

Baby strollers will get a Bosch push in tech features

September 3 2019, by Nancy Cohen



Credit: Bosch

Bosch is promoting its e-stroller system as a safe and comfortable way for baby to enjoy the ride. The system components include (1) two smart electric motors mounted on the stroller's rear axle (2) electromechanical brake (3) a battery unit with removable lithium-ion battery and (4) smartphone app.



Electrically powered, the stroller brings motorized assistance when the owner needs to push the stroller uphill and on rough terrain. "On an uphill path, the motors automatically help push the stroller... When on a downhill slope, they step in to help brake."

"If the parents let go of the stroller, the motor brake prevents it from rolling away unchecked, and the electromechanical lock engages the parking brake...the e-stroller system has no need for additional switches or buttons on the push handle."

The Bosch design calls for sensors to regulate electrical drive and an automatic braking function. The sensors measure things like the stroller's speed and acceleration while assessing the road surface.

The smartphone app gives the Bosch e-stroller system connectivity via Bluetooth.

What good is the app?

It displays, for example, the charge level of a detachable 18-volt lithiumion battery. The person is warned if the power is running out. (What if the battery were to run out while the stroller is on the move? Bosch said then it could just be used as a normal stroller "with no perceptible motor resistance.")

The app could activate an alarm when parents park the stroller somewhere if the Bluetooth connection is established with the owner's phone; say, for example, if someone tried pushing the stroller away, then a warning would sound off and the parking brake would automatically reengage.

The battery charging time takes two and a half hours. The range is up to 15 kilometers (9.32 miles).





Credit: Bosch

But wait. Do you think this is a bit much? What's wrong with the old and still pervasive way of depending on your own two hands and two arms to push and control the stroller?

Bosch created this scenario to show what the e-strollers will offer.

"Measuring a seven on the Beaufort scale, the air in the wind tunnel blasts the stroller at a speed of 60 kph. Its hood may be flapping wildly, but the stroller doesn't budge. This isn't because its parking brake is on, or because someone is holding it still. It's all thanks to the new Bosch estroller system. This is much more than an electrical drive—it is an assistance system for strollers with a comprehensive range of comfort and safety features: in addition to offering push support and an



automatic braking function, this includes connectivity via a <u>smartphone</u> <u>app</u>, an alarm function, and a variety of high-tech sensors."

Aside from <u>safety features</u> for the baby, the Bosch stroller also was designed with the parent's posture in mind. The e-stroller system can help to support parents' posture, since it takes a less effort to push the stroller uphill, or over uneven terrain.

What's next? A Swedish collaboration is being planned for next year. The Swedish stroller manufacturer is Emmaljunga. The company site described NXT90e as an intelligent stroller. "In cooperation with Bosch, the cooperation partners are presenting the first intelligent, electrically powered Stroller NXT90e."

Emmaljunga described its product further: "The silent intelligent engines are equipped with sensors and algorithms that detect the type of <u>surface</u> on which the stroller is traveling on: the NXT90e provides pushing assistance."

Engadget covered the story and these were some of the reader comments:

"If you're not strong enough to push a stroller, you shouldn't be pushing a stroller."

Another viewer was waiting "for version 2, which marries a stroller with a follow-me drone."

Another comment indicated an earnest welcome for pushing support. "I have been looking for this for 11 months now. Especially for pushing the stroller uphill, elsewhere is no big deal. Recovering mothers could also really benefit from it."



More information: <u>www.bosch-presse.de/pressporta</u> ... <u>trollers-197442.html</u>

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