

### Kilometre by kilometre, the eBike learns more

#### AI-based features: Bosch presents intelligent route planning and navigation

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- ▶ Artificial intelligence makes eBikes more fun to ride with the smart system from Bosch
- ▶ Customised route planning and navigation – thanks to technical solutions that recognise user behaviour
- ▶ New “Range Control” function makes it possible to arrive with the desired battery level
- ▶ New Eco+ mode for an energy-saving riding experience and long ranges

Stuttgart/Reutlingen – AI solutions are increasingly being used to make a variety of everyday tasks easier. They impress with personalised applications by analysing individual needs and continuously learning from them. Thanks to Connected Biking, the physical riding experience merges with the digital world. Consequently, the eBike has long become an intelligent companion. Connected via the eBike Flow app, it forms part of a modern, digital lifestyle and always remains up-to-date. Bosch eBike Systems integrates AI-based solutions into the smart system, which recognise user behaviour, learn from it and enable, for example, smarter route planning and navigation.

“We’re confident that Connected Biking is the future. Only by merging the physical riding experience with the digital world can the full potential of our eBike systems be realised,” explains Gregor Dasbach, Vice President Digital Business at Bosch eBike Systems. “With the integration of AI, we are taking the next logical step in developing and creating priceless added value for eBikers: Kilometre by kilometre, the eBike learns more and unnoticed, becomes a smart and connected companion along the way.”

#### **Range Control: AI ensures greater reliability when it comes to range on the eBike**

The new, AI-based “**Range Control**” feature makes planning rides easier: eBikers no longer need to worry about their battery range. When you plan a route in the eBike Flow app, it immediately indicates the percent of battery

charge remaining when you reach your destination. To display the most accurate range possible, the smart system gathers various information, including the system weight, the elevation profile of the route and your personal riding behaviour during your recent rides. Its predictions become increasingly precise: once the first activities have been recorded, the system is able to determine the battery status on arrival much more accurately than on the first journey. The predicted battery level is also updated during the journey and the current riding style is taken into account. This means that riders can concentrate fully on their eBike experience.

To rule out every last worry about range during the journey, you can even set the desired minimum battery level at destination. The smart system takes care of the rest – extremely practical if, for example, charging isn't possible before the return journey or the next ride. If required, eBikers can enable this additional feature via a toggle button in the eBike Flow app. A slider can then be used to precisely set the desired battery level at destination. Depending on the selection, the app indicates whether the route can be travelled with full, low or very low support. During the journey, the smart system then adjusts the motor support as necessary. This ensures that you arrive with the predetermined battery level. With this new development, wondering whether the battery will last to the destination is now a thing of the past for eBikes with a smart system from Bosch.

### **Personalised arrival time and route planning**

The smart system also uses other AI features for personalised planning. The expected arrival time, for example, can be calculated and displayed before a ride. An analysis of previous riding behaviour on similar routes helps here. eBikers also benefit from personalised route suggestions: The smart system knows, for example, which road types, which surfaces and which gradients and speeds are preferred, and makes a corresponding route recommendation.

### **Current charge level for easy planning and detailed maps for Kiox displays**

Further new functions make navigation and planning even easier. With the **“current charge level” feature**, users can track the battery status live during the charging process on the eBike Flow app and view it anytime and anywhere. So you can plan your next tour or onward journey at home on the couch or in a cosy café. The **“extended navigation” feature** enhances the navigation display on the Kiox 300 and Kiox 500 displays. This no longer only shows the planned route and junctions, but also all side roads. These new, additional map details ensure the best possible orientation and intuitive navigation. “Extended navigation” and “current charge level” are part of the Flow+ subscription service.

### **New insights on completed journeys**

Bosch also presents numerous innovations in terms of the **ride statistics**. This means that all riders who have a Bosch eBike ABS installed on their eBike can view the percentage of braking manoeuvres with and without ABS as a direct comparison in the eBike Flow app. During the ride, the number of braking manoeuvres where ABS was activated is also displayed.

The **“riding mode usage” display** is no longer only available during the ride, but also as a statistic afterwards. A clear pie chart shows the ratios of the riding modes used (including Off mode). The same applies to the **“power share” screen**. The “power share” screen provides insights into the average rider power compared to the average power of the drive unit, based on current activity and the selected riding mode. This information helps eBikers to improve their fitness level and optimise their training. Display of riding mode usage and power share after the ride are both part of Flow+.

### **New Eco+ mode enables long ranges**

In addition to the digital features, Bosch is also introducing a new riding mode for the smart system. The new Eco+ mode blurs the boundaries between eBiking and normal cycling, saves energy and enables particularly long ranges. It is particularly suitable for eBikers who enjoy pedalling without support on flat terrain, but do not want to do without a motor on climbs or when overtaking, for example. Depending on the rider performance, the motor remains completely switched off until an activation threshold that can be customised in the eBike Flow app is exceeded. This is ideal for lightweight eBikes, but also for eSUVs and eTrekking bikes. When support is no longer required, the motor switches off automatically. This makes it easy to save energy and extend the range, making even lengthy tours possible without charging or replacing the battery. The Eco+ mode is available for all drive units with the smart system from Bosch eBike Systems and can be installed on your own eBike using the eBike Flow app.

### **Even more customisation: display configuration on the Purion 200**

The networking of components creates new possibilities for customisation. Like the Kiox 300 and Kiox 500 displays, the display of the Purion 200 control unit can now also be customised according to your own preferences: eBikers can sort, add or delete content in the eBike Flow app. You prefer the speed to be displayed on the left and always want the heart rate on the right? No problem, because two tiles per screen can be freely assigned. The screen order can also be redefined.

Features at a glance

Feature	Flow+	Release
Range Control		July 2024
Riding statistics: ABS		July 2024
Eco+ mode		July 2024
Purion 200: Display configuration		July 2024
Current charge level	x	August 2024
Extended navigation	x	August 2024
Additional statistics: Riding mode usage and power share	x	August 2024

Press photo 1:



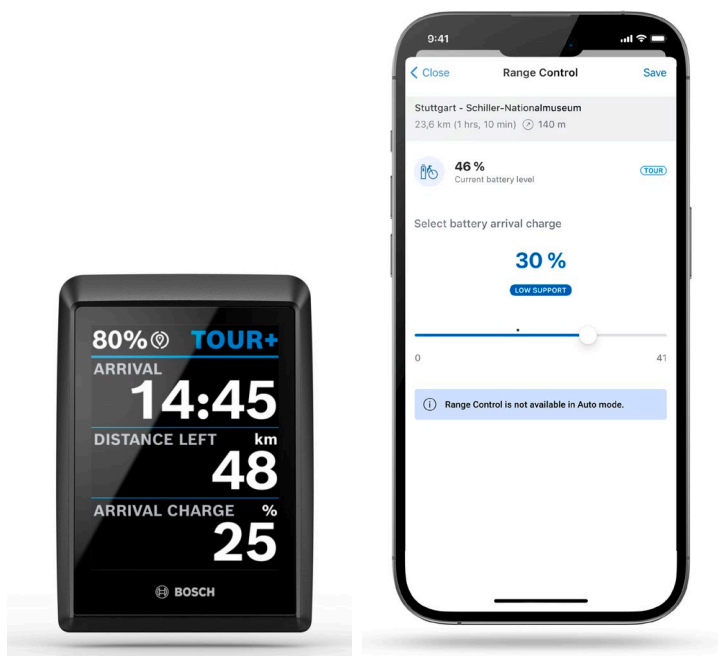
More riding fun thanks to AI-based features: eBikes with the smart system from Bosch learn kilometre by kilometre.

**Press photo 2:**



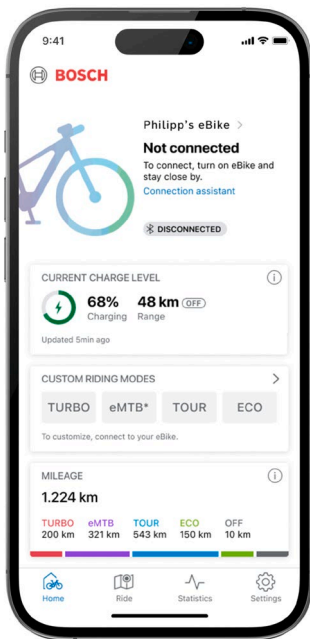
Thanks to Connected Biking, the physical eBike experience is merging with the digital world and has long become an intelligent companion in everyday life.

**Press photo 3 + Press photo 4:**



Know what battery level you will reach your destination with before your ride – or even set the desired minimum battery level at destination yourself: This can be done with the new “Range Control” feature.

### Press photo 5:



With the “current charge level” feature, the battery level can be tracked live on the eBike Flow app during the charging process and viewed at any time and anywhere.

### Press photo 6:



The new Eco+ mode blurs the boundaries between eBiking and normal cycling, saves energy and enables particularly long ranges.

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For more information please visit [www.bosch-ebike.com](http://www.bosch-ebike.com)

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