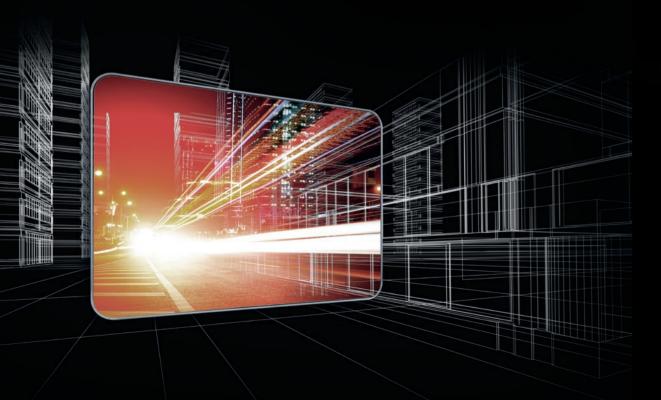
# **A VEHICLE LIKE NO OTHER** THAT IS CONSTANTLY **LOOKING OUT FOR YOU**



#### **READY FOR THE FUTURE OF DRIVING**

For a complete connected lifestyle experience, LIVS, HARMAN provides the key ingredients to consumer experience. With its ability to predict the driver's needs, LIVS' learning personal assistant maximum productivity. is always one step ahead.

LIVS comes alive in the Rinspeed  $\Sigma$ tos concept car LIVS captures the dynamic and constantly improv- to showcase HARMAN's solutions for the future ing nature of our next generation products. With of driving. Tomorrow's cars will feature your personal, adaptive infotainment system with ultra high tie all the elements together for a game-changing definition displays, intuitive operation, intelligent learning navigation, and a complete office suite for





## THE END-TO-END **CONNECTED CAR SOLUTION**

#### INTEGRATING THE CAR AND THE CLOUD

The HARMAN LIVS automotive compute platform integrates all vehicle functions for a holistic approach to in-car infotainment, connectivity, and critical functions. In combining this platform in the of solutions to our OEM customers, and is car with the cloud-based Service Delivery Platform, unparalleled in the industry.

HARMAN has created the industry's most complete end-to-end system. LIVS is highly coherent, personalized, intuitive, and adaptive to drivers other domains such as instrument cluster or safety and passengers, dramatically increases the scope





### SAFE

HARMAN has integrated pedestrian detection, camera-based navigation, 180° front and rear view and electronic mirrors with object detection, curb view, 360° surround view, and E-Horizon solutions as part of its Connected ADAS suite. For increased protection, HARMAN has taken a giant leap forward to warn the driver of varying road conditions.

- Beyond line-of-sight vision
- Minimized driver distraction
- 360° connected safety

### **SECURE**

HARMAN's 5+1 cyber security architecture is the industry's most robust and in-depth security framework to ensure the integrity of the vehicle over its lifetime through over-the-air updates. It features TowerSec's ECUSHIELD and TCUSHIELD providing the most comprehensive on-board automotive network protection against hacking and intrusion.

- Intrusion detection & prevention
- Secured content
- Privacy protection
- Update all vehicle ECUs over the air

### **MOBILE**

Working while commuting: Whether it be scheduling a meeting, dialing and conducting a conference call, reviewing documents, or simply better managing your travel, HARMAN has partnered with Microsoft to embed the Office 365 productivity suite.

- Efficient use of time spent travelling
- Universal mobile device compatibility
- Intelligent communication & improved networking

### **SMART**

Proactive and predictive, learning and evolving: With LIVS, a virtual personal assistant anticipates the intentions of its passengers and delivers personalized and customized information. Users interact with the system by voice, gestures, haptic controls, or touch – smart features to simplify the operation of the vehicle in everyday use.

- Functional simplicity
- & intuitive operation
- Seamless media & fresh content
- Updatable applications & services

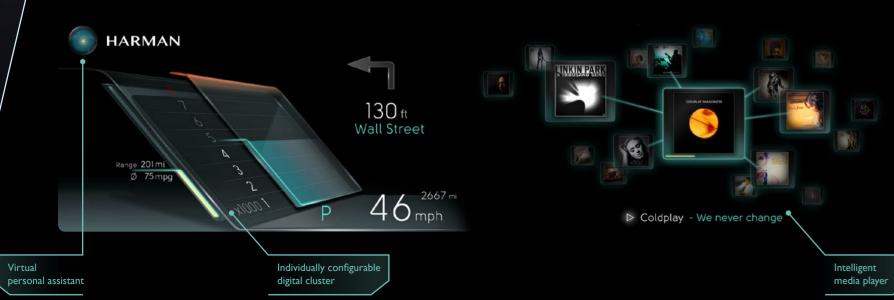


#### SERVICE DELIVERY PLATFORM

HARMAN's cloud-based Service Delivery Platform enables the launch of a variety of services including new software features after vehicle sale, vehicle data to predict part failures, forecasting for preventative maintenance, and analysis of warranty • OTA campaign management claims. It is a powerful, comprehensive framework with a collection of core services, third-party services and management features, fully integrated with vehicle systems, and updated seamlessly

over the air. This platform includes an expandable collection of managed and SAAS services available to automakers, including, but not limited to:

- Vehicle diagnostics
- Remote control
- Connected infotainment
- Connected navigation





Electronic rear-view mirrors

with object tracking





**HARMAN** 

Microsoft Office 365 productivity suite

Dedicated passenger menu & entertainment