

# World-Class In-Car Speech Recognition System for Navigation in 2005 Honda Cars

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[IBM®](#), the world leader in information technology innovation, today announced that it has jointly developed with Honda Motor Company a unique, hands-free and natural-sounding in-vehicle speech-recognition system - the industry's leading-edge [navigation](#) application. Honda will offer the system as standard equipment on the 2005 Acura RL and as options on both the 2005 Acura MDX and 2005 Honda Odyssey in the United States and Canada beginning this month.

Using IBM Embedded ViaVoice software, Honda is the first car manufacturer to equip automobiles with in-car navigation systems using advanced speech recognition and text-to-speech capabilities that can identify spoken street and city names that exist across the entire continental United States. This allows drivers to speak all street addresses represented in the US navigation system database and receive turn-by-turn voice guidance to their destinations. The breakthrough voice-recognition system can also enable enhanced ease-of-use by eliminating the need for drivers to take their hands off the wheel or eyes off the road, since no typing on touch screens or manual dialing is required.

To create this advanced, natural-sounding text-to-speech system, IBM and Honda research-and-development teams digitally processed hundreds of hours of speech recordings previously found in earlier-model Honda systems. They also produced hundreds of additional recordings to design a high-quality, customized, natural-sounding text-to-speech voice, digitally segmenting speech and intonations that can allow

vehicles to communicate naturally with their drivers. The result: a totally new type of speech synthesis that can capture the characteristics of the human voice. In addition to the natural-sounding text-to-speech, the Honda Odyssey, the Acura RL and the Acura MDX now feature more than 700 commands and more than 1.7 million street and city names that are accessible by voice.

Another unique system feature is nationwide dining information from Zagat's Survey, which provides drivers and their passengers the ability to request the names of, and directions to, nearby restaurants and also listen to or view restaurant reviews.

Besides its advanced speech recognition capabilities, the 2005 Acura RL comes equipped with the first real-time traffic navigation system in the United States, which integrates real-time traffic data into the navigation display. Other integrated features include:

AcuraLink, which communicates information between dealers and drivers, and

HandsFreeLink, which uses BlueTooth technology to synchronize personal cell-phone data within the car environment; this provides drivers hands-free, speech-enabled dialing on phones with built-in BlueTooth capability.

IBM's voice-recognition technology is integrated into the car's audio system so that driving instructions can be heard over the speakers.

Alongside its navigation functions, the system also provides command-and-control capabilities for audio, DVD entertainment system (Odyssey) and climate control functions.

Honda and IBM, using IBM Embedded ViaVoice, have deployed leading-edge voice-enabled telematics solutions since 2003. User satisfaction with the Voice Recognition-enabled systems has been outstanding due to Honda's engineering ability and the strength of IBM Embedded

ViaVoice's speech technology and automotive telematics solutions.

The new Honda navigation system is the latest in a broad portfolio of in-vehicle solutions that combine IBM's pervasive computing technology and telematics know-how. Software and electronics comprise a rapidly growing percentage of innovation and differentiation in cars today. IBM's integrated, open-standards-based software and telematics solutions are increasingly allowing data to benefit customers virtually wherever they are, helping to create entirely new industry models.

"Drivers can now fully access the majority of the resources inside the navigation system with voice input" said Tom Elliott, executive vice president of American Honda Motor Co., Inc. "As in-car navigation systems evolve and become more commonplace in today's vehicles, our extensive voice-recognition features give Honda and Acura products a distinct competitive advantage."

IBM's advanced software and telematics solutions featuring Embedded ViaVoice deliver IBM speech technology to mobile devices that include smart phones, handheld personal digital assistants (PDAs) and automobile components.

"By 2012, telematics services will be accessible in more than half of all new vehicle models," said Gartner's Thilo Koslowski. "The industry will shift from a vehicle-centered approach to one centered on the mobile customer. This transformation will make telematics an essential element of a new generation of personalized mobile services.

"IBM is proud of its history of teamwork with Honda - a history that leverages our full portfolio of technologies, products and services. The latest of these, a unique and sophisticated speech-enabled navigation system jointly developed by Honda R&D and IBM, illustrates the deep relationship IBM has with its industry partners," said Janette

Beauchamp, General Manager, IBM Global Automotive Industry. "From software and hardware solutions to consulting expertise, IBM is helping world-class companies like Honda to break new ground for their customers by implementing high-quality, innovative solutions that puts them ahead of their competition."

The 2005 Honda Odyssey minivan is all new for the 2005 model year and adds new style, performance and sophistication along with class-leading fuel economy, power and features, with room for eight passengers. The Acura RL, also new for 2005, features a 300-horsepower V-6 engine with an innovative Super Handling All-Wheel Drive system, among its many other refinements. The Odyssey will go on sale at Honda dealerships in September, and the RL will be available at Acura dealerships in October.

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