Making Time in the Car, Time Well spent

Mobility is more than getting from one place to another. It’s about shifting from one state of being to the next. HARMAN ExP doesn’t just move people from one place to another; it delivers in-vehicle experiences that put people first, so time in the car becomes time well spent.

HARMAN ExP bundles advanced technologies to deliver meaningful consumer experiences; enables OEMs to unlock new market opportunities; and empowers HARMAN to create value today while positioning our customers to thrive tomorrow.

HARMAN ExP maximizes consumers’ time and quality of life in four key consumer benefits:

• Accomplishment,
• Well-being,
• Social Connection, and
• Enjoyment.

Smart conformal antenna
The all-in-one connectivity solution

The antenna challenge

The number of vehicle radio services for navigation, infotainment, ADAS, and other features has dramatically increased. To stay relevant to consumers, a modern, connected car may require as many as 18 antennas. This poses major design challenges. HARMAN’s multi-band conformal antenna is designed to address these challenges by combining multiple antennas in a single module that can be mounted beneath the vehicle’s body surface and covered with a waterproof, non-conductive cover (radome). The result is a sleek look and aerodynamic design that is a perfect complement to the vehicle body design. The conformal antenna provides gain, directionality and the ability to accommodate beam forming while delivering performance and the required isolation.

Streamlining car and radio services

In addition to streamlining radio services, the multiband conformal antenna can be made part of an integrated package with HARMAN’s Telematics Control Unit (TCU) to become a “smart antenna.” By combining the radios and the antennas into one package, automakers capture immediate benefits of cost reduction, reduced installation complexity and improved reliability as a result of the removal of coax and connectors.

This 5G-ready technology will help automakers to keep up with the pace of innovation in the telecommunications sector so that drivers can be remain connected without tethering to a mobile phone. It also supports the vehicle-to-everything (V2X) solutions that increasingly connects cars to their surroundings to improve driver awareness and safety.

Key highlights

Provides hemispherical or monopole pattern coverage, multiple simultaneous beams, and spatial MIMO capability

Reduces cost and weight

Flush design improves aesthetics and reduces drag

May be integrated with HARMAN’s 4G, 5G-ready and fully enabled 5G TCUs
More than 50 million automobiles on the road today are equipped with HARMAN audio and connected car systems. Our software services power billions of mobile devices and systems that are connected, integrated and secure across all platforms, from work and home to car and mobile. HARMAN’s latest innovations leverage Samsung’s connected lifestyle and hardware expertise, allowing automakers to create an ecosystem of unique, smart, enhanced and rich in-vehicle experiences. Together HARMAN and Samsung are architects of experience, designing the most intuitive and immersive interactions with in-vehicle technology. HARMAN is a wholly-owned subsidiary of Samsung Electronics Co., Ltd.

car.harman.com