



AAA CENTER FOR DRIVING SAFETY & TECHNOLOGY



2018 KIA OPTIMA LX



INFOTAINMENT SYSTEM* DEMAND RATING

Moderate Demand



The 2018 Kia Optima LX UVO® infotainment system* placed moderate demand on drivers in the study. The voice command system allowed users to easily place calls and program audio entertainment, although using the center stack placed very high levels of visual (eyes-off-road) demand on drivers.

Standard and Optional Features in the 2018 Kia Optima

○ Optional

● Standard

	LX	S	LX 1.6T	EX	SX
Android Auto	●	●	●	●	●
Apple CarPlay	●	●	●	●	●
Mobile App Support					
Text Messaging					
Navigation				○	○
Touch Screen	●	●	●	●	●
Gesture Control					
Heads-Up Display					
Voice Commands	●	●	●	●	●
Console Control					

Additional trim levels available.

ABOUT THE STUDY

Researchers evaluated 40 new 2017/2018 vehicles' infotainment systems* to measure overall demand** placed on a driver when using voice command, touch screen and other interactive technologies to make a call, send a text message, program audio entertainment or program navigation, all while driving down the road.

STRENGTHS

- Short and intuitive voice commands can be used to place calls and adjust audio entertainment.

WEAKNESSES

- The dial pad and access to the full phone book are accessible via the touch screen while the vehicle is in motion.
- Very high levels of visual and cognitive (mental) demand were required to program audio entertainment using the center stack.

* Infotainment System: Vehicle system that combines entertainment and information content.

** Overall demand measured: visual (eyes-off road), cognitive (mental) and time-on-task.

VEHICLE OVERVIEW: CONTROLS AND DISPLAYS



VOICE COMMANDS



STEERING WHEEL COMMANDS



INSTRUMENT CLUSTER



CENTER STACK

INFOTAINMENT SYSTEM

The UVO® In-Vehicle Infotainment System* offers the following features:

CALLING AND DIALING



The 2018 Kia Optima LX UVO® infotainment system* allows drivers to place calls using the center stack or voice command system. Incoming phone calls can be answered or ended using color-coded buttons on the steering wheel. To pair a Bluetooth device using the touch screen, the vehicle must be in park. Once paired, drivers can place calls to contacts and dial numbers using the touch screen or voice commands. All phone functions are accessible while the vehicle is in motion.

The calling system placed an overall moderate demand on drivers, who were able to use simple and intuitive voice commands to place calls with only moderate levels of both visual (eyes-off-road) and cognitive (mental) demand. On average, drivers took 20 seconds[‡] to place calls using the voice command system.

Using the center stack touch screen to place calls was moderately demanding on drivers overall, requiring an average of 15 seconds[‡] to complete the task. The simple and well-labeled phone menu displayed all headings at the top of the screen, allowing drivers to easily make selections without scrolling or searching through excessive options. However, researchers[‡] noted that full access to the contacts list and dial pad while driving may have contributed to the very high levels of visual demand.

Researchers[‡] complimented the large buttons and clear labels on the touch screen, which helped drivers quickly find and select their desired option. In addition, researchers[‡] noted the voice system is able to quickly process one long string of conversational commands with high accuracy (e.g., “Place a call to John Smith on his work phone”).

AUDIO ENTERTAINMENT



The system provides access to: AM, FM and XM radio; CD; USB, auxiliary and Bluetooth audio connectivity; and certain third-party applications downloaded on the user’s phone. Drivers can make audio selections using the center stack touch screen and buttons or voice commands. Additionally, the instrument cluster display contains an audio menu that can be accessed using steering wheel buttons.

Drivers were able to make audio entertainment selections quickly using either the voice command system or the center stack touch screen. The voice system is flexible, allowing the use of numerous, simple and straightforward commands, as well as accepting several different voice commands to complete a task. This system imposed moderate levels of demand on drivers. However, the limited functionality of the voice system for selecting music on a USB-connected device may force the use of the touch-screen or other technology to complete this task, which might increase the overall demand of the system.

While the voice command system supported a quick and simple process for selecting audio entertainment, researchers[‡] noted the center stack’s cluttered menu interface led to overall high levels of demand. In addition, they noted that the inclusion of the sensitive digital tuning bar and physical tuning dial (that was not very responsive) made choosing a radio station a frustrating task, which contributed to the very high levels of visual and cognitive demand required to use the system successfully.

Researchers[‡] remarked that the voice command system excels in its flexibility and accuracy. The touch-screen audio menu imparts high levels of demand, most likely due to the menu structure and unconventional methods for tuning the radio.

* Infotainment System: Vehicle system that combines entertainment and information content.

[‡] Compared to a recommended maximum of 24 seconds.

[‡] Researchers with expertise about how humans interact with technology evaluated the usability of the infotainment system in stationary vehicles.

VEHICLE CONTROLS AND DISPLAYS

VOICE COMMANDS



The 2018 Kia Optima LX comes equipped with a voice command system that allows drivers to access phone functions, audio entertainment and voice command help. Once activated by pressing the dedicated button on the steering wheel, drivers can use either voice commands or the touch screen to make selections. Although commands are not conversational, a list of intuitive and common commands is displayed on the touch screen for additional aid. The driver can interrupt the voice command system by speaking over the system's dialogue at any time, rather than being required to press a button on the steering wheel before speaking a command.

INSTRUMENT CLUSTER



The instrument cluster located behind the steering wheel features a central 3.5-inch display surrounded by the standard gauges, such as the speedometer, fuel level, tachometer and engine temperature. Drivers can access a range of infotainment and vehicle status information on the display by using buttons on the steering wheel.

STEERING WHEEL CONTROLS



The steering wheel contains 10 buttons and two toggles. Buttons on the left side provide access to the voice command system, phone call pickup and hang-up, and various audio entertainment controls. Buttons on the right side provide access to the instrument cluster display and cruise control.

CENTER STACK



The center stack is equipped with a 7-inch full-color touch screen and 10 surrounding buttons with a home screen that uses tiles of various sizes linked to common in-vehicle infotainment system (IVIS) functions. With UVO, users can access audio entertainment, phone functions, third-party applications and system settings. The black-and-white color scheme contrasts well with the red accents used to indicate selections. Below the touch screen, an additional eight buttons and four dials provide access to the vehicle's climate control.

VEHICLE SALES SUMMARY

The 2018 Kia Optima is the 51st bestselling vehicle in the United States, with 107,493 sold during 2017 YTD.⁵

⁵Source: *GoodCarBadCar* at goodcarbadcar.net — data updated to Dec. 6, 2017.