



## THE MULTIFUNCTION STEERING WHEEL – FORMERLY AN EQUIPMENT OPTION, TODAY A CONTROL CENTER

In 2001, the number of new vehicles equipped with multifunction steering wheels was still just under 25% (source: DAT Report). Today, hardly any cars are delivered without a multifunction switch in the steering wheel. And for good reason, because the intuitive operability within reach of the thumb with minimal averting of driver gaze from the road speaks for itself.

Today's challenge of new developments is to realize more and more functions in the limited space of the steering wheel, including the integration of electronic components. Since the gripping range of the thumb is limited, functions are often "outsourced" to so-called "satellite switches". Preh has developed such additional control elements, which are often located in the 7 and 5 o'clock position on the steering wheel, for the newer AMG models from Mercedes Benz, among others. By means of a rotating ring and integrated color display, they allow, for example, suspension and driving profile settings. But additional switches beyond the reach of the thumb are a compromise, and because they are not quite ideal in minimizing driver distraction, they are therefore reserved for selected functions.

The Preh Group's pre-development department is constantly coming up with new concepts for multifunctional steering wheel switches that remain focused on accurate haptic feedback. Particularly in the case of concepts with closed surfaces, haptic feedback is crucial, as the sometimes harsh reader comments in leading German automotive magazines in recent months have shown. Many a customer has called for a return to classic buttons on the steering wheel.

The Preh HMI specialists have designed an interesting solution that cleverly combines the new with the tried and tested. Here, closed touch-sensitive switch surfaces are combined with active or passive haptic feedback. The function displays are largely mapped in the instrument display, with special attention paid to a clear arrangement and large display. In this way, the function assignment of the switches not only remains highly flexible, but also goes hand in hand with convincing haptic feedback. Of course, even with this concept, the frequently used functions, such as "volume up / down", are always in the same position. Furthermore, the closed surfaces can be combined with individual conventional control elements, such as scroll wheel or button.