

PearTune MSO Bosch SMART + RIM Magnet CX

Product Data Sheet

Product description

The **PearTune MSO Bosch SMART + RIM Magnet CX** tuning chip is an additional device developed by **PearControl** for e-bikes with the **Bosch Smart drive system with Performance Line CX Gen4 and Gen5** engines. It is used to remove the 25 km/h pedaling speed limit of the e-bike. The product is designed with minimal dimensions for easy installation in all e-bike models from all manufacturers on the market and for flawless cooperation with speed sensors in the original Bosch system.

Product variant description

- 3.0 Normal : Chip in basic version. Possibility of activation/deactivation.
- 3.0 Still ON: Chip in the basic version. Automatically active throughout the ride.
- 4.0 Chip in an extended version. Possibility of personal settings in the chip service menu.
- 5.0 Chip in the highest variant. Possibility of activation/deactivation and chip lock by remote control. Personal settings in the full service menu

Order codes

PT-MSO-3.0 -B2 -SMART-RIM-CX	PearTune MSO 3.0 Normal BOSCH SMART + RIM magnet CX
PT-MSO-3.0 -B2 -SMART-RIM-CX-X	PearTune MSO 3.0 Still ON BOSCH SMART + RIM magnet CX
PT-MSO-4.0 -B2 -SMART-RIM-CX	PearTune MSO 4.0 BOSCH SMART + RIM magnet CX
PT-MSO-5.0-RC-B2-SMART-RIM-CX	PearTune MSO 5.0 REMOTE CONTROL BOSCH SMART + RIM magnet CX

Compatibility

The device is fully compatible with the **BOSCH SMART System Performance Line CX Gen4 and Gen5 engine** and all displays available on the market for these engines such as Kiox 300, Kiox 500, Purion 200, Intuvia 100, Remote Control etc.

Fully compatible with the latest Bosch SW update 10/2025 | Version 17.16.0

Also fully compatible with the GPS module from Bosch: Bosch connect module

The PearTune chip is also fully functional using the original Bosch E-BIKE FLOW APP, including enabling the transfer of diagnostic data.

Installation

It takes place directly in the engine compartment using waterproof connectors for connection to the engine, display and PearTune simulator. Furthermore, the speed sensor with waterproof connectors is installed on the rear fork of the e-bike. The magnet is attached to the spoke of the rear wheel with a recommended distance of 2–10 mm from the sensor.

Calibration is performed completely automatically without user intervention during the first switching on or off of the chip.

A detailed installation procedure can be found in the enclosed installation manual. Careful installation takes approximately 45 min. including a test ride.

Activation

Activation/Deactivation can be done in two ways:

1. **by starting the WALK function** (press the MINUS button for 1-2 seconds until the first digit 9 of the WALK function countdown is displayed, then you must release it immediately (before the number 8 is displayed))
2. or **by pressing the - + - + buttons** (i.e. 4 presses) , start from the TURBO assistance mode with the MINUS button .

Chip activation is indicated by the display of 19 km/h instead of the current speed for 2-3 seconds. Chip deactivation is indicated by the display of 12 km/h instead of the current speed for 2-3 seconds.

Calibration is performed completely automatically when the chip is first turned on or off.

Speed limit

completely removed

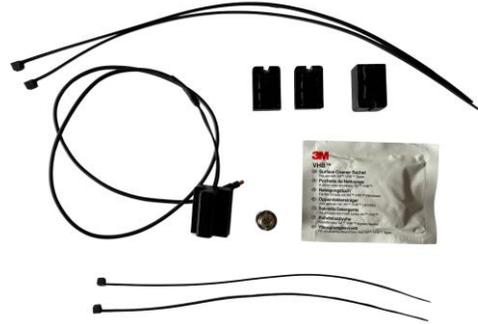
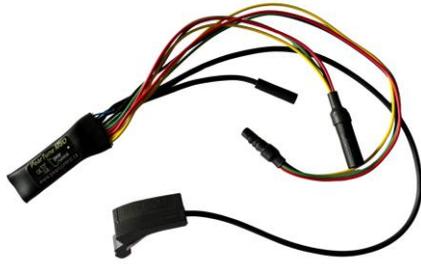
Displaying values

When riding with the chip on, the e-bike display correctly displays the actual speed up to 22.9 km/h. After exceeding this value, the actual speed is displayed on the last two digits of the display, for example: 23.3 corresponds to a speed of 33 km/h, 24.2 corresponds to a speed of 42 km/h, etc.

Key product features

- Fully compatible with the latest Bosch software version
- Full removal of the speed limit
- True display of real speed after the decimal point
- No additional km count and no need to wait to turn off the ebike after stopping/ending the ride.
- Small dimensions allow easy installation in all models of all e-bike manufacturers
- Fully functional with Bosch Ebike flow app, including allowing diagnostic data transmission
- Also fully compatible with the GPS module from Bosch: Bosch connect module
- PearTune chip is not traceable even when connected to original Bosch diagnostics
- Fully automatic calibration and adaptation of the chip to the ebike

Product photos



Package contents

- Tuning chip with simulator
- Speed sensor
- Magnet
- Assembly kit (double-sided tape, 4 pcs. cable ties, degreasing wipes)
- Installation and safety instructions

Technical specifications

- Dimensions without wires (L x W x H): 18 mm × 12 mm × 3 mm
- Cable length: 550 mm
- Supply voltage: 5-24 V
- Maximum current consumption: 100 mA
- Maximum power consumption: 1.5 W
- Weight of chip + accessories: 19 g + 36 g
- Power supply: from the original Bosch system
- Operating temperature: -10°C to +50°C
- Material: ABS plastic, color black

Manufacturer

PearControl , s. r. o, Příkopy 1889, 393 01 Pelhřimov, CZECH REPUBLIC

Notice

The use of tuning devices for e-bikes is intended exclusively for **sports and racing purposes outside public roads**. By using the PearTune MSO device, the user agrees to use the modified e-bike in accordance with the applicable legislation of the destination country. The user also acknowledges that the operation of bicycles outside one's own land or land designated for this purpose, with the PearTune MSO chip installed but deactivated, may not be in accordance with the legislation. The manufacturer does not guarantee that the factory warranty of the bicycle will not be violated, nor does it guarantee the impossibility of damage or blockage of the e-bike system. The manufacturer disclaims any liability for damage to health or property that may arise in connection with the installation or use of this product.