# **Rimac All Wheel Torque Vectoring**

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**Zagreb, January 2016, Rimac Automobili started as a true start-up, from a small garage, as the idea of one man, Founder, CEO and CTO Mate Rimac. His idea was to build the world’s first electric hypercar.**

One of the many features that make the Concept\_One unique and define its essence is the Rimac All Wheel Torque Vectoring System (RAWTV). The Rimac All Wheel Torque Vectoring system uses the maximum traction of each tire and gives the driver the possibility to adjust the driving behaviour exactly to his or her preferences thus giving it superior driving characteristics.

This system precisely controls the torque of each motor 100 times per second. By utilising the data from various precise sensors placed throughout the car and advanced control algorithms, it can use the maximum grip of each tire, thus providing superior dynamic characteristics. RAWTV has various modes that give the car multiple characters, depending on the driver’s preferences and abilities. For example – the driver can choose an “oversteer mode” where the system helps skilled drivers to slide through corners. RAWTV not only changes the character of the car under acceleration and braking but also acts as a dynamic stability control system. Compared to the conventional systems where hydraulic brakes are used to stabilise the vehicle, the RAWTV takes advantage of the use of electric motors. Changing the torque more than a 100 times per second on each wheel, RAWTV covers the functionalities of traditional ABS and ESP systems faster and more efficient than ever before while delivering a whole suite of new functionalities and possibilities. Combining high safety levels with superior performance, Rimac All Wheel Torque Vectoring brings a brand new electrifying driving experience.

*With 1088 HP and 1600 Nm of torque the Concept\_One accelerates from 0-100 km/h in 2,8 seconds and reaches the limited top speed of 325 km/h.*

Thanks to the highly sophisticated liquid cooled battery system that can deliver more than 800kW of power, it can reach up to 330 km on a single charge. Rimac All Wheel Torque Vectoring was developed for the Concept\_One, but this system was also implemented in the Tajima Rimac e-Runner, a racing car that Rimac Automobili developed for Monster Sport. Nobuhiro Monster Tajima completed the Pikes Peak International Hill Climb race in the Tajima Rimac e-Runner finishing the race in front of all race cars with internal combustion engines. This was the ultimate proof of RAWTV’s efficiency and superior characteristics.