly. Do not attempt to use thinners, alcohol or benzene as these will damage the unit.
4. We know the unit looks good but remember to watch the road!

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Sensor with transmitter	Non-contact magnet sensor with analogue wireless transmitter
Wireless sensing distance	55cm (1.8 feet) between the transmitter and the main unit.
Cross talk/interference	Within 40cm (15.8"), no interference by 2 bicycles carrying similar cycle computers, even when ridden side by side.
Wheel circumference setting	1mm-3999mm (1mm increments)
Operating temperature	0°C - 50°C (32°F - 122°F)
Storage temperature	-10°C - 60°C (14°F - 140°F)
Main unit battery power	×1 CR2032 3V cell. ⚠ *The transmitter battery should last approximately one year with an average usage of around 1.5 hours per day.*
Transmitter unit battery power	×1 LR44 1.5V cell. ⚠ *The transmitter battery should last approximately one year with an average usage of around 1.5 hours per day.*
Dimensions	Main unit: 53 × 51 × 40mm Transmitter unit: 52 × 27 × 52mm
Weight	Main unit: 45 grams Transmitter unit: 39 grams

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