

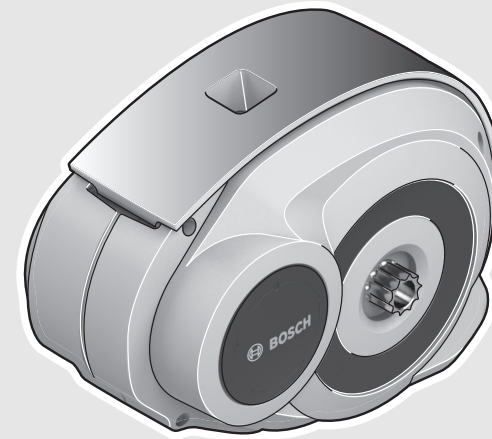
Active Line

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Active Line



Drive Unit 25 km/h

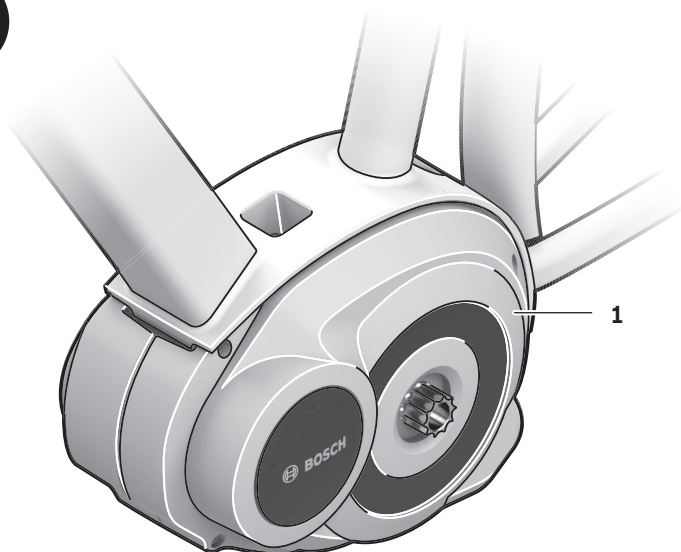
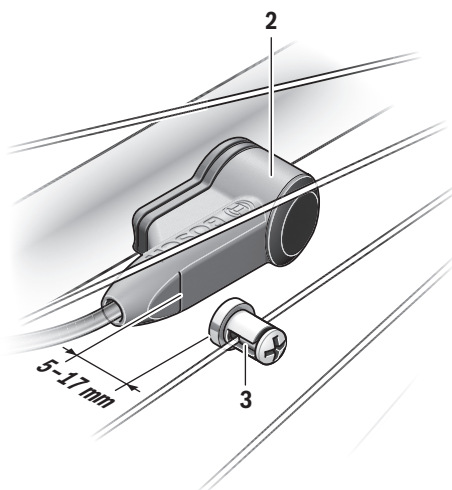
0 275 007 040 | 0 275 007 042



BOSCH

en Original instructions



**A**

Safety Notes



Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all safety warnings and instructions for future reference.

The term “battery pack” used in these operating instructions, irrespective of model, refers both to standard battery packs (battery packs with holder on the bike frame) and to rack-type battery packs (battery packs with holder in the rear rack/carrier).

- ▶ **Do not open the drive unit yourself. The drive unit must be repaired only by qualified experts and only with original spare parts.** This will ensure that the safety of the drive unit is maintained. Unauthorised opening of the drive unit will void warranty claims.
- ▶ **All components mounted to the drive unit and all other components of the eBike drive (e.g., the chainwheel, chainwheel seat, pedals) may be replaced only with identical components or components specifically approved for your eBike by the bicycle manufacturer.** This protects the drive unit against overload and damage.
- ▶ **Remove the battery pack from the eBike before beginning work (e.g. inspection, repair, assembly, maintenance, work on the chain, etc.) on the eBike, transporting it by car or plane, or storing it.** Unintentional activation of the eBike system poses a risk of injury.
- ▶ **The eBike system can switch itself on when the eBike is pushed backwards.**
- ▶ **The push-assistance function may only be used when pushing the eBike.** Danger of injury when the wheels of the eBike do not have ground contact while using the push-assistance function.
- ▶ **If the push assistance is switched on, the pedals will also rotate on bikes with back-peddalling function.** When the push assistance is activated, make sure that your legs are a sufficient distance away from the rotating pedals. There is a risk of injury.
- ▶ **Use only original Bosch battery packs approved for your eBike by the manufacturer.** Using other battery packs can lead to injuries and pose a fire hazard. When using other battery packs, Bosch shall not assume any liability and warranty.
- ▶ **Do not make any modifications to your eBike system or fit any other products which would be suitable for increasing the performance of your eBike system.** This normally reduces the lifetime of the system and risks damage to the drive unit and the bike. There is also a risk of losing the guarantee and warranty claims on the bike you have purchased. By handling the system improperly you are also endangering your safety and that of other road users, thus running the risk of high personal liability costs and possibly even criminal prosecution in the event of accidents attributable to manipulation.

- ▶ **Please observe all national regulations on registering and using eBikes.**
- ▶ **Read and observe the safety warnings and instructions in all operating instructions of the eBike system and in the operating instructions of your eBike.**

Product Description and Specifications

Intended Use

The drive unit is intended only for driving your eBike and must not be used for other purposes.

Product Features

The numbering of the components shown refers to the illustrations on the graphic pages at the beginning of the manual. Individual illustrations in these operating instructions may differ slightly from the actual circumstances depending on the equipment of your eBike.

- 1 Drive unit
- 2 Speed sensor
- 3 Spoke magnet of the speed sensor

Technical Data

Drive Unit		Drive Unit
Article number		0 275 007 040 0 275 007 042
Rated continuous output	W	250
Torque at drive, max.	Nm	50
Rated voltage	V _{nom}	36
Operating temperature	°C	– 5 ... + 40
Storage temperature	°C	– 10 ... + 50
Degree of protection		IP 54 (dust and splash water protected)
Weight, approx.	kg	4

Bike lights ¹⁾		
Voltage, approx. ²⁾³⁾	V _{nom}	6/12
Maximum output		
– Front light	W	8.4/17.4
– Taillight	W	0.6/0.6

1) Not possible via the eBike battery pack in all country-specific versions, depending on the statutory regulations

2) The voltage level is preset and can be changed only by the bicycle dealer.

3) When changing the bulbs, ensure that the bulbs are compatible with the Bosch eBike system (ask your bicycle dealer) and that the specified voltage matches. Bulbs must be replaced only with bulbs of the same voltage.

▶ **Incorrectly inserted bulbs can be destroyed!**

Assembly

Inserting and removing the battery pack

For inserting and removing the eBike battery pack in/from the eBike, please read and observe the battery pack operating instructions.

Checking the Speed Sensor (see figure A)

The speed sensor **2** and its spoke magnet **3** must be mounted in such a manner that the spoke magnet, after a turn of the wheel, moves past the speed sensor with a clearance of at least 5 mm, yet no more than 17 mm.

Note: If the distance between speed sensor **2** and spoke magnet **3** is too small or too large, or if the speed sensor **2** is not properly connected, the speed indication will fail, and the eBike drive unit will operate in emergency mode.

In this case, loosen the screw of the spoke magnet **3** and fasten the spoke magnet to the spoke in such a manner that it runs past the mark of the speed sensor at the correct clearance. If the speed is still not being indicated in the speed indication after this, please contact an authorised bicycle dealer.

Operation

Initial Operation

Requirements

The eBike system can only be activated when the following requirements are met:

- A sufficiently charged battery pack is inserted (see battery pack operating instructions).
- The on-board computer is properly inserted in the holder (see on-board computer operating instructions).
- The speed sensor is connected properly (see "Checking the Speed Sensor", page English – 2).

Switching the eBike System On/Off

Options for **switching on** the eBike system:

- If the on-board computer is already switched on when you insert it into the holder, then the eBike system will be switched on automatically.
- With the on-board computer and the eBike battery pack inserted, briefly press the On/Off button of the on-board computer (see on-board computer operating instructions).
- When the on-board computer is inserted, press the On/Off button of the eBike battery pack (see battery pack operating instructions).

The drive is activated as soon as you step on the pedals (except when in the push aid feature, see "Switching the Push-assistance mode On/Off", page English – 3). The motor output depends on the settings of the assistance level on the on-board computer.

As soon as you stop pedaling when in normal operation, or as soon as you have reached a speed of 25 km/h, the assistance from the eBike drive is switched off. The drive is automatically re-activated as soon you start pedaling again and the speed is below 25 km/h.

Options for **switching off** the eBike system:

- Press the On/Off button of the on-board computer.
- Switch the eBike battery pack off by its On/Off button (see battery pack operating instructions).
- Remove the on-board computer out of its holder.

If the eBike is not moved **and** no button is pressed on the on-board computer for 10 minutes, the eBike system will shut down automatically in order to save energy.

eShift (optional)

eShift is the integration of automatic gear shifting systems into the eBike system. The eShift components are electrically connected to the drive unit by the manufacturer. The operation of automatic gear shifting systems is described in the operating instructions of the on-board computer.

Setting the Assistance Level

On the on-board computer you can set how much the eBike drive assists you while pedalling. The assistance level can be changed at any time, even while cycling.

Note: For individual versions, it is possible that the assistance level is pre-set and cannot be changed. It is also possible that less assistance levels are available for selection than listed here.

The following assistance levels (max.) are available:

- **"OFF"**: The motor assistance is switched off, and the eBike can be moved as a normal bicycle only by pedalling. The push assistance cannot be activated in this assistance level.
- **"ECO"**: Effective assistance at maximum efficiency for maximum cruising range
- **"TOUR"**: Uniform assistance, for touring with long cruising range
- **"SPORT"**: Powerful assistance for sportive riding off road as well as for urban traffic
- **"TURBO"**: Maximum assistance, supporting highest cadence for sportive riding

The requested motor output appears on the display of the on-board computer. The maximum motor output depends on the selected assistance level.

Assistance Level	Assistance Factor*
"ECO"	40%
"TOUR"	100%
"SPORT"	150%
"TURBO"	250%

* The motor output can vary for individual versions.

Switching the Push-assistance mode On/Off

The push-assistance feature makes it easier to push the eBike. The speed in this function depends on the set gear and cannot exceed 6 km/h (max.). The lower the set gear, the lower the speed in the push-assistance function (at full output).

► **The push-assistance function may only be used when pushing the eBike.** Danger of injury when the wheels of the eBike do not have ground contact while using the push-assistance function.

To **activate** the push-assistance function, briefly press button **“WALK”** on your on-board computer. After activation, press button **“+”** within 3 s and keep it pressed. The eBike drive is switched on.

Note: The push assistance cannot be activated in the **“OFF”** assistance level.

The push assistance is **switched off** as soon as one of the following occurs:

- you release button **“+”**,
- the wheels of the eBike are blocked (e.g. by actuating the brakes or impacting against an obstacle),
- the speed exceeds 6 km/h.

Note: On some systems the push-assistance function can be started directly by pressing the **“WALK”** button.

Back-peddalling function (optional)

For bikes with back-peddalling function, the pedals rotate when the push aid is switched on. If the rotating pedals are blocked, the push aid switches off.

Switching bike lights on/off

In the version which has the bike lights powered by the eBike system, the front and rear lights can be switched on and off at the same time via the on-board computer.

Notes on Riding with the eBike System

When does the eBike Drive Unit Operate?

The eBike drive unit assists you when riding, as long as you step into the pedals. Without pedaling, there is no assistance. The motor output always depends on the amount of your pedaling power.

When applying less pedaling power, the assistance or support will be lower than when applying a lot of pedaling power. This applies independent of the assistance Level.

The eBike drive automatically switches off at speeds in excess of 25 km/h. When the speed falls below 25 km/h, the drive is automatically available again.

An exception applies to the push-assistance function, in which the eBike can be pushed at low speed without pedalling. The pedals may also rotate when the push assistance is used.

The eBike can also be ridden as a normal bicycle without assistance at any time, by either switching off the eBike system or setting the assistance level to **“OFF”**. The same applies when the battery pack is empty.

Interaction of the eBike System with the Bicycle Gears

The bicycle gears should be used as with a normal bicycle, even with eBike motor assistance (please observe the operating instructions of your eBike).

Independent of the type of gearing, it is recommended to briefly interrupt the pedaling while changing gears. This makes changing gears easier and reduces the wear of the drive train.

By selecting the right gear, you can increase the speed and range with the same pedaling effort.

Gathering First Experience

It is recommended to gather first experience with the eBike away from roads with heavy traffic.

Test the various assistance levels. Start with the lowest assistance level. As soon as you feel confident, you can ride your eBike in traffic like any other bike.

Test the operating range of your eBike under different conditions before planning longer and more challenging rides.

Influences on the Operating Range

The range is affected by a number of factors, such as:

- Assistance level
- Speed
- Gear changing behaviour
- Tyre type and tyre pressure
- Age and condition of the battery
- Route profile (gradients) and conditions (road surface)
- Headwind and ambient temperature
- Weight of eBike, driver and luggage.

For this reason, it is not possible to precisely predict the range before and during a trip. General rules:

- With the **same** assistance level on the eBike drive: The less energy you need to exert in order to reach a certain speed (e.g. by changing gears optimally), the less energy the eBike drive will consume and the higher the range per battery charge will be.
- The **higher** the assistance level under otherwise same conditions, the lower the range.

Careful Handling of the eBike

Please observe the operating and storage temperatures of the eBike components. Protect the drive unit, on-board computer and battery against extreme temperatures (e.g. from intense sunlight without adequate ventilation). The components (especially the battery pack) can become damaged through extreme temperatures.

Maintenance and Service

Maintenance and Cleaning

When changing the bulbs, ensure that the bulbs are compatible with the Bosch eBike system (ask your bicycle dealer) and that the specified voltage matches. Bulbs must be replaced only with bulbs of the same voltage.

Do not immerse any components, including the drive unit, in water or clean them with pressurised water.

Have your eBike system checked by an expert at least once a year (including mechanical parts, up-to-dateness of system software).

For service or repairs on the eBike, please refer to an authorised bicycle dealer.

After-sales Service and Application Service

In case of questions concerning the eBike system and its components, please refer to an authorised Bosch eBike dealer.

For contact data of authorised Bosch eBike dealers, please refer to **www.bosch-ebike.com**

Disposal



The drive unit, on-board computer including operating unit, battery pack, speed sensor, accessories and packaging should be disposed of in an environmentally correct manner.

Do not dispose of eBikes and their components into household waste!

Only for EC countries:



According to the European Guideline 2012/19/EU, electrical devices/tools that are no longer usable, and according to the European Guideline 2006/66/EC, defective or used battery packs/batteries, must be collected separately and disposed of in an environmentally correct manner.

Subject to change without notice.



Nyon operating instructions

Online version

en Original instructions



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Safety Notes

General Safety Rules



Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all safety warnings and instructions for future reference.

The term “battery pack” used in these operating instructions, irrespective of model, refers both to standard battery packs (battery packs with holder on the bike frame) and to rack-type battery packs (battery packs with holder in the rear rack/carrier).

- ▶ **Make sure to not be distracted by the display of the on-board computer.** If you do not focus exclusively on the traffic, you risk being involved in an accident. If you want to make entries in your on-board computer other than switching the assistance level, stop and enter the appropriate data.
- ▶ **Before beginning any exercise program, seek advice from a doctor about which pressure you can place yourself under.** This is the only way to avoid potential overloading.
- ▶ **When using a heart rate monitor the heart rate displayed may be distorted by electromagnetic interference.** The heart rates displayed are for reference only. No liability can be accepted for consequences caused by incorrectly displayed heart rates.

Safety Warnings for eBikes

- ▶ **Do not open the drive unit yourself. The drive unit must be repaired only by qualified experts and only with original spare parts.** This will ensure that the safety of the drive unit is maintained. Unauthorised opening of the drive unit will void warranty claims.
- ▶ **Do not open Nyon.** Opening Nyon can destroy it and void warranty claims.
- ▶ **All components mounted to the drive unit and all other components of the eBike drive (e.g., the chainwheel, chainwheel seat, pedals) may be replaced only with identical components or components specifically approved for your eBike by the bicycle manufacturer.** This protects the drive unit against overload and damage.
- ▶ **Remove the battery pack from the eBike before beginning work (e.g. inspection, repair, assembly, maintenance, work on the chain, etc.) on the eBike, transporting it by car or plane, or storing it.** Unintentional activation of the eBike system poses a risk of injury.
- ▶ **The eBike system can switch itself on when the eBike is pushed backwards.**
- ▶ **The push/start aid feature may only be used when pushing or starting the eBike.** There is danger of injury if the wheels of the eBike do not have ground contact while using the push/start aid feature.
- ▶ **Use only original Bosch battery packs approved for your eBike by the manufacturer.** Using other battery packs can lead to injuries and pose a fire hazard. When using other battery packs, Bosch shall not assume any liability and warranty.
- ▶ **Do not make any modifications to your eBike system or fit any other products which would be suitable for increasing the performance of your eBike system.** This normally reduces the lifetime of the system and risks damage to the drive unit and the bike. There is also a risk of losing the guarantee and warranty claims on the bike you have purchased. By handling the system improperly you are also endangering your safety and that of other road users, thus running the risk of high personal liability costs and possibly even criminal prosecution in the event of accidents attributable to manipulation.

- ▶ **Please observe all national regulations on registering and using eBikes.**
- ▶ **Do not use the on-board computer as a handle.** Lifting the eBike up by the on-board computer can cause irreparable damage to the on-board computer.
- ▶ **Nyon is not a medical product.** The values displayed in the “Fitness” operating mode may differ from the actual values.
- ▶ **Use the Nyon on-board computer only with the associated operating unit, which has its own joystick.** The joystick on the operating unit has the same range of functions as the joystick on the on-board computer itself.
- ▶ **Read and observe the safety warnings and instructions in all operating instructions of the eBike system and in the operating instructions of your eBike.**

Safety information relating to the navigation system

- ▶ **Do not plan your routes whilst you are cycling. Stop and wait until you are stationary before entering a new destination.** If you do not focus exclusively on the traffic, you risk being involved in an accident.
- ▶ **Abandon your route if the navigation system suggests a path or road which is too ambitious, risky or dangerous for you based on your cycling ability.** Have your navigation system propose an alternative route.
- ▶ **Do not ignore any road signs, even if the navigation system tells you to take a specific route.** The navigation system cannot take roadworks or temporary diversions into account.
- ▶ **Do not use the navigation system in situations which are safety-critical or unclear (road closures, diversions, etc.).** Always carry extra maps and means of communication with you.

Congratulations

Congratulations on purchasing the first all-in-one eBike computer.

Nyon is an eBike controller, navi and fitness trainer in one and also performs smartphone functions.

- First all-in-one eBike on-board computer with separate operating unit
- eBike, navigation, fitness and internet functions
- Bike-optimised navi with moving map in 2D and 3D
- Bluetooth® connection to a heart rate monitor possible
- Wi-fi link to portal **“Bosch eBike Connect”**

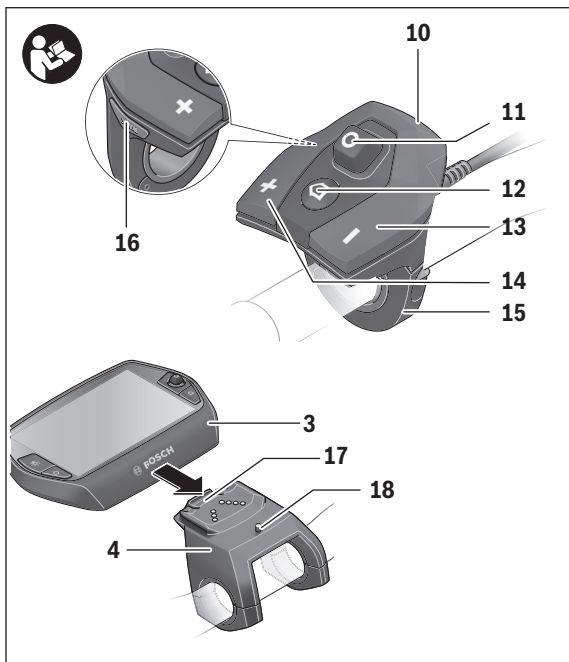
Updates

The Nyon's range of functions is continually being expanded. Keep your **“Bosch eBike Connect”** smartphone application up to date. You can use this application to download new functions and transfer them to your Nyon.

First steps



- 1 Joystick
- 2 Button **"Home"**
- 3 On-board computer
- 4 Holder for on-board computer
- 5 On/Off button for on-board computer
- 6 Bike lights button
- 7 Brightness sensor
- 8 USB port
- 9 Protective cap of USB port



- 10** Operating unit
- 11** Joystick on the operating unit
- 12** **"Home"** button on the operating unit
- 13** Decrease assistance level button
- 14** Increase assistance level button
- 15** Holder for operating unit
- 16** Button push/start aid **"WALK"**
- 17** Lock latch for on-board computer
- 18** Locking screw for on-board computer

The “Nyon” operating system

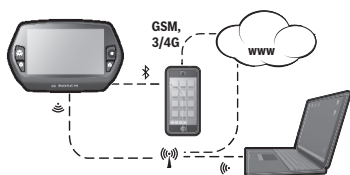
The Nyon operating system consists of three components:

- the Nyon on-board computer with operating unit
- the smartphone application “**Bosch eBike Connect**”
- the online portal “**www.eBike-Connect.com**”



Standard functions and display	Advanced functions	Data collection and evaluation
Login on Nyon	Registration in online portal	Registration in online portal
Operation of eBike	User-defined settings	User-defined settings
Recording and visualisation of journey data	Purchasing and downloading premium features	Import and evaluation of routes travelled
Navigation	Convenient route planning	Advanced display with statistics
		Convenient route planning

Many configurations and features can be managed and used on all components. Some configurations and features can be accessed or operated only via certain components. The synchronization of data occurs automatically during Bluetooth®-/internet connection. The following table provides an overview of the available features.



	On-board computer	Smartphone application	Online portal
Log in/registration	✓	✓	✓
Change of configurations	✓	✓	✓
Recording of journey data	✓		
Real-time display of journey data	✓		
Processing/analysis of journey data		✓	✓
Creating user-defined displays		✓	✓
Displays the current location*	✓	✓	✓
Navigation	✓		
Route planning	✓	✓	✓
Display of remaining distance (circle around the current location)	✓	✓	
Training effect in real-time	✓		
Overview of journeys		✓	✓
Statistics “Dashboard”	✓	✓	✓
Purchase of “premium features”		✓	

* GPS required

Premium features

The standard features of the “Nyon” operating system can be expanded via the App Store for Apple iPhones and Google Play Store for Android devices through the purchase of “premium features”.

In addition to the free **“Bosch eBike Connect”** application, fee-based premium features are available.

- User-related adaptation of the assistance levels
- **“Topo operating range”** (for displaying the battery’s remaining range, taking into consideration the geographical conditions)

Smartphone compatibility

A smartphone is not included in the delivery. To register with the smartphone internet connection is required, which, depending on the contract, can generate costs at your telephone provider. For the synchronization of data between the smartphone and online portal an Internet connection is also required.

To make use of the full range of functions provided by your on-board computer, you need a smartphone with the Android operating system, version 4.0.3 or a later version, or iOS 8 or a later version.

Compatible smartphones are listed in the table below.

Manufacturer	Compatible smartphones	Operating system
Apple	iPhone 5, 5S, 5C, 6, 6+, 6S, 6S+	iOS ≥8
Apple	iPod Touch (5th Generation)	iOS ≥8
Google	Nexus 4	Android ≥4.0.3
HTC	Desire X	Android ≥4.0.3
HTC	One	Android ≥4.0.3
HTC	One X	Android ≥4.0.3
Huawei	Ascend P2	Android ≥4.0.3
LG	Optimus L7	Android ≥4.0.3
Motorola	Razr HD	Android ≥4.0.3
Samsung	Galaxy S3	Android ≥4.0.3
Samsung	Galaxy S3 mini	Android ≥4.0.3
Samsung	Galaxy S4, S5, S6, S7	Android ≥4.0.3
Sony	Xperia arc S	Android ≥4.0.3
Sony	Xperia Z	Android ≥4.0.3

Smartphones with the above mentioned operating systems, which are not included in the list can be connected under certain circumstances with the on-board computer. However, a complete compatibility of the on-board computer with the smartphones not listed, can not be guaranteed.

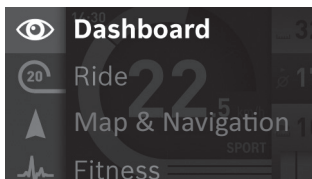
Download the application **“Bosch eBike Connect”** to your smartphone from the App Store for Apple iPhones and Google Play Store for Android devices.

Operating logic

A change in the display can be achieved during the trip via the operating unit **10**. This way both hands can stay on the handlebars while cycling.

With the control elements on the on-board computer, you have the following options:

- Switch the on-board computer on or off using the On/Off button **5**.
- The default mode of operation in **“Settings”** > **“My Nyon”** can be reached via the **“Home” (2 or 12)** button.
- The bike lights can be switched on or off using the bike light button **6**.
- Use the joystick **1** to navigate through the respective operating modes. Make a selection by pressing the joystick **1**.








Press left on the joystick **1** to overlay the active operating mode with the main menu and to switch it to the main menu (see picture above).

If you press the joystick **1** right while in the active operating mode, the current screen is overlayed with the potential configuration options of the current operating mode. Move the joystick to the desired option and select it by pressing the joystick **1**.

Tip: If you are in an active operating mode, you can switch directly to the next operating mode by pressing the joystick **1** up or down.

If Nyon is on the eBike, **“Ride”** is displayed after switching on the operating mode. If Nyon is not mounted on the eBike, **“Dashboard”** is displayed on the operating mode.

Main Menu

Symbol	Operating mode	Function
	“Dashboard”	This operating mode displays various pieces of statistical data, the connection status and the synchronisation status.
	“Ride”	This operating mode provides current journey data.
	“Map & Navigation”	Use this operating mode to download map data based on Open Street Map (OSM) over the web. You can navigate using these maps.
	“Fitness”	Via this mode you can view various fitness-related information.
	“Settings”	This operating mode allows you to set the basic configurations of your on-board computer.

Initial Operation

Requirements

The eBike system can only be activated when the following requirements are met:

- A sufficiently charged eBike battery pack is inserted (see operating instructions of the battery pack).
- The on-board computer is properly inserted in the holder (see “Inserting and removing the on-board computer”, page English – 17).

Switching the eBike System On/Off

Options for **switching on** the eBike system:

- Place the on-board computer into the holder **4**.
- When the on-board computer and the eBike battery pack are inserted, briefly press the On/Off button **5** of the on-board computer.
- When the on-board computer is inserted, press the On/Off button of the eBike battery pack (see battery pack operating instructions).

The drive is activated as soon as you step on the pedals (except for in the push assistance function or in assistance level “**OFF**”). The motor output depends on the settings of the assistance level on the on-board computer.

As soon as you stop pedaling when in normal operation, or as soon as you have reached a speed of 25/45 km/h, the assistance from the eBike drive is switched off. The drive is automatically re-activated as soon you start pedaling again and the speed is below 25/45 km/h.

Options for **switching off** the eBike system:

- Press the On/Off button **5** of the on-board computer for at least 1 second.
- Switch the eBike battery pack off by its On/Off button (see battery pack operating instructions).
- Remove the on-board computer out of its holder.

If no power is drawn from the drive for about 10 minutes (e.g. because the eBike is not moving) or no button is pressed on the Nyon, the eBike system will shut down automatically to save energy.

Inserting and removing the on-board computer

To **insert** the on-board computer **3**, slide it from the front into the holder **4**.

To **remove** the on-board computer **3**, press the lock latch **17** and slide the on-board computer toward the front out of the holder **4**.

► Remove the on-board computer when you park the eBike.

It is possible to secure the on-board computer against removal in the holder. To do so, remove the holder **4** from the handlebar. Put the on-board computer in the holder. Screw the locking screw **18** (thread M3, 8 mm long) from below into the thread provided in the holder. Mount the holder back onto the handlebar.

Switching on/shutting down the on-board computer

To **switch on** the on-board computer briefly press the On/Off button **5**.

To **shut down** the on-board computer press the On/Off button **5** for at least 1 second.

If no button is pressed after 5 minutes, Nyon goes into power saving mode (back lighting off) and shuts down automatically after a further 5 minutes.

Power Supply of External Devices via USB Connection

With the USB connection, it is possible to operate and charge most devices whose power supply is possible via USB (e.g., various mobile phones).

Prerequisite for charging is that the on-board computer and a sufficiently charged battery pack are inserted in the eBike.

Open the protective cap **9** of the USB port on the on-board computer. Connect the USB connection of the external device to the USB port **8** on the on-board computer using the USB charging cable Micro A – Micro B (available from your Bosch eBike dealer).

Once the consumer has been disconnected, the USB connection must be sealed again carefully with the protective cap **9**.

- **USB connections are not a waterproof. When cycling in the rain, do not connect any external devices and make sure that the USB port is fully covered by the protective cap 9.**

Attention: Users connected to Nyon can affect the range of the eBike.

Initial Operation of the On-board Computer

The battery pack is supplied partially charged. Before the first use, the Nyon battery pack must be fully charged via the USB port (see “Energy supply of the on-board computer”, page English – 33) or the eBike system.

In order to use all the features of the operating system, you must also register online.

Registration at the On-board Computer

- Switch on the on-board computer using the On/Off button **5**.
- Use the joystick **1** to select your preferred language (select by pressing the joystick) and follow the instructions.

You have the following options to put Nyon into operation:

- **“TEST RIDE”**

You can perform a test ride without having to register in advance or to enter data. After shutting down, all trip data will be deleted.

- **“SET UP”>“OFFLINE”**

This is a very short registration process limited to Nyon. Offline means in this case that your journey and user data are only saved locally on the on-board computer.

Follow the instructions and choose one of the suggested answers.

Entered data is kept after shutting Nyon down, but will not be synced to the online portal or smartphone application.

If you subsequently undergo the complete registration process, the data collected up to that point is deleted, i.e. it is not synchronised with the online portal or the smartphone application either.

- **“SET UP”>“ONLINE”>“PHONE”**

This is a complete registration process. Insert Nyon in the holder **4**, download the application **“Bosch eBike Connect”** to your smartphone and register using the application. Following registration, the journey data are stored and synchronized with the smartphone application and the online portal.

- **“SET UP”>“ONLINE”>“WI-FI”**

This is a complete registration process. Go to an access point of a wi-fi network. Place your Nyon in the holder **4**. After selecting a network and entering your ID and password, Nyon then connects to the WLAN network of your choice and you are directed to the

“www.eBike-Connect.com” online portal where you can register. Following registration, the journey data are stored and synchronized with the online portal. You can then connect your Nyon to your smartphone (**“Settings”>“Connections”>“Connect Smartphone”**).

Connecting a heart rate monitor to Nyon

A heart rate monitor is not included in the delivery.

To check your heart rate, you can use a heart rate monitor, which you can connect to Nyon via Bluetooth®.

Nyon supports most chest straps that transmit signals via “Bluetooth Low Energy”.

However, achieving exact results in the fitness application requires ECG-accurate transmission of the values (so-called heart rate variability).

For this reason, the table below lists only compatible heart rate monitors that also perform ECG-accurate measurement.

Chest straps transmitting via ANT+ are not supported.

Connect the heart rate monitor to your Nyon in the **“Settings”** menu under **“Connections”** using the **“Heart Rate Monitor”** menu item. When the menu item has been selected, your Nyon will automatically search for a device. When Nyon has found your heart rate monitor, select it and follow the instructions.

► **Please also observe the instructions in the owner’s manual from your heart rate monitor manufacturer.**

The compatible heart rate monitors are listed in the table below.

Manufacturer	Compatible heart rate monitors
Polar	H7

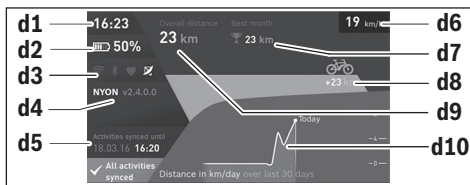
Operation

Displays and configurations of the on-board computer


Note: All interface displays and interface texts on the following pages correspond to the release status of the software. Since the Nyon software is updated a number of times a year, the interface displays and/or interface texts may change slightly after an update.

Operating mode “Dashboard”

This operating mode displays various pieces of statistical data, the connection status and the synchronisation status.



- d1** Clock
- d2** Charge level indicator of the eBike battery pack
- d3** Connection status
- d4** Nyon version information
- d5** Nyon synchronisation information
- d6** Speed/light status display (when the on-board computer is fitted)
- d6** Charge level indicator of the on-board computer battery (when the on-board computer is removed)
- d7** Highest number of kilometres travelled in a month
- d8** Kilometres travelled in comparison to the previous month
- d9** Total kilometres
- d10** Daily kilometres travelled in the last 30 days

Pushing the joystick **1** to the right allows the changes made in the portal or in your app to be synchronised with the Nyon. To do so, select the  button.

The following are synchronised:

- Saved routes and locations
- User-defined screens and riding modes
- User settings

Synchronisation is performed via WLAN or Bluetooth®. If both connection types are deactivated, you will receive a corresponding fault message.



Operating mode “Ride”

This operating mode provides current journey data.



- r1** Clock
- r2** Own pedal power
- r3** Speed
- r4** Engine power
- r5** Assistance-level indicator
- r6** Shift recommendation/eShift displays
- r7** Trip meter
- r8** Average speed
- r9** Coverage
- r10** Charge level indicator of the eBike battery pack

Pressing the joystick **1** to the right enables you to choose from the following options:

- **“Custom Modes”** (Custom Riding Modes)
This option is a premium feature which can be activated by purchasing it. The settings of the configuration data are made using the **“Bosch eBike Connect”** application on a smartphone (see Menu item **“Settings”**, page English – 48).
- **“Custom Screen”**
The settings of the configuration data are made using the **“Bosch eBike Connect”** application on a smartphone (see Menu item **“Settings”**, page English – 48). You can also enter settings for configuration data in the online portal.
- **“Reset Trip”**
This option can be used to reset the trip meter, calories burned and all average values to **“0”**.



Operating mode “Map & Navigation”

- ▶ **Make sure to not be distracted by the display of the on-board computer.** If you do not focus exclusively on the traffic, you risk being involved in an accident. If you want to make entries in your on-board computer other than switching the assistance level, stop and enter the appropriate data.
- ▶ **Do not plan your routes whilst you are cycling. Stop and wait until you are stationary before entering a new destination.** If you do not focus exclusively on the traffic, you risk being involved in an accident.
- ▶ **Abandon your route if the navigation system suggests a path or road which is too ambitious, risky or dangerous for you based on your cycling ability.** Have your navigation system propose an alternative route.
- ▶ **Do not ignore any road signs, even if the navigation system tells you to take a specific route.** The navigation system cannot take roadworks or temporary diversions into account.
- ▶ **Do not use the navigation system in situations which are safety-critical or unclear (road closures, diversions, etc.).** Always carry extra maps and means of communication with you.

Use this operating mode to download map data based on Open Street Map (OSM) over the web. You can navigate using these maps.

The map material suitable for the place of residence is installed by the bike dealer for the respective buyer. If required, additional maps can be downloaded via your smartphone application “**Bosch eBike Connect**” and be transferred to your on-board computer.

If you have an active WLAN connection, it is possible to load any maps directly onto Nyon via “**Settings**” > “**Map & Navigation**” > “**Map Manager**”.

When you switch on Nyon, it begins the satellite search to receive GPS signals. Once a sufficient number of satellite signals is found, the operating mode displays **“Map&Navigation”** on the map with the current location. In case of unfavourable weather conditions or locations, the satellite search may take a little longer. If the application fails to find satellites over a long period of time, restart Nyon.

Pressing the joystick **1** to the right enables you to choose from the following options:

- **“Navigate”**

You can use the **“Enter Destination”** menu item to enter the destination address. To do so, use the joystick to select the letters from the list and confirm each selection by pressing the joystick. Once you have entered the destination, you will be offered three different routes (**“Short/MTB”**, **“Scenic”** and **“Fast”**) displaying the elevation profile. The **“Short”** route shows you the shortest way from your location to your selected destination (**only** for eBikes up to 45 km/h).

The **“MTB”** route guides the cyclist over mostly unpaved trails and offers the best route for mountain bikers (**not** for eBikes up to 45 km/h).

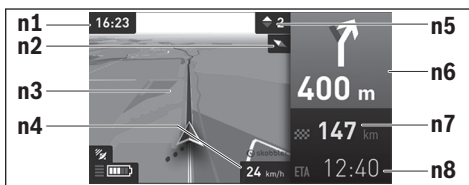
The **“Scenic”** route shows you the most scenic connection from your location to your selected destination and avoids main roads.

The **“Fast”** route shows you the fastest connection from your location to your selected destination while avoiding steeper slopes.

The different **“Short/MTB”**, **“Scenic”** and **“Fast”** routes may be identical on short routes.

Navigation will start once you have selected your preferred route. Route planning can also be performed using the **“Bosch eBike Connect”** application and in the online portal.

Alternatively, you can opt to be guided home, select one of the last destinations used, or choose from saved locations and routes.



n1 Clock

n2 Compass needle

n3 Map

n4 Speed

n5 Shift recommendation

n6 Turn instructions and distance to the next turn

n7 Distance to destination

n8 Estimated time of arrival at destination

– “Battery Range”

This option enables you to view the battery range as a circle on the map.



The basic remaining range of the battery can be extended by means of the **“Topo operating range”** premium feature. The **“Topo operating range”** feature then calculates and displays the battery’s remaining range, taking into consideration the topographical conditions.



– “Zoom Out/Zoom In”

You can use this option to change the level of zoom. The zoom settings for the map section can also be changed by (repeatedly) pressing the joystick.

During the navigation, the guidance (e.g. turn left in 50 meters) will also be displayed via a cross fade in other operating modes.

If you interrupt a journey for which you are using navigation and then call up **“Map & Navigation”**, you will be asked whether or not you wish to continue navigation. If you continue navigation, the navigation system will guide you to your last destination.

If you have imported GPX routes via the online portal, these will be transferred to your Nyon via Bluetooth® or via a WLAN connection. You can start these routes when you wish. If you are near a route, you can have the navigation system guide you to the starting point or you can start navigating along the route immediately.

You can enter up to eight intermediate destinations for a trip.

If you are using intermediate destinations, a message will inform you when you have reached an intermediate destination.

Your nearest **“Bosch eBike experts”** are also shown under **“Points of Interest”**. When you select a dealer, the route to it will be calculated and made available for you to select.

Nyon is not suitable for a navigation without a bicycle (for hikers or motorists).

At temperatures below 0 °C, the altitude measurement is likely to deviate significantly.



Operating mode “Fitness”

Via this mode you can view various fitness-related information.

Based on the activity level provided in your registration, the effect of your activities will be displayed on your stamina level (training effect).

The training effect is calculated from pedal power and the duration of an eBike journey. The calculation accounts for the age, body size, weight and activity level of the rider.

This enables the rider to be warned of possible overexertion in relation to his/her fitness level. For example, an unfit eBike rider may be notified of possible overexertion after only 30 minutes, whereas a very fit rider will not be notified at all if subjected to the same strain or may only be notified after 2 hours if subjected to very heavy strain.



- f1** Clock
- f2** Current performance/heart rate*
- f3** Display of the current training effect
- f4** Training effect
- f5** Kilocalories burned
- f6** Current cadence
- f7** Current speed
- f8** Duration

*** When using a chest strap to measure the heart rate (not included in the delivery), your current heart rate will be displayed instead of the performance.**

Pressing the joystick **1** to the right enables you to choose from the following options:

- **“Custom Screen”**

The settings of the configuration data are made using the **“Bosch eBike Connect”** application on a smartphone or via the online portal.

- **“Reset Trip”**

This option can be used to reset the trip meter, calories burned and all average values to **“0”**.



Operating mode “Settings”

This operating mode allows you to set the basic configurations of your on-board computer.

Note: Some basic configurations can only be changed when Nyon is inserted into the holder **4**.

To reach the “**Settings**” menu, press the joystick **1** down in the main menu until “**Settings**” is displayed.

Tip: If you press the joystick down long enough, you will also reach the “**Settings**” menu.

The following configurations can be made:

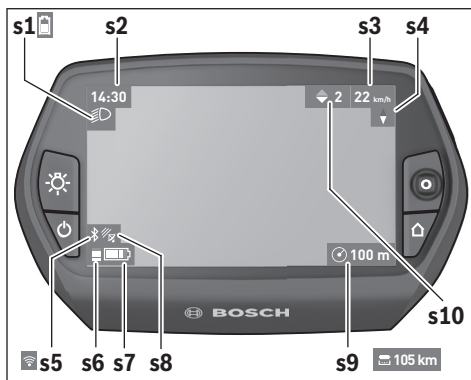
- “**Connections**”: You can configure the Bluetooth® settings, a new smartphone connection, a WiFi connection or a heart rate monitor. When you enable WiFi, Nyon searches for available networks. Found networks will be displayed. Use the joystick **1** to select the desired network and enter the password.
- “**Map & Navigation**”: Here under “**Map Style**” you can select the display mode (2D or 3D) for “**Map Mode**” and “**Navigation**” and turn on automatic adaptation of the map display depending on the ambient brightness.
Under “**Map Manager**”, you can manage the maps installed on your Nyon, e.g. delete maps which are no longer required to free up storage space.
Under “**Auto Day/Night**”, you can automatically change the map display depending on the ambient brightness.

- **“My Profile”**: Here you can also choose to display the active user.
- **“My eBike”**: When Nyon is plugged in, you can change the pre-set value given by the manufacturer of the wheel circumference by $\pm 5\%$.
Under **“Shift Recommendation”**, you can switch the indication of a shift recommendation on and off.
If your eBike is equipped with **“eShift”**, you can also configure your eShift system here (see “eShift (optional)”, page English – 38).
Under **“Range reset”**, you can reset the range calculation of your drive unit to the default values.
- **“My Nyon”**: Here you can search for updates, configure the Home button, automatically set the counters such as trip meter, calories burned and average values to “0” every night, or reset Nyon to the factory settings.
Under **“Auto Brightness”**, the brightness of the display can be automatically adjusted.
Under **“Altitude correction”**, you can adjust the value displayed to the actual altitude to compensate for weather-related changes.
- **“Region & Language”**: You can set speed and distance in kilometres or miles, display clock in 12 or 24 hour format, select the time zone and set your preferred language. The current time is automatically taken from the GPS signal.
- In the **“Help”** menu item, you will find a selection of FAQs (frequently asked questions), contact details and information about the system and licenses.

Status display

You are shown status indicators in addition to the displays of your current operating mode.

Depending on the operating mode shown, all status indicators are not always displayed. Indicators already shown on the main screen will not be shown again. The position of the indicators may vary. If the on-board computer is taken out of its holder, the charging state of the Nyon battery of the on-board computer is displayed in place of the bike lights indicator.



- s1** Bike lights indicator/Charge level indicator of Nyon battery pack
- s2** Clock display
- s3** Speed display
- s4** North display
- s5** Bluetooth®/WiFi connection display
- s6** Assistance level display
- s7** Charge level indicator of the eBike battery pack
- s8** GPS signal display
- s9** Zoom range/remaining range display
- s10** Shift recommendation

Energy supply of the on-board computer

If the on-board computer is in the holder **4**, a sufficiently charged eBike battery pack is inserted into the eBike and the eBike system is turned on, then the Nyon battery pack is powered by the eBike battery pack.

If the on-board computer is removed from the holder **4**, the energy is supplied via the Nyon battery pack. If the Nyon battery pack is weak, a warning message appears on the display.

To charge the Nyon battery pack, insert the on-board computer back into the holder **4**. Note that if you do not charge the eBike battery pack straight away, the eBike system will automatically switch off after 10 minutes of inactivity. In this case, the charging of the Nyon battery pack will also cease.

You can also charge the on-board computer via the USB port. Open the protective cap **9**. Connect the USB port **8** of the on-board computer via a micro USB cable with a standard USB charger (not included in the delivery) or the USB port of a computer (5 V charging voltage, max 500 mA charging current).

Note: If Nyon is shut down during charging, Nyon can only be switched on again if the USB cable has been disconnected (applies to 1 270 020 907 only).

If the on-board computer is removed from the holder **4**, all values of the features are saved and can still be displayed.

Without recharging the Nyon battery pack, date and time will remain up to a maximum of 6 months. When switching back on, date and time are reset after a successful GPS fix.

Note: To achieve maximum lifetime of the Nyon battery pack, you should recharge it every 6 months if not using it.





Resetting Nyon

If, contrary to expectations, Nyon can no longer be operated, then Nyon can be reset by **simultaneously** pressing the buttons **1**, **2**, **5** and **6**. Carry out the reset only if absolutely necessary, as various configurations may be lost.

Battery Charge-control Indicator

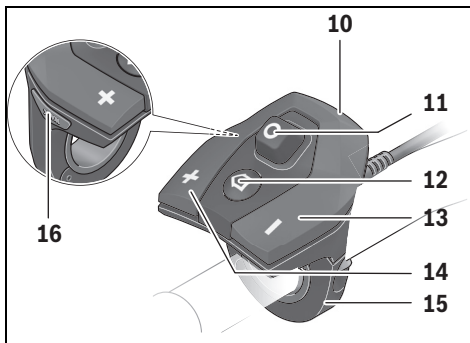
The battery charge level indicator **r10 (s7)** displays the charge level of the eBike battery pack. The charge level of the Nyon battery pack can be read on the display **s1**. The charge level of the eBike battery pack can also be read on the LEDs on the eBike battery pack itself.

Each large bar in the battery symbol of indicator **r10** corresponds to approximately 20% capacity:

-  The eBike battery pack is fully charged.
-  The eBike battery pack should be recharged.
-  The capacity for assisting the drive has been used up, and assistance is gently switched off. The remaining capacity will be provided for the bike light and the on-board computer.
The capacity of the eBike battery pack is enough for about 2 hours of lighting. This does not account for other consumers (e.g. automatic gearbox, charging external devices at the USB port).
-  Nyon has never been inserted into the holder **4** or Nyon has been reset to the factory configurations.

If the on-board computer is removed from the holder **4**, the last displayed battery charge level is saved.

Setting the Assistance Level



On the operating unit **10** you can set how much the eBike drive assists you while pedalling. The assistance level can be changed at any time, even while cycling.

Note: For individual versions, it is possible that the assistance level is pre-set and cannot be changed. It is also possible that less assistance levels are available for selection than listed here.

The following assistance levels (max.) are available:

- **“OFF”**: The motor assistance is switched off, and the eBike can be moved as a normal bicycle only by pedalling. The push assistance cannot be activated in this assistance level.
- **“ECO”**: Effective assistance at maximum efficiency for maximum cruising range
- **“TOUR”**: Uniform assistance, for touring with long cruising range
- **“SPORT”**: Powerful assistance for sportive riding off road as well as for urban traffic
- **“TURBO”**: Maximum assistance, supporting highest cadence for sportive riding

To **increase** the assistance level, press the “+” **14** button on the operating unit until the desired assistance level appears in the display **r5**. To **decrease** the assistance level, press the button “-” **13**.

The requested motor output is displayed in indicator **r4**. The maximum motor output depends on the selected assistance level.

Assistance Level	Assistance Factor* (Deraillieur)			
	Active Line	Performance Line		
	Cruise	Cruise	Speed	CX
“ECO”	40%	50%	55%	50%
“TOUR”	100%	120%	120%	120%
“SPORT”	150%	190%	190%	210%
“TURBO”	250%	275%	275%	300%

* The motor output can vary for individual versions.

When the on-board computer is removed from the holder **4**, the last indicated assistance level is stored; the motor-output indicator **r4** remains empty.

Switching the Push-assistance mode On/Off

The push-assistance feature makes it easier to push the eBike. The speed in this function depends on the set gear and cannot exceed 6 km/h (max.). The lower the set gear, the lower the speed in the push-assistance function (at full output).

- ▶ **The push-assistance function may only be used when pushing the eBike.** Danger of injury when the wheels of the eBike do not have ground contact while using the push-assistance function.

To **activate** the push-assistance function, briefly press button **“WALK”** on your on-board computer. After activation, press button **“+”** within 3 s and keep it pressed. The eBike drive is switched on.

The push assistance is **switched off** as soon as one of the following occurs:

- You release button **“+” 14**,
- The wheels of the eBike are blocked (e.g. by actuating the brakes or impacting against an obstacle),
- The speed exceeds 6 km/h.

After releasing the **“+”** button, the push assistance remains on standby for another three seconds. Pressing the **“+”** button again within this period will reactivate the push assistance.

Note: On some systems the push-assistance function can be started directly by pressing the **“WALK”** button.

Note: The push assistance cannot be activated in the **“OFF”** assistance level.

Switching bike lights on/off

In the model, in which the lighting is powered by the eBike system, the front and rear light can be switched on and off at the same time via the on-board computer with the button **6**.

The illumination symbol **s1** is displayed when the light is on.

Switching the bike light on and off has no effect on the back lighting of the display.

eShift (optional)

eShift is the integration of automatic gear shifting systems into the eBike system. You can configure the settings for the **“eShift”** function under **“My eBike”**. The gear or the cadence is displayed in the **“Ride”**, **“Fitness”** and **“Map & Navigation”** operating modes. If the field is not displayed, the user is informed of changes by means of an indication on the display. eShift mode is activated by holding down the **“Home”** button **12**. It is only possible to activate eShift mode via the operating unit **10**. You can exit **“eShift”** mode again by repeatedly pressing the **“Home”** button.

eShift with NuVinci H|Sync

The optimum gear for the respective speed is automatically set according to a pre-defined desired cadence. In manual mode you can choose between multiple gears.

In the **“Cadence Control”** mode, you can use the **“–”** or **“+”** button on the operating unit to increase or decrease the required cadence. If you hold down the **“–”** or **“+”** button, the cadence will increase or decrease in increments of five. The desired cadence is shown on the display.

In the **“Gear Control”** mode, you can use the **“–”** or **“+”** button on the operating unit to switch back and forth between several defined transmission ratios. The engaged gear is shown on the display.

Under **“Gear calibration”**, you can calibrate the continuously variable transmission. Then follow the instructions on the display.

In the event of an error, it can also be necessary to perform calibration when riding. Confirm the calibration here too, and follow the instructions on the display.

eShift with SRAM DD3 Pulse

The hub gear of the SRAM DD3 Pulse works on a speed-dependent basis. Regardless of which gear is engaged on the derailleur gears, one of the three gears of the gear hub will automatically be engaged.

It is also possible to use the “–” or “+” button to shift gear manually here. Automatic mode is activated automatically if you press the “–” button in first gear. If you press the “–” or “+” button in automatic mode, the mode changes back to manual mode. In automatic mode, only **“A”** is ever shown in the gear display. If the gear is shifted in automatic mode, the gear is **not** shown on the display.

If you are not in automatic mode, the engaged gear will be shown briefly on the display whenever the gear of the hub gear is shifted.

The drive unit recognises the gear shift and briefly reduces the motor assistance level as a result of it, which means the gear can also be shifted at any time under load or on a hill.

If the eBike is brought to a stop from a speed of more than 10 km/h, the system may automatically shift down a gear to a set **“Starting gear”**. The **“Starting gear”** can be set under **“My eBike” > “eShift (SRAM)”**.

eShift with Shimano Di2

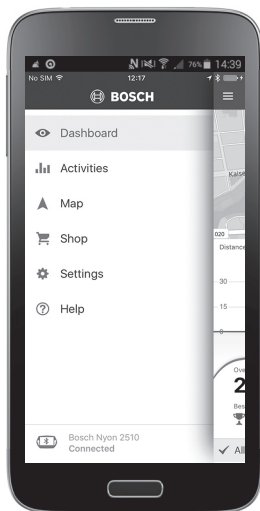
For Shimano eShift you use the Shimano control lever to shift gears.

The gear is always displayed in the eShift field. The gear is displayed briefly during a gear shift only when the eShift field is not visible (e.g. in settings).

The drive unit recognises the gear shift and briefly reduces the motor assistance level as a result of it, which means the gear can also be shifted at any time under load or on a hill.

If the eBike is brought to a stop from a speed of more than 10 km/h, the system may automatically shift down a gear to a set **“Starting gear”**. The **“Starting gear”** can be set under **“My eBike” > “eShift (Shimano)”**.

Displays and settings of the smartphone application “Bosch eBike Connect”



A smartphone is not included in the delivery. To register with the smartphone internet connection is required, which, depending on the contract, can generate costs at your telephone provider. For the synchronization of data between the smartphone and online portal an Internet connection is also required.

Note: All interface displays and interface texts on the following pages correspond to the release status of the software. Since the Nyon software is updated a number of times a year, the interface displays and/or interface texts may change slightly after an update.

Activating the application “Bosch eBike Connect”

In order to be able to use all features of your Nyon, it is necessary to have a smartphone with the **“Bosch eBike Connect”** application.

Proceed as follows to perform activation:

- Open Google Play (Android) or the App Store (iOS) on your smart-phone.
- Search for **“Bosch eBike Connect”**.
- Install the **“Bosch eBike Connect”** application and open it.
- Register as described in the next section.







If you have already registered via the online portal, you can also log in directly with your login data. The **“Bosch eBike Connect”** application will then search for an available Nyon on-board computer. If necessary, insert your Nyon into the holder and follow the instructions to establish the Bluetooth® connection.

Registration via smartphone and Bluetooth® connection

- Start the **“Bosch eBike Connect”** application.
- Select **“REGISTER”**.
- Read and accept the terms and conditions and the privacy policy.
- Switch the on-board computer on using the On/Off button **5** to set up the Bluetooth® connection.
- Select **“SEARCH”** on your smartphone. The application will try to find your on-board computer and will display it once the search has been successful. If your on-board computer is not found, ensure that Bluetooth® is activated on your on-board computer. You can view this setting under **“Settings” > “Connections” > “Bluetooth = On”**.
- Perform the Bluetooth® link by checking and confirming the code displayed on your on-board computer.
- Once the link has been successfully established, press **“NEXT”** and start collection of your personal data.
- Follow the instructions and complete the registration. According to the answers you give about your fitness level, you will be assigned to a fitness category which is required for the **“Fitness”** operating mode.

If the application **“Bosch eBike Connect”** is active and there is a Bluetooth® connection to your on-board computer, data between on-board computer and smartphone will sync automatically.

Main menu of “Bosch eBike Connect”

Symbol	Menu item	Function
	“Dashboard”	This operating mode displays various pieces of statistical data, the connection status and the synchronisation status.
	“Activities”	Under this menu item you can view the trips you have made.
	“Map”	You can use this menu item to plan routes and view the remaining range of your eBike.
	“Shop”	You can use this menu item to download additional map material or purchase premium features.
	“Settings”	You can use this menu item to create custom screens (“Custom Screens”) and custom riding modes (“Custom riding modes”) and manage your profile.
	“Help”	Under this menu item you will find the FAQ, contact details and other information.

Menu item “Dashboard”

Under this menu item, the current location of the bicycle on a map, the synchronisation status and the kilometres travelled in the last 30 days are displayed.




Menu item “Activities”

Three views of your trips are available under this menu item.

- **“Rides”**: Each of the trips is displayed here (from switching on the on-board computer to the next time it was switched off).
A **“Ride”** is complete:
 - When Nyon is shut down.
 - When Nyon is removed from the holder.
 - When a manual or automatic reset is performed.
- **“Days”**: All the trips started on one day are summarised here.
- **“Trips”**: All trips are displayed here, starting with the first trip until the counter is either reset manually or automatically.

When you select a journey, you will be shown the trip distance, the trip duration, the average speed, and also the route travelled on a map. The elevation profile of your eBike journey will also be displayed.

Unsynchronised activities are displayed with this symbol .

Activities which are not complete are also displayed following synchronisation.

Menu item “Map”

When you have selected this menu item, your current location will be shown using the GPS function of the smartphone. You can use the signpost symbol in the top right corner to start route planning.

- You can use the “**Enter destination address**” menu item to enter the destination address. Once you have entered the destination, you will be offered three different routes (“**Short/MTB**”, “**Scenic**” and “**Fast**”) displaying the elevation profile.
- The “**Short**” route shows you the shortest way from your location to your selected destination (**only** for eBikes up to 45 km/h).
- The “**MTB**” route guides the cyclist over mostly unpaved trails and offers the best route for mountain bikers (**not** for eBikes up to 45 km/h).
- The “**Scenic**” route shows you the most scenic connection from your location to your selected destination and avoids main roads.
- The “**Fast**” route shows you the fastest connection from your location to your selected destination while avoiding steeper slopes.
The different “**Short/MTB**”, “**Scenic**” and “**Fast**” routes may be identical on short routes.
- Once you have selected your preferred route, you can transfer the route to your Nyon by pressing the button at the top right. There you can start navigation or just save the route for later.

In addition to route planning, you will find your previously saved destinations and routes. Starting from your current location, you can also navigate home or to work.

Menu item “Shop”

Use the premium features in the “**Shop**” menu item to extend the features on your Nyon.

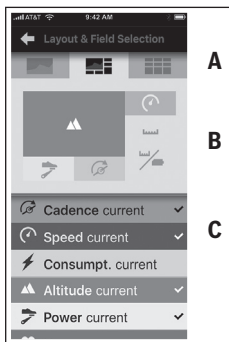
- “**Custom riding modes**”: Four different riding modes can be configured with this expansion. This means that for each of the four riding modes, you can set the level of motor assistance at three points based on the speed.
- “**Topo operating range**”: This expansion enables details of the battery’s remaining range to be displayed, taking into consideration the geographical conditions.

Menu item “Settings”

You can use the “**Settings**” menu item to make extensive settings for and changes to the personal profile, the eBike and the Nyon.

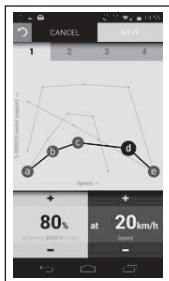
- A possible connection to Nyon is displayed. If no connection is established, you can use Bluetooth® to connect to a previously used Nyon.
- You can use “**Delete Nyon**” to remove the connection to your Nyon and then connect to a different Nyon.
- “**My eBike**”: This displays the eBikes connected to Nyon. If Nyon was placed on at least two different eBikes, they are displayed here for selection. Otherwise no selection is possible and only one eBike is displayed. You can edit the name for each eBike. You can also create and edit your custom views and your personal riding modes. You can also delete any eBike from the selection list.

“**Custom screens**”: You can create a user-defined view for each of the operating modes “**Ride**” and “**Fitness**”.



You can choose from three layouts for the custom views in the upper section (A) and you can select the data you want to have displayed in both sections. This is done by selecting the corresponding field in the middle section (B) and then selecting the desired values or graphs from the list in the lower section (C). Save the view to complete the procedure. If there is an existing Bluetooth® connection, the view will then be automatically transferred to the Nyon.

“Custom riding modes”: This setting option is available only if you have purchased it via the shop.



You can configure four different riding modes however you like. For the configuration there are five definable “check points” or stages available. For the middle three points you can select any desired performance assistance for a certain speed. For the outer left point you can only change the performance assistance (speed is fixed to 0 km/h). For the outer right point you can only change the top speed (performance assistance is fixed to 0%). The speed is plotted on the horizontal x-axis and the performance assistance on the vertical y-axis in percent. If you are happy with the definition, save the riding mode. If there is an existing Bluetooth® connection, the riding mode will then be automatically transferred to the Nyon.

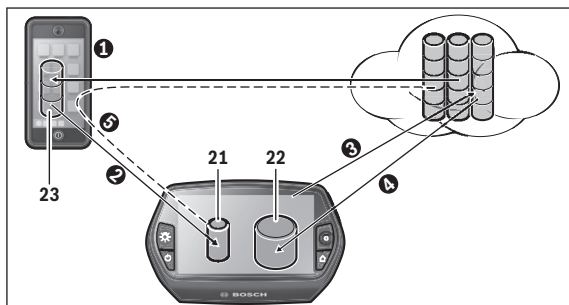
- **“My Profile”:** The personal data collected by registration are contained here. These data can be adjusted, expanded and corrected here. If a Bluetooth® link or Nyon wi-fi link to the web exists, these data are automatically synchronised.
Here you can also set up and edit your home address and your work address, set up your **“Bosch eBike Connect”** login via Facebook and change your password.
- **“Map Manager”:** Use the **“Map Manager”** to load more maps of other destination areas directly to Nyon.
- **“Upload using mobile data”:** You can turn this function on or off. If the function is switched on, activity data will be uploaded to the portal via mobile data if WiFi is not available.
- **“Map Streaming”:** You can turn this function on or off. If the function is switched on, map data that Nyon requires for navigation will be download to the smartphone via mobile data if WiFi is not available.
- **“Help improve the App”:** You can turn this function on or off. If the function is switched on, anonymised usage data will be transmitted to Google Analytics for analysis.

Transferring the maps to Nyon

Nyon only has the maps currently required for navigation in its cache memory **21** and automatically loads the areas required for navigation as required.

If Nyon realises that it needs additional map material, it initially either searches for map material available locally in the main memory **22** of the Nyon or it searches for map material in the smartphone memory **23**. If the required maps are not available, Nyon connects to the internet via the smartphone and automatically downloads the required map material from the internet into its cache memory **21**.

Caution! Roaming fees may be charged if you ride your eBike abroad. For this reason, load the required maps onto your smartphone or your Nyon before embarking on your journey abroad.



The maps are transferred to the Nyon cache memory as follows:

- **Downloading the maps to the smartphone and transferring them to Nyon:**

On your smartphone, select the **“Map Manager”** menu item in the **“Settings”** menu and load the desired maps onto your smartphone (❶). If Nyon requires maps, the data will load automatically via Bluetooth® from your local smartphone memory **23** directly into the Nyon cache memory (❷). The map is then available for navigation.

- **Downloading the maps to Nyon:**

This function is available only when Nyon is connected to a WLAN network. For this reason, connect to a WLAN network (❸) in order to have access to the internet.

Select the **“Map Manager”** menu item under **“Settings” > “Map & Navigation”** on your Nyon. Select the desired maps and download them (❹). If required, the Nyon will transfer the saved maps from its main memory **22** to its cache memory **21**. The map is then available for navigation.

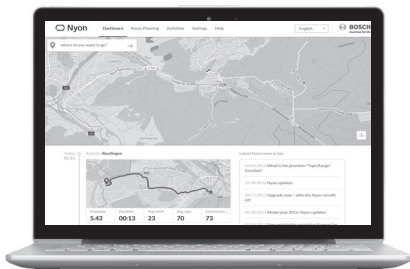
- **Transferring the maps from the internet via a smartphone:**

If Nyon requires maps and they are not located in the local memory **21/22** or in the smartphone memory **23**, Nyon will automatically establish an internet connection via the smartphone (❺) and load the required data into its cache memory **21**. The map is then available for navigation.

Menu item “Help”

In the **“Help”** menu item, you will find a selection of FAQs (frequently asked questions), contact details and information about the system and licenses.

Displays and settings of the online portal



Note: All interface displays and interface texts on the following pages correspond to the release status of the software. Since the Nyon software is updated a number of times a year, the interface displays and/or interface texts may change slightly after an update.

Online registration

Internet access is required for online registration.

- Use your browser to open the **“Bosch eBike Connect”** online portal at **“www.eBike-Connect.com”**.
- Read and accept the terms and conditions and the privacy policy.
- Follow the instructions and complete the registration.

Once you have registered, you can log in with e-mail and password from this point on. Alternatively you can also log in using the **“Facebook login”**. An existing Facebook profile is required for the **“Facebook login”**. The login data from the online portal matches the login data of the smartphone application **“Bosch eBike Connect”**.

Online portal main menu

Menu item	Function
“Dashboard”	Under this menu item you can view your recent activities, news and tips.
“Route Planning”	You can plan new routes via this menu item.
“Activities”	Under this menu item you can view the trips you have made.
“Settings”	You can use this menu item to create custom views and manage your profile.
“Help”	Under this menu item you will find the FAQ, contact details and other information.

Menu item “Dashboard”


This page shows you your current location and enables you to quickly plan a route to a desired destination.

The following is also shown:

- the recent activities in chronological order
- news and tips on Nyon
- information about your Bosch eBike system

Menu item “Route Planning”

Use “**New Route**” to plan a new route by specifying the start and end points. If required, you can also specify other intermediate destinations.

You can rearrange the sequence of the points by moving them. Click on  to remove individual points.

Click on ☆ to save individual points as a location.

You can enter addresses or coordinates as the start and end points or as the intermediate destination. Alternatively you can select an element from the list of recent destinations, saved locations or POIs.

You can add another intermediate destination by right-clicking another location on the map. The start and end points and the intermediate destinations can be moved on the map.

You can choose between three different routes (“**Fast**”, “**Scenic**” and “**Short/MTB**”).

- The “**Fast**” route shows you the fastest connection from your location to your selected destination while avoiding steeper slopes.
- The “**Scenic**” route shows you the most scenic connection from your location to your selected destination and avoids main roads.
- The “**Short**” route shows you the shortest way from your location to your selected destination (**only** for eBikes up to 45 km/h).
- The “**MTB**” route guides the cyclist over mostly unpaved trails and offers the best route for mountain bikers (**not** for eBikes up to 45 km/h).

The different “**Short/MTB**”, “**Scenic**” and “**Fast**” routes may be identical on short routes.

The currently selected route is shown on the map in “green”. The alternative routes with other profiles are shown in “grey”. The elevation profile, the distance and the estimated trip duration of the selected route are also shown.

Once you have compiled your desired route, save it by pressing “**Save**”.

Importing GPX Track

GPX files contain a number of geographical coordinates (waypoints) whose sequence describes a route. The GPX files can be used for navigation with Nyon. You can create or edit GPX files with the appropriate programs.

You can use the button **“Upload GPX file”** to import GPX files with a size of up to 5 MB into the online portal. GPX files are transferred to Nyon as soon as Nyon is connected via the smartphone to the internet over WiFi or Bluetooth®. On its own, Nyon cannot import GPX files directly over a USB link.

The routability of GPX tracks depends on the accuracy of details on OSM maps. The following results are possible depending on the existence of roads and tracks which are navigable:

- **GPX Track can be fully routed**

Navigation can be performed as usual, including turn-off instructions and information of the remaining distance and estimated time of arrival. The turn-off instructions can be switched off using the button at the top right.

If Nyon is close to the starting point, navigation can be started immediately.

If Nyon is further away from the starting point, the rider can be navigated to that point.

- **GPX Track cannot be routed**

The route is displayed statically on Nyon and can be travelled by the rider. No navigation details or time calculations can be made.

- **GPX Track can be partially routed**

If you use the changed versions, you can convert and save the route into a fully routable track.

If you have the original version, the route is treated as a non-routable track.

Menu item “Activities”

Three views of your trips are available under this menu item.

- **“Rides”**: Each of the trips is displayed here (from switching on the on-board computer to the next time it was switched off).
A **“Ride”** is complete:
 - When Nyon is shut down.
 - When Nyon is removed from the holder.
 - When a manual or automatic reset is performed.
- **“Days”**: All the trips started on one day are summarised here.
- **“Trips”**: All trips are displayed here, starting with the first trip until the counter is either reset manually or automatically.

When you select a trip, you will be offered other statistical data in addition to the trip distance and trip duration. The route travelled will be displayed on a map. You can view up to two measurement parameters of the trip in a diagram.

If you use a chest strap, your heart rate is also displayed.

Activities which are not complete are also displayed following synchronisation.

You can use the button **“Export”** to export the performed activity as a GPX file or you can use the button **“Convert to route”** to convert the activity into a stored route.

If you have connected your account with Facebook, you can share the performed activity with your friends on Facebook.

Menu item “Settings”

Under **“Settings”** you can adjust your profile, request a new password, adjust your fitness status, change the registered address and the work address. You can create and adapt custom views and custom riding modes.

Menu item “Help”

In the **“Help”** menu item, you will find a selection of FAQs (frequently asked questions), contact details and information about the system and licenses.

Device Information

Technical Data

On-board computer		Nyon
Article number		1 270 020 907/915
Internal memory in total		
1 270 020 907	GB	1
1 270 020 915	GB	8
Max. charging current, USB connection	mA	500
Charging voltage, USB connection	V	5
USB charging cable ¹⁾		1 270 016 360
Operating temperature	°C	-5 ... +40
Storage temperature	°C	-10 ... +50
Charging temperature	°C	0 ... +40
Protection type ²⁾		IP x7 (watertight)
Supported wi-fi standards		802.11b/g/n (2.4 GHz)
Weight, approx.	kg	0.2
1) Not included as part of standard delivery		
2) When USB cover is closed		

Error Code Indication

The components of the eBike system are continuously and automatically monitored. If an error is detected, the respective error code is indicated on the on-board computer.

Depending on the type of error, the drive unit is automatically shut off, if required. Continued travel without assistance from the drive unit is possible at any time. However, have the eBike checked before attempting new trips.

► **Have all repairs performed only by an authorised bike dealer.**

Code	Cause	Corrective Measure
410	One or more buttons of the on-board computer are blocked.	Check if any buttons are blocked, e.g. from dirt or debris. Clean the buttons, if required.
414	Connection problem of the operating unit	Have connections and contacts checked.. Contact your Bosch eBike dealer.
418	One or more buttons of the operating unit are blocked.	Check if any buttons are blocked, e.g. from dirt or debris. Clean the buttons, if required.
422	Connection problem of the drive unit	Have connections and contacts checked.
423	Connection problem of the eBike battery pack	Have connections and contacts checked.
424	Communication error among the components	Have connections and contacts checked.
426	Internal time-out error	Restart the system. If the problem persists, contact your Bosch eBike dealer.
430	Internal battery pack of the on-board computer is empty.	Charge the on-board computer (in the holder or via the USB port).
431	Software version error	Restart the system. If the problem persists, contact your Bosch eBike dealer.
440	Internal error of the drive unit	Restart the system. If the problem persists, contact your Bosch eBike dealer.

Code	Cause	Corrective Measure
450	Internal software error	Restart the system. If the problem persists, contact your Bosch eBike dealer.
460	Error at USB connection	Remove the cable from the USB connection of the on-board computer. If the problem persists, contact your Bosch eBike dealer.
490	Internal error of the on-board computer	Have the on-board computer checked.
500	Internal error of the drive unit	Restart the system. If the problem persists, contact your Bosch eBike dealer.
502	Bike lighting error	Check the light and the associated wiring. Restart the system. If the problem persists, contact your Bosch eBike dealer.
503	Error of the speed sensor	Restart the system. If the problem persists, contact your Bosch eBike dealer.
510	Internal sensor error	Restart the system. If the problem persists, contact your Bosch eBike dealer.
511	Internal error of the drive unit	Restart the system. If the problem persists, contact your Bosch eBike dealer.
530	Battery pack error	Switch off the eBike, remove the eBike battery pack and reinsert the eBike battery pack. Restart the system. If the problem persists, contact your Bosch eBike dealer.
531	Configuration error	Restart the system. If the problem persists, contact your Bosch eBike dealer.
540	Temperature error	The eBike is outside of the permissible temperature range. Switch off the eBike system and allow the drive unit to either cool down or heat up to the permissible temperature. Restart the system. If the problem persists, contact your Bosch eBike dealer.

Code	Cause	Corrective Measure
550	An improper load was detected.	Remove load. Restart the system. If the problem persists, contact your Bosch eBike dealer.
580	Software version error	Restart the system. If the problem persists, contact your Bosch eBike dealer.
591	Authentication error	Switch off the eBike system. Remove the battery pack and reinsert it. Restart the system. If the problem persists, contact your Bosch eBike dealer.
592	Incompatible component	Insert a compatible display. If the problem persists, contact your Bosch eBike dealer.
593	Configuration error	Restart the system. If the problem persists, contact your Bosch eBike dealer.
595, 596	Communication error	Check the wiring to the transmission and restart the system. If the problem persists, contact your Bosch eBike dealer.
602	Internal battery pack error while charging	Unplug the charger from the battery pack. Restart the eBike system. Plug the charger into the battery pack. If the problem persists, contact your Bosch eBike dealer.
602	Internal battery pack error	Restart the system. If the problem persists, contact your Bosch eBike dealer.
603	Internal battery pack error	Restart the system. If the problem persists, contact your Bosch eBike dealer.

Code	Cause	Corrective Measure
605	Battery pack temperature error	The eBike is outside of the permissible temperature range. Switch off the eBike system and allow the drive unit to either cool down or heat up to the permissible temperature. Restart the system. If the problem persists, contact your Bosch eBike dealer.
605	Battery pack temperature error while charging	Unplug the charger from the battery pack. Allow the battery pack to cool. If the problem persists, contact your Bosch eBike dealer.
606	External battery pack error	Check the wiring. Restart the system. If the problem persists, contact your Bosch eBike dealer.
610	Battery pack voltage error	Restart the system. If the problem persists, contact your Bosch eBike dealer.
620	Charging error	Replace the charger. Contact your Bosch eBike dealer.
640	Internal battery pack error	Restart the system. If the problem persists, contact your Bosch eBike dealer.
655	Multiple battery pack errors	Switch off the eBike system. Remove the battery pack and reinsert it. Restart the system. If the problem persists, contact your Bosch eBike dealer.
656	Software version error	Contact your Bosch eBike dealer so that he can perform a software update.
No display	Internal error of the on-board computer	Restart your eBike system by switching it off and back on.

Maintenance and Cleaning

Please observe the operating and storage temperatures of the eBike components. Protect the drive unit, on-board computer and battery against extreme temperatures (e.g. from intense sunlight without adequate ventilation). The components (especially the battery pack) can become damaged through extreme temperatures.

An abrupt change of environmental conditions, can cause the screen to fog up from inside. After a short time, a temperature adjustment takes place and the fog disappears.

Keep the screen of your Nyon clean. Dirt can cause faulty brightness detection. The day/night switch-over in the navigation mode can be distorted.

Keep all components of your eBike clean, especially the battery-pack contacts and corresponding holder contacts. Clean them carefully with a soft, damp cloth.

Have your eBike checked by an expert at regular intervals. The on-board computer displays a message telling you when the service date is due for four seconds after switching it on. The bicycle manufacturer or dealer may base the service date on the distance travelled and/or on a period of time. Do not immerse any components, including the drive unit, in water or clean them with pressurised water.

Clean your on-board computer using a soft cloth dampened only with water. Do not use any detergents.

Have your eBike system checked by an expert at least once a year (including mechanical parts, up-to-dateness of system software).

The bicycle manufacturer or dealer may also base the service date on the distance travelled and/or a period of time. In this case, the on-board computer displays a message telling you when the service date is due for four seconds after each time it is switched on.

For service or repairs on the eBike, please refer to an authorised bicycle dealer.

► **Have all repairs performed only by an authorised bike dealer.**

After-sales Service and Application Service

In case of questions concerning the eBike system and its components, please refer to an authorised Bosch eBike dealer.

For contact data of authorised Bosch eBike dealers, please refer to **www.bosch-ebike.com**

Transport

- **If you transport your eBike attached to the outside of your car, e.g. on a bike rack, remove the on-board computer and the PowerPack to avoid damaging them.**

The battery packs are subject to the Dangerous Goods Legislation requirements. Private users can transport undamaged battery packs by road without further requirements.

When being transported by commercial users or third parties (e.g. air transport or forwarding agency), special requirements on packaging and labelling must be observed (e.g. ADR regulations). If necessary, an expert for hazardous materials can be consulted when preparing the item for shipping.

Dispatch battery packs only when the housing is undamaged. Tape or mask off open contacts and pack up the battery pack in such a manner that it cannot move around in the packaging. Inform your parcel service that the package contains dangerous goods. Please also observe the possibility of more detailed national regulations.

In case of questions concerning transport of the battery packs, please refer to an authorised Bosch eBike dealer. The Bosch eBike dealers can also provide suitable transport packaging.

Disposal



The drive unit, on-board computer including operating unit, battery pack, speed sensor, accessories and packaging should be disposed of in an environmentally correct manner.

Do not dispose of eBikes and their components into household waste!

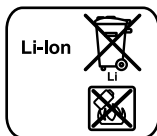
Only for EC countries:



According to the European Guideline 2012/19/EU, electrical devices/tools that are no longer usable, and according to the European Guideline 2006/66/EC, defective or used battery packs/batteries, must be collected separately and disposed of in an environmentally correct manner.

The integrated battery pack in the on-board computer may only be removed for disposal. Opening the housing shell can destroy the on-board computer.

Please return battery packs and on-board computers that are no longer usable to an authorised bicycle dealer.



Li-ion:

Please observe the instructions in section “Transport”, page English – 63.

Subject to change without notice.

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Bosch eBike Systems
72703 Reutlingen
GERMANY

www.bosch-ebike.com

1 270 020 Wen (2016.08) T / 65

Active Line/Performance Line

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0 275 007 XPX (2016.04) T / 57 WEU

Active Line/Performance Line



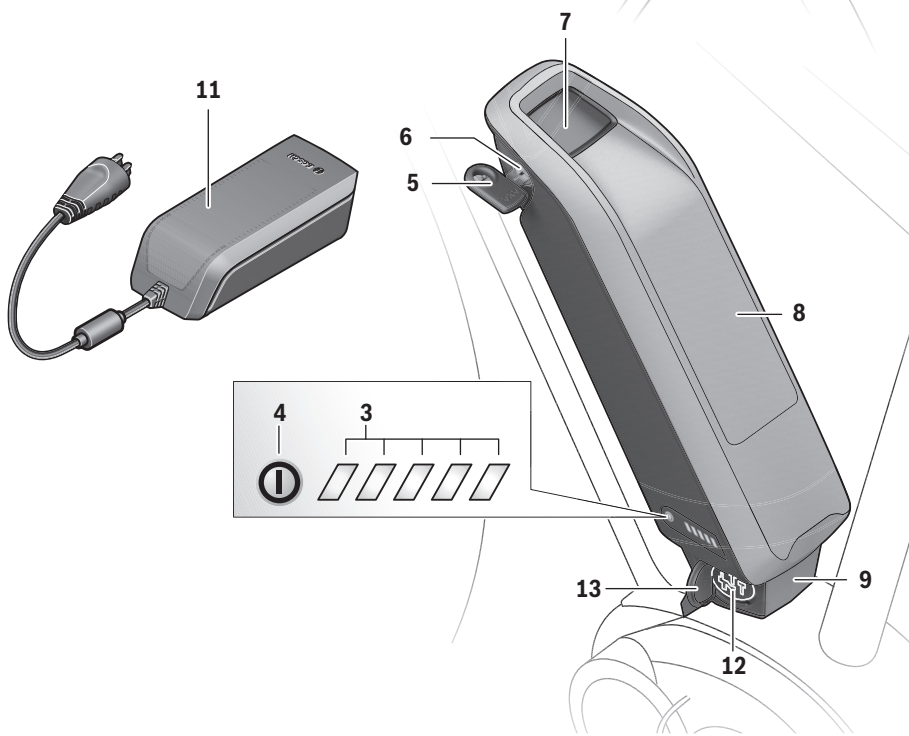
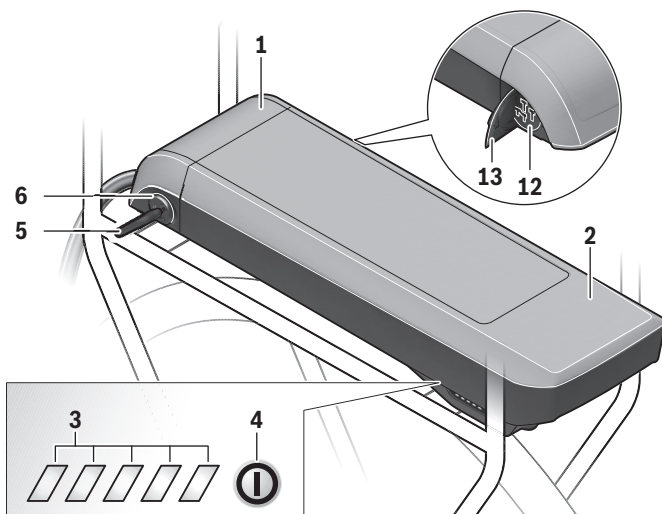
PowerPack 300 | 400 | 500

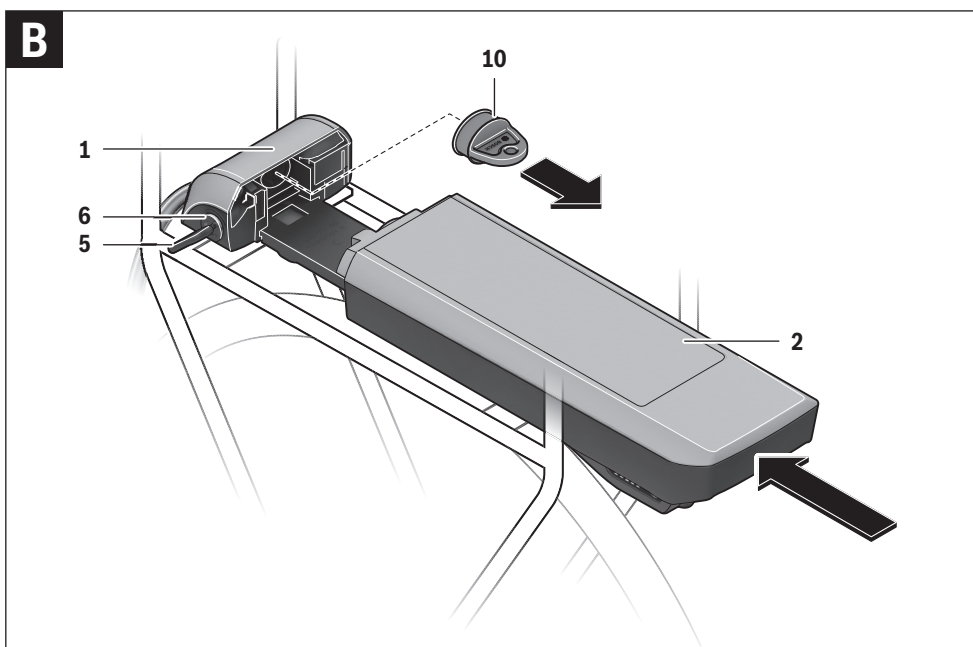
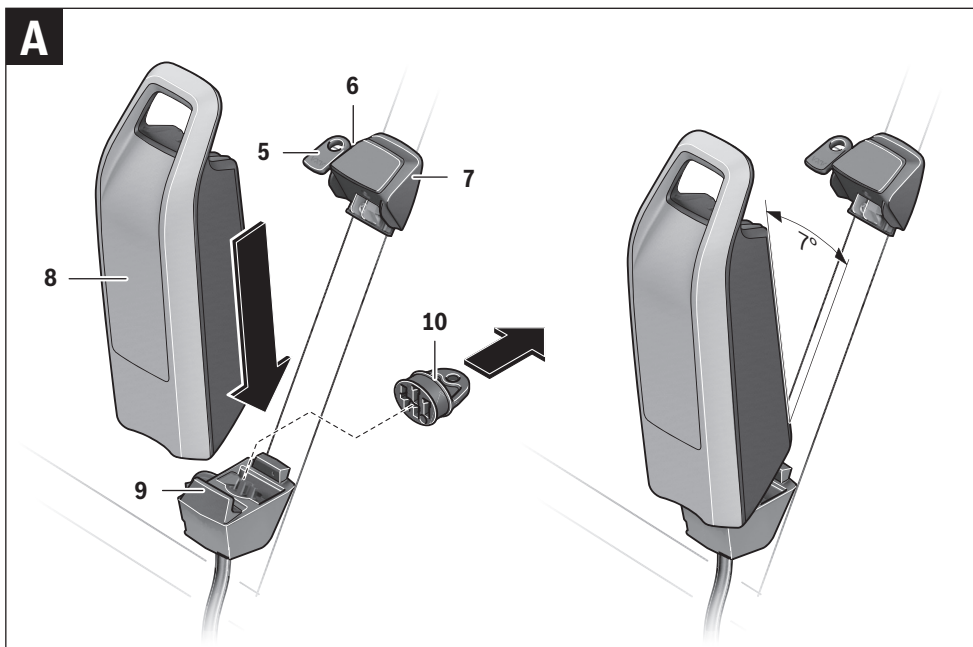
0 275 007 509 | 0 275 007 510 | 0 275 007 511 | 0 275 007 512
0 275 007 513 | 0 275 007 514 | 0 275 007 522
0 275 007 529 | 0 275 007 530 | 0 275 007 531 | 0 275 007 532



en Original instructions







Safety Notes



Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all safety warnings and instructions for future reference.

The term “battery pack” used in these operating instructions refers both to standard battery packs (battery packs with holder on the bike frame) and to rack-type battery packs (battery packs with holder in the rear rack/carrier), except when explicitly referring to the design type.

- ▶ **Remove the battery pack from the eBike before beginning work (e.g. inspection, repair, assembly, maintenance, work on the chain, etc.) on the eBike, transporting it by car or plane, or storing it.** Unintentional activation of the eBike system poses a risk of injury.
- ▶ **Do not open the battery pack.** Danger of short-circuiting. Opening the battery pack voids any and all warranty claims.



Protect the battery against heat (e.g. prolonged sun exposure) and fire and from being submerged in water. Do not store or operate the battery near hot or flammable objects.
There is a risk of explosion.

- ▶ **Keep the battery pack not being used away from paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** Shorting the battery-pack terminals together may cause burns or a fire. For short-circuiting damage caused in this manner, any and all warranty claims through Bosch shall be invalid.
- ▶ **Do not place the charger or battery pack near flammable materials. Charge battery packs only when dry and in a fireproof area.** There is a risk of fire due to the heat generated during charging.
- ▶ **The eBike battery must not be left unattended while charging.**
- ▶ **Under abusive conditions, liquid may be ejected from the battery pack. Avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery pack may cause skin irritations or burns.
- ▶ **Battery packs must not be subjected to mechanical impacts.** There is a risk that the battery pack will be damaged causing vapours to escape. The vapours can irritate the respiratory system. Provide for fresh air and seek medical attention in case of complaints.

- ▶ **The battery may give off fumes if it becomes damaged or is used incorrectly. Provide a fresh air supply and seek medical advice in the event of pain or discomfort.** These fumes may irritate the respiratory tract.
- ▶ **Charge the battery pack only with original Bosch battery chargers.** When using non-original Bosch chargers, the danger of fire cannot be excluded.
- ▶ **Use the battery pack only together with eBikes that have an original Bosch eBike drive system.** This is the only way to protect the battery pack against dangerous overload.
- ▶ **Use only original Bosch battery packs approved for your eBike by the manufacturer.** Using other battery packs can lead to injuries and pose a fire hazard. When using other battery packs, Bosch shall not assume any liability and warranty.
- ▶ **Do not use the rack-type battery pack as a handle.** Lifting the eBike up by the battery pack can cause damage to the battery pack.
- ▶ **Read and observe the safety warnings and instructions in all operating instructions of the eBike system and in the operating instructions of your eBike.**
- ▶ **Keep the battery pack out of reach of children.**

Product Description and Specifications

Product Features

The numbering of the product features refers to the illustrations on the graphics pages.

All representations of bike components, with exception of the battery packs and their holders, are schematic and can deviate from your eBike.

- 1 Holder of the rack-type battery pack
- 2 Rack-type battery pack
- 3 Operation and charge-control indicator
- 4 On/Off button
- 5 Key of the battery pack lock
- 6 Battery-pack lock
- 7 Upper holder of the standard battery pack
- 8 Standard battery pack
- 9 Bottom holder of the standard battery pack
- 10 Cover lid (Supplied only on eBikes with 2 battery packs)
- 11 Battery charger
- 12 Socket for charge connector
- 13 Charge socket cover

Technical Data

Lithium-ion battery pack		PowerPack 300	PowerPack 400	PowerPack 500
Article number				
– Standard battery pack		0 275 007 509 0 275 007 511	0 275 007 510 0 275 007 512	0 275 007 529 0 275 007 530
– Rack-type battery pack		0 275 007 513	0 275 007 514 0 275 007 522	0 275 007 531 0 275 007 532
Rated voltage	V=	36	36	36
Rated capacity	Ah	8.2	11	13.4
Energy	Wh	300	400	500
Operating temperature	°C	–10 ... +40	–10 ... +40	–10 ... +40
Storage temperature	°C	–10 ... +60	–10 ... +60	–10 ... +60
Allowable charging temperature range	°C	0 ... +40	0 ... +40	0 ... +40
Weight, approx.	kg	2.0/2.4	2.5/2.6	2.6/2.7
Degree of protection		IP 54 (dust and splash water protected)	IP 54 (dust and splash water protected)	IP 54 (dust and splash water protected)

Assembly

- **Place down the battery pack only on clean surfaces.** In particular, avoid soiling the charge socket and the contacts, e.g. by means of sand or soil.

Checking the Battery Pack Before Using for the First Time

Check the battery pack before charging it or using it with your eBike for the first time.

For this, press the On/Off button **4** to switch on the battery pack. When no LED of the charge-control indicator **3** lights up, the battery pack may be damaged.

When at least one, but not all LEDs of the charge-control indicator **3** is lit, then fully charge the battery pack before using for the first time.

- **Do not attempt to charge or use a damaged battery pack.** Please refer to an authorised Bosch eBike dealer.

Charging the Battery Pack

- **Use only the Bosch charger provided with your eBike or an identical original Bosch charger.** Only this charger is matched to the lithium-ion battery pack used in your eBike.

Note: The battery pack is supplied partially charged. To ensure full battery pack capacity, completely charge the battery pack in the charger before using for the first time.

For charging the battery pack, read and observe the operating instructions of the charger.

The battery pack can be recharged at any time on its own or on the bike without shortening the lifespan. Interrupting the charging process does not damage the battery pack.

The battery pack is equipped with a temperature control indicator, which enables charging only within a temperature range between 0 °C and 40 °C.



When the battery pack is not within the charging-temperature range, three LEDs of the charge-control indicator **3**

flash. Disconnect the battery pack from the charger until its temperature has adjusted.

Do not connect the battery pack to the charger until it has reached the allowable charging temperature.

Charge-control Indicator

When the battery pack is switched on, the five green LEDs of the charge-control indicator **3** indicate the charge condition of the battery pack.

In this, each LED indicates approx. 20 % capacity. When the battery pack is completely charged, all five LEDs light up.

The charge level of the switched on battery pack is also shown on the display of the on-board computer. When doing so, read and observe the operating instructions of the drive unit and on-board computer.

If the capacity of the battery pack is below 5 %, all LEDs of the charge-control indicator **3** on the battery pack go out. However there is another display function of the on-board computer.

Using Two Battery Packs for One eBike (optional)

An eBike can also be equipped with two battery packs by the manufacturer. In this case, one of the charge sockets is not accessible or is sealed by the bicycle manufacturer with a sealing cap. Charge the battery packs only at the accessible charge socket.

- **Never open charge sockets that have been sealed by the manufacturer.** Charging at a previously sealed charge socket can lead to irreparable damage.

If you have an eBike that is designed for two battery packs and you want to use it with only battery pack, cover off the contacts of the unused socket using the cover lid **10** provided because otherwise the open contacts pose a risk of short-circuiting (see figures A and B).

Charging with Two Battery Packs Inserted

If two battery packs are mounted on one eBike, both battery packs can be charged using the unsealed connection. The charging process will charge both battery packs alternately, automatically switching between both battery packs numerous times. The charging times add up.

Both battery packs are also discharged alternately during operation.

If you take the battery packs out of the holders, you can charge each battery pack individually.

Charging with One Battery Pack Inserted

If only one battery pack is inserted, then you can charge only the battery pack that has the accessible charge socket on the bike. You can charge the battery pack with the sealed charge socket only when you take the battery pack out of the holder.

Inserting and removing the battery pack (see figures A – B)

- **Always switch off the battery pack and the eBike system when you insert the battery pack into the holder or when you take it out of the holder.**

In order for the battery pack to be inserted, the key **5** must be inserted into the lock **6** and the lock must be unlocked.

To **insert the standard battery pack 8**, place it with the contacts on the lower holder **9** on the eBike (the battery pack can be inclined up to 7° to the frame). Tilt it into the upper holder **7** until it engages.

To **insert the rack-type battery pack 2**, slide it with the contacts facing ahead until it engages in the holder **1** of the rear rack/carrier.

Check if the battery pack is tightly seated. Always lock the battery pack with lock **6**, as otherwise the lock can open and the battery pack could fall out of the holder.

After locking, always remove the key **5** from the lock **6**. This prevents the key from falling out and the battery pack from being removed from unauthorised persons when the eBike is parked.

To **remove the standard battery pack 8**, switch it off and unlock the lock with the key **5**. Tilt the battery pack out of the upper holder **7** and pull it out of the lower holder **9**.

To **remove the rack-type battery pack 2**, switch it off and unlock the lock with the key **5**. Pull the battery pack out of the holder **1**.

Operation

Initial Operation

- **Use only original Bosch battery packs approved for your eBike by the manufacturer.** Using other battery packs can lead to injuries and pose a fire hazard. When using other battery packs, Bosch shall not assume any liability and warranty.

Switching On and Off

Switching on the battery pack is one of the ways of switching on the eBike system. When doing so, read and observe the operating instructions of the drive unit and on-board computer.

Before switching on the battery pack or the eBike system, check that the lock **6** is locked.

To **switch on** the battery pack, press the On/Off button **4**. The LEDs of indicator **3** light up and at the same time indicate the charge condition.

Note: If the capacity of the battery pack is below 5 %, no LED on the charge-control indicator **3** lights up. It is only visible on the on-board computer, if the eBike system is switched on.

To **switch off** the battery pack, press the On/Off button **4** again. The LEDs of indicator **3** go out. This also switches off the eBike system.

If no power is drawn from the eBike drive for about 10 minutes (e.g. because the eBike is not moving) and no button is pressed on the on-board computer or the operating unit of the eBike, the eBike system and therefore also the battery pack will shut down automatically to save energy.

The battery pack is protected against deep discharging, overcharging, overheating and short-circuiting through the "Electronic Cell Protection (ECP)". In case of hazardous situations, a protective circuit automatically switches off the battery pack.



When a defect of the battery pack is detected, two LEDs of the charge-control indicator **3** flash. In this case, please refer to an authorised Bosch eBike dealer.

Notes for Optimum Handling of the Battery Pack

The battery-pack life can be prolonged when being properly maintained and especially when being operated and stored at the right temperatures.

With increasing age, however, the battery-pack capacity will diminish, even when properly maintained.

A significantly reduced operating period after charging indicates that the battery pack is worn out and must be replaced. You can replace the battery pack yourself.

Recharging the Battery Pack prior to and during Storage

When not using the battery pack for a longer period, charge it to approx. 60 % (3 to 4 LEDs lit on the charge-control indicator **3**). Check the charge condition after 6 months. When only one LED of the charge-control indicator **3** lights up, recharge the battery pack again approx. 60 %.

Note: When the battery pack is stored discharged (empty) for longer periods, it can become damaged despite the low self-discharging feature and the battery-pack capacity may be strongly reduced.

It is not recommended to have the battery pack connected permanently to the charger.

Storage Conditions

Store the battery pack in a dry, well-ventilated location. Protect the battery pack against moisture and water. Under unfavourable weather conditions, it is recommended e.g. to remove the battery pack from the eBike and store it in an enclosed location until being used again.

The battery pack can be stored at temperatures between -10°C and $+60^{\circ}\text{C}$. For a long battery-pack life, however, storing the battery pack at a room temperature of approx. 20°C is of advantage.

Take care that the maximal storage temperature is not exceeded. As an example, do not leave the battery pack in a vehicle in summer and store it out of direct sunlight.

It is recommended to not store the battery pack on the bike.

Maintenance and Service

Maintenance and Cleaning

Keep the battery clean. Clean it carefully with a soft, damp cloth.

► **The battery must not be submerged in water or cleaned using a jet of water.**

When the battery pack is no longer operative, please refer to an authorised Bosch eBike dealer.

After-sales Service and Application Service

In case of questions concerning the battery packs, please refer to an authorised bicycle dealer.

► **Note down the manufacturer and the number of the key 5.** In case of loss of the keys, please refer to an authorised bicycle dealer. Please provide the name of the manufacturer and the number of the key.

For contact data of authorised Bosch eBike dealers, please refer to www.bosch-ebike.com

Transport

► **If you carry your eBike outside of your car, e.g. on a luggage rack, remove the eBike battery pack in order to avoid damaging it.**

The battery packs are subject to the Dangerous Goods Legislation requirements. Private users can transport undamaged battery packs by road without further requirements.

When being transported by commercial users or third parties (e.g. air transport or forwarding agency), special requirements on packaging and labelling must be observed (e.g. ADR regulations). If necessary, an expert for hazardous materials can be consulted when preparing the item for shipping.

Dispatch battery packs only when the housing is undamaged. Tape or mask off open contacts and pack up the battery pack in such a manner that it cannot move around in the packaging. Inform your parcel service that the package contains dangerous goods. Please also observe the possibility of more detailed national regulations.

In case of questions concerning transport of the battery packs, please refer to an authorised Bosch eBike dealer. The Bosch eBike dealers can also provide suitable transport packaging.

Disposal



Battery packs, accessories and packaging should be sorted for environmentally-friendly recycling.

Do not dispose of the battery packs into household waste!

Tape or mask off the contact surfaces of the battery pack's terminals with adhesive tape before disposing of battery packs.

Only for EC countries:



According to the European Guideline 2012/19/EU, electrical devices/tools that are no longer usable, and according to the European Guideline 2006/66/EC, defective or used battery packs/batteries, must be collected separately and disposed of in an environmentally correct manner.

Please return battery packs that are no longer usable to an authorised bicycle dealer.



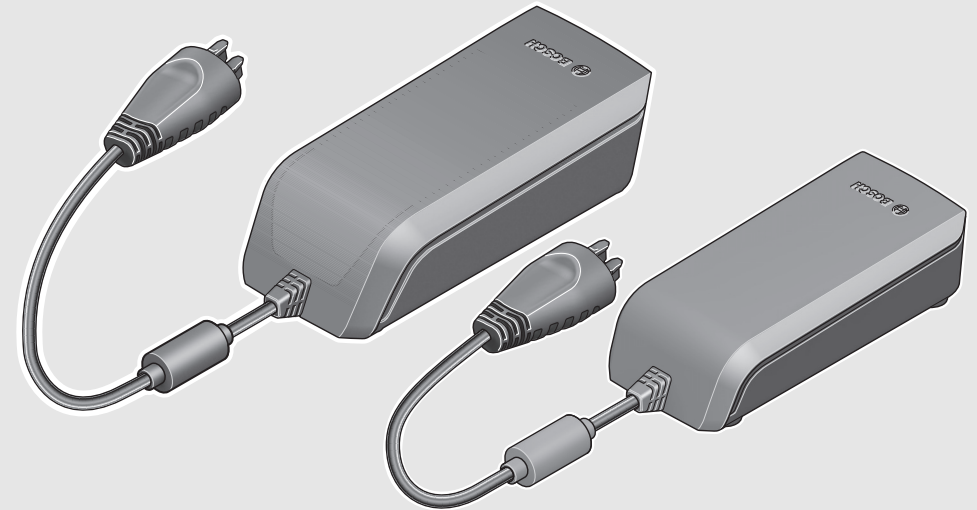
Li-ion:

Please observe the instructions in section "Transport", page English – 4.

Subject to change without notice.

Active Line/Performance Line

Active Line/Performance Line



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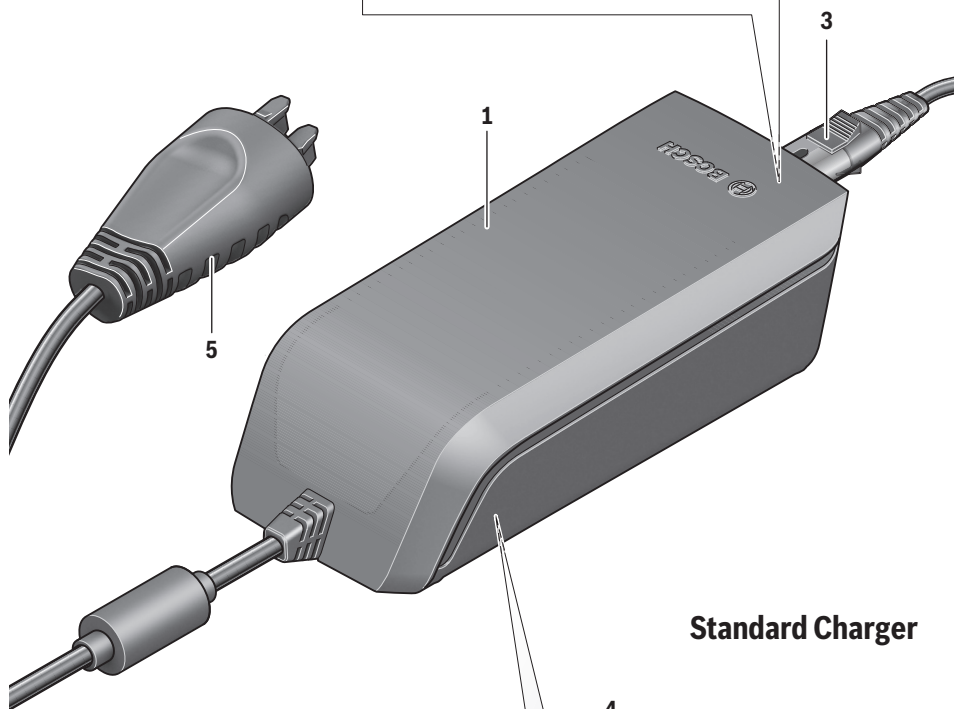
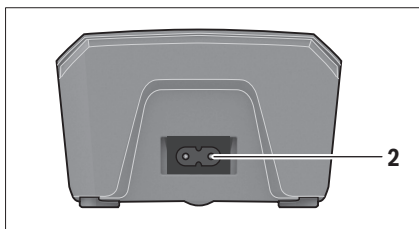
Charger

0 275 007 907 | 0 275 007 915



en Original instructions





Standard Charger

eBike Battery Charger 36-4/230

0 275 007 907

Input: 230V ~ 50Hz 1.5A

Output: 36V --- 4A

Made in

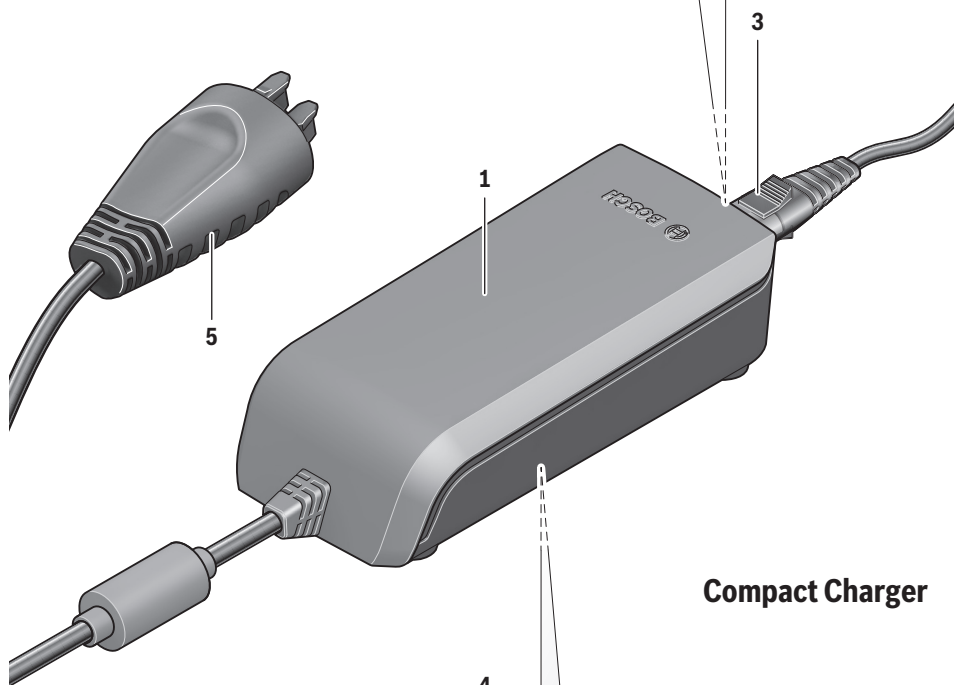
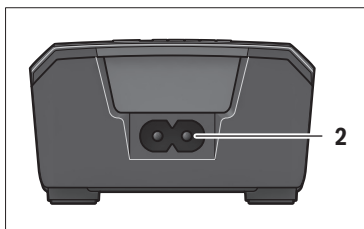
Robert Bosch GmbH, Reutlingen

Standard Charger

Li-Ion

Use ONLY with BOSCH Li-Ion batteries





Compact Charger

eBike Battery Charger 36-2/100-240

0 275 007 915

Input: 100-240V ~ 50/60 Hz 1.6A

Output: 36V --- 2A

Made in

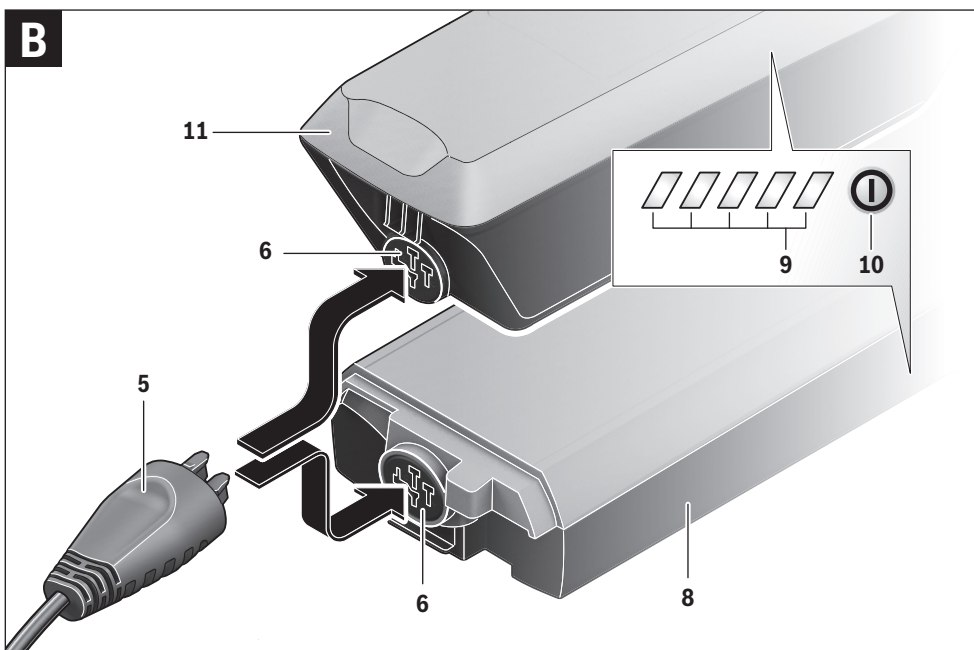
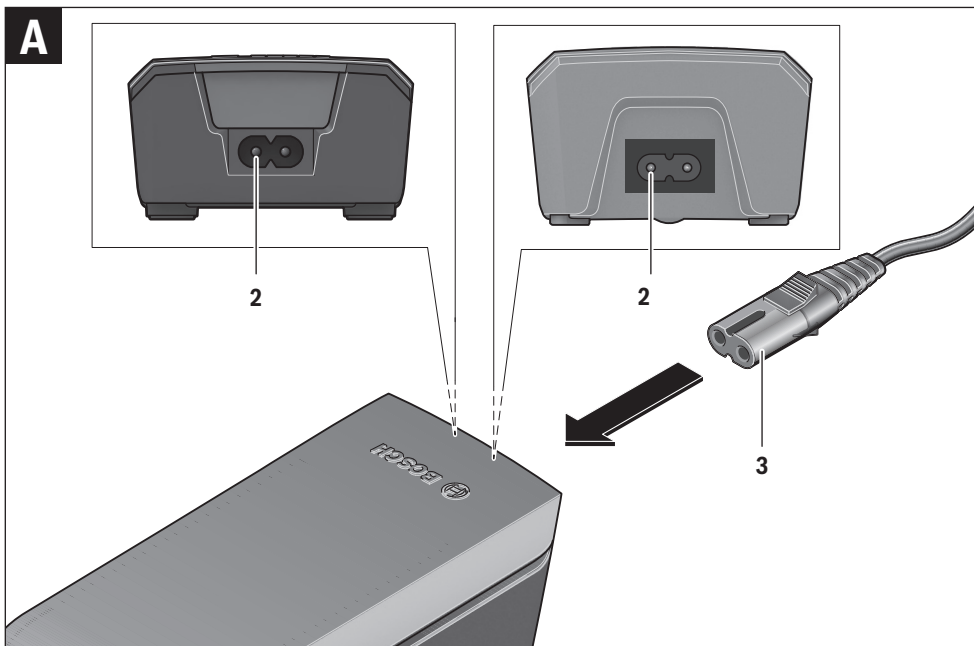
Robert Bosch GmbH, Reutlingen

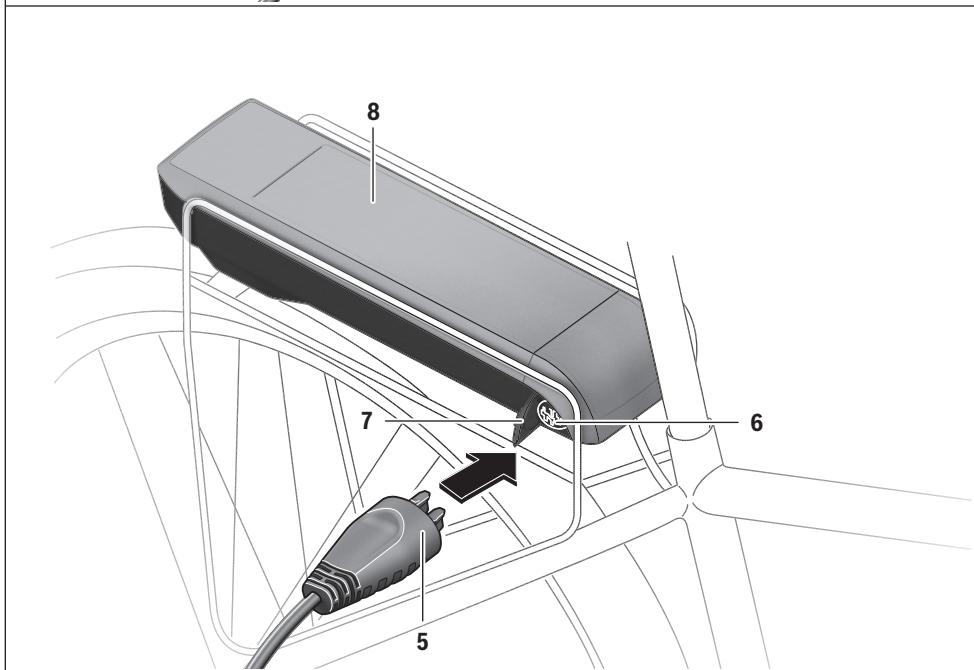
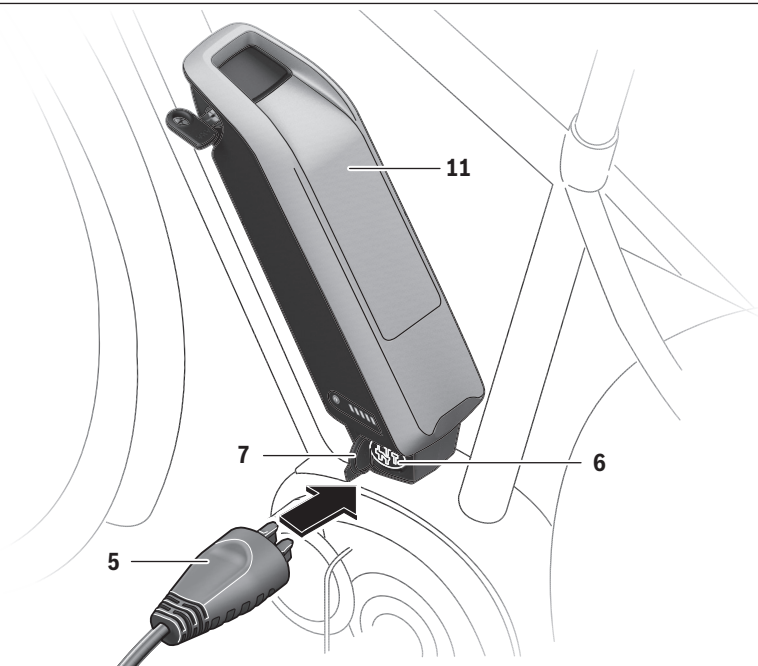
Active/Performance Line

Li-Ion

USE ONLY with BOSCH Li-Ion batteries





C

Safety Notes



Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all safety warnings and instructions for future reference.

The term “battery pack” used in these operating instructions refers both to standard battery packs (battery packs with holder on the bike frame) and to rack-type battery packs (battery packs with holder in the rear rack/carrier).



Keep the charger away from rain or moisture. The penetration of water into a battery charger increases the risk of an electric shock.

- ▶ **Only charge eBike-approved Bosch lithium-ion battery packs. The battery-pack voltage must match the battery-pack charging voltage of the charger.** Otherwise there is danger of fire and explosion.
- ▶ **Keep the battery charger clean.** Contamination can lead to danger of an electric shock.
- ▶ **Before each use, check the battery charger, cable and plug. If damage is detected, do not use the battery charger. Never open the battery charger yourself. Have repairs performed only by a qualified technician and only using original spare parts.** Damaged battery chargers, cables and plugs increase the risk of an electric shock.
- ▶ **Do not operate the battery charger on easily inflammable surfaces (e. g., paper, textiles, etc.) or surroundings.** The heating of the battery charger during the charging process can pose a fire hazard.
- ▶ **Use caution when touching the charger during the charging procedure. Wear protective gloves.** Especially in high ambient temperatures, the charger can heat up considerably.
- ▶ **The battery may give off fumes if it becomes damaged or is used incorrectly. Provide a fresh air supply and seek medical advice in the event of pain or discomfort.** These fumes may irritate the respiratory tract.
- ▶ **Do not place the charger or battery pack near to flammable materials. Charge battery packs only when dry and in a fireproof area.** There is a risk of fire due to the heat generated during charging.

- ▶ **The eBike battery must not be left unattended while charging.**
- ▶ **Supervise children during use, cleaning and maintenance.** This will ensure that children do not play with the charger.
- ▶ **Children or persons that owing to their physical, sensory or mental limitations or to their lack of experience or knowledge, are not capable of securely operating the charger, may only use this charger under supervision or after having been instructed by a responsible person.** Otherwise, there is danger of operating errors and injuries.
- ▶ **Read and observe the safety warnings and instructions in all operating instructions of the eBike system and in the operating instructions of your eBike.**
- ▶ A sticker in English is adhered to the bottom of the charger (marked **4** in the diagram on the graphics page). This says: Use ONLY with BOSCH lithium-ion batteries.

Product Description and Specifications

Product Features

The numbering of the components shown refers to the illustrations on the graphic pages at the beginning of the manual. Individual illustrations in these operating instructions may differ slightly from the actual circumstances depending on the equipment of your eBike.

- 1 Battery charger
- 2 Charger socket
- 3 Plug-in connector
- 4 Safety warnings, charger
- 5 Charge connector
- 6 Socket for charge connector
- 7 Charge socket cover
- 8 Rack-type battery pack
- 9 Operating/state of charge indicator
- 10 Battery on/off button
- 11 Standard battery pack

Technical Data

Battery Charger		Standard Charger (36 – 4/230)	Compact Charger (36 – 2/100-240)
Article number		0 275 007 907	0 275 007 915
Rated voltage	V~	207 ... 264	90 ... 264
Frequency	Hz	47 ... 63	47 ... 63
Output voltage	V---	36	36
Charging current	A	4	2
Charging time			
– PowerPack 300 approx.	h	2.5	5
– PowerPack 400 approx.	h	3.5	6.5
– PowerPack 500 approx.	h	4.5	7.5
Operating temperature	°C	– 5 ... + 40	– 5 ... + 40
Storage temperature	°C	– 10 ... + 50	– 10 ... + 50
Weight, approx.	kg	0.8	0.6
Degree of protection		IP 40	IP 40

The values given are valid for a nominal voltage [U] of 230 V. For different voltages and models for specific countries, these values can vary.

Operation

Initial Operation

Connecting the charger to the mains (see figure A)

- **Observe the mains voltage!** The voltage of the power supply must correspond with the data given on the nameplate of the battery charger. Battery chargers marked with 230 V can also be operated with 220 V.

Plug the charger plug **3** of the power cord into the charger socket **2** of the charger.

Connect the mains cable (country-specific) to the mains supply.

Charging the removed battery (see figure B)

Switch the battery pack off and remove it from the holder of the eBike. For this, read and observe the operating instructions of the battery pack.

- **Place down the battery pack only on clean surfaces.** In particular, avoid soiling the charge socket and the contacts, e. g. by means of sand or soil.

Insert the charger plug **5** of the battery charger into the socket **6** on the battery pack.

Charging the battery on the Bike (see figure C)

Switch the battery off. Clean the cover of the charge socket **7**. Prevent especially the charge socket and the contacts from getting dirty, e. g. by sand or soil. Lift the cover of the charge socket **7** and plug the charge connector **5** into the charge socket **6**.

- **Charge the battery only in accordance with all safety instructions.** If this is not possible, remove the battery from the holder and charge it in a more suitable location. When doing so, read and observe the operating instructions of the battery.

Charging with Two Battery Packs Inserted

If two battery packs are mounted on one eBike, both battery packs can be charged using the unsealed connection. The charging process will charge both battery packs alternately, automatically switching between both battery packs numerous times. The charging times add up.

Both battery packs are also discharged alternately during operation.

If you take the battery packs out of the holders, you can charge each battery pack individually.

Charging Procedure

The charging procedure begins as soon as the charger is connected to the battery or the charge socket on the bike and the main power supply.

Note: Charging is only possible if the temperature of the eBike battery is within the permitted charging temperature range.

Note: The drive unit is deactivated during the charging procedure.

The battery can be charged with and without the on-board computer. When charging without the on-board computer, the charging procedure can be observed on the battery charge-control indicator.

When the on-board computer is connected, a corresponding message is shown on the display.

The charging state is displayed by the battery charge-control indicator **9** on the battery and by the bars on the on-board computer.

During the charging procedure, the LEDs of charge-control indicator **9** on the battery pack light up. Each continuously lit LED is equivalent to a charge capacity of approx. 20 %. The flashing LED indicates the charging of the next 20 %.

Once the eBike battery is fully charged, the LEDs extinguish immediately and the on-board computer is switched off. The charging procedure is terminated. The charging state can be displayed for 3 seconds by pressing the on/off button **10** on the eBike battery.




Disconnect the charger from the main power supply and the battery pack from the charger.

When disconnecting the battery pack from the charger, the battery pack is automatically switched off.

Note: If you have charged on the bike, carefully close the charge socket **6** with the cover **7** after the charging procedure so that no dirt or water can get in.

If the charger is not disconnected from the battery after charging, after a few hours the charger will switch itself back on, check the charging state of the battery and begin the charging procedure again if necessary.

Troubleshooting – Causes and Corrective Measures

Cause	Corrective Measure
	Two LEDs of the battery pack flashing Refer to an authorised bicycle dealer.
	Three LEDs of the battery pack flashing Disconnect the battery from the charger until the charging temperature range has been reached. Do not connect the battery pack to the charger until it has reached the allowable charging temperature.
	No LEDs flashing (one or more LEDs will remain permanently lit depending of the state of charge of the eBike battery). The charger is not charging. Refer to an authorised bicycle dealer.

Cause	Corrective Measure
No charging procedure possible (no indication on battery pack)	
Plug not inserted correctly	Check all plug connections.
Contacts of battery pack soiled	Carefully clean the contacts of the battery pack.
Socket outlet, cable or charger defective	Check mains voltage, have charger checked through bicycle dealer
Battery pack defective	Refer to an authorised bicycle dealer.

Maintenance and Service

Maintenance and Cleaning

If the charger should fail, please refer to an authorised bicycle dealer.

After-sales Service and Application Service

In case of questions concerning the charger, please refer to an authorised bicycle dealer.

For contact data of authorised Bosch eBike dealers, please refer to www.bosch-ebike.com

Disposal

Battery chargers, accessories and packaging should be sorted for environmental-friendly recycling.

Do not dispose of battery chargers into household waste!

Only for EC countries:



According to the European Directive 2012/19/EU on waste electrical and electronic equipment and its transposition into national law, chargers that are no longer usable must be collected separately and sorted for environmental-friendly recycling.

Subject to change without notice.