

# **gearsensor.com**

**gearsensor.com assembly instructions**

**Version: V.1 GSFD**

**Valid from: 20.11.2016**



## **Gearsensor.com certifications:**

Gearsensor.com is RoHS Compliant, based on information provided by our suppliers, this product does NOT contain the substances restricted by the RoHS legislation at levels over the maximum concentration values.

Gearsensor.com is fully CE certified, it also includes EMC certification.



## General description

It's a unique patent pending system, developed and made in Czech Republic. It's based on intelligent shifting sensor fixed on shifting cable, which is reducing or cutting off motor drive when the rider activates gear shifting. This market-proven device allows smooth shifting in combination with **front Deraillleur** (double and triple chain wheel). It also provides longer lifetime to whole shifting system.

Gearsensor.com is made in Czech Republic.

**Gearsensor.com** are marked on housing using laser technology. Sample shown below.

**gearsensor.com**

made in Czech Republic

GSFD - 16.33 - 00053

Character position	Description
1+2+3+4	letter GS (permanently)
5+6+7	space+dash+space
8+9	year of production
10	dot
11+12	week of production
13+14+15	space+dash+space
16+17+18+19+20	Production batch number

# gearsensor.com assembling to the e-bike

Do not open the gearsensor.com housing for assembly!

## First step – position choosing

For choosing the ideal position we recommend to follow these main instructions:

- place **gearsensor.com** near shifter (handle bars), as shown on the picture below



## Second step -outer cable cutting

Cut 50mm of the outer casing, and place cap ends on the both ends of cutted outer casing.

### Third step – inner cable routing via housing

Start pushing the inner cable into the plastic housing from LED light side of **gearsensor.com**. When pushing inner cable into the housing, keep inner cable as much as possible parallel with both axis of the housing. Red Arrow showing shifting cable direction from the shifter.



Now that you have the shifting cable inside of the housing and you have to push harder until the shifting cable goes out of the housing on the other side of **gearsensor.com**. When pushing inner cable into the housing, keep inner cable as much as possible parallel with both axis of the housing.



In below picture the inner cable is correctly fixed into the housing. Then adjust shifting system properly, and connect gearsensor.com to drive unit input.



### Last step – test

How do you know that **gearsensor.com** is working properly? If the **gearsensor.com** is connected correctly, after turning on the control unit on your e-bike the **gearsensor.com** LED indicator will flash 3 times. Also, when the shifting process is activated, then LED indicator blinks once.

## **gearsensor.com without connector**

If you do need to connect **gearsensor.com** to any mid-drive unit without a connector, then see below the description of the wires:

Black wire – Ground(earth)

Green or Blue wire – Signal

Red wire - Voltage supply

### **Maintenance Notice:**

If E-BIKE is stored for longer time period (1 month and more with no shifting cable movement), it is essential to store bike in dry storage and once a month change gears (change at least 5x gears at one time) and continue in changing gears once a month for all storage period in order to obtain full lifetime of gearsensor.com! Breaching of this instructions, could lead to severe malfunction of gearsensor.com.

For this maintenance operation is no need to power up E-BIKE system, because it is just mechanical operation.

Explanation in this case: combination of seated dirt (salty conditions around seaside) and dampness could lead to oxidation and oxidation could cause jam between peg and pulley.

**Agentura Repro spol. s r.o. CZECH REPUBLIC**

[www.gearsensor.com](http://www.gearsensor.com)