

Bike Speed / Cadence 2-in-1 Sensor



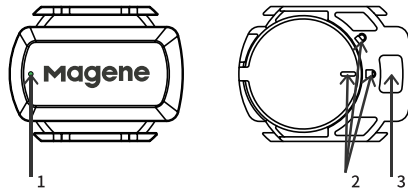
Model:S304

► Magene Dual Mode Sensor Introduction

The product supports both Bluetooth 4.0 and ANT+ protocols and can be used as both a speed sensor or a cadence sensor.

The sensor can be used by most smartphone apps and GPS Head units. Re-installing the battery will switch modes between cadence and speed sensor.

When the battery is installed, the green light flashes to indicate that it is in speed mode, or the red light flashes to indicate the sensor is in cadence mode.



1. Red and green mode indicator light (visible only when battery is first installed)

2. Battery compartment locked / unlocked indicator

3. Silicone gasket mounting position (Cadence sensor mode)

► Using the Sensor (1)

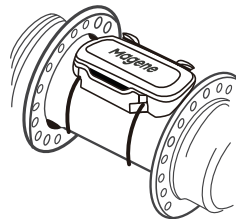
★ The new sensor comes with a battery insulation sheet that must be removed from the battery compartment before use.

Speed sensor mode

1. Reinstall the battery and the green light will illuminate to indicate that the sensor is in speed sensor mode.

2. Install the sensor on the front hub using a rubber ring.

3. Spin the wheel and search for the sensor using ANT+ or Bluetooth device.



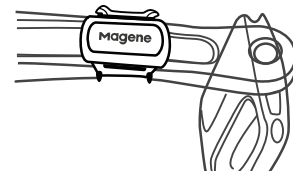
► Using the Sensor (2)

Cadence sensor mode

1. Remove and reinstall the battery and the red indicator lights up to indicate that the sensor is in cadence mode.

2. Install the flat silicone gasket on the bottom of the sensor and install the sensor on the inside of the left crank using a rubber ring.

3. Rotate the crank and search for the cadence sensor using an ANT+ or Bluetooth device.



Note: After installing the sensor, please make sure that the sensor and rubber ring do not rub against the shoes or bicycle during riding, so as to avoid damage or loss of the sensor during use.

► Device Connection Instructions

Indicator Light	Status
Flashing Green Light	Speed data is being broadcast over bluetooth.*
Flashing Red Light	Cadence data is being broadcast over bluetooth.*
Alternatively Flashing Red & Green	Device Battery Low*

1. The sensor will only start sending Bluetooth and ANT+ broadcasts after it is properly installed and woken-up. Then, you can use the corresponding device or APP to search and connect.

2. When using the Bluetooth protocol, you can only connect to one device or APP concurrently. Please disconnect the previous device or APP when you want to change it.

3. When using a smartphone app, you need to search for the sensor in the app, searching through the phone system's bluetooth settings is invalid

4. After the sensor is in static, it will automatically enter the sleep state for 1 minute to save power.

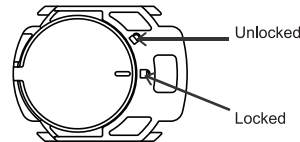
► Product Specification

5. Rotating the crank or spinning the wheel is the wake up operation. It will make the sensor be found from the list of connectable sensors in 30 seconds. If the sensor doesn't be connected in 30 seconds, it will stop broadcasting and can't be found any more. You must stop rotating the crank or spinning the wheel for a couple of seconds and redo the wake up operation.

Accessories: Sensor, Silicone pads, Rubber band, CR2032 Battery	
Weight: 9g	Battery life: 500h
Temperature: -20°C~50°C	Water Proof: IP66
Protocol: Bluetooth 4.0&ANT+	Sensor Scale: 38.3*29.8*8.9mm
Maximum Speed: 700c 110km/h	

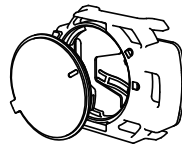
★ Actual battery life depends on using environment.

► Battery Replacement



1. Open the battery compartment by turning the position mark on the battery cover counterclockwise from the lock position to the unlocked position.

2. Place the new battery into the battery compartment and press the battery cover into position with the marker aligned with the unlocked indicator (as shown below). After the battery cover is fully pressed, turn the battery cover clockwise to align the indicator to the locked position.



► FAQ (1)

1. Which apps and GPS head-units are compatible with the sensor?

A: The sensor is compatible with all devices that support the ANT+ standard protocols, such as; Garmin, Bryton, iGPSPORT, Zwift, Onelap, BKool, TACX, etc and many other virtual training software. When using Bluetooth it's compatible with magene bike computer, XingZhe, etc.

2. Why is the sensor not discovered by other equipment when it is not used for a long time?

A: In order to save power, the sensor will go to sleep when it detects no data for 1 minute. Normal broadcasting will resume when the device is used.

3. Why doesn't the indicator light illuminate when reinstalling the battery?

A: 1) It's possible the battery connector is covered with foreign contaminate or the spring is not pushed up; 2) If the connector is clean and sprung-up, replace the battery with a brand new battery. (battery model is CR2032-3V); (If you are still unable to solve your problem, please contact online technical support).

► FAQ (2)

4. Why can't the newly purchased Magene sensor be found by other equipment? You should check;

1) Check the device is in the correct mode. Red: Cadence, Green: Speed.
2) Whether the software is compatible.
3) Whether there are any inductive magnets causing interference.
4) When searching for the device using a GPS headunit, select the "speed" or "cadence" option, do not select the "Speed/Cadence" (combined) option.
(If you are still unable to solve your problem, please contact online technical support).

5. Why does a GPS head unit connected to the sensor in speed mode not display speed data?

This is because the head unit is set to prefer speed data from the GPS data. Therefore if you have not obtained a GPS position lock, there will be no speed data. Please change the settings of the head unit to prefer speed data from a speed sensor.

► FAQ (3)

6. Why does a GPS head unit connected to the sensor in speed mode not display cadence data?

1) Determine whether the working mode of the device is the cadence mode; 2) check whether the connection with the software is normal; 3) whether there is an induction magnet left around; 4) if the battery is dead, replace it with a new one. (If you are still unable to solve the problem, please contact online technical support)

7. Is there any delay in the data of the sensor?

The sensor uses geomagnetic sensor measurement data, abandoning the traditional magnet sensing scheme - the installation is more convenient, but there is a certain delay in calculating the data, but the main reason for the data display delay is that the bicycle GPS head unit uses an averaging algorithm to smooth the data.

8. How many hours can the Magene cadence sensor be used?

The battery life is about 500 hours (there will be differences due to the influence of temperature and use environment)

► Firmware Updates

Install the Magene Utility app on a Bluetooth-enabled smartphone and connect to the sensor to get the latest firmware.



App Download

E-mail: support@magenefitness.com

For more information, please visit:
<http://www.magenefitness.com>

► Multi-language Manual



Manual in multiple languages
can be available from the following link:
<https://magenefitness.com/pages/manual>

FCC Statement

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) **This device may not cause harmful interference**
- (2) **This device must accept any interference received, including interference that may cause undesired operation.**

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment .

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.