

Press Releases

PREH TO SUPPLY INTEGRATED CONTROL SYSTEM FOR THE NEW AUDI Q7

The new "MMI All-in-Touch" touchpad has a genuine glass surface with a haptic feedback.

NOVI, Mich. – In the new Audi Q7, Preh, Inc. delivers a particularly high-quality and technologically advanced operating system – the multimedia interface (MMI) "All-in-Touch" – an innovative "hub" in the vehicle's center console. The latest MMI generation – a joint development of Audi and Preh – provides an easy-to-use and comfortable control, offering a variety of functions at the same time. All input for navigation, multimedia and telephone can be made with a few steps. In the center, a large control system touchpad confirms the input with acoustic and haptic feedback.

Car owners have become familiar with handwriting recognition and gestures – so touch controls are found more and more in the automotive interior. In the new Audi Q7, the MMI was selected for its ease-of-use touch panel and a three-dimensional surface with a tactile and audible feedback. Thus the driver gets a response similar to that when a conventional button is pressed. As a result, the MMI All-in-Touch sets a new standard, because its haptic feedback goes far beyond that of consumer products. Such feedback quality is made possible through force sensors and actuators specially developed by Preh.

Preh Managing Director and Head of Development Jochen Ehrenberg says, "when using the touchpad the haptic feedback feels for the driver like pressing a button. To implement the touch requirements from our client Audi, it took a perfectly matched system of actuators, force sensors and corresponding software."

An innovation in the series production is the genuine glass surface of the touchpad. Glass surfaces with such a tactile feedback, where the individual icons can be easily felt and distinguished, Preh had first shown in a 2013 center console concept. Glass, with a processed surface structure and perfect sliding properties, also gives the advantage of high scratch-resistance and chemical resistance.

The illumination of function icons and design details turned Preh engineers toward a further challenge. That was to represent the backlighting with maximum homogeneity, in spite of different materials: a glass touchpad, polycarbonate casing and light guides in the rotary control. Specialized measurements for electronics production and calibration setup were specifically designed.

The bottom line for the new Audi MMI All-in-Touch is that it sets the highest standards in terms of control functionality and feel.